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# THE FISCAL YEAR 2008 BUDGET REQUEST FOR THE U.S. DEPARTMENT OF ENERGY

## HEARING

BEFORE THE

## COMMITTEE ON ENERGY AND COMMERCE
## HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

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# THE FISCAL YEAR 2008 BUDGET REQUEST FOR THE U.S. DEPARTMENT OF ENERGY

**THURSDAY, FEBRUARY 8, 2007**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
*Washington, DC.*

The committee met, pursuant to call, at 10:09 a.m., in room 2123 of the Rayburn House Office Building, Hon. John D. Dingell [chairman of the committee] presiding.

Members present: Representatives Markey, Boucher, Pallone, Eshoo, Stupak, Engel, Wynn, Green, DeGette, Capps, Doyle, Harman, Allen, Schakowsky, Solis, Gonzalez, Inslee, Baldwin, Ross, Hooley, Matheson, Butterfield, Barrow, Hill, Barton, Upton, Stearns, Whitfield, Cubin, Shimkus, Wilson, Pitts, Walden, Terry, Ferguson, Sullivan, Murphy and Burgess.

Staff present: Sue Sheridan, Bruce Harris, Jonathan Cordone, Chris Treanor, Seth, Alec Gerlach, Sharon Davis, chief clerk; and Elizabeth Ertel.

The CHAIRMAN. Good morning. The committee will come to order.

The purpose of today's full committee hearing is to receive the testimony from the Secretary of Energy regarding the President's fiscal year 2008 budget request. Mr. Secretary, welcome to the committee.

As I explained at Tuesday's hearing, the chair is going to follow slightly different procedures with respect to opening statements and questions during full committee hearings. This is going to be simply to expedite the business of the committee and see to it that we can not only conduct the business but also can treat all Members fairly according to clear and understandable rules.

Now, consistent with the rules and past practices of the committee, the chairman and the ranking member of the full committee will be recognized for a 5-minute opening statement. Today the chairman and the ranking member of the subcommittee on Energy and Air Quality will be recognized for 3-minute opening statement. All other Members will be recognized for 1-minute opening statements but they may waive their opening statements for additional 1-minute of questioning during the first round. The chair will recognize Members who are here when I called the meeting to order by order of their seniority on the full committee. Once all these Members have delivered or waived an opening statement, the chair will recognize all remaining Members in the order that they arrived at the hearing. The clerks will keep a careful accounting of this attendance to be assured that it is properly dealt with. The

chair will also recognize Members for the purpose of questioning Secretary Bodman under the same procedures just outlined.

The chair reminds Members, as previously noted, that Members and staffs are invited to a briefing by the Intergovernmental Panel on Climate Change regarding his recently announced fourth assessment report tomorrow at 10 a.m. The chair suggests very strongly that Members should be here because this is a matter that is going to receive full and vigorous attention of this committee.

The Subcommittee on Energy and Air Quality will hold two hearings next week on global climate change: Tuesday at 10 a.m. to hear the views from the private sector panels and Wednesday at 10 a.m. to examine how human activity has affected global warning.

Before we proceed, I think most of the Members know that our friend and colleague, Charlie Norwood, has been fighting cancer with dignity and with courage. He has decided, however, to decline further treatment and will be returning home to Augusta, Georgia. His service in this House and on this committee has been one of great distinction and great honor. My wife Debra and I will be praying for him and his family during this difficult time, and I know that his family would appreciate your thoughts and prayers also.

The chair now recognizes himself for the purposes of an opening statement for 5 minutes.

**OPENING STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN**

Mr. Secretary, we are pleased to welcome you back to the committee to discuss the fiscal year 2008 budget request of your Department. This is an important opportunity for the committee to understand the Department's priorities and for you, Mr. Secretary, to hear the concerns of committee members.

First, we are going to confront the issue of climate change. As you know, the committee is going to endeavor to write legislation addressing this issue, a complex and difficult matter we are going to have to work very hard on. We seek and we hope that we can count on the administration's involvement, and I mean, that, Mr. Secretary. It is important that the members of the committee understand the actions of Federal agencies to date as well as the fiscal year 2008 budget proposal's impact on these programs. In addition, Members need to know the administration's position on the question of climate change legislation and all the subtleties and issues that are associated therewith. I have seen recent press reports quoting you on the matter and I am sure the committee will have questions later for you to better understand your statements and position.

Second, the Department administers a wide variety of statutory responsibilities that we will want to proceed on and to discuss with you, Mr. Secretary. For example, the Energy Policy Act of 2005 included an array of statutory deadlines on energy efficiency and conservation matters that are important for both energy independence and reducing greenhouse gas emissions. In particular, the Department does not have a strong record in meeting appliance efficiency

rulemaking deadlines. Representatives Boucher, Markey and I have asked the Government Accountability Office to examine this problem, and I am sure Members will have questions for you on this matter.

Mr. Secretary, third, I would raise the Yucca Mountain nuclear waste repository program. This has been a program in much disarray and the Department has estimated that it will file a license application with the Nuclear Regulatory Commission by 2008, which the Commission must evaluate for scientific merit. If the Commission adopts this proposal or grants approval, DOE said that it could begin accepting waste at Yucca Mountain by 2017. None of this, however, can occur if the Department lacks the necessary funding. As you know, Mr. Secretary, the committee was disappointed that the administration sent a bill to Congress last year without fully funding the necessary reforms. These reforms would ensure that the contributions of ratepayers to the nuclear waste fund are preserved for their intended purpose and not dissipated for other extraneous and conflicting purposes. Absent reform, consumer funds are in peril and so is the program, and we all know that a major piece of litigation is going to continue to bother you and the Department because of the failure of the Government to properly deal with these matters.

Finally, Mr. Secretary, you will probably be asked about repeated security breaches at Department facilities, particularly Los Alamos National Laboratory. This was a matter of concern to us long years ago and seems to remain a thorny, difficult and poorly handled problem.

Mr. Secretary, you have appeared before this committee on prior occasions and I am satisfied that you can and will be an honest broker. I know that you understand that the tough questions to be asked today are part of the responsibilities of the members of the committee and that they will support present, past and future work of the committee. I am grateful for the work you do at the Department on behalf of the American people and for your appearance before this committee, and I want you to know the affection and respect in which you are held by the current occupant of the chair. I will note, Mr. Secretary, that we will probably follow up with some questions in writing which will be sent to you either by mail or other way, and that we will be requesting your answer to these questions so that we might have a more full record and the record will of course remain open for the purpose of receiving those answers.

The chair now recognizes my distinguished friend from Michigan, Mr. Upton, for 1 minute.

**OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN**

Mr. UPTON. Thank you, Mr. Chairman. I had stitches so my shoulder is particularly sore this morning.

I want to share the chairman's remarks and echo his remarks for the kind words and the competence, Mr. Secretary, that you have exhibited as Secretary of the Department of Energy, a very important spot as we look to this next year and to the final 2 years of the Bush presidency.

I for one am a strong supporter of nuclear power. I went through the budget and looked at the nuclear waste trust fund and saw the increases in essence from $17 billion in 2006 to what will be nearly $20 billion in 2008, so one of the things that I will be asking in my questions is the continued committee of the administration to push to get this particular facility in Nevada open, but I also want to compliment you on the increase in alternative energy. That remains a priority not only with this administration but certainly Members on both sides of the aisle. We look forward to your leadership and to your discussion this morning.

I yield back my time.

The CHAIRMAN. The chair thanks the distinguished gentleman. The chair recognizes now our good friend from Virginia, the chairman of the subcommittee, Mr. Boucher. Three minutes.

**OPENING STATEMENT OF HON. RICK BOUCHER, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA**

Mr. BOUCHER. Thank you very much, Mr. Chairman, and welcome, Secretary Bodman. We are delighted to have you with us this morning, and I want to thank the chairman for providing this opportunity to hear from the Secretary regarding the Department of Energy's priorities for the fiscal year 2008 budget request, and with this hearing we can begin to focus on what the Department's priorities are for the entire 110th Congress.

I am particularly interested today in hearing about the budget request for coal and for clean coal technologies including carbon sequestration. The advancement of carbon sequestration technologies is essential to ensuring that coal, which is our nation's most abundant energy resource, can continue to play a vital role in the national fuel mix at a time of a carbon-constrained economy, and so having a clear understanding of the status of carbon sequestration technologies and what the Department intends to do in order to advance those technologies to the point where they can be commonly utilized is very important to us.

In addition, I look forward to hearing from the Secretary regarding the administration's efforts with regard to implementation of the loan guarantee program for alternative transportation fuels that we authorized as a part of EPACT 2005. To date, there have been no loan guarantees issued under the program and I understand that the continuing resolution which is currently pending includes an appropriation of $7 million to administer the program and provides the potential to guarantee up to $4 billion in loan guarantees. In addition, it is my understanding that the Department's fiscal year 2008 budget includes a request of $9 billion for loan guarantees as well as $8.4 million to operate the administrative office. While I think it is encouraging that we see this movement, I am concerned about the pace of this program and the fact that we haven't seen guarantees put forward to date and would welcome your comments about why that hasn't happened and what you foresee happening in the near term.

I very much look forward to a discussion of these and other matters that are of importance to our Nation's security and again I

thank the Secretary for joining us here this morning and thank the chairman for providing this opportunity. I yield back.

The CHAIRMAN. The chair thanks the distinguished gentleman. The chair now recognizes the gentle lady from Wyoming, Ms. Cubin, 1 minute.

Mrs. CUBIN. Thank you, Mr. Chairman. I waive my opening statement so that I have an extra minute for questioning.

The CHAIRMAN. The chair recognizes now the distinguished gentleman from Nebraska, Mr. Terry, for 1 minute.

Mr. TERRY. I will waive.

The CHAIRMAN. The gentleman waives also. The chair recognizes now the distinguished gentleman from Pennsylvania, Mr. Murphy.

**OPENING STATEMENT OF HON. TIM MURPHY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA**

Mr. MURPHY. Thank you, Mr. Chairman. You know, as our Nation looks towards energy independence, it is very important that we look at our energy security, our economic security, our national security and note how they are closely intertwined. In this budget, there is a number of things which I am pleased with that is going to help us move towards some of that energy independence and security with moves towards such things as nuclear technology and looking at how that is helpful as a clean energy source.

I must admit though that I continue to be very concerned about some of the cuts and what is going on with clean coal technology, particularly as it may relate to some of our national energy technology labs. One is located in my district. I think it is very important to recognize that while parts of the world may only have a few decades left of oil resources, we have over a couple centuries left of coal and we need to be working towards ways that we can work at having clean coal technology and maintain those investments. We have abundant coal throughout the Nation and as needed for our manufacturers. Our manufacturers are also concerned that when it comes to natural gas and coal used for energy that by having the higher costs for that, we are in a position where we are driving more jobs out of our Nation unless we reach some answers to that. So I am hoping as we go through this some of the issues that we can work towards are increasing some of that funding for research for clean coal technology, eliminating emissions for the sake of our health but also for the sake of our jobs and our Nation, and I am pleased to have this time and I welcome and I am looking forward to the Secretary's comments on these issues.

Thank you, Mr. Chairman.

The CHAIRMAN. The time of the gentleman has expired. The chair recognizes now the gentleman from New Jersey, Mr. Pallone, for 1 minute.

**OPENING STATEMENT OF HON. FRANK PALLONE JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY**

Mr. PALLONE. Thank you, Mr. Chairman. This budget proposal seems to be at odds with the administration's recent promises. During the State of the Union, the President referred to the serious

challenge of climate change and suggested an initiative to reduce our dependence on oil, and these are certainly noble goals but I am afraid the reality doesn't match the rhetoric. If the President were serious about clean energy, perhaps he wouldn't slash energy efficiency and renewable energy funding by 18 percent from current levels. Perhaps he wouldn't zero the entire geothermal and hydropower programs or sharply reduce critical energy saving programs like weatherization assistance, and if he realizes the serious challenge of climate change, he wouldn't propose an alternative fuel standard that has no mechanism for limiting carbon emissions, meaning that it could actually exacerbate global warming.

The President should simply do the right thing and support mandatory controls on carbon emissions, and I am still the optimist and I hope that the President can live up to his rhetoric.

Thank you, Mr. Chairman.

The CHAIRMAN. The chair thanks the distinguished gentleman and the chair recognizes now my good friend and colleague from Texas, Mr. Barton, for 5 minutes.

**OPENING STATEMENT OF HON. JOE BARTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS**

Mr. BARTON. Thank you, Mr. Chairman, and welcome back, Mr. Secretary. It is always good to have a friend before the committee.

We are here to review the fiscal year 2008 budget of the Department of Energy. I will note that in the last several years since you have been the Secretary, it is my opinion that the Department's performance has improved and I want to congratulate you on that. We do want to keep the trends going in the right direction, given the state of the energy markets both in our country and overseas. That is not an easy job.

There are two issues before this Congress that seem to be converging at the same time. One is the perennial issue of energy security. The other is what is now called global warming or climate change. Energy security has preoccupied this Congress and our country since the Department of Energy was created back in the 1970's. Global warming is becoming a larger and larger issue for the public each day. It also has not only policy significance but political significance. This may be the year that we have a meeting of those two issues at the same time. Because of the mission of the Department and Energy and its expertise, the Department is going to be right in the middle of that. I hope the Energy and Commerce Committee, is also going to be in the middle of it since we are the committee of the Congress with the greatest depth and greatest amount of experience on both sides of the aisle.

The Energy Policy Act of 2005 gave your Department greater responsibilities for energy efficiency, electricity transmission and security, nuclear power, clean coal development, renewable energy, hydrogen and of course oil and gas. All of the Energy Policy Act authorities are central to the debate on energy security and global warming. The President has announced plans in his State of the Union address this year to have a goal of 35 billion gallons of alternative fuels by 2017 and wants to reduce gasoline usage by 20 percent over the next 10 years. Again, your Department is right in the middle of those initiatives.

The challenge ahead is daunting. It is going to take leadership and vision to successfully manage all of these programs and initiatives to ensure a bright future for America. The President's budget is a road map but just that, a road map, to show how we can balance priorities and get the job done. I certainly hope that we can work together on the President's budget and with this committee to help make some of those plans realities.

We need more energy here in the United States, not less. We expect that our electricity production is going to increase by 50 percent to meet the growing demand over the next 15 to 20 years. That is average of 2 to 3 percent a year. That is just to supply the current demand for a growing job-creating economy. That is not a bad thing that our electricity demand is increasing. It is a good thing because United States is the most productive economy in the world. As we use more energy, we produce more goods and services, not just for the United States of America but for the entire world economy.

On the transportation side, we know that in the short term we are going to have to import more oil and there are things that we could do in this committee, in fact, this committee has done some of those things in the last Congress that would increase the fuel efficiency. Hopefully the bill that passed this committee and passed the House but didn't pass the Senate might be a bipartisan vehicle for increasing fuel efficiency standards in this Congress. It is my view that every source of energy that makes any sense at all should be reviewed and see if we can enhance it, make it more efficient, make it more available for the consumers of the United States. I think the United States has the ability to produce more energy. I think it can do it in an environmentally affordable and environmentally safe way. If we have more energy at affordable prices that is produced in an environmentally safe fashion, we are going to have a stronger economy and more opportunities for our citizens.

Again, Mr. Secretary, we appreciate you being here and we look forward to hearing your testimony. Thank you.

The CHAIRMAN. The gentleman's time has expired. The chair recognizes the distinguished gentlewoman from California, Ms. Eshoo, for 1 minute.

## OPENING STATEMENT OF HON. ANNA G. ESHOO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Ms. ESHOO. Thank you, Mr. Chairman. Mr. Secretary, welcome to the committee.

While there is much that I don't agree with in the administration's approach to energy policy, I do want to commend you and DOE Undersecretary for Science, Dr. Ray Orbach, for the commitment you have made to funding science at DOE in the last two budgets, and it is very important for our country and I would like to start out on a very positive note by recognizing this. I think this is exactly the kind of investment that my constituents in Silicon Valley, leaders as you know in academia and high technology have been calling for for years in order to maintain our Nation's eco-

nomic and technological leadership. So I want to commend you for that.

Speaker Pelosi and many of my colleagues worked on an effort that we will bringing forward in the Congress called our innovation agenda, and in that proposal we call for doubling the budget for the Office of Science as well as the National Science Foundation and other agencies. These are really nonpartisan issues. Therefore, there should be a bipartisan effort and I hope that we can work together on it.

I also agree with the administration's call for reducing our dependence on foreign oil by embracing alternative fuels. What I have very serious concerns about are the fuels that the administration plan considers alternatives which I believe will undermine air quality and the effort to reduce greenhouse gas emissions.

So thank you for being here, I look forward to working with you.

The CHAIRMAN. The time of the distinguished gentlewoman has expired. The chair recognizes now the gentleman from Illinois, Mr. Shimkus, for 1 minute.

Mr. SHIMKUS. Thank you, Mr. Chairman. I will waive.

The CHAIRMAN. The gentleman has waived. The chair recognizes now the distinguished gentleman, Mr. Ferguson, for 1 minute.

**OPENING STATEMENT OF HON. MIKE FERGUSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY**

Mr. FERGUSON. Thank you, Mr. Chairman. Thanks for holding this hearing, and I appreciate the Secretary for being here with us today.

I am pleased to see the President's budget reflects some investments in renewable energy. In my home State of New Jersey, the market for solar power is one of the fastest growing solar markets in the country. In 2001, our State began offering 70 percent rebates on solar power installation. Five years later, some 2,000 homes and businesses have taken advantage of this program and there continues to be a long waiting list. I am particularly proud that Halls Warehouse Corporation, which is a company in South Plainfield, New Jersey, in my district has recently completed installing 8,000 solar panels on top of their refrigerated warehouses. It is the largest roof-mounted solar electric system in the Nation and it is expected to save this particular company $600,000 a year in energy costs and reduce $C0^2$ admissions by 24,000 tons over the next 30 years. Now, I realize the importance of making solar energy systems more accessible to homeowners—we have talked about this a little bit—and businesses as well. That is why in the last Congress I introduced the Clean and Green Solar Tax Credit Act which would extend the solar tax credits that were in our Energy Policy Act. I plan to expand upon this and reintroduce it in this Congress, and I thank you, Mr. Chairman.

The CHAIRMAN. The time of the gentleman has expired. The chair recognizes now the distinguished gentleman from Michigan, Mr. Stupak.

**OPENING STATEMENT OF HON. BART STUPAK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN**

Mr. STUPAK. Thank you, Mr. Chairman. Mr. Secretary, welcome to the committee. As the new chairman of Oversight and Investigations Subcommittee, I look forward to working with you and your staff. The subcommittee has already held an important hearing on the security at the Los Alamos National Lab and I appreciate your continued cooperation and assistance in this issue.

For the past several years Americans have paid record-high prices to fill up their cars and heat their homes from industry to agriculture, businesses continue to struggle with wide energy price fluctuations. As the President has stated in several of his State of the Union speeches, we remain dangerously dependent on foreign energy sources. Unfortunately, I see nothing or very little from the President's 2008 budget that will change this any time soon. The President's budget drastically cuts proven programs such as LIHEAP, weatherization assistance, building efficiency programs and vehicle technologies. These cuts place the burden of the high energy prices on lower-income Americans and small businesses. The Federal Government should be investing in these programs as well as wind, solar, geothermal and other renewable energy sources to help Americans with high energy prices now. Unfortunately, the President's budget seems focused on increasing Federal handouts to his friends in big oil, increasing the funding for fossil fuel energy up by 33 percent. We can do better.

Thank you, Mr. Chairman.

The CHAIRMAN. The time of the gentleman has expired. The chair now recognizes our good friend and colleague, Mr. Pitts, for 1 minute.

Mr. PITTS. Mr. Chairman, I waive.

The CHAIRMAN. The chair recognizes our good friend and colleague, Mr. Sullivan, for 1 minute.

**OPENING STATEMENT OF HON. JOHN SULLIVAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA**

Mr. SULLIVAN. Thank you, Mr. Chairman. I don't have a lot to say but I want to thank you, Mr. Secretary, for being here today and I think this is an important time in energy policy in this country.

We have a lot to do, and I am for a lot of alternative fuels, I support them, I am going to continue to support them. I think it is exciting that we are doing that, but we can never forget about domestic production of oil and gas. We are never going to be able to totally eliminate the use of gas and oil. We need to make sure too, I think it is important we do all we can with secondary recovery, going in drilling domestically on the outer continental shelf offshore, doing all we can here domestically, and I think too that a lot of people, especially on the left, think that the oil and gas industry is bad, people are like J.R. Ewing that are in it, and that is not true. They don't all go out drinking at lunch and drive a Cadillac with horns on it. They are good people. Mainly the domestic oil and gas that is produced in the United States is done by independent producers and they are like small-business people, and

I think that they need to be recognized more and they are not, and there is always a lot of byproducts that come from oil and gas that need to be talked about, and I guess what I am trying to say is, sir, that we need to have some kind of educational effort out there maybe in the Department of Energy and other places as well that can educate us on this important issue. Thank you.

The CHAIRMAN. The time of the gentleman has expired. The chair recognizes now the gentlewoman from California, Ms. DeGette, for 1 minute.

Ms. DEGETTE. Colorado, Mr. Chairman. I will waive my opening.

The CHAIRMAN. The gentlewoman passes. The chair recognizes now the distinguished gentlewoman from California, Mrs. Capps, for 1 minute.

Mrs. CAPPS. Thank you, and I will waive my opening statement.

The CHAIRMAN. The gentlewoman waives. The chair recognizes now the distinguished gentleman from Pennsylvania, Mr. Doyle, for 1 minute.

**OPENING STATEMENT OF HON. MICHAEL F. DOYLE, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA**

Mr. DOYLE. Thank you, Mr. Chairman. Welcome, Mr. Secretary.

After declaring us addicted to oil in his State of the Union address, I was disappointed last year to see that the President did not provide you with the additional resources required to break this addiction. Sadly, we see this trend continue this year, even after the President has declared that America is on the verge of technological breakthroughs that will enable us to live our lives less dependent on oil. Once again, the President has said the right thing and then delivered a budget that will produce the exact opposite result. Mr. Secretary, I find it incredible that your entire budget, a budget that it tasked with breaking our so-called addiction to oil, is a mere $24.6 billion. That is barely more than what we spend in Iraq every 3 months. I can only imagine the breakthroughs that your Department could achieve if the President actually backed up his rhetoric with real new funding designed to make our country truly energy independent. I appreciate the tough position you are in as you attempt to defend this bait-and-switch but we need to provide substantial new funding as I believe this will do more to change our foreign policy, protect our environment and strengthen our economy than any other action we could possibly take her in Washington.

