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DEPARTMENT OF ENERGY'S FISCAL YEAR 2009 BUDGET PROPOSAL

HEARING

BEFORE THE

COMMITTEE ON ENERGY AND COMMERCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

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DEPARTMENT OF ENERGY'S FISCAL YEAR 2009 BUDGET PROPOSAL

THURSDAY, FEBRUARY 7, 2008

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

The committee met, pursuant to call, at 10:00 a.m., in room 2123 of the Rayburn House Office Building, Hon. John D. Dingell (chairman) presiding.

Members present: Representatives Dingell, Markey, Towns, Rush, Stupak, Engel, Green, DeGette, Capps, Allen, Schakowsky, Solis, Inslee, Ross, Matheson, Butterfield, Melancon, Barrow, Barton, Hall, Upton, Stearns, Whitfield, Cubin, Shimkus, Terry, Murphy, and Burgess.

Staff present: John Jimison, Chris Treanor, Alex Haurek, Rachel Bleshman, David McCarthy, Kurt Bilas, Tom Hassenboehler, and Garrett Golding.

Mr. DINGELL. Good morning. Today the committee will hold the first in a series of hearings on the President's fiscal year 2009 budget request. For each of these four committee hearings, the chair is going to recognize members for opening statements and questions under the same procedures as in subcommittee hearings with one exception, and the chair invites the attention of the members to this. The chairman and ranking member of the subcommittee with primary jurisdiction will be recognized for a 3-minute opening statement. All other members will be recognized for a 1-minute opening statement. Members who are recognized for an opening statement and waive will have the opportunity for an additional minute during the first round of questions.

The chair will recognize himself now for an opening statement.

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

The chair first welcomes you back to the committee, Mr. Secretary, and we appreciate you taking time to appear before us to enlighten us on the Administration's priorities for the Department of Energy. Much has been happening in the energy section in the years since you have last testified. The International Panel on Climate Change released several landmark reports that focused the world's attention on the problems of climate change and the need for solutions. This committee spent a good deal of last year gathering information to prepare us to craft legislative solutions to the issue.

The members of the committee will be interested to hear about the Department's efforts to address the problem and whether the Administration would be willing to participate with us in the crafting of an appropriate solution. The Congress recently passed an energy bill. It was signed by the President which included a landmark agreement on motor vehicle fuel economy as a substantial increase in the amount of bio-fuels that will be blended into the Nation's gasoline pool to decrease our dependence on imported petroleum. The bill also contains several important provisions on energy efficiency and conservation for appliances and buildings. In addition to saving energy these will bring about a significant reduction in the amount of greenhouse gases emitted into the atmosphere.

As we have discussed before, Mr. Secretary, the department's track record in meeting past efficiency deadlines is less than stellar. I recall from the 2005 Energy Bill which my good friend, Chairman Barton, led us so ably, the DOE missed a number of deadlines contained in that statute, and I hope that you will outline to the committee what steps the department will be taking to implement the bill we just passed, particularly the energy efficiency provisions, which I would note have been a source of considerable distress to the committee, particularly with regard to appliance questions.

There are two management issues that I do wish to have you direct your attention to as well. The first is related to the Yucca Mountain project. The Omnibus Appropriation Bill that was recently signed into law contained a substantial cut for Yucca Mountain. To your credit, Mr. Secretary, you have once again proposed a higher amount of funding, and I commend you and support you in that. Given the funding shortfall you face this year, however, I am interested in knowing how you see the project proceeding and what this meager appropriation means in terms of your ability to submit a license to the Nuclear Regulatory Commission by the end of the year.

Second, this is a matter of great concern to me. DOE has requested $24 million to continue the initiatives for Proliferation Prevention Program, IPP, which aims to create commercial sector employment for Russian's weapons scientists who were left unemployed following the collapse of the former Soviet Union. In the 1990s this program may have helped prevent scientists' migration to rogue nations, a commendable purpose. Since that time, however, the landscape has significantly changed. Russia is now thriving. It is the largest oil producer in the world and the second largest oil exporter after OPEC. Given their going reserves it is fair to ask whether we should continue supplementing the pay of Russian scientists, and if so why and how. In addition, IPP funds may have been badly misdirected. The Government Accountability Office, GAO, recently found that more than half of the scientists funded by the IPP program had no involvement with weapons.

More importantly, and this is a matter of very special concern to the committee, it appears that U.S. taxpayers are funding Russian institutes that are working on nuclear projects in Iran including the Bushehr reactor. The chair notes the Administration says the Bushehr is a front for the nuclear ambitions of Iran and that a No-

vember, 2007 national intelligence estimate on Iran's nuclear intentions and capability states that Iranian entities are continuing to develop a range of technical capabilities that could be applied to producing nuclear weapons if a decision is made to do so. Does DOE support Russian institutes that are also working on the nuclear projects of Iran? This program was born, we all agree, with a noble purpose. I have no doubt that those who run this program do so with the best of intentions.

However, as I have said before, there is often a thin line between the noble and the naive. Again, Mr. Secretary, thank you for your appearance here today. I look forward to your responses to our questions. The chair now recognizes my distinguished friend, the gentleman from Texas, Mr. Barton.

Mr. BARTON. Thank you, Mr. Chairman. I have a formal statement for the record. I am just going to submit it and speak extemporaneously.

Mr. DINGELL. Without objection. If it is the wish of the gentleman, that will be inserted in full form.

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

Mr. BARTON. Thank you. Mr. Secretary, we are always glad to have you here at the Energy and Commerce Committee. As you know, the agency that you are the Secretary of has a special place in my heart. I was a White House Fellow there. My son worked there until recently. And in 22 of the 24 years I have been in the Congress, I have focused on energy issues on this committee so I am always glad to have you, and we appreciate your service to the country, things that you tried to do to improve our energy security and our energy future of our great Nation. You are here specifically to talk about the budget of your agency. As we all know, you are responsible for the weapons programs for this country and those are a very high priority. You also have responsibility for our national laboratories. They are also a very high priority.

In this new era of alternative energy there are several things in terms of the research areas that the department is responsible for, and we look forward to hearing about that. I am sure you are going to be asked by some of our colleagues about the situation with the FutureGen project, which I also have some questions about. I am not a big fan of the government telling the country what kind of energy sources and energy situations we have to do, so I did not vote for this Energy Bill which the President signed recently. I have always supported a voluntary market base policy instead of a mandatory policy. It is going to be interesting to me to see how we implement a policy where we tell the American people what kind of cars and trucks, if any, they get to drive, what kind of fuel, if they have a car or truck, they get to put in it, what kind of light fixtures they get to use in their homes, and even pre-empt state and local building codes in terms of any new construction so you may have some comments on that.

I asked you out in the annex but somebody is going to ask you on the record how we are going to implement these alternative energy mandates when we don't have the alternative energy in America. We have got some ethanol mandates that are supposed to be

me this spring that is just not there. And I know it is the EPA's decision whether to grant a waiver, but you may have comments on that. And of course we are going to listen to what you say on the budget with special emphasis on the loan guarantees for our new nuclear power plants. You have worked very hard on that, and I think you got a fairly innovative solution to that so we will ask you about that. We are glad to have you here and it is going to be an interesting morning but we do appreciate your service to your country.

Secretary BODMAN. Thank you, sir.

Mr. BARTON. Mr. Chairman, I yield back.

Mr. DINGELL. The time of the gentleman has expired. The chair advises now just for the assistance of the members, perhaps for the assistance of the chair, the Clerk and the counsel are going to assist the chair in maintaining a list of members, and they will advise the chair on members recognition and in what order. The members who will be recognized first are those who are present when the committee is called to order, and they will be recognized in the order of their seniority on the full committee. Second, members who arrived after the committee was called to order, those members will be recognized in the order that they arrived at the hearing but after all members who were present when the chair called the committee to order.

Now the chair recognizes now the—the chair is looking for the subcommittee chair, who would be first, but he is not here, so the chair will recognize then the distinguished gentleman from Michigan, Mr. Upton, who is the ranking member of the subcommittee, for 3 minutes.

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

Mr. UPTON. I thank my chairman, and I also thank Mr. Boucher, chairman of the subcommittee, for holding this hearing today. As we look at the Department of Energy's 2009 budget proposal—I also want to congratulate and welcome my good friend, Secretary Bodman, a gentleman that I have had the great pleasure of working with over the last couple of years. I recognize also that you visited our district in Southwest Michigan this last August, and I look forward to continuing that close relationship. Now I can guess that perhaps some of my colleagues will use their opening statements to question to address what this Administration is doing to address global climate change.

I expect some may criticize the Department of Energy or the White House for lagging behind Europe or not doing enough to address global warming, and I would like to launch a pre-emptive strike by congratulating the Secretary for the great strides that DOE has taken in this area, and would note that from 2000 to 2005 the EU's CO_2 emissions actually increased by 50 percent more in the United States. I believe that solutions can be found in technology. Increasing funding for R&D and providing incentives for the new investment have been responsible for our successes this year, and I think that that record of success and the failures in Europe prove that very same model. I am pleased to see that this budget continues down the road of continuing to increase R&D. A

realistic approach to insure that our Nation's energy security and to meet our future demand must include substantial investments in nuclear and clean coal, and I applaud your requested increases in funding for both the nuclear energy programs, as well a clean coal technology.

Nuclear energy accounts for over 70 percent of our 0 emissions power. It is not possible to cut our greenhouse gas emissions without increasing our supply of nuclear power, and additionally it is not prudent to turn our back on coal, and the budget recognizes those facts. And as this budget recognizes, it is imperative that we address nuclear fuel cycle issues including the 800-pound gorilla in the room, Yucca Mountain. We have been talking about a spent fuel repository at Yucca Mountain for years and years, and we have thrown billions of dollars at that problem. And while I support the funding in the budget for Yucca it is time for a change in strategy of our fuel cycle policies as well as funding.

I was one of the original proponents for creating the Yucca repository, and I recognize that Yucca needs to be a component of our nuclear fuel policies but there is great promise as well in perhaps going back and readdressing the issue of recycling spent nuclear fuel. Through advanced recycling technologies that reduce the volume, heat, and toxicity of used nuclear fuels it is possible to separate the uranium from the used fuel to once again power commercial nuclear reactors, so I hope that we can perhaps look at that in the next year to readdress that. And, lastly, in conclusion as we debate an economic stimulus package to reignite our economy, we must not lose sight of the impact that energy plays in that effort. We will build on affordable energy as we move forward towards working on these incredibly complex issues. Let us all take note of the impact that energy has on American jobs in our economy. Mr. Chairman, I yield back the balance of my time which I see has expired.

Mr. DINGELL. The chair recognizes now the distinguished gentleman from Massachusetts, Mr. Markey, under the rules for 1 minute.

Mr. MARKEY. Mr. Chairman, I would like to waive my opening statement and preserve it for questions.

Mr. DINGELL. The gentleman waives his opening statement. The chair now recognizes the gentleman from New York, Mr. Towns, for 1 minute.

OPENING STATEMENT OF HON. EDOLPHUS TOWNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. TOWNS. Thank you very much, Mr. Chairman. Let me thank you and Ranking Member Barton for holding this very important hearing. With energy costs on the rise and increasing concerns about climate change and global warming, it is more important now than ever for us to work together in focusing on developing safe and clean energy alternatives, reducing greenhouse gas emissions, and improving energy efficiency. One of my primary concerns is over the drastic cuts to funding of the Low Income Home Energy Assistance Program, which helped many residents in my district to pay their heating bills. It is imperative that we set aside bipartisan

differences in order to meet crucial energy goals and work together to develop an energy budget that reflects our priorities of increased energy efficiency, reduce reliance on foreign oil, and work towards a reduction in greenhouse gas emissions.

Again, I thank you, Mr. Chairman, and Ranking Member Barton for bringing us together today and look forward to hearing from the witnesses. On that note, Mr. Chairman, I yield back.

Mr. DINGELL. The chair thanks the distinguished gentleman from New York. The chair recognizes now our good friend and colleague, Mr. Shimkus, for 1 minute.

OPENING STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. SHIMKUS. Thank you, Mr. Chairman. I will be focusing on FutureGen. In the 2003 State of the Union, President Bush laid out a goal of co-producing electricity and hydrogen from a coal-fired power plant that would produce near zero emissions. Mattoon, Illinois was selected as the best site for FutureGen. The State of Illinois and the town of Mattoon worked extremely hard only to be crushed recently when the DOE announced their plan to restructure FutureGen and to cut it up into a series of smaller projects. The cruelest hoax was the letter from you, Mr. Secretary, on November 30, 2007, saying that the DOE's record of decision would be out by the end of 2007, yet the record of decision is nowhere in sight.

My discussion with industry tells me this decision sets us back, not forward. I would like to submit the following thing for the record, Mr. Chairman.

Mr. DINGELL. Without objection, so ordered.

Mr. SHIMKUS. Secretary Bodman's letter to me and the Illinois delegation dated November 30, 2007, letters from the Governors of West Virginia, Ohio, Michigan, Kentucky, Wyoming, Indiana, Wisconsin, and Pennsylvania in support of the FutureGen project, 50 plus pieces of correspondence from myself and fellow members of Congress to the White House, Department of Energy, EPA appropriators, governors, and other discussions on FutureGen, and finally a newspaper article from the Journal Register in Mattoon, Illinois requesting donations from local citizens. I yield back, Mr. Chairman.

[The information appears at the conclusion of the record.]

Mr. DINGELL. Without objection, so ordered. The time of the gentleman has expired.

[The prepared statement of Mr. Shimkus follows:]

Representative John Shimkus
Energy and Commerce Committee
Hearing:
"Department of Energy's Fiscal Year 2009 Budget Proposal"

First, let me thank Chairman Dingell and Ranking Member Barton for holding this hearing and Secretary Bodman for coming before the Committee to discuss the FY 09 DOE Budget. There are many important programs affected in the Budget, but personally there is one that I believe to be of the utmost importance.

Back in the 2003 State of the Union, President Bush laid out a goal of co-producing electricity and hydrogen from a coal fired power plant that would produce near-ZERO emissions. The solution to this goal is FutureGen, a state-of-the art facility designed to be the cleanest fossil fuel-fired power plant in the world. It will convert coal into hydrogen and electricity, while capturing and storing the carbon dioxide deep underground. This project will lay the ground work for developing similar plants around the country and world, providing a framework for new energy projects that capture, rather than release greenhouse gases.

From the onset, many of us in Congress fought hard to make FutureGen a reality. From securing funding, to working with our colleagues for support, we engaged with the Administration, DOE and Congress on both sides of the aisle to make sure FutureGen would happen.

I have here 50+ pages of correspondence between myself and my fellow members of Congress to the White House, Department of Energy, Environmental Protection Agency, Appropriators, Governors and others discussing FutureGen. I would like to submit them for the record.

Over the last 5 years, there were many proposed sites for the location of FutureGen; the final four of them being Mattoon IL, Tuscola IL, Jewett TX and Odessa TX. The work done by these communities and the states involved was truly amazing. I know that in Illinois, the State Government worked hard to secure liability protections for a possible site, in fact Illinois received letters of support from the Governors from Indiana, Wisconsin, Ohio, Kentucky, Michigan, Wyoming, West Virginia and Pennsylvania. Also, the towns involved raised money from local and individual donations to advance the FutureGen project. I have here an article from the Journal Gazette in Mattoon Illinois requesting donations from fellow citizens, and you know what, these citizens gave. This is what the people of these communities have been doing; this is a perfect example of what this means to them.

After much debate, research and findings, the FutureGen Alliance decided that Mattoon IL was the best place for this state-of-the-art facility, and they picked it over these other sites in Illinois and Texas. I cannot tell you what a huge boost this is for this community of roughly 18,000 and for all of us in Illinois. What a source of great pride they have taken in being named the final site for FutureGen.

Well, as many of you may have heard, recently the Department of Energy announced a plan to restructure FutureGen and to cut it up into a series of smaller projects.

I do not believe this plan is a step in the right direction and I am extremely disappointed. This will not be better for Illinois, America or the World and certainly not for Mattoon. The people of Mattoon feel at best misled, particularly in light, Mr. Secretary, of your November 30th letter to me and the rest of the Illinois Delegation

which you say that you will come out with your Record of Decision by the end of 2007. I will also place this letter into the record.

FutureGen, as it was first proposed was and continues to be the best plan for our country. I do not believe the Department of Energy's new plan will meet industry's need for the urgent development of integrated, near-zero emissions power technology with carbon capture and sequestration, in fact I believe this permanently delays it. The DOE plan would likely result in no major and meaningful U.S. program involving the integration of carbon capture and sequestration in a single flagship project.

DOE indicates the reason for restructuring is increases in FutureGen cost growth. While they cite a doubling of cost, their original share was $800M in Fiscal Year 2003 constant dollars. DOE's current share is around $1.2 billion in nominal, as-spent dollars through 2017. The rise is due to cost escalation that is affecting the construction of power plants around the US and around the world. Did no one at DOE believe the price of steel, concrete and labor was going to rise over these years?

FutureGen is not only important to America, but it is important to the world. Coal is one of our most abundant energy resources and we have to find a way to burn it cleanly and sequester the CO2. Can you imagine if a ZERO emission coal burning facility was built in India and China? This can be done, and FutureGen is the first step. We must keep pushing forward. Turning back now does not make sense fiscally, or for the dependence of energy of our country and the rest of the globe.

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

Mr. DINGELL. The chair recognizes now the gentleman from Texas, Mr. Green. Where is Mr. Green? The chair recognizes the distinguished gentlewoman from Colorado, Ms. DeGette, for 1 minute.

[The prepared statement of Mr. Green appears at the conclusion of the hearing.]

OPENING STATEMENT OF DIANA DEGETTE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Ms. DEGETTE. Thank you very much, Mr. Chairman, and welcome, Mr. Secretary. I would like to spend my time this morning talking about the National Renewable Energy Laboratory, NREL, which is located right outside my congressional district in Colorado. NREL is the world's pre-eminent renewable energy and energy efficiency research facility and with oil prices approaching $100 a barrel, toxic greenhouse gas emissions increasing, and the mounting trade deficit exacerbated by our reliance on foreign oil, we would think that our Federal government would make it a priority to bolster the primary green energy research lab. Sadly, once again, the budget before us proposes to slash funding for NREL. When the Secretary appeared before this committee last year with the same recommended cuts the Secretary assured me that in fact these were not cuts. Fortunately, Congress injected about $100 million into NREL in February, '07.

And, Mr. Chairman, I was out at NREL last month. They are doing fabulous research with this money, and so I think rather than flat lining this budget we should increase the money so that we can have clean renewable energy. Thank you, Mr. Chairman.

Mr. DINGELL. The chair thanks the distinguished gentlewoman. The chair recognizes now our good friend and colleague from Nebraska, Mr. Terry, for 1 minute.

Mr. TERRY. I will waive my opening.

Mr. DINGELL. The gentleman waives. He will get his 1 minute later. The chair recognizes the distinguished gentleman from Florida, Mr. Stearns, for 1 minute.

OPENING STATEMENT OF HON. CLIFF STEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. STEARNS. Thank you, Mr. Chairman. Let me thank you and Ranking Member Barton for putting this hearing on. It is always good to have the Secretary here to hear first hand. My only comment is I would like to give a positive note here. I want to commend him and the Administration. Their proposal to double the strategic petroleum reserve to 1.5 million barrels and to continue the advance energy initiative as part of an overall goal of reducing America's dependence on foreign sources of energy through diversification of our Nation's energy supply. I frankly think these initiatives combined with further research in a bio-mass and especially ethanol can help bolster America's national security and economic development.

Also, Mr. Secretary, I am concerned with the DOE's announcement regarding a major restructuring of the FutureGen project, Mr. Shimkus had mentioned that earlier, which could possibly set

back this important initiative so I share with him my concern but I look forward to your testimony.

Mr. DINGELL. The time of the gentleman has expired. The chair recognizes now the distinguished gentlewoman from California, Ms. Solis, for 1 minute.

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

Ms. SOLIS. Thank you, Mr. Chairman, and thank you, Mr. Secretary, for being here this morning with us. In a time of economic downturn the Administration's budget cuts is attempting in my opinion to go in the wrong direction. And I say that because while we are trying to assist many of our low income families in this tight situation where we see sky rocketing gas prices and electricity bills, I don't see the kind of sensitivity that you would think you would see from this particular department. And I am very concerned because in California the costs of energy have gone up tremendously for many, many working families, and the result is that we continue to see in your proposal a reduction in weatherization programs, in the LIHEAP program, and also in the energy efficiency programs that you have offered in the past.

And we did pass a major Energy Bill here through this committee and on the floor of the Congress that was signed into law, and my concern is that we provide not just hope but that we provide funding for many of the programs that will help continue to have our families with some better standard of living there but also to keep jobs in mind because many of the programs that you are proposing to cut will also impact those individuals who are on the verge of losing their jobs. In my district we have employment that goes up towards 7 percent and higher, and in many cases it is unreported. So I would just ask you to take another look and maybe we can work with you on a bipartisan effort to reach a better agreement on these proposed cuts. And I yield back the balance of my time.

Mr. DINGELL. The chair thanks the distinguished gentlewoman. The chair recognizes now the distinguished gentleman from Pennsylvania, Mr. Murphy, 1 minute.

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

Mr. MURPHY. Thank you, Mr. Chairman. Thank you for being here, Secretary Bodman. As you know, America's energy demands are going to double by 2050 and we are going to need coal, clean coal, for energy security to meet those needs. I am pleased with the 26 percent increase for clean coal research but let us keep in mind there are about 400 coal plants in the U.S. and many of them are old and need to have scrubbers and pollution equipment replaced so we are going to need to build about 800 new coal plants by 2050, 400 to replace the old ones, 400 to meet the new demands. This is twice as many plants that have been built since the start of the industrial revolution, and this means starting in 2010 we are going to need to open up a new coal-fired power plant every 2-1/2 weeks.

I hope that this Administration and you will continue to push for the funding we desperately need to make sure we take the emissions out of coal. We have got to have zero emissions coal if we are going to meet our needs, if we are going to compete, if we are going to rebuild America and also let us keep our efforts for clean nuclear energy as well.

While the rest of the world is doing mass amounts of pollution and beating us in so many areas of manufacturing, we have to make sure that our consumers and our employers are having their energy demands met in a clean and efficient way, and I thank you, Mr. Chairman.

Mr. DINGELL. The chair thanks the distinguished gentleman. The chair recognizes now the distinguished gentleman from Washington State, Mr. Inslee, for 1 minute.

Mr. INSLEE. I will waive and reserve.

Mr. DINGELL. The gentleman reserves.

The chair recognizes now our good friend and colleague, Mr. Matheson, of Utah.

Mr. MATHESON. Mr. Chairman, I will also waive and reserve for later.

Mr. DINGELL. The gentleman waives.

The chair recognizes now the distinguished gentleman from Georgia, Mr. Barrow.

OPENING STATEMENT OF HON. JOHN BARROW, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF GEORGIA

Mr. BARROW. Thank you, Mr. Chairman, and thank you, Mr. Secretary, for being here today. I am pleased to note that in the budget that has been submitted there is a proposed increase in the science budget of some 19 plus percent, and I appreciate that. I support that. I want to encourage your efforts in that area. I also note at the same time a proposed cut on the order of 27 percent in the Office of Energy Efficiency and Renewable Energy, and it would help us in responding to that if you could give us some sort of explanation of what your thinking is. So I would ask your staff, if you would, please, to prepare us something in writing that would give us a statement of your reasons for that. It can be as long or as short as you want so long as it is comprehensive and gives us a good understanding of what your reasoning is.

Also, back to the research. The Savannah River Ecology Lab is virtually the only lab that has been engaged in basic research for the last 50 years at either of our national energy parks, so what I want to do is I want to have an explanation from you all as to why it got totaled zeroed out. It will help us going into the upcoming appropriations process. If you call could give us a statement within the next week of what your reasoning was in zeroing out and defunding that part of that laboratory. Thank you. I yield back.

Mr. DINGELL. The time of the gentleman has expired. The chair recognizes the distinguished gentlewoman from California, Ms. Capps, for 1 minute.

OPENING STATEMENT OF HON. LOIS CAPPS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Ms. CAPPS. Thank you, Chairman Dingell. I have been evaluating this budget proposal, and as I have I can't help but wonder exactly what the President's priorities are. For example, the budget provided a prime opportunity for him to respond to our Nation's energy priorities, but instead of investing in programs to increase the efficiency and reduce our dependence on fossil fuels it once again proposes to increase taxpayer giveaways to those kinds of industries we know to be dirty and dangerous like coal, oil, and nuclear. I am especially disappointed by the proposed 27 percent decrease from the current funding levels for the Office of Energy Efficiency and renewable energy and zeroing out the funding for weatherization assistance. I had hoped the President would have taken Congress' strong support for increasing these programs last year to put forward an equally strong request but that does not appear to be the case.

Myself, I think this is a huge mistake. Now is not the time to be rolling back investments and programs that make energy bills more affordable and create high wage jobs so I look forward to working with my colleagues over the coming months to make significant improvements to the department's budget, and I appreciate again very much the chairman holding the hearing today and our Secretary for being before us. I hope it will allow us to refocus our priorities and talk about ways we can improve our energy policy. I yield back, Mr. Chairman.

Mr. DINGELL. The time of the gentlewoman has expired. The chair recognizes now our distinguished colleague, Mr. Butterfield, for 1 minute.

Mr. BUTTERFIELD. Thank you very much, Mr. Chairman, and I too want to thank the Secretary for coming forward today and sharing with us your vision and your testimony. I have a very long opening statement, and 1 minute is not sufficient for me to do all that I need to do, and so—

Mr. DINGELL. Without objection the whole statement will be inserted in the record.

Mr. BUTTERFIELD. Yes. That was going to be my request, Mr. Chairman. I am going to submit my statement for the record and simply say publicly that I am very disappointed with the weatherization decreases that we are experiencing and the LIHEAP decrease. That is unacceptable. I represent a poor district and my people are suffering. We need to revisit those reductions. I am going to submit my statement for the record. I yield back.

[The prepared statement of Mr. Butterfield appears at the conclusion of the hearing.]

Mr. DINGELL. The time of the gentleman has expired. The chair recognizes now the distinguished gentleman from Maine, Mr. Allen, for 1 minute.

Mr. ALLEN. Mr. Chairman, I will waive opening and reserve.

Mr. DINGELL. The gentleman waives.

The chair recognizes now our good friend and colleague from Illinois, Mr. Rush, for 1 minute.

Mr. RUSH. Mr. Chairman, I will waive and reserve.

Mr. DINGELL. The gentleman waives.

The chair recognizes now the gentlewoman from Illinois, Ms. Schakowsky, for 1 minute.

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

Ms. SCHAKOWSKY. Thank you, Mr. Chairman. I would like to use my time to address the incredible decision last week by the Department of Energy to renege on its commitment to build and operate the world's first coal-fueled near zero emissions power plant in Mattoon, Illinois. During his State of the Union address in 2003, the President announced his intention to build the FutureGen plant. As recently as November 30 this year this project remained on track. As Secretary Bodman wrote to my colleague, Representative Tim Johnson from Illinois, that the Department of Energy was committed to selecting a site by the "end of December, 2007." On December 18, Mattoon, Illinois was officially awarded the FutureGen project. Over the last 5 years the City of Mattoon and the State of Illinois has worked tirelessly and spent millions of dollars to secure the FutureGen project.

You can understand, Mr. Secretary, why my colleagues from the Illinois delegation and I were outraged to hear you tell us last week that the Department of Energy was going to renege on their agreement to build the plant at Mattoon. To be frank, the State of Illinois believes that a bait and switch plan has been pulled, and it is unbelievable that while the President was reiterating his commitment to invest in "new technologies that can produce coal power, that can produce power from coal with significantly lower carbon emissions" during last week's State of the Union address you were acting to jettison FutureGen. The FutureGen plant in Mattoon represented the President's commitment. You need to explain, Mr. Secretary, the Department of Energy's 11th hour decision to abandon Mattoon, its citizens, and delay the FutureGen project indefinitely when the need for the technology is so clear. Thank you, Mr. Chairman, and I yield back.

Mr. DINGELL. The time of the gentlewoman has expired. The chair recognizes our good friend and colleague from Louisiana, Mr. Melancon, for 1 minute. The gentleman waives.

The chair inquires are there other members desiring recognition at this time? The chair hears none. The chair apologizes to Mr. Secretary for the time that it has taken us to complete these but it is the right of the members, and seeing that it is done fairly and properly is fairly hard for the chair but it also causes some burdens for you. With our thanks then, Mr. Secretary, you are welcome for such statement as you choose to give the committee.

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

Secretary BODMAN. Mr. Chairman, Mr. Barton, members of the committee, I want to thank you for giving me the opportunity to appear before you for what is now the fourth time. I think it is safe to say that the goals of the department as represented in the '09 budget are largely unchanged from our budget goals in previous years. This budget request provides us in my judgment the re-

sources that are needed to continue to move forward on our 5 central missions promoting and enhancing energy security, nuclear security, scientific discovery and innovation, environmental responsibility, and management excellence. Since 2001 this Administration has invested more than $180 billion in the Department of Energy and its programs. These investments have been used to address the growing demand for affordable, clean, and reliable energy. They have helped safeguard our national security and have enabled scientific research leading to significant improvements in the quality of life and the health of the American people.

The department's fiscal year 2009 request in the amount of $25 billion was developed with the need to continue these activities in mind and to address the energy challenges that confront us daily. An investment of this size allows us to fulfill our central missions as well as advance the goals of the President's American competitiveness initiative to insure U.S. technological competitiveness and economic security. It also allows us to continue our progress toward the goals of the President's advanced energy initiative accelerating the research, development, and deployment of clean alternative energy technology. The Department of Energy is responsible for promoting America's energy security. We encourage the development of reliable, clean, and affordable energy supplies, and we strengthen U.S. competitiveness by leading in innovation and scientific discovery.

At the same time we continue to insure the security of the nuclear stockpile and we reclaim and restore the sites that are the Nation's environmental legacy. All of this is done under a rubric of sound management consistent with the President's management agenda to improve performance and accountability. This budget request also reflects our concerns about America's energy future. The projected growth in energy demand is a major challenge for us all. It is a challenge that must be met with responsible action. Global demand will continue to grow. We cannot depend solely on hydrocarbons to meet it. This is a problem for all nations, energy producers, and consumers alike. I believe, therefore, that it is vital that the United States pursue policies that enhance global energy security, not just our own. We need new energy options, cleaner, more efficient technologies, and alternative fuels, and we just support fully the research and innovation necessary for their development.

We must diversify our energy supplies, diversity our energy suppliers, and diversify established and secure additional energy supply routes. This budget document should also be viewed as a road map showing the future course of America's energy security. This course will not in my judgment be an easy one but it is necessary. These efforts will require a sustained commitment on the part of government, strong private sector investment, and strategic collaboration between the government, the private sector, and the research community including academia. Our goal is to foster continued economic growth and promote a sustainable energy future. Mr. Chairman, I believe that the committee has a copy of my written statement, which I now ask be included in the record so that in the interest of time we may move to any questions that you or other

members of your committee may have about the department's budget request. Thank you, sir.

Mr. DINGELL. Without objection, it is so ordered.

[The prepared statement of Mr. Bodman follows:]

Statement of Samuel W. Bodman
Secretary of Energy
Before the
Committee on Energy and Commerce
U.S. House of Representatives
February 7, 2008

Mr. Chairman and members of the Committee, I am pleased to be before you today to present the President's fiscal year (FY) 2009 budget proposal for the Department of Energy. 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 committed $183 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 FY 2009 budget request of $25 billion stays on course to address the growing demand for affordable, clean and reliable energy; preserve our national security; and enable scientific breakthroughs that could have significant impacts on our quality of life and the health of the American people. The FY 2009 budget was developed to continue to meet these goals.

In FY 2009, the Department will advance the President's American Competitiveness Initiative aimed at ensuring U.S. technological competitiveness and economic security, and implement the Advanced Energy Initiative, to accelerate the research and development 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. The FY 2009 budget request translates into investments that will:

- Expand research, development, and demonstration of cost-effective carbon capture and storage,
- Accelerate technological breakthroughs outlined in the Advanced Energy Initiative,
- Provide enhanced energy security through the expansion of the Strategic Petroleum Reserve,
- Continues to foster scientific leadership with the American Competitiveness Initiative,
- Advance environmental cleanup and nuclear waste management,
- Maintain the safety and reliability of the nuclear weapons stockpile and continue transforming the weapons complex, and
- Work with other countries to prevent the spread of weapons of mass destruction.

To highlight, in FY 2009 the Department of Energy continues to meet this vision and strengthen the framework built over the last eight years to ensure our national energy security and reliability. The FY 2009 budget request:

- **Invests in Climate Change Technologies**
  In support of the Administration's initiatives that support climate change technology and to implement the U.S. Climate Change Technology Program's Strategic Plan, the FY 2009 budget emphasizes a two-pronged strategy for its climate change technology programs: invest in carbon dioxide (CO_2) mitigation technologies for coal with carbon capture and storage (CCS) and in nuclear power, and invest in near-term, CO_2 mitigation technologies focused on improving energy efficiency. The budget provides $407 million to research and $241 million to demonstrate advanced coal technologies which includes cost-effective CCS for coal-fired power plants. The Department also continues to help work with the Department of the Treasury to administer $1.65 billion in investment tax credits from the Energy Policy Act of 2005 that will accelerate commercial deployment of technologies that are central to carbon capture and storage.

  Through international collaboration, the United States strives to maintain a leadership role in promoting and deploying clean energy technology domestically and around the world. President Bush believes that the greatest progress will be assured by working together with other nations to advance the related objectives of improving economic and energy security, alleviating poverty, improving human health, reducing harmful air pollution, and reducing the growth of greenhouse gases. The United States, Australia, China, India, Japan, Canada, and South Korea work to implement the objectives of the **Asia-Pacific Partnership** (APP) on Clean Development and Climate. This Partnership is helping to advance the President's goal of developing and accelerating the deployment of cleaner and more efficient technologies and practices. It builds on existing multilateral climate initiatives including the Carbon Sequestration Leadership Forum, the International Partnership for a Hydrogen Economy, and Methane to Markets. In FY 2009, the Department is requesting $15.0 million, evenly divided between the Fossil Energy Program and the Energy Efficiency and Renewable Energy Program, to continue to support this important initiative.

- **Advances the American Competitiveness Initiative**
  In 2007, President Bush launched the American Competitiveness Initiative (ACI) to encourage innovation throughout the economy and to give America's children a firm foundation in math and science. A request of $4.7 billion in FY 2009, $748.8 million above the FY 2008 enacted level, will increase basic research in the physical sciences that will have broad impacts on future energy technologies and environmental solutions. ACI funding will support the construction and operation of world-class scientific facilities and will support literally thousands of scientists and students -- our current and future scientific and technical workforce. 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. This investment is essential if the United States is to maintain its world-class, scientific leadership and global competitiveness.

- **Accelerates the Advanced Energy Initiative**
  At a request of $3.2 billion, $623 million above the FY 2008 enacted appropriations of $2.5 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 help to reduce our dependence on oil. The FY 2009 budget for AEI includes funding to promote the licensing of new nuclear power plants and research on an advanced nuclear fuel cycle. Also, AEI's diverse energy portfolio includes investment in making solar power cost-competitive with conventional sources of electricity by 2015 and supports a robust vehicle technology program that includes developing lithium-ion batteries, plug-in hybrids, and drive-train electrification.

- **Expands 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 free of greenhouse gas (GHG) emissions, safe, and reliable, and currently supplies about 20 percent of the nation's electricity. The Department is leading the Administration's efforts to spur a nuclear renaissance in the United States to meet energy and climate goals. We continue to work with industry partners to promote the near term licensing and deployment of the first new nuclear plants in over 30 years, as well as to extend the life of current plants. Furthermore, the Department is developing advanced, more proliferation-resistant nuclear fuel technologies that will maximize energy from nuclear fuel. These technologies will further support the expansion of nuclear power as a safe, efficient, and cost-effective source of energy capable of supporting continued economic growth in the 21st century. In FY 2009, a total of $1.4 billion is requested for nuclear energy activities including $487 million for the Mixed Oxide Fuel Fabrication Facility.

  It is critical to note that the growth of nuclear power is only possible if we continue to develop a responsible path for disposing of spent nuclear fuel. Therefore, $494.7 million is requested in FY 2009 for the continued development of the geologic waste repository at **Yucca Mountain**, Nevada, and to support the defense of the License Application that we will submit in 2008 to the Nuclear Regulatory Commission for authorization to construct the repository.

- **Transforms Our Nuclear Weapons Complex**
  The FY 2009 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 $6.6 billion in this

request for **Weapons Activities**, a $320.6 million increase from the FY 2008 enacted appropriation, to meet the existing requirements for stewardship of the nation's nuclear weapon stockpile, technologies and facilities, as well as to continue to transform the nuclear weapons complex with the goal of a much smaller size by 2030. This transformation effort is structured to achieve President Bush's vision to create a more efficient and less expensive nuclear weapons complex of the future that is able to respond to changing national and global security challenges.