The CHAIRMAN. The time of the gentleman has expired. The chair recognizes now our good friend from Pennsylvania, Mr. Pitts, for 1 minute. The gentleman has waived. The chair recognizes now the distinguished gentleman from Texas, Mr. Burgess, for 1 minute.

Mr. BURGESS. Thank you, Mr. Chairman. In the interest of time, I will submit for the record and leave time for questions.

The CHAIRMAN. Very well. The gentleman waives. The chair recognizes now the gentlewoman from California, Ms. Harman, for 1 minute.

**OPENING STATEMENT OF HON. JANE HARMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA**

Ms. HARMAN. Thank you, Mr. Chairman. Two observations. First on Charlie Norwood, unfailingly courteous, optimistic, a ray of sunshine and hope. He is missed in this Congress and on this committee.

Second, on the need for courage as we confront the threat of global warming, which may prove an even bigger challenge than the threat of terrorism. Mr. Secretary, this budget is far too timid and will do far too little. Hopefully this committee will not be timid and will show the kind of courage Charlie Norwood exemplifies. I yield back.

The CHAIRMAN. Ms. Harman yields back. The chair recognizes now the distinguished gentleman from Maine, Mr. Allen.

Mr. ALLEN. Mr. Chairman, I will waive my opening.

The CHAIRMAN. The gentleman waives. The chair recognizes now the distinguished gentlewoman from Illinois, Ms. Schakowsky. The chair recognizes now the distinguished gentlewoman from California, Ms. Solis.

**OPENING STATEMENT OF HON. HILDA L. SOLIS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA**

Ms. SOLIS. Thank you, Mr. Chairman, and good morning, Mr. Secretary.

In the district I represent in California, gas prices have increased by 104 percent. In January our temperatures plunged during the worse freeze in 9 years, driving up heating costs and foodstuffs. Revenue at 71 percent of small businesses in California have decreased as a result of increased energy costs but the budget before us today fails again to deliver stability for these working families, growth for small businesses and a health environment for future generations. Only 5 percent of the overall Energy Department's budget is dedicated, by the way, to clean renewable technology, weatherization programs are cut by 41 percent, and assistance programs for low-income families are cut by $200 million. The budget fails to address disproportionate impact on global warming, especially on low-income communities and communities of color. Mortality rates associated with global warming could increase twelvefold just in the Latino community. The rate of infectious diseases will climb, exacerbating impacts for the uninsured. The price of foodstuffs will increase, impacting the large Latino workforce in California. Latinos gathered, as you know, last September to report on the National Latino Congresso. I would ask that we may consider——

The CHAIRMAN. The time of the gentlewoman has expired. The chair recognizes now the distinguished gentleman from Washington, Mr. Inslee.

**OPENING STATEMENT OF HON. JAY INSLEE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON**

Mr. INSLEE. Thank you, Mr. Secretary, for being here. I wanted to explore with you later some schizophrenia in the budget and the two items I mention, and one is the clean coal research which I

support. I think it is good research. We should find out if we can sequester $CO^2$. But the problem is because the President refuses to accept the regulation on carbon, we may spend a billion dollars in taxpayer money and no one will ever deploy a clean coal plant because why would you ever do it when you can put your carbon dioxide into the Bush plan for free and unlimited amounts up the stack. That is schizophrenia. The second issue is, you have money in for alternative fuels but you include coal to liquids which doesn't save us anything in any realistic amount in carbon dioxide.

So you have got two major schizophrenias going on in here and I look forward to discussing that with you because if we are going to get serious on $CO^2$ reductions, we need consistent policies that will match the research with the deployment. I look forward to that. Thank you.

The CHAIRMAN. The time of the gentleman has expired. The chair now the distinguished gentleman from Texas, Mr. Green, for 1 minute.

Mr. GREEN. Thank you, Mr. Chairman. I would like to reserve my time and also just join in all our colleagues in your comment about our colleague, Charlie Norwood, in his illness.

The CHAIRMAN. The gentleman waives. The chair recognizes now the distinguished gentlewoman from Wisconsin, Ms. Baldwin.

**OPENING STATEMENT OF HON. TAMMY BALDWIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN**

Ms. BALDWIN. Thank you, Mr. Chairman. Welcome, Mr. Secretary.

I was pleased that President Bush in his State of the Union address spoke so candidly about his goals for improving American's energy policy including increasing production of renewable fuels, modernizing fuel economy standards and investing in new technologies such as cellulosic ethanol. Our President even changed course, acknowledging to the National that global climate change must be taken seriously. However, his ambitious words fail to come across in the budget that we have before us. The budget lacks any proposals for curbing emissions. At the same time, the budget proposes a decrease in funding for an energy-efficiency and environmentally sound power source, wind. With the focus so strong on renewable energy sources, I wonder why the administration is proposing cuts to its investment in wind power.

Mr. Secretary, the spotlight is really on us right now. It is time for us to lead by example and show that we are committed to addressing energy efficiency and global warming. The President's words alone are not enough. I only hope that we will be able to correct the shortcomings that we have highlighted today and address the real problems before it is too late. Thank you.

The CHAIRMAN. The time of the distinguished gentlewoman has expired. The chair recognizes now the gentleman from Utah, Mr. Matheson.

## OPENING STATEMENT OF HON. JIM MATHESON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF UTAH

Mr. MATHESON. Thank you, Mr. Chairman. Welcome, Mr. Secretary.

Three specific points I want to raise. First, the significant budget increase for RRW is concerning. The rationale for RRW used to be aging plutonium pits. As we just heard in December, the pits are fine for at least 100 years, so I have to question DOE's rationale in attempting to move forward on new nuclear warheads that we might have to test at some point.

Second, Senator Reed and I have been working on legislation calling for interim onsite nuclear waste storage at nuclear power plants. Dry cask storage, which wasn't even on the table back when Congress enacted the Nuclear Waste Policy Act of 1982, combined with the Federal Government taking title of the nuclear waste, is likely a better option than throwing good money after bad with respect to Yucca Mountain.

And third, I am still very concerned about the Moab uranium tailing pile. I see huge budget numbers in the Department's budget for programs that don't seem nearly as urgent, so I have to question how DOE can say that the budget can provide the $500 million it will likely take to clean up 16 million tons of radioactive mill tailings sitting on the banks of the Colorado River. The alternative would be a 20- to 25-year schedule. That is a difficult timeline for people at Utah, Arizona, Nevada and California. These are all critical issues and I look forward to hearing from you during the question period.

I yield back.

The CHAIRMAN. The time of the gentleman has expired. The chair now recognizes the distinguished gentleman from North Carolina, Mr. Butterfield.

## OPENING STATEMENT OF HON. G.K. BUTTERFIELD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

Mr. BUTTERFIELD. Thank you, Mr. Chairman. Thank you, Mr. Secretary, for coming forward today and giving us the benefit of your testimony.

I am not so sure that the American people really understand our need for energy independence. I know that is not the case in my congressional district, and so I want to encourage the Department to have a more aggressive campaign to educate the American people on the seriousness of this issue.

I am also concerned, Mr. Secretary, about the Department's proposal to cut by 40 percent the funds for weatherization programs. I represent a poor district in eastern North Carolina and we are vitally concerned about that particularly when we are spending $2 billion a week in Iraq. Low-income people in my district are suffering from unbearable heating costs and your decrease, if it is true, will exacerbate this problem. I hope my statistics are wrong, but if not, please take care of our citizens who are cold.

I yield back.

The CHAIRMAN. The time of the gentleman has expired. The chair recognizes now the distinguished gentleman from Georgia, Mr. Barrow, for 1 minute.

Mr. BARROW. Thank you, Mr. Chairman. I waive opening statement.

The CHAIRMAN. The gentleman waives. The chair recognizes now the distinguished gentleman from Indiana, Mr. Hill.

**OPENING STATEMENT OF HON. BARON P. HILL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF INDIANA**

Mr. HILL. Thank you, Mr. Chairman, and thank you, Mr. Secretary, for joining us here today.

The budget before us today is an ambitious one. I would like to concentrate on provisions that are important to my constituents in Indiana, specifically the Twenty in Ten gasoline initiative that aims to reduce our gasoline usage by 20 percent in the next 10 years. As you know, Indiana currently has the resources to produce fuel and electricity from crops, coal and biomass. Our citizens will remain a leader in reducing United States' dependency on foreign oil and oil in general by continuing to research and develop methods to produce clean energy from our homegrown resources. I look forward to hearing details of how you propose to accomplish this lofty goal through law or regulatory changes and how we can work together to ensure its success.

The CHAIRMAN. The time of the gentleman has expired. The chair recognizes now the distinguished gentlewoman from Illinois, Ms. Schakowsky.

**OPENING STATEMENT OF HON. JANICE D. SCHAKOWSKY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS**

Ms. SCHAKOWSKY. Thank you, Chairman Dingell, and thank you, Secretary, for being here.

The President's budget for the sixth time in a row to me shows that the President favors tax cuts for the wealthy above meeting basic human needs like heating and home weatherization assistance and seriously combating climate change by reducing carbon emissions. In my view, this is a dangerous budget. The President's budget cuts LIHEAP, which helps low-income families pay their heating and cooling bills, by $1.4 billion and it slashes weatherization assistance grants which help low-income households make their homes more energy efficient by 40 percent below last year. Based on the President's proposal, 40 percent fewer families will receive weatherization assistance next year. For Chicago, the cost of those cuts will be human lives. Already at least one person has died due to the deep freeze that gripped Chicago this week. At minus 30 degrees wind chill, people die if they don't have adequate heat. The cold snap we are currently experiencing has been responsible for at least 13 deaths already across the country. Each cut, more people at put at risk. So Secretary Bodman, I look forward to hearing from you and what the administration have to say about those cuts as well as the flat funding of energy efficiency, renewable energy. Thank you.

The CHAIRMAN. The time of the gentlewoman has expired. The chair now the gentleman from Maryland, Mr. Wynn.

**OPENING STATEMENT OF HON. ALBERT R. WYNN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND**

Mr. WYNN. Thank you, Mr. Chairman. Welcome, Mr. Secretary.

Let me begin by echoing the sentiments of my colleagues on the subject of weatherization. I too am concerned about the 41 percent reduction that has been proposed. We have a waiting list in Maryland, and this was before the budget was put out so that we are very concerned.

I also want to say that although the administration maintained its commitment on hydrogen fuel cells, it did not maintain its commitment on the transition programs. We talk about energy independence, but if we don't have market transition programs that would create markets for these new technologies, they don't work.

Third, I would like to mention the issue of the loan guarantees again for new technologies. That program was significantly delayed. I hope we will expedite this process so that the companies that are trying to provide new technologies will be able to benefit from a program that we passed more than 18 months ago. I thank you and relinquish the balance of my time.

The CHAIRMAN. The time of the gentleman has expired. The chair recognizes now the distinguished gentleman from New York, Mr. Engel.

**OPENING STATEMENT OF HON. ELIOT L. ENGEL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK**

Mr. ENGEL. Thank you, Mr. Chairman. Welcome, Mr. Secretary. I too was happy to hear the President's words at the State of the Union but we heard those words last year and nothing was done, so I hope this time we back up the words with action. We need action to make our vehicles more fuel-efficient, action to help provide our motorists with clean alternative fuels and actions to help commercialize plug-in hybrid technology.

Congressman Kingston and I in a bipartisan fashion have introduced H.R. 670, the Drive Act, to achieve these goals. We have got about 80 or 90 bipartisan cosponsors. We shouldn't wait for the perfect bill. We think this is the perfect bill but we should act on this now, and we need the administration and you, Mr. Secretary, to help us push it because this is something that the American people need. We need to help American automakers transform their fleets to run on biofuels. We need to act now to transform our fuel infrastructure to allow electricity and renewable fuels to power our vehicles and we need to make dramatic strides to make us energy-efficient, and we need to pass H.R. 670, the Drive Act, and I hope you put your influence and the administration's influence behind it, and I yield back.

The CHAIRMAN. The time of the gentleman has expired. The Chair notes that that concludes the opening statements. Other statemetns will be accepted for the record.

[The prepared statements of Mrs. Cubin and Mr. Burgess follow:]

PREPARED STATEMENT OF HON. BARBARA CUBIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WYOMING

I represent a State where the budget depends largely on our Nation's energy policy.

Wyoming accounts for approximately 40 percent of all coal mined in the United States. We are in the top five onshore natural gas-producing States, eighth in crude oil production, and first in both trona and uranium. Wyoming truly is the "energy breadbasket" of our Nation.

However, Wyoming also has an unmeasured potential for renewable and clean-burning fuels, and I want to compliment the Department of Energy on submitting a budget proposal that promotes new science and technology, as well as better utilization of renewable resources.

At least one coal-to-liquids facility is already moving forward in my State, which will bring to market roughly 13,000 barrels per day of refined, ultra-low-sulfur diesel fuel. The southeastern Wyoming corridor is one of the most favorable locations for wind power development in the country. These are the types of energy projects we should be incentivizing at both the State and Federal levels.

We live in a time when our national energy policy has a direct effect on the safety and prosperity of our Nation. I look forward to hearing the Secretary's thoughts on how this budget helps achieve those vital goals.

PREPARED STATEMENT OF HON. MICHAEL C. BURGESS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. Chairman, thank you for convening this hearing today.

One of my most important responsibilities as a Member of Congress is to ensure that my constituents' tax dollars are being spent wisely. It is for that reason that I look forward to the ongoing debate about our national funding priorities.

Secretary Bodman, thank you for appearing before us this morning. As we begin the fiscal year 2008 appropriations cycle, it will be helpful to hear from you about the President's budget request for the Department of Energy.

I am especially interested to hear your testimony regarding the President's Proposed "Twenty in Ten" Initiative, as well as the oil and natural gas research programs that have been zeroed out in the President's proposed Budget.

Secretary Bodman, thank you again for appearing before us this morning. I yield back.

The CHAIRMAN. Mr. Secretary, we recognize you for your statement. Mr. Secretary, welcome.

## STATEMENT OF HON. SAMUEL W. BODMAN, SECRETARY, U.S. DEPARTMENT OF ENERGY

Secretary BODMAN. I will try to be brief, Mr. Chairman. Let me begin by noting the good relationship that I have enjoyed with the chairman and the ranking member over the last couple of years and I hope that we can strengthen that because we have a lot before us, as I have just listened to the views of so many members of this committee. I too would like to take note of the absence of Mr. Norwood. He has become a friend of mine during my brief tenure here, and I miss him.

As you heard in the State of the Union address, the President announced several new energy initiatives that will shape our Department's work over the coming 2 years. The President announced a goal of reducing our gasoline usage by 20 percent over the next 10 years, the so-called Twenty in Ten program, first by requiring 35 billion gallons of renewable and alternative fuels by the year 2017, nearly five times the 2012 target, which we should meet as soon as next year, I believe, as best I see it, and second, by reforming and modernizing the CAFE standards for automobiles and extending the current light truck rule which already exists. Together we believe these measures will help reduce our dependence on unstable regimes and will also check the growth, in fact should re-

verse the increase of carbon emissions from the transportation sector.

In addition, the President proposed doubling the size of the Strategic Petroleum Reserve to further protect our Nation from shocks in oil markets. We look forward to working with the Congress and with other parts of our administration to accomplish these important goals.

Let me now just take a minute to mention a few of the highlights in our $24.3 billion budget request of Congress. To maintain our economic prosperity by encouraging scientific innovation, the President last year proposed the American Competitiveness Initiative. Our budget proposes, as has been noted, a $4.4 billion budget or an increase of about $300 million over the 2007 request to fund basic research in the physical sciences and to support science and technology education programs in our Office of Science. We are also requesting $2.7 billion to accelerate the Advanced Energy Initiative, also announced last year. Through this initiative, we will continue to develop the most promising clean energy technologies including clean coal, biomass, solar and wind power, hydrogen research and new technologies in nuclear energy. The President and I believe that nuclear power must play a significant role in meeting future energy needs in our country.

Our budget requests a total of $400 million for the President's global nuclear energy partnership, an international effort to expand the availability of safe proliferation-resistant nuclear power. To make the expansion of nuclear power possible, we must of course address the matter of nuclear waste. Our budget requests $495 million for the continued development of the geologic waste repository at Yucca Mountain, Nevada. For the NNSA, the budget proposes $6.5 billion for weapons activities which includes funding for our complex 2030 program to create a smaller, more efficient weapons complex that is better able to respond to changing global security challenges. Also within the NNSA, we request $1.7 billion for our nuclear nonproliferation activities.

One of the most important responsibilities concerns our commitment to public health and safety. Our fiscal year 2008 budget proposes $5.7 billion to clean up hazardous radioactive waste left over from the Manhattan Project and the Cold War. It is amazing to me that we are still working on this but we are and we will be for some years to come. I am proud to note that we have completed cleanup of 81 sites through the end of 2006 as well as three sites in Ohio, Fernald, Columbus and Ashtabula this year. So we are making some progress there.

Mr. Chairman, there are many other productive and promising initiatives underway in our Department. I look forward to discussing them with the members of this committee during the question-and-answer session. Thank you very much.

[The prepared statement of Secretary Bodman appears at the conclusion of the hearing.]

The CHAIRMAN. You performed a middle-sized miracle and something that I hope my colleagues up here including myself will learn to do and that is, you have completed your statement with time left, a remarkable accomplishment. Mr. Secretary, the chair recognizes himself for 5 minutes.

At a recent press conference, Mr. Secretary, you were reported as saying in effect the question of whether man is contributing to the planet's warming is no longer up for debate. Is that still your view?

Secretary BODMAN. Yes, sir.

The CHAIRMAN. Mr. Secretary, you should know that this committee is going to, by direction of the Speaker, spend considerable time meeting a deadline of June 1 with regard to presenting the Congress with a piece of legislation on global warming. So we will be looking forward to your assistance as we proceed with an extensive program of hearings to write a bill to address this. Mr. Secretary, it is the intention of the committee that this bill be fair and that it be fairly and properly conceived and that it be, if humanly possible, a bill which will both be bipartisan in character and have the support of members of both sides and will be able to pass both the House and Senate and arrive at the President's desk for signature. My question, Mr. Secretary, will you help us in that undertaking?

Secretary BODMAN. Of course.

The CHAIRMAN. Now, Mr. Secretary, is it still the administration's position that it will oppose any type of mandatory cap on carbon emissions?

Secretary BODMAN. Yes, sir.

The CHAIRMAN. Mr. Secretary, the office of Mr. Ward Sproat, director of the Office of Civilian Waste Management, testified before the committee regarding the Yucca Mountain nuclear test repository. He testified that he plans to submit a license application to NRC by 2008, and if that succeeds, to open the repository in 2017. Are those timetables still valid?

Secretary BODMAN. I believe they are valid, sir. It will be a challenge to get it done but I believe they are valid. This timetable was constructed with the assumption that we do not have outside interference with our moving forward, things like lawsuits and——

The CHAIRMAN. I am aware of that, so what you are telling me is that we really don't think that date is necessarily a valid date?

Secretary BODMAN. Well, it is the only date that I can put forth, that we can put forth that deals with matters that we can control.

The CHAIRMAN. Now, Mr. Secretary, we asked Mr. Sproat when he was before us that he would provide us with an updated version of the projected costs for the repository program. This he agreed to do, but Mr. Secretary, it has not been done. When will we receive that information?

Secretary BODMAN. I looked at the numbers. We still are working on it. I would tell you that my own estimate is something like $20 billion.

The CHAIRMAN. We would like to have the response to those questions as soon as it is comfortable because I would like to have that in the record. Now, Mr. Secretary, does the administration's budget provide enough funding to keep the program on track with Director Sproat's timetable?

Secretary BODMAN. Yes, sir.

The CHAIRMAN. There is enough money there to do this?

Secretary BODMAN. Yes, sir.

The CHAIRMAN. All right. Now, Mr. Secretary, I have long advocated a nuclear waste fund being taken off budget. The bill which

the administration sent up to the Congress last year did not include such and it did not, in my view, provide the critical element of protecting the $20 billion or so in the corpus of this nuclear waste fund from diversion by the budget and the Appropriations Committee. If I read this budget correctly, of the $770 million that is expected to be collected from ratepayers, only $202 million actually be appropriated, leaving $568 million to be added to the unprotected balance of the fund. Now, does the administration support the taking of the corpus off budget?

Secretary BODMAN. Let me say that, as I said before, my own estimate is that this is about a $20 billion project. There is already $19 billion in the fund. As you pointed out, there is some $700 million that will be paid in this year. The income from the fund, from the $20 billion, is also going to be something like $700 or $800 million. You have a billion-five——

The CHAIRMAN. Mr. Secretary, the nub of the question is, what is the administration going to do to protect this money which doesn't belong to anybody except for the ratepayers and the fund for the purpose which the fund was created.

Secretary BODMAN. We are certainly happy to work with Congress, sir, on that question.

The CHAIRMAN. You have got a fine lawsuit going on in this regard.

Secretary BODMAN. Yes, sir.

The CHAIRMAN. I would like to have you submit to us an answer to the question of what the administration proposes to do about this matter because this has been a source of considerable irritation to all and sundry. My time has expired. And we will, I note, Mr. Secretary, be submitting to you a list of questions which members of the committee and the occupant of the chair would like to have answered in view of the shortness of the time.

The chair now recognizes my distinguished friend and colleague from Texas, Mr. Barton, for 5 minutes.

Mr. BARTON. Thank you, Mr. Chairman. Let me say that at the hearing with the Secretary of Commerce, you commented that you seemed a bit rusty. My observation is, you are not at all rusty today, so your learning curve is accelerating. You are back in your old form, which is a good thing for the committee.

Mr. Secretary, the first thing I want to ask you is the status of the project for clean coal technology, which we call FutureGen. I believe the President's budget requests $108 million for that project. Could you comment on that?

Secretary BODMAN. Yes, sir. The goal is to pick one of the four contending communities. There are two in Texas, two in Illinois, that are competing for this. They were down-selected from a group of I think 13 different communities. I would add, if I may interject, that it was a rare privilege for the Secretary of Energy to have actually calls coming from State leaders requesting that this facility be built in their State, which is not usually the case, and so we will be selecting one of the four communities this summer. This is a result of the environmental study, and we will be proceeding later on this year with the preliminary design and construction.

Mr. BARTON. My next question is also on the coal area. Section 3104 of the Energy Policy Act authorized $300 million for fiscal

year 2007, $100 million for 2008 and $40 million for 2009 to work with private industry to go out and pick existing coal-fired power plants that were not using the latest technology and retrofit those plants to bring their emissions up to current Clean Air Act standards. I can't see anywhere in the budget that the Department has funded that program. If you haven't, why not, and if you have, where is it?

Secretary BODMAN. It is not there. You are reading it correct. The initial interest, that is to say last year, was that we had felt that there were other programs in place that were dealing with that particular question and that particular issue so when we stacked it up versus other parts of the Energy Policy Act, it did not have the same priority as those that were judged to be appropriate. The reason that this year the program has been discontinued in its entirety is that there are now regulations in place that force the utilities to deal with matters related to mercury, to sulfur oxides and to nitrogen oxides.

Mr. BARTON. Well, that was put in the Energy Policy Act at the personal request of the then-chairman of the committee.

Secretary BODMAN. Yes, sir.

Mr. BARTON. So as ranking member, it still is a high priority and we on the minority side catch some flack in the appropriation process by members of the majority that say the administration talks a good game but it doesn't deliver and specifically in some of the coal areas, and this is an example of that. I would strongly urge and request that you go back and take a look at that particular program because the whole point was to clean up existing coal-fired plants so that you keep the jobs there, you keep the resource base, which is American-manufactured coal, and we also meet the latest environmental standards. It is a win, win, win. It is not that much money and the private sector has to participate, so I understand the legislative initiative that you talked about or the administration initiative but I would hope that we could still see some money put into that.

Secretary BODMAN. I will certainly comply with your request, sir. I will go back and look at it.

Mr. BARTON. And then last but not least, a perennial problem at Los Alamos, which you are aware of as I am, in our hearing in the Oversight Subcommittee last week on Los Alamos, it was pointed out that there are a huge number of vacant positions in the field office, so these are direct Department of Energy employees, and if my memory is right, there are over 20 vacancies. What steps, if any, are being planned to fill those slots so that we can have good administrative oversight of that program?

Secretary BODMAN. You are correct that there are a significant number of vacancies in that office. As a result of the recent problems at Los Alamos, I made the difficult decision—you and I have talked about this—of relieving the administrator of his responsibilities. The acting administrator of NNSA has changed up the management, the leadership of the site office, the one to which you referred. The new manager arrived there on Monday of this week. Monday was his first day. He will be addressing questions of exactly the sort that you asked promptly. There are two individuals that have been identified from our independent oversight office,

that is to say from the HHS organization here in Washington, and two of those who are very knowledgeable on security matters will at least on an interim basis fill the gap and be working for the new manager in the site office to help strengthen that activity. So there are a number of things that are ongoing.

Mr. BARTON. Mr. Chairman, could I ask one very brief question?

The CHAIRMAN. Without objection, so ordered.

Mr. BARTON. Mr. Secretary, Mr. Dingell and myself and several of the members of the committee have introduced legislation to take the oversight authority over Los Alamos and other weapons programs away from the NNSA and give it directly back to the Department of Energy. Have you taken a position on that legislation?

Secretary BODMAN. Yes. I was in testimony before the Armed Services Committee last week. I said that I had appointed a committee a year ago roughly to look at the question of the organization of NNSA, how it relates to the Department, and they came up with a number of suggestions that would improve in their judgment the management structure of the NNSA. I agreed with them their suggestions would improve the structure. But I have to tell you, none of those changes really would have prevented the problem that we had.

Mr. BARTON. My question is, do you support the legislation that Mr. Dingell and I have introduced?

Secretary BODMAN. I have not asked for any legislation.

Mr. BARTON. That is a no. Can we make it a maybe or a yes if we work with you?

Secretary BODMAN. Sure. I mean, I would be happy to work with you but I just would tell you that the challenges before us relate to the culture that exists in Los Alamos, in my judgment, and that is where I am putting my time and effort and my focus, but of course I am happy to work with you and the chairman on that.

The CHAIRMAN. The time of the gentleman has expired. The chair observes that his questions are very important. We have had a splendid succession of scandals down there at Los Alamos and somebody has to clean it up and there is no sign that the current system is working and we have got to get it in the hands of somebody like you who I think will try to do something about it.

Secretary BODMAN. I am attempting to do something as we speak, sir.

The CHAIRMAN. The time of the gentleman has expired. The distinguished gentleman from Virginia, Mr. Boucher, is recognized for 5 minutes.

Mr. BOUCHER. Thank you very much, Mr. Chairman, and Mr. Secretary, thank you for your participation here this morning. I want to focus for a few moments on the very important question of carbon sequestration and state of the art and what we are seeking to learn and when we are going to learn it. DOE now has seven regional partnerships that are focused on carbon sequestration, and your budget request for fiscal year 2008 asks for $79 million in order to begin four large-scale field tests. I am told these field tests would be of about 1 million tons per year per project of sequestered carbon. Could you describe the goals of your partnership and also what you hope to learn through these field tests, and can you give us a sense of when you think carbon sequestration technology could

be sufficiently reliable for deployment and for something we can actually begin to rely upon as we structure legislation that in fact might require the capture and sequestration of carbon?

Secretary BODMAN. First, I think there are seven partnerships.

Mr. BOUCHER. You have seven, and you are proposing four large-scale field tests.

Secretary BODMAN. Well, I think there are going to be seven large-scale field tests. That is what the money is intended to do and it is about $10 million per year per partnership, and the goal is to determine what kind of geological formations are receptive to the carbon dioxide. Once you put it down there, does it stay there, in its simplest form, so we are going to have to do enough monitoring and work in order to do a material balance and measure what is there. Your G2 is quite good, sir, in terms of the size and scale and scope. We have been working on this for the past 3 or 4 years, first doing paper studies. We are now embarking on programs that will put this effort into real practice to deal with the physics of it, if you will, and I would think we would start to have a sense of this over the next 4 or 5 years. I mean, it is going to take a period of time in order to be sure that once you put the carbon dioxide down there, that it stays there, that it accomplishes that which you had anticipated when you started.

In addition to this, we also have the so-called FutureGen project which also involves sequestration and seeks to convert most of the energy that is in the coal into a stream of hydrogen and then simultaneously sequestering the carbon dioxide. So we will also learn from that. That is supposed to start up about 5 years from now. So I think 5 years is sort of my sense of it.

Mr. BOUCHER. And at the end of 5 years, we should have some sense of the reliability of sequestration?

Secretary BODMAN. Yes, sir, I believe so.

Mr. BOUCHER. OK. Let me focus briefly on the loan guarantee program for alternative transportation fuels. There is a little bit of frustration that loan guarantees have not been issued to date. This program is authorized in EPACT 2005. Some of the companies that want to apply have expressed an interest in self-funding the Government's risk in issuing the loan guarantee which would be a way in the absence of appropriations that would fund that risk to get a loan guarantee issued, and I am told that self funding is a rather common practice with regard to loan guarantees in other program areas historically. I know that you have asked for language that would be in appropriations bill that would authorize the self-funding for this. Assuming that you have that language provided, how long do you think it will be before you can put out a request for proposals, a solicitation for projects and actually begin to issue the loan guarantees?

Secretary BODMAN. Let me say for the record that we have been attempting to implement the Energy Policy Act of 2005, the title that contains the provision of the loan guarantees. That has been of great interest to a variety of Members of Congress as well as members of my Department. During fiscal year 2006, about a year ago, we asked for a reprogramming of $1 million in order to get sufficient funding so that we can start the office, we could hire some people and get it going. That request was denied by the Ap-

propriations Committee of this House, and it was a bipartisan denial, so I want to point that out. It was a matter that is sort of frankly still—I then was before the Senate yesterday. I know it is a matter of some concern here. I was criticized yesterday. I expected to be criticized more today for my failure in this regard.

Mr. BOUCHER. Well, please understand, I am not criticizing, I am just asking for information, but let us assume that you get this—— how soon could you actually begin the solicitation process?

Ms. DEGETTE [presiding]. The gentleman's time has expired.

Secretary BODMAN. Well, first, as I understand it, the rule—we will be required to issue and get approved a rule that under which we operate. We will only be permitted to move forward. We had attempted and had requested that we would deal under guidelines which we would have been started already had we been funded and permitted to go. It is going to take 6 months, I think at least, to get the rule done. That is how long it takes, and if we were to successfully complete the solicitation and program a year from now, we would be doing well in my judgment.

Mr. BOUCHER. Thank you, Mr. Secretary.

Ms. DEGETTE. The chair recognizes the gentleman from Michigan, Mr. Upton, for 5 minutes.

Mr. UPTON. Thank you, Madam Chair, and again, Mr. Secretary, we welcome your presence here and in the future as well. As you know, I have got two nuclear plants, facilities in my district on the shore of Lake Michigan. Both of them have exceeded their capacity in wet storage for their spent nuclear rods, and I have been out to Yucca Mountain a couple different times. It has been a number of years since I was there. I think there was a genuine concern as we looked through the budget request, as I looked through the nuclear trust fund as I indicated in my opening statement, that we will actually expand the nuclear waste trust fund by about $2 billion from the actual 2006 until what is estimated to be in 2008, and of course, that is paid for by us, the ratepayers, as we use that. And as much as we want this facility to open, I can remember when they first started talking about having it open I think in 2010 and then 2012 and 2015 and now, as you indicated in your testimony, about 2017. Yet it seems that the funding for the project is about flat from 2006 to what the request is for 2007. I don't know if you have been there recently. I remember when you were first sworn in, you talked about this was a project that you were going to really grapple with and make sure that the right people were there and making progress and I am just wondering what you might say about what has happened in your tenure since you have been Secretary.

Secretary BODMAN. Well, I have been there and I have visited the facility. I have to tell you, I was quite impressed and encouraged by the state of the geology and the efforts that have gone into characterizing the geology of that site. Ward Sproat has been on the job, again I have lost track of time, but close to a year, I guess. He is coming up on a year. And he is the Assistant Secretary for Radioactive Waste Management and he has done a very good job. He tells me when I talk to him, as recently as yesterday, that the amount of money in the budget is sufficient to move forward and get this license approved, or not approved but get it finalized and

submitted within a period of 18 months, and so that is what our intentions our.

Mr. UPTON. Well, that is great to hear, and I know that this committee and the subcommittee will follow through to make sure that we try to stick with those deadlines. I don't know if you saw yesterday's Wall Street Journal, "Can Bush Reach Our Goal With Proposed Spending Plan". They in essence—and I know you were on the House floor for the President's State of the Union address.

Secretary BODMAN. Yes, sir.

Mr. UPTON. You saw the fervor and the passion in support of alternative fuels when the President mentioned that in his speech. This story goes on to say that analysts suggest that increasing production of corn-based ethanol would result only in enough fuel to meet half of the President's alternative fuel usage goal for 2017. It talks about a number of budget numbers. It does go up but I would say that probably not e significant amount to try and make sure that at some point we can follow through, as your spokesman said, that we need to be more reliant on farmers of the Midwest than on oil sheiks of the Mideast, and I thought that was a great statement. But where is the beef to make sure that we can get this done?

Secretary BODMAN. First of all, the statement of half refers to about 15, let us say 17 billion gallons that could come from corn and the production of virtually all ethanol that is used today in this country comes from corn, and——

Mr. UPTON. Well, we can do it from sugar, right? Brazil has proved that they can do it from sugarcane.

Secretary BODMAN. Sugar is the best alternative. We have very expensive sugar in our country for a variety of reasons, sir. Going back to the corn, the goal is to have corn-based ethanol that could produce about 15 billion gallons, 15, 16, 17 billion gallons. That is the half. In order to get to the President's goal, we need cellulosic base which is the production of ethanol from materials that are ways of much cheaper feedstocks—switchgrass, sawdust, woodchips, that sort of thing. And we have a program to do that and we are working on it. The President has asked in this budget for $180 million to increase the commitment to that endeavor at our renewable energy laboratory out in Colorado and I am encouraged by that. I was apprehensive when I heard the President say the words that he said because we are the ones that have t deliver on that. I would tell you that I felt better the next day after I visited the DuPont Company with the President. The Energy Department has a relationship with the DuPont Company for the last 3 or 4 years developing a so-called biorefinery. They told me during the visit that they felt they would have an industrially attractive process in the next couple of years, so I felt good about that. And if could just say one additional thing. I am sorry for this. I started out life as a venture capitalist in Boston and this is the first time in the 43 years that I have been in and around the venture capital business that we have seen the private venture capital community putting big money, billions of dollars, every year into renewable energy including cellulosic ethanol and that also increases my optimism.

Mr. UPTON. Thank you.

Ms. DEGETTE. The chair recognizes the gentleman from Massachusetts, Mr. Markey, for 5 minutes.

Mr. MARKEY. Welcome, fellow Bostonian.

Secretary BODMAN. Thank you, sir.

Mr. MARKEY. Mr. Secretary, does President Bush support a mandatory cap and trade system to control emissions of carbon dioxide and other greenhouse gases?

Secretary BODMAN. No, sir.

Mr. MARKEY. No. Does the President believe that climate change is a serious problem given the U.N. scientific panel's conclusions that were released last week?

Secretary BODMAN. Yes, sir.

Mr. MARKEY. Is the President aware that the United States contributes 25 percent of the world's total of greenhouse gases, far more than any other nation in the world?

Secretary BODMAN. Yes, sir.

Mr. MARKEY. Is there any reason to believe that the President is going to take the world leadership on this issue if he will not support mandatory controls on the emissions of greenhouses gases into our environment, not just our, meaning the United States, but the global environment?

Secretary BODMAN. Yes, sir.

Mr. MARKEY. And what evidence would we have to indicate that?

Secretary BODMAN. There are a number of things that are in this budget that is before you that relate to this. One is the requirement that 15 percent of the gasoline that is now, or is anticipated to be used 10 years from now, be a renewable or alternative energy. Second, we have had a program in place for some time to reduce the intensity of emissions of greenhouse gases by 18 percent by the year 2012. We are ahead of target in order to accomplish that. We are ahead of virtually every country that has been a signatory to the Kyoto Agreement, and so the mere commitment to a regulatory regime does not accomplish that which you wish to accomplish.

Mr. MARKEY. Let me just stop you there, Secretary. As you know, that 15 percent number includes coal to liquid which actually results in more $CO^2$, so I dispute the numbers that the administration uses. Let me go to some specific big items here. Would President Bush support mandating a fleet-wide improvement in car and SUV efficiency in the law so that we can be certain that the President's promise is actually carried out?

Secretary BODMAN. We are happy to work with you on that subject.

Mr. MARKEY. So a mandate is possible? The Bush administration——

Secretary BODMAN. We are happy to work with you on that subject and work with Congress on matters related to that which the President proposed was to give the Department of Transportation—as you know, that is where the legal authority resides in order to set CAFE standards which is I think the question that you are asking, and we would have requested that the same pattern be put in place for automobiles that has existed for SUVs——

Mr. MARKEY. May I say, Mr. Secretary, the big problem we are going to have is that the people of the United States don't trust the

Department of Transportation anymore, that we need to have a mandate that they actually apply. We can determine what the level is. I think we can negotiate on that. Four percent per year, 3 percent, 5 percent, we can discuss that. But we can't discuss whether or not it is optional. That is where the Department of Transportation has let down the country.

Secretary BODMAN. That is my view, just so that it is clear.

Mr. MARKEY. On appliance efficiency standards, the Bush administration has had an abysmal record in putting new regulations on the folks to guarantee that appliances are more efficient so we don't have to build as many coal and natural gas plants to generate the electricity for them. Would the President support allowing the States to step in and set appliance standards if the Department of Energy is more than 3 years late in issuing a new, revised standard?

Secretary BODMAN. I read during the days of my confirmation hearings an article on the abysmal record that has existed, not just in the Bush administration but I also say, sir, the Clinton administration before it.

Mr. MARKEY. Would you support after 3 years letting the States do it——

Secretary BODMAN. I would be happy to talk to you about any subject related to this matter. I will tell you that we have an agreement with the court that we have been sued as you are I am sure aware and we have also had review that was required by——

Mr. MARKEY. You should not be sued, Mr. Secretary for doing your job.

Secretary BODMAN. We have been sued. It is not a matter of being sued or not a matter of whether we should be. We have been. We have an agreement with the court. We have an agreement I believe with this Congress to get back on track by the year 2011 and we are fully focused on doing that.

Ms. DEGETTE. The gentleman's time has expired. The chair recognizes the gentle lady from Wyoming, Mrs. Cubin, for 6 minutes.

Mrs. CUBIN. Thank you, Madam Chairman, and welcome, Mr. Secretary. Thank you for being here today. I wanted to follow up on the loan guarantee questions that Representative Boucher was asking and make sure that the information that I have or at least the understanding that I have is correct. All right. So the Energy Policy Act authorized $2 billion in loan guarantees and there has already been solicitation on those $2 billion but no awards have been made. Is that the correct status of that?

Secretary BODMAN. No, ma'am. I mean, I would be happy to give you the facts if you would like the facts.

Mrs. CUBIN. I would.

Secretary BODMAN. The Energy Policy Act did not stipulate any particular amount. That was an agreement between this Department and OMB related to the 2007 budget submittal and that is what we put into the 2007 budget submittal. That is where the $2 billion limit came from. The second part of what you said related to what, ma'am? My brain has gone dead.

Mrs. CUBIN. That there has already been solicitation on that $2 billion.

Secretary BODMAN. Oh. There was not solicitation. It was a pre-solicitation. It was an expression of interest because we knew full well that we didn't have the people in place because we were turned down on the reprogramming, that we didn't have the people to evaluate it. So we had expressions of interest from over 100 companies that totaled some tens of billions of dollars of requests that were made available.

Mrs. CUBIN. OK. Then in the CR for fiscal year 2007, $4 billion was authorized and——

Secretary BODMAN. That is apparently so.

Mrs. CUBIN. OK. And then the DOE request for fiscal year 2008 is $9 billion.

Secretary BODMAN. That is correct.

Mrs. CUBIN. OK. So now, I am talking about the rulemaking that you were discussing.

Secretary BODMAN. Yes.

Mrs. CUBIN. It is my belief that there needs to be a rulemaking before any solicitation can be made or before the process can go forward for the $4 billion in the CR and for the $9 billion request, but there doesn't necessarily have to be a rulemaking before the $2 billion can be awarded. Do you agree with that?

Secretary BODMAN. No, that is contrary to what I have been told by our general counsel but I will be happy to review that with him.

Mrs. CUBIN. Thank you. That is my understanding, but we will just wait for the review.

Secretary BODMAN. My colleague just told me that at least our understanding is that I was correct, that even with the $2 billion, according to the 2007 CR language, that we would have to have a rulemaking.

Mrs. CUBIN. However, that 2007 CR is subsequent to the $2 billion so it seems to me there is room there where maybe it wouldn't be, but we will follow through on that.

Secretary BODMAN. Thank you.

Mrs. CUBIN. Another understanding that I had is the regulation requirement in the CR applies only to the new $4 billion solicitation authority, not the existing $2 billion, so we will work together on that.

Secretary BODMAN. We will be happy to work with you, ma'am, on that.

Mrs. CUBIN. And one issue that I heard a great deal of concern about is the administrative change that the DOE has made regarding the interest range charged to the PMAs on the Federal power investment. I know you would agree with me that PMAs are not Government corporations nor Government entities. Is that right?

Secretary BODMAN. I am an engineer, not a lawyer, so I don't know the answer to that question.

Mrs. CUBIN. Well, trust me on this one. I know I am right on that.

Secretary BODMAN. I accept your answer.

Mrs. CUBIN. Yes, the PMAs are not Government entities and so I wonder if you can explain to me the justification in revising your historic long-term yield rates to the agency rates that are charged to Government corporations. In other words, the rates to the PMAs

haven't been tied to the Government corporation rates, and this wasn't done by Congress, it was done by an agency.

Secretary BODMAN. The justification is the one that you have given, namely that there is sufficient privilege that goes with operating a PMA that is in effect a monopoly in a given region or has very strong market presence in a given region, and therefore there is either the formal or informal financing that the rates for financing are similar to Government-owned corporations or Government-sponsored corporations, GSCs, and therefore having interest rates that are similar to other Government types of corporations makes sense, and it is strictly that.

Mrs. CUBIN. Just one statement. I don't think that is historically the way the interest rates have been dealt with on the PMAs.

Secretary BODMAN. I am sure that is correct.

Mrs. CUBIN. And so there is a lot of complaints about that and maybe we can discuss that too. Thank you, Madam Chair.

Secretary BODMAN. I would be happy to.

Ms. DEGETTE. Thank you. The chair recognizes now the gentleman from Michigan, Mr. Stupak, for 5 minutes.

Mr. STUPAK. I thank the chairwoman. Mr. Secretary, over the last 7 years, the Subcommittee on Oversight and Investigation has held a dozen hearings about security concerns at Los Alamos. You have a number of ongoing reviews related to DOE and the security at Los Alamos which are due at the end of February. I would like your commitment to come before the subcommittee in early March to discuss those reports. Can I have your commitment that you will appear in early March before the O & I subcommittee to discuss these reports?

Secretary BODMAN. I don't want to commit on the terms of a schedule. I will be happy to provide you with the information and——

Mr. STUPAK. Well, we were already told that you would appear. That is why I am just trying to get this nailed down.

Secretary BODMAN. The fact that you were told that I would appear is fine. If my colleagues said that I would appear, then I will appear, but what I don't want to do is to appear at a time that where I have not had sufficient opportunity to make a judgment on what is in those reports and I don't know what my own schedule is going to be late in February, early in March and when I will have the opportunity to do that and so I——

Mr. STUPAK. All right. Well, when you are getting prepared, would you please be prepared to discuss how the Department plans to improve the process of granting high-level security clearance at labs, if you would, please, sir?

Secretary BODMAN. That is certainly one of the questions that is on the plate, yes, sir.

Mr. STUPAK. Thank you. Now, Mr. Secretary, on January 23, same day of the State of the Union speech, you announced and the President also announced in the State of the Union that he would double the size of the Strategic Petroleum Reserve by 2027. You announced that the U.S. would start buying 100,000 barrels of crude oil a day starting this spring to accomplish this goal. The same day the price of a barrel of crude oil for March rose $2.46 on the New York Mercantile Exchange. This was the largest 1-day in-

crease in 16 months. Should we expect for the next 20 years that crude oil prices will be t$2.50 a barrel more than it normally would be because the administration is expanding the SPR, and is the Federal Government achieving its goal of reducing gas prices if the Federal Government is actually driving the prices higher?

Secretary BODMAN. No, and then yes.

Mr. MARKEY. OK. Well, should your announcement that the Federal Government will purchase 100,000 barrels of crude oil a day be enough to cause such an increase?

Secretary BODMAN. No.