- **Reduces the Risk of Weapons of Mass Destruction (WMD) Worldwide**
  The Department has provided $1.8 billion in this request for detecting, securing, eliminating and disposing of dangerous nuclear materials around the world. The amount includes $1.2 billion within Defense Nuclear Nonproliferation, $487 million within the Office of Nuclear Energy, and $117 million funded in Weapons Activities. The Mixed Oxide (MOX) Fuel Fabrication Facility project remains a key activity of the nation's nuclear nonproliferation efforts. The FY 2009 request for MOX is $ 208.2 million more than the FY 2008 enacted appropriation reflecting continued support for this project. 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 2009 budget provides for the installation of radiation detection equipment at an additional 49 foreign sites in 14 countries and at 9 additional Megaports; continues to implement an aggressive, prioritized work schedule to complete all shipments of Russian origin spent highly-enriched uranium (HEU) fuel stored outside reactor cores by the end of 2010; and maintains a schedule allowing completion of the construction of the second of two fossil-fueled power plants located in Zheleznogorsk, Russia, in 2010. The Seversk project is scheduled for completion by the end of December 2008.

- **Meets 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 my vision, I created a new **Office of Health, Safety and Security**. 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 2009 budget request of $446.9 million, builds on a number of actions the Department has taken over the past two years to increase safety of DOE workers.

  The FY 2009 budget includes $5.5 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. 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. By the end of

2009, cleanup projects at Sandia National Laboratory and Argonne National Laboratory will be finished.

As the Department continues to make progress in completing clean-up, the FY 2009 budget request of $186 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.

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 $157 million in FY 2009 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 2009, 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 2009 request will deliver a balanced and diverse portfolio of solutions to strategically address the urgent energy and environmental challenges facing our country today. Our goal can be met by: 1) accelerating the development of clean and renewable energy technologies to dramatically increase the amount of clean energy produced in the United States; 2) advancing energy efficient technologies and practices that use less energy; and 3) providing information from research, development, and demonstration activities, which could help stimulate private sector choices that will drive change in our energy systems. DOE's applied energy programs are taking pro-active steps to catalyze the advancement of these important technologies through research and development, innovative partnerships, international cooperation through the **Asia Pacific Partnership**, and collaboration with states, industry leaders, and other stakeholders.

The budget lays the groundwork for implementing key elements of the Energy Independence and Security Act of 2007 (EISA). It contains elements that are unprecedented in size, scope and timeframe for increasing our energy security, diversifying our energy system and making America's energy systems stronger, safer and cleaner for future generations. We can further advance the U.S. commitments made at the U.N. Climate Change Meeting in Bali and the Major Economies Meetings to employ clean energy technologies in the global effort to reduce greenhouse gas emissions.

Consistent with the President's initiatives and the EISA, the FY 2009 budget contributes to key elements of the American Competitiveness and Advanced Energy Initiative that

will help reduce our dependence on foreign sources of energy, and change the way we power our homes, businesses, and automobiles.

The proposed Office of Energy Efficiency and Renewable Energy (EERE) budget of $1.255 billion provides a diverse portfolio of solutions to our challenges, including:

Fuels and Vehicle Solutions (Biomass, Vehicles, and Hydrogen programs: $592.3 million)

- Advancing essential R&D projects to achieve cost competitive, commercial scale cellulosic ethanol production by 2012;
- Conducting R&D on lithium-ion batteries, plug-in hybrids, and drive-train electrification to diversify and make our nation's vehicles more efficient to reduce petroleum dependency;
- Continuing to research and develop critical hydrogen technologies that enable a commercialization decision in 2015; and
- Supports fuel testing and validating codes and standards that will help accelerate new fuel and vehicle solutions to the market.

Renewable Power Solutions (Wind, Solar, Geothermal, and Water Power programs: $241.6 million)

- Integrating renewable energy technologies with energy storage technologies to resolve the intermittency challenge;
- Supporting wind power R&D to enable wind turbines to produce an increasing amount of the nation's electricity;
- Investing in solar power to make photovoltaics widely available nationwide and commercially cost-competitive with conventional electricity by 2015;
- Accelerating a refocused geothermal program that conducts enhanced geothermal systems R&D; and
- Pursuing water power technologies as part of EERE's R&D portfolio.

Efficiency Solutions (Buildings and Industrial Technologies programs: $185.9 million)

- Reducing energy consumption and transforming the carbon footprint of the built environment through the development of zero energy buildings; and
- Supporting the advancement of clean and efficient industrial technologies and processes that will drive a 25 percent increase in U.S. industrial energy productivity by 2017.

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. Because coal in the U.S. accounts for 25 percent of the world's coal reserves, the FY 2009 request focuses on carbon capture and storage.

- Integration of advanced **Integrated Gasification Combined Cycle** (IGCC) coal technology with **Carbon Capture and Storage** remains the foundation of the Department's clean coal research program to establish the capability of producing electricity from coal with near-zero atmospheric emissions. The Administration

remains strongly committed to **FutureGen** and is requesting $156 million in FY 2009. An additional $407 million is requested within the **Coal** program to support research and development on technologies that support the concept.

- The Coal program continues to fund large-scale demonstrations through the **Clean Coal Power Initiative** (CCPI) with $85 million requested in FY 2009 to support a Round 3 solicitation which will focus on demonstrating carbon capture and storage technologies.
- As part of the greenhouse gas mitigation strategy, the Department continues the **Carbon Sequestration** program through its large-scale field testing, and will inject carbon dioxide into several types of geological formations. Within the $407 million requested for coal research and development activities, the Department is requesting $149 million for continued work in this area.

Consistent with the FY 2006, 2007, and 2008 budget requests, the FY 2009 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. Federal staff, paid from the program direction account, will work toward an orderly termination of the program in FY 2009.

To further assure against significant oil supply disruptions that could harm our economy, this budget also proposes $171.4 million for expanding the Strategic Petroleum Reserve (SPR) to an ultimate capacity of 1.5 billion barrels by 2029. In FY 2008, DOE will use available balances for the purchase of additional SPR oil and will continue to fill using federal royalty oil until 727 million barrels is achieved in FY 2009. Capacity expansion from 727 million barrels to 1.0 billion barrels will begin in FY 2008 with land acquisition activities. The request also funds National Environmental Policy Act (NEPA) activities associated with the further expansion of SPR capacity to 1.5 billion barrels.

The EPACT 2005 included authorization for a new **Loan Guarantee Program**. The Department requests $19.9 million in funding in FY 2009 for administrative expenses to operate the Office and support personnel and associated costs. This request will be offset by collections in the same amount, as authorized under EPACT 2005. In addition, during fiscal years 2008 through 2011, commitments to guarantee loans under Title XVII of the EPACT 2005 will total $38.5 billion. In the Energy and Water Development and Related Agencies Appropriations Act of 2008, Congress authorized the Department to issue loan guarantees under the Title XVII program until September 30, 2009. The FY 2009 budget now seeks to extend that authorization through FY 2010 and 2011 and specifies amounts and uses of loan guarantee authority for those periods consistent with Congressional guidance accompanying the FY 2008 Appropriations Act. Of the total provided, $20.0 billion will be available through fiscal year 2010 to support projects such as Uranium Enrichment, Coal Based Power, Advanced Coal Gasification, Renewables, and Electricity Delivery. The remaining $18.5 billion will be available through FY 2011 to support nuclear power facilities. The $38.5 billion provided in FY 2008 through 2011 will be in addition to the $4.0 billion in authority provided in FY 2007 under P.L. 110-05 Section 20320(a) for a total loan volume limitation of $42.5 billion.

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 $110.6 million for the **Energy Information Administration** to improve energy data and analysis programs, reflecting a 16 percent increase over the FY 2008 enacted level.

The FY 2009 budget requests $301.5 million for the **Advanced Fuel Cycle Initiative**, the technology development element of the Global Nuclear Energy Partnership (GNEP). The request supports research and development activities focused on methods to reduce the volume and long-term toxicity of high-level waste from spent nuclear fuel, reduce the long-term proliferation threat posed by civilian inventories of plutonium in spent fuel, and provide for proliferation-resistant technologies to recover the energy content in spent nuclear fuel.

Recognizing the potential of nuclear energy, the President announced GNEP in February 2006. 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 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 (GHG);
- Recycle spent nuclear fuel to minimize waste and reduce proliferation concerns;
- Enable developing nations to safely and securely deploy nuclear power to meet their energy needs;
- Increase energy recovery from spent 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. Improving the way spent nuclear fuel is managed will facilitate the expansion of civilian nuclear power in the United States and encourage civilian nuclear power internationally to evolve in a more proliferation-resistant manner. The United States and other countries having the established infrastructure could arrange to supply nuclear fuel to countries seeking the energy benefits of civilian nuclear power, and the spent nuclear fuel could be returned to supplier countries for eventual disposal in international repositories. In this way, foreign countries could obtain the benefits of nuclear energy without needing to design, build, and operate uranium enrichment or recycling technologies to process and store the waste.

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.

Beginning in FY 2008 in accordance with the Consolidated Appropriations Act, 2008, the Office of Nuclear Energy is funding the MOX Fuel Fabrication Facility, which was previously funded by the National Nuclear Security Administration's (NNSA) Nuclear Nonproliferation program. In FY 2009, the Department funds the **MOX Fuel Fabrication Facility** program within the Office Nuclear Energy under the Other Defense activities account at a request of $487 million.

To support the near-term domestic expansion of nuclear energy, the FY 2009 budget seeks $241.6 million for the **Nuclear Power 2010** program to support cost-shared, near term technology development and licensing demonstration activities with industry that focus on enabling an industry decision by 2010 to build a new nuclear plant. To this end, the program will continue to support industry interactions with the Nuclear Regulatory Commission on new plant license applications, as well as first-of-a-kind design finalization for standardized reactor designs.

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 7-year, 50-50 industry cost-shared program could result in a new nuclear power plant order by 2010 and a new nuclear power plant constructed by the private sector and in operation by 2015.

EPACT 2005 authorizes DOE to enter into contracts with the first six sponsors that are issued a license and begin construction of new nuclear facilities and meet all contractual conditions to provide risk insurance for certain regulatory and litigation delays in the full power operation of their facility. Up to $500 million in coverage is available for the initial two licensed plants for which construction is started and up to $250 million is available for the next four plants. 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. In FY 2009, the Department may issue conditional agreements for standby support to sponsors of new nuclear power plants.

The FY 2000 budget request includes $70 million to continue the development of next-generation nuclear energy systems known as "**Generation IV** (GenIV)." These next-generation technologies will enhance the safety, cost-effectiveness, and proliferation-resistance of nuclear power, while harnessing its potential to generate hydrogen for use as a fuel. Gen IV's FY 2009 resources 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 on continued advances in science and technology. Scientific and technological discovery and innovation are the major 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. Today it is especially vital that nations around the globe -- not only the developed nations but also the largest developing ones -- increase their strategic national investments in scientific research with an eye to global economic competition.

The Science program at the Department of Energy delivers discoveries and scientific tools that transform our understanding of energy and matter and advance the national, economic, and energy security of the United States. Science is a primary sponsor of basic research in the United States, leading the nation to support the physical sciences in a broad array of research subjects in order to improve our energy security and address issues ancillary to energy, such as climate change, genomics, and life sciences. In FY 2009, the Department requests $4.7 billion, an increase of 18.8 percent over the enacted FY 2008 appropriation, to continue to invest in science research that supports the American Competitiveness Initiative.

The **High Energy Physics** ($805.0 million) program conducts **basic** research on the nature of matter and energy at its most fundamental level, seeking to understand the universe by investigating the most basic constituents of matter and energy and exploring the nature of space and time, and probing the forces that bind them together. Support is provided for operation of the Tevatron and Neutrinos at the Main Injector (NuMI) beam line which are both located at Fermi National Accelerator Laboratory (Fermilab). In addition, the request supports the research of U.S. scientists at the Large Hadron Collider in Switzerland ($72.5 million) and the U.S. involvement in the global research and development effort for a potential International Linear Collider ($35 million). The program also funds non-accelerator physics to investigate dark energy and dark matter, supernovae, solar neutrinos, black holes, and other topics, including support for the Joint Dark Energy Mission (JDEM) in partnership with NASA.

The **Nuclear Physics** ($510.1 million) program conducts research to understand the structure and interactions of atomic nuclei and the fundamental forces and particles of nature in nuclear matter in terms of their fundamental constituents. Support is provided for operation of the Relativistic Heavy Ion Collider ($161.00 million), which enables us to glimpse conditions of the very early universe, and the Continuous Electron Beam Accelerator Facility (CEBAF) ($106.4 million) which provides insight into the quark structure of matter.

The **Biological and Environmental Research** (BER) ($568.5 million) program provides the environmental and biological knowledge that promotes national security through improved energy production and use, supports the President's National Energy Plan, and conducts research to protect our environment. This research is focused in two areas: **Biological Research** and **Climate Change**. BER supports the **Genomics: GTL** program supports the most 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 2009 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 biofuels production truly cost-effective on a national scale. Climate change research includes the study of the scientifically-based predictions and assessments of the potential effects of greenhouse gas on climate and the environment, and funds DOE participation in the nation's **Climate Change Science Program** ($145.9 million).

The **Basic Energy Sciences** ($1.568.2 billion) program supports research and operates facilities to provide the foundation for new and improved energy technologies and for understanding and mitigating the environmental impacts of energy use. The FY 2009 request enhances support in high priority research areas addressing both grand challenge science and basic research needs for energy-related science. One implementation strategy will be new **Energy Frontier Research Centers,** which will bring together the skills and talents of multiple investigators to enable research of a scope and complexity that would not be possible with the standard individual investigator or small group award. The **Materials Sciences and Engineering** subprogram supports basic research to explore the scientific foundations for the development of materials that improve their efficiency, economy, environmental acceptability, and safety for energy generation, conservation, transmission, and use. Applications include lighter, stronger materials to increase fuel economy in automobiles, alloys and ceramics that improve the efficiency of combustion engines, and more efficient photovoltaic materials for solar energy conversion. **Chemical Sciences**, **Geosciences**, and **Energy Biosciences** support research crucial for improving combustion systems, solar photoconversion processes, and for applications to renewable fuel resources, environmental remediation, and photosynthesis. BES supports the Advanced Energy Initiative with solar conversion and biomass production research. A major part of the BES mission is to build and operate world-class user facilities including the Spallation Neutron Source at ORNL, the world's most powerful neutron scattering facility. All five of the Nanoscale Science Research Centers, part of the **National Nanotechnology Initiative**, will be fully operational in FY 2009 with a total request of $101.2 million.

The **Advanced Scientific Computing Research** ($368.8 million) program delivers forefront computational and networking capabilities to scientists nationwide that enable them to extend the frontiers of science. Leadership in scientific computation is a cornerstone of the Department's strategy to ensure the security of the nation, and to succeed in its science, energy, environmental quality, and national security missions.

Fusion is the energy source of stars, including our own sun. The **Fusion Energy Sciences** ($493.1 million) program is the national research effort to advance plasma science, fusion science, and fusion technology -- the knowledge base required for an economically and environmentally friendly, carbon free energy. DOE is also one of seven international parties participating in the **ITER** project, an international burning plasma fusion experiment to be built in Cadarache, France. The FY 2009 request provides $214.5 million for the U.S. contribution to this international effort.

ENSURING AMERICA'S NUCLEAR SECURITY

The **National Nuclear Security Administration** (NNSA) continues significant efforts to meet Administration and secretarial priorities, leveraging science to promote national security. The FY 2009 President's budget request is $9.1 billion, essentially level with the FY 2008 appropriation, to meet defense and homeland security-related objectives:

- Transforming the nuclear weapons stockpile and infrastructure while meeting Department of Defense requirements;
- 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 physical and cyber security for facilities, employees and information by implementing and sustaining upgrades throughout the complex;
- Providing nuclear counter-terrorism and 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 program operations.

The United States continues a fundamental shift in national security strategy to address the realities of the 21st century. The FY 2004-directed reductions to the U.S. nuclear weapons stockpile were completed in 2007, five years early. Today's nuclear weapons stockpile is now the size envisioned for 2012, and by 2012 it will be almost 15 percent less than that -- a total that is just 25 percent of what it was at the end of the Cold War. Consistent with the Administration's Nuclear Posture Review, the Department of Energy has created a vision for a revitalized nuclear weapons complex that is significantly more agile and responsive, and will allow further reductions in the nuclear stockpile by providing an industrial hedge against geopolitical or technical problems.

In compliance with the National Environmental Policy Act, NNSA is preparing a Complex Transformation supplement to the 1996 Stockpile Stewardship and Management Programmatic Environmental Impact Statement. In January 2008, NNSA announced a *preferred alternative* for the future nuclear weapons complex infrastructure that identifies the proposed major facilities, and consolidations of missions, capabilities, and special nuclear materials. The FY 2009 budget includes funding to pursue a program

consistent with the preferred alternative, with NNSA planning to promulgate a Record of Decision in 2008.

The FY 2009 budget request of $6.6 billion for **Weapons Activities** includes programs to meet the immediate national security requirements of the stockpile, including stockpile surveillance, annual assessment, life extension programs, and warhead dismantlement. 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. Readiness in Technical Base and Facilities supports facilities and operations across the government-owned, contractor-operated nuclear weapons complex. 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.

Growth areas in the Weapons Activities appropriation include **Cyber Security** and **Nuclear Weapons Incident Response**. The Cyber Security activities increase to support a major five-year effort focused on revitalization, certification, accreditation and training across the NNSA complex. The Nuclear Weapons Incident Response program increases due to functional transfers of emergency management and counterterrorism-related activities. Defense Nuclear Security activities focus on maintaining and implementing security upgrades needed to address the DOE Design Basis Threat. A new Transformation Disposition program is proposed at $77.4 million to begin to eliminate excess NNSA facilities in concert with transformation activities.

The FY 2009 budget request for the **Defense Nuclear Nonproliferation** appropriation totals $1.2 billion. The appearance of a significant decrease is due to the final FY 2008 enacted appropriations that added about $480 million in funding above the President's request to programs in this account. In addition, the Consolidated Appropriations Act, 2008, (P.L. 110-161) shifted the funding for the Mixed Oxide (MOX) Fuel Fabrication Facility to DOE's Office of Nuclear Energy and funding for the related Pit Disassembly and Conversion Facility/Waste Solidification Building (PDCF/WSB) project to the Weapons Account. This shift represents over $600 million in funding that would have been requested within the Defense Nuclear Nonproliferation appropriation in FY 2009. These shifts do not change or diminish in any way the importance of these projects to the nation's nuclear nonproliferation efforts, and in total, the funding commitment to DOE's nonproliferation activities is $1.8 billion in FY 2009. The budget describes a shift in emphasis from work completed under the Bratislava agreement to additional **Second Line of Defense** sites, including Megaports, and continued expansion of nuclear and radiological material removal under the **Global Threat Reduction Initiative**.

In FY 2009, NNSA's nonproliferation programs will complete major activities in the **Elimination of Weapons Grade Plutonium Production** program, as well as complete upgrades associated with the agreement from the Bratislava Summit. Our focus shifts to sustainability support to Russian warhead and material sites with completed upgrades, and acceleration of projects to assist the Russian Federation and other partner countries in establishing the necessary infrastructure to sustain effective material control operations. The budget request also provides for the installation of radiation detection

equipment at an additional 49 foreign sites in 14 countries and at 9 additional Megaports, for a total of 32 ports completed.

The FY 2009 request also supports research and development on detection technology, and a new **Next Generation Safeguards Initiative** (NGSI), which aims to strengthen international safeguards and revitalize the U.S. technical base. The budget request supports continued significant expansion of nuclear and radiological material removal under the Global Threat Reduction Initiative; and initiates support of disablement, dismantlement, and verification of nuclear programs in North Korea.

NNSA continues to support the U.S. Navy's nuclear propulsion systems. The FY 2009 request for **Naval Reactors** of $828 million is an increase of about 6.9 percent over the FY 2008 appropriation. These programs ensure the safe and reliable operation of reactor plants in nuclear-powered submarines and aircraft carriers, and fulfill the Navy's requirements for new nuclear propulsion plants that meet future requirements.

PROTECTING THE ENVIRONMENT BY PROVIDING RESPONSIBLE SOLUTIONS TO THE ENVIRONMENTAL LEGACY OF NUCLEAR WEAPONS PRODUCTION

The federal government has the dual responsibilities of addressing the nuclear weapons production legacy of our past and providing the necessary environmental infrastructure for today that will ensure a clean, safe and healthy environment for future generations. As such, the Department is committed to strategic acquisitions for long-term waste treatment projects and the implementation of sound project management principles to meet our long-term cleanup commitments. In FY 2009, a total of $6.2 billion is dedicated to supporting three key pillars that set the framework for the Department to reach these goals. The first pillar is to continue the **environmental cleanup** ($5.5 billion) of contaminated Cold War sites across the country. The second pillar is to continue to provide **long-term stewardship** and to carry out our responsibilities ($186 million) to our former contractor workforce. The third pillar completes the framework by working to construct a permanent nuclear waste repository at **Yucca Mountain** ($494.7 million) to address long-term nuclear waste disposal and to defend the License Application that we will submit in 2008 to the Nuclear Regulatory Commission for authorization to construct the repository. My core principle of safe operations throughout the Department will be dynamically applied within this framework.

To deliver on the Department's 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 those activities that will yield the greatest risk reductions, with safety as the utmost priority. To achieve a balance of risk reduction and environmental cleanup, the FY 2009 request of $5.5 billion supports the following activities, in priority order:

- Stabilizing radioactive tank waste in preparation for treatment (about 34 percent of the FY 2009 request);

- Storing and safeguarding nuclear materials and spent nuclear fuel (about 20 percent of the FY 2009 request);
- Disposing of transuranic, low-level and other solid wastes (about 14 percent of the FY 2009 request); and
- Remediating major areas of our sites and decontaminating and decommissioning excess facilities (about 23 percent of the FY 2009 request).

The Administration recognizes that EM's FY 2009 budget request of $5.528 billion is based on, and would implement, an environmental management approach under which the Department would not meet some of the milestones and obligations contained in all of the environmental agreements that have been negotiated over many years with regulators. It is also important to recognize that some upcoming milestones will be missed regardless of the approach that is chosen and its associated level of funding. Moreover, some of the relevant agreements were negotiated many years ago, with incomplete knowledge by any of the parties of the technical complexity and magnitude of costs that would be involved in attempting to meet the requirements. This incomplete knowledge, coupled with other issues including contractor performance, overly optimistic planning assumptions, and emerging technical barriers, also have impeded the Department in meeting all milestones and obligations contained in the environmental compliance agreements.

In planning its environmental cleanup efforts and developing the budget for those activities, the Department seeks to focus on work that will produce the greatest environmental benefit and the largest amount of risk reduction. The Department strongly believes that setting priorities and establishing work plans in this way is the most effective use of taxpayer funds and will have the greatest benefit, at the earliest possible time, to the largest number of people. In determining these priorities, the Department works closely with federal and state regulators, and will seek the cooperation of those entities in helping evaluate needs and focus work on the highest environmental priorities based on current knowledge, particularly where doing so necessitates modification of cleanup milestones embodied in prior agreements with DOE.

In FY 2009, EM is aggressively pursuing the consolidation and disposition of surplus plutonium and other special nuclear materials to enhance national security and to minimize the storage risks and costs associated with these materials. In addition, EM continues to make significant progress on the construction and operation of waste treatment and immobilization facilities across the complex. The budget continues shipments of remote-handled transuranic waste to the Waste Isolation Pilot Plant.

The EM program has made great strides in achieving cleanup results. Since 2001, EM has cleaned up and closed 14 sites, including three former weapons production sites -- Rocky Flats and Fernald, with Mound to be completed in FY 2008, -- as part of its risk-reduction cleanup strategy. In the fall of 2007, DOE transferred nearly 4,000 acres of its former Rocky Flats nuclear weapons production site to the Department of Interior's U.S. Fish and Wildlife Service for use as a National Wildlife Refuge. Additionally, the Rocky Flats Cleanup Team received the 2007 Service to America Medal for Science and Environment for completing the first successful cleanup of a former nuclear weapons

facility. In 2007, DOE's Waste Isolation Pilot Plant in New Mexico celebrated its 6000th safely received shipment, reached a milestone for disposal of over 50,000 cubic meters of waste and began disposing of remote-handled transuranic waste. DOE's Closure Project at Fernald, a 900-acre former uranium processing facility located in southwest Ohio -- was named the 2007 Project of the Year by the Project Management Institute.

Recognizing that cleanup completion dates at the majority of EM sites extend beyond 2013, EM is working to improve project and program management in a number of areas. EM is strengthening its project baselines, verifying the reasonableness of scope, cost and schedule of all environmental projects. These baselines will provide the basis for conducting credible analyses to better assess existing priorities and identify opportunities to accelerate cleanup work. Working collaboratively with the sites, EM is also continuing to seek aggressive but achievable strategies for accelerating cleanup of discrete sites or segments of work. In addition, functional and cross-site activities such as elimination of specific groundwater contaminants, waste or material processing campaigns, or achievement of interim or final end-states are being evaluated. Developing robust life-cycle planning capabilities, realistic near-term baselines, as well as a focused technology program, a best-in-class project management system, an acquisition strategy that promotes performance and efficiency, and a proactive human capital plan allows EM to build a reliable, high-performing organization that will continue to advance risk reduction and cleanup across all EM sites.

After the Environmental Management program completes cleanup and closure of sites that no longer have an ongoing DOE mission, 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.

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 approximately 2,000 additional metric tons of additional 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 (SNF) and high-level nuclear waste (HLW) at **Yucca Mountain**. The FY 2009 budget of $494.7 million sets us on the path to meet that goal. The funding will support continued development of a repository including:

- Robustly defending the License Application (LA) that we plan to submit to the Nuclear Regulatory Commission in 2008;
- Progression of preliminary designs for facilities required for the receipt of SNF and HLW;

- Continuing essential interactions with state, local, and tribal governments needed to support national transportation planning;
- Completing the horizontal layout of the Right-of-Way application for the Nevada Rail Line;
- Enhancing the design, staffing, and training of the OCRWM organization so that it has the skills and culture to design, license, and manage the construction and operation of the Yucca Mountain Project with safety, quality, and cost effectiveness;
- Addressing the federal government's mounting liability associated with unmet contractual obligations to move SNF from commercial nuclear plant sites; and
- Planning a compliant and well-integrated safeguards and security, safety, and emergency management program for the disposal, transportation, and management of SNF and HLW.

Designing, licensing and constructing a permanent geologic repository for spent nuclear fuel and high level waste will help resolve the challenge of safe disposal of these materials and make construction of new nuclear power plants 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 "best-achievable schedule" to initiate repository operations was in 2017. The opening date of 2017 was predicated upon enactment of pending legislation and was developed without regard to budget constraints. Given the funding levels in FY 2007 and FY 2008, the "best-achievable schedule" of 2017 for the initial operating capability date is no longer possible. There is an immediate and strong need to address the funding of the repository construction program now for FY 2009 and beyond. To ensure program success it is critical that the Administration's legislative proposal, the Nuclear Fuel Management and Disposal Act, be enacted to provide stability, clarity, and predictability to the Yucca Mountain repository project. Without funding reform, development of a credible schedule for the program is not possible.

ENABLING THE MISSION THROUGH SOUND MANAGEMENT

The Department of Energy is committed to continuing the transformation of its management culture and increasing its focus on results. The Department has continued its efforts to improve in key functional areas and is using its strategic plan as the roadmap to instill management excellence.

The Department's human capital management efforts are focused on an integrated approach that ensures human capital programs and policies are linked to the Department's missions, strategies, and strategic goals, while providing for continuous improvement in efficiency and effectiveness. The Department has revised its human capital management strategic plan to address future organizational needs, workforce size, skill gaps, performance management systems and diversity. In FY 2009, the Department

will implement key components of this strategic plan, especially critical efforts to ensure the Department's workforce has the necessary skills to carry out its critical mission. To accomplish this goal, the Department will continue to implement strategies to attract, motivate and retain a highly skilled and diverse workforce to meet the future needs of the nation in such vital areas as scientific discovery and innovation.

To continue to improve the Department's stewardship of taxpayer dollars, the Department will continue to issue audited financial statements in an accelerated timeframe and provide assurance that the Department's financial management meets the highest standards of integrity. The Department's fiscal year 2007 financial statements were reviewed by independent auditors and received an unqualified "clean" opinion. This was made possible by implementing an aggressive plan to mitigate and remediate a number of financial management challenges that were identified by the Department and its independent auditors. The Department in FY 2009 will continue its effort to build and improve its integrated business management system, I-MANAGE, with the deployment of budget execution and formulation modules.

The Department continues to make strides in improving performance. The Department and OMB have worked collaboratively to complete a Program Assessment Rating Tool (PART) review for 51 of the Department's 56 programs (91 percent). Since 2002, the Department's average PART score has steadily improved from Adequate to Moderately Effective. The Department is also leading the government in the number of Effective and Moderately Effective programs.

In FY 2007, the Department improved the quality of its performance measures. This was accomplished by evaluating 30 percent of the Department's FY 2008 performance measures against a standard set of criteria. This analysis identified a need for the Department to improve some of its performance measures to make them more outcome focused and trendable.

In FY 2008, DOE will work with OMB to improve the quality of PART performance and efficiency goals. This initiative will support implementation of Executive Order 13450, Improving Government Program Performance. The quality review will result in improved goals, more consistency between performance information in the PART and the budget submission, and improved performance measures.

To improve financial performance in project management, the Department enhanced the use of Earned Value Management (EVM) techniques that objectively track physical accomplishment of work and provide early warning of performance problems. A certification process was instituted for contractors' EVM systems to improve the definition of project scope, communicate objective progress to stakeholders and keep project teams focused on achieving progress. Currently, 70 percent of the Department's capital asset projects have certified EVM systems. In FY 2009, the Department will continue toward our goal of ensuring all projects have certified systems which will make projects far more likely to stay within planned cost and schedule.

The Department continues to strengthen information technology management by consistent execution of robust IT Capital Planning and Investment Control oversight and reporting processes designed to ensure successful investment performance, including the use of EVM Systems as appropriate, and the remediation of poorly performing investments. Through the establishment and use of an Enterprise Architecture that aligns to the Federal Enterprise Architecture, DOE has ensured that all IT investments follow a comprehensive Modernization Roadmap.

The Department continues to take significant actions to improve its cyber security posture by implementing its **Cyber Security Revitalization Plan** to address long-standing, systemic weaknesses in DOE's information and information systems. Specifically, the Department seeks to ensure that 100 percent of operational information technology systems are certified and accredited as secure and that the Department's Inspector General has rated the certification and accreditation process as "satisfactory." Additional steps will be taken to ensure that electronic classified and personally identifiable information are secure.

To manage the Department's large real property portfolio requires reliable data. The Department has improved its Facility Information Management System and satisfied the Federal Real Property Council's goal of 100 percent reporting of all data elements. Further, the Department implemented a statistical validation program to ensure the integrity of real property data and better support real property decision-making. To make continuous improvements, the Department will invest in its infrastructure to reduce overall facility square footage, improve energy efficiency and sustainability, and implement an active asset management plan to align resource needs with key Departmental goals.

CONCLUSION

I appreciate the opportunity to appear before you to present the FY 2009 budget proposal for the Department of Energy. I will be happy to take any questions that members of the Committee may have.

Mr. DINGELL. Does that complete your presentation?

Secretary BODMAN. Yes, it does, sir.

Mr. DINGELL. We thank you. The chair is going to recognize members under the same rules that we did before commencing with our good friend from Texas, Mr. Barton. The gentleman is recognized for 5 minutes. Mr. Barton.

Mr. BARTON. Thank you. Thank you, Mr. Chairman. Mr. Secretary, last year we had a little bit of a tiff with the Administration over what a loan guarantee for the new nuclear power plants meant, what was 80 percent of 80 percent. As you remember the O&B, it said that 80 percent was really 80 percent of 80 percent, which is 64 percent, and simple people like me thought 64 percent wasn't the same as 80 percent. We were kind of concerned about that. Could you explain what has happened and what the solution is and just what the status of that program is right now?

Secretary BODMAN. Yes, Mr. Barton. We, first of all, had decided that 80 percent is the right number and that that is——

Mr. BARTON. That is a good step.

Secretary BODMAN. That is the first step. Secondly, you may recall that we had over 100 applicants that submitted applications for loan guarantees. We have selected 16 of those and had meetings with each of the companies that are involved, and we expect applications to arrive some time during the next couple of months, some time in February and March. I would expect that we would start to see some loan guarantees issued during the balance of this year. It is going to take some time to work through it. Additionally, there will be—we had ignored work on nuclear power in the initial applications and now with the Congress' generosity in providing for some $38 billion worth of loan guarantees, we will be in a position to issue, I would think, within let us say in the spring time a solicitation for both renewable energy and nuclear power, and we would be in a position if Congress allows us to extend the time frame over which we would have the monies available for loan guarantees. We are not asking for a change in the amount but merely——

Mr. BARTON. Is there a cap on any specific proposal?

Secretary BODMAN. There is a cap. I think we have $18 billion worth that we are allowed to grant to utilities, $2 billion to the fraud end, if you will, of the operation, that is to say to the enrichment companies that are involved, and the balance, I believe, is renewable energy——

Mr. BARTON. Within a specific category if I am a company is there a limit on how much a company——

Secretary BODMAN. Oh, a company?

Mr. BARTON [continuing]. A request can be for.

Secretary BODMAN. No, but we will have to look at—we got $18 billion, let us say for nuclear power. Nuclear power plants have become much more expensive. I think it unlikely that we are going to be able to offer the loan guarantees in the amount of 80 percent. If it is a $10 billion project that would mean you are going to have 2, and I think it is going to be a tough decision to make so I would rather have 4 at 40 percent.

Mr. BARTON. You zeroed out funding for oil and gas, R&D. I kind of understand that for the big companies but there is a section in the Energy Policy Act of 2005, I think it is Section 999, it may not

be but I think that is the section, it is for small projects and it is a guaranteed $50 million a year program. It is funded from money from the Federal royalty program. It is a loan program that people get a grant and have to repay it. The committee that is making these guarantees met in Houston last week, 32-1/2 percent of the program goes to things like hard to get natural gas, coal methane gas. It is a program that was proposed by a gentleman named Walter Mise in Clayburn, Texas, who just passed away. In fact, I was at his funeral last week. You zeroed it out last year. We put the money back in.

Would you go back and take a look at that because we are not talking about funding Exxon Mobile. We are talking about loans to really small operators that go out and try to get primarily natural gas but some oil that is hard to get. And let me give you an example. In my district right now there is a natural gas play called the Barnett Shale. It is driven about 8,000 feet to 10,000 feet using horizontal drilling and hydraulic technology that didn't exist 10 years ago. That technology was partially funded by the Department of Energy in the last 20 years. That one field is going to produce three-quarters of a trillion cubic feet of natural gas this year. That is about 4 percent of domestic supply. It wouldn't have been possible 10 or 15 years ago because that technology wasn't in existence. And all of that field is small guys, little guys, so we are not talking about funding Exxon Mobil or Chevron. We are talking about a very small program. I am sure we are going to reinstitute it. I just ask you to take another look at it because long term it will have a pay-off and it will actually make money for the Treasury.

Secretary BODMAN. I believe, Mr. Barton, that program which is there because of your interest and Mr. Hall's interest and we are—that program I believe is the law of the land.

Mr. BARTON. Well, it is the law but you got to fund it.

Secretary BODMAN. Well, it is funded, I believe.

Mr. BARTON. Okay. Well, I hope so.

Secretary BODMAN. I believe it is funded.

Mr. BARTON. My time is expired. I appreciate you being here, Mr. Secretary. Thank you, Mr. Chairman, for your courtesy.

Mr. DINGELL. The chair thanks the gentleman. Mr. Bodman, I want to make three statements. Tell me which of them you disagree with. Do you agree that the Federal Scientific and Industrial Center for Nuclear Machine Building in Russia has been doing work on the Iran Bushehr reactor? Do you agree that the Scientific Research Institute of Measuring Systems has also been doing work on the Bushehr reactor in Iran, and do you agree that the department has approved funding and funding projects at these two institutes?

Secretary BODMAN. Mr. Chairman—

Mr. DINGELL. It is a very simple yes or no.

Secretary BODMAN. Well, if I may, sir, I did receive a letter from you yesterday on this subject that you are aware of.

Mr. DINGELL. Yes.

Secretary BODMAN. So I wanted to acknowledge the fact that that was received. Secondly, I have not had time to fully investigate in the last 15 hours since I received the letter all of the

issues that are enumerated in your letter. But I have directed the principal deputy of the NNSA, Bill Ostendorff, to look into those questions and to report back to me and then he and I will report to you. I am told that the projects that are cited in the committee's letter or any of the department's scientific engagement projects are not enhancing the Iranian nuclear program. All the projects under the scientific engagement program in question are vetted through a very rigorous interagency effort and are fully consistent with U.S. law and policy.

All of the contracts are of a pay for performance nature and that is to say once a product is achieved we then will pay the money. Regarding Bushehr, the U.S. has been in dialogue with Russia for many years relating to the proliferation issues associated with nuclear cooperation involving Iran. The reactor in Bushehr will be under IAEA safeguards. It is a commercial transaction, and Russia has agreed to long-term nuclear fuel supply program and a take back program.

Mr. DINGELL. How, Mr. Secretary, do you then rhyme that statement with what the State Department said when they said this. Iran uses Bushehr as a cover and protection for obtaining sensitive technology to advance its nuclear weapons program.

Secretary BODMAN. I have no doubt that there are inconsistencies in the statement. I will tell you what I believe to be true, and these are things that I have been told over the last 15 hours since I received your letter.

Mr. DINGELL. Well, DOE has provided this committee with documents, has provided same to GAO, which has provided them to us which indicates that these projects at these institutes has been funded. Now you are aware of the fact that dollars are fungible, is that right?