Mr. MARKEY. OK. Well, so far we got no, yes, no. Let me ask you this. Has the Department of Energy done any research on the effect that these market swings have on the price of crude oil, gasoline and natural price?

Secretary BODMAN. Yes.

Mr. MARKEY. OK. I got a no, yes, no, yes. We are still going.

Secretary BODMAN. Could I amplify that?

Mr. MARKEY. Sure.

Secretary BODMAN. We announced that we would be working with initially 50,000 barrels a day of acquisition. This country uses, as has been suggested, 20 million barrels a day. The Energy Information Agency within the Department of Energy studied this matter because I was asked about it a year ago when I was in here.

Mr. MARKEY. Right. I asked you those questions. My next question——

Secretary BODMAN. The effect of this on the price of oil is trivial.

Mr. MARKEY. Trivial?

Secretary BODMAN. Trivial, because the day after I announced, the price backed off a dollar and a half. You have markets that are in the hands of human beings. Human beings are essentially emotional souls and so people bought on the grounds that there was a story apparently going on that indicated that this would drive up the price of oil. This is a 20-year program if we are successful in accomplishing it, and we will be starting the acquisition——

Mr. MARKEY. I understand I have got a minute left. Let me go. If it is $2.46 and you said the next day it dropped $1.50, it makes my point that there are these wild swings in the marketplace.

Secretary BODMAN. There are substantial swings in the marketplace.

Mr. MARKEY. And I asked you about it last time, so I take it based on your answer you would agree with the legislation I reintroduced, the Pump Act, to prevent unfair manipulation of prices, H.R. 594, to prevent these wild swings in the market because the experts tell us if we would pass the Pump Act, we could lower the cost of the price of crude oil by $20 a barrel by having the Commodity Futures Trading Commission oversee these trades. So therefore I take it from your answer, you agree with the purpose and intent behind the Pump Act?

Secretary BODMAN. Sir, I don't agree with the Act from what I know of it.

Mr. MARKEY. Why would you disagree with it?

Secretary BODMAN. I haven't studied the Act.

Mr. MARKEY. Does the Department plan on taking a position on the Pump Act? It didn't last year. Will you this year?

Secretary BODMAN. I don't know, but I would be happy to study it.

Mr. MARKEY. Would you and get back with us, especially since you have indicated in your answer there are these wild swings in the market——

Secretary BODMAN. There are substantial swings in the market. The reason there are substantial swings in the market is that the suppliers are having a terrible time keeping up with the demand and therefore the price is set in the marketplace and it is like a share of stock.

Mr. MARKEY. But I don't think that demand would drop a buck fifty in one day or go up $2.46 the next day based on a pronouncement from the Secretary of Energy.

Secretary BODMAN. Of course it didn't.

Mr. MARKEY. It shouldn't, but it did.

Secretary BODMAN. Of course it shouldn't and it did but it doesn't mean that the system is broken.

Mr. MARKEY. What it means is speculation based on fear leads to greed and therefore——

Secretary BODMAN. I guess there are varying views on that subject, sir.

Mr. MARKEY. We look forward to your response to the Pump Act. Thank you, and I thank the gentlewoman.

Ms. DEGETTE. The chair now recognizes Mr. Shimkus of Illinois for 6 minutes.

Mr. SHIMKUS. Thank you, Madam Chairman. Mr. Secretary, thanks for being here. A couple things. I just want to just for clarification, in the discussion with Joe Barton—of course, he has great interest in FutureGen and so do I. Your response to him was, we will make the decision on location. Didn't you really mean the alliance will make the decision?

Secretary BODMAN. Yes.

Mr. SHIMKUS. And that is important.

Secretary BODMAN. That is right. I think that is right, yes.

Mr. SHIMKUS. Because we are going to be highly competitive in this field. We think science— and when you have all these different partners in the FutureGen project, they are going to look at all these variables and I would say that is kind of an arm's length transaction from the political environment that——

Secretary BODMAN. I think your criticism is valid.

Mr. SHIMKUS. No, it is just clarification.

Secretary BODMAN. Well, no, I think it is a correction.

Mr. SHIMKUS. And I think some of my colleagues will want to get more knowledgeable because the alliance aspect of this project is I think very important. The issue too, and I gave you kind of a heads-up, the coal-to-liquid debate. When the President made the State of the Union, he talked about the alternative fuels and had the increase in alternatives, he to my disappointment didn't mention coal-to-liquid but we were informed that the word "alternative" meant also the option of coal-to-liquid. Is that your understanding as to the alternative debate?

Secretary BODMAN. That is my understanding.

Mr. SHIMKUS. That is great. Rick Boucher and I worked last year and dropped a bill and we will do so pretty soon again and we

would just like for your input and advice and counsel on what we are now terming price collar based on a loan application where the industry puts in and above a certain ceiling price and they can recovery from the treasury based upon input if it goes below a floor. We think it is going to score well, in fact, we are hoping a budget neutral score because there is going to be money in early over a certain ceiling price, and we would ask for your help and assistance and due diligence on that. We are very, very excited about it and we are seeing great fluctuations right now in the market and of course based upon your business background, the higher the risk, the higher the fluctuation, the cost of capital goes higher and makes it more it more difficult to do, and this eases that because we want to get that first plant on the ground and of course you know that the first plant will make it opportunistic for other plants to be developed. That also addresses our concerns on carbon dioxide issues but that is the whole sequestration issue that FutureGen is premised on and all these other research projects——

Secretary BODMAN. And the seven partnerships that exist throughout the country.

Mr. SHIMKUS. And I encourage that. We know we can geologically store natural gas. We have done it for decades now in parts of the country. We don't think carbon dioxide is going to be a problem but I know we have to jump through the hoops. I want to now just briefly turn to the renewable aspect of E–85 and I am very pleased with where we are at. I applaud the administration. I am on my third flex-fuel vehicle now. It is a Jeep Commander. I have got 20 retail locations in my—I mention this all the time, and on average, 20 cents cheaper a gallon. So in parts of the country it is there and it is an opportunity for choice. There is a problem on infrastructure that you are aware of and this—Denny Hastert is recovering and he asked me to also address this concern. What are you doing to ensure that the infrastructure is in place to provide to meet the demand for E–85, and it is really the certification issue and United Laboratories aspect and we have pumps and facilities that aren't being certified, they can't be used, and can you address that on the infrastructure side?

Secretary BODMAN. Yes, there are two questions at least on the infrastructure. One is getting sufficient flex-fuel vehicles manufactured, and that is something that the President talked with the CEOs of at least the American manufacturers.

Mr. SHIMKUS. Well, I have had a Ford Taurus, I have had a Ford Explorer and now I have a Jeep Commander. They are out there for the public to buy and many people don't even know they have them.

Secretary BODMAN. I understand that, and we are attempting to get to be better known and to have the companies take a role in that regard. The second part are the pumps and we are working directly with the, I think it is Underwriters Laboratory to certify the type of pump that needs to be installed so that we can get the kind of protection that the insurance companies demand and so I am optimistic that that will get done this year.

Mr. SHIMKUS. And I hope as we move on the global warming debate, of course my friend Mr. Markey already raised some points, but he is also the number one opponent to nuclear power, and the

issue is, if global warming and the carbon debate is critical to meet our electricity generation demand and needs, the nuclear portfolio has to stay strong and it has to expand.

Secretary BODMAN. I agree with that very strongly.

Mr. SHIMKUS. And so we just want to help make that case, especially from the emissions side, and with that, I appreciate your time. Thank you, Madam Chairman. I yield back.

Ms. DEGETTE. Thank you. I now yield 6 minutes to the gentleman from Texas, Mr. Green.

Mr. GREEN. Thank you, Madam Chairman. Welcome, Mr. Secretary.

Secretary BODMAN. Nice to see you, Mr. Green.

Mr. GREEN. Good to see you. I know we ran into each other a couple weeks ago coming back from Houston. Mr. Secretary, what can you update—I know Mrs. Cubin actually asked an earlier question but I would like an update on the energy loan guarantee program that was funded in the CR that the House passed. Assuming the CR signed by the President, does the Department of Energy have a time frame for some of the decisions to be made? And also, obviously from our area, I have mountains of petroleum coke sitting there that we would like to see some of those things, the loan guarantees the same as we would do for goal, and is there a time frame we can look for for a decision?

Secretary BODMAN. Well, as I mentioned before, that my understanding is that we will require a rule to be promulgated. Six months would be record time. We already are working on the rule, anticipating that we get the CR that we think we are going to get although I never want to count— as I have learned in dealing with Congress, I never count my chickens until they are there. And so if we were to get that rule done in 6 months, if we were to have grants made a year from now, we would be doing well.

Mr. GREEN. Well, I know we will be visiting for our committee on a bipartisan basis. We have an interest because that is again some alternatives we could utilize. A few of the potential technologies such as FutureGen, zero emission coal-powered plants, or the widespread adoption of biofuels has the capability to change the game in terms of $CO^2$ emissions. If we are facing a high probability of increasing global warming and a major regulatory regime, it could be far-ranging restrictions over many decades. Should we be engaging in more crash-course projects to make sure we get results as fast? It sure would be better if we could solve our global warming with technology instead of regulation, especially since regulation won't be global whereas the problem is global. Could you just address that?

Secretary BODMAN. Well, I agree with you. We are doing everything we know how to do in order to accomplish an improvement in the fuel mix that we have available to us, and we are happy to get advice and counsel from members of this committee or others if there are other things we ought to be doing.

Mr. GREEN. I think all of us would love to see the problem solved technologically instead of regulation.

Secretary BODMAN. I agree with that, sir.

Mr. GREEN. And that goes across national lines. Let me jump ahead on one. We hear that cellulosic ethanol is more efficient than

corn-based ethanol and more compatible with our existing fuel supply infrastructure. Is that generally the opinion of the Department?

Secretary BODMAN. Cellulosic ethanol would be produced over a broader range of States. That is the advantage that it has and so the goal here would be to have a series of regionally based industries based on different sorts of cellulose that could be grown within a State or a group of States in a region and so that is why it is—and also, cellulosic ethanol has a substantial advantage in terms of its contribution to global warming problem, namely that it has a more substantial reduction in carbon dioxide emissions than corn does.

Mr. GREEN. Well, and I know the interest of I think a lot of Members and we are hearing it the last few weeks, that it would be important for our renewable fuels policy to have a feedstock neutral so we don't pit our cattle raisers against our corn growers, and I would hope the Department will pursue that objective when we deal with those policies. My last question is, I would also like to raise the issue of carbon sequestration in oil and gas production. When exploration companies drill for oil and natural gas, they often inject carbon dioxide gas into the underground rock formations to create pressure to put that product out. The fact that they reinject the $CO^2$ underground has two benefits. One, the gas does not contribute to our global warming, and it creates a demand for others to capture that $CO^2$. For those reasons, I want to make sure the Department of Energy works with this particular industry due to their expertise with the DOE dealing with carbon sequestration, and can the Department give us a commitment that we would like to see that expanded, particularly when we are dealing with oil and gas that we could sequestrate that $CO^2$?

Secretary BODMAN. Yes, sir.

Mr. GREEN. Thank you. Thank you, Madam Chairman. I actually yield back a minute.

Ms. DEGETTE. Thank you very much, Mr. Green. We all commend you, and I am now pleased to recognize Mr. Stearns from Florida for 5 minutes.

Mr. STEARNS. Thank you, Madam Chairwoman. Mr. Secretary, I am just pulling up here on my little Web here. It says northern Michigan is experiencing among the top-10 coldest starts ever in the last 100 years. When you read this kind of information, does it confirm or not confirm global warming?

Secretary BODMAN. I don't think it is relevant, sir.

Mr. STEARNS. So when I read different parts of the country are experiencing the coldest they have ever had in 100 years, that has no relevance on the debate?

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

Mr. STEARNS. And why is that?

Secretary BODMAN. The existence of global warming as an issue comes from observation, namely the fact that the temperature has increased on average for the world coupled with an analysis of carbon dioxide percentage in the atmosphere, that also reaching a record, coupled with an analysis done in part using Department of Energy computers of various models that have been organized and developed and worked on by scientists who work for some 12 or 13 different agencies within this Government.

Mr. STEARNS. Well, we have had a hearing on this and there was some debate upon the statistical information that was used to come up with these figures. Are you aware of any of that analysis that there is some controversy on it?

Secretary BODMAN. Yes, I am aware of it.

Mr. STEARNS. So based upon that, some people would indicate that it is still not scientifically 100 percent proven that the figures that you quoted, the increased warming is accurate. Would that be a fair statement?

Secretary BODMAN. Would it be a fair statement to say that some people say that? I don't happen to subscribe to that, as I suggested to you, but it would be a fair statement that some people believe that. I don't.

Mr. STEARNS. Let me start out by saying there is some talk about focusing on solar energy and biomass, ethanol. At the University of Florida in my congressional district, they are developed new, innovative technologies for the conversion of renewable biomass into fuel. We have 15 million acres of forestland and 10 million acres of farmland, so Florida has a tremendous potential to become a national leader and producer of bioenergy. And so my question is, the President has laid out his initiatives for biomass and alternative fuels in his State of the Union recently. How will these goals be met and how much is DOE proposing to spend on them and are there other agencies that are involved?

Secretary BODMAN. We are spending what to me is a lot of money in the 2008 budget that is before you, $180 million roughly to be spent on cellulosic ethanol. We are proposing to spend significant amounts of money on wind, on solar energy, on electric transmission, all of which will contribute to the delivery of renewable energy to large markets. So I am satisfied that we are spending a good deal of money in our Department that is coupled with a similar kind of funding stream, even higher, I believe, for the Agriculture Department for their funding of work in exactly the area that you mentioned, developing cellulosic-based ethanol.

Mr. STEARNS. I would to commend, as others have, the administration's proposal to increase the Strategic Petroleum Reserve and the Advanced Energy Initiative as part of the administration's overall strategy for reducing Americans' dependence. The President has called for this expansion .5 billion barrels to 1.5 billion barrels and DOD has budgeted $168 million in fiscal year 2008 to begin that process. If you could, please describe the long-term plan for the Strategic Petroleum Reserve if you can just briefly.

Secretary BODMAN. First of all, the current reserve consists of five different locations, two in Texas, two in Louisiana. The total amount of oil in the reserve today is 690 million barrels. We have enough funds to start purchasing oil at a rate of about 50,000 barrels per day, which is a very small fraction of what we use in this country. It is like 2 percent. And so we will start that in the next couple of months through a Presidential order to spend—we have $500 million or so that we have in the kitty that we would set aside from the sale previously of oil after Katrina and Rita that we expect to get about a year from now. Late this year we expect to have completed the purchase and to be back in a position where we have 727 million barrels, which is the current capacity. The En-

ergy Policy Act indicates that we are to expand the size of the SPR to 1 billion barrels. We have a plan in place to do that that involves the selection of a fifth site in Richton, Mississippi. We expect that to take the next 5 years to get that built, to get two of the four facilities expanded and then to add additional oil to it, and it will take 5, 6 years before we accomplish that. The next half a billion barrels will come after a thorough analysis and will take until 2027 to accomplish.

Mr. STEARNS. Thank you.

Ms. DEGETTE. The chair now yields herself 6 minutes. Mr. Secretary, let me add my thanks for you coming today. I want to talk about a couple of issues. The first one is renewable energy. Both the President in his State of the Union speech and you today in your testimony have made it clear that this administration has a goal of transitioning to renewable energy. Is that correct?

Secretary BODMAN. We have a goal of having renewable energy as a far greater component of our motor fuels in our country, yes, ma'am.

Ms. DEGETTE. Thank you. And in order to achieve that goal, it would seem to me that we would have to have a national commitment to scientific research. Is that correct? We need more research into renewable energy in order to increase that use?

Secretary BODMAN. That is fair, yes.

Ms. DEGETTE. I am really concerned therefore about the funding cuts that the administration has proposed to the National Renewable Energy Laboratory, which is in my home State of Colorado, and which is the preeminent research facility on renewable energy and energy efficiency in the world. According to the budget, it looks to me like the 2007 requested amount was $187.5 million and this year the Department is requesting a cut. They are requesting $181.5 million. Is that correct?

Secretary BODMAN. This is for work on cellulosic ethanol?

Ms. DEGETTE. This is for the National Renewable Energy Laboratory in Golden, Colorado.

Secretary BODMAN. No, I know that, but we are requesting about $180 million for just renewable energy or just cellulosic ethanol, much of that, most of that to be spent at NREL.

Ms. DEGETTE. Well, according to the DOE 2008 budget, the NREL budget request for 2008, the entire NREL budget request is $181,508,000 versus last year where the request was roughly $187.5 million, right?

Secretary BODMAN. That is accurate, yes.

Ms. DEGETTE. So my question is, if we really are going to have a commitment to renewable energy, how can we justify a cut to the NREL budget?

Secretary BODMAN. The NREL budget has a number of different initiatives. The budget for cellulosic ethanol, which is the component that you started asking me about, is going to increase by a substantial amount over that which we requested last year.

Ms. DEGETTE. And is that research being done at NREL?

Secretary BODMAN. A lot of it is, yes.

Ms. DEGETTE. So what the administration is proposing then, if I hear you correctly, is a big increase for cellulosic ethanol and

then you would have to drastically cut over types of renewable research, correct?

Secretary BODMAN. I don't have the breakout of what work is being done at NREL, and I would be happy to take the question for the record and I would be happy to give you an answer.

I don't have a working number on it. I would also tell you that I think that as we work our way through this, it is highly unlikely that we will end up with NREL being reduced.

Ms. DEGETTE. Well, I think you are right about that and I think the reason is because just as in the continuing resolution where Congress, the Democratic Congress put more money, I think Congress will increase these funds. But what I am concerned about is, if the administration really has a commitment to renewables. It would seem that in your budget for NREL, you would be asking for an overall increase and not just really robbing Peter to pay Paul, one type of renewable versus another.

Secretary BODMAN. I understand, and I don't have an answer to that, but I would be happy to get it for you.

Ms. DEGETTE. The other thing I will let you know, and this is something else you should explore, Mr. Secretary, last year the DOE tried to lay off 32 workers. In fact, they did lay off 32 workers at NREL and then the President was scheduled to go there the next week for a press conference at NREL and so they hurriedly hired all those 32 workers back before he could come and announce his renewable initiative. So the other question I have is, does the Department intend this year to lay off scientists at NREL? And if you can look at that, because I think that is really a direction going backward and I don't think that the administration should say it is committed to research into renewable energy and then be laying off scientists, and I think you would probably agree with that.

Secretary BODMAN. I do agree, and I don't expect that that would be the case.

Ms. DEGETTE. OK. I just want to ask you one more thing, because this Los Alamos situation. Mr. Barton and I went down to Los Alamos a couple of years ago and did a site visit where we had a complete change. Everyone had been fired and we had a complete change of administration down there. This was after the last security breach and they were instituting new technologies and new personnel techniques and so on, and I commend you for making a quick and decisive change in the leadership down there but I guess I would say that we need to work together to make sure that we get some continuity and some high standards because it can't be helpful towards our goal of securing that facility having these continual personnel changes.

Secretary BODMAN. I agree with that, and I will be happy to work with this committee as well as other committees in Congress to accomplish that.

Ms. DEGETTE. Thank you so much, Mr. Secretary. I am now pleased to recognize Mr. Whitfield from Kentucky for 5 minutes.

Mr. WHITFIELD. Thank you, Madam Chairman, and Mr. Secretary, we are delighted that you are with us this morning.

Secretary BODMAN. Thank you, Congressman.

Mr. WHITFIELD. Thank you for the great job that you do in trying to use more nuclear power. We have a 250-year reserve of coal,

more renewables, and we appreciate your effort in helping develop clean coal technology. Mr. Secretary, as you know, USEC is operating the gaseous diffusion plant down in Paducah and it is the only uranium enrichment plant operating in the country today, and the Environmental Management Office in Lexington of course oversees the environmental cleanup, and the Oak Ridge Operations Office has historically managed the lease to make sure that USEC is complying with the terms of that lease, and they have always had a contract and most recent there has been a firm named Hazelwood that provides that service for Oak Ridge operations, and unless I am mistaken, it looks like that in the fiscal year 2008 budget, that money for that purpose has been zeroed out, and we have always had some concern that there may be an effort made to move that responsibility from Oak Ridge operations up to the Environment Management Office in Lexington and merge that responsibility. A lot of us have concern about that and it is certainly possible that I misread the budget but I was wondering if you would make a comment on that or you are aware of that.

Secretary BODMAN. I have no idea, sir. I would be happy to find out for you and give you an answer.

Mr. WHITFIELD. Well, I would really appreciate that, and I know in the past you all have been very good in getting back with a lot of questions.

Secretary BODMAN. I will be happy to respond. I am unfamiliar with that turn of events.

Mr. WHITFIELD. And then of course there has always been money in the budget under safeguard and security at the USEC plant and I have been told that the funding for that has been zeroed out for fiscal year 2008 as well, and if your staff——

Secretary BODMAN. I would find that very surprising but again, I don't know that and I would be happy to respond to that question.

Mr. WHITFIELD. Well, I appreciate that very much and we look forward to talking to your staff more about it as we go along.

Secretary BODMAN. Thank you, sir, very much. I appreciate it.

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

Ms. DEGETTE. The chair now recognizes the gentlelady from California for 6 minutes.

Mrs. CAPPS. Thank you, Madam Chair, and again, Mr. Secretary, as I said in the beginning, welcome to the committee, and thank you for answering the questions and the ones I am about to pose. As you know, the Department of Energy has been plagued for years and through more than one administration by long delays in issuing appliance efficiency standards. So far you seem to be meeting the aggressive schedule that you set last year for getting the required standards out and I am pleased that you have asked for additional funds, and we may get back to that topic, but however, I am very concerned that recent proposed standards have been weak and are not using the tremendous potential of this program to address our energy needs. For example, the proposed home furnace standard is well below the norm that already exists in much of the North. The only real savings from the furnace standard would be if northern States were allowed to enact a higher stand-

ard, and a similar situation exists in California. The State was prepared to put in place a new water efficiency standard for residential washing machines but just days before that rule was to take effect on January 1, DOE denied California's request to set the standard. Californians could have saved a lot of money, water and vast amounts of energy but we needed a Federal waiver to set the new water standards, and why was it denied? Among the reasons for this denial was the absurd, I believe, suggestion, and I am going to put this in quotes, "that California failed to prove it has unusual and compelling water interests." We discussed where I live, Mr. Secretary, in a coastal desert. Much of California treats water like gold, and actually the delivery of water in California is the single largest user of electricity. So we do have unusual and compelling water interests and we have had these for decades. In this case, instead of allowing a State to proactively and voluntarily look inside its own jurisdiction for a way to save energy, the Federal Government actually stopped us from doing so, and I would like to have you comment on DOE's action, and also keeping in mind the request by the northern States for home heating standards.

Secretary BODMAN. Well, first of all, I did ask about this at the time that this was being done and I to be honest have forgotten the rule. I will be happy to get it back to you. But there was a concern not that there were a lack of interest in water, I never heard that before, but that there was a lack of legal standing that the State had for some reason. There were other reasons offered in that letter, I am sure, and I don't have it there. I would be happy to take a look at it or be happy to look it up. We have it. So it was done on a, at least what I would term to be a technicality and not on the merits of the case. I would also tell you that part of the reason that this Department has struggled, and this has been a bipartisan struggle, it has been back since the 1990's that we have had problems of setting proper standards of efficiency. When you set things in our country, you mentioned furnaces in the North. Well, furnaces in the North are different than furnaces in the South and therefore one is required to set a standard and those standards are a problem trying to deal across the board. So we are constantly meeting with interest groups, both on the manufacturing side and on the energy efficiency side, if you will, and we are attempting to broker substantial interface and improvement by working together with those two groups working together and it is that effort that is yielding some significant results. We certainly didn't achieve results for the State of California, and I will try to respond more fully on that.

Mrs. CAPPS. I would appreciate an answer in writing on that and——

Secretary BODMAN. I would be happy to do it.

Mrs. CAPPS. And it is also kind of ironic and difficult that the response didn't come until 3 days before the end of the time and that puts us again at 5 years until this can happen. I want to lead into the question. I want to just beg that we do want Federal standards whenever possible but you are right, we do have regional differences, and that is what the waiver process should be about, in my opinion, to allow States to push ahead and sometimes the in-

dustries then will follow suit and then we get the desired result of energy efficiency and that is the goal.

Secretary BODMAN. I understand.

Mrs. CAPPS. But back to the point that I did mention in the beginning when I commended you have gotten some increase in funds and you set out an aggressive schedule, but I wonder if you could tell us how you have analyzed the staffing and funding requirements to carry through the standards planned because there seems still to be a bottleneck and some of the largest possible savings, for example, some standards on furnaces and refrigerators are not included in the plan and thus won't be considered for another 5 years. This seems to be a difficulty that should be surmounted, particularly with extra funds that you could for staffing.

Secretary BODMAN. Yes, I think that we will certainly encourage that. I just will tell you that I don't deal with the details of how this happens but I do deal with the details that we have enough resources and we have enough people and I have been satisfied with what I have been told about our ability to comply with the 2011 date and getting back on a schedule that we have committed to and so that is 4 years out, and we are committed to that.

Mrs. CAPPS. Maybe when you respond to the one question on the washing machines, I could also hear how you plan then to implement along the path that you have to meet the standards.

Secretary BODMAN. I would be happy to.

Mrs. CAPPS. Thank you.

Secretary BODMAN. Thank you.

Ms. DEGETTE. Mr. Secretary, if I can inquire, we have, it looks like, about six Members left to question and of course others may come in, we don't know. Would you like to have a 15-minute break now or would you just prefer to go straight through?

Secretary BODMAN. I would rather get it done if we can get it done.

Ms. DEGETTE. Thank you. That would be my preference as well. The chair now recognizes Mr. Walden of Oregon for 5 minutes.

Mr. WALDEN. Thank you very much, Madam Chair. I appreciate it. Mr. Secretary, it is good to see you again. Thank you for the work you are doing for the country. I want to thank you especially for sending Dale Gardner out to the Oregon Institute of Technology's renewable energy conference. We had invited you, and I know your schedule is very complicated and we do appreciate sending Dale out there. There are some issues though that I would like to raise with you. Of course, I would be remiss coming from the Northwest if I didn't raise some level of objection to the administration's decisions regarding the Bonneville Power Administration and the plan to capture the net secondary revenues above $500 million a year. We do appreciate the way this proposal came out as opposed to the one last year which was going to set it in motion immediately and rather this proposal at least allows and calls for facilitation among various parties in the Northwest. So while we appreciate that, we still obviously have concerns about the impact this potentially could have on rates in the Northwest, and I want to express that to you as I have before.

Secretary BODMAN. It is dutifully understood. I had the occasion to testify before the Senate committee yesterday and there were a

number of Senators from northwestern States who offered even if I say, even more vigorous tones——

Mr. WALDEN. I am not surprised.

Secretary BODMAN. I just would tell you what I told them, and that is, in my judgment, there is a prudence about that that makes sense to me just in terms of managing the business and trying to put some money aside to save it for the future and you automatically pass everything through to your customers. I wouldn't do that if I were running a company and that is what we tried to encourage the management there to do, to think through, and that I think is a reasonable and prudent thing to do.

Mr. WALDEN. And the notion that if we prepay debt which we are on a schedule to pay now, agreed to by the Government, that if we get into a problem we might be able to draw back on that.

Secretary BODMAN. That is the goal.

Mr. WALDEN. And that is a better proposal than just taking the dollars off the top and never getting any——

Secretary BODMAN. No, and that is the goal.

Mr. WALDEN. Because you know how wide the swings can be in terms of——

Secretary BODMAN. I understand.

Mr. WALDEN. Unless you are better at predicting the weather than anybody on television and tell us what the snow pack will be and the runoff will be.

Secretary BODMAN. I can tell you, sir, that I am not.

Mr. WALDEN. I appreciate that. I also want to raise some concerns about the funding specifically for the geothermal research that again has been zeroed out in this budget and I have objected to this before. As fate would have it, not only do we have this wonderful renewable resource center at Oregon Institute of Technology, one of their great focuses is on geothermal energy production and how you take what is sort of scientifically known and then convert it into something that is practical, and there is some really exciting opportunities in that field. Many parts of the country, and indeed many parts of my district where existing known geothermal resources are, there are some new technologies they tell me could result in much lower temperature production of power among other things, and I know the administration has been committed to advancing the idea of renewables and new technologies and research, so I hope you would take another look at that. I know we will in the Congress again but it is I think an essential element.

Secretary BODMAN. It would be of interest to me if the reason that it has been zeroed out is that the general thesis is that the research has been done. This is a matter now of applying the technology that has already been developed and getting it into the marketplace. Queried what role should the Government play, that should be something the private sector does. But if there are areas for research, and there are different voices on this subject, I would like to know about it personally.

Mr. WALDEN. I would be happy to get that——

Secretary BODMAN. If you would do that for me, I would appreciate it.

Mr. WALDEN. It sort of reminds me of that old story, I think it was out of the patent office, that somebody at the turn of the cen-

tury said we really didn't need one because everything that had what could be invented has been invented and I am finding even in the area of warm water in the ground, they are finding new technologies, new ways to——

Secretary BODMAN. Well, this whole area of what role the Government should play and how much we should do, it is very difficult to discontinue anything. Once you start down a path, it is hard to discontinue anything once you get going because people like it and they——

Mr. WALDEN. I understand.

Secretary BODMAN. Members of your committee like it. I am sure I will hear more about it later.

Mr. WALDEN. And I appreciate that position, so we will continue to——

Secretary BODMAN. We tried to be reasonable and tried to make a judgment on where to put the money.

Mr. WALDEN. And we will help you even be more reasonable. How is that?

Secretary BODMAN. All right.

Mr. WALDEN. Thank you, Madam Chair.

Ms. DEGETTE. The chair recognizes the gentleman from Pennsylvania, Mr. Doyle, for 5 minutes.

Mr. DOYLE. Thank you. Mr. Secretary, welcome and thank you for spending all this time that Members can ask questions. Mr. Secretary, I can't think of anything more important to the future of our country than lessening and hopefully somebody eliminating the need to go outside our borders for oil and for energy. It seems to me that we would not be in Iraq today had we had energy independence in the country and there is nothing more important. I have voted for every energy bill that has come out of this committee since I have been a member of this committee. I have advocated for a diverse portfolio of nuclear energy. I just can't tell you how frustrating it is to see that this is not being given the priority our country needs to give this. I can't think of anything more important, and every year we hear talk when the budget comes out, we have lost more money in Iraq that we can't even account for than what we spend on making energy independence a priority, and it is very frustrating. I was happy to hear you tell Mr. Shimkus that coal-to-liquids was part of your definition of alternative energy sources, and I have a question for you, sir. My State, Pennsylvania, was about to become the first State in the Nation to site a plant that would convert waste coal into zero-sulfur diesel fuel and home heating oil. It was an $800 million project. The Department of Energy in 2003 had committed a $100 million zero-interest loan as part of this project. Site preparation for this project started just this past fall and construction was to start this spring of 2007. In the President's budget, this $100 million zero-interest loan was rescinded. I wonder, Mr. Secretary, if you could speak to me about this rescission and why just as we were about to put online a facility that would have converted 1.4 million tons of waste into 60 millions gallons of fuel, that we have pulled the plug on this?

Secretary BODMAN. That particular project, there had been an inability on the part of the company and my Department to reach agreement on the terms of whatever the loan was, and as I under-

stand it, we have been working at this for 4 years. This grant was originally made some 4 years ago.

Mr. DOYLE. Two thousand and three. That is correct.

Secretary BODMAN. And our folks were of the view that the project was not going to be real, I am just telling you that that was the report that I was given. It was not going to be accomplished and that they did not have a financial plan that held together and therefore for that reason, that the financial viability of this program was called into question and that was the reason for the rescission.

Mr. DOYLE. Mr. Secretary, I would ask that you revisit this with your staff. We have information quite to the contrary. Governor Rendell and the State of Pennsylvania, which is also contributing considerable funds to this project, has come out publicly and asked the President to revisit this rescission in the budget. All indications that are given to us is that this project is ready to start construction in a matter of months, so it is hard for me to understand how we could have such different information on where this project is, and I would ask that you at the very least revisit this with your staff, and I would be interested if you could forward to my office all of these reasons for the rescission so that we can address them and make sure that at least we all agree that the facts are the same.

Secretary BODMAN. I would be happy to do that, sir.

Mr. DOYLE. Thank you. I appreciate that. Mr. Secretary, in his State of the Union address, the President said we must continue changing the way America generates electric power by even greater use of clean coal technology. The concern I have is every year we hear good words but actions don't seem to follow the words, and while funneling money into FutureGen, a project that I think has minimum support of industry and is way behind where it should be, given the President's goal, we are continuing to cut money from clean coal programs in order to fund this other initiative at the NETL, which is just outside my district and in Congressman Murphy's district, they are seeing their core coal research program being cut by $28 million while their oil and gas programs which were getting $60 million have been eliminated. At the same time, $149 million of clean coal technology deferred funding which was to be used for the next clean coal power initiative solicitation has been sent back to Treasury. The President has also stated that these technologies will help us be better stewards of the environment and help us to confront the challenges of global climate change but we are terminating a $23 million program, innovations for existing plants, that is entirely concerned with the development of environmental technologies necessary for the existing fleet of coal-powered generation. We are talking about over 1,500 power plants that provide 52 percent of the Nation's electricity. And finally, the oil and natural gas research programs that are being zeroed out provide funding to 5,000 small, independent oil and gas companies that employ an average of less than 20 people. Can you explain to me how gutting all these programs helps further the President's goals that he states his State of the Union address?

Secretary BODMAN. One, oil and gas, oil at $60-plus a barrel, natural gas at 780 MCF. In the President's view, and I subscribe to

it, that there is plenty of incentive for industry to develop whatever technology needs to be developed in order to accomplish that. Secondly, with clean coal, I just simply have different numbers. At least my number of the clean coal part of what goes on in fossil energy is $385 million, up from $281 million in last year's request, up from $314 million the year before.

Mr. DOYLE. I will check our numbers and maybe you can send me yours.

Secretary BODMAN. I would be happy to.

Ms. DEGETTE. The chair recognizes Mr. Gonzalez from Texas for 5 minutes.

Mr. GONZALEZ. Thank you very much, Madam Chair. Welcome, Mr. Secretary. My apologies, a lot of us have other things we——

Secretary BODMAN. No, I understand entirely. Not a problem.

Mr. GONZALEZ. But thank you for your patience and also I want to tell you that I am quite impressed with the breadth of knowledge, specific questions to specific projects, so either you keep up with everything or you have one heck of a staff that——

Secretary BODMAN. Well, I know the latter is true and I would like to think the former is also accurate.

Mr. GONZALEZ. It is usually a combination. Now, it has been refreshing in the State of the Union address by the President, your own remarks and what is coming out of the Department of Energy, there seems to be a real emphasis now on alternatives, renewables, biofuels, everything that we have been talking about for a number of years but I never really believed that the administration embraced. Would you say that that portion of this part of the portfolio is essential and fundamental to an energy policy when we are talking about the renewables, the alternatives, the efficiencies, which all equate to conservation?

Secretary BODMAN. Yes.

Mr. GONZALEZ. So and the reason I say that, and you know where I am probably coming, will you say that we have finally reached the point where conservation is a sufficient basis for a sound, comprehensive energy policy? And to be fair with you, you know where I am going, to Vice President Cheney's remark in 2001 where he said conservation may be a sign of personal virtue but it is not a sufficient basis for a sound, comprehensive energy policy. What I am sensing is that we have reached that point I would have to ask the Vice President, that it is not just a personal virtue anymore.

Secretary BODMAN. I think it is fair to say that conservation is—I don't know that I would call it the basis of a comprehensive strategy or policy but it certainly is an important component of such an animal, so I would agree with that.

Mr. GONZALEZ. Now, regarding ethanol, I am from Texas, and you know how that works because you are very knowledgeable, but the oil industry people made some comments recently on ethanol and this is somebody in the San Antonio area. He said because gasoline demand is growing 1.5 percent to 1.7 percent a year, and I am paraphrasing here—biofuels reaches 35 billion gallons, that is not enough to keep up.

Secretary BODMAN. I am sure it is. The goal that the 35 million gallons would accomplish would be that 20 percent of the then-

amount of gasoline that we use would be alternative fuels 10 years from now and so when you say—I guess I would respectfully disagree with whoever said that.

Mr. GONZALEZ. I wanted your opinion on it. Despite the growing use—in other words, you are projecting out the next few years the increased demand for standardized, good old gasoline is the way we do it?

Secretary BODMAN. Yes.

Mr. GONZALEZ. And taking that into consideration, 35 billion still——

Secretary BODMAN. The 35 million is 15 percent and then we accomplish the other 5 percent by the reduction of gasoline usage by increasing CAFE standards for automobiles as well as trucks and light trucks and SUVs.

Mr. GONZALEZ. And I know we are looking at hydrogen and others, how we fuel our vehicles, but ethanol is probably where we are putting a big portion of our faith and investment. Wouldn't you say that?

Secretary BODMAN. Yes, sir, I would agree with that.

Mr. GONZALEZ. And part of it is so that we are not dependent on foreign sources of energy, fuel, oil?

Secretary BODMAN. That is correct.

Mr. GONZALEZ. All right. And so in today's paper we are now discussing agreements maybe with Brazil regarding ethanol, and what is your view or your position regarding the degree that imported ethanol will play in meeting some of our benchmarks?

Secretary BODMAN. First of all, I would not advocate changing either the tariff or the subside that exists. One lasts until 2009, the other I think until 2010 or 2011, and as we start to approach that, I would think that that was something that the administration and Congress would work together to try to examine. There are a number of different proposals and ideas that I have heard and we would like to share our views with yours and see if we can't come up with a proposal that makes sense.

Mr. GONZALEZ. And if you will indulge me, I have a few seconds but I wanted to touch on, just give you a heads-up, we have a municipally owned utility company and we would like to make greater investment in nuclear power, but there are no incentives when it comes to municipal-owned utilities and representatives from CPS Energy Company will be meeting with general counsel today from DOE and I really would appreciate it if you could explore what those incentives might be there that we may institute. Again, I want to thank you for your patience, your time and your service.

Secretary BODMAN. Thank you. I appreciate that. Is it your view that because of the municipally owned, that it is not eligible for the——

Mr. GONZALEZ. That is my understanding, that under the law at that time, that is what is being represented to me, and I really would appreciate it if you would explore that.

Secretary BODMAN. That is a new one on me, and I will try to take a look at it.

Mr. GONZALEZ. Thank you.

Ms. DEGETTE. The chair recognizes the gentleman from Washington State, Mr. Inslee, for 5 minutes.

Mr. INSLEE. Thank you, Mr. Secretary. Many of us think the best way to categorize the global warming challenge is a planetary emergency, that it rises to that level, and that really to approach it, we need to have an approach similar to John F. Kennedy's effort to go to the moon, and it takes that type of scope of national endeavor, and I have to say looking at the budget, I think we fall well short of getting to the moon. I don't think this plan will get it to Cleveland when it comes to solving $CO^2$, and I wanted to show you a couple of charts while I talk about that, if we could get those up on the screen. First one shows R&D budgets going back to the late 1970's, 1978 on the left show our budgets. These are constant dollars, and you see over time they have shrunk down to 2005 we are down here at less than a third of what we were spending during the late years of the Carter administration investing in energy research, and you are not the only administration who has been short in that regard. But I think this demonstrates how little we are investing in a planetary emergency relative to at least one other occasion where we were serious about energy, the late 1970's, where we actually increased our full efficiency of our cars by 60 percent.

If we look at the next slide, if you can look it, it compares our declining investment in research R&D to other areas. On the left it shows our energy investments in the little left-hand chart. We had a spike during the Carter administration. It has been flat since then. In the middle chart we show our R&D in health, and you see it has thankfully gone up dramatically by a factor of eight or nine during that same period. And on the right of the chart, the right graph shows the increase in R&D for military R&D during that same time period. What you will see is, in military R&D we have this enormous increase in R&D but on another major threat to America with global warming we have less than a third, now just over a third with your budget, what we were spending in the late 1970's, and I point this out because I think that our country is going to have to come to grips with the scope of the challenge that global warming faces and I just have to express that I think our efforts are going to have to be much higher magnitude. I am going to ask you a question about that in a moment.

Second, I ask you about the schizophrenia in the budget that I had seen, and we are spending, you just told us, about $40 million a year on clean coal technology on CGCC plants that might be able to sequester $CO^2$ some day, and I think that would be great. I support that research. But the problem is under your policies, no one will ever build such a plant because under the President's policies, he doesn't want to do anything to regulate carbon dioxide. He wants to make it free for companies to put unlimited amounts of carbon dioxide, which they do today, for free, at no cost, no regulation. They can put any gigatons of $CO^2$ they want. As a result of that, even if the taxpayers develop this technology, no one is going to ever deploy it because under the Bush plan, he wants to let you just keep putting carbon dioxide with no restrictions whatsoever into the atmosphere, and I think that is a schizophrenic policy that dooms us to failure to actually these new technologies deployed.

In the last slide I want to show you, I would like your comment. If we can have the last slide up there? This shows the wheel-to-wheel global warming gas emissions per gallon for various sources

of fuel. First on the left is crude oil. The third bar I want to show you is coal to liquids, and it is in two parts. It is $CO^2$ emissions on the light shade. The blue on this chart up here shows the tailpipe $CO^2$ emissions and the last part is the production $CO^2$ emissions, and what it shows is that the coal-to-liquids technology which as I understand your budget and the President's speech would allow that to be considered a, quote, alternative fuel that would get the benefits of your budget actually without sequestration has more $CO^2$ emissions than crude oil and with $CO^2$ sequestration or processing has essentially equivalent $CO^2$, and this chart actually shows a little bit more $CO^2$ emissions than actually burning oil, so we are going, if not backwards, we don't make any progress on $CO^2$ emissions. And you, as I understand, consider this eligible for the alternative fuels credit. So my take on the budget is a wholesale failure to really face this enormous challenge that we have, one that I am very optimistic we are going to succeed in eventually because we have got the know-how to do it and we are going to grow markets, we are going to sell our technology to China when we finally get this to be commercialized. So I would just ask your comment on those observations, if you would?

Secretary BODMAN. Sure. First, in terms of the coal-to-liquids, I would hope that part of this would be ways of sequestering the carbon dioxide that comes out of this process and so the production part of this, I agree with you that in order to deal with coal-to-liquids, you have to account for the fact that you are producing a lot of carbon dioxide in the production process, and one has to develop technology to sequester it, so this would be dependent, in my judgment, on that effort to sequester carbon dioxide that we are already working on. And as to the differences between the tailpipe, those emissions are, at least it strikes me, are relatively inconsequential differences from oil.

Mr. INSLEE. Just one closing comment. We are not going to be able to solve this problem unless we put taxpayer money into $CO^2$ reduction, and spending millions of dollars on something that does not reduce $CO^2$ emissions for a new fuel is not going to get us to where we need to go, and that is my concern, and my time has expired.

Ms. DEGETTE. The gentleman's time has expired. The chair recognizes Mr. Matheson from Utah for 5 minutes.

Mr. MATHESON. Thank you, Madam Chair, and Mr. Secretary, I don't expect you have detailed knowledge of the specific project in Moab, Utah, but I am going to ask you about it anyway and we may need a written response after we are done here.

Secretary BODMAN. Sure.

Mr. MATHESON. We talk about this a lot, and historically back in 2000, Congress authorized moving the pile. There were some discussions about wanting to keep the pile in place in 2005. Going through the record, a decision was issued to move the pile. And then you and I had a discussion in a Science Committee hearing about where the budget proposed last year showed what might have been perceived as a smaller amount going into moving this pile than what we would have needed to complete this in a reasonable time frame, and at the time we had a discussion about, OK, you don't spend the same every year. There is a ramping up, there

is associated timeline, and I would ask, if there was a sense of what the timeline might be on a year-by-year basis to pay for this project and I want to reiterate that request because I haven't gotten an answer to that one yet about how we project doing this over time in terms of dollars, how you budget it out over the years to move this pile. The reason that I am particularly concerned about this is that ultimately we have issued what is called a request for task proposal. DOE issued that in just November of last year.

Secretary BODMAN. Right.

Mr. MATHESON. It should have been good news but what concerned me about it is, it talks about only cleaning up two and a half million tons of a 16-million-ton pile, and I am curious why a decision was made to break this apart and do a little bit of the pile when the record decision said we are going to move the whole pile anyway, and it just reflects a concern on my part about is there a commitment to move this pile? Is there a rationale behind breaking this into two different contracts, and are we going to be talking about this, or will this be talked about long after you and I are both gone from being in this position?

Secretary BODMAN. I hope you are still here, sir. I am likely to only be here for the next—in fact, for sure I will only be here for the next 2 years and I will then have completed 8 years and I think I will have completed my duty to my country. With respect to this, this is something that the Department rightly or wrongly thinks that we did the right thing. We made the judgment and we wrote the ROD and we were the ones that made a decision that this was the right thing to do is to move the entire pile.