Secretary BODMAN. I am aware of the fact that dollars are fungible.

Mr. DINGELL. You get dollars in Russia, and they can move the dollars around to suit their needs. Now let me ask you this question. Are these grants which you are making solely to the scientists or are they to the scientists and to the institute or are they for—is any part of them for overhead?

Secretary BODMAN. They are contracts that are paid for performance, sir, so we pay for a product to be created by the scientist so we identify the scientist. For example, one of the—

Mr. DINGELL. Mr. Secretary, you are being very helpful but understand I have 54 seconds left, and what I am trying to find out is when DOE gives contracts they give them for 2 purposes. One, to support the particular goal or objective of the contract, and, 2, to pay the overhead that is associated with it. Are they paying just the cost for a contract or are they paying in fact the contract—the overhead for the operation of the institute?

Secretary BODMAN. I truly don't know, Mr. Dingell.

Mr. DINGELL. I think that is an important question. Mr. Secretary, we will be sending you other correspondence on this particular matter. I would like to have your comments about this in greater detail but I note that my time has expired and perhaps on the second time around I can recognize myself for further ques-

tions. The chair now recognizes the distinguished gentleman from Michigan, Mr. Upton, for 5 minutes.

Mr. UPTON. I think my chairman. Mr. Secretary, I noted in my opening statement, I talked a little bit about nuclear power, and that nuclear reactions today generate 20 percent of America's electricity, yet we know that our demand is going to grow by 50 percent by the year 2030. To maintain that 20 percent nuclear share is going to require that we are going to need to build perhaps as many as 45 or 50 new nuclear reactors by that time. Do you think that the funding in your budget that was submitted by the President this last week along with existing regulatory policies will allow us to reach that minimum level of 45 to 50 nuclear reactors by the year 2030?

Secretary BODMAN. I believe that the effort that is anticipated by the budget that has been submitted will put us into a position to see nuclear power used not only in this country but throughout the world, and I am very hopeful about that. As to what will happen over the next 30 years, I would be foolish to try to estimate that or agree with the proposition so it would be—I hope that it will lead to that. I certainly think that your forecast is a reasonable one but I wouldn't want to say that there is a linkage between this budget and that forecast.

Mr. UPTON. I know that the level of funding for Yucca seemed to be a flat level in essence in '09 the same as it what it was in '08 and in past years. Does the department support taking the nuclear waste fund for Yucca off budget, an issue that Mr. Towns and I on a bipartisan basis have introduced?

Secretary BODMAN. Yeah, I think that the issue of the nuclear waste fund is a major challenge. What we are committed to do in the Energy Department is to get a license application that is scientifically sound filed with the Nuclear Regulatory Commission some time this year.

Mr. UPTON. And that is the same time table that you referenced last year when you testified on the budget as well.

Secretary BODMAN. I said last year that we were going to do it in the middle of the year in May-June, and I think that time table is going to be more questionable now because of the reduction we have for I think almost $500 million, and that has been reduced by $120 million so it is back to the 380 or so, and so we are now looking at what the implications of that are but I am hopeful that we will be successful in that endeavor. That is all I wanted to say about that. But in order to get a serious effort, in order to comply with the 2017 time frame that was when this budget was to have been completed, I think that is now off the table, the 2017 date, and we are going to have to start spending between $1 billion and $2 billion a year on Yucca Mountain if we are to be successful in accomplishing what needs to be accomplished, not $300 million or $400 million.

Mr. UPTON. So taking the trust fund off budget would help us get to that goal.

Secretary BODMAN. Yes, sir, it would.

Mr. UPTON. Where are we in terms of re-examining the recycling of nuclear fuel, reprocessing nuclear fuel? What do we need to do here to try and help open up that debate again?

Secretary BODMAN. Well, the proposed budget which has got the advanced fuel cycle initiative of some $300 million, which is an increase of about $130 million over that which was a lot last year, that is where that is. That is where GNEP, the Global Nuclear Energy Partnership, funding, that is what is intended to see the technical work done that would start. We have already filed an environmental impact statement about the prospects of putting a unit or research facility in any—I think there are 8 different communities that have applied for it so we are quite serious about it, and we hope that Congress agrees with our seriousness and the need for it.

Mr. UPTON. My time is expiring so I will yield back. Thank you. Thank you, Mr. Secretary. I appreciate your service.

Secretary BODMAN. Thank you.

Mr. DINGELL. The time of the gentleman has expired. The chair recognizes now the distinguished gentleman from Michigan—rather from New York, Mr. Towns, for 5 minutes.

Mr. TOWNS. Thank you very much, Mr. Chairman. Let me thank you, Mr. Secretary, for coming up. As I travel around the country when I talk to seniors they are concerned about the heating bills, and many of them tell stories that they have to make a decision whether to buy their medicine or whether they buy food or whether they pay their heating bill. I notice that this budget has cut the Low Income Home Energy Assistance Program by 22 percent. How do you arrive at this number?

Secretary BODMAN. First of all, sir, that is the LIHEAP proposal, I believe, the low income heating assistance plan.

Mr. TOWNS. That is correct.

Secretary BODMAN. That is in the Department of Health and Human Services, HHS, not in the Energy Department, so I can't—I would be happy to defend anything that we are responsible for but that is not one of them.

Mr. TOWNS. Let me ask you this. Are you willing to speak out against it?

Secretary BODMAN. Well, I think that, look, there are issues related to all of the budgets. These are very tough times in terms of the pressures that are on the various secretaries to create budgets. I don't happen to know what all the demands are in HHS so I can't speak to that. But I can speak about the weatherization plan which has been zeroed out on our budget. It is a drop of, you mentioned 22 percent, this is a drop of 100 percent that we are proposing that would affect low income residents. And the reason for that is that that plan has existed in what we call EERE, Energy Efficiency and Renewable Energy department, which is largely an applied research department. That is what they do. And it is something that they have had great success over the years of investing money so for every dollar that goes into weatherization it is a dollar that is not going into the creation of new codes for construction.

It is a dollar that is not going into the support of new appliances or the so-called Energy Star program. So we do a lot of things that help low income people and these are much higher rates of return on the investment that we get by pointing it to work as I described.

Mr. TOWNS. I think both are very important. Let me just move along. My time is running. I notice in the budget proposal that

there are also cuts in funding for renewable technology development of hydrogen, solar energy, and water power. Why?

Secretary BODMAN. Well, the answers in each are different. Solar energy, the reduction is not a reduction over that which we asked for last year. We were blessed with the fact that Congress elected to give us more money last year than we asked for. So what we have asked for is an increase over that which we asked for last year which is I think a modest decrease over the amount that was this year. Water power, I think, is that one of your questions?

Mr. TOWNS. Yes, water power. Yes, it is.

Secretary BODMAN. Water power, we were granted I think $10 million last year and we have put in—we still haven't spent the money because it came in—it didn't come in until the continuing resolution was passed, and we now have the $10 million and we will be spending that plus I think it is $3 million that we are asking for in the 2009 budget and so we will have $13 million spent on doing a survey of where the technology is and does it make sense for our department to move forward in that regard.

Mr. TOWNS. It seems to me that we should continue researching safe and clean alternative fuel sources so that we may reduce dependence on foreign oil and of course—

Secretary BODMAN. I agree with that, sir.

Mr. TOWNS. You agree with that?

Secretary BODMAN. Yes, sir.

Mr. TOWNS. I am happy that we agree on that, and I hope that you will also—I would like to talk further with you because I understand you are saying that it has—it is another department but your influence is still there and it could be helpful because I really think that what is happening with that—I just think low income people are just really, really being harmed in this budget, and I think that we should try to do whatever we can to fix it. So, Mr. Secretary, I thank you very much for coming, and I hope that you will join me on working on that.

Secretary BODMAN. Thank you, sir.

Mr. DINGELL. The time of the gentleman has expired. The chair recognizes now the distinguished gentleman from Illinois, Mr. Shimkus, for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman. Mr. Secretary, I am going to talk, hopefully get through 3 issues, FutureGen related, delay cost, and communication issues. First on delay, we need zero emission clean coal now. Everyone agrees with that. Your new plan is—it is felt that your new plan in rescoping will not speed up the process but will delay the process by conservatively 3 years based upon past performance on government, probably 4 to 5 years. How do you respond to this line of questioning that by rescoping we actually delay the onset of clean coal technology?

Secretary BODMAN. I don't believe that is the case. I believe that we are going to be in a position, Mr. Shimkus, to fund a variety of approaches. That is what the goal is. And we are in the process of doing a solicitation of interest among utilities, and we are hopeful that we will be in a position to fund, as I said, a variety of capture and sequestration efforts. Carbon capture and sequestration, CCS, is a requirement. I agree with you in terms of the use, the

more broad use of coal in America. That is why we have increased our R&D budget by a sizable amount of $650 million.

Mr. SHIMKUS. Mr. Secretary, if we can stay on the alliance of FutureGen and just the alliance proposal. I understand the answer. I would say in my discussions, and I am discussing with industry probably as much as the department is, there is not an immediate stampede to accept this rescoping of the project. I think a lot of problems is the carbon capture sequestration, the liability aspects. They are big concerns. And I think it is credible to say that what you are proposing is going to move us quicker. There are a lot of people that think it is going to delay us.

I want to move to cost real quick. The alliance has countered with a response saying no new dollars over what was originally agreed to. The new hold up is debt financing at least from the energy. DOE clean coal projects routinely involve financing. It is common practice for commercial plants to be majority financed, often up to 80 percent financing. Why is the department balking at the alliance's proposal to use highly limited financing as a tool to manage cash flow and to deal with project uncertainties?

Secretary BODMAN. This budget which calls for or their proposal which calls for our equally sparing or sharing in the cost overruns which I believe will occur, and I believe they believe will occur.

Mr. SHIMKUS. But would you accept the premise that DOE routinely allows financing on clean coal projects? Do you not—

Secretary BODMAN. I do. I do acknowledge that. But this is a research project, sir.

Mr. SHIMKUS. I understand. That is where we agree to disagree and that is the problem with the proponents of moving forward as scoped versus Department of Energy and we need to get this on the record. Let me finish. I only have a minute and 16 seconds left. I want to talk about communication aspects, and you are fully aware these have been raised by many members of the Illinois delegation, and I think members of the Texas delegation would be raising the same concerns if Texas would have been sited. You know what I am talking about. Here is the letter of November 30, 2007, saying notice of the EIS availability was published in the Federal Register. We are working to complete the process and issue the record of decision. This was a mistake, Mr. Secretary, for you to sign this letter.

Secretary BODMAN. I think that is probably right but I signed that letter at that time because I believed in the alliance and I believed that we had a deal with the alliance, and it turned out that we didn't. Well, I have talked with both you all and the alliance, and you guys are as far apart of ever coming to a deal that I have ever seen two groups. I have seen Republicans and Democrats closer than DOE and the alliance.

Mr. SHIMKUS. The last thing has to do with the EIS, the environmental impact statement, and on the summary on page S-4 DOE proposes to provide—this is November, 2007. We are as close to any date of a publication right now to being timely as any Federal document that people will quote. And here in this document we are saying DOE proposes to provide financial assistance to the alliance to plan, design, construct, operate the FutureGen project. DOE has identified 4 reasonable alternative sites and will determine which

sites, if any, are acceptable to DOE to host a FutureGen project. Not projects, project, the 4 sites, and we know what they are. And this thing along with this, and I think 4 other comparable size documents cost Federal taxpayers about $10 million, and the question is for what?

And this is also the communication problem. We have this out in November. Eleven days later the alliance wants to make an announcement. You guys say hold off. The people of Mattoon and all the other places are left high and dry. That is the emotional problem that we in Illinois have. Thank you, Mr. Chairman.

Mr. DINGELL. The time of the gentleman has expired. The chair recognizes now the distinguished gentlewoman from Colorado, Ms. DeGette, for 5 minutes.

Ms. DEGETTE. Thank you very much, Mr. Chairman. First of all, Mr. Secretary, I want to make an apology and correction in my opening statement because in fact the agency's budget is not flat lined but there is a 22.27 percent decrease in the budget over the congressional appropriation from last year. So it has not decreased from the Administration's request but the congressional appropriation. And that is what I want to talk to you about today because it seems to me with this Nation's new commitment to renewable energy and conservation we should really be making a renewed commitment to NREL. And as I said in my opening statement, I was just out there a few weeks ago and they are doing fabulous work. And so I would like to ask you is it true that in the fiscal year 2009 Department of Energy budget NREL funding is cut from the appropriation from Congress of $293 million to $228 million for fiscal year 2009.

Secretary BODMAN. What is at work here is the fact that when we do a budget for any of our laboratories, but let us pick NREL, when we do a budget we budget for what we know will be spent in support of that laboratory. We then have other budget categories that within the EERE activity and those monies end up getting spent at NREL.

Ms. DEGETTE. Well, you know, this is not exactly responsive to my question.

Secretary BODMAN. Well, if I may, Congresswoman, in 2007 we had $171 million in the equivalent of what you are reading there and we ended up spending $314 million.

Ms. DEGETTE. Right, but if you want to talk about the EERE budget which is one of the sources of funding for NREL—

Secretary BODMAN. Right.

Ms. DEGETTE. Now in your proposal this year it is being slashed from $1.72 billion to $1.26 billion, that particular account, so it is hard to see under the Administration's budget how we are going to increase funding for NREL if you are cutting that budget by a figure of 27.1 percent.

Secretary BODMAN. NREL had in 2008 in the LAMP table, which is what the equivalent of that figure of $165 million in 2008. This year it is $210 million. So we have seen a sizable increase. Last year we ended up with $277 million being spent at NREL, and so you and I are working at different figures. That is all I am telling you.

Ms. DEGETTE. But it seems to me what happens, and every year you have been here, Mr. Secretary, we talk about this, it seems to me what happens is the Administration requests a reduction or flat line and then Congress appropriates more so in the end then you can come back in and say, well, NREL had more but that is because Congress puts that money in.

Secretary BODMAN. With all due respect, ma'am, it is not all due with respect to Congress. Some parts of it are for sure but also there are funds within EERE that get spent at NREL that are not located in that table in that figure.

Ms. DEGETTE. Okay. Well, let us talk about a few of the other ones in the fiscal year 2009 budget. Let us talk about solar energy, which is cut 7.3 in the Administration's budget. Hydrogen is cut 30.7 percent. EERE facilities and infrastructure is cut 81.6 percent, and weatherization is eliminated altogether, but at the same time in the budget I see increases for funding for fossil energy research and development, increases for coal, increases for nuclear, and for department administration and public affairs a 1.32 percent increase. So I guess that is what some of us are concerned about in looking at the overall budget. It seems that the Administration is continuing with its traditional energy approach and relying on Congress to look at alternatives and renewables. Would you disagree with that statement?

Secretary BODMAN. No, I would not, ma'am. With all due respect, there is an almost $470 million drop in EERE and that comes largely from 2 areas. One is $187 million in earmarks that were put in by Congress. Secondly, it is $223 million in the weatherization program and that is in combination of the vast bulk of the reduction in EERE.

Ms. DEGETTE. Well, I know that my time has expired so someone else perhaps will ask you about the reduction in weatherization, but I can't help but agree with you on the earmarks myself, and I yield back.

Mr. DINGELL. The time of the gentlewoman has expired. The chair recognizes now the gentleman from Nebraska, Mr. Terry, for 6 minutes.

Mr. TERRY. Thank you, Mr. Chairman. Just to make sure that I have read the budget right on that. Terraphon ethanol, that is still in there?

Secretary BODMAN. The terraphon ethanol is geared to expire, I believe at the end of this year. And the Administration's position on the terraphon ethanol is that we are prepared to talk with Congress about that as we move forward but it is not something that is in the budget, neither the subsidy nor the tariff. I guess the subsidy is but not the tariff.

Mr. TERRY. Okay.

Secretary BODMAN. The subsidy lasts through, I believe, the year 2010, if I am not mistaken. But the tariff expires at the end of this calendar year.

Mr. TERRY. Then just a cursory review of the budget. My friend from Colorado and I share some of the same concerns on research and development and renewable fuels. My emphasis has been more on the cellulosic ethanol portions of it. I was energized, enthusiastic with some of the words of the President during the State of

the Union when he challenged the appropriators in Congress to double the funding for renewable energy research and development. I look in the programs in the budget and some projects have increases, some have decreases, but it doesn't look like your office wants additional funds for research and development. Can you help clarify or work me through where we are going to do the increased amount of research and development on renewables?

Secretary BODMAN. The request that we have is about the same as the 2008 request. It is also a $100 million increase in the advanced energy initiative from the 2008 request so I mean it all depends on which aspects of this you look at. I can tell you that I do not view this as something that we are—I didn't think I was going to have to come in here and defend against accusations that we were cutting research funding. That is not what this is involved with. The science budget calls for an increase from about $4 billion up to $4.7 billion. That is $700 million. It is a very sizable effort. Some of that will go to hydrogen. Some of that will go to carbon capture and sequestration. So it is moving in a whole variety of areas technically that I think one of the issues that we are trying to do is to integrate the science office much more carefully with the applied research efforts, and I think we have been successful in doing that, but the result is that when you look at the budget on a budgetary basis it does not appear that way because we don't account for it that way.

Mr. TERRY. You mentioned that in the budget research budget generically then some will go to hydrogen, for example.

Secretary BODMAN. Yes.

Mr. TERRY. Hydrogen is another area that I have spent a lot of time and effort trying to push down the road. Now I see from the budget though that we do have that it is planned to zero out the 5-year hydrogen initiative. Is it a fair assumption on my part that you feel that the science has progressed far enough that now you are going to put your emphasis how to roll it out into the market?

Secretary BODMAN. No. The focus is two-fold in the budget. First of all, my hydrogen initiative shows that we got $267 million that we are going to spend on hydrogen this year versus $280 last year, so pretty close to where it was. EERE shows a sizable reduction. Why? Because we are focusing in EERE on fuel cells and on hydrogen storage on board a vehicle, not on the vehicle technology aspects, so that is what that is, but we are seeing an increase in the science budget from $36 million last year to the request of $60 million, and that goes a long way to making up the difference but it is going to be focused on the science aspects of this as opposed to the engineering aspects or the vehicle technology aspects.

Mr. TERRY. For example, what would be some of the science aspects so I can get my mind around it?

Secretary BODMAN. Oh, I think it is going to be—I am now beyond my knowledge of this.

Mr. TERRY. You can send your science person up to talk to me. Will you make sure that happens?

Secretary BODMAN. We would be happy to do that but it is going to be studying the chemistry of various kinds of metal hydrides so that we will know how and why hydrogen gets absorbed in dif-

ferent ways with different metals and so that will be the focus of it, and that is something that only a scientist can do.

Mr. TERRY. I appreciate that, and my time has run out, so thank you, Mr. Secretary and Mr. Chairman.

Mr. DINGELL. The chair thanks the gentleman. The chair notes that the next of our colleagues to be recognized is the gentleman from Washington State, Mr. Inslee, will be recognized for 6 minutes.

Mr. INSLEE. Thank you. Mr. Secretary, this is the climate change report of 2007, the synthesis report, a summary for policy makers. Have you read this document?

Secretary BODMAN. I can't tell you that I have, no.

Mr. INSLEE. This is the pre-eminent scientific assessment of the condition of the planet Earth and the major challenge to its continued stability of our climate system upon which human life depends. I think it would be a really good idea if the United States Secretary of Energy was fully familiar with the science in this report. I will tell you why.

Secretary BODMAN. I didn't say I wasn't familiar with the science. I don't know what is in there. I haven't read it.

Mr. INSLEE. Well, I am here to urge you to read it because if you read it, I think you will conclude as I have that the United States under the current Administration is still taking the attitude of the ostrich rather than the attitude of the American eagle when it comes to the science of this report. If you read this report, you will conclude that there is overwhelming consensus in the scientific community that we are up against very, very significant danger in the plant, not just the earth but in fact we are in a planetary emergency, and we would expect the United States under those circumstances to lead the world in the technological development of the policies to deal with this problem.

Secretary BODMAN. I believe we are doing that.

Mr. INSLEE. Well, I don't think you are, and I will tell you why.

Secretary BODMAN. Well, I believe we are.

Mr. INSLEE. Well, I am going to give you a chance to express your position. Let me express mine.

Secretary BODMAN. Sure.

Mr. INSLEE. Two weeks ago James Connaughton sat where you are, and I asked him to help lead the country in development of a cap and trade system that will put a legally binding limit on the amount of carbon dioxide going into the atmosphere and using the efficient use of the market to allocate that resource. He basically did this sort of shuffle that we have seen on occasion that refuse to give us that leadership. We now are talking on a bipartisan basis trying to develop a meaningful cap and trade system.

Secretary BODMAN. Right.

Mr. INSLEE. It is absolutely fundamental to the development of the technologies you and I know we have to develop to tame this beast. So given the science that you say you are familiar with and that is very clear in this report, given the fact that you Europe is moving in the cap and trade system, given the fact that we know that it works because we invented it here for sulfur dioxide. Why can't your Administration help us on a bipartisan effort, come out

and say the President is going to help adopt a cap and trade system in a meaningful and practical sense? Why can't you do that?

Secretary BODMAN. I will tell you why. I have been here 7 years, 3 years in Commerce, 1 year in Treasury, 3 years in Energy. During that time I have been negotiating with the Chinese in one form or other about their exchange rates. You know how much progress we have made? About that much in terms of the exchange rates of the Chinese. I do not believe that we are going to be in a position until we get a buy-in by China, by India, by the developing world into with all of the major emitters. That is what the so-called MEM process is all about. And they have had 2 meetings so far, one here in Washington, and then in Honolulu. I am not sure where the next one is going to be. I think in Europe. And the goal here is to have all of the major emitters meet and agree on a plan that, if you will, parse out who will deal with this. But until that time for us to unilaterally agree to do something in my judgment is a mistake from a negotiating standpoint.

Mr. INSLEE. So one person in a not very diplomatic statement at the last conference in Bali asked the United States to lead, follow or get out of the way. We are working on a cap and trade system that is not going to work for the Chinese. We did not wait for China to adopt democracy before we did in the United States. We are the world's leaders and we are the people who have the technological ability to solve this problem. Now I want to ask the Administration to lead, follow or get out of the way. I am going to ask you today to tell us if we pass a cap and trade system on a bipartisan basis and it passes the House and U.S. Senate can you tell us the President is going to sign it or at least tell us today he hasn't decided to veto it?

Secretary BODMAN. I can't tell you that. I have not talked with the President about it.

Mr. INSLEE. You haven't talked to the President about a cap and trade system?

Secretary BODMAN. No.

Mr. INSLEE. That is stunning to me.

Secretary BODMAN. Well, I am telling you my view, and I tried to explain that to you, sir. I will say it again. I have spent 7 years negotiating with the Chinese about their exchange rates. There is no leverage in dealing with the Chinese. The only leverage we have is what we will be willing to do, and that has to be arrived at in a negotiation with them, with the Indians, and with other participants, I believe. That is what the President's view is and that is certainly what my view is.

Mr. INSLEE. Well, I have to tell you it is most disturbing while we are making progress here in Congress the Administration continues to keep its head in the sand on this issue. America wants to lead the world on this issue. I just tell you it is stunning to me that our Secretary of Energy has not talked to the President of the United States about how to fashion a cap and trade system. I encourage you to do so. We need your leadership. We want this to be a bipartisan effort, and I hope you will find a way to help us on that. Thank you.

Mr. DINGELL. The time of the gentleman has expired. The chair has a quick announcement and then the chair is going to indicate

further business here. The chair notes that there are going to be a series of votes on the floor, 4 in number. First, previous question on H.R. 4137, College Opportunity and Affordability Act. Second, H.Res. 956, a rule providing for consideration of H.R. 4137. Then H.Con Res. 283 calling for peaceful resolution of the current election crisis in Kenya. The first vote will be 15 minutes. The second will be 5. The third will be 5. And then there will be an additional 5-minute vote on H.R. 4848 to extend for one year the priority on application of certain limits to mental health benefits and for other purposes. The chair will plan on hearing from two of our colleagues. We will go then promptly to the Floor. The committee will reconvene at 1:00. At this time the chair recognizes the gentleman from Florida, Mr. Stearns, for 5 minutes.

Mr. STEARNS. Thank you, Mr. Chair. Mr. Secretary, let us just separate China and India from this. Do you agree or disagree in principal with the idea of a cap and trade system?

Secretary BODMAN. You know, the idea of a cap and trade system or a carbon tax or whatever it is is something that has been talked about. I have expressed my views until the White House decides to—

Mr. STEARNS. No, I am just asking your view.

Secretary BODMAN. I am not going to render an opinion.

Mr. STEARNS. So you are saying as the Secretary of Energy, you have no opinion on cap and trade?

Secretary BODMAN. That is correct.

Mr. STEARNS. Okay. Are you familiar with the problems that the cap and trade has had in the European Union?

Secretary BODMAN. Generally, yes.

Mr. STEARNS. In fact, they suspended it because of fraud, corruption, and they are relooking at it. You are familiar with those backgrounds?

Secretary BODMAN. Yes.

Mr. STEARNS. Do you think any of that would be a concern if we adopted cap and trade in the United States?

Secretary BODMAN. Of course. Of course.

Mr. STEARNS. So what has happened in Europe could very likely occur in the United States with the same problems?

Secretary BODMAN. Of course. Of course.

Mr. STEARNS. With my opening statement talking about the strategic petroleum reserve expanding it, can you give me just briefly the long-term plan for the expansion of this reserve, the strategic petroleum reserve, just real briefly what the long-term plan is.

Secretary BODMAN. Well, the current inventory is about 700 million barrels. That is about what we now have, and we are in the process of increasing that number up to the capacity of 727, which we hope to do this year. The existence of the strategic petroleum reserve is a matter of in my judgment of national security. We need it to protect this country in the event of a physical interruption in supply as we had with Katrina and Rita and we used it at that time. The President looked at that. We have about 58 days, I think, and if we are able to get up to the 727 that will be about 60 days of protection. We would like to have 90. And so that the increase of the capacity of this to a billion barrels is something that Congress has already signed off on. If we are successful in doing that,

that will get our coverage up to about 75 days. By going up to a billion and a half barrels which we would expect to be by the year 2025 then we would be at about 90 days protection.

Mr. STEARNS. When you do your projections and you look at this, what do you anticipate oil prices will be in 5 years?

Secretary BODMAN. One of the advantages of this job, there aren't many sir, but one of the advantages, I don't make forecasts in terms of price.

Mr. STEARNS. So you could not even project what it would be in 2 years or 1 year?

Secretary BODMAN. Well, I choose not to. That is not something that I have to do in this job. My job is to try to arrange for any work on a diversity of supplies, of roots, and of suppliers within each type of energy, and that is what I do.

Mr. STEARNS. At the University of Florida researchers are developing a new innovative technology for the conversion of renewable biomass into fuels, and with the 15 million acres of forest land and 10 million acres of farm land Florida has tremendous potential to become a national leader and producer of bio-energy. With the passage of the 36 million gallon renewable fuel mandate last year, Mr. Secretary, do you have any new updates for us on the status of the technology for cellulosic bio-fuel? As I understand it, by the year 2012 a new law will demand over 15 billion gallons, 2 billion of which need to be advanced bio-fuel. The other question is are we on target at all for the 2012?

Secretary BODMAN. Well, we are on target to try to accomplish the cost performance of cellulosic ethanol to cause that to become competitive with corn-based ethanol by the year 2012 so it not exactly is going to meet that criteria. With respect to the investments that we are making, we have made substantial investments in the new bio-energy centers that are located in Tennessee, in Wisconsin, and in California. Those are leading efforts to apply the science that has been developed by the bio-tech industry to the energy problem, and then in addition we have had sizable investments in new types of cellulosic ethanol, one of which is in Florida using citrus rinds as a feed stock and so we are optimistic. There is one in Florida using citrus rinds, one in Georgia using wood pulp, two in Iowa and Kansas that are using corn switch grass in Idaho and—

Mr. STEARNS. Thank you, Mr. Chairman.

Mr. DINGELL. The chair apologizes. The chair asks unanimous—the chair has been informed Secretary Bodman must leave here at 1:00. Mr. Secretary, we are trying to respect that, so we will reconvene then at 12:30. Ms. DeGette will preside over the committee. The chair has something else to do. The chair recognizes now the distinguished gentleman from Massachusetts, Mr. Markey, for 5 minutes.

Mr. MARKEY. I thank the chair. Secretary Bodman, are you familiar with the Markey-Cox nuclear export amendment to the 2005 Energy Policy Act?

Secretary BODMAN. No.

Mr. MARKEY. The Cox-Markey amendment states that no nuclear materials and equipment or sensitive nuclear technology shall be exported or re-exported or transferred or re-transferred whether directly or indirectly, and no Federal agency shall issue any license

approval or authorization for the export or re-export or transfer or re-transfer whether directly or indirectly of these items or assistance to any country whose government has been identified by the Secretary of State as engaged in state sponsorship of terroristic activities. Earlier you told Mr. Dingell that you believe that the Energy Department's contracts with these Russian nuclear institutes were in your words fully consistent with U.S. law and policy.

Why wouldn't funding a Russian nuclear institute that is working to build key components of Iran's nuclear reactor in Bushehr be either a direct or indirect export transfer or re-transfer of nuclear technology or nuclear assistance to Iran?

Secretary BODMAN. What I expressed to the chairman was that at the time that I received his letter yesterday, I have had whatever it is, 15 hours to try to work it, and I have asked the principal deputy administrator of the NNSA to go to work on the problem and to answer the questions in his letters. That is basically what I said. I said with respect to the Bushehr reactor, my understanding is that this is something that the President has spoken to President Putin about, that the proliferation issues have been discussed, and that that reactor remains under IAEA safeguards and this—

Mr. MARKEY. Before this contract was entered into, did you make a determination as to whether or not it could be in violation of the Markey-Cox amendment which is the law of the United States barring nuclear assistance to countries that sponsor terrorism?

Secretary BODMAN. I presume that they did but I did not personally so I cannot speak—

Mr. MARKEY. So you do not know?

Secretary BODMAN. That is correct.

Mr. MARKEY. Will you give me your assurance personally that you will investigate the legality of this program and ascertain whether it is in fact a violation of the Markey-Cox amendment?

Secretary BODMAN. I will certainly do that.

Mr. MARKEY. Thank you. I think there is a very disturbing possibility that it is in fact in violation of the law. Let me ask a second question. Mr. Secretary, would you agree that the weatherization assistance program which President—which the Bush Administration fiscal year 2009 budget would zero out is the country's longest running and perhaps most successful energy efficiency program?

Secretary BODMAN. I don't know the answer to that.

Mr. MARKEY. Well, your own department on its web site until 2 days ago said that the weatherization program is the country's longest running and perhaps most successful energy efficiency program.

Secretary BODMAN. Okay.

Mr. MARKEY. Then, Mr. Secretary, the Bush Administration zeroed out the money for the weatherization program.

Secretary BODMAN. Yes.

Mr. MARKEY. And then yesterday deleted the text from the Department of Energy web site that said that it is the country's longest running and perhaps most successful energy efficiency program. So, Mr. Secretary, why would you cut out the funding for your most successful program?

Secretary BODMAN. For the reasons that I mentioned that this program is carried out in EERE who have all sorts of increases in research funding and energy efficiency work and Energy Star work that have higher rates of return on the investment that goes into it.

Mr. MARKEY. Your own analysis makes clear that this program is your top program, and I just think that once again it shows that the Bush Administration is sacrificing the long-term energy efficiency opportunities that our country has for short-term budgetary purposes. It is just not still well understood inside the Bush Administration how much energy will be saved if we make the investment now. Let me ask one final question, and that is on the question of television set efficiency. You probably now that new high definition television sets can consume as much power as a refrigerator, and the department has yet to develop a minimum energy efficiency standard this year for televisions. When can we expect the Department of Energy to propose energy standards in this area?

Secretary BODMAN. I have no idea, Congressman, but I will be happy to take that question for the record and respond to you.

Mr. MARKEY. Millions of new, highly inefficient television sets, these new huge sets that men go out and buy so they can see the Super Bowl, so they can see the NCAA basketball tournament now consume as much electricity as a refrigerator. Would you support the efforts underway in states like California and Massachusetts to issue minimum energy efficiency standards for televisions in the absence of no national standards in the Bush Administration?

Secretary BODMAN. I don't know. I mean I will be happy to respond to that rather than doing something on the spur of the moment. I would be happy to respond as I have said to you across the board on this issue.

Mr. MARKEY. You should expect me to continue to press you on this television set issue, and to insist that California and Massachusetts be allowed to act if you are not going to make a decision on it.

Secretary BODMAN. I understand.

Mr. MARKEY. I thank you. This hearing is in recess until the aforementioned 12:30 reconvening of the committee. Thank you, Mr. Secretary.

[Recess.]

Ms. DEGETTE. [Presiding] The committee will come to order. The chair recognizes the gentleman from Pennsylvania, Mr. Murphy, for 5 minutes.

Mr. MURPHY. Thank you, Madam Chair, and thank you, Secretary Bodman, for being here. I appreciate all the work you have done to help our country, but as you know there is much that needs to be done in the area of energy. I want to ask you specifically about some things related to oil. A couple months ago the report came out the U.S. trade deficit had surged by 9.3 percent to $63.12 billion, which was the highest in many years. They attributed that to a large extent on the price of oil saying it was an economic drag and saying that at that same time imports from China declined and imports from Europe declined because of the condition of the dollar and other issues there. I wonder if you could comment

to the extent that we continue to increase our dependence upon foreign oil, your comments on—I know the President recently was in Saudi Arabia and there it seemed to me made an appeal for more oil production, and yet in this country we have placed off limits or in effect embargoed our oil off the Atlantic Coast, The Gulf Coast, the Pacific Coast, the western states and Alaska, and my sense is that if we had more oil in the pipelines coming from our country and to do that in an environmentally responsible way following our laws that we would not have this same issue on our economy. I wonder if you could comment about those issues of our access to oil and its impact on our economy.

Secretary BODMAN. Well, it is a big problem. I would say certainly if we had—were to exploit our own reserves in a better fashion than we have heretofore, we would have more oil. We would be able to get the benefits to this country to our citizens. We would also it seems to me affect the world price so that it would start to reduce pressure on price around the world, and it would incidentally, if I may say, it would make the job of the energy Secretary a lot easier because we have a—every time I start it is always a discussion of oil price and OPEC and what the issues are so anything we can do to do that, the President has spoken to it, I have spoken to it, so whether it is Anwar or whether it is drilling offshore in Alaska, whether we got an embargo on the West Coast, we got an embargo on the East Coast, the only place that seemingly want to drill or will drill is in the Gulf of Mexico, and it is a real problem.

Mr. MURPHY. And much of that is further away. I understand Cuba is drilling from our coast. Thank you for that input. I share your concern about the drag it has on our economy and we keep saying no to that and yet we have to power our cars, and we are investing so much money now. It is affecting our economy, and money that is going overseas instead of being invested here. What I would like to see us do it in smarter transportation systems, and if we are even going to have the money for more efficient automobiles we are not going to have that if we are sending our money over to the countries.

If I could shift now to the issue of coal. I mentioned in my opening statement about the demands for energy in this country doubling by 2050. And I said I was pleased that you are offering to put more money into research and development and clean coal. I do want to ask you though will that be enough and what do we need to engage in a long-term commitment to move us really towards cracking the code on clean coal zero emissions coal technology in order to meet our needs for the future.

Secretary BODMAN. Well, we have $648 million in the budget for research and development of coal. That is a big increase. I think that is the biggest number in 25 years and so it is a major undertaking. There are all a manner of different approaches to it but in significant measure that money will go to the carbon capture and sequestration program, not in its entirety, not all $650 million but well over $400 or $500 million of it will eventually end up in that area. In order to use coal in my judgment we have to capture and sequester the carbon dioxide that gets created when coal gets burned. That is an issue. And so we have to find a way to resolve

the problem and in my view that is what we are aiming to do, and we are doing everything that I know how to do and more than that to try to solve this problem.

Mr. MURPHY. I want to thank you. I really think that is one of the environmental and economic challenges of our time. I know the jobs of hundreds of thousands, millions of Americans, depend—

Secretary BODMAN. I think that is right. Fifty percent of our electricity comes from coal as you well know and we are going to need it.

Mr. MURPHY. Thank you so much, sir. I yield back. Thank you.

Ms. DEGETTE. The gentleman's time has expired. The gentleman from Utah is recognized for 6 minutes.

Mr. MATHESON. Thank you, Madam Chair. Welcome again, Secretary Bodman, before our committee. We were talking just before we started, you guessed I might ask you a question about the tailings pile so you anticipate well. It is an issue near and dear to me and my constituents in Utah but also to the many millions of downstream users along the Colorado River in Arizona, Nevada, and California as well, and I actually got a picture of where the tailings pile is with the Colorado River going right by it, 16 million tons of radioactive tailings. Over the years many sites have been cleaned up. This is the biggest and ends up being sort of the last one in the queue for clean-up. And last year when we were talking here before this committee questions came up about the schedule for doing this, and you had indicated it could very well be extended out for a long period of time. That wasn't necessarily what some of us liked to hear and subsequent to that hearing and in the past year Congress has now passed in the defense authorization bill language that calls for a completion date to move the tailings by the end of the year 2019.

That was signed into law by the President as part of the 2008 defense bill. Do you think that with Congress kind of encouraging you and that signed into law, is this a date that the DOE thinks is going to be achievable to make?