Mr. MATHESON. I think that is the right decision.

Secretary BODMAN. Well, I would assume that you do so that and we are committed to that. As to why the contract was broken in half, I don't know. We will get you an answer.

Mr. MATHESON. I would love to get a follow-up on that and also the timing——

Secretary BODMAN. This is expected to take some 20 years to accomplish.

Mr. MATHESON. Well, that is news because we used to be talking about it taking seven to 10 years and so——

Secretary BODMAN. Well, I am just telling you, at least the information I have, that 2028 is the schedule. It may be that this is a matter that we have a lot of demands on our environmental management operation. We have a lot of demands on the budget, as you I am sure are aware, and my guess is that that is the reason that this was set up that way.

Mr. MATHESON. Well, if you would be able to follow up with just explaining why we broke it into two and also what you think the projected schedule is, I would appreciate it.

Switching issues, do you know how much the Department of Energy is going to spend on Divine Strake and other similar tests in this fiscal year and the next fiscal year and which appropriations acts those tests are funded from, from DOE, since you are the manager of the Nevada test site?

Secretary BODMAN. Well, it would be in the NNSA budget. That would be coming out of that. That is where the test sites funding comes from.

Mr. MATHESON. If you could give me follow-up, and I don't expect you to know this number but how much DOE plans on spending on this test compared to what DOD is going to spend. I would appreciate it if you would follow up on that question.

Secretary BODMAN. Sure. I would be happy to do that.

Mr. MATHESON. The last question I wanted to throw at you was about the reliable replacement warhead program. This budget provides about $89 million for it. The Navy is asking for an additional $30 million. The Jason report, as I mentioned in my opening statement, on aging plutonium pits just came out and it seems to undercut one of the primary rationales for moving ahead with creating these new nuclear warheads.

Secretary BODMAN. Right.

Mr. MATHESON. So I am wondering, and since we haven't got a design actually selected yet, I am wondering why we are now between your budget and the Navy looking at throwing $120 million out of this year when we don't have a design yet.

Secretary BODMAN. This is for the design. This is a major undertaking, and I believe that it is well justified. It is really unrelated to the decision—not the decision but to the information we received on plutonium aging that was encouraging because I was concerned that we would have to deal with a very inherently unstable material. The weapons that we have in the stockpile today were designed at a time when our Nation was continuing to replace weapons on a regular basis. Every 4 or 5 years we got a new design, a new weapon and therefore the design was done without adequate tolerance for something that would have to last for many years, that it was designed to only last 3 or 4 years and then it so we had much more narrow tolerances in the overall approach to the design.

So the goal of the reliable replacement warhead is to enable us to design something that would have much greater tolerances built into it, and where the Secretary of Energy and the Secretary of Defense each spring in the month of March—next month I have to write a letter to the President as a part of my job certifying that the weapons that, God forbid, if we need to use a weapon in the stockpile that it will work. That gets harder to write every year. This initiative is meant to deal with that question and to produce a smaller number of replacement warheads to replace the stockpile that we have.

Mr. MATHESON. I look forward to continuing the dialog. We will submit written questions as well. Thanks, Madam Chair.

Ms. DEGETTE. The chair recognizes Mr. Murphy from Pennsylvania for 5 minutes.

Mr. MURPHY. Thank you, Madam Chair. Mr. Secretary, I want to go back to a point here about the National Energy Technology Lab in my district which you visited and you know what fine work they do there.

Secretary BODMAN. Yes, sir.

Mr. MURPHY. And I know you were talking about more money that goes into FutureGen and other areas like that. What my understanding of the bill is that in the request for fossil energy research and development in 2008, it is $566 million as compared with 2007 which was $592, a reduction of $25 million. There is also

some significant changes to fossil energy's coal and power and oil and gas programs, which I think are concealed on the appropriation. Specifically from the coal and power program, the existing clean coal technology account of $257 million is eliminated by transfer of $108 to the administration's FutureGen initiative and cancellation of the remaining $149 million. Also the $73 million that has been allocated to the clean coal power initiative to conduct a solicitation for fiscal year 2007, this amount together with the prior year funding of what is likely to be available in 2008 is going to be insufficient to make awards under the solicitation for 2008.

I see this is having been chipping away and pushing at the one hand. We really understand we need coal, we have abundant supplies of it. We don't have to fund both sides of the war on terror when it comes to coal, but it is one of those things that I wish we had the kind of energy, if you will pardon the pun, behind that of looking at that much like we had under the launch of the moon initiatives we had back in the 1960's. And so I am very concerned about that. I wonder if you could elaborate any further, or if you don't have that information available today, I would appreciate if you could get back to me with other information about that, how we can continue to invest strongly in clean coal technology and the National Energy Technology Labs.

Secretary BODMAN. I will be happy to get back to you on that. I just would tell you it is the same answer I gave to Mr. Doyle a minute ago that my figures show that we have significant increases in the clean coal research area. I don't have it broken out by laboratory so I don't know what the funding would be for a particular laboratory, but if that is what your question is, I will be happy to get an answer for you.

Mr. MURPHY. Well, I would appreciate that because for that laboratory too, I know they do a lot of valuable work and have a long legacy in terms of experience there, and although I understand that sometimes the parties shift but when we have such an asset, I hate to see funding cut where someone else starts up and every couple years these sorts of things change, so please do that. I think they are great people doing a lot of great work. The second thing, you talked a little bit about nuclear. As you know, Westinghouse Nuclear is headquartered in my district.

Secretary BODMAN. Right.

Mr. MURPHY. We are enjoying a lot of job growth there and obviously clean energy, and I am wondering with this, if other provisions in the budget are going to look at—if there are other things you see in there that are going to encourage the construction of more nuclear power plants and now we have the Yucca Mountain issue and I know they are looking at about 20 power plants in America, but do you see there is other things within that budget, other initiatives that the Department of Energy will be looking at to even push for more nuclear energy?

Secretary BODMAN. Absolutely. First of all, we are working on Yucca Mountain, and a parallel and longer term effort, we are working on GNEP, which is the Global Nuclear Energy Partnership, which has to do with the treatment of, the recycling of or reprocessing of spent fuel. It is a way of getting at the spent fuel problem. We still need Yucca Mountain but the goal is to reprocess

that fuel, extract more of the energy out of it that we have today and still produce a waste that is much less toxic than the waste that exists today from our standard utility plants. So that effort is underway. And then the Energy Policy Act that you all passed, I like to say it has every kind of incentive in there that one could think of. It has got an insurance program at the back end. It has got front-end loan guarantee provisions in the law. It has got production credits in the law. It has got all kinds of things that are there, and we are doing our level best to encourage the development of more nuclear power in America.

Mr. MURPHY. I appreciate that. I know that we have a lot of other issues too and I wish I had more time. I wanted to ask about where we stand with some of the renewables like wind and solar, et cetera. I don't think if you could answer quickly, what level do you think we can get up to in the next 5 to 10 years with regard to using some of those renewables?

Secretary BODMAN. Wind energy, there is concern about a reduction in the amount of effort we are doing on wind. Wind has demonstrated that it is close to being economically viable and that the goal, or the effort now has to be, how do we get the energy that is produced by the wind devices to the marketplace and so we need to worry more about transmission and we need to worry more about the new technology for long-distance superconductivity, and all of that is going on in another office, another part of the Department. So we are enthused about that. The President believes it can be 20 percent of our total electricity, and that is a big number. It is about 1 percent today.

Mr. MURPHY. Well, I appreciate that, Madam Chair.

Ms. DEGETTE. Thank you.

Mr. MURPHY. I hope that one of the things the Department of Energy also can get us information on what we need to be doing with those transmission lines, but I thank the——

Ms. DEGETTE. Without objection. The chair now recognizes Mr. Barrow from Georgia for 6 minutes.

Mr. BARROW. Thank you, Madam Chair, and thank you for being here, Mr. Secretary. If I am not the last person to talk with you today, I am getting close to the last, one of the guys you have been waiting for today. I appreciate your patience in being with us today. I want to follow up on some of the concerns that Mr. Boucher raised about getting this loan guarantee program but not just along the lines that are of course of importance to him, clean coal technology, but also to try and fund research and development of cellulosic ethanol. I am going to put in a shameless plug for my part of the country. I am old county commissioner and we would have occasion from time to time to talk about what the highest and best use for something is to try and decide how to zone some property.

Secretary BODMAN. Sure.

Mr. BARROW. And I think we need to apply that kind of thinking toward ethanol production in this country because while I certainly want to support corn to gas as much as possible, something tells me that the highest and best use of corn isn't necessarily putting gas in our tanks. I don't think America is going to want to be taking beef off the table, to be able to put gas in the tanks. But I can

tell you in my part of the country, we produce more cellulosic waste doing the things we want to do and do better than they do anyplace else in the world. We got pine waste and products that are a great raw material. So I want to encourage you as your Department moves forward in this area to look at cellulosic ethanol research and development.

And back to Mr. Boucher's concerns about the loan guarantee program. If I heard you correct, I think I heard you say that the Department would be doing well if we are cutting any kind of loans or backing any loans by the end of the next year.

Secretary BODMAN. A year from now, I said, and I was just giving an honest——

Mr. BARROW. I just wanted to make sure I had—because you didn't say—you didn't give us a hard deadline. You said you would be doing well to be doing that, and it sounds like you would be lucky to be doing that.

Secretary BODMAN. It takes 6 months to write a rule. We have to write a rule, and you have to send out a notice of intent to write a rule and then have to dod a draft.

Mr. BARROW. Well, we have got utilities and we got co-ops, we got enterprises in this country that have never defaulted on a loan before that are ready to go in this area. They need the full faith and credit that you have offered in this program that is not going anywhere, so whatever we can do to help you help us, please let us know. We have got folks who need to go on this who can make a lot of progress in this area if only we could free up that credit that doesn't seem to go anywhere.

Secretary BODMAN. I would just remind you, sir, that it is limited. I mean, remember, this is all kinds of industry are going to be interested and I am concerned that the appetite——

Mr. BARROW. Which is why I prefaced my remarks with trying to you all to try to think about this in terms of what has the longest term, most sustainable bang for our buck in renewable energy development, and we have a lot of potential there that I want you all to be aware of. Touching on the subject of the renewable fuel mandates and the program to try and get 35 billion gallons a year of renewable fuels by 2017, do you all have any idea of how many flex-fuel vehicles we are going to need in order to be able to match that supply? Because while we are straining and busting a gut really to try and do incentives through credit, through research and development, through direct grants, every way conceivable to make sure that we have that kind of supply of renewable energy, what are we doing to make sure that the demand is going to match the supply, to make sure we have a sufficient supply so people can use the stuff.

Secretary BODMAN. The problem we have is that we have 220 million vehicles roughly in America today so even as you sell 17 million a year, that takes you a long time to modify the averages, if you will. So Detroit has committed, I believe, and I am hesitant to give you a different answer if it turns out to be true but to produce something like half of its vehicles in shape as a part of a flex-fuel program, I think it is 4 years from now. It takes a number of years in order to set up and operate and get in place the production activities so they have to plan well in advance and so——

Mr. BARROW. The point is, it is part of you all's plan to make sure that the supply of vehicles can meet the demand for this.

Secretary BODMAN. We are not ignorant of it. We are working on it but it is a legitimate question as to we would like to do it frankly without mandates, without saying you will have to produce so many vehicles with such-and-such standard equipment and we would like to do it without that. Obviously if it proves that we have to do that, we will do it.

Mr. BARROW. One last thing. The Savannah River, which abuts my district, drains a basis that serves both the Savannah River site and Plant Vogel. Plant Vogel is probably the last commercial nuke power plant in the country, if not the last to be commissioned. It has got two cells with two more units are going to try to be put online. Their unique concern is about the river that serves the surrounding riverside area. The environmental lab for the Savannah River site is an institution long standing. I would like your staff to look into how we can expand its mission and broaden its base of support because it will provide a lot of support that we need in order to do at Vogel what we want to do and to do at SRS what we need to do. So I would like your staff to brief us on that so we can expand their mission.

Secretary BODMAN. We would be happy to do that. As I think about the laboratory, I was supposed to have been there last week and then it was canceled but I think it is next week that I go so I will be down there and get a chance to visit it personally, but they have a lot of expertise in hydrogen because of the efforts of the Savannah River site dealing with tritium.

Mr. BARROW. They are experts on hydrogen and they have developed a lot of groundbreaking work on groundwater and they have been very good at that. They also have an advantage in that it is the safest of all the laboratories that we have run in our whole district. That is something that is high on my list.

Mr. BARROW. Thank you, Mr. Secretary.

Secretary BODMAN. Yes, sir.

Ms. DEGETTE. The chair recognizes the gentleman from New York, Mr. Engel, for 5 minutes.

Mr. ENGEL. Thank you, Madam Chairwoman, and thank you, Mr. Secretary, for staying so long. I am sure it won't be long now. I mentioned in my opening remarks the Drive Act, which I am doing with Congressman Kingston, which is H.R. 607 in this Congress. We dropped it in last year as the Kingston-Engel Bill and we dropped it in this year, given the change in the politics in the House as the Engel-Kingston Bill but the important thing is, is that it is a bipartisan bill and we are trying to get as many people on both sides of the aisle on the bill. I really think that the administration can go a long way in helping us to pass this bill. Everybody is talking about energy independence. The President mentioned it in his State of the Union last year, albeit briefly, and then mentioned it more extensively this year. I spoke to the President after the State of the Union about our bill when he was coming off and last week at the Democratic retreat I spoke with the President about it again and I think that this is something that we really can make a difference in. It is modest but it is something I think that is really doable, and last year frankly some of us went to the White

House to speak with the President and some of his aides. They told both me and Congressman Kingston that there would be follow-up, and there really wasn't. So I am hoping that don't kind of fall into that this year. We believe that our bill would save 2½ million barrels of oil a day by 2015 and 5 million barrels by 2025, which is right in line with what the President said in his State of the Union, and what our bill does, it helps U.S. automakers manufacture more-efficient vehicles and provides the same performance consumers expect, so it is breaks both for the industry and for consumers in terms of encouraging people to buy these cars.

Secretary BODMAN. How does it do it, sir? What does the bill provide?

Mr. ENGEL. Well, the bill provides tax incentives and tax breaks for people who purchase these cars, for the industry to make these cars. It mandates incentives for cellulosic biofuels, creates an alternative fueling infrastructure, funds for installation of alternative-fuel pumps and things like that, and it provides incentives, tax breaks to purchase these things. We don't think it is an end-all and a be-all and obviously we have got to build from there but we think it is a great start, and we think it is a great bipartisan start and it is a modest start and I really think this would be a great thing. Another thing that is done in the bill is we talk about plug-in hybrid vehicles. It incentivizes the rapid commercialization of it, and I am wondering if DOE has formulated plans to do that. Batteries of plug-in vehicles are very expensive, and we want to see if we can bring down the cost of batteries. So I am wondering if you can talk about that, and I was a bit disturbed when I saw that the DOE cut its funding request for vehicle efficiency research by $8 million. That disturbed me a bit. I mean, $8 million isn't a lot of money but it is sort of an indication of what is important and what is not. So I am wondering if you can——

Secretary BODMAN. Everybody has different comparisons they are using with either the year before or 2 years before. My number on vehicle technology is $176 million, up from $166 million, $10 million more than the 2006 request. It is true that it was $182 million in 2006, so depending on what one compares it with, it is up. Battery technology is up some $15 million according to within that, up some $27 million, so we are working to expand our efforts, research efforts with respect to batteries.

Mr. ENGEL. OK. I would like to obviously have more discussions with you and your staff about this. I have one final question, which is a somewhat parochial question. Indian Point nuclear power plant in New York—and by the way, in your opening remarks I listened very carefully. You said that the administration looks at nuclear power as an important component.

Secretary BODMAN. Yes, it is.

Mr. ENGEL. I agree with that, and I never uttered a word about Indian Point until after the September 11 attacks in 2001 when we learned that one of the planes that hit the World Trade Center flew directly over the Indian Point nuclear power plant which is less than a 50 mile radius from Manhattan, and of all the power plants in the country, that is the plant that is the closest to any major metropolitan area, and of course, it is not just any metropolitan area, it is the New York City metropolitan area. So we are con-

cerned and they are up for re-licensing and I am very unhappy with NRC rubberstamping, what I regard as rubberstamping all these things. It may be approved. I know my time is up and I just want to ask you quickly, you mentioned Yucca Mountain in your opening remarks, and what is the plan, since Yucca Mountain, if it is ever built, is so far away and keeps getting pushed back. What happens with the spent fuel at all these plants across the country that really have no real place to go?

Secretary BODMAN. Your question is, what happens if I get Yucca Mountain open?

Mr. ENGEL. Well, I think Yucca Mountain is not going to open for a long time.

Secretary BODMAN. Well, we have it at 10 years out and the status quo would be unless Congress decides something other than that would be the way it is situated the way it is now. Once we get a license, under the Nuclear Waste Policy Act, we are given permission to discuss interim storage but I am precluded from doing interim storage until I get a license. That is just the way is written and so assuming I file and we get a license in a reasonable period of time, you will be talking to a new secretary. I won't be here but the secretary would then be in a position to deal with this matter at that point in time, would deal with interim storage and you start setting this up. I sure wouldn't create 30 different sites the way one of the bills that was around last year suggested. It has to be a smaller number.

Ms. DEGETTE. The gentleman from Arkansas, Mr. Ross, is recognized for 5 minutes.

Mr. ROSS. Thank you, Madam Chair, and Mr. Secretary, thank you for joining us here today. One, let me just say that I am extremely disappointed that the administration is cutting the weatherization assistance program from $242 million in fiscal years 2006 and 2007 to $140 million in fiscal year 2008. The Department of Energy has called it our Nation's "most successful energy efficiency program" and yet we are seeing this type of dramatic cut on America's working families, especially the working poor. It is about priorities, and I think this gives us an idea of the priorities unfortunately of this administration. You did mention in your testimony, sir, that in fiscal year 2008 there is going to be $180 million spent on cellulosic ethanol research. My numbers indicate it is actually $179 million, and you pointed out that that is actually an increase over last year, and you are right, it is. It is a $29 million increase over 2007. These are big numbers, at least where I come from, in Hope, Arkansas.

Secretary BODMAN. I agree with that, sir.

Mr. ROSS. So let me put them in perspective in a way that I would understand them and hopefully a lot of us will get a greater perspective as we talk about priorities. The entire cellulosic ethanol research budget is equal to less than 15 hours of the amount of money we are going to spend in Iraq. We will spend more money in Iraq in the next 15 hours than we are going to spend in fiscal year 2008 on cellulosic ethanol research. I think that more clearly puts into perspective what our priorities really are in investing in alternative renewable fuels. We talk about it a lot. The administration talks about weatherization a lot and yet they cut the weather-

ization funding. They talk about research and development a lot and then they cut—if not cut, certainly do not properly fund cellulosic ethanol research. I am absolutely convinced—and by the way, the $29 million increase over 2007 for cellulosic ethanol research amounts to about 3 hours of the amount of money—we will spend more money in the next 3 hours in Iraq than we are going to spend on the increase. So that is a couple numbers to put that into perspective. The reason I raise that is because I represent 29 counties in Arkansas, about half the State, 21,000 square miles, and in that area, included in that is a number of counties that fall within the delta region, one of the poorest regions in the country. Husbands and wives combined have an annual income of less than $29,000 a year, and I really do believe that as a Nation if we will properly invest in alternative renewable fuels like ethanol and particularly ethanol from cellulosic-based products, we can realize an economic revival in the delta region of our country.

Finally, 2 weeks ago, Mr. Secretary, you said that the U.S. tariff on ethanol imports probably would be lifted to meet President Bush's goal of increasing the use of renewable fuels. I am quoting you, "We are probably going to need to remove the tariffs so we can enforce more," and that was your quote from a roundtable discussion at the World Economic Forum in Switzerland. Based on your testimony today, perhaps you have reversed that position, but my question is this: In order to meet the President's goal of producing 35 billion gallons of renewable and alternative fuel by 2017, it is necessary to maintain and create incentives that are favorable to continue an expanded investment in renewable fuels. However, your recent comments suggesting that the ethanol tariff be discontinued seem contradictory to that goal. Your statement seemed to suggest that this county will be exchanging a dependence on foreign oil for a dependence on foreign renewable fuel. How does trading one source of foreign energy for another reconcile with our goal of energy independence? Further, I am concerned that the administration continues to support tax incentives for oil and gas companies arguing that they are necessary to achieve energy independence but disavow similar treatment to the renewable and alternative fuels that you yourself, sir, stipulate will displace 15 percent of projected gasoline usage by 2017? You suggest that you support a decrease in foreign oil tankers in our ports but an increase of foreign ethanol tankers. Again, sir, how does this trading one source of foreign energy for another meet the goal of energy independence? Thank you.

Secretary BODMAN. One, I will try to answer. You have asked a number of questions. Oil and gas, neither the President nor I support tax incentives for oil and gas companies. I have said that multiple times. That is not something the President advocated. It wasn't in the proposal and it was put in by those who wrote the law, so that is comment one. Comment two, I was quoted as having said what I said. I didn't say that, and what I said was and what I meant was, that this administration is an advocate for us looking at the question of both the subsidy and the tariff closer to the time when they run out so that we can then analyze it and work together to try to come up with something that makes sense. We have had a very strong response on the subsidy side. We have a

lot of ethanol that is being manufactured in this country. One of the questions will be, how much, how far, how fast, and we are also going to get a sense of whether or not we are able to get cellulosic ethanol commercialized. We are expecting that to happen over next couple of years so we are working toward that end and so I have an optimistic view.

I will conclude by saying I am the one that made the judgment on weatherization and I understand that it is painful for some citizens in our country. I am able to do so much with the money I have allocated to me and I made the judgment that I made, and that is why are you looking at the proposal that I made.

Ms. DEGETTE. Last but never, ever least, the chair is pleased to recognize the gentlelady from Oregon, Ms. Hooley.

Ms. HOOLEY. Thank you, and thank you, Mr. Secretary, for your patience and your answers. There are a couple things I want to address, or have you address. One is, I also am from the Northwest and BPA is an important part of our economy. What the President's budget asks to do will increase 11 percent for ratepayers, their energy prices at a time that we just sort of recovered from a downturn in our economy. This would be devastating to our region. This is an agency that has never missed a payment to the Government in 23 years, and in fact has prepaid $1.8 billion without raising in the last 6 years and we need that flexibility, and I know you addressed that when you were talking to Representative Walden, but again, I just want to emphasize our important BPA is to our economy, and having this happen would just be devastating.