Secretary BODMAN. Based on what I now know, the answer is no. We are in the stages of doing engineering and work on it that will enable us to, if you will, base line the project and get a better sense of it. But based on the funding restrictions that we have placed on that we are looking at something that is going to be 2025 or later.

Mr. MATHESON. And that is obviously something I didn't want to hear because we did pass this law here.

Secretary BODMAN. I know you didn't want to hear it. I thought I told the truth and—

Mr. MATHESON. And I appreciate that. I am trying to figure out when the DOE completed its decision it said this would take somewhere from 7 to 10 years and so that is I guess what also causes the frustration is we are dragging this thing out over a lot longer time frame than your own record of decision had indicated. I do know your folks in the field are talking about viewing this act of Congress as a soft date, and I do think we need to keep talking about this because I do think we want that to be done by 2019.

Secretary BODMAN. I certainly recognize your zeal about that subject, sir.

Mr. MATHESON. Not just my zeal. As I said, I got a lot of members of Congress in a bipartisan way in the down river states who don't understand why it has taken so long. It seems like every step of the process is taking longer, and I would encourage you to take a look at what is going on in your field office because I do not understand why it is one delay after another after another. I don't think it is just funding. I really don't. I think this has taken far too long even for the preliminary engineering and preliminary stages that have been pursued so far. It is not happening on a timely basis out there in the field.

Secretary BODMAN. I would be happy to look at it, sir.

Mr. MATHESON. If you believe that the budget doesn't allow for moving ahead on this, is that because there are other projects of greater priority for the existing budget?

Secretary BODMAN. Yes.

Mr. MATHESON. Could you maybe articulate what those would be within this—and I just mean within this clean-up and remediation—

Secretary BODMAN. It is about 1 billion 9. It is almost I think 7 or 8 of the entire budget of the Energy Department is at Hanford, and there there is concern about the presence of heavy metals as well as nuclear materials in the ground water so that has a very high priority. The work at Savannah River has a high priority. The work at parts of Oak Ridge has a priority. Areas where we have so-called D&D which is decommissioning and destruction of a building that tends to have a lesser priority just because those buildings, they are unsightly to look at but they don't have a big impact on the environment.

Mr. MATHESON. So Congress provides additional money in that fund. I want to make sure that in your view is the primary variable that is delaying this because my concern is I see a lot of foot dragging, I don't know why, for other reasons, I am just moving along where money at the front end is not really the problem. So I am going to work my best here in Congress to make sure we appropriate the right amount of money in this area to get this thing done. But my concern is that, and I would suggest you do need to review what is going on within your field office to find out why this is taking so long.

Let me raise one other issue in the brief time I have got left. The record of decision suggests that this should be moved by rail, and yet I understand the DOE's field office is talking about possibly changing the way they transport this. And I don't expect you to be in the weeds on this issue but I want to make sure this change if it is going to be considered does not delay the project or if there is going to be a change, we ought to go ahead and make the change but I would encourage you to—if you could maybe get back to me on that about how that issue is going to be considered and what hopefully is a time limit because—and let me just finish this thought and then you can respond, discussion about reopening the record of decision. That discussion has been going on for over a year. And if we are going to reopen it, let us reopen it. Let us not talk about it for more than a year and not reopen it. Let us make a decision and let us move on because this is the example I have been talking about.

I feel like everything just gets slow walked. Everything seems to get slow walked here and a lot of us are feeling frustration about that.

Secretary BODMAN. I am unfamiliar with whether it is rail or moved on I guess roads which would be the alternative, truck it, and so I will respond and do it for the record with you personally.

Mr. MATHESON. Okay. I really appreciate that. Madam Chair, I see my time has expired.

Ms. DEGETTE. Thank you. The gentleman's time has expired. The gentleman from Texas, Mr. Hall, is recognized for 5 minutes.

Mr. HALL. Madam Chairman, I thank you. Mr. Secretary, I am one of your admirers. I respect you and I thank you for leaving the highly successful business world and coming here and giving us your time.

Secretary BODMAN. Thank you, sir.

Mr. HALL. And now you expect me to knock you around a little but I am not even going to do that. I thank former Chairman Barton who visited with you about the ultra deep water. I just want to get some input into the record on this. I know what your position is. I know what the Administration's position is. I know what you need to do, and I respect it, and I am not offended by it. I am kind of like the farmer was toward the boll weevil. He didn't hate him. He just didn't like the way he made his living. I have got to talk about the ultra deep water and the unconventional natural gas and other petroleum research fund. And as you know, the ultra deep water and unconventional natural gas and other petroleum research fund created by the Energy Policy Act of 2005 has been scheduled, and is funded from mandatory Federal revenues from oil and gas leases, and I understand that consistent with fiscal year 2007, fiscal year 2008 budget requests it has been funded, right?

Secretary BODMAN. That is correct.

Mr. HALL. And fiscal year 2009 budget proposal to repeal the program through a legislative proposal.

Secretary BODMAN. That is correct, sir.

Mr. HALL. And I would like to say that I don't understand the President's position on this. I am not real comfortable in the position of opposing his wishes on that but I have to do that. And I want to read into the record if we can ask these things like a question, will the R&D program increase domestic energy supply, and that is very important to the American people and to you and to this Congress and to the President. But the answer to that is EI estimates that an earlier version of the program would result in a 20 percent increase in natural gas supplies by 2025 with a steady increase in production between now and then.

In addition, between 2009 and 2025 lower 48 offshore oil production would be over 850 billion barrels higher if this program is implemented. And it goes on down to who supports the research, and you know the strongest supporters of the research have been research universities, small producers that produce most of the offshore, on shore natural gas and who have not terrible big research capabilities or infrastructure for it. Usually the little guys find it and the big guys buy it. And actually this program asks the question are major oil companies the biggest beneficiaries which has been said, and it is just not true. Is this a subsidy for big oil? I

am asking is Halliburton getting the money? Does Exxon get the money? I think the program is clear that it would level the R&D playing field which is currently controlled by very few companies putting the technology in to the hands of thousands of producers and technology firms. What are the environmental implications for natural gas exploration and production goes along with this. There are positive environmental benefits to increasing our use of natural gas.

Natural gas is clean, efficient fuel. Increased natural gas usage will have a positive impact on the environment. And finally I guess I would ask you to assure me that the Administration will comply with the schedules and intent of the law as you see the law, and you have done that.

Secretary BODMAN. As long as the program remains the law of the land we will do our best to fund it and execute it, sir.

Mr. HALL. And I am not talking down to anybody but I read to one of your assistants that came here about six months ago, I think, when maybe Representative Markey had a bill to knock it out at the request of the Administration that the law stipulates that the Secretary shall provide funding, not that the Secretary may do so, and you have complied with that. I read that shall to him 7 times. I am not going to do that to you.

Secretary BODMAN. Thank you, sir.

Mr. HALL. If and when the effort to repeal fails, which I think it is going to do, and fails through the legislative process for the second time officially and other methods to counter the congressional matter that we voted on here that we passed through the House, passed the Senate, the President signed it. I had the pleasure, Joe Barton and I did, of riding west with him to sign the bill, stood right behind him. He did say that all I wanted to go out there for was to get some free coffee on Air Force One but what he didn't know was I had 6 of his coffee mugs in my briefcase at that time.

But I have high regard, high respect for the President. I differ with him on this. And I just hope since it has been signed into law this with drilling on Anwar, off the coast of Florida, and other places we ought to be drilling that we can do that for the greatest good for the greatest number. Thank you for your good work.

Secretary BODMAN. Thank you, sir. I appreciate your help.

Ms. DEGETTE. The gentleman from New York, Mr. Engel, is recognized for 5 minutes.

Mr. ENGEL. Thank you, Madam Chairwoman. Mr. Secretary, welcome. My colleagues have asked some excellent questions on instituting a cap and trade system for greenhouse gas emission, on nuclear waste storage at Yucca Mountain, on the proposed termination of the weatherization program, all questions that in my view haven't received adequate answers. We are very concerned about them, and we are disappointed with the approach that the Administration is taking in all of these matters. But instead of trying to push further on these topics since you have been asked these questions, I would like to ask something a little different. I would like to talk about something that we did do on a bipartisan basis which I think when Congress works on a bipartisan basis we always do our best.

Last year we showed a commitment to addressing our Nation's dependence on oil by passing the Energy Independence and Security Act, which was signed into law in December of 2007. I am wondering, Mr. Secretary, if you could provide me with an update to the extent possible and whatever you can't do now, I would be happy to take it in writing later on, on the implementation of certain important programs that I advocated for in that act when this committee was putting it together. Among the items that I am particularly interested in are the hybrid electric vehicle program and some other advanced drive technologies, the renewable fuel standard, and the U.S./Israel Energy Cooperation Program.

The Energy Independence and Security Act included provisions from H.R. 670, the Drive Act, which I introduced last January along with Representative Kingston. Again, we did it in a bipartisan fashion. We had nearly 100 bipartisan co-sponsors, and I believe and he believes that the provisions might change how and what we drive in the future. In particular, it requires the establishment of a grant program for plug-in electric drive vehicles, the promotion of more affordable batteries, and the development of an education program for our high schools and colleges to train more engineers and scientists that specialize in electric drive technologies. It also includes the U.S./Israel Energy Cooperation Program, which Representative Sherman originally introduced as a stand-alone bill, and then I introduced as an amendment to the main House energy bill.

This requires the establishment of a grant program to fund joint ventures between American and Israeli businesses, academic institutions, and non-profit agencies to promote the development of clean alternative fuels and more energy efficient technologies. I just recently learned that Israel is going to be a laboratory for cars, electric driven cars, and I am particularly interested in that as a way of weaning us off of foreign oil, and I look forward to seeing how that works. In addition, I advocated for a renewable fuel standard whereby a percentage of our Nation's fuel supply will be provided by domestic reduction of bio-fuels. I have been in Brazil and I have seen how successful they have been with this there and obviously this provides a pathway for reduced consumer fuel price increase, energy security, and growth in our Nation's factories and farms.

The law requires, Mr. Secretary, that you as the Secretary of Energy enter an arrangement with the National Academy of Sciences to assess the impact and effectiveness of the renewable fuel standards, so I am wondering if you could provide me to the extent possible with an update on the status of these programs. Thank you.

Secretary BODMAN. Well, we have done in my judgment a great deal of work on bio-fuels, on nuclear power plants, on all sorts of efforts on solar power, on wind power, renewable energy, as well as on nuclear power, all of which to get back to the first point you made affect global climate change, and they are effectively reducing the carbon foot print of this country. And I believe the research work that we are doing is leading us in that direction. As to work with the National Academy of Sciences, I don't know what happened in all that but I would be happy to give you a response on that for the record, sir.

Mr. HALL. Thank you. I know the law also provides you with 18 months, I believe it is, for the implementation of these projects so I would assume that some of these may be just starting up and much hasn't happened yet. But if you could provide me written testimony with any of this, I would appreciate it.

Secretary BODMAN. I would be happy to do that.

Mr. HALL. Thank you very much. I yield back.

Ms. DEGETTE. The gentleman yields back. The chair now recognizes the gentlelady from Illinois, Ms. Schakowsky, for 5 minutes.

Ms. SCHAKOWSKY. Thank you very much, Madam Chair. Mr. Secretary, there is so much to ask about but this question which focuses on FutureGen also focuses, I think, on the need for sense of urgency to move, to move ahead. And we were all set to move ahead in Illinois, and I look now at the final site selection report by the FutureGen alliance, this was December 18 when Illinois was announced, the alliance believes the Mattoon site provides many clear advantages and minimal disadvantages and then lists them, legal issues, the geologic conditions and sequestration. For example, the Mattoon site would have the smallest CO_2 foot print of all the candidate sites. The Mattoon sites provides unfettered access to world class monitoring program. The potential for environmental impacts is low, offers significant coal transportation cost advantages.

Illinois has enacted meaningful CO_2 storage legislation, et cetera. That is why in that unpleasant meeting that we had in Senator Durbin's office last week, and maybe I came late, I don't know if Bud Albright said this really offensive statement in that meeting when he said that the government isn't interested in building Disneyland in some swamp in Illinois, which first of all was geologically incorrect. There is no swamp in Mattoon. And I know that he has apologized but I believe it reflects an incredible attitude on the fact that he would actually say that. Maybe there is some explanation that he was vice president of Federal Affairs for Reliant Energy which is based in Texas and lost out to Illinois for FutureGen. But that kind of comment, I am not sure it renders him fit to serve in our Department of Energy, and I know that the senator and others suggested that you rethink his employment.

Here is my question. If we are to move forward quickly, which I think we need to do, on clean coal technologies it took a year for us to do the environmental impact statement in Illinois, which was pretty record time, and now I am trying to understand how a time table even would be met of December, 2008, which put this whole thing off another year which I think is extremely unfortunate. You know, there would be need to do other environmental impact statements, right?

Secretary BODMAN. Yes, there would.

Ms. SCHAKOWSKY. So do you see the December, 2008 as a reasonable time table?

Secretary BODMAN. I think it is certainly a reasonable time table if we take advantage of the environmental impact work that has been done on the other 4 sites, on Mattoon and the other 3 sites.

Ms. SCHAKOWSKY. I don't understand what that means. How would that affect—

Secretary BODMAN. What we are doing is the idea of FutureGen, and I know that this is not pleasant for you to hear but I will say it anyway, that the goal here is to try to accelerate the develop of CCS technology which in my view is the technology that is going to tell the tale as to how and whether coal gets used—

Ms. SCHAKOWSKY. Obviously we completely agree on that.

Secretary BODMAN. I am sorry?

Ms. SCHAKOWSKY. Obviously we completely agree on that. That is why we work so hard in Illinois.

Secretary BODMAN. The issue, therefore, is to try to limit the cost to the U.S. taxpayer and to accomplish this in 2 or 3 or 4 different locations. We don't know how much because I haven't figured that—we have not yet established—

Ms. SCHAKOWSKY. That is exactly my point that you haven't figured out where those would be. When did you decide that Mattoon would be a bad idea and that you were going to scrap that program?

Secretary BODMAN. I can't give you an exact date, Madam, but I can tell you that the issues related to—when I signed the letter that Congressman Shimkus—

Ms. SCHAKOWSKY. The November 30 letter.

Secretary BODMAN. Whenever that was, around December 1, when I signed that letter I was operating under the impression that I had a deal with the alliance, and it turned out I did not have a deal with the alliance and so that was—I made an error in signing that letter. I agree with that but that was the issue.

Ms. SCHAKOWSKY. Okay, but this was a 5-year effort.

Secretary BODMAN. I understand.

Ms. SCHAKOWSKY. Let me ask one further question. The criticism of it being too costly now, in our examination of those cost figures it appears to us that the increase in costs if not entirely, almost entirely due to DOE's project delays and the ensuing construction inflationary pressures resulting from those delays, that it is the cost of inflation that made the project in your estimation unreasonable, is that true?

Secretary BODMAN. The cost increase is certainly on account of inflation. I think that the cost increase in the future has yet to be told, and the big worry is not just about what the cost increase has been which is a doubling is to whether it is going to double again, and that is the issue.

Ms. SCHAKOWSKY. Exactly. And the longer we wait to do this we are going to see these costs go up. We are extremely disappointed, insulted by this decision, and I think it is not just about Illinois and Mattoon, it is about moving ahead with this technology. Thank you, Madam Chair.

Ms. DEGETTE. The gentleman from Michigan is recognized for 5 minutes.

Mr. STUPAK. Thank you, Madam Chairwoman. I first ask unanimous consent that my opening statement be made part of the record.

Ms. DEGETTE. Without objection, so ordered.

[The prepared statement of Mr. Stupak follows:]

STATEMENT OF HON. BART STUPAK

Mr. Secretary, I appreciate your appearing in the Committee today.

The past two weeks, Congress has been working on an economic stimulus bill. While this legislation will provide some economic relief, it does not address a major cause of our economic problems - high energy prices.

Over the past several years, Americans have paid record prices to fill up their cars and heat their homes. From industry to agriculture, businesses continue to struggle with high energy prices as well.

Unfortunately, rather than addressing the problems of high energy prices, the Department of Energy's budget makes significant cuts and even eliminates several important programs that help diversify our energy sources and help Americans cope with high prices.

This budget drastically cuts Energy Efficiency and Renewable Energy programs by $467 million. That's a 27 percent cut, which will significantly slow the development of alternative fuels and technologies to improve energy efficiency.

Despite Congressional opposition to past cuts, the Weatherization Assistance program is completely eliminated from the budget, in an attempt to end a vital program that helps families reduce their energy bills by improving their homes' energy efficiency.

The Administration also continues to buy oil to double the Strategic Petroleum Reserve, driving up demand when prices are already very high. As we learned during Hurricanes Katrina and Rita, increasing the Strategic Petroleum Reserve will not keep prices down during an emergency if we do not have the capacity to refine this crude oil.

These misguided policies continue to place the burden of high energy prices on lower-income Americans and small businesses.

If we are serious about turning around our nation's economy, we should be doing a better job of promoting alternative energy sources such as wind, solar, and geothermal, which not only create jobs but will help ease high energy costs for families and businesses. We should be encouraging the development of energy efficient technologies that will help reduce our energy use and lower our energy bills. And we should pass my legislation, the PUMP Act, to provide oversight to energy markets and reduce the cost of crude oil by as much as $30 a barrel.

Mr. Secretary, the American people deserve solutions that help them, not policies that favor the energy sources of the past.

I look forward to your testimony.

Mr. STUPAK. And therefore do I get an extra minute since I didn't give it?

Ms. DEGETTE. Because the gentleman was not present when the gavel came down, that answer is no, but I will give the gentleman a little comity if the Secretary will.

Mr. STUPAK. Thank you. Mr. Secretary, welcome. As you know, and has been alluded to in this hearing here this morning that Mr. Dingell and I wrote to you because we believe DOE is funding Russian nuclear institutes who are working on commercial nuclear projects such as the $1 billion contract to build a nuclear power plant in Iran. DOE is also funding various projects under the Global Nuclear Energy Partnership in Russia including ones involving reprocessing technology. In fact, as chair of O&I we had a hearing on this on January 23, and we asked a number of questions. Can you assure us today that DOE funds are not subsidizing directly or indirectly scientists or overheads at Russian institutes that are working on the Bushehr reactor in Iran?

Secretary BODMAN. Congressman, as I told the chairman 3 hours ago or so, I received a letter yesterday from the chairman. I have not had time to fully investigate matters but I have directed the principal deputy, Bill Ostendorff, who is the principal deputy administrator of NNSA, to look into the questions that have been

raised and to report back to me shortly, and I will then report to the chairman—

Mr. STUPAK. Well, our concern was we asked that question on January 23, 15 days ago. We did not receive an answer so that is why we had to write to you. I understand it has only been 15 hours or whatever you said earlier, but our investigation shows that that is actually in fact what is happening.

Secretary BODMAN. I am told that the project cited in the committee's letter or any of the department's scientific engagements or projects are not contributing to the Iranian nuclear program. That is what I am told.

Mr. STUPAK. I would respectfully request you get that verified because GO and others sort of lead us to believe just the opposite.

Secretary BODMAN. I understand that, and that is exactly—

Mr. STUPAK. Let me ask you this.

Secretary BODMAN. Sir, if I could just—

Mr. STUPAK. Sure. Sure.

Secretary BODMAN. That is what I am doing and so—

Mr. STUPAK. We asked your chief deputy January 23, it is sort of a sensitive issue, and we are still waiting for answers. The DOE people who were in charge of this program.

Secretary BODMAN. Chief deputy, sir.

Mr. STUPAK. The guy who is head of GNEP from DOE was here. Let me ask you this question. What specific safeguards are in place in the GNEP program to prevent the diversion of U.S. supplied nuclear technology after we send it to Russia?

Secretary BODMAN. Anything in Bushehr, for example, has got IEAE safeguards.

Mr. STUPAK. I am talking about these institutes, U.S./Russia institutes. There is one in Moscow and there is one in the Ukraine. So what safeguards are in place as part of the Global Nuclear Energy Partnership to prevent the diversion of U.S. supplied technology?

Secretary BODMAN. I don't have an answer to that, sir, but I will get one.

Mr. STUPAK. Well, I asked regarding safeguards because our hearing showed that there is no agreement between U.S. and Russia so no agreement of cooperation that this technology won't be shared outside that institute, and we are very concerned about it.

Secretary BODMAN. The program is called GIPP—

Mr. STUPAK. GNEP, Global Nuclear Energy Partnership.

Secretary BODMAN. The statute that authorizes us to or authorizes GIPP describes DOE responsibilities with respect to both commercial and non-commercial projects. All GIPP-related projects support fundamental, non-proliferation objectives of the United States. Whether they address the deployment of proliferation resistance fuel cycles or advanced safeguards, technologies or assistance, that is what they do. They are part—

Mr. STUPAK. I agree that is the mission statement, but what has this Administration done to make sure that policy, that technology has not been transferred? If we don't even have a cooperative agreement between the U.S. and Russia in this area, how do you prevent that transfer of technology?

Secretary BODMAN. I will get you an answer.

Mr. STUPAK. Very good. Let me ask you this question. I asked you this a year ago, still waiting for an answer. When you were here last time, we talked about the Administration's plans to double the size of the strategic petroleum reserve and the effect it had on crude oil prices under New York Mercantile Exchange. When I asked you about it, you said, and I am quoting now, "You have markets that are in the hands of human beings. Human beings are essentially emotional souls." You went on to say there are substantial swings in the market place. We see that. Here we are back here a year later. Oil is around $100 a barrel, and during the last year when I asked you, I suggested you take a look at our legislation, the PUMP Act, H.R.594, which would improve government oversight of these oil future markets so we don't have these wild unwarranted swings in the market.

You did a good job of recognizing the problem last year. You said you would look at my legislation. Have you looked at the PUMP Act, and are you prepared to give us a position on the PUMP Act to prevent the unfair manipulation of prices in the oil futures markets?

Secretary BODMAN. No, I am not, sir. I am here to tell you that the supply and demand for oil has favored the suppliers and not the demanders, not the consumers, ever since I was here a year ago, that those who have looked at the markets and looked at the question of whether speculators are affecting the price tell me that the answer is no.

Mr. STUPAK. We had a hearing on that on December 12, and experts told us, yes, we could reduce the price of barrels of oil by $20 or $30 if we take this speculation out especially on the dark market called the Intercontinental Exchange or the ICE market. So we have legislation, and whether you agree with me or not in our theory, at least I would have hoped that a year later you could have at least looked at our legislation and commented on it as you had promised a year ago.

Secretary BODMAN. Had I been told to get ready to comment on your legislation for this hearing, sir, I would have done so but I would—

Mr. STUPAK. Well, I had asked you a year ago. I would hope there would have been better follow through with the Department of Energy.

Secretary BODMAN. I can't say anything more than I don't know.

Mr. STUPAK. Would you look at our legislation and get back to us?

Secretary BODMAN. I will look at your legislation and get back to you.

Mr. STUPAK. Thank you.

Ms. DEGETTE. The gentleman from Kentucky is recognized for 5 minutes.

Mr. WHITFIELD. Thank you, Chairman DeGette. Mr. Secretary—

Secretary BODMAN. Hello, Congressman. How are you, sir?

Mr. WHITFIELD. Just fine. Welcome to the Hill. I am very sorry that I missed your opening statement. The tornado touched down in my district and we had 7 deaths down there, and I just got back. But I am glad you are here, and I did want to take this opportunity to bring up an issue that you and I have discussed before with Sen-

ator McConnell and others, and that relates to this legislation that I had introduced regarding the reprocessing of the waste tailings at the Paducah plant. And we know that it is a complicated issue, and it is not clear to everyone on precisely what can be done. But many of us agree that there are a lot of positives in this legislation, particularly the cleaning up of these waste tailings and with uranium prices increasing. We have been—as you know, we have introduced the legislation. My office and I particularly have been talking to Chairman Boucher and Fred Upton and others about the possibility of doing a hearing in the energy subcommittee on the legislation so that everyone will have an opportunity to express their concerns or whatever.

And I am assuming that from the way that you discussed this with us in the past that you will probably be supportive of that, not be opposed to it, I would assume.

Secretary BODMAN. Having a hearing?

Mr. WHITFIELD. Yeah.

Secretary BODMAN. I certainly would not oppose having a hearing.

Mr. WHITFIELD. Well, we are going to try to proceed with that because we do think there are a lot of positive things about this legislation, and I just wanted to raise that issue with you and look forward to continue working with you on that and others.

Secretary BODMAN. Thank you, sir.

Mr. WHITFIELD. Thank you.

Secretary BODMAN. I appreciate it.

Ms. DEGETTE. The gentleman yield back. The chair wishes to thank the Secretary for his time today and for answering the committee members' questions, and announce that this concludes the hearing on the Department of Energy's fiscal year 2009 budget proposal.

Secretary BODMAN. Thank you very much.

[Whereupon, at 1:15 p.m., the committee was adjourned.]

[Material submitted for inclusion in the record follows:]

STATEMENT OF HON. GENE GREEN

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

I want to commend DOE's strong commitment to basic science research as well as to nuclear energy programs that can reduce our greenhouse gas emissions.

However, the budget misses several opportunities.

First, I share my colleagues' frustration with the cut to the Weatherization Assistance Program which helps improve the living conditions of our most vulnerable citizens.

Second, DOE's initiative to double the capacity of the Strategic Petroleum Reserve is not in our best interest when markets are tight and prices are touching inflation-adjusted highs.

Third, I am concerned with the attempt to phase-out research into oil and gas technology development that could help our nation recover more domestic energy while increasing environmental mitigation.

Finally, I am concerned the loan guarantee program may be too prescriptive and not provide enough time for project implementation.

My District has mountains of petroleum coke that, if gasified, could reduce our dependence on foreign supplies of energy.

While eligible for loans under EPACT05, these projects may not meet the narrowly defined targets set by Congress in the FY2008 omnibus.

Thank you Mr. Secretary, and I look forward to your testimony.

STATEMENT OF HON. G.K. BUTTERFIELD

Good morning Mr. Bodman. I wanted to start off on a positive note and express my support for the Administration's proposed increase in funding for biomass and biorefinery Research and Development. Despite my many objections to the recently passed Renewable Fuels Standard and its over reliance upon corn-ethanol as a feedstock, the 13% recommended increase from last year's funding level will help advance the development of the cellulosic biofuels that will eventually replace corn-ethanol as the country's primary renewable transportation fuel. North Carolina is celebrating the opening of our new Biofuels Research Center and they hope to play a pivotal role in helping validate the viability of advanced biofuels. I also applaud the recommended 3.8% increase for vehicle technologies Research and Development because we are at the cusp of realizing the promise of fuel-cell technology.

Despite seeing some promise I must also convey my complete dismay with the proposed elimination of the weatherization assistance program as well as the 22% decrease in LIHEAP funding. For the life of me, I cannot understand how the Administration can expect average Americans to cope with significant increases in energy costs and an economy on the brink of recession while simultaneously pulling the rug from up under them.

Despite receiving roughly $10 million for weatherization, North Carolina has put the money to good use assisting 3,500 households improve the energy efficiency in their homes and reduce their home heating and cooling costs. With the overwhelming majority of families being 150% below the poverty level, saving $300 a year through lower utility rates helps people put food on the table. I am acutely aware of how this program impacts people in my District given the fact that it's the 15th poorest District in Congress. Completely defunding the program is a non-starter and it is a moral imperative that we do better for Americans.

I'm equally shocked by the proposed 22% decrease in LIHEAP funding, never mind the fact that I already have serious concerns with the outmoded funding formula we use at the expense of southern states. That is an argument for another time but the problem still exists and it only seems to worsen each year. In 2007, North Carolinians received $3 million less than the previous year despite record drought and heat this past summer. Of the 490,000 North Carolina households eligible for LIHEAP last year, only 51% received any assistance at all. And under the proposed reductions, North Carolina would deplete it's LIHEAP funding well before the peak summer season leaving many families unable to cover the costs of their electricity bills.

With this being the Administration's last year in office, I was hopeful it would show the same level of commitment to the American people as it has shown for the people of Iraq. These proposed funding levels for weatherization assistance and LIHEAP take this country in the wrong direction but I look forward to working together to get this country back on track. Thank you and I look forward to your testimony.

STATEMENT OF HON. TAMMY BALDWIN

I regret that I was unable to attend the hearing on the Department of Energy's FY09 budget due to the serious snowfall we received in Wisconsin. However, below are my remarks I would have made had I been present.

In this year's State of the Union, President Bush did something nearly unprecedented during his Presidency. He actually spent time addressing the United States' commitment to confronting climate change. His comments - I'd say written in about a paragraph or two - showed a progression in the Administration's attention on the issue. For years, there wasn't so much as a mention of the need to tackle our nation's greenhouse gas emissions. Then last year, we finally heard an acknowledgment from the Administration that global warming must be taken seriously. And now, in his final year in office, we learn that the Administration supports efforts to slow, stop, and eventually reverse the growth of greenhouse gases.

But, as in recent years, our excitement that the President will lead our nation and the world in confronting global climate change quickly ends when the President's budget is released.

Once again, the FY09 budget calls for increases in funding for controversial programs addressing nuclear energy and coal. At the same time, the budget proposes to cut energy efficiency and renewable programs by 28%. Clearly, this Administration's priorities are misplaced.and it makes me wonder whether the President's com-

ments at this point are mere lip service until a new Administration, one that is committed to solving global warming and saving our planet, takes over next year.

Just as troubling is the Administration's attempt to gut our nation's highly successful weatherization program. This program not only makes homes more energy efficient, but it also produces jobs and provides families with much needed spending money that would otherwise be spent on soaring energy bills.

In my home state of Wisconsin, where we are experiencing an especially cold and snowy winter, these funds are critical to decreasing residential electric and gas costs and improving conservation and efficiency. I am eager to hear from Secretary Bodman how the Administration plans to make up for this substantial loss of funding that my constituents so desperately need.

In the interest of forging some common ground, let's end on a happy note and thank the Administration for devoting funding to two science programs that are significant to the University of Wisconsin - Madison: first, the increase in funds for fusion energy sciences, which will allow UW to sustain its leadership in plasma science and electrical energy technology without greenhouse gas emissions. And second, the increased funds for the bioenergy research centers, one of which is led by the University of Wisconsin - Madison, and allows us to accelerate basic research in the development of cellulosic ethanol and other biofuels. These funds are much appreciated, but their impact is going to be minimal under this larger budget with misplaced priorities and a lack of global leadership. I can only hope that Congress will be able to correct many of the shortcomings highlighted here today.

Thank you Mr. Chairman. I look forward to hearing from the Secretary.

STATEMENT OF HON. ANNA G. ESHOO

Thank you, Mr. Chairman, for holding this hearing and thank you, Secretary Bodman, for testifying today about the Department of Energy's budget request for the 2009 fiscal year.

The Department of Energy has a critical role to play in some very challenging questions currently before us, most importantly our efforts to ensure our energy security and mitigating global warming.

This is an exciting time for the energy market. I think that it's safe to say that in 10 years our energy industry will look very different than it does today. Researchers are making great strides towards harnessing energy derived from the sun, water, wind, plants, and the earth. As you know, much of this research is taking place in my Congressional District. What will power our cars in the future: Electricity, fuel cells, solar panels, cellulosic biofuels, or new resources? There are many exciting possibilities. The Department of Energy and the vital research that it funds is central to developing these solutions.

While the Department of Energy oversees an incredible range of important research programs, we are also faced with tight budgetary constraints, requiring us to make some difficult choices.

In my district, the Stanford Linear Accelerator Center (SLAC) has been a leading physics research facility for more than 45 years and made substantial contributions to science, producing three Nobel Prizes in Physics and one in Chemistry. While we have worked to make substantial increases in the federal science budget, it's unfortunate that the President's inflexibility and refusal to compromise on the overall budgetary number came at such a price to important elements of the Office of Science budget. As a result, SLAC has had to lay off employees due to budget shortfalls from last year's appropriations process.

We can't allow this to happen at a time when we are so concerned with maintaining American competitiveness and lead the world in energy research. I'm pleased, therefore, to see increases in funding for both High Energy Physics and Basic Energy Sciences and I'm hopeful that we will make up for any damage done by the 2008 budget shortfall. I encourage the Administration to send a supplemental request that would staunch some of the cuts that SLAC, FermiLab, and other national labs face.

The budget calls for an increase of more than $130 million, or 26 percent, for coal research and development. This is a substantial new investment in fossil energy which seems to have come at the expense of additional investment in renewable energy sources that hold greater promise for clean, sustainable sources of energy.

In contrast to the sharp increase in the coal program, the budget request for Energy Efficiency and Renewable Energy (EERE) is almost flat relative to the FY08 request. Within EERE, I see a $12.3 million cut from the solar energy program. Can we really afford to subject a resource as abundant as the sun to a 7% budget cut?

Are we committing our nation's energy future to coal? Is this the Administration's vision?

Last year a group of researchers announced the development of a new solar power cell that is over 40% efficient, more than twice the output of what is now available commercially. These kinds of discoveries merit further investment. We need to identify national priorities and invest in them consistently, year after year, to ensure that we make forward progress rather than ramping up a program that will then be scaled back if funding gets tighter.

Again, thank you, Mr. Secretary for being here today. I look forward to our discussion of these issues and the DOE's priorities for the coming year.

The Secretary of Energy
Washington, D.C. 20585
November 30, 2007

The Honorable John Shimkus
U.S. House of Representatives
Washington, DC 20515

Dear Congressman Shimkus:

Thank you for your October 25, 2007, letter expressing continued support of the FutureGen project and for the efforts of many individuals throughout the State of Illinois who have been working on Illinois' proposal to host FutureGen.

The Department of Energy has been working expeditiously to assure that the final stage of the environmental compliance process is thoroughly completed. We have recently issued the final Environmental Impact Statement (EIS). Notice of the EIS availability was published in the Federal Register on November 16, 2007. We are diligently working to complete the process and issue the Record of Decision in a timeframe that supports FutureGen site selection by the end of December 2007.

We appreciate your interest in FutureGen and your support for the project. If you require additional information, please contact me or Ms. Lisa E. Epifani, Assistant Secretary for Congressional and Intergovernmental Affairs, at (202) 586-5450.

Sincerely,

Samuel W. Bodman

Printed with soy ink on recycled paper

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Joe Manchin III
Governor

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State Capitol
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November 30, 2007

Governor Rod R. Blagojevich
Suite 1500
James R. Thompson Center
200 W. Randolph
Chicago, IL 60601

Dear Governor Blagojevich:

As you are aware, West Virginia was one of the states that submitted an application for the FutureGen demonstration project. We believe zero emission power plants are in our nation's future. We look forward to working with the Department of Energy and coal producing states to usher in this coal-to-hydrogen technology.

The coal industry and state coal economics need the technologies to be demonstrated and perfected through FutureGen. FutureGen can and should be of service to our nation's coal industry and coal states. Site selection is critical to achieving this goal.

As coal states, we have unique challenges. Surmounting these challenges is best accomplished as a team. I feel the Illinois sites best reflect the needs of our nation's coal industry and the economy of coal states. I support an Illinois FutureGen location.

We wish you luck. Please feel free to contact me if I can be of further assistance.

With warmest regards,

Joe Manchin III
Governor

JM/mb

DAVE FREUDENTHAL
GOVERNOR

THE STATE OF WYOMING

STATE CAPITOL
CHEYENNE, WY 82002

Office of the Governor

November 9, 2007

The Honorable Rod Blagojevich
Governor of Illinois
207 State House
Springfield, IL 62706

Dear Governor Blagojevich:

As Congress moves forward in its consideration of legislation to address global climate change, the role that advanced clean coal technologies will play to reduce greenhouse gas emissions (GHG) will be vital. Like Illinois, Wyoming knows well that coal is our most abundant domestic energy resource and we are proud of the contribution coal has made in meeting the Nation's energy needs.

Wyoming also shares Illinois' passion and commitment to clean coal technology development. We applaud the program Illinois has put in place to partner with the private sector to encourage enhanced coal utilization and development of commercial scale projects that respond to the need reduce carbon dioxide (CO2). I am particularly impressed with Illinois' comprehensive approach to FutureGen, including collaborative efforts to engage the coal research expertise of your university system and those of other coal states who are also eager to learn from this historically significant clean coal demonstration.

Our State Geologist was intimately involved in Wyoming's bid for FutureGen and is one of the recognized experts on geological CO2 sequestration. His team has reviewed the final four FutureGen site proposals and concluded while both Texas and Illinois offer solid sequestration plans, the edge goes to Illinois. One of the biggest challenges for both FutureGen and other clean coal projects will be the ability to manage CO2 in such a manner that once it has been captured and stored, it remains sequestered.

I also believe it is extremely important to site FutureGen in a coal state. Illinois is not only a coal state, but one of great tradition and pride for its coal mining operations and its skilled workers. These are the kind of intangible qualities which lead to solid proposals.

TTY: 777-7860 PHONE: (307) 777-7434 FAX: (307) 632-3909

While it is certainly not my decision, I believe Illinois would be a favored location to host FutureGen. I look forward to working with you on this project and clean coal technology programs that will help meet our Nations' energy needs.

Best regards,

Dave Freudenthal
Governor

DF/RL/pjb

c: FutureGen Alliance

JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
OFFICE OF THE GOVERNOR
LANSING

JOHN D. CHERRY, JR.
LT. GOVERNOR

November 28, 2007

Mr. Michael Mudd
FutureGen Industrial Alliance
1001 Pennsylvania Ave., NW
Washington, D.C. 20004

Dear Mr. Mudd:

I am writing to express my support for the location of a U.S. Department of Energy-funded FutureGen project site in the State of Illinois. In choosing between Illinois and Texas, locating the site in Illinois would be the superior choice because of the state's abundant coal resources, as well as the commitments it and other Midwestern states have made to develop clean energy technologies that substantially reduce carbon emissions.

Like Michigan, Illinois has led efforts to convert to cleaner energy technologies in an effort to reduce American dependence on foreign oil and limit the effects of climate change by reducing carbon emissions. Earlier this month, Illinois joined Michigan and other Midwestern states in a series of regional energy and climate agreements that will help deploy clean energy sources and set clear carbon emissions targets.

As Illinois has vast coal reserves, awarding it a FutureGen project site would allow the entire region to leverage clean coal technologies to meet national energy and climate change goals. In Michigan, we stand ready to deploy our manufacturing and alternative energy technologies to assist the FutureGen project as part of a truly regional collaboration to meet tomorrow's energy needs.

I appreciate the mission and efforts of the FutureGen Energy Alliance, and strongly support Illinois' efforts to locate this innovative and unprecedented project in the Midwest.

Sincerely yours,

Jennifer M. Granholm
Governor

TED STRICKLAND
GOVERNOR
STATE OF OHIO

November 8, 2007

Mr. Mike Mudd
FutureGen Industrial Alliance
1001 Pennsylvania Ave. NW
Washington DC 20004

Dear Mr. Mudd:

I am expressing my support for siting the U.S. Department of Energy's FutureGen project at one of the Illinois candidate sites. As you know, Ohio competed vigorously for this project in an effort I supported as Congressman. I believe it is essential to site both the FutureGen power plant and its carbon capture and sequestration pilot project in a location that maximizes the value of this significant federal investment to the entire nation. And, I believe that place is Illinois.

Illinois has the right combination of geology, expertise, and transportation infrastructure, all strengthened by state and community support. More importantly, the characteristics of the Illinois sites have much more in common with those of coal producing states with a significant portion of the nation's power plant fleet. Both the challenges and lessons learned at Illinois sites will translate more quickly for Ohio.

Ohio's long coal mining history and its position as one of the largest consumers and producers of electricity make the transferability of FutureGen findings critical. Our long standing commitment to the development of clean coal technology has resulted in the nation's leading system of clean coal research through our universities and research institutions. Those institutions stand ready to support the work of FutureGen. In addition, our manufacturing base can contribute to the production of the myriad component parts FutureGen will require.

I applaud your leadership of the FutureGen Industrial Alliance and urge the siting of the FutureGen project in Illinois.

Sincerely,

Ted Strickland

Ted Strickland
Governor of Ohio

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MEMORANDUM OF UNDERSTANDING

BETWEEN

THE STATE OF ILLINOIS AND THE STATE OF INDIANA

NOVEMBER 28, 2005

WHEREAS, the U.S. Department of Energy has launched a $1 billion initiative, with private sector and international support, to design, construct and operate a nominal 275-megawatt (net equivalent output) prototype plant that will, when operational, produce electricity and clean-burning hydrogen with near-zero emissions and demonstrate the effectiveness, safety and permanence of geologic carbon dioxide sequestration; and

WHEREAS, this full-scale prototype power plant, which has been named *FutureGen*, will turn coal into a gas, employ the latest technology to remove the resultant air pollutants (sulfur dioxide, nitrogen oxides, and mercury), separate carbon dioxide from other gases, and inject and permanently sequester the isolated carbon dioxide in underground formations, all as a means of reducing greenhouse gases; and

WHEREAS, by virtue of its capabilities, *FutureGen* will, according to the U.S. Department of Energy, be one of the boldest steps our nation takes toward a pollution-free energy future and serve as a platform to test and evaluate new technologies as they emerge from research and development; and

WHEREAS, there is a high degree of confidence that the prospects for *FutureGen*'s success will be enhanced by multi-state collaboration with respect to site selection, evaluation of available water sources, access to the electrical grid, and opportunities for geological carbon sequestration; and

WHEREAS, an industry-based consortium, known as the FutureGen Industrial Alliance, expects to partner with the U.S. Department of Energy to develop the *FutureGen* project; and

WHEREAS, being selected by the FutureGen Industrial Alliance as the site for the *FutureGen* plant will lead to valuable opportunities to develop an understanding of, and the necessary infrastructure to support, the low-emissions coal gasification process as a way of meeting future electrical generation and other fuel needs using coal—America's most abundant fossil resource:

NOW, THEREFORE, in consideration of the premises and of the mutual undertakings contained herein, the State of Illinois ("Illinois") and the State of Indiana ("Indiana," and, with Illinois, the "parties"), acting by and through their executives, hereby agree as follows:

1. The parties will pool their collective expertise in a joint effort to secure the *FutureGen* project for that part of the Illinois Coal Basin that is shared by the two states. With goal of ensuring environmental quality, abundant electricity supplies and economic growth, the parties will make all reasonable efforts to assure that the *FutureGen* power plant demonstration project is sited within Illinois and that at least one carbon sequestration demonstration project is sited within Indiana.

2. Illinois already has in place a variety of financial incentives, has established a solid technical collaboration among the Illinois, Indiana and Kentucky geological surveys, and has held initial discussions concerning potential sites for the *FutureGen* plant. Indiana will become a partner in that effort, bringing its expertise and sharing its knowledge base in the process.

3. The parties believe that their joint collaboration and mutual support are essential to affording them the best opportunity to secure, for them and their citizens, the benefits of this important federal initiative, with the goal of continuing to utilize abundant and low-cost coal resources and making preparations for the hydrogen economy, while meeting concerns over the harmful effects of emissions, including greenhouse gases.

IN WITNESS WHEREOF, the parties have, through their duly-elected executives, entered into this Memorandum of Understanding as of the date first written above.

Rod R. Blagojevich
Governor of Illinois

Mitchell E. Daniels, Jr.
Governor of Indiana

KENTUCKY COMMERCE CABINET
OFFICE OF ENERGY POLICY

Ernie Fletcher
Governor

Capital Plaza Tower, 12th Floor
500 Mero Street
Frankfort, Kentucky 40601
Phone (502) 564-7192
Fax (502) 564-7484
www.energy.ky.gov

George Ward
Secretary

August 22, 2006

Mr. Bill Hoback
Office of Coal Development
620 E. Adams Street
Springfield, IL 62701-1615

Dear Mr. Hoback:

Congratulations on the success of Illinois' FutureGen proposal receiving not just one but two sites as finalists! You and your team have done a great job and produced an excellent proposal.

The Kentucky Office of Energy Policy believes strongly that eastern bituminous coal is vital for the economic and energy security of the nation. Furthermore, we believe that a FutureGen plant in the Illinois Basin will greatly benefit the Midwest region by demonstrating the value of eastern coals as a dependable energy source in this advanced zero-emission technology. Illinois has done outstanding work to get to this level in the competitive process, and Kentucky is ready to assist you in any way that we can to ensure that the FutureGen plant is located in the Illinois Basin.

Kentucky and Illinois are already cooperating on a number of energy and coal-related programs, e.g. the Clean Fuels Alliance, and in several carbon-sequestration, coal-bed methane, and deep-petroleum research projects. As you know, Kentucky's capabilities in the areas of energy and coal in our research, engineering, and educational institutions are very substantial. We are anxious to add to this portfolio of cooperation for FutureGen.

We wish you and your state the best success in this effort, and we will assist you in any way that we can.

Very sincerely yours,

Talina Mathews

Talina Mathews
Executive Director
Kentucky Office of Energy Policy

TL/DCH

COMMONWEALTH OF PENNSYLVANIA
OFFICE OF THE GOVERNOR
HARRISBURG

THE GOVERNOR

September 25, 2007

Mr. Mike Mudd
FutureGen Industrial Alliance
1001 Pennsylvania Ave NW
Washington DC 20004

Dear Mr. Mudd:

On behalf of the Commonwealth of Pennsylvania, I wish to offer our support to the U. S. Department of Energy's (DOE) FutureGen project and its siting in Illinois. This project is of great importance to the entire country. In Pennsylvania, we have kept a watchful eye on the FutureGen competition and believe that it is in our nation's best interest to place the power plant in a location that provides the optimum environment for reaching the goals and vision of FutureGen, and we believe that place is Illinois.

With only four sites now in the running, Illinois offers the right mix of geology, expertise, transportation infrastructure as well as the state and community support, which is necessary for a project of this magnitude. Furthermore, Illinois' natural characteristics are more common with other coal producing states that will look to replicate the technologies demonstrated by the FutureGen project. Issues that will need to be worked out, as well as the lessons learned during construction and operation, at an Illinois FutureGen site will be much more readily transferable to Pennsylvania.

Pennsylvania has a rich coal mining history, and our universities and research facilities share the commitment to advancing clean coal technologies, ensuring America's ample reserves of coal remains a viable energy source in a carbon-constrained world. Research conducted by Pennsylvania's brightest professors and students along with those from Illinois will certainly realize the goals of FutureGen. In addition, Pennsylvania businesses stand ready to provide, as necessary, equipment, feedstock, and services for the successful completion of the project.

FutureGen represents a tremendous opportunity—as it will help create clean, reliable, and affordable domestic-based energy. It is critical that FutureGen is successful, and we believe that the State of Illinois and their sites offer the FutureGen Industrial Alliance the best chance for success.

Sincerely,

Edward G. Rendell

Edward G. Rendell
Governor

cc: The Honorable Rod Blagojevich
Director Jack Lavin
Bill Hoback

JIM DOYLE
GOVERNOR
STATE OF WISCONSIN

November 6, 2007

Governor Rod Blagojevich
207 State House
Springfield, IL 62706

Governor Blagojevich:

I am writing to express Wisconsin's support for Illinois' bid to be a site for the U.S. Department of Energy's FutureGen project. We feel strongly that the evolution of cleaner coal technologies will be of vital importance to the nation, and specifically the Midwest, and we enthusiastically back the important research that would be conducted at an Illinois FutureGen plant.

Midwestern states have demonstrated a strong commitment to converting to cleaner energy sources, technology advancement and energy conservation, and Illinois' competitive bid to host a FutureGen project and maximize its geologically ideal sites for such a project is an important demonstration of this commitment. While Wisconsin does not have the coal storage reserves Illinois holds, our state has maximized other energy opportunities to conserve more and use less. In March 2006, I signed Act 141, which secured and boosted our state's funding for our energy efficiency and renewable energy program and created a Renewable Portfolio Standard for our state to require 10% renewable energy by 2015. Earlier this year, I signed an Executive Order to create a Task Force on Global Warming to develop innovative policy recommendations to address global warming issues.

Projects like FutureGen create an exhilarating opportunity for new regionalism. In a carbon-constrained world, we here in Wisconsin understand the importance of developing cleaner coal technology not only for our energy, environmental and economic future, but the future of the Midwest. Carbon capture and storage opportunities and other technology development that would move forward at Illinois' FutureGen site will be very beneficial to utilities and ratepayers throughout the region. We strongly endorse the selection of Illinois as a site for the FutureGen project, and pledge to offer the support of our business and research communities to ensure the success of this important endeavor.

Sincerely,

Jim Doyle
Governor

P.O. BOX 7863, MADISON, WISCONSIN 53707-7863 • (608) 266-1212 • FAX: (608) 267-8983
WWW.WISGOV.STATE.WI.US

Congress of the United States

Washington, DC 20515

March 19, 2003

Honorable Spencer Abraham
Secretary
U.S. Department of Energy
1000 Independence Ave., SW Rm 7A257
Washington, D.C. 20510

Dear Secretary Abraham:

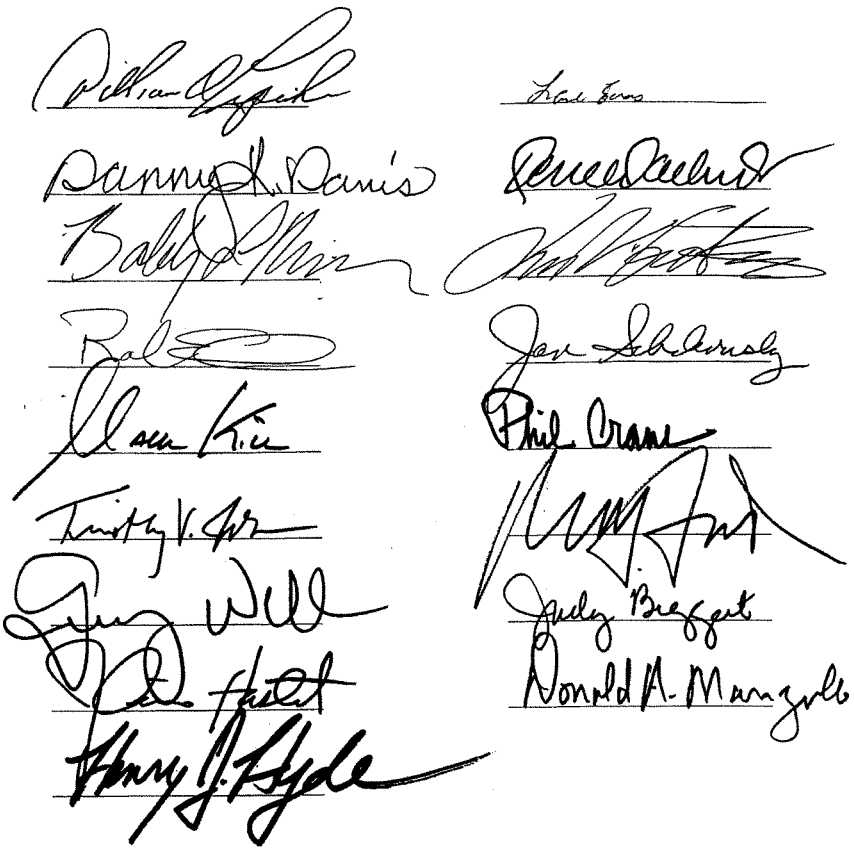
As the Department of Energy considers placement of the President's new FutureGen Initiative, we, as members of the Illinois Congressional Delegation, strongly urge you to place the FutureGen project in Southern Illinois.

As you know, Illinois coal is a significant industry that produces approximately 35 million tons of coal and generates more than $1 billion in gross revenues. The valuable mineral underlies 65 percent of the state's surface. Currently, recoverable coal reserves in the state of Illinois amount to more than 30 billion tons. Illinois has almost one-eighth of the coal reserves in the United States and one-quarter of the nation's bituminous coal reserves. The largest coal deposits found east of the Mississippi River are in Illinois. Further, the geology of the region is well suited to the carbon-trapping technology to be developed. Illinois is home to oil and gas reserves and deep saline aquifers that can permanently sequester carbon dioxide.

In addition, Southern Illinois University operates its Coal Research Center - one of the field's most comprehensive programs in the United States, with a combination of facilities and achievements that make it a unique contributor to our nation's energy infrastructure. Located at the university's campus in Carbondale, the Coal Research Center conducts a wide range of studies with direct practical applicability to the commercial development of coal. The ramifications of the center's work extend far beyond state lines and includes improvements of coal cleaning processes, the reduction of air pollution from coal-fired power plants, the reduction of solid waste residues from coal burning, and the development of products from those residues.

Southern Illinois is the perfect home for this forward-thinking project. We have the coal and expertise needed to make this project a reality. We respectfully urge you to give careful consideration to locating the FutureGen project in Southern Illinois.

Sincerely,



675

Congress of the United States
Washington, DC 20515

July 7, 2003

The Honorable George W. Bush
President of the United States
The White House
1600 Pennsylvania Avenue, NW
Washington, D.C. 20500

Dear President Bush:

As you know, fossil fuels meet the vast majority of America's and the world's energy needs. Earlier this year, you took a bold step forward by proposing a near zero-emission, coal-fueled power plant entitled the FutureGen Initiative. The FutureGen Initiative represents a unique opportunity to increase our understanding of carbon capture and sequestration technologies and expand the options for producing hydrogen from coal. The development of these technologies furthers our pursuit for cleaner, more efficient coal combustion.

Illinois is the perfect location for this forward-thinking project with almost one-eighth of the coal reserves in the United States and one-quarter of the nation's bituminous coal. Our state's strong commitment to the growth of its coal and energy industries and its natural resources, geological composition, infrastructure, and extensive research and expertise in coal allows Illinois to play a proactive role in our national energy future.

The State of Illinois and members of the Illinois congressional delegation recently sponsored a roundtable discussion entitled FutureGen and Illinois. This event allowed the Department of Energy and the FutureGen sponsors and participants to explore Illinois' unique features and to discover the many ways our state can meet the goals and objectives of this project. The discussion also enhanced state and local officials' understanding of the FutureGen Initiative.

Illinois has the coal and expertise needed to make this project a reality. We respectfully urge you to give careful consideration to locating the FutureGen project in Illinois.

Sincerely,

Congress of the United States
Washington, DC 20515

July 7, 2003

Honorable Spencer Abraham
Secretary
U.S. Department of Energy
1000 Independence Ave., SW Rm 7A257
Washington, D.C. 20510

Dear Secretary Abraham:

We wanted to follow up on the roundtable discussion we recently sponsored with the Governor of Illinois, Rod Blagojevich, at Southern Illinois University-Carbondale concerning the FutureGen project.

While we were sorry you could not personally attend and participate in the discussion, Dr. C. Lowell Miller from your office did an excellent job of representing the Department of Energy and explaining the FutureGen project.

We believe each of the individuals serving on the panel representing business, industry, and government and the 250 people in the audience agree that Southern Illinois has the necessary natural and technical resources, critical infrastructure, and favorable business environment to bring FutureGen to fruition.

The Governor's staff did an exceptional job of detailing why FutureGen should be built in Southern Illinois. Further, Governor Blagojevich is personally committed to doing whatever is necessary to assist you and your Department in locating the project in our state and making certain that the project is successful.

We hope that you will have the opportunity to review the material submitted by the Governor on the benefits Illinois brings to this project. Further, members of the Illinois congressional delegation would like the opportunity to visit with you at the appropriate time during the site selection process.

We thank you for your consideration and look forward to hearing from you in the near future concerning this important project.

Sincerely,

Richard Durbin (IL)
Member of Congress

Jerry F. Costello (IL-12)
Member of Congress

John Shimkus (IL-19)
Member of Congress

635

Congress of the United States
Washington, DC 20515

October 10, 2003

The Honorable Charles H. Taylor
Chairman
Subcommittee on the Interior
B308 Rayburn HOB
Washington, DC 20515

The Honorable Norman Dicks
Ranking Member
Subcommittee on the Interior
2467 Rayburn HOB
Washington, DC 20515

The Honorable Conrad Burns
Chairman
Subcommittee on Interior
SD-132
Washington, DC 20510

The Honorable Bryon L. Dorgan
Ranking Member
Subcommittee on Interior
SD-160
Washington, DC 20510

Dear Chairmen Taylor and Burns and Ranking Members Dicks and Dorgan:

As you know, President Bush took a bold step forward in advancing our use of domestic energy sources by announcing a $1 billion public/private partnership to design and operate a nearly emission-free, coal-fired electric and hydrogen power plant called the FutureGen Initiative. The FutureGen Initiative represents a unique opportunity to increase our knowledge of carbon capture and sequestration technologies and expand the options for producing hydrogen from coal. The development of these new technologies furthers our pursuit for cleaner, more efficient coal combustion. It also reduces U.S. dependence on foreign oil.

It is our understanding that the Department of Energy (DOE) will make available $320 million of previously appropriated clean coal technology funding for allocation to a new project. DOE has proposed transferring these funds to the FutureGen Initiative, and we strongly support this proposal. By providing federal funding in FY2004, we allow the DOE to commence with structuring the industrial partnership, site selection, and engineering design. This funding allows FutureGen to be a valuable complement to ongoing federal fossil energy research and development programs that also must be sustained. Further, because this funding was appropriated in past years, it will not increase spending for FY2004.

A reliable and affordable energy supply is crucial to America's economic vitality, security, and quality of life. New and improved scientific and technical advances hold the promise of far greater emissions reductions and increased efficiency. The FutureGen Initiative will serve as the test bed for researching, developing, and demonstrating the best technologies in the world. Knowledge from this prototype power plant will help make coal into an environmentally sustainable energy resource. Like the Bush administration, we, too, must take a bold step forward and provide this essential funding in FY2004 to ensure its success.

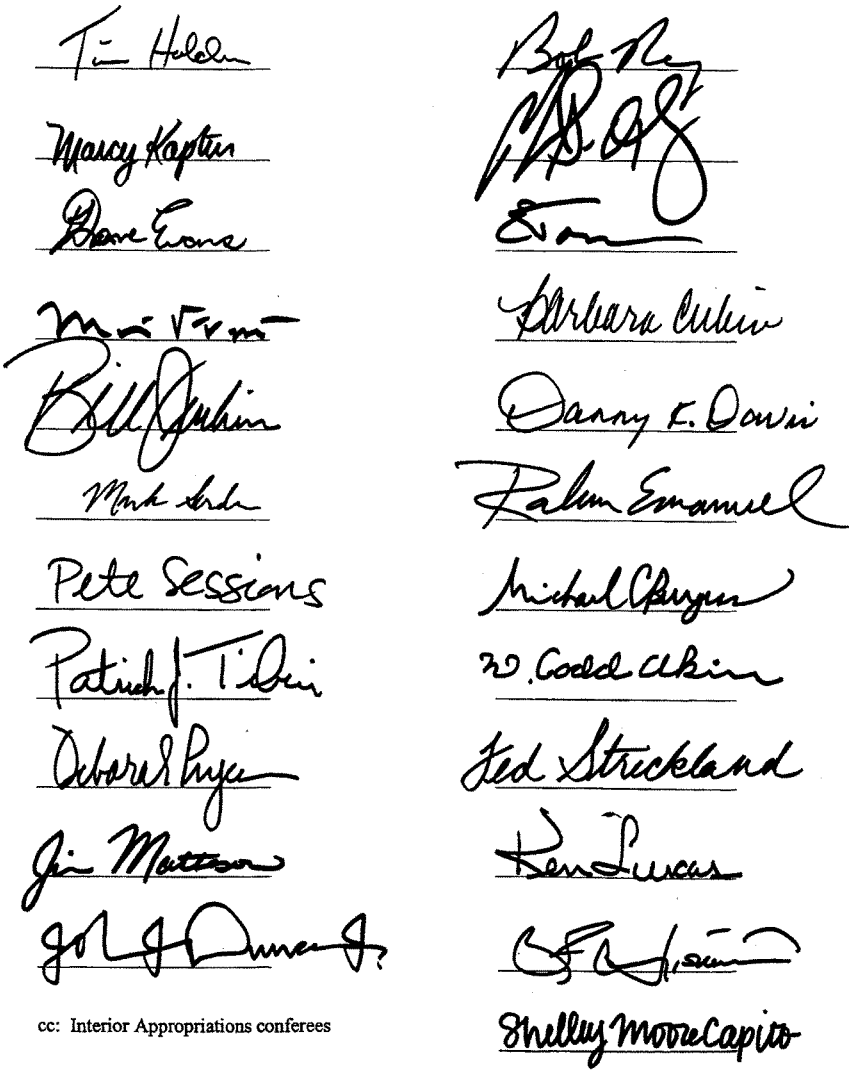
Thank you for your consideration of our request.

Sincerely,

Jerry F. Costello

[signature]

IL-19th



cc: Interior Appropriations conferees

641

Congress of the United States
Washington, DC 20515

December 15, 2003

The Honorable Joshua B. Bolten
Director
Office of Management and Budget
725 17th Street, NW
Washington, D.C. 20503-0009

Dear Director Bolten:

As you know, coal is an indispensable part of our nation's energy portfolio because of its abundance and low-cost. It currently provides more than one-half of the United States' affordable electricity.

The Department of Energy (DOE) continues to direct significant research and development funding to discover new technologies that will use coal in a more efficient, cost-effective, and environmentally sustainable manner. New government-industry collaborative efforts are underway which help to limit emissions from coal-fired power generation at lower cost. The $1 billion public/private partnership to design and operate a nearly emission-free, coal-fired electric and hydrogen power plant called the FutureGen Initiative is representative of these efforts. This new initiative, which enjoys bi-partisan support, gives us a unique opportunity to increase our knowledge of carbon capture and sequestration technologies and expand the options for producing hydrogen from coal.

In the FY2004 Interior Appropriations bill, $9 million was provided to initiate the FutureGen program. While this is a decent start, significant funding must be included in the FY2005 budget to demonstrate not only a strong commitment to clean power generation, but also to allow DOE to continue with structuring the industrial partnership, engineering design, and site selection for FutureGen. At a minimum, $316 million is requested for the FutureGen initiative in the FY2005 budget. In the President's FY2004 budget request, it was the administration's intent to transfer previously appropriated, unobligated funds from the Clean Coal Technology Account to FutureGen. Of the $316 million, $237 million could be offset with a rescission from the Clean Coal Technology Account. Thus, only $79 million of new funds are required to cover the full $316 million in FY2005. Further, we request clarification on the cost-share required for this project.

We urge the Bush administration to keep its promise to this important initiative and the development of clean coal technologies and provide the essential funding in FY2005 to ensure FutureGen's success. Thank you for your consideration of our request.

Sincerely,

Jerry F. Costello (IL-12)

John Shimkus (IL-19)

Rahm Emanuel (IL-5)

Rick Boucher (VA-9)

Shelley Moore Capito (WV-2)

Tammy Baldwin (WI-2)

Ken R. Lucas (KY-4)

William L. Jenkins (TN-1)

William O. Lipinski (IL-3)

Patrick J. Tiberi (OH-12)

Melissa A. Hart (PA-4)

Todd Akin (MO-2)

Tim Holden (PA-17)

Michael G. Oxley (OH-4)

Michael J. Rogers (MI-8)

Sherrod Brown (OH-13)

Bob Ney (OH-18)

Barbara Cubin (WY-At Large)

Timothy V. Johnson (IL-15)

Mark S. Kirk (IL-10)

Timothy F. Murphy (PA-18)

Joe Wilson (SC-2)

Judy Biggert (IL-13)

Cc: Secretary Spencer Abraham, U.S. Department of Energy
Chairman James Laurence Connaughton, Council on Environmental Quality

645

Congress of the United States
Washington, DC 20515

February 19, 2004

The Honorable Carl Michael Smith
Assistant Secretary for Fossil Energy
U.S. Department of Energy
Forrestal Building
1000 Independence Ave
Washington, D.C. 20585-0002

Dear Mr. Smith:

As you know, the Illinois Congressional Delegation is very supportive of the President's FutureGen initiative.

As we demonstrated at our roundtable forum in July of last year at Southern Illinois University in Carbondale, we think that Illinois offers all of the resources needed to make this project successful and therefore, believe the FutureGen plant should be built in Illinois.

The Governor of Illinois has said that the state is committed to doing everything it possibly can to work with the federal government to bring the FutureGen initiative to Illinois.

We would like to invite you to attend a meeting on FutureGen to be held on Wednesday, March 24, 2004 at 2 pm in the House Science Committee room. We expect members of the Illinois Congressional Delegation, including Senator Durbin and Senator Fitzgerald, as well as representatives of the Governor's office to attend in order to have an open discussion on the FutureGen project.

We ask that you have someone from your office call Christa Fornarotto at 202.225.5661 to let us know if you will be able to attend. We thank you for your prompt attention to this invitation.

Sincerely,

Jerry F. Costello
Member of Congress

John Shimkus
Member of Congress

Congress of the United States

Washington, DC 20515

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March 3, 2004

The Honorable Donald A. Manzullo
Member of Congress
U.S. House of Representatives
2228 Rayburn HOB
Washington, D.C. 20515-1316

all members of IL Delegation

Dear Don:

As you know, President Bush announced a $1 billion government/industry partnership to design and operate a nearly emission-free, coal-fired electric and hydrogen power plant called the FutureGen Initiative.

As was demonstrated at our roundtable forum in July of last year at Southern Illinois University Carbondale, we think that Illinois offers all of the resources needed to make this project successful and therefore, believe the FutureGen plant should be built in Illinois. Further, the FutureGen Initiative represents a unique opportunity to increase federal dollars within the state of Illinois and also create much-needed jobs and investment in Southern Illinois.

The Governor of Illinois has said that the state is committed to doing everything it possibly can to work with the federal government to bring the FutureGen initiative to Illinois.

We would like to invite you to attend a meeting on FutureGen to be held Wednesday, March 24, 2004 at 2pm in 2325 Rayburn House Office Building, the House Science Committee room. Acting Assistant Secretary of Fossil Energy Mark Maddox, members of the Illinois Congressional Delegation, as well as representatives of the Governor's office and the state of Illinois will be attending in order to have an open discussion on the FutureGen project.

We ask that you have someone from your office call Christa Fornarotto at 202.225.5661 or Ray Fitzgerald at 202.225.5271 to let us know if you will be able to attend. We thank you for your prompt attention to this invitation.

Sincerely,

Jerry F. Costello
Member of Congress

John Shimkus
Member of Congress

641

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

THE DEPUTY DIRECTOR

March 16, 2004

The Honorable John Shimkus
U.S. House of Representatives
Washington, DC 20515

Dear Representative Shimkus:

Thank you for your letter of December 15, 2003, requesting funding for the near zero emissions FutureGen coal power and hydrogen production plant to be included in the FY 2005 Budget request. Director Bolten has asked that I respond on his behalf.

As you know, the President submitted the FY 2005 Budget on February 2, 2004, and the Budget proposes $237 million for FutureGen.

The President's 2005 Budget advances three overriding national priorities: winning the war on terror, protecting the homeland, and strengthening the economy. The President is committed to spending what is necessary to provide for America's security while restraining spending elsewhere. The President's Budget proposes to limit the growth in discretionary spending unrelated to security to 0.5 percent in 2005, less than the rate of inflation. This commitment to spending restraint, combined with the continuation of the pro-growth economic policies reflected in the President's Budget, will put us on a path to cutting the deficit in half within five years.

Thank you again for your interest in this matter, and for taking the time to communicate your views.

Sincerely,

Joel D. Kaplan
Deputy Director

Congress of the United States
Washington, DC 20515

659

March 25, 2004

The Honorable Mark Maddox
Acting Assistant Secretary for Fossil Energy
U.S. Department of Energy
Forrestal Building
1000 Independence Ave
Washington, D.C. 20585-0002

Dear Mark:

We wanted to follow up on the discussion we recently had concerning the FutureGen project.

We were pleased you could attend and participate in the discussion. You and your staff, including George Rudins, did an excellent job explaining the FutureGen project.

We believe Southern Illinois has the necessary natural and technical resources, critical infrastructure, and favorable business environment to bring FutureGen to fruition. The Governor's staff did an exceptional job of detailing why FutureGen should be built in Southern Illinois. Further, Governor Blagojevich is personally committed to doing whatever is necessary to assist you and the Department in locating the project in our state and making certain that the project is successful.

We hope that you found the presentation helpful and informative. Further, members of the Illinois congressional delegation are committed to moving this project forward and we hope you consider the us and the State of Illinois a resource for you to rely on at any time during the process.

We thank you for your consideration and look forward to hearing from you in the near future concerning this important project.

Sincerely,

Jerry F. Costello
Member of Congress

John Shimkus
Member of Congress

Department of Energy
Washington, DC 20585

April 27, 2004

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The Honorable John Shimkus
U. S. House of Representatives
Washington, D. C. 20515

Dear Congressman Shimkus:

Thank you for your March 25, 2004, letter following up on the discussions we recently had concerning the FutureGen project.

The exchange of ideas that occurred during these discussions are of significant value to us as we proceed with efforts to build ths prototype of the fossil fuel power plant of the future. We appreciated your comments that Southern Illinois has the necessary natural and technical resources, critical infrastructure, and favorable business environment to make FutureGen a success.

It was especially gratifying to hear that Governor Blagojevich is committed to doing whatever is necessary to assist the Department in locating the project in Illinois and ensuring its success. It was also a pleasure to be informed of the commitment by the members of the Illinois congressional delegation to moving this project forward.

Again, thank you for giving the Department the opportunity to meet with you and discuss the FutureGen project. Should you require further information, please contact me or have a member of your staff contact Mr. Erik Rasmussen, Office of Congressional and Intergovernmental Affairs, at (202) 586-2762.

Looking forward to working with you!

Sincerely,

Mark R. Maddox
Acting Assistant Secretary
Office of Fossil Energy

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Congress of the United States
Washington, DC 20515

685

COPY

June 15, 2004

The Honorable Spencer Abraham
Secretary of Energy
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Mr. Michael L. Eastman
U.S. Department of Energy
National Energy Technology Lab.
626 Cochrans Mill Road
Pittsburgh, PA 15236-0940

Re: Solicitation #DE-PS26-04NT42061

Dear Secretary Abraham and Mr. Eastman:

We, the undersigned members of the Illinois Congressional Delegation, wish to express our support of the proposal submitted by ClearStack Combustion Corporation in response to Solicitation #DE-PS26-04NT42061 as part of the Clean Coal Power Initiative of the U.S. Department of Energy.

ClearStack Combustion Corporation possesses a unique multi-pollutant control technology for the burning of coal. They have successfully completed a demonstration project at the Lincoln Developmental Center in Lincoln, Illinois. This is a front-end gasification technology that provides for multi-pollutant control. The project allowed ClearStack to successfully demonstrate their multi-pollutant technology at the facility.

Tremendous results were achieved, which included 70%+ reduction in sulfur dioxide emissions, nitrogen oxide emissions below 0.15lb/million Btu, and mercury and other air toxic reductions of over 90%. Further, the mercury does not leach from the slag and fly ash produced. The combustion efficiency is high (low carbon in ash) and it also removes a portion of the chlorine and fluorine liberated from the coal. The U.S. Environmental Protection Agency has proposed a set of rules to regulate mercury emissions from the near 1,200 coal-fired power plants in the United States. These mercury rules are expected to be in effect as early as 2007. Through their proposed project, ClearStack believes they can demonstrate that they possess the Best Available Control Technology (BACT) to reduce mercury and the other major air pollutants from coal combustion.

ClearStack Combustion Corporation has entered into an agreement with AmerenEnergy Generating to retrofit an 80-megawatt coal-fired power unit in Hutsonville, Illinois. This will be the first large scale application of the technology. If the demonstration project is successful, the sulfur dioxide, nitrogen oxide and mercury levels at the unit will be significantly reduced to meet the current, and future, federal requirements. It will also offer the opportunity to utilize the technology on a large number of new and existing facilities throughout the United States.

The reasons that Ameren offered their plant as a host site are clear. Low cost multi-pollutant control technologies exist, such as ClearStack's Ashworth Combustor. These advancements would now allow many smaller plants (200MW and less) to become compliant for a fraction of the current cost of installing and operating Selective Catalytic Reduction (SCR) units.

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We believe this technology is innovative and effective, and support ClearStack Combustion Corporation's initiative. We respectfully request your full consideration of their proposal.

Sincerely,

Rep. Timothy V. Johnson

Rep. John Shimkus

Speaker. J. Dennis Hastert

Sen. Peter Fitzgerald

Sen. Richard J. Durbin

Rep. William O. Lipinski

Rep. Phil Crane

Rep. Rahm Emanuel

Rep. Judy Biggert

Rep. Luis V. Gutierrez

Rep. Danny K. Davis

Rep. Henry Hyde

Rep. Ray LaHood

Rep. Jerry F. Costello

Rep. Lane Evans

Department of Energy
Washington, DC 20585

July 27, 2004

685

The Honorable John Shimkus
U.S. House of Representatives
Washington, DC 20515

Dear Congressman Shimkus:

This is in response to your letter of June 15, 2004, to Secretary of Energy Spencer Abraham, and Mr. Michael Eastman at the Department of Energy's National Energy Technology Laboratory, regarding an application submitted by your constituent, ClearStack Combustion Corporation, titled "AEG Hutsonville Ashworth Combustor Retrofit." The application was submitted in response to the Department's Funding Opportunity Announcement No. DE-PS26-04NT42061, "Clean Coal Power Initiative (CCPI), Round 2."

ClearStack's application was received on June 15, 2004. Their application, along with a number of others received in response to the solicitation, will be initially reviewed to establish if they are qualified for further evaluation. Applications passing the preliminary review will then be subjected to a comprehensive evaluation in accordance with the evaluation criteria.

It is anticipated that preliminary reviews will be completed within the next few weeks, and final selection decisions will be made by the end of December 2004. Notification of the results of the evaluation will occur shortly thereafter. Please be assured that your constituent's application will be given every consideration and carefully evaluated according to criteria listed in the solicitation.

Thank you for your interest in this project and your support of the Fossil Energy Program. Should you require additional information, please contact me or have a member of your staff contact Mr. Erik Rasmussen, Office of Congressional and Intergovernmental Affairs, at 202-586-2762.

Sincerely,

Mark R. Maddox
Acting Assistant Secretary
Office of Fossil Energy

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Congress of the United States
Washington, DC 20515

107

December 13, 2004

The Honorable Joshua B. Bolten
Director
Office of Management and Budget
725 17th Street, NW
Washington, D.C. 20503-0009

Dear Director Bolten:

We are writing concerning funding for the FutureGen Initiative in FY 2006. This year, coal production in the U.S. is expected to climb to over 1.2 billion tons, an increase of more than 3.7% from 2003. About 90% of the coal mined in the U.S. is used to produce electricity, and coal produces about half the U.S. electricity needs. This increased activity demonstrates that coal will continue to play an important role in the U.S. energy policy and further decrease our dependence on foreign energy sources.