Secretary BODMAN. I appreciate your views, ma'am.

Ms. HOOLEY. There are some questions I have. First of all, we have a lot of small businesses that are looking at putting together biodiesel biomass programs. There are clearly some missing pieces, distribution, having in the case of crushing seeds with canola. That is a problem. Do you think it is appropriate that where you have a viable source that is cost-effective and again to get us to that energy independence for the Government to step in and say here are the missing pieces, this is where we are going to help out, provide incentives, provide grants, provide loans?

Secretary BODMAN. That is what we are trying to do. We are trying to do it in a cost-effective way. We are trying to do it by doing research, particularly on cellulosic ethanol, so that we can crack the code, if you will, and see that we develop processes that can be used by regions like Oregon, that have potential of growing cellulose in that region and making use of it, and perhaps you are already are growing it in the region and would make use of it. So we are trying to do the research. We are also trying to work with companies to encourage them to do research through growing efforts with us and we are having some success in that endeavor, so I think there are areas where we are I think having very good programs that hopefully will deal with the question you raised.

Ms. HOOLEY. One of my universities, Oregon State University, has been doing a lot of research on wave energy. Our State is obviously a State that is ripe for wave energy. What do you see a role for that in the future?

Secretary BODMAN. I would be kidding you if I said I knew very much about wave energy. I know that your university is leading

the activity in that area. I do know of all places from Utah there is activity with a professor at the University of Utah that also has an interest in this. I would be happy to put you in touch with our assistant secretary for renewable energy because he deals with this on a—Andy Carther deals with this every day and—not every day but once a week he has got various activities involved in this. So I would be happy to have you deal with him.

Ms. HOOLEY. I would like to have a conversation.

Secretary BODMAN. OK.

Ms. HOOLEY. And then my last question is, the two big issues that are going to be talked about over and over and over again in this Congress is energy independence, making sure that we have our own energy supply in this country, and the other issue is going to be climate change, global warming. I was just in the Science Committee that had a hearing on this. Are you looking at how do those two—as we develop our energy independence, is it also going to be good for climate change and global warming and what we need to do in that area? Are we coordinating these two efforts?

Secretary BODMAN. In most cases, they are very compatible, not in every case as was mentioned on coal-to-liquids. I mean, that is an issue we have to deal with, how to sequester carbon dioxide coming from the coal. But that is what we are doing because we have so much coal and so I think that is worth looking at. But other areas, for example, cellulosic ethanol, 85 percent of the carbon that is emitted from the tailpipe of the car is saved because the plant, the switchgrass or whatever plant grows, grows by absorbing carbon dioxide as part of the photosynthesis process and it is very efficient and very effective in doing that and so only 15 percent of it is lost, 85 percent of it is gained and so you have a big additional advantage in cellulosic ethanol and that is directly in line with the President's proposal.

Ms. HOOLEY. Thank you, Mr. Secretary, for your patience and for being here today.

Secretary BODMAN. Thank you very much.

Ms. DEGETTE. Mr. Secretary, thank you so much for appearing in front of us and answering all of our questions so thoroughly. We look forward to working with you and the rest of the Congress.

Secretary BODMAN. Thank you very much.

Ms. DEGETTE. The hearing is adjourned.

[Whereupon, at 1:20 p.m., the committee was adjourned.]

[Material submitted for inclusion in the record follows:]

**Testimony of**
**Secretary Samuel W. Bodman**
**U.S. Department of Energy**

**Before the**
**Committee on Energy and Commerce**
**U.S. House of Representatives**

**Regarding the**
**FY 2008 Budget Request**

**February 8, 2007**

Chairman Dingell, Ranking Member Barton, and members of the Committee, I am pleased to be with you this morning to present the President's FY 2008 budget proposal for the Department of Energy.

Before I discuss the details of our budget proposal, I would like to briefly mention the President's energy initiatives announced during the State of the Union. As you know, President Bush asked Congress and America's scientists, farmers, industry leaders and entrepreneurs to join him in pursuing the goal of reducing U.S. gasoline usage by 20 percent in the next ten years. We have named this our **"Twenty in Ten"** plan and I urge your support for this ambitious plan. For too long, our nation has been dependent on oil. America's dependence leaves us more vulnerable to hostile regimes, and to terrorists who could cause huge disruptions of oil shipments, raise the price of oil, and do great harm to our economy.

America will reach the President's "Twenty in Ten" goal by increasing the supply of renewable and alternative fuels by setting a mandatory fuels standard to require 35 billion gallons of renewable and alternative fuels in 2017; nearly five times the 2012 target now in law. In 2017, this will displace 15 percent of projected annual gasoline use. We have also proposed to reform and modernize Corporate Average Fuel Economy (CAFE) standards for cars and extending the current light truck rule. In 2017, this will reduce projected annual gasoline use by up to 8.5 billion gallons, a further 5 percent reduction that, in combination with increasing the supply of renewable and alternative fuels, will bring the total reduction in projected annual gasoline use to 20 percent.

This plan will also strengthen America's energy security by stepping up domestic oil production in environmentally sensitive ways, and by doubling the current capacity of the Strategic Petroleum Reserve (SPR) to 1.5 billion barrels by 2027.

Coupled with the **Advanced Energy Initiative (AEI)** and the **American Competitiveness Initiative (ACI)**, which were launched a year ago, these proposals offer a strong plan to strengthen America's energy security, and I encourage members of the Committee to join us in pursuing these proposals.

**HIGHLIGHTS OF THE FY 2008 DEPARTMENT OF ENERGY BUDGET**

The strength and prosperity of America's economy is built on the security of our nation and the reliability of energy sources. Since 2001, the Administration has invested $158 billion through the Department of Energy (DOE) to help drive America's economic growth, provide for our national security, and address the energy challenges that face our nation. The Department of Energy's fiscal year (FY) 2008 budget request of $24.3 billion stays on course to address the growing demand for affordable, clean and reliable energy; preserve our national security; and enable scientific breakthroughs that will have significant impacts on our quality of life and the health of the American people. The FY 2008 budget was developed to meet those goals.

With a total investment of $24.3 billion in FY 2008, the Department will seek to advance the President's American Competitiveness Initiative aimed at ensuring U.S. technological competitiveness and economic security, and implement the Advanced Energy Initiative which seeks to accelerate the research, development and deployment of clean energy technologies to diversify our nation's energy supply. These efforts, combined with investments to meet our commitment to protect the United States as stewards of our nation's nuclear weapons stockpile and to environmental cleanup, will foster continued economic growth and promote a sustainable energy future.

This budget, while focused on delivering results to meet the nation's priorities, also serves as the roadmap for the future of America's energy security. It is a budget poised to support the President's pro-growth economic policies and spending restraints. In addition, the FY 2008 budget request was shaped to reflect the Department's five strategic themes consistent with the President's Management Agenda to improve performance and accountability across the Department of Energy. They are:

- Promoting America's energy security through reliable, clean, and affordable energy;
- Strengthening U.S. scientific discovery, economic competitiveness, and improving quality of life through innovations;
- Ensuring America's nuclear security;
- Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons; and
- Enabling the Mission through sound management.

To highlight, the FY 2008 budget for the Department of Energy emphasizes investments that will:

- **Advance the American Competitiveness Initiative**
  Last year President Bush launched the American Competitiveness Initiative -- (ACI) -- to encourage innovation throughout the economy and to give America's children a firm grounding in math and science. The FY 2008 budget investment of $4.4 billion from the Department, an increase of approximately $300 million

from the FY 2007 budget request, increases basic research in the physical sciences, builds the large-scale scientific facilities essential for U.S. world leadership, supports thousands of scientists and students – our current and future scientific and technical workforce – and encourages entrepreneurship and technology discovery. Scientific and technological discovery and innovation are the major engines of increasing productivity—indispensable to ensuring growth, job creation, and rising incomes for American families in the technologically driven twenty-first century. The investment is essential if the United States is to maintain its world-class, scientific leadership and global competitiveness.

- **Accelerate the Advanced Energy Initiative**
  At a request of $2.7 billion, $557 million above the FY 2007 budget request of $2.1 billion, the President's Advanced Energy Initiative (AEI) will continue to support clean energy technology breakthroughs that will help improve our energy security through diversification and could help to reduce our dependence on foreign oil. The FY 2008 budget for AEI includes funding for the advancement of renewable energy technologies such as biomass, wind, and solar energy, as well as hydrogen research and development. Also, AEI's diverse energy portfolio includes accelerating the development of clean coal technology, including building a near-zero atmospheric emissions coal plant known as FutureGen. AEI also includes funding for nuclear energy technologies, including the Global Nuclear Energy Partnership, and basic science research that supports developments in many of the aforementioned technologies as well as fusion energy research.

- **Expand the Resurgence of Nuclear Energy**
  Nuclear energy is an important source of energy in the United States and is a key component of the AEI portfolio. Nuclear energy is clean, safe, and reliable, and already supplies about 20 percent of the nation's electricity. Recognizing the potential of nuclear energy, the President announced in February 2006 the Global Nuclear Energy Partnership (GNEP). GNEP seeks to bring about significant, wide-scale use of nuclear energy through the development of better, more efficient and proliferation-resistant nuclear fuel cycles while reducing the volume of nuclear waste requiring ultimate disposal. GNEP will also help reduce the threat of nuclear proliferation around the world. In addition, it helps address the Department's long-term nuclear waste disposal challenges. A total of $405 million ($10 million in Defense Nuclear Nonproliferation) is requested in this budget for GNEP, which is an increase of $155.0 million above the FY 2007 budget request of $250 million.

  We can not forget that expansion of nuclear power is only possible if we continue to develop a responsible path for disposing of spent nuclear fuel. Therefore, $494.5 million is requested in FY 2008 for the continued development of a geologic waste repository at Yucca Mountain, Nevada. Not later than June 30, 2008, the Department intends to complete and submit a License Application to the Nuclear Regulatory Commission for authorization to construct the repository.

GNEP has important implications for the permanent repository at Yucca Mountain. The increased efficiency in recycling spent nuclear fuel would ensure that even with expanded use of nuclear energy, the U.S. would need only one geologic repository. GNEP is consistent with the Yucca Mountain Project and extends its benefits beyond the twenty-first century.

- **Transform Our Nuclear Weapons Complex**
  The FY 2008 budget reconfirms the Department of Energy's steadfast commitment to the national security interests of the United States through stewardship of a reliable and responsive nuclear weapons stockpile and by advancing the goals of global non-proliferation. Through the National Nuclear Security Administration (NNSA), the Department directs $6.5 billion in this request for **Weapons Activities**, a $103 million increase from the FY 2007 request, to meet the existing requirements for stewardship of the Nation's nuclear weapon stockpile, technologies and facilities, as well as to continue to revitalize the nuclear weapons complex with the goal of a much smaller size by 2030. This effort, called "**Complex 2030,**" is structured to achieve President Bush's vision to create a more efficient Nuclear Weapons Complex of the future that is able to respond to changing national and global security challenges.

- **Reduce the Risk of Weapons of Mass Destruction Worldwide**
  The Department has provided $1.7 billion in this request for **Defense Nuclear Nonproliferation**, for a comprehensive set of programs to meet our commitment to detect, prevent, and reverse the proliferation of Weapons of Mass Destruction (WMD) in close cooperation with our partners around the world. This program is an Administration priority and while the funding amount shows a 3 percent decrease, this reflects accelerated completions in FY 2007. Further, the request provides significant out-year growth to fulfill our international agreements and accelerate our work to reduce the risk of WMD threats. Among many advances, the FY 2008 budget for example will further our work in the Megaports program by initiating the installation of radiation detection equipment at the Port of Hong Kong.

- **Meet Our Commitments to Public Health and Safety and the Environment**
  During my first days at the Department of Energy, I announced safety as my top priority and the number one operating principle of the Department. To implement this vision, we created a new **Office of Health, Safety and Security**. As I said at the time, "As Secretary of Energy, ensuring the safety of workers across the DOE complex is my top priority and this new office will go a long way in strengthening our safety and security organization. We must be world class not only in how we carry out our mission, but in the safe, secure, and environmentally responsible way in which we manage operations at our facilities across the country." The organization's FY 2008 budget request of $428 million, builds on a number of actions the Department has taken over the past two years to increase safety of DOE workers.

The FY 2008 budget includes $5.7 billion for the **Environmental Management** program to protect public health and safety by cleaning up hazardous, radioactive legacy waste left over from the Manhattan Project and the Cold War. Past investments have resulted in the completed clean up of 81 sites through the end of FY 2006, including Rocky Flats, Colorado, and a total of 86 sites by the end of FY 2007, including the Fernald site in Ohio, which was completed in January 2007. This budget allows the program to continue to make progress towards cleaning up and closing sites and focuses on activities with the greatest risk reduction.

As the Department continues to make progress in completing clean up, the FY 2008 budget request of $194 million for **Legacy Management** supports the Department's long-term stewardship responsibilities and payment of pensions and benefits for our former contractor workers after site closure.

The GNEP strategy complements the Department's Civilian Radioactive Waste Management program, which is working to address the problems of long-term nuclear waste disposal in an environmentally sound manner. The program office is working to construct a permanent repository for spent nuclear fuel at **Yucca Mountain**. Funding of $494.5 million is proposed in FY 2008 to support the development of a repository that will protect public health and safety in ways that are both environmentally and economically viable. The funding also supports the submission, not later than June 30, 2008, of a comprehensive License Application to the Nuclear Regulatory Commission for authorization to construct the repository.

In light of the increased number of sophisticated cyber attacks directed at all facets of our communities, from military to civilian to private users, the Department is taking significant steps to secure the virtual pathways and mitigate the threat from cyber intrusions. Implementing these steps will be seamless and will not interrupt the availability of information systems resources while preserving the confidentiality and integrity of the information and their contents. A budget request of $170 million in FY 2008 supports the Department's efforts to defend against emerging, complex cyber attacks. Through these efforts, the Department will be in a better position to effectively manage and monitor cyber risk across the complex. In FY 2008, DOE will increase support on a Department-wide basis to deploy new cyber security tools and cyber security management activities to detect, analyze, and reduce the threat across the complex.

**PROMOTING AMERICA'S ENERGY SECURITY THROUGH RELIABLE, CLEAN, AND AFFORDABLE ENERGY**

The FY 2008 budget request addressing energy and environmental security is an essential component of the Department's strategic goals. This priority is reflected in the increase of $506 million or 20 percent of the Department's energy programs compared to the FY 2007 budget request. These investments in research, development and deployment could strengthen America's energy security, environmental quality, and economic vitality through public-private partnerships that expand the use of cost-effective energy efficient technologies; enable and accelerate market adoption of clean, reliable and affordable energy technologies; and support the implementation of the President's National Energy Policy. Additionally, the energy programs at DOE are working with the basic research and scientific community to focus on development of technology components that could enable and catalyze the rapid development, commercialization and deployment of next generation energy technologies.

This budget includes President Bush's **Advanced Energy Initiative (AEI)** which aims to reduce our dependence on foreign sources of oil and transforming our national energy economy by promoting development of cleaner sources of electricity production. For too long, our nation has been dependent on oil. America's dependence leaves us more vulnerable to disruptions to domestic production like hurricanes, to hostile regimes, and to terrorists - who could cause huge disruptions of oil shipments, raise the price of oil, and do great harm to our economy. In concert with the President's **Twenty In Ten** initiative to reduce U.S. gasoline usage by 20 percent in the next ten years, or by 2017, a total of $2.7 billion is requested in FY 2008 to support the **AEI**. These funds support a diverse portfolio of energy research and development (R&D) and deployment programs designed to help meet the energy challenges of the 21st century. Highlights of the request include the following components of the President's AEI:

- **The President's Biofuels Initiative**. The President's goal to make cellulosic ethanol cost-competitive by 2012 is the focus of the biomass program. Biomass is the key renewable resource supported by the Department because it is a promising renewable option for producing liquid transportation fuels in the near term, thereby reducing our dependence on imported oil. In FY 2008, the Department is investing $179 million to support the goals of the initiative.
- **The President's Hydrogen Fuel Initiative**. This budget request includes $309 million (an increase of $19.5 million above the FY 2007 request) for the President's Hydrogen Fuel Initiative and completes the President's commitment of $1.2 billion over five years for this initiative. Increased funding is proposed to expand research in several areas, including: hydrogen production from renewables; materials for hydrogen storage; fuel cell stack components; and a new R&D effort on cost-effective manufacturing technologies to help industry build a competitive, domestic hydrogen and fuel cell supplier capability.
- **Vehicles Technologies and FreedomCAR.** This year's request emphasizes plug-in hybrid vehicle component technologies by increasing the requested research support to $81 million. These technologies offer the potential to make

significant additional improvements in petroleum reduction beyond that achievable with standard hybrid configurations. By utilizing energy drawn from the nation's electricity grid at off-peak times to charge high energy batteries, these technologies will be able to operate in an electric vehicle mode for expanded distances, potentially meeting most drivers' needs for commuting and short distance driving.

- **The President's Solar America Initiative (SAI).** Launched in FY 2007, SAI is designed to achieve cost competitiveness for photovoltaic (PV) solar electricity by 2015. With a request of $148 million in FY 2008, SAI seeks to achieve its mission through public-private partnerships with industry, universities, national laboratories, states, and/or other government entities.

The FY 2008 budget request also supports renewable energy and energy efficiency R&D that could help reduce the overall demand for natural gas and lower emissions in the electricity sector. The FY 2008 request for the **Wind Energy** program includes $40 million to continue wind energy research to reduce costs and overcome barriers to large-scale use of wind power. The FY 2008 budget also includes $19 million to continue the accelerated development of **Solid State Lighting** technologies that have the potential to reduce commercial building lighting electricity consumption by 50 percent and could revolutionize the energy efficiency, appearance, visual comfort, and quality of lighting.

Our energy portfolio also recognizes the abundance of coal as a domestic energy resource and remains committed to research and development to promote its clean and efficient use. Coal in the U.S. accounts for 25 percent of the world's coal reserves. The foundation of the Department's clean coal research program is the **FutureGen** project, which will establish the capability and feasibility of co-producing electricity and hydrogen from coal with near-zero atmospheric emissions. The Administration remains strongly committed to FutureGen and is requesting $108 million in FY 2008, consistent with the project plan to keep the project on schedule for start-up in 2012. An additional $246 million is requested within the Coal program to support research and development on technologies needed to realize the concept.

Funding for the Coal program will be partially derived from transferring $166 million in prior year balances from the **Clean Coal Technology** appropriation to the **Fossil Energy Research and Development** appropriation. These prior year balances are no longer needed for active Clean Coal Technology projects and will be used to support FutureGen ($108 million) and the **Clean Coal Power Initiative** ($58 million). Better utilization of these fund balances to support FutureGen and related technologies will generate real benefits for America's energy security and environmental quality. Using fund balances and new appropriations, in 2008 the Clean Coal Power Initiative will issue a solicitation for demonstration of technologies focusing on carbon sequestration.

As part of the greenhouse gas mitigation strategy, the Department continues to develop low cost **carbon sequestration** technology for both new and existing coal plants. To that end, the Department includes $79 million in FY 2008 for sequestration research and

development, including initiating work on four large-scale sequestration field tests, each of which will inject about one million tons per year of carbon dioxide. The carbon sequestration program, together with FutureGen and other supporting research, will assure the timely development of this technology that will be capable of eliminating 90 percent of carbon emissions from new coal fired plants.

Consistent with the FY 2006 and FY 2007 budget requests, the FY 2008 budget request continues to shift resources away from oil and gas research and development programs, which have sufficient market incentives for private industry support, to other energy priorities. The decision reflected strategic consideration by assessing the program's technical effectiveness and comparing it to other programs which have achieved more clearly demonstrated and substantial benefits. Federal staff, paid from the program direction account, will work toward an orderly termination of the program in FY 2008.

The Energy Policy Act of 2005 established a new mandatory oil and gas research and development (R&D) program, called the Ultra-Deep and Unconventional Natural Gas and Other Petroleum Research program, that is funded from federal revenues from oil and gas leases beginning in FY 2007. These R&D activities are more appropriate for the private-sector oil and gas industry to perform. Therefore the FY 2008 budget proposes to repeal the program through a separate legislative proposal.

To further assure against oil supply disruptions that could harm our economy, this budget also proposes $168 million to begin expanding the **Strategic Petroleum Reserve** to an ultimate capacity of 1.5 billion barrels by 2027 as announced by President Bush in his State of the Union address. DOE will begin filling the Reserve to its current capacity of 727 MB by immediately purchasing oil for the Reserve in FY 2007, and also placing the Department of the Interior's federal royalty in-kind oil into the Reserve in FY 2007 and FY 2008. The FY 2008 Budget requests funds to expand the capacity of the SPR to the one billion barrel capacity authorized by current law and funds to conduct National Environmental Policy Act work to expand to 1.5 billion barrels. The Administration will, through a separate legislative proposal, seek the necessary authority to increase the authorized capacity of the Reserve from one billion barrels to 1.5 billion barrels.

The Energy Policy Act of 2005 authorized the establishment of a new **Loan Guarantee Program**. This budget request includes $8.4 million to operate a Loan Guarantee Office. This program will centralize loan guarantee services for the Department to ensure all processes and criteria are applied uniformly in accordance with established requirements, procedures, guidelines, regulations and manage the assessment of all loan guarantee applications submitted to the Department in compliance with Title XVII of the Energy Policy Act of 2005. Section 1703 of that Act authorizes the Department to provide loan guarantees for renewable energy systems, advanced nuclear facilities, coal gasification, carbon sequestration, energy efficiency, and many other types of projects. The budget proposes an FY 2008 loan volume limitation of $9 billion. Of this amount, the Department will seek to guarantee approximately $4 billion in loans for central power generation facilities (for example, nuclear facilities or carbon sequestration optimized coal power plants); $4 billion in loans for projects that promote biofuels and clean

transportation fuels; and $1 billion in loans for projects using new technologies for electric transmission facilities or renewable power generation systems.

Reliable energy information plays a critical role in promoting efficient energy markets and informing the public and policy makers. This budget requests a total of $105 million for the Energy Information Administration to improve energy data and analysis programs, reflecting a 17 percent increase over the FY 2007 budget request.