As such, the Department of Energy (DOE) continues to direct significant research and development funding to discover new technologies that will use coal in a more efficient, cost-effective, and environmentally sustainable manner. Representative of these efforts is the FutureGen Initiative, the $1 billion public/private partnership to design and operate a nearly emission-free, coal-fired electric and hydrogen power plant. This significant initiative continues to garner bi-partisan support in Congress.

In the FY 2005 Omnibus Appropriations bill, $18 million was provided to allow DOE to continue with structuring the industrial partnership, engineering design, and site selection for FutureGen. We strongly urge the Bush administration to continue to follow the DOE's program plan and provide the required $18 million in FY2006 to meet FutureGen's aggressive goals and schedule. We also urge the designation of the previously appropriated and unobligated clean coal technology funds for FutureGen in order to provide all participants financial certainty that the project can succeed.

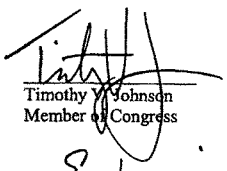
It is important this funding not come at the expense of other fossil research and development funding as increased fossil research and development is critical to improving current technology and ensuring the best use of our domestic coal reserves. Any such cuts will prevent government and industry from achieving the intended goals of FutureGen because the technologies that are currently under development in the research and development program are expected to be utilized in the FutureGen project.

We urge the Bush administration to keep its promise to the FutureGen initiative and the development of clean coal technologies and provide the essential funding in FY2006 to ensure its success. Thank you for your consideration of our request.

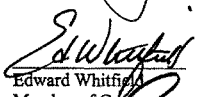
Sincerely,

Jerry F. Costello
Member of Congress

John Shimkus
Member of Congress



Timothy V. Johnson
Member of Congress

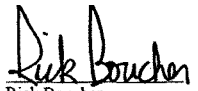


Edward Whitfield
Member of Congress

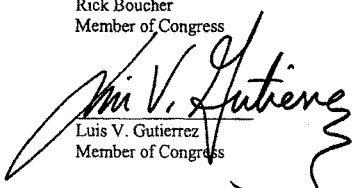
Ray H. LaHood
Member of Congress

Joe Wilson
Member of Congress

Bob Ney
Member of Congress

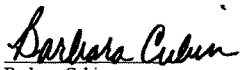


Rick Boucher
Member of Congress

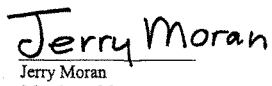


Luis V. Gutierrez
Member of Congress

Shelley Moore Capito
Member of Congress



Barbara Cubin
Member of Congress



Jerry Moran
Member of Congress

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

THE DEPUTY DIRECTOR

January 24, 2005

707

The Honorable John Shimkus
U.S. House of Representatives
Washington, D.C. 20515

Dear Representative Shimkus:

Thank you for your letter of December 13, 2004, to Director Bolten requesting funding for the FutureGen project in the President's FY 2006 Budget. Director Bolten has asked that I respond on his behalf.

The President's Budget for FY 2006 must be submitted to Congress no later than February 7, 2005. The FY 2006 Budget will reflect the President's commitment to providing the critical resources needed for our Nation's highest priorities: fighting the War on Terror, strengthening our homeland defenses, and sustaining the momentum of our economic recovery. The President's pro-growth economic policies, coupled with spending restraint, will allow the deficit to be cut by more than half in five years. We will take careful note of the interests raised in your letter and will bear your concerns in mind as we evaluate the many competing requests for Federal funding.

Thank you again for your interest in the preparation of the President's FY 2006 Budget, and for taking the time to communicate your views.

Sincerely,

Joel D. Kaplan
Deputy Director

711

Congress of the United States
Washington, DC 20515

January 27, 2005

The Honorable Samuel W. Bodman
Secretary-designate of Energy
U.S. Department of Energy
1000 Independence Ave., SW Rm 7A257
Washington, D.C. 20510

Dear Mr. Bodman:

We, as members of the Illinois Congressional Delegation, are writing to strongly urge you to place the FutureGen Initiative in Southern Illinois.

As you know, the Department of Energy (DOE) continues to direct significant research and development funding to discover new technologies that will use coal in a more efficient, cost-effective, and environmentally sustainable manner. Representative of these efforts is the FutureGen Initiative, the $1 billion public/private partnership to design and operate a nearly emission-free, coal-fired electric and hydrogen power plant. This significant initiative continues to garner bi-partisan support in Congress.

Illinois has almost one-eighth of the coal reserves in the United States and the largest reserves of bituminous coal in the nation. The State of Illinois has long supported its coal industry through programs that finance research, development, and commercialization of new technologies and uses of coal. As a result, Illinois is a national leader in developing clean and efficient coal technologies.

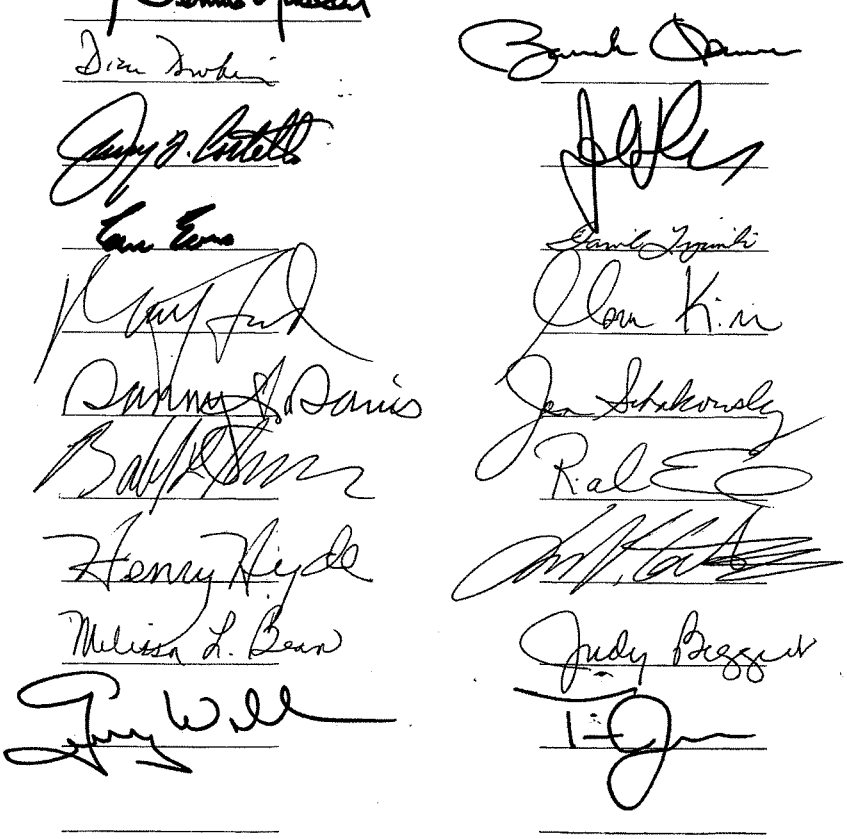
For example, Southern Illinois University Carbondale operates its Coal Research Center, one of the field's most comprehensive programs in the United States, with a combination of facilities and achievements that make it a unique contributor to our nation's energy infrastructure. The Coal Research Center conducts a wide range of studies with direct practical applicability to the commercial development of coal. The ramifications of the center's work extend far beyond state lines and include improvements of coal cleaning processes and the reduction of air pollution from coal-fired power plants.

In addition, carbon sequestration will be one of the primary features that will set the FutureGen plant apart from other electric power projects. No other plant in the world has been built with this capability. Illinois offers geological sequestration potential over a wide area of the Illinois basin with potential storage media for carbon sequestration in structures such as deep coal beds, mature oil reservoirs, and saline reservoirs.

Our state's strong commitment to the growth of its coal and energy industries and its natural resources, geological composition, infrastructure, and extensive research and expertise in coal

allows Illinois to play a proactive role in our national energy future. We respectfully urge you to give careful consideration to locating the FutureGen project in Southern Illinois.

Sincerely,



Department of Energy
Washington, DC 20585

February 28, 2005

The Honorable John Shimkus
U.S. House of Representatives
Washington, D.C. 20515

Dear Representative Shimkus:

Thank you for your January 25, 2005, letter to the Secretary of Energy in which you and your fellow Illinois Congressional Delegation members expressed your support for the President's *FutureGen Initiative* and your desire to locate the project in Southern Illinois.

I want to take this opportunity to express my appreciation for your support of this important energy project that will create the world's first coal-based, zero-emissions power plant. We have received much interest and support since the Department's Request for Information on *FutureGen* was published in the *Federal Register* on April 21, 2003. We want to assure you that we will carefully consider all inputs received as we finalize our decision on the path forward to implement the *FutureGen* Project.

Again, please accept my thanks for your support of the *FutureGen* Project. If you have any further comments or questions concerning this initiative, please contact Dr. Victor Der, FutureGen Program Manager, by phone at (301) 903-2700, or by e-mail at victor.der@hq.doe.gov.

Sincerely,

Mark R. Maddox
Principal Deputy Assistant Secretary
Office of Fossil Energy

Printed with soy ink on recycled paper

Congress of the United States
Washington, DC 20515

Support Funding for FutureGen and Clean Coal Technology

July 13, 2005

Dear Colleague:

We are writing to seek your support for Fossil Energy's clean coal technology programs when the House and Senate meet to conference the Fiscal Year 2006 Energy & Water Development Appropriations bill.

The House designated and made $257 million available for the President's FutureGen Initiative, a $1 billion public/private partnership to design and operate a nearly emissions-free, coal-fired electric hydrogen power plant. Complementary programs to the FutureGen Initiative in the proposed budget, such as the Clean Coal Power Initiative (CCPI) and the base coal R&D projects, are also critical to our National Energy policy.

Adequate funding for coal research, development & demonstration programs is critical to advancing our use of domestic energy sources. The Department of Energy continues to invest in research and development funding to discover new technologies that will use coal in a more efficient, cost effective, and environmentally sustainable manner.

The development of these technologies furthers our pursuit of cleaner, more efficient coal combustion. It also reduces U.S. dependence on foreign oil.

We need to demonstrate our continued bi-partisan support for these programs.

To co-sign the attached letter to Chairman David Hobson and Ranking Member Pete Visclosky please contact Sarah Wisner with Congressman Costello at 5-5661 **by July 29, 2005.**

Sincerely,

Jerry F. Costello
Member of Congress

John Shimkus
Member of Congress

Ted Strickland
Member of Congress

Bob Ney
Member of Congress

October 10, 2005

Dear FutureGen Industrial Alliance member:

Illinois is determined to capitalize on our many resources to make this state the nation's centerpoint for early deployment of coal gasification technology. We have been cultivating a strong reputation as the first stop for prospective developers of coal-fueled energy projects for the next generation.

Ours is an ambitious strategy, one that by the end of this decade will see Illinois firms gasifying coal to produce electric power, low-emission motor fuels, synthesis natural gas, even nitrogen fertilizer for our farmers.

Within the borders of this state, the FutureGen Industrial Alliance will find the necessary physical, commercial and intellectual resources for a successful project. We boast low-cost coal resources, optimum conditions for geologic carbon sequestration, land and water availability, extensive transportation networks and ample electric transmission. Moreover, no state in the nation can match Illinois' long-term public commitment to coal and energy development.

We also believe no other state can match the broad bipartisan and bicameral support for FutureGen by the Illinois Congressional Delegation, which is on record for an Illinois site with President Bush and his current and previous secretaries of energy. Our Washington D.C. effort also is geared to securing ongoing fiscal support for the project.

Given the above, plus Illinois' geographic and geological advantages, we can make a home for FutureGen that allows your vision for zero-emissions, coal-to-energy production to be fully realized. Therefore, we would like to extend the resources, business environment and hospitality of Illinois to the U.S. Department of Energy and the FutureGen Industrial Alliance.

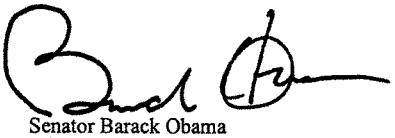
As Illinois' primary economic development entity, the Illinois Department of Commerce and Economic Opportunity (DCEO) can coordinate with any state government agency affected by the project, including the Illinois Environmental Protection Agency, Illinois Department of Natural Resources, Illinois Department of Transportation and the Illinois Department of Employment Security.

As the project proceeds, it is our hope that the U.S. Department of Energy and the FutureGen Industrial Alliance will give our state the opportunity to provide detailed information on potential Illinois sites for FutureGen. We look forward to working with you.

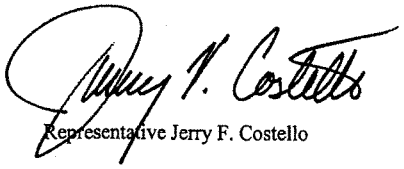
Sincerely,

Governor Rod R. Blagojevich

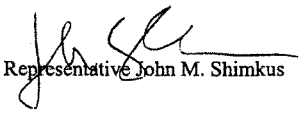
Senator Richard J. Durbin



Senator Barack Obama



Representative Jerry F. Costello



Representative John M. Shimkus

The Illinois General Assembly last June passed Senate Bill 1814, which essentially extends the incentives and other benefits of the Illinois Resource Development and Energy Security Act to the project and the FutureGen Industrial Alliance. This action makes the FutureGen project eligible for a full range of grants, tax and financing incentives.

As Illinois' primary economic development entity, the Department of Commerce and Economic Opportunity (DCEO) can coordinate with any state government agency affected by the project, including the Illinois Environmental Protection Agency, Department of Natural Resources, Department of Transportation and the Illinois Department of Employment Security. DCEO is also available to assist in coordinating with local governments as well as private sector resources.

Among the programs available to assist with major projects in Illinois, which range from infrastructure assistance to workforce development, several have been identified which may be beneficial to the FutureGen project. Each program has certain eligibility thresholds. Below the principal programs are briefly outlined.

ILLINOIS RESOURCE DEVELOPMENT AND ENERGY SECURITY ACT INCENTIVES

COAL REVIVAL PROGRAM

Financial assistance through the Illinois Coal Revival Program is provided in the form of a grant based on State Retail Occupation Taxes paid on Illinois coal purchases for new electric plants. To qualify, facilities must create at least 400 megawatts of new, base load electric generating capacity at one site, use Illinois-mined coal as the primary fuel, support the creation of at least 150 new Illinois coal mining jobs and commence foundation construction no earlier than July 1, 2001. Legislation passed in the 2006 session of Illinois General Assembly extends the program to facilities, such as FutureGen, that deploy coal gasification technology.

Based on current information and assuming 200,000 tons annually of Illinois coal use at $30.00 per ton and a 5.5 percent interest rate for General Obligation Bonds, this generating facility would be eligible for an Illinois Coal Revival Grant in the amount of $2,870,000. Obviously, greater levels of coal consumption will result in a proportionally larger grant. Application is made to DCEO's Office of Coal Development.

HIGH IMPACT BUSINESS PROGRAM

Public Act 92-0012 extended the state's High Impact Business designation to new or expanded base load electric generating capacity, electric transmission facilities and coal production facilities in Illinois. It also will be extended under SB1814 to projects utilizing coal gasification technology.

High Impact Businesses are eligible for a sales tax exemption on building materials and equipment, a utility tax exemption, and an investment tax credit.

ILLINOIS FINANCE AUTHORITY REVENUE BONDS

The Illinois Finance Authority (IFA) has expressed their interest in working with the developers of FutureGen to encourage coal development and utilization in Illinois. As a leading issuer of bonds in Illinois and in the nation, their role in the project would be to provide access to the capital and to the expertise needed to assist in structuring the financing.

The Illinois Finance Authority supports clean coal and energy projects through specific "Coal Bonding Authority" granted by the State of Illinois to finance new electric generating facilities, transmission facilities, scrubbers at existing generating plants, and alternative energy projects, including renewable energy. These bonds are eligible for a State of Illinois "Moral Obligation Pledge" which is a commitment by the State to secure debt repayment in the event that project revenues are insufficient. IFA will pursue the issuance of up to $50 million of Moral Obligation Bonds for FutureGen. With the backing of the financial strength of the State of Illinois, this pledge may reduce costs of borrowing up to 1% as compared to conventional financing.

Additionally, IFA will seek to finance a significant portion of the project costs with Solid Waste Disposal Facilities Bonds. These bonds are exempt from federal income tax, providing borrowers with up to 2% average annual interest rate savings as compared to conventional financing. IFA taxable and non taxable financing structures are well received by investors, attracting market attention and favorable terms.

PROPERTY TAX ABATEMENT

Public Act 92-0012 created two options for property tax abatement for facilities receiving the High Impact Business designation from DCEO. Local taxing districts grant the abatements themselves. The first option allows any taxing district to abate property taxes on new High Impact Businesses for up to 10 years, with a $4 million aggregate limit per facility on all taxes abated. The second provision allows any taxing district to abate property taxes on a new electric generating facility that uses coal and supports 150 new Illinois coal mining jobs. This abatement may extend for up to 10 years. The limit to the amount of abatement is based on a sliding scale based on the equalized assessed valuation ("EAV") of the new facility.

OTHER DEVELOPMENT INCENTIVES

COAL COMPETITIVENESS PROGRAM

An applicant may apply for grant funds for projects to build the coal handling and utilization infrastructure at the proposed power station. This is an annual program that can provide up to 25 percent of the total project cost with a cap of $1.0 million per grant. DCEO's Office of Coal Development may be able to provide one or more grants during the construction phases of the project.

EMPLOYER TRAINING INVESTMENT PROGRAM / LARGE COMPANY COMPONENT

An employer in the state of Illinois may apply for an Employer Training Investment Program / Large Company Component grant if the company is undertaking one or more eligible training activities, including training programs in response to new or changing technologies or processes being introduced in the workplace. DCEO may reimburse a grantee for up to 50 percent of the total training costs of an approved training program.

IDOT ECONOMIC DEVELOPMENT PROGRAM

The Illinois Department of Transportation provides assistance for highway improvements that are needed to provide access to new or expanding industrial developments. The program is designed to provide up to 50 percent state matching funds for eligible local agency roadway-related construction and engineering items.

CLEAN COAL REVIEW BOARD

The Clean Coal Review Board, administered by Southern Illinois University-Carbondale, provides grants for the development and deployment of advanced clean coal technologies. The program provides partial funding for systems that provide advanced pollution control and/or efficiency capabilities needed for the continued use of Illinois coal.

EDGE TAX CREDIT

Tax Incentives may be available through the Economic Development for a Growing Economy Program (EDGE), in the form of tax credits against Illinois income tax liability up to a maximum of ten years.

BUSINESS DEVELOPMENT PUBLIC INFRASTRUCTURE PROGRAM

The Business Development Public Infrastructure Program (BDPIP) provides grants or low interest financing to units of local government for public improvements (e.g., water and sewer extensions) on behalf of businesses undertaking expansion projects that meet the program criteria and demonstrate great potential for creating and retaining jobs.

COMMUNITY DEVELOPMENT ASSISTANCE PROGRAM

Community Development Assistance Program (CDAP) funds may be used to assist companies to carry out economic development projects. CDAP grant funds will be loaned by the unit of local government to the business for acquisition, construction, or rehabilitation of buildings, purchase of machinery and equipment and working capital needs. In addition to using CDAP funds for low-interest loans, CDAP funds may be used to finance public improvements in support of economic development.

Congress of the United States
Washington, DC 20515

October 27, 2005

The Honorable David Hobson
Chairman, Subcommittee on Energy & Water Development
U.S. House of Representatives
2346 Rayburn House Office Building
Washington, DC 20510

The Honorable Peter Visclosky
Ranking Member, Subcommittee on Energy and Water
U.S. House of Representatives
2256 Rayburn House Office Bldg.
Washington, D.C. 20510

Dear Chairman Hobson and Ranking Member Visclosky:

We appreciated your support for Fossil Energy coal programs in the House Fiscal Year 2006 Energy & Water Development Appropriations bill. Specifically, we were pleased with the House recommendation to designate and make available $257 million in unused Clean Coal Technology Program funds for the FutureGen Initiative. When the House and Senate meet to conference the Fiscal Year 2006 Energy & Water Development Appropriations bill, we again urge your support for the FutureGen Initiative.

Complementary programs to the FutureGen Initiative in the proposed budget, such as the Clean Coal Power Initiative (CCPI) and the base coal R&D projects, are also critical to our National Energy policy. **We are writing to request your continued support for the FutureGen Initiative and encourage you to accept the Senate's recommendation of $100 million for the Department of Energy's CCPI.**

In order to sustain the future supply of energy while achieving near-zero net emissions from coal-fueled power plants, $100 million is necessary to conduct demonstration projects that involve advanced clean coal technology. The Department of Energy already has conducted two successful projects using the appropriations from two combined fiscal years. We are concerned that if this year's funding is limited to $50 million, it is highly unlikely there will be enough money this year and next to undertake a new clean coal technology project.

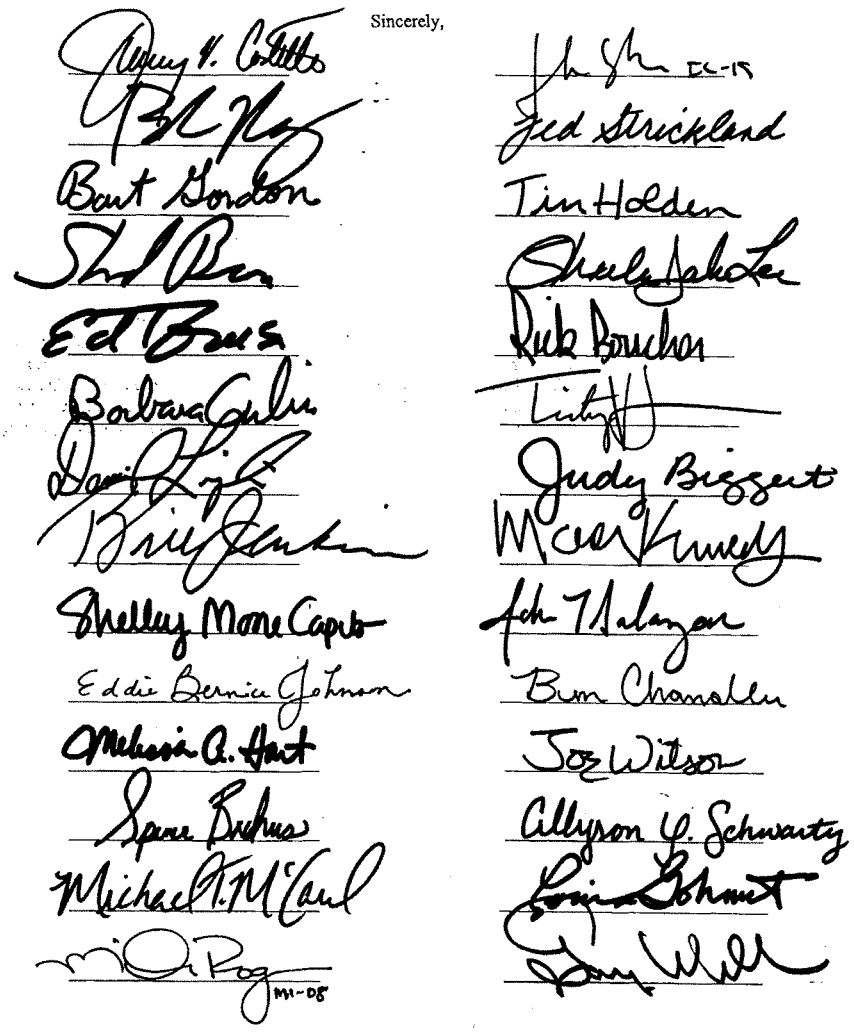
As you know, the President's $1 billion FutureGen Initiative will be cost-shared with an industry alliance of coal and utility companies. The designation to the FutureGen account of these previously appropriated funds will provide a portion of the Government's commitment to this research project. The industry participants have pledged their contribution toward the project, and the Federal Government must do the same.

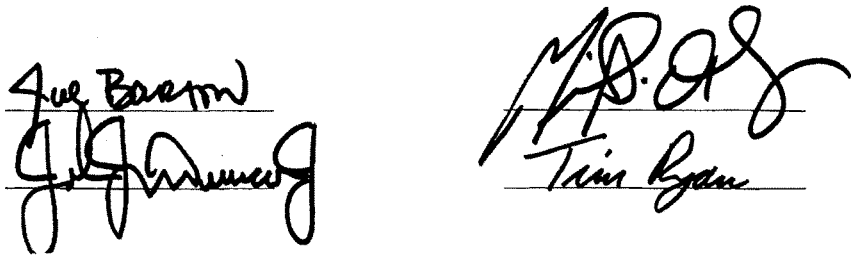
According to the Annual Energy Outlook 2005 projection, the consumption of coal for electricity is expected to increase 38 percent by 2025. Thus, the need for advanced technologies to accommodate the increase in coal consumption requires large-scale development of the most advanced clean coal technologies. CCPI enables and accelerates the deployment of these advanced technologies to ensure that the United States has clean, reliable, and affordable energy,

and a successful FutureGen will demonstrate near zero emissions, high efficiency and the future of a hydrogen economy.

We appreciate your consideration of our request and thank you for your continued leadership.

Sincerely,





Congress of the United States
Washington, DC 20515

February 2, 2006

Honorable Rod Blagojevich
Governor
State of Illinois
207 State House
Springfield, Illinois 62706-0001

Dear Governor Blagojevich:

We are writing to provide you with an update on the FutureGen Initiative based upon our recent meeting with the new Assistant Secretary for Fossil Energy at the Department of Energy, Jeffery Jarrett.

As you are aware, the FutureGen Industrial Alliance was formed on September 15, 2005 and signed a formal agreement with the Department of Energy on December 6, 2005. Assistant Secretary Jarrett provided us with a timeline indicating how the Alliance plans to proceed. We have included a copy for your review. As you can see, the deadline for the states to have their site proposals submitted is May 22, 2006. We look forward to continuing to work with you to bring FutureGen to Illinois.

If you have any questions about this process or our discussion with the Assistant Secretary, please do not hesitate to contact us.

Sincerely,

Jerry F. Costello
Member of Congress

John Shimkus
Member of Congress

Congress of the United States
Washington, DC 20515

February 2, 2006

Secretary Jeffery D. Jarrett
Assistant Secretary
U.S. Department of Energy
1000 Indepedence Ave., SW
Washington, D.C. 20585

Dear Assistant Secretary:

Thank you for taking the time to come and meet with us on Wednesday. We enjoyed the opportunity to discuss FutureGen, coal to liquids technology, and the "Centers of Excellence for Energy Systems of the Future" provision in the Energy bill.

We appreciated your willingness to share the timeline for the FutureGen Initiative and listen to our request to allow Illinois to make a presentation to the Alliance to explain their site selection proposal. As we indicated in the meeting, we are very supportive of the project and are pleased the Department is moving along in a timely fashion.

Additionally, we are glad to hear your positive reaction to moving toward deployment of coal to liquid technology and will continue to support the Department in its efforts. Lastly, we look forward to hearing how the Department will proceed in designating potential universities, such as Southern Illinois University at Carbondale (SIUC), as Clean Coal Centers of Excellence.

If we can ever be of assistance, please feel free to contact us.

Sincerely,

Jerry F. Costello
Member of Congress

John Shimkus
Member of Congress

Congress of the United States

Washington, DC 20515

April 26, 2006

Support Funding for Clean Coal Technology

Dear Colleague:

We are writing to seek your support for Fossil Energy's clean coal technology programs in the Energy and Water Development Subcommittee's Fiscal Year 2007 bill.

As America faces record natural gas and oil prices, it is imperative we aggressively invest in technologies that are reliable, clean, efficient, and affordable. Coal is our most abundant natural resource and can meet our energy needs. Further, we believe investing in cutting edge technology that possess the ability to remove the carbon dioxide emission stream from a coal fired power plant, while utilizing billions of tons of coal found in states across the country, will spur economic growth, improve our environment, and lessen our dependence on foreign sources of oil.

New and ongoing coal research and demonstration programs are essential to ensure the United States has a clean, reliable, and affordable energy supply. We need to demonstrate our continued bi-partisan support for clean coal technologies.

To co-sign the attached letter to Chairman Hobson and Ranking Member Visclosky, please contact Bill Olson in Congressman Shimkus' office at 5-5271 or bill.olson@mail.house.gov or Laura Vaught in Congressman Boucher's office at 5-3861 or laura.vaught@mail.house.gov by Friday, May 5, 2006.

Sincerely,

John Shimkus

Rick Boucher

Robert Ney

Jerry Costello

PRINTED ON RECYCLED PAPER

Congress of the United States

Washington, DC 20515

April 26, 2006

Honorable Samuel W. Bodman
Secretary
U.S. Department of Energy
1000 Independence Ave., SW Rm 7A257
Washington, D.C. 20510-0001

Dear Secretary Bodman:

We, as members of the Illinois and Indiana Congressional delegations, are writing to strongly urge you to place the FutureGen Initiative in Illinois.

As you may know, our delegations have partnered together to demonstrate a regional, bipartisan alliance that joins our resources and expertise in clean coal technology. We applaud the strong commitment you and the President have shown for this project and support the bold step our nation is taking towards an emissions-free energy future.

Our bi-state collaboration will enhance the prospect for FutureGen's success. Both states posses all the elements needed to make this project a success: availability of coal and water resources, sound geology for geologic storage of carbon dioxide, critical infrastructure, ready market for electricity, cost-sharing opportunities, tax incentives, and strong bipartisan support at every level of government.

We respectfully urge you to give careful consideration to locating the FutureGen project in Illinois.

Sincerely,

Speaker Dennis Hastert

Senator Dick Durbin

Senator Richard Lugar

Senator Evan Bayh

Senator Barack Obama

Congressman Jerry Costello

Congressman John Shimkus

Congressman Pete Visclosky

Congressman Steve Buyer

April 26, 2006

Congress of the United States
Washington, DC 20515

FutureGen Industrial Alliance, Inc.
International Square
1875 I Street, N.W.
5th Floor
Washington, D.C. 20006

Dear FutureGen Alliance Members:

We, as members of the Illinois and Indiana Congressional delegations, are writing to strongly urge you to place the FutureGen Initiative in Illinois.

As you may know, our states have partnered to demonstrate a regional alliance that joins our resources and expertise in clean coal technology. We applaud the strong commitment the President, the Department of Energy, and the Alliance have shown for this project and support the bold step our nation is taking towards an emissions-free energy future.

Our bi-state collaboration will enhance the prospect for FutureGen's success. Both states posses all the elements needed to make this project a success: availability of coal and water resources, sound geology for geologic storage of carbon dioxide, critical infrastructure, ready market for electricity, cost-sharing opportunities, tax incentives, and strong bipartisan support at every level of government.

We respectfully urge you to give careful consideration to locating the FutureGen project in Illinois.

Sincerely,

Speaker Dennis Hastert

Senator Dick Durbin

Senator Richard Lugar

Senator Evan Bayh

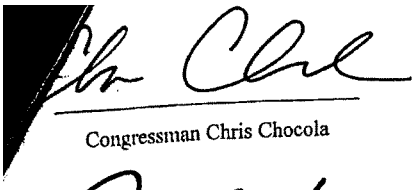
Senator Barack Obama

Congressman Jerry Costello

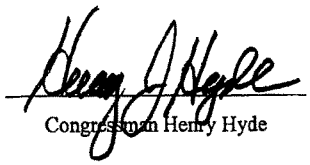
Congressman John Shimkus (IL-19)

Congressman Pete Visclosky

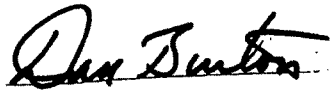
Congressman Steve Buyer



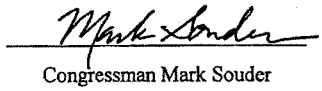
Congressman Chris Chocola



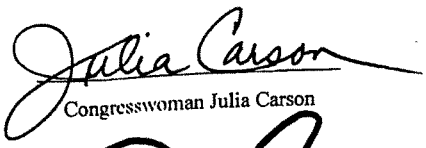
Congressman Henry Hyde



Congressman Dan Burton

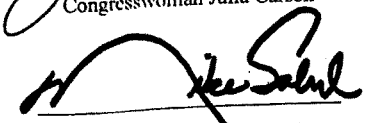


Congressman Mark Souder

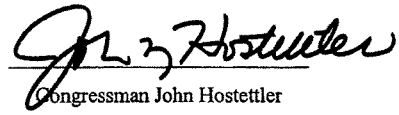


Congressman Julia Carson

Congressman Mike Pence

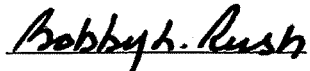


Congressman Mike Sodrel

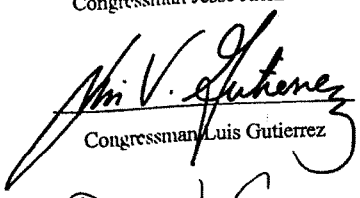


Congressman John Hostettler

Congressman Jesse Jackson Jr.

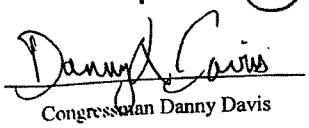


Congressman Bobby Rush

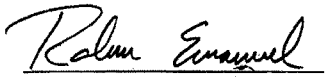


Congressman Luis Gutierrez

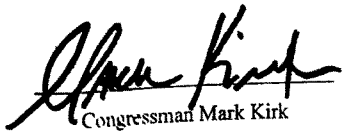
Congressman Daniel Lipinski



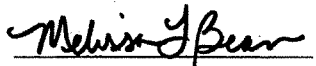
Congressman Danny Davis



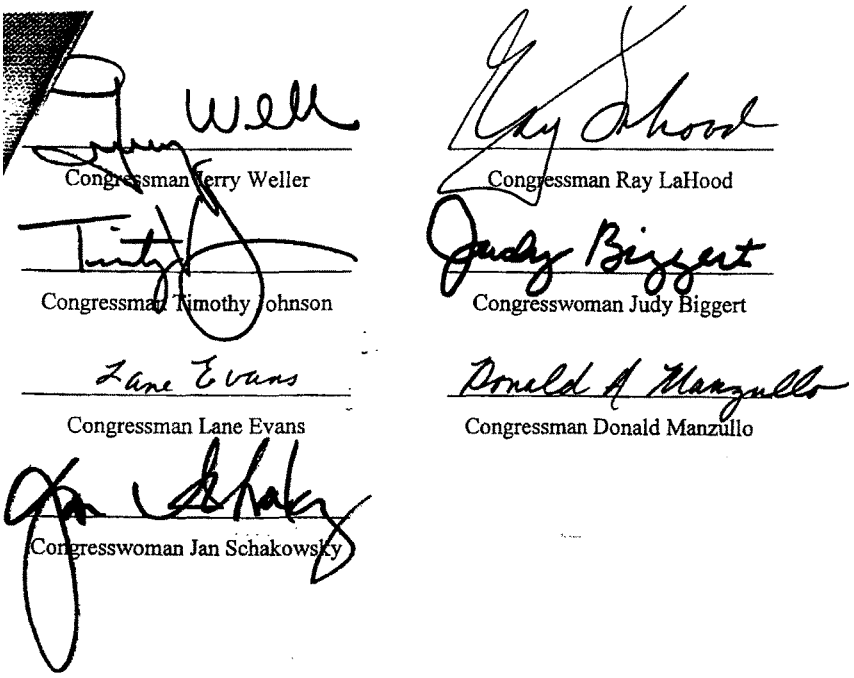
Congressman Rahm Emanuel



Congressman Mark Kirk



Congressman Melissa Bean



Congressman Jerry Weller

Congressman Ray LaHood

Congressman Timothy Johnson

Congresswoman Judy Biggert

Congressman Lane Evans

Congressman Donald Manzullo

Congresswoman Jan Schakowsky

Congress of the United States

Washington, DC 20515

May 8, 2006

Honorable David Hobson and Honorable Peter Visclosky
Chairman and Ranking Member
Subcommittee on Energy and Water Development
House Appropriations Committee
2362 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Hobson and Ranking Member Visclosky:

We appreciated your support for Fossil Energy coal programs in the House Fiscal Year 2006 Energy and Water Development Appropriations bill and the conference report. As you know, new and ongoing coal research and demonstration programs are essential to ensure that the United States has clean, reliable, and affordable energy supply.

We are writing to request an increase in the funding level for the Clean Coal Power Initiative (CCPI), basic coal research and development programs, and the FutureGen project and urge you to maintain your support for coal research and demonstration programs from previous fiscal years, in addition to coal provisions authorized in the Energy Policy Act of 2005.

First, we were pleased the committee appropriated $50 million in FY06 for CCPI. In addition, the Energy and Water FY06 conference report acknowledges that the Administration's request for CCPI was "woefully short" of its stated $200 million annual commitment. This year, the President's budget requests only $5 million. We believe an additional $145 million is needed to conduct the next solicitation for demonstration projects cost-shared with private industry to get us back on track. The CCPI program is a necessary component of basic coal research and development projects because it is designed to guide projects all the way to the demonstration phase, particularly in the area of mercury control, which is needed to prevent carbon dioxide emissions.

Second, basic coal research and development programs are essential to advancing the next generation of clean coal technologies, such as carbon sequestration, designed to meet the environmental challenges of the future. For example, the Energy Policy Act of 2005 authorized $30 million for FY07 to create a Carbon Capture Research and Development Program to develop advanced technologies to remove carbon dioxide from coal emissions and permanently sequester it below ground. This is one of the technologies that the FutureGen project is designed to use and needs funding to bring it to fruition. While the President's budget requests $271 million for basic coal research and development programs, we urge you to increase the funding amount by $61.8 million because the CCPI and the FutureGen Initiative are dependent upon these research project to be successful.

Third, we are grateful for your steady support for the FutureGen project. The House Energy and Water appropriations bill and conference report for FY06 appropriated $18 million for FutureGen and supported a deferral of $257 million in unused Clean Coal Technology Program

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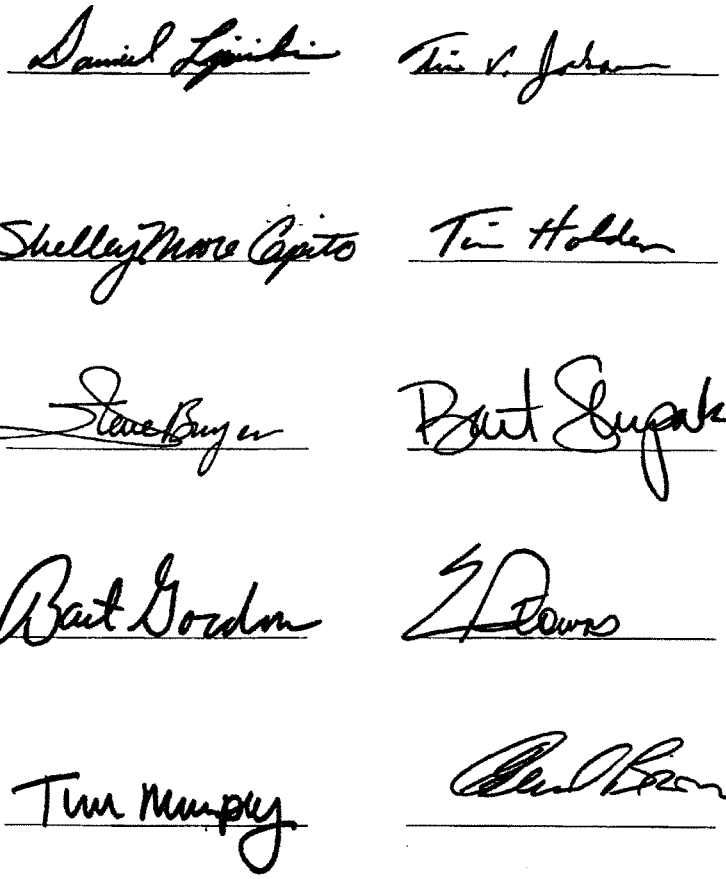
funds to be set aside for the FutureGen project. Instead of leaving the $257 million designation for future use, the President's FY07 budget takes $54 million out of the Clean Coal Technology Program, decreasing the FutureGen project's funds to $203 million. Therefore, we urge you to provide the FutureGen project with an additional $54 million in new funds and designate the entire $257 million for the project in future years. As the project gets underway, Congress must continue to provide adequate funding for the project in FY07 and beyond.

As America faces record natural gas and oil prices, it is imperative we aggressively invest in technologies that will allow clean and efficient use of our 250 year supply of coal. Thank you for your consideration of our request.

Sincerely,



Department of Energy
Washington, DC 20585

October 31, 2006

The Honorable John M. Shimkus
U.S. House of Representatives
Washington, DC 20515-1319

Dear Congressman Shimkus:

Thank you for your September 26, 2006, letter to Secretary Bodman expressing support for two applications for tax credit for Christian County Generation, LLC (CCG) and Christian County Methane, L.P. (CCM), under the Qualifying Advanced Coal and Gasification Project Programs of the Energy Policy Act of 2005 (EPACT).

EPACT required that the Secretary of the Treasury, in consultation with the Secretary of Energy, establish a qualifying gasification project program for the deployment of advanced gasification technologies. As a result, on February 21, 2006, the Internal Revenue Service (IRS) issued Notice 2006-24, titled "Qualifying Advanced Coal Project Program Credit," and Notice 2006-25, titled "Qualifying Gasification Project Program Credit," setting forth IRS guidance on the program.

The Department of Energy's (DOE's) role is to provide a certification of the feasibility and consistency with energy policy goals to the IRS for tax credit applicants that meet the criteria set forth in EPACT section 1307. Accordingly, DOE is reviewing the applications received to determine if they meet these requirements. Full consideration is being given to all applicants. Once DOE's review is complete, it will certify to the IRS those projects that are both technically and economically feasible and are consistent with energy policy goals. The IRS will then select which applications will be certified for receipt of tax credits.

It is anticipated that the IRS will make final selection decisions by December 2006. Notification of the selection results will occur shortly thereafter. Please be assured that the applications submitted by CCG and CCM will be carefully evaluated according to the applicable criteria provided in section 48(A), Qualifying Advanced Coal Project Credit, and section 48(B), Qualifying Gasification Project Credit, of the Internal Revenue Code of 1986, and the applicable IRS Notice.

The Department appreciates the support the State of Illinois has provided to coal and gasification initiatives and your commitment to advance National Energy Policy goals. If you require additional information, please contact me or have a member of your staff contact Mr. Christopher Guith, Deputy Assistant Secretary for Congressional and Intergovernmental Affairs, at (202) 586-5337.

Sincerely,

Thomas D. Shope

for Jeffrey D. Jarrett
Assistant Secretary
Office of Fossil Energy

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Congress of the United States

House of Representatives

Washington, DC 20515

June 27, 2007

Secretary Samuel Bodman
United States Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Dear Secretary Bodman:

We are writing to express our strong support for the Department of Energy's (DOE) Carbon Sequestration Partnerships. As you know, the Partnerships are preparing to inject one million tons of CO_2 at seven sites to assess large-scale sequestration in varied geologic settings and we urge you to refrain from making major changes to the program's structure or composition, which could delay this process by several years.

The strengths of these Partnerships are evident. Teams of regional experts, such as the Illinois, Indiana and Kentucky geological surveys that lead the Midwest Geological Sequestration Consortium (Illinois Basin) encompass more geological data and knowledge about their region than any single, nationally focused entity. Having regional groups lead and direct this program is essential to the concept of sequestration research that respects geologic variability. In addition, the relationships built and maintained through the partnership process are critical to timely implementation and community acceptance of sequestration. Integrated Federal, State, regional, and local leadership provides a level of trust and accountability appropriate for the scale and potential risk incurred by these projects.

As you know, the DOE Partnerships are ready to undertake large scale injection tests, as we speak. Any acceleration of schedule is best achieved by utilizing the existing Partnership framework, personnel, and infrastructure, not by returning to square one.

Secretary Bodman, thank you for your leadership on this important issue. We look forward to working with you to strengthen and expand this vitally important work. We endorse the Regional Partnership concept and trust it will continue under your direction.

Sincerely,

Tim Johnson
Member of Congress

Jerry Costello
Member of Congress

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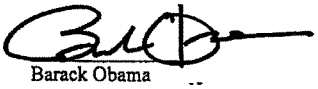
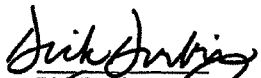
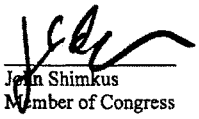


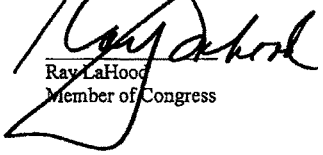
Barack Obama
United States Senator



Dick Durbin
United States Senator



John Shimkus
Member of Congress



Ray LaHood
Member of Congress

Congress of the United States

Washington, D.C. 20515

October 25, 2007

Honorable Samuel W. Bodman
Secretary
U.S. Department of Energy
1000 Independence Ave., SW Rm 7A257
Washington, D.C. 20510

Dear Secretary Bodman:

We, as members of the Illinois Congressional delegation are writing to strongly urge you to expedite the approval process of the FutureGen project.

We applaud the strong commitment you and the President have shown for this project and support the bold step our nation is taking towards an emissions-free energy future. As you may know, our delegation has partnered with state officials to ensure the success of the FutureGen project in Illinois. It is our understanding that the approval process has reached a critical point. In order for the Department of Energy to finalize the Environmental Impact Study, issue the Record of Decision, and move forward to the site selection phase, a Notice of Availability must be placed in the Federal Register for a period of 30 days. In order for this process to take place before the year-end deadline, the Notice must be submitted by Tuesday, November 6th in order to meet the publishing date of Friday, November 9th.

We are thankful for your efforts thus far to shepherd this project through the approval process. However, at this time of year, a great deal of teamwork on the statewide and federal levels will be squandered if we can not meet the end-of-year deadline.

We appreciate your attention to this matter and look forward to hearing from you to learn of the status of the FutureGen project.

Sincerely,

Congressman Jerry Costello

Congressman John Shimkus

Congressman Tim Johnson

Department of Energy
Washington, DC 20585

November 5, 2007

The Honorable John Shimkus
U.S. House of Representatives
Washington, DC 20515

Dear Congressman Shimkus:

Thank you for your October 25, 2007, letter which was received on October 26, 2007, urging the Department to expedite the approval process for the FutureGen project.

The Office of Fossil Energy is preparing a detailed response to your letter, and you will receive a complete response as soon as possible. However, if you have any questions in the interim, please call me at (202) 586-5450.

Thank you.

Sincerely,

Lisa E. Epifani
Assistant Secretary for Congressional
and Intergovernmental Affairs

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Congress of the United States
Washington, DC 20515

December 20, 2007

The Honorable Samuel W. Bodman
Secretary
United States Department of Energy
Forrestal Building, Room 7B138
1000 Independence Avenue SW
Washington, D.C. 20585-0800

Dear Mr. Secretary:

This week the FutureGen Alliance announced its final selection of Mattoon, Illinois, as the location for the construction of the FutureGen project - - pronouncing the Mattoon proposal "exceptional" and underscoring the highest forms of teamwork and community support. We are writing today to urge the Department to release the Record of Decision (RoD) for the FutureGen project, so that this important effort can stay on track and on budget.

We are pleased that this independent council of renowned experts carefully assessed the science and strengths of this Illinois location and favorably affirmed the commitment of state and local resources that were assembled in response to clear federal expectations announced 4 years ago.

The Department of Energy announced on November 9, 2007 the completion of the Final Environmental Impact Statement, and acknowledged that the FutureGen Alliance, as required under the cooperative agreement with the Department, would make its final site selection before the end of the year.

While the site selection has been completed, the 30-day period for the issuance of the RoD by the Department of Energy has not been met. We are interested in learning when the Department intends to release this document so that this project can move forward in Illinois without additional unnecessary delays.

In 2003, when President Bush announced the long term commitment of the United States government to this project, representatives of academia, industry, labor and government responded, investing considerable resources to make their case. It is the commitment of the Illinois Congressional Delegation to maintain the scope of this project in Illinois and implement the independent recommendation of the FutureGen Alliance.

We look forward to the continued commitment by the Department of Energy to the current project and look forward to learning the issue date of the RoD.

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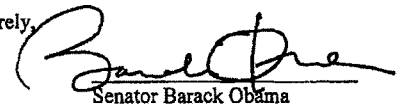
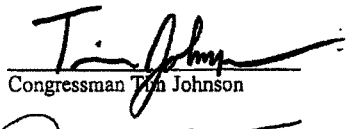
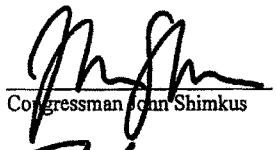
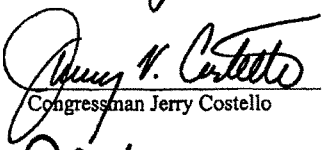
Sincerely,


Senator Dick Durbin

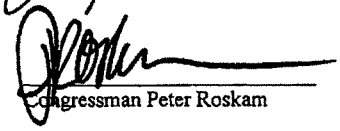

Senator Barack Obama

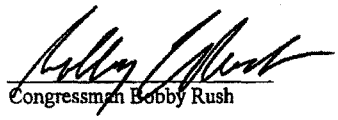

Congressman Tim Johnson


Congressman John Shimkus

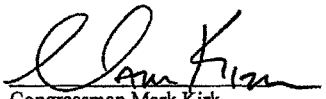

Congressman Jerry Costello


Congressman Rahm Emanuel

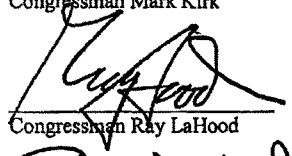

Congressman Peter Roskam


Congressman Bobby Rush

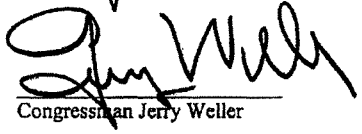

Congressman Daniel Lipinski

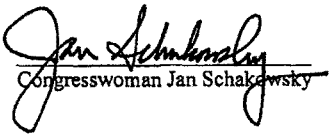

Congressman Mark Kirk


Congressman Donald Manzullo


Congressman Ray LaHood

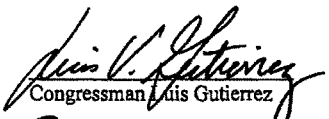

Congressman Danny Davis

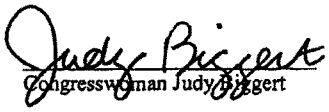

Congressman Jerry Weller


Congressman Jan Schakowsky


Congressman Melissa Bean


Congressman Phil Hare


Congressman Luis Gutierrez


Congressman Judy Biggert


Congressman Jesse Jackson Jr.

Department of Energy
Washington, DC 20585

January 9, 2008

The Honorable John Shimkus
U.S. House of Representatives
Washington, DC 20515

Dear Congressman Shimkus:

Thank you for your December 20, 2007, letter that was received on January 2, 2008, requesting the release date for the Record of Decision for the FutureGen project.

The Office of Energy Efficiency and Renewal Energy is preparing a detailed response to your letter, and you will receive a complete response as soon as possible. However, if you have any questions in the interim, please call me at (202) 586-5450.

Thank you.

Sincerely,

Lisa E. Epifani
Assistant Secretary for Congressional
and Intergovernmental Affairs

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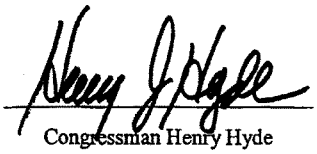
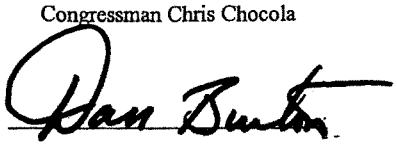
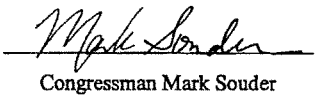
Congressman Chris Chocola



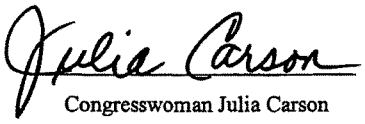
Congressman Henry Hyde



Congressman Dan Burton

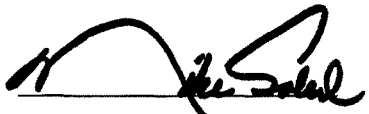


Congressman Mark Souder

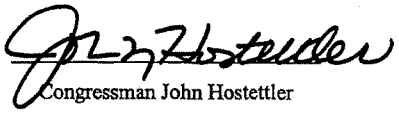


Congressman Julia Carson

Congressman Mike Pence

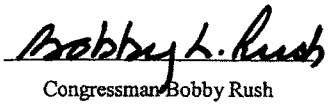


Congressman Mike Sodrel

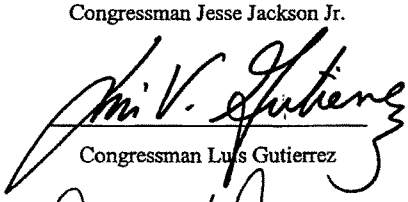


Congressman John Hostettler

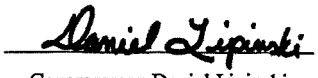
Congressman Jesse Jackson Jr.



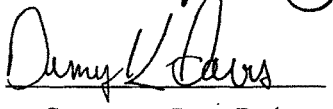
Congressman Bobby Rush



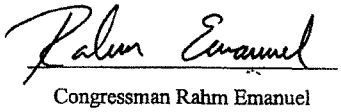
Congressman Luis Gutierrez



Congressman Daniel Lipinski

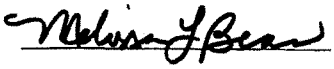


Congressman Danny Davis

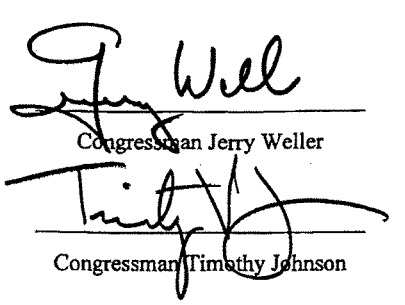


Congressman Rahm Emanuel

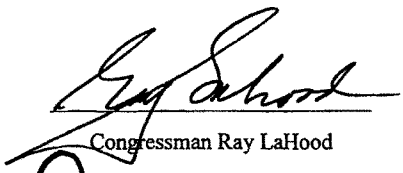
Congressman Mark Kirk



Congresswoman Melissa Bean

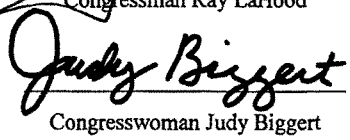


Congressman Jerry Weller



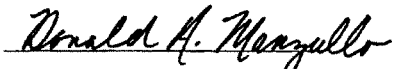
Congressman Ray LaHood

Congressman Timothy Johnson

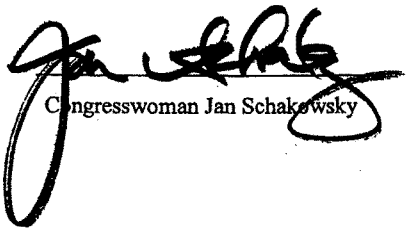


Congressman Judy Biggert

Congressman Lane Evans



Congressman Donald Manzullo



Congressman Jan Schakowsky

Journal Gazette Times-Courier

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Thursday, January 24, 2008 10:54 PM CST

COLUMN: Every dollar puts us closer to our FutureGen goal

By Steve Grissom and Joyce Madigan, Chairman of the Board Treasurer, Coles Together

The last month has been an absolute whirlwind of activity for our community since the FutureGen announcement.

The telephones at Coles Together have not stopped ringing. Interest in our community is mounting, and the media have had many questions to answer as stories are written about this project nearly everyday.

Because of the sheer uniqueness and complexity of this project, no one has ever thread these waters. So at Coles Together we're taking one day at a time, continually looking forward in the hopes of anticipating the next round of questions. We have worked hard to be as open as we can about the progress and where we stand.

We'd like to take this opportunity given to us by the Journal Gazette and Times-Courier to bring you up to speed on the project. The snapshot view is this:

On Dec. 18, 2007, the FutureGen Alliance announced Mattoon was selected for a near-zero emissions coal gasification and carbon capture and sequestration (CCS) plant. The Alliance, comprised of 13 international energy companies, is partnering with the US Department of Energy (DOE) to develop this unique research facility, to be located west of Mattoon.

The Alliance and DOE continue to meet regarding the project. The Alliance has proposed a new financing approach to DOE which will maximize the technology benefits of FutureGen while limiting taxpayer investment.

The Alliance Board of Directors will meet in Mattoon on Feb. 5 and 6.

FutureGen staff members are moving quickly to establish office space in Mattoon, complete the seismic survey permitting process, and hire a site manager.

The process has moved from a site-location decision based on science into a different arena. Nonetheless, the resolve of the FutureGen Alliance, the State of Illinois, and our Congressional delegation is strong and they are working hard to achieve DOE approval. In the meantime, we are leaving the negotiations up to the two parties involved, so the experts have the space they need to make this important project a reality.

With so much excitement surrounding FutureGen, people want to know what they can do to help. Putting geology aside, one of the key reasons Mattoon was selected for the FutureGen site was the tremendous community support we demonstrated for the project. So, what we really need is your continued strong support. You can show it many ways — by posting FutureGen welcome signs at your business and in your yards, by showing community pride, and by helping us achieve our $3-million commitment to the project, part of the incentive package we offered. We made this commitment in our original offer, only after we received pledges to provide up to $2 million in matching funds for the first $1 million raised.

Our goal is to tell the FutureGen Alliance Board of Directors that the community's $3 million has been raised when it meets in Mattoon on Feb. 5 and 6. We believe this goal is achievable because our generous community has proven itself time and again. In fact, the day we announced our short-term fundraising project, individuals and organizations donated $275,000. As of today, we have received donations

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and pledges totaling over $500,000.

Donations large and small are deeply appreciated. We understand the capacity to give varies from person to person and from business to business, but together we can achieve this goal.

This is a community project that also includes the communities surrounding Coles County and takes all of us to be successful. If you want to be involved in this enormous project that's attracting international attention to Coles County and east central Illinois, please donate. Every dollar donated puts us that much closer to our goal. The advantage of this donation is that you can donate to receive a business deduction by writing your check to Coles Together, or a personal charitable deduction by writing your check to Mattoon Area Community Foundation. Donation cards are available at the Mattoon and Charleston Chambers of Commerce offices and downloadable online at www.colestogether.com. Also, watch this paper for advertisements, which will include the donation card.

So what happens to the $3-million incentive we are offering if the project stalls and FutureGen doesn't become a reality? First, we know that our $3 million won't be called by the Alliance until they have acquired the 420 acres of land at the proposed site. If the land isn't purchased, we will be returning all contributions. If the land is purchased, we will assume the project will move forward. However, if it doesn't, it is the intention of all the parties that the land will be returned to us, the community. In that scenario, the land is far more valuable because of the extensive studies that have been completed and it is situated in an enterprise zone. If it is not developed now, it will be of great interest to numerous parties, and the community should have control over its future development.

While FutureGen is attracting international attention both to East Central Illinois and to Coles County, it is a project of the community, for the community. So much of our future depends on it. We encourage you to take a stake in this prestigious project by participating in this fundraising effort. You will be able to say with pride that you helped make FutureGen a reality. Our future is now.

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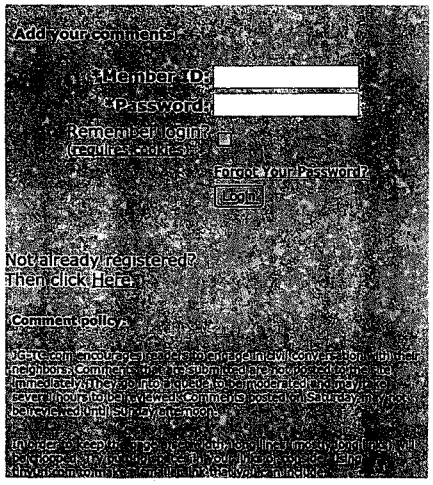

LETTER: With Blagojevich, it's 'I'll do what I want'

LETTER: One more time: NAFTA will supercede U.S.

LETTER: New American puzzled by political system

OFFICE OF THE GOVERNOR
CHICAGO, ILLINOIS 60601

ROD R. BLAGOJEVICH
GOVERNOR

February 6, 2008

The Honorable John Dingell
House Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Chairman,

As you begin to examine the fiscal year 2009 Department of Energy (USDOE) budget request, I would like to thank you for holding the upcoming hearing with Secretary Bodman and share with you my concern about an issue that is fundamental to the energy efforts in my state of Illinois as well as the nation: FutureGen.

FutureGen is the only clean coal project nationwide ready to demonstrate how coal gasification – integrated with carbon capture and sequestration technology – can allow us to tap America's vast coal reserves while dramatically reducing the greenhouse gas emissions that cause global warming.

In December, 2007 Mattoon, Illinois was chosen for the site of the FutureGen project after tireless efforts of my administration and the FutureGen Alliance. Over the past 5 years, the State of Illinois has committed millions of dollars to the future success of this critical clean coal initiative that has the potential to provide the clean, secure, energy independence we seek. Last week, Secretary Bodman announced that the DOE was abandoning the five years of investment made by the federal government in the FutureGen project and that they will start over with a new process.

This raises many serious questions about USDOE, among them: How can business and international partners rely on the word the U.S. government if the UDOE abandons a process that it started and to which it has been committed for almost five years?

How can the Secretary sign a letter to a Member of Congress on November 30, 2007, asserting that the project was on track for completion of site selection and publication in the Record of Decision by the end of 2007, and then within six weeks declare that he has

no intention of publishing the Record of Decision and walk away from all of the work that had been put into the project?

The withdrawal of support by USDOE for the FutureGen project creates a tremendous setback to our progress in addressing two issues of great importance to our nation: our quest for energy independence and our fight against climate change. That is why I ask that you use all the powers of the legislative branch to reverse USDOE's decision and uphold the federal government's commitment to build FutureGen, the world's cleanest fossil fuel-fired power plant.

Proceeding with FutureGen as planned will demonstrate that we can capture and safely store greenhouse gases deep underground, paving the way for America's continued use of coal and enabling coal to be an engine for job creation and economic growth.
With the current energy crisis world-wide and the economic instability here at home, implementing sound policy that addresses these issues is of utmost importance. FutureGen enjoys strong support from the scientific and business energy community and had the potential to offer great success and reward to the Illinois and our Nation.

The coal industry, mine workers, environmental groups and the international consortium of thirteen power companies that comprise the FutureGen Alliance, all recognize the great importance of FutureGen to our nation.

I urge you to stand by FutureGen as originally envisioned and to resist the Administration's proposals to abandon this landmark project. Thank you for your continued commitment to successful energy policy for our country.

Sincerely,

Rod R. Blagojevich
Governor

Cc:
Illinois Congressional Delegation
Members of the FutureGen Alliance

Department of Energy
Washington, DC 20585

June 5, 2008

The Honorable John D. Dingell
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

On March 31, 2008, we sent you the edited transcript of the February 7, 2008, testimony given by Secretary Samuel W. Bodman, regarding the Department of Energy's Budget for Fiscal Year 2009.

Enclosed are ten inserts that were requested by Representatives Markey, Stupak, Engel and Matheson for the hearing record.

If we can be of further assistance, please have your staff contact our Congressional Hearing Coordinator, Lillian Owen, at (202) 586-2031.

Sincerely,

Lisa E. Epifani
Assistant Secretary
Congressional and Intergovernmental Affairs

Enclosures

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until 2 days ago said that the weatherization program is the country's longest running and perhaps most successful energy efficiency program.

Secretary {Bodman.} Okay.

Mr. {Markey.} Then, Mr. Secretary, the Bush Administration zeroed out the money for the weatherization program.

Secretary {Bodman.} Yes.

Mr. {Markey.} And then yesterday deleted the text from the Department of Energy web site that said that it is the country's longest running and perhaps most successful energy efficiency program. So, Mr. Secretary, why would you cut out the funding for your most successful program?

Secretary {Bodman.} For the reasons that I mentioned that this program is carried out in EERE who have all sorts of increases in research funding and energy efficiency work and Energy Star work that have higher rates of return on the investment that goes into it.

Mr. {Markey.} Your own analysis makes clear that this program is your top program, and I just think that once again it shows that the Bush Administration is sacrificing the long-term energy efficiency opportunities that our country has for short-term budgetary purposes. It is just not still well understood inside the Bush Administration how much

energy will be saved if we make the investment now. Let me ask one final question, and that is on the question of television set efficiency. You probably now that new high definition television sets can consume as much power as a refrigerator, and the department has yet to develop a minimum energy efficiency standard this year for televisions. When can we expect the Department of Energy to propose energy standards in this area?

Secretary {Bodman.} I have no idea, Congressman, but I will be happy to take that question for the record and respond to you.

Mr. {Markey.} Millions of new, highly inefficient television sets, these new huge sets that men go out and buy so they can see the Super Bowl, so they can see the NCAA basketball tournament now consume as much electricity as a refrigerator. Would you support the efforts underway in states like California and Massachusetts to issue minimum energy efficiency standards for televisions in the absence of no national standards in the Bush Administration?

Secretary {Bodman.} I don't know. I mean I will be happy to respond to that rather than doing something on the spur of the moment. I would be happy to respond as I have said to you across the board on this issue.

Mr. {Markey.} You should expect me to continue to press

you on this television set issue, and to insist that California and Massachusetts be allowed to act if you are not going to make a decision on it.

Secretary {Bodman.} I understand.

Mr. {Markey.} I thank you. This hearing is in recess until the aforementioned 12:30 reconvening of the committee. Thank you, Mr. Secretary.

[Recess.]

Ms. {DeGette.} [Presiding] The committee will come to order. The chair recognizes the gentleman from Pennsylvania, Mr. Murphy, for 5 minutes.

Mr. {Murphy.} Thank you, Madam Chair, and thank you, Secretary Bodman, for being here. I appreciate all the work you have done to help our country, but as you know there is much that needs to be done in the area of energy. I want to ask you specifically about some things related to oil. A couple months ago the report came out the U.S. trade deficit had surged by 9.3 percent to $63.12 billion, which was the highest in many years. They attributed that to a large extent on the price of oil saying it was an economic drag and saying that at that same time imports from China declined and imports from Europe declined because of the condition of the dollar and other issues there. I wonder if you could comment to the extent that we continue to increase our dependence

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INSERT FOR THE RECORD

In response to Section 141 of the Energy Policy Act of 2005 (EPACT), the Department submitted an action plan to address the large backlog of existing obligations to update or establish energy efficiency standards, most of which were already beyond their statutory deadlines. Under the action plan, the Department also committed to completing on time the new standards requirements included in EPACT. The schedule included in the action plan represented a pace of publishing new standards that was six times the historic pace for the Appliance Standards program. The action plan was delivered to Congress on January 31, 2006.

In December 2007, the Energy Independence and Security Act added many new requirements to the Department's list of standards to be developed. We are diligently addressing those new requirements, in addition to the prior commitments reflected in the action plan.

We agree that television sets use a significant amount of energy and, accordingly, may present an opportunity for energy savings through potential energy conservation standards. Under 42 U.S.C. 6292, Congress has authorized the Department to develop efficiency standards for television sets, with the schedule to be determined by the

Department. While being mindful of our many required activities, including several with legal deadlines covered under a consent decree, we are prudently beginning to study the possibility of a television set standard and the many rapidly changing technologies involved. As part of this effort, we have initiated discussions with the Federal Trade Commission and with a major trade association to better understand the complexities of such an undertaking. At the present time, our priority is initiating a new test procedure rulemaking which must be completed before the Department can publish a standard for television sets.

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Part A of Title III of the Energy Policy and Conservation Act as amended (hereafter "EPCA" or "Act") established the Energy Conservation Program for Consumer Products Other Than Automobiles (42 U.S.C. 6291-6309). Most residential products covered under the Program, including televisions, are listed in section 322 (42 U.S.C. 6292). For such products, inclusion in the Federal Program generally preempts State laws or regulations concerning energy conservation testing, labeling, and standards, whether or not standards have been prescribed for these products (42 U.S.C. 6297(a)-(c)). Generally, the Department can grant waivers of Federal preemption (hereafter "waiver" or "exemption") for particular State laws or regulations, in accordance with the procedures and other provisions of section 327(d) of EPCA (42 U.S.C. 6243(d)). In particular, section 327(d)(1)(A) of EPCA provides that any State or river basin commission with a State regulation regarding energy use, energy efficiency, or water use requirements for products for which there is a Federal energy conservation standard, may petition for an exemption from Federal preemption in order to apply its own State regulation (42 U.S.C. 6297(d)(1)(A)).

However, in the case of television sets, EPCA specifically exempts from Federal preemption those State regulations effective on or after January 1, 1992, that pertain to

the energy efficiency or energy use of television sets (42 U.S.C. 6297(b)(6)). This exemption from Federal preemption applies for these products until such time as a national standard under 42 U.S.C. 6295 becomes effective, after which a State may seek a waiver under 42 U.S.C. 6297(d).

Mr. {Matheson.} Thank you, Madam Chair. Welcome again, Secretary Bodman, before our committee. We were talking just before we started, you guessed I might ask you a question about the tailings pile so you anticipate well. It is an issue near and dear to me and my constituents in Utah but also to the many millions of downstream users along the Colorado River in Arizona, Nevada, and California as well, and I actually got a picture of where the tailings pile is with the Colorado River going right by it, 16 million tons of radioactive tailings. Over the years many sites have been cleaned up. This is the biggest and ends up being sort of the last one in the queue for clean-up. And last year when we were talking here before this committee questions came up about the schedule for doing this, and you had indicated it could very well be extended out for a long period of time. That wasn't necessarily what some of us liked to hear and subsequent to that hearing and in the past year Congress has now passed in the defense authorization bill language that calls for a completion date to move the tailings by the end of the year 2019.

That was signed into law by the President as part of the 2008 defense bill. Do you think that with Congress kind of encouraging you and that signed into law, is this a date that the DOE thinks is going to be achievable to make?

Secretary {Bodman.} Based on what I now know, the answer is no. We are in the stages of doing engineering and work on it that will enable us to, if you will, base line the project and get a better sense of it. But based on the funding restrictions that we have placed on that we are looking at something that is going to be 2025 or later.

Mr. {Matheson.} And that is obviously something I didn't want to hear because we did pass this law here.

Secretary {Bodman.} I know you didn't want to hear it. I thought I told the truth and--

Mr. {Matheson.} And I appreciate that. I am trying to figure out when the DOE completed its decision it said this would take somewhere from 7 to 10 years and so that is I guess what also causes the frustration is we are dragging this thing out over a lot longer time frame than your own record of decision had indicated. I do know your folks in the field are talking about viewing this act of Congress as a soft date, and I do think we need to keep talking about this because I do think we want that to be done by 2019.

Secretary {Bodman.} I certainly recognize your zeal about that subject, sir.

Mr. {Matheson.} Not just my zeal. As I said, I got a lot of members of Congress in a bipartisan way in the down river states who don't understand why it has taken so long.

It seems like every step of the process is taking longer, and I would encourage you to take a look at what is going on in your field office because I do not understand why it is one delay after another after another. I don't think it is just funding. I really don't. I think this has taken far too long even for the preliminary engineering and preliminary stages that have been pursued so far. It is not happening on a timely basis out there in the field.

Secretary {Bodman.} I would be happy to look at it, sir.

Mr. {Matheson.} If you believe that the budget doesn't allow for moving ahead on this, is that because there are other projects of greater priority for the existing budget?

Secretary {Bodman.} Yes.

Mr. {Matheson.} Could you maybe articulate what those would be within this--and I just mean within this clean-up and remediation--

Secretary {Bodman.} It is about 1 billion 9. It is almost I think 7 or 8 of the entire budget of the Energy Department is at Hanford, and there there is concern about the presence of heavy metals as well as nuclear materials in the ground water so that has a very high priority. The work at Savannah River has a high priority. The work at parts of Oak Ridge has a priority. Areas where we have so-called D&D

which is decommissioning and destruction of a building that tends to have a lesser priority just because those buildings, they are unsightly to look at but they don't have a big impact on the environment.

Mr. {Matheson.} So Congress provides additional money in that fund. I want to make sure that in your view is the primary variable that is delaying this because my concern is I see a lot of foot dragging, I don't know why, for other reasons, I am just moving along where money at the front end is not really the problem. So I am going to work my best here in Congress to make sure we appropriate the right amount of money in this area to get this thing done. But my concern is that, and I would suggest you do need to review what is going on within your field office to find out why this is taking so long.

Let me raise one other issue in the brief time I have got left. The record of decision suggests that this should be moved by rail, and yet I understand the DOE's field office is talking about possibly changing the way they transport this. And I don't expect you to be in the weeds on this issue but I want to make sure this change if it is going to be considered does not delay the project or if there is going to be a change, we ought to go ahead and make the change but I would encourage you to--if you could maybe get back to me

on that about how that issue is going to be considered and what hopefully is a time limit because--and let me just finish this thought and then you can respond, discussion about reopening the record of decision. That discussion has been going on for over a year. And if we are going to reopen it, let us reopen it. Let us not talk about it for more than a year and not reopen it. Let us make a decision and let us move on because this is the example I have been talking about.

I feel like everything just gets slow walked. Everything seems to get slow walked here and a lot of us are feeling frustration about that.

Secretary {Bodman.} I am unfamiliar with whether it is rail or moved on I guess roads which would be the alternative, truck it, and so I will respond and do it for the record with you personally.

Mr. {Matheson.} Okay. I really appreciate that. Madam Chair, I see my time has expired.

Ms. {DeGette.} Thank you. The gentleman's time has expired. The gentleman from Texas, Mr. Hall, is recognized for 5 minutes.

Mr. {Hall.} Madam Chairman, I thank you. Mr. Secretary, I am one of your admirers. I respect you and I thank you for leaving the highly successful business world

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On February 29, 2008, the *Amended Record of Decision for the Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah* was published in the *Federal Register*. This amendment states the Department will use truck or rail to move the Moab uranium mill tailings to the Crescent Junction, Utah, site for permanent disposal.

The Record of Decision (ROD) amendment is essential to give the Department the flexibility needed to plan for completion of the Moab Project as soon as possible. The Department is currently evaluating the alternatives of differing proportions of rail and truck shipments in the context of determining whether project completion can be accelerated.

An all-truck option was among the methods DOE analyzed in the Final Environmental Impact Statement (EIS) for transporting the residual radioactive material and was found to be an acceptable method. Trucking was included in the 2005 ROD for a portion of the material to be transported. The amended ROD increases the amount that can be trucked. It is also supportive of an accelerated date of the first shipment, potential reduction of long-term risks through earlier completion, and potential reduction of total project costs.

which I think it is going to do, and fails through the legislative process for the second time officially and other methods to counter the congressional matter that we voted on here that we passed through the House, passed the Senate, the President signed it. I had the pleasure, Joe Barton and I did, of riding west with him to sign the bill, stood right behind him. He did say that all I wanted to go out there for was to get some free coffee on Air Force One but what he didn't know was I had 6 of his coffee mugs in my briefcase at that time.