**Nuclear Energy**

A staple in our energy portfolio, nuclear energy has the potential to drive our 21st century economy to produce vast quantities of economical hydrogen for transportation use without emitting greenhouse gases and to generate heat and clean water to support growing industry and populations worldwide. In FY 2008, a total of $874.6 million is requested for nuclear energy activities. Included in the total is $395 million for the **Advanced Fuel Cycle Initiative** to support the Global Nuclear Energy Partnership (GNEP). GNEP is a comprehensive strategy to: enable an expansion of nuclear power in the United States and around the world; promote nuclear nonproliferation goals; and help resolve nuclear waste disposal issues. An additional $10 million is requested within the nuclear nonproliferation budget to support safeguards technology development as part of the far-reaching GNEP strategy.

GNEP will build upon the Administration's commitment to develop nuclear energy technology and systems and enhance the work of the United States and our international partners to strengthen nonproliferation efforts. The GNEP strategy will accelerate efforts to:

- Provide abundant energy without generating carbon emissions or greenhouse gases;
- Recycle used nuclear fuel to minimize waste and reduce proliferation concerns;
- Safely and securely allow developing nations to deploy nuclear power to meet their energy needs;
- Assure maximum energy recovery from still-valuable used nuclear fuel; and
- Reduce the number of required U.S. geologic waste repositories to one for the remainder of this century.

Through GNEP, the United States will work with key international partners to develop new recycling technologies. Recycled fuel would be processed through advanced burner reactors to extract more energy, reduce waste and consume plutonium, dramatically reducing proliferation risks. As part of GNEP, the U.S. and other nations with advanced nuclear technologies would offer developing nations a reliable supply of nuclear fuel in exchange for their commitment to forgo enrichment and reprocessing facilities of their own, alleviating a proliferation concern.

GNEP would also help resolve America's nuclear waste disposal challenges. By recycling spent nuclear fuel, the heat load and volume of waste requiring permanent geologic disposal would be significantly reduced, delaying the need for another repository in addition to the one at Yucca Mountain for the remainder of this century.

To support the near-term domestic expansion of nuclear energy, the FY 2008 budget seeks $114 million for the **Nuclear Power 2010** program to support continued cost-shared efforts with industry to reduce the barriers to the deployment of new nuclear power plants in the United States.

The technology focus of the Nuclear Power 2010 program is on Generation III+ advanced light water reactor designs, which offer advancements in safety and economics over older designs. If successful, this seven-year, $1.1 billion project (50 percent to be cost-shared by industry) could result in a new nuclear power plant order by 2009 and a new nuclear power plant constructed by the private sector and in operation by 2014.

The Energy Policy Act of 2005 authorized the Secretary to enter into standby support contracts for six new advanced nuclear reactors. The program will allow DOE to offer **standby support/risk insurance** to protect sponsors of the first new nuclear power plants against the financial impact of certain delays that are beyond the sponsors' control. This program would cover 100 percent of the covered cost of delay, up to $500 million for the first two new reactors, and 50 percent of the covered cost of delay, up to $250 million each, for up to four additional reactors. This risk insurance offers project sponsors additional certainty and incentive to provide for the construction of a new nuclear power plant by 2014. In FY 2008, the Department will receive and evaluate applications for standby support contracts from sponsors of new nuclear power plants.

The FY 2008 budget request includes $36 million to continue to develop next-generation nuclear energy systems known as **"Generation IV (GenIV)"**. These technologies will offer the promise of a safe, economical, and proliferation resistant source of clean, reliable, sustainable nuclear power with the potential to generate hydrogen for use as a fuel. Resources in FY 2008 for GenIV will be primarily focused on long-term research and development of a gas-cooled very-high temperature reactor, the reactor technology of choice for the Next Generation Nuclear Plant (NGNP) project.

## STRENGTHENING U.S. SCIENTIFIC DISCOVERY, ECONOMIC COMPETITIVENESS, AND IMPROVING QUALITY OF LIFE THROUGH INNOVATIONS IN SCIENCE AND TECHNOLOGY

Today our nation's ability to sustain a growing economy and a rising standard of living for all Americans depends in part on continued advances in science and technology. Scientific and technological discovery and innovation are engines of increasing productivity and are indispensable to ensuring economic growth, job creation, and rising incomes for American families in the technologically driven 21st century.

The FY 2008 Office of Science budget request of $4.4 billion or 7 percent above the FY 2007 request is designed to sustain the planned doubling of Federal support for physical sciences research by FY 2017 under the American Competitiveness Initiative. Given the large-scale nature of Office of Science facilities and the thousands of scientists and researchers receiving DOE support for their research and education, sustained and

predictable budgetary trajectories are essential to preserve America's vitality in science and avoid an attrition of U.S. scientific talent.

DOE's Office of Science has played a central role over the last 50 years in supporting and sustaining institutional research in the physical sciences in the United States. Among Federal agencies, it is the largest supporter of basic research in the physical sciences, providing over 40 percent of such funding. The Office of Science is the main builder and operator of large-scale scientific facilities and instruments that are increasingly important to physical sciences research and maintains and operates ten major national laboratories that have been seedbeds of scientific discovery, technological innovation, and economic progress. Office of Science funding also plays an indispensable role in training, educating, and sustaining the nation's scientific workforce. Each year, Office of Science facilities meet the needs of a diverse set of 20,000 researchers. Thousands of university researchers—professors, "post-docs", and undergraduate students—also rely, each year, on Office of Science support. Roughly half of the researchers at Office of Science-run facilities come from universities, and about a third of Office of Science research funds go to institutions of higher learning.

The Office of Science is also the main federal sponsor of basic research aimed at achieving the scientific breakthroughs necessary to meet our nation's growing energy challenge by developing alternative, carbon-free or carbon neutral sources of energy to enhance our energy security and protect the global environment.

Many scientists believe there is a real promise that biotechnology may transform the field of energy production—providing transformational breakthroughs that will enable the cost-effective, homegrown production of biofuels that can eventually meet much of our transportation energy demand and substantially reduce net carbon dioxide emissions. Today the Genomics: GTL program supports advanced biotechnology tools and techniques to probe for biological and biologically inspired solutions to Department mission challenges in energy, carbon sequestration, and environmental remediation. The FY 2008 request includes $75 million for three innovative Bioenergy Research Centers that will bring together multi-disciplinary teams of some of the nation's leading researchers in a mission-driven laboratory setting to probe plants and microbes at all levels (molecular, cellular, system) in an effort to crack nature's code and achieve the breakthroughs that will make biofuel production cost-effective on a national scale.

The capacity to create new, stronger, more durable, or more energy efficient materials—"smart" materials that respond to the environment, improved catalysts for oil refining, better batteries, more efficient windows, to name only a few applications—increases as we gain the tools and expertise to manipulate matter at the atomic level. These scientific advances contribute to improving our way of living. This year, the Office of Science will continue this work by completing construction of the last Nanoscale Science Research Center in FY 2008, and the FY 2008 request provides $20 million each for operations at the Office's five Nanoscale Science Research facilities. In addition, construction continues on the Linac Coherent Light Source, the world's first x-ray free electron laser, which will enable us to observe chemical reactions at the molecular level in real time. Project engineering and design funds are also provided for the proposed National

Synchrotron Light Source II, which would provide unique capabilities for probing structural biology and nanostructures and observing materials under extreme conditions.

Computational power gives scientists the capability to explore complex systems and simulate experiments that would be impossible to perform in a laboratory. With the FY 2008 budget request, the Office of Science performance goal is attainment of roughly one petaflop, which is a million billion operations per second, of computational capability to sustain the Department's position as world leader in civilian computing power. The Advanced Scientific Computing Research request increases by $21.5 million over the FY 2007 request.

Progress in energy-related and use-inspired basic science builds on the foundation of discovery in more fundamental science. These investigations into the very nature and origins of our universe expand the horizons of our knowledge, providing insight into who we are and where we come from. Within the $4.4 billion request for Science, $146.5 million is provided for operations of the Relativistic Heavy Ion Collider (RHIC), which enables us to glimpse conditions of the very early universe, and $79.2 million is for the Continuous Electron Beam Accelerator Facility (CEBAF), which provides insight into the quark structure of matter.

Within high energy or particle physics, research promises to radically transform our understanding of the structure of matter, space, and time. Within the Office of Science budget request, $158 million is provided for operations of the Tevatron at Fermilab for collider and neutrino physics programs. In addition, the request provides $62 million to support the research of U.S. scientists at the Large Hadron Collider in CERN, which will be the world's most powerful accelerator. R&D support is maintained for the International Linear Collider, to maintain a strong U.S. role in the development of this potential next-generation accelerator, which promises to further illuminate the nature of matter at terascale energies.

In the Asia-Pacific Partnership, we are a vital member of the international effort to promote the development and deployment of clean energy goods and services among our Pacific-Rim partners; Australia, China, Japan, India and South Korea. To date, the partnership has launched nearly a hundred projects that advance energy efficiency, clean development and common standards on which new clean energy technology and programs can be built. This partnership has created a forum where American companies can learn, compete, and innovate, in a region with extraordinary economic growth, energy demands and market potential. The $15 million requested to support the partnership will be in concert with contributions from private-sector and international partners.

Finally, on November 21, 2006, the U.S. Department of Energy signed an agreement with China, the European Union, India, Japan, the Republic of Korea and the Russian Federation to build the international fusion energy project known as ITER. Under this arrangement of international scientific cooperation, these nations will collaborate to construct an experimental reactor that will put the world on a path toward harnessing fusion energy—the fuel that powers the stars—for the production of plentiful,

environmentally friendly, carbon-free energy. The request provides $160 million for the U.S. contribution to this international effort.

## ENSURING AMERICA'S NUCLEAR SECURITY

The President, in his first days in office, was faced with the new and challenging realities of national security in the 21st century. The War on Terror has substantially and fundamentally reshaped the national security programs and activities in the Department. This budget of $24.3 billion for the Department is an important component of the President's strategy to address some of these very important issues facing our nation. Within the $24.3 billion request in FY 2008, $9.4 billion or 39 percent is proposed to support DOE's contribution to the Federal government-wide effort to ensure the security of our nation.

The National Nuclear Security Administration (NNSA) continues significant efforts to meet Administration and Secretarial priorities leveraging science to promote national security. The FY 2008 budget proposes $9.4 billion to meet defense and homeland security-related objectives. The budget request maintains current commitments to the nuclear deterrence policies of the Administration's Nuclear Posture Review. To implement those policies for the long term, NNSA has established a new planning scenario, "Complex 2030", to guide the transformation of the complex. The FY 2008 budget also continues to fund a high profile strategy to mitigate throughout the world the threat of weapons of mass destruction, and provides for the nuclear propulsion needs of the U.S. Navy. Key investments include:

- Transforming the nuclear weapons stockpile and infrastructure while meeting Department of Defense requirements, through the Reliable Replacement Warhead and other Complex 2030 initiatives;
- Conducting innovative programs in the nations of the former Soviet Union and other countries to address nonproliferation priorities;
- Supporting naval nuclear propulsion requirements of the U.S. Navy;
- Maintaining comprehensive security for facilities, employees and information implementing and sustaining upgrades throughout the complex;
- Providing nuclear emergency response assets in support of homeland security;
- Reducing the deferred maintenance backlog and achieving facility footprint reduction goals; and,
- Providing corporate management and oversight for NNSA programs and operations.

The United States continues a fundamental shift in national security strategy to address the realities of the 21st century. The Administration's Nuclear Posture Review (NPR) addressed a national security environment in which threats may evolve more quickly and be less predictable and more variable than in the past. The NPR recognizes the need to transition from a threat-based nuclear deterrent with large numbers of deployed and reserve weapons, to a deterrent consisting of a smaller nuclear weapons stockpile with greater reliance on the capability and responsiveness of the Department of

Defense (DoD) and NNSA infrastructure to respond to threats. The NNSA infrastructure must be able to meet new requirements in a timely and agile manner while also becoming more sustainable and affordable. The Department of Energy has created a plan for a revitalized nuclear weapons complex called "Complex 2030." This significantly more agile and responsive complex will allow further reductions in the nuclear stockpile by providing an industrial hedge against geopolitical or technical problems and will reduce security costs by consolidating nuclear materials. The FY 2008 President's Budget contains some of the resources required for transformation of the Complex in ongoing base program activities that are already underway and contributing to Complex 2030 objectives. The Administration is still studying plans and funding projections for other parts of the effort.

The FY 2008 budget request of $6.5 billion for **Weapons Activities** includes all programs to meet the immediate needs of the stockpile, stockpile surveillance, annual assessment, and life extension programs. On November 30, 2006, the Nuclear Weapons Council determined that the **Reliable Replacement Warhead** (RRW) program was feasible as a means for sustaining the long-term safety and reliability of the nation's nuclear deterrent force. This shift in strategy from a Life Extension Program to a RRW program will require substantial planning and resource realignments by the Departments of Defense (DoD) and Energy. The Campaigns are focused on long-term vitality in science and engineering and on R&D supporting current and future stockpile stewardship and DoD requirements. A number of these NNSA programs and facilities also support scientific research users from other elements of the Department, Federal government, and the academic and industrial communities. Within the Nuclear Weapon Incident Response programs, a new National Technical Nuclear Forensics R&D and operations program is established, as well as a stabilization program through leveraged Render Safe R&D development of first generation equipment in support of homeland security. NNSA's **Safeguards and Security** activities are also encompassed within the request for Weapons Activities. The Defense Nuclear Security program supports the physical security needs at NNSA sites. These activities increase by 17 percent to sustain base program increases associated with the FY 2003 DBT upgrades, and a revised schedule for 2005 Design Basis Threat implementation at NNSA sites. Cyber Security activities, protecting information and information technology infrastructure, increase by over 15 percent. This will provide for the first step in a major five-year effort focused on revitalization, certification, accreditation and training across the NNSA complex.

Preventing weapons of mass destruction from falling into the hands of terrorists and rogue states is one of this Administration's top national security priorities. The FY 2008 request of $1.67 billion for nuclear nonproliferation activities strongly supports the international programs that are denying terrorists and rogue states the nuclear materials, technology and expertise needed to develop or otherwise acquire nuclear weapons. NNSA continues unprecedented efforts to protect the U.S. and our allies from threats, including $265 million for cutting-edge **nonproliferation research and development** for improved technologies to detect and monitor nuclear proliferation and nuclear explosions worldwide. There are additional major efforts focused on potential threats abroad. For example, in the area of **nuclear material protection and cooperation** the program has completed security upgrades for Russian navy nuclear fuel and weapons

storage at the end of FY 2006 and will complete security upgrades for Rosatom facilities by the end of FY 2008. Also by the end of FY 2008, the program will complete security upgrades at the nuclear warhead sites of the Russian Strategic Rocket Forces and the 12th Main Directorate. To help complete the shutdown of three Russian nuclear reactors still producing 1.2 metric tons of plutonium per year and to replace them with conventional fossil fuel power plants, this budget request includes $182 million for the Elimination of Weapons Grade Plutonium Production program.

The budget includes a request of $334 million for the U.S. **Mixed Oxide Fuel Fabrication Plant** project at DOE's Savannah River Site in South Carolina. This facility will dispose of 34 metric tons of U.S. surplus plutonium and facilitate complex-wide consolidation of nuclear material. The project is awaiting Congressional authorization to proceed to construction. Various programs funded by NNSA's Defense Nuclear Nonproliferation appropriation support the President's Bratislava Nuclear Security Cooperation initiative (about $293 million) including security upgrades at Russian nuclear warhead sites, and also support the Global Partnership against the Spread of Weapons of Mass Destruction ($537 million) to meet the U.S. commitment to the G8 nations. In coordination with the Office of Nuclear Energy, the budget request also includes $10 million to support the Global Nuclear Energy Partnership (GNEP), which is focused on advanced safeguards technology development that is crucial to the ultimate success of the GNEP initiative.

NNSA continues to support the United States Navy's nuclear propulsion systems. The FY 2008 request of $808.2 million is an increase of 1.6 percent over the FY 2007 request level. The funding increase assists the Naval Reactors program to ensure the safe and reliable operation of reactor plants in nuclear-powered submarines and aircraft carriers and fulfills the Navy's requirements for new nuclear propulsion plants that meet current and future national defense requirements.

## PROTECTING THE ENVIRONMENT BY PROVIDING A RESPONSIBLE RESOLUTION TO THE ENVIRONMENTAL LEGACY OF NUCLEAR WEAPONS PRODUCTION

The Federal Government must address the legacy of our past and our responsibility to the American taxpayers to provide a clean, safe and healthy environment to live in. A total of $6.34 billion is dedicated in FY 2008 to support the three key pillars that set the framework for the Department to reach that goal. The first pillar is to continue our **environmental cleanup** ($5.7 billion) of contaminated Cold War sites across the country. The second pillar is to continue to provide **site post-closure management** and to carry out our responsibilities ($194 million) to our former contractor workers. The third pillar completes the framework by working to construct a permanent nuclear waste repository at **Yucca Mountain** ($494.5 million) to address long-term nuclear waste disposal and for authorization of which the Department will submit a License Application to the Nuclear Regulatory Commission not later than June 30, 2008. And it goes without saying that my core principle of safe operations throughout the Department will be applied with vigor within this framework.

To deliver on the Department's cleanup obligations stemming from 50 years of nuclear research and weapons production during the Cold War, the Environmental Management program (EM) continues to focus its resources on the highest health and safety risks, such as treatment of over 90 million gallons of radioactive liquid waste stored in decades old tanks; disposition of thousands of metric tons of special nuclear material (surplus weapons-grade uranium and plutonium), spent nuclear fuel, and solid waste stored in older facilities that do not meet today's environmental requirements; and remediation of contaminated soil and groundwater. Up through FY 2007, DOE has completed cleanup of 86 of 108 legacy nuclear waste sites, with another three site cleanup completions – the Pantex Plant in Texas; Lawrence Livermore National Laboratory - Site 300 in California, and the Inhalation Toxicology Lab in New Mexico – planned for completion in FY 2008.

In FY 2008, the budget includes $5.7 billion to continue cleanup, giving priority to those activities that offer the greatest risk reduction while staying focused on completing cleanup and closing sites. This is a reduction from the FY 2007 request of $173 million, which in part reflects completion of some sites, but also reflects hard choices that must be made. Safety remains the utmost priority. EM is committed to applying my safety principles and will continue to maintain and demand the highest safety performance to protect the workers and the communities where EM operates.

In keeping with the principles of reducing risks and environmental liabilities, the FY 2008 request of $5.7 billion will support the following priority activities:

- Stabilizing radioactive tank waste in preparation for treatment (about 31 percent of the FY 2008 request);
- Storing and safeguarding nuclear materials and spent nuclear fuel (about 17 percent of the FY 2008 request);
- Dispositioning transuranic, low-level and other solid wastes (about 16 percent of the FY 2008 request);
- Remediating major areas of our sites and decontamination and decommissioning excess facilities (about 26 percent of the FY 2008 request).

One of the significant cleanup challenges the EM program faces is the construction of the Hanford Waste Treatment and Immobilization Plant (WTP), which will treat highly radioactive tank waste at Hanford. WTP has encountered significant technical and project management problems, which have caused the project to slow down while the problems were addressed. With the help of senior professionals from private industry, academia and other Government agencies, EM has undertaken an intensive review scrutinizing key elements of the project, including the technology, cost and schedule, project management, project controls, and earthquake seismic criteria. In December 2006, the Department approved a revised, validated baseline of $12.3 billion for WTP. The Department believes WTP is now back on a sound technical and project management footing, and is ready to move forward.

Despite numerous accomplishments and successfully accomplishing site completions, the EM program has experienced setbacks in achieving its vision of accelerated cleanup. At

the core of these setbacks are optimistic planning assumptions that have not materialized, combined with new scope and requirements that were not anticipated. As a result, EM estimates the lifecycle cost of the program could increase by $50 billion. EM continues to take steps to address challenges and improve the effectiveness and efficiency of its operation. The Department remains committed to completing this important and necessary mission.

After the Environmental Management program completes cleanup of sites throughout the DOE complex, post closure stewardship activities are transferred to the **Office of Legacy Management** (LM). Post closure stewardship includes long-term surveillance and maintenance activities such as groundwater monitoring, disposal cell maintenance, records management, and management of natural resources at sites where active remediation has been completed. At some sites the program includes management and administration of pension and benefit continuity for contractor retirees. In FY 2008, $194.2 million is requested to carry out legacy management functions. The majority of the funding is for long-term stewardship activities and pension and post-retirement benefits for former contractor employees at the Rocky Flats, Colorado, and the Fernald, Ohio, closure sites.

Over the last 50 years, our country has benefited greatly from nuclear energy and the power of the atom. We need to ensure a strong and diversified energy mix to fuel our nation's economy, and nuclear power is an important component of that mix. Currently more than 50,000 metric tons of spent nuclear fuel is located at over 100 above-ground sites in 39 states, and every year reactors in the United States produce an additional approximately 2,000 metric tons of spent fuel. In order to ensure the future viability of our nuclear generating capacity, we need a safe, permanent, geologic repository for spent nuclear fuel and high-level nuclear waste at **Yucca Mountain**. The FY 2008 budget of $494.5 million sets us on the path to meet that goal. The funding will support the development of a repository including:

- Filing and defending a high quality License Application at the Nuclear Regulatory Commission (NRC) based on a simpler and safer approach to handling spent nuclear fuel and operating the repository not later than June 30, 2008;
- Continuing the planning and design for facilities required for the receipt of spent nuclear fuel and high-level waste for emplacement in the repository;
- Making critical infrastructure upgrades at Yucca Mountain to ensure worker, regulator, and visitor safety and operational efficiency; and
- Continuing critical interactions needed to support national transportation planning activities and issuance of the Nevada Rail Alignment Environmental Impact Statement.

Designing, licensing and constructing a permanent geologic repository for spent nuclear fuel and high level waste will resolve the challenge of safe disposal of these materials and make construction of new nuclear power plants through the President's **Global Nuclear Energy Partnership** (GNEP) more feasible, helping to expand our energy options and secure our economic future. In addition, a repository is necessary to support nuclear nonproliferation goals, contributing to national security objectives.

In late 2006, the Department announced its plans to submit a License Application for the repository to the NRC by June 30, 2008, and to initiate repository operations in 2017. This opening date of 2017 is a "best-achievable schedule" and is predicated upon enactment of pending legislation. This proposed legislation addresses many of the uncertainties, currently beyond the control of the Department, that have the potential to significantly delay the opening date for the repository. The legislative proposal that the Administration submitted to Congress in 2006 and will resubmit in this Congress addresses significant funding reform and regulatory issues that, if enacted, would allow the Department to secure the necessary fiscal resources needed for program success and clears the path for the program to move forward expeditiously.

## CONCLUSION

I appreciate the opportunity to appear before you to present the FY 2008 budget proposal for the Department of Energy. I will be happy to take any questions that members of the Committee may have.