But I have high regard, high respect for the President. I differ with him on this. And I just hope since it has been signed into law this with drilling on Anwar, off the coast of Florida, and other places we ought to be drilling that we can do that for the greatest good for the greatest number. Thank you for your good work.

Secretary {Bodman.} Thank you, sir. I appreciate your help.

Ms. {DeGette.} The gentleman from New York, Mr. Engel, is recognized for 5 minutes.

Mr. {Engel.} Thank you, Madam Chairwoman. Mr. Secretary, welcome. My colleagues have asked some excellent questions on instituting a cap and trade system for greenhouse gas emission, on nuclear waste storage at Yucca

Mountain, on the proposed termination of the weatherization program, all questions that in my view haven't received adequate answers. We are very concerned about them, and we are disappointed with the approach that the Administration is taking in all of these matters. But instead of trying to push further on these topics since you have been asked these questions, I would like to ask something a little different. I would like to talk about something that we did do on a bipartisan basis which I think when Congress works on a bipartisan basis we always do our best.

Last year we showed a commitment to addressing our Nation's dependence on oil by passing the Energy Independence and Security Act, which was signed into law in December of 2007. I am wondering, Mr. Secretary, if you could provide me with an update to the extent possible and whatever you can't do now, I would be happy to take it in writing later on, on the implementation of certain important programs that I advocated for in that act when this committee was putting it together. Among the items that I am particularly interested in are the hybrid electric vehicle program and some other advanced drive technologies, the renewable fuel standard, and the U.S./Israel Energy Cooperation Program.

The Energy Independence and Security Act included provisions from H.R. 670, the Drive Act, which I introduced

last January along with Representative Kingston. Again, we did it in a bipartisan fashion. We had nearly 100 bipartisan co-sponsors, and I believe and he believes that the provisions might change how and what we drive in the future. In particular, it requires the establishment of a grant program for plug-in electric drive vehicles, the promotion of more affordable batteries, and the development of an education program for our high schools and colleges to train more engineers and scientists that specialize in electric drive technologies. It also includes the U.S./Israel Energy Cooperation Program, which Representative Sherman originally introduced as a stand-alone bill, and then I introduced as an amendment to the main House energy bill.

This requires the establishment of a grant program to fund joint ventures between American and Israeli businesses, academic institutions, and non-profit agencies to promote the development of clean alternative fuels and more energy efficient technologies. I just recently learned that Israel is going to be a laboratory for cars, electric driven cars, and I am particularly interested in that as a way of weaning us off of foreign oil, and I look forward to seeing how that works. In addition, I advocated for a renewable fuel standard whereby a percentage of our Nation's fuel supply will be provided by domestic reduction of bio-fuels. I have

been in Brazil and I have seen how successful they have been with this there and obviously this provides a pathway for reduced consumer fuel price increase, energy security, and growth in our Nation's factories and farms.

The law requires, Mr. Secretary, that you as the Secretary of Energy enter an arrangement with the National Academy of Sciences to assess the impact and effectiveness of the renewable fuel standards, so I am wondering if you could provide me to the extent possible with an update on the status of these programs. Thank you.

Secretary {Bodman.} Well, we have done in my judgment a great deal of work on bio-fuels, on nuclear power plants, on all sorts of efforts on solar power, on wind power, renewable energy, as well as on nuclear power, all of which to get back to the first point you made affect global climate change, and they are effectively reducing the carbon foot print of this country. And I believe the research work that we are doing is leading us in that direction. As to work with the National Academy of Sciences, I don't know what happened in all that but I would be happy to give you a response on that for the record, sir.

Mr. {Hall.} Thank you. I know the law also provides you with 18 months, I believe it is, for the implementation of these projects so I would assume that some of these may be

just starting up and much hasn't happened yet. But if you could provide me written testimony with any of this, I would appreciate it.

Secretary {Bodman.} I would be happy to do that.

Mr. {Hall.} Thank you very much. I yield back.

Ms. {DeGette.} The gentleman yields back. The chair now recognizes the gentle lady from Illinois, Ms. Schakowsky, for 5 minutes.

Ms. {Schakowsky.} Thank you very much, Madam Chair. Mr. Secretary, there is so much to ask about but this question which focuses on FutureGen also focuses, I think, on the need for sense of urgency to move, to move ahead. And we were all set to move ahead in Illinois, and I look now at the final site selection report by the FutureGen alliance, this was December 18 when Illinois was announced, the alliance believes the Mattoon site provides many clear advantages and minimal disadvantages and then lists them, legal issues, the geologic conditions and sequestration. For example, the Mattoon site would have the smallest CO2 foot print of all the candidate sites. The Mattoon sites provides unfettered access to world class monitoring program. The potential for environmental impacts is low, offers significant coal transportation cost advantages.

Illinois has enacted meaningful CO2 storage legislation,

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The Department is strongly supporting hybrid electric drive technologies, including plug-in hybrids, as a critical component of our strategy to diversify our transportation options and end reliance on oil. During the last year, the Department has transitioned and accelerated its focus on Plug-In Hybrid Electric Vehicles (PHEVs) and has made significant progress in establishing projects that robustly address key barriers, especially battery technology.

In 2007, DOE selected for award ten financial assistance projects totaling $36.2 million for development of high energy batteries, power electronics, and electric motors for PHEVs. Industry cost share will bring the total funding of these projects to $77 million. These projects are focused on the critical barriers to PHEV commercialization including battery cost and life, and will also develop advanced components for PHEVs and other electric drive vehicles.

In December 2007, DOE issued a solicitation to conduct a large-scale technology demonstration of PHEVs, with initial award selections expected to be announced in the next month. Awardees will deliver optimized PHEVs to DOE, which will be strategically placed in service with fleet users in geographically-dispersed locations

throughout the U.S. to assess their fuel economy, electricity use patterns, operational issues, and compatibility with the electric grid.

In January 2008, a competitive solicitation was issued for the development of advanced battery materials and manufacturing technology. This is intended to assist and support battery developers in establishing domestic manufacturing facilities for lithium ion batteries so the U.S. can become competitive in this strategically-critical technology. The Department has also initiated a PHEV Value Proposition Study that will identify, characterize, and quantify several plausible business cases that can accelerate PHEV commercialization. The study will also explore various scenarios for battery ownership, vehicle utilization, and consumer behavior and their impacts on energy use, costs, and the environment. Initial results are expected this June.

DOE has convened high level meetings with stakeholders from academia, auto and energy industry, utilities, other Federal agencies, and others to discuss and receive feedback on the Department's PHEV R&D portfolio and future plans, as well as engaged with the utility industry to examine the electricity supply, air quality, global warming, and economic impacts of widespread adoption of PHEVs. We have also conducted detailed laboratory tests of every existing PHEV conversion available in order to determine current status of the technology and to determine what the research needs are.

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The Environmental Protection Agency (EPA) has the lead responsibility to produce a rulemaking this year that will clarify how technologies will be evaluated and regulated with respect to the Renewable Fuel Standard (RFS). The Department of Energy is providing analysis to support EPA in this activity. The collaboration between EPA and the Department of Energy on this rulemaking is an important first step toward establishing guidelines for the RFS with the goal of displacing petroleum in the transport sector by mandating the use of 36 billion gallon of renewable fuels by 2022. To help the nation reach the cellulosic-specific RFS goal of 16 billion gallons by 2022, the Department is collaborating on research and development (R&D) with the private sector to make ethanol produced from cellulosic feedstocks cost-competitive by 2012. Over the last year, the Department has announced more than $1 billion in multi-year funding for biofuels R&D. This includes up to $385 million for six commercial-scale biorefineries, one of which, Range Fuels, broke ground last November. In addition, there is up to $200 million available for smaller-scale biorefineries that focus on next generation technologies. Over the last four months, we have announced the selection of seven of these ten-percent scale projects that will use a wide variety of feedstocks and test novel conversion technologies to provide the data necessary to scale-up to full-size, commercial biorefineries.

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Recognizing that June 2009 is the due date for the report on the Renewable Fuel Standard (RFS) by the National Academy of Sciences as required by the Energy Independence and Security Act of 2007, the Department of Energy is providing the funding to pay for the study. We are currently working to set up a contractual agreement with the National Academy to conduct the study.

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The Department of Energy has been working with Israel's Ministry of National Infrastructures (MNI) to develop areas for bilateral cooperation. The National Renewable Energy Laboratory and the National Energy Technology Laboratory met with energy officials from the Ministry in November 2007 for expert discussions on areas for joint research on alternative energy sources. A senior MNI official also met with officials of DOE's Office of Energy Efficiency and Renewable Energy in November 2007 to explore potential areas of cooperation, including energy efficiency technologies. On March 6, 2008, Minister of National Infrastructures Binyamin Ben Eliezer and I signed a Memorandum of Understanding Concerning Cooperation on Renewable and Sustainable Energy that expressed our intent to develop a scope of work and a plan of action for cooperation on solar energy, biomass/biofuels, energy efficiency and clean coal/carbon sequestration technologies.

Secretary {Bodman.} The cost increase is certainly on account of inflation. I think that the cost increase in the future has yet to be told, and the big worry is not just about what the cost increase has been which is a doubling is to whether it is going to double again, and that is the issue.

Ms. {Schakowsky.} Exactly. And the longer we wait to do this we are going to see these costs go up. We are extremely disappointed, insulted by this decision, and I think it is not just about Illinois and Mattoon, it is about moving ahead with this technology. Thank you, Madam Chair.

Ms. {DeGette.} The gentleman from Michigan is recognized for 5 minutes.

Mr. {Stupak.} Thank you, Madam Chairwoman. I first ask unanimous consent that my opening statement be made part of the record.

Ms. {DeGette.} Without objection, so ordered.

Mr. {Stupak.} And therefore do I get an extra minute since I didn't give it?

Ms. {DeGette.} Because the gentleman was not present when the gavel came down, that answer is no, but I will give the gentleman a little comity if the Secretary will.

Mr. {Stupak.} Thank you. Mr. Secretary, welcome. As you know, and has been alluded to in this hearing here this

morning that Mr. Dingell and I wrote to you because we believe DOE is funding Russian nuclear institutes who are working on commercial nuclear projects such as the $1 billion contract to build a nuclear power plant in Iran. DOE is also funding various projects under the Global Nuclear Energy Partnership in Russia including ones involving reprocessing technology. In fact, as chair of O&I we had a hearing on this on January 23, and we asked a number of questions. Can you assure us today that DOE funds are not subsidizing directly or indirectly scientists or overheads at Russian institutes that are working on the Bushehr reactor in Iran?

Secretary {Bodman.} Congressman, as I told the chairman 3 hours ago or so, I received a letter yesterday from the chairman. I have not had time to fully investigate matters but I have directed the principal deputy, Bill Ostendorff, who is the principal deputy administrator of NNSA, to look into the questions that have been raised and to report back to me shortly, and I will then report to the chairman--

Mr. {Stupak.} Well, our concern was we asked that question on January 23, 15 days ago. We did not receive an answer so that is why we had to write to you. I understand it has only been 15 hours or whatever you said earlier, but our investigation shows that that is actually in fact what is happening.

Secretary {Bodman.} I am told that the project cited in the committee's letter or any of the department's scientific engagements or projects are not contributing to the Iranian nuclear program. That is what I am told.

Mr. {Stupak.} I would respectfully request you get that verified because GO and others sort of lead us to believe just the opposite.

Secretary {Bodman.} I understand that, and that is exactly--

Mr. {Stupak.} Let me ask you this.

Secretary {Bodman.} Sir, if I could just--

Mr. {Stupak.} Sure. Sure.

Secretary {Bodman.} That is what I am doing and so--

Mr. {Stupak.} We asked your chief deputy January 23, it is sort of a sensitive issue, and we are still waiting for answers. The DOE people who were in charge of this program.

Secretary {Bodman.} Chief deputy, sir.

Mr. {Stupak.} The guy who is head of GNEP from DOE was here. Let me ask you this question. What specific safeguards are in place in the GNEP program to prevent the diversion of U.S. supplied nuclear technology after we send it to Russia?

Secretary {Bodman.} Anything in Bushehr, for example, has got IEAE safeguards.

Mr. {Stupak.} I am talking about these institutes, U.S./Russia institutes. There is one in Moscow and there is one in the Ukraine. So what safeguards are in place as part of the Global Nuclear Energy Partnership to prevent the diversion of U.S. supplied technology?

Secretary {Bodman.} I don't have an answer to that, sir, but I will get one.

Mr. {Stupak.} Well, I asked regarding safeguards because our hearing showed that there is no agreement between U.S. and Russia so no agreement of cooperation that this technology won't be shared outside that institute, and we are very concerned about it.

Secretary {Bodman.} The program is called GIPP--

Mr. {Stupak.} GNEP, Global Nuclear Energy Partnership.

Secretary {Bodman.} The statute that authorizes us to or authorizes GIPP describes DOE responsibilities with respect to both commercial and non-commercial projects. All GIPP-related projects support fundamental, non-proliferation objectives of the United States. Whether they address the deployment of proliferation resistance fuel cycles or advanced safeguards, technologies or assistance, that is what they do. They are part--

Mr. {Stupak.} I agree that is the mission statement, but what has this Administration done to make sure that

policy, that technology has not been transferred? If we don't even have a cooperative agreement between the U.S. and Russia in this area, how do you prevent that transfer of technology?

Secretary {Bodman.} I will get you an answer.

Mr. {Stupak.} Very good. Let me ask you this question. I asked you this a year ago, still waiting for an answer. When you were here last time, we talked about the Administration's plans to double the size of the strategic petroleum reserve and the effect it had on crude oil prices under New York Mercantile Exchange. When I asked you about it, you said, and I am quoting now, ``You have markets that are in the hands of human beings. Human beings are essentially emotional souls.'' You went on to say there are substantial swings in the market place. We see that. Here we are back here a year later. Oil is around $100 a barrel, and during the last year when I asked you, I suggested you take a look at our legislation, the PUMP Act, H.R.594, which would improve government oversight of these oil future markets so we don't have these wild unwarranted swings in the market.

You did a good job of recognizing the problem last year. You said you would look at my legislation. Have you looked at the PUMP Act, and are you prepared to give us a position

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To date, the Global Nuclear Energy Partnership (GNEP) program has not provided any sensitive nuclear technology information, sensitive nuclear data, or funding to any Russian institute(s). There have been two U.S./Russian workshops under the *U.S.-Russian Bilateral Action Plan to Enhance Global and Bilateral Nuclear Energy Cooperation* established at the direction of Presidents Bush and Putin. This Bilateral Action Plan was cleared through the U.S. Government interagency process, which included the National Security Council and the Department of State. The proposed activities for the workshops were reviewed in advance by the Department to ensure that no sensitive nuclear technology was transferred. The workshops focused on outlining potential joint work on GNEP technologies, to leverage U.S. programmatic research and development funding, and included a State Department representative. In addition, the GNEP program has instructed all U.S. laboratory co-chairs not to hold any meetings with Russian entities or individuals that may involve sensitive technology or information.

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In accordance with section 57(b) of the Atomic Energy Act, the Secretary of Energy authorizes the transfer of technology and assistance not in the public domain. The Department implements this authority in accordance with the procedures outlined in 10 CFR Part 810, including the provisions of sections 127 and 128 of the Atomic Energy Act. The Department may authorize transfers pursuant to Part 810 independent of whether an Agreement for Cooperation is in force with the recipient country. GNEP has not, however, provided any sensitive nuclear technology information, sensitive nuclear data, or funding to any Russian institute(s).

policy, that technology has not been transferred? If we don't even have a cooperative agreement between the U.S. and Russia in this area, how do you prevent that transfer of technology?

Secretary {Bodman.} I will get you an answer.

Mr. {Stupak.} Very good. Let me ask you this question. I asked you this a year ago, still waiting for an answer. When you were here last time, we talked about the Administration's plans to double the size of the strategic petroleum reserve and the effect it had on crude oil prices under New York Mercantile Exchange. When I asked you about it, you said, and I am quoting now, ``You have markets that are in the hands of human beings. Human beings are essentially emotional souls.'' You went on to say there are substantial swings in the market place. We see that. Here we are back here a year later. Oil is around $100 a barrel, and during the last year when I asked you, I suggested you take a look at our legislation, the PUMP Act, H.R.594, which would improve government oversight of these oil future markets so we don't have these wild unwarranted swings in the market.

You did a good job of recognizing the problem last year. You said you would look at my legislation. Have you looked at the PUMP Act, and are you prepared to give us a position

on the PUMP Act to prevent the unfair manipulation of prices in the oil futures markets?

Secretary {Bodman.} No, I am not, sir. I am here to tell you that the supply and demand for oil has favored the suppliers and not the demanders, not the consumers, ever since I was here a year ago, that those who have looked at the markets and looked at the question of whether speculators are affecting the price tell me that the answer is no.

Mr. {Stupak.} We had a hearing on that on December 12, and experts told us, yes, we could reduce the price of barrels of oil by $20 or $30 if we take this speculation out especially on the dark market called the Intercontinental Exchange or the ICE market. So we have legislation, and whether you agree with me or not in our theory, at least I would have hoped that a year later you could have at least looked at our legislation and commented on it as you had promised a year ago.

Secretary {Bodman.} Had I been told to get ready to comment on your legislation for this hearing, sir, I would have done so but I would--

Mr. {Stupak.} Well, I had asked you a year ago. I would hope there would have been better follow through with the Department of Energy.

Secretary {Bodman.} I can't say anything more than I

don't know.

Mr. {Stupak.} Would you look at our legislation and get back to us?

Secretary {Bodman.} I will look at your legislation and get back to you.

Mr. {Stupak.} Thank you.

Ms. {DeGette.} The gentleman from Kentucky is recognized for 5 minutes.

Mr. {Whitfield.} Thank you, Chairman DeGette. Mr. Secretary--

Secretary {Bodman.} Hello, Congressman. How are you, sir?

Mr. {Whitfield.} Just fine. Welcome to the Hill. I am very sorry that I missed your opening statement. The tornado touched down in my district and we had 7 deaths down there, and I just got back. But I am glad you are here, and I did want to take this opportunity to bring up an issue that you and I have discussed before with Senator McConnell and others, and that relates to this legislation that I had introduced regarding the reprocessing of the waste tailings at the Paducah plant. And we know that it is a complicated issue, and it is not clear to everyone on precisely what can be done. But many of us agree that there are a lot of positives in this legislation, particularly the cleaning up

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As you have requested, I have reviewed H.R. 594, the Prevent Unfair Manipulation of Prices Act of 2007, which was referred to the House Agriculture Committee. As you know, the bill would amend the Commodity Exchange Act and is therefore primarily under the purview of the Commodity Futures Trading Commission. The Department of Energy has no specific view as to the ideal technical mechanisms for oversight of commodity contract trading, however I do share your general view that transparency and clarity in the energy markets is beneficial to consumers and investors.

Department of Energy
Washington, DC 20585

September 29, 2008

The Honorable John D. Dingell
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

On February 7, 2008, Secretary Samuel W. Bodman testified regarding the Department of Energy's Budget for Fiscal Year 2009.

Enclosed are the responses to 91 questions that were submitted by you, Representatives Markey, Pallone, Rush, Butterfield, Melancon, Ferguson, Rogers and Burgess to complete the hearing record.

If we can be of further assistance, please have your staff contact our Congressional Hearing Coordinator, Lillian Owen, at (202) 586-2031.

Sincerely,

Lisa E. Epifani
Assistant Secretary
Congressional and Intergovernmental Affairs

Enclosures

Printed with soy ink on recycled paper

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q1(a). Did Americans face home heating costs at or near historic high levels this past winter for natural gas, electricity, and fuel oil?

A1(a). In the first quarter of 2008, according to EIA, the cost of heating with natural gas was just below its historical high and the cost of using home heating oil was at record levels. The residential price for electricity was below the historical highs in the mid-1990s.

Q1(b). As energy costs rise, does the economic value of weatherizing a home also increase?

A1(b). Yes, the value of weatherizing a home increases with rising energy prices. The weatherization investment improves the energy efficiency of a home, although the amount of energy saved remains unchanged the financial savings goes up as energy prices rise.

Q1(c). Is the economy slowing placing increased financial stress on low-income Americans and fewer new jobs?

A1(c). This is a question better answered by the Treasury Department.

Q1(d). Does the sub-prime credit crunch make it more difficult for a low-income citizen to qualify to borrow money against a home to invest in weatherization?

A1(d). This is a question better answered by the Treasury Department.

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q2. Why, when energy costs are at record highs and rising, when the economy is headed into or already in a recession, and when low-income Americans are less able to obtain credit for home improvements, would the Administration reverse its prior support and eliminate a program that helps low-income Americans with all of these issues?

A2. The Weatherization program is not completely aligned with DOE's core mission. Weatherization Assistance is an important goal, but is an anomaly because it addresses social welfare goals in addition to energy efficiency improvement. Prudent portfolio management requires DOE to focus available resources on its core areas of expertise and mission consistent with the DOE Strategic Plan.

Based on a study by the National Research Council, investments in some energy efficiency applied R&D between 1978 and 2000 resulted in returns 20 times greater than the cost of the investment.[1] In contrast, the energy savings from Weatherization Assistance Program grants result in a significantly lower benefit/cost ratio of 1.53 to 1. This ratio was calculated by Oak Ridge National Laboratory based on past evaluation efforts and Energy Information Administration projected energy prices.[2]

[1] "Energy Research at DOE: Was It Worth It?" National Research Council (http://www.nap.edu/openbook.php?isbn=0309074487). This study, published in 2001, analyzed investments in 17 energy efficiency R&D activities between 1978 and 2000 costing a total of $1.566 billion (p.23) and representing about one fifth of energy efficiency program spending in that time frame. The NRC found overall net economic returns of about $30 billion (p.29). This is a public return 20 times greater than the cost of the investment within the time period considered. In addition, the NRC calculated net environmental benefits worth $3-20 billion for these activities. As is the case with many diverse R&D investment portfolios, most of the benefits were generated by few – in this case, three of 17 – activities assessed (p. 29).

[2] The ORNL analysis can be found on the web (http://weatherization.ornl.gov/pdf/CON-493FINAL10-10-05.pdf). The benefit/cost ratio in the study is 1.34 – the 1.53 ratio cited above uses the same calculations with energy cost data updated for 2006.

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q3. This Administration's 2001 National Energy Policy Project report recommended that the President increase Weatherization Assistance funding by $1.2 billion over 10 years, and this policy was until recently enthusiastically embraced in this Administration's budget proposals. Indeed, the Administration proposed $144 million for this program for the current fiscal year 2008. What has led to the outright reversal of position on this efficiency program?

A3. The Weatherization program is not completely aligned with DOE's core mission. Weatherization Assistance is an important goal, but is an anomaly because it addresses social welfare goals in addition to energy efficiency improvement. Prudent portfolio management requires DOE to focus available resources on its core areas of expertise and mission consistent with the DOE Strategic Plan.

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QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q4. Your stated rationale for cutting or eliminating the Weatherization Assistance Program is that the Department of Energy (DOE) obtains a better rate of return on its investment in research and development. However, the reason that the Federal Government is involved in basic science research and development, including energy technology research and development, is because it is deemed too risky from a financial perspective for the private sector to undertake. What risk is involved in achieving the 10 percent rate of return on investment that has been calculated to result from Weatherization Assistance Program investments? Please provide any analysis performed for the Department quantifying these returns on a risk-adjusted basis.

A4. The Department has not conducted a risk assessment analysis of the Weatherization Assistance Program. In contrast to high-risk R&D, the energy savings impacts from home energy retrofits are relatively reliable and are considered low-risk improvements. Utilities and States regularly provide weatherization funds to complement the Federal Program.

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q5. No one would claim that Weatherization Assistance Program is a research and development (R&D) program. Clearly it is intended to support low-income Americans with basic needs. Why is it relevant to compare it to R&D programs for purposes of budget decisions? Why does your rationale for cutting the Weatherization Assistance Program ignore its clear purpose?

A5. It is relevant to compare the Weatherization Assistance Program to research and development programs because it is currently located in a research and development portfolio. The Weatherization program is not completely aligned with DOE's core mission. Weatherization Assistance is an important goal, but is an anomaly because it addresses social welfare goals in addition to energy efficiency improvement. Prudent portfolio management requires DOE to focus available resources on its core areas of expertise and mission consistent with the DOE Strategic Plan.

Based on a study by the National Research Council, investments in some energy efficiency applied R&D between 1978 and 2000 resulted in returns 20 times greater than the cost of the investment.[5] In contrast, the energy savings from Weatherization Assistance Program grants result in a significantly lower benefit/cost ratio of 1.53 to 1. This ratio was calculated by Oak Ridge National

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QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q6. Residential energy use accounts for 40 percent of United States usage. All new housing units, whether they add to or replace the current units, historically add up to about 2 percent per year of residential energy consumption, and presumably less during a construction slow-down as we are currently facing. Is it DOE's position that updating energy efficient building codes for new construction is a fully adequate means of achieving appropriate energy efficiency in the residential sector?

A6. Updating building energy efficiency codes for new construction is one way to improve energy efficiency in the residential sector. During the design and construction of a new home, far more can be achieved to bring it to net-zero energy use in a cost-effective way than can be done with an existing building. Furthermore, many of these energy efficiency gains can be achieved in new construction at no initial first cost. Even though U.S. housing stock only grows by 2 percent per year, it is advantageous if buildings added to that stock are more energy efficient when built, so as to avoid the more costly task of retrofitting them in the future (or not retrofitting them at all and having a less efficient building stock).

However, building energy codes only establish a minimum level of construction that should not be built below. While it is important to continue to raise the energy codes bar, it is also important to invest in research, development and demonstration of homes that can achieve greater energy efficiency than code and eventually net-zero energy homes, as well as to apply these technologies to existing homes as much as possible. It is important to raise the bar on appliance standards, so that replacement appliances and equipment are made continually

more efficient than the models they replace. It is also important to put in place energy efficiency rating programs, such as Home Performance with ENERGY STAR, to encourage private sector investment in greater efficiency, as well as upgrade our existing building stock.

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q7. What percentage of occupants of new homes in the United States are low-income occupants who qualify for the Weatherization Assistance Program?

A7. Unfortunately, DOE does not have reliable data on the number of households qualified for Weatherization who live in new housing. According to the Department of Health and Human Services approximately 33.8 million households are federally eligible for the program. Over the last 30 years, States, through the Weatherization Assistance Program, weatherized 6 million homes.

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q8. Has DOE evaluated the national program since 1989?

A8. The last national comprehensive evaluation of the program was in 1992-1993 and utilized 1989 data. In the interim, Oak Ridge National Laboratory has conducted several metaevaluations which estimate program results using state-level evaluation studies. A new strategic management evaluation is being developed. The strategic management evaluation will be focused on examining whether there are more efficient ways of delivering the program, while the evaluation that was recommended in the PART process in 2003 is focused on how well the existing program performs. This more fundamental issue – whether an alternative program can be structured to more efficiently serve the low-income community – will precede the more traditional evaluation because it may have implications for program delivery that would change the PART evaluation.

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q9. From FY2005 to FY2007, the Office of Management and Budget performance documents included a commitment to evaluate the Weatherization Program; funds were requested and appropriated; States were assigned record-keeping tasks in Program Years 2006 and 2007. A Request for Proposal was issued, bids received, and a final contractor selected. Why was the evaluation suddenly cancelled last summer?

A9. The Weatherization evaluation was delayed pending the analysis of strategic options for improving the program's cost-effectiveness. The strategic management evaluation will be focused on examining whether there are more efficient ways of delivering the program, while the evaluation that was recommended in the PART process in 2003 is focused on how well the existing program performs. This more fundamental issue – whether an alternative program can be structured to more efficiently serve the low-income community – will precede the more traditional evaluation because it may have implications for program delivery that would change the PART evaluation. It is expected the strategic evaluation will be completed by the fall of this year.

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q10. Is it DOE's position that there should be no evaluation of the effectiveness of this effort to retrofit the inefficient housing stock after Federal expenditures of $5.3 billion from DOE and perhaps twice as much more from State and utility ratepayers?

A10. No, the new Weatherization evaluation was delayed pending the analysis of strategic options on improving the program's cost-effectiveness. It is expected the strategic evaluation will be completed by the fall of this year.

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q11. In the absence of results from such an evaluation, what is the source of the performance and savings data on which the program was evaluated to reach the determination that it should be "zeroed out"?

A11. The Department's Oak Ridge National Laboratory estimates program impacts through the analysis of State conducted weatherization program evaluations. The benefit/cost ratio of 1.53 to 1 was calculated using 2006 energy price data. However, based on a study by the National Research Council, investments in some energy efficiency applied R&D between 1978 and 2000 resulted in returns 20 times greater than the cost of the investment.[7] So we feel that R&D investments offer the potential for greater returns than weatherization.

[7] "Energy Research at DOE: Was It Worth It?" National Research Council (http://www.nap.edu/openbook.php?isbn=0309074487). This study, published in 2001, analyzed investments in 17 energy efficiency R&D activities between 1978 and 2000 costing a total of $1.566 billion (p.23) and representing about one fifth of energy efficiency program spending in that time frame. The NRC found overall net economic returns of about $30 billion (p.29) . This is a public return 20 times greater than the cost of the investment within the time period considered. In addition, the NRC calculated net environmental benefits worth $3-20 billion for these activities. As is the case with many diverse R&D investment portfolios, most of the benefits were generated by few – in this case, three of 17 – activities assessed (p. 29).

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Based on your best current data, please provide the following:

Q12(a). Up-to-date national and regional statistics on Weatherization's average per-household energy bill reductions by fuels saved.

A12(a). The Department does not have the information for individual fuels at the level of detail requested. Overall the nationwide average annual energy cost savings are estimated at: $358 in 2006; $375 in 2007; and $413 in 2008, according to Oak Ridge National Lab's Metaevaluation, ORNL/CON-493; and EIA Short Term Energy Outlook.

Q12(b). Average per-household energy usage savings by fuels.

A12(b). The most recent metaevaluation conducted by Oak Ridge National Laboratory estimated natural gas savings of 30.5 million Btu per weatherized household.

Q12(c). The number of inefficient appliances, lights, or heating systems replaced.

A12(c). This data is not available. DOE does not require the States and local agencies to report this information.

Q12(d). The number of homes with major safety problems that made them impossible to weatherize.

A12(d). This data is not available. DOE does not require the States and local agencies to report this information.

Q12(e). The amount of aggregate energy saved by the program on a national basis.

A12(e). Oak Ridge National Laboratory estimates annual energy savings from weatherization of 90,000 homes to be 2.75 trillion Btu, approximately 0.03% of total U.S. residential energy consumption.

Q12(f). How much has the use of each of the major heating fuels reduced.

A12(f). This data is not available. DOE does not collect data on fuel savings by major heating fuels.

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q13. Oak Ridge National Laboratory has been using small state-level evaluations to estimate the effects of contemporary practices in the program and has found that those reports show primary fuel usage reductions per home now average 31 million btus as opposed to about 17 million btus per home per year in the 1989 program. Does DOE dispute this evidence that the program has become more effective over this 18-year period?

A13. No. As energy consumption per home has risen, the weatherization benefit has also risen. However, the benefit-cost ratio of 1.53 is far less than the potential for DOE's applied R&D programs. The current Weatherization program strategy results in about 100,000 homes weatherized annually out of the 34 million annually eligible. Unfortunately, the gap between the number of homes being reached and the number of homes eligible has not been significantly narrowed during the time period.

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q14. The Committee understands that DOE has never evaluated the savings from the electric base load reduction investments the program now delivers, potentially adding considerably to the return on investment. Why has DOE not measured such savings? Why would they not validly contribute to the return on investment?

A14. DOE intends to analyze the Weatherization Assistance Program's impact on the electric base load, although it is not certain whether such impacts would raise or lower the program's benefit/cost ratio. The Weatherization evaluation was delayed pending the analysis of strategic options for improving the program's cost-effectiveness. The strategic management evaluation will be focused on examining whether there are more efficient ways of delivering the program, while the evaluation that was recommended in the PART process in 2003 is focused on how well the existing program performs. This more fundamental issue – whether an alternative program can be structured to more efficiently serve the low-income community – will precede the more traditional evaluation because it may have implications for program delivery that would change the PART evaluation. It is expected the strategic evaluation will be completed by the fall of this year.

QUESTION FROM CHAIRMAN DINGELL

Proposed Elimination of Weatherization Assistance Program

Q15. Please identify DOE and other ongoing Federal programs that will achieve the energy efficiency potential of weatherizing the existing stock of buildings and offset the loss of the Weatherization Assistance Program in this objective.

A15. After almost three decades, DOE has weatherized about 5.5 million homes out of the 34 million annually eligible. Based on the metrics of the rate of return, the Weatherization Assistance Program (WAP) cannot compete with all of the Department's R&D activities. Weatherization Assistance is an important goal, but is an anomaly because it addresses social welfare goals in addition to energy efficiency improvement. Based on a study by the National Research Council, investments in some energy efficiency applied R&D between 1978 and 2000 resulted in returns 20 times greater than the cost of the investment. In contrast, the energy savings from Weatherization Assistance Program grants result in a significantly lower benefit/cost ratio of 1.53 to 1. This ratio was calculated by Oak Ridge National Laboratory based on past evaluation efforts and Energy Information Administration projected energy prices.

Prudent portfolio management requires DOE to focus available resources on its core areas of expertise and mission consistent with the DOE Strategic Plan. DOE is currently prioritizing development of new technologies, model building codes, and innovative programs for existing homes. Through the Building Technologies Program, the Department is committed to developing reliable, affordable, and environmentally sound renewable energy and energy efficiency technologies that significantly reduce the energy consumption and peak electrical demands of

residential and commercial buildings. During the design and construction of a new home, far more can be achieved to bring it to net zero energy use in a cost-effective way than can be done with an existing building. It is important that buildings added to that stock be more energy efficient when built, so as to prevent the more costly and less effective task of fixing the problem by retrofitting them in the future. Informing and training designers, builders and code officials on how to build more energy efficient new buildings allows them to gain knowledge on the retrofit of existing homes.

However, building energy codes only establish a minimum level of construction that should not be built below. While it is important to continue to raise the energy codes bar, it is also important to invest in research, development and demonstration of homes that can achieve 50 percent greater energy efficiency than code and eventually net-zero energy homes, as well as to apply these technologies to existing homes as much as possible. It is important to raise the bar on appliance standards, so that replacement appliances and equipment are made continually more efficient than the models they replace. It is also important to put in place incentive programs, such as Home Performance with ENERGY STAR, to encourage private sector investment in greater efficiency, as well as upgrade our existing building stock.

QUESTION FROM CHAIRMAN DINGELL

Cuts to Low-Income Home Energy Assistance Program

Q16. The Budget proposals for the Department of Health and Human Services (HHS) proposed to reduce the appropriation for the Low Income Home Energy Assistance Program (LIHEAP) by $570 million (22 percent), cutting support for low-income Americans struggling to heat or cool their homes in extreme weather conditions and in the face of steeply rising costs for heating fuels and energy. What degree of coordination and joint decision making between DOE and HHS was involved in the simultaneous proposed elimination of the Weatherization Assistance Program and the drastic reduction of the Low Income Home Energy Assistance Program at HHS?

A16. The budget requests for LIHEAP and the Weatherization Assistance Program were developed separately.

QUESTION FROM CHAIRMAN DINGELL

Cuts to Low-Income Home Energy Assistance Program

Q17. Did both agencies participate simultaneously in an OMB review to understand the compounding impacts of such simultaneous cuts?

A17. No, DOE and HHS did not participate in a simultaneous review during the budget development process.

QUESTION FROM CHAIRMAN DINGELL

Cuts to Low-Income Home Energy Assistance Program

Q18. What alternate Federal programs do you believe will provide these low-income citizens the ability to meet their minimum heating or cooling requirements without suffering greater deprivation in food, medical care, and other basic necessities?

A18. Programs with missions that include assistance for low-income citizens are suited to meet these needs.

QUESTION FROM CHAIRMAN DINGELL

Clean Coal and FutureGen Project

Q19. The President announced the FutureGen project in February 2003, five years ago. DOE is now substituting a new and different set of projects for that one. How much of the five-years worth of effort and investment made in support of the FutureGen project has been wasted, and how much will provide a jump-start to the proposed replacement projects?

A19. We believe the knowledge gained and lessons learned over the past five years will be very helpful as we move forward with the restructured approach. The original approach provided a great deal of valuable information, especially in terms of siting processes for coal-based power plant projects equipped with carbon capture and storage (CCS), as well as conceptual and preliminary design parameters, equipment specifications, and a preliminary cost estimate. This information may also be insightful during the early stages of the restructured program, and will provide value in the form of analytical techniques and thought processes that were developed and utilized. Additionally, companies which are members of the FutureGen Alliance may themselves participate in the restructured FutureGen as well.

QUESTION FROM CHAIRMAN DINGELL

Clean Coal and FutureGen Project

Q20. It is widely recognized that there is great urgency in proving the viability of near-zero emission coal-fueled power including carbon capture and sequestration. Your alternative plan will consume an extra three years (based on your official announcement). What is the justification for such delays?

A20. Under the original FutureGen, the initial experimental phase would have been followed by commercial demonstrations. The Department believes that a number of commercial power producers are ready to move forward with projects that can demonstrate FutureGen's objectives in roughly the same time frame, provided they receive partial support from the Government. The restructured FutureGen project contemplates multiple commercial demonstrations of integrated gasification combined cycle or other advanced technology plants with carbon capture and storage, with operations commencing in the 2015-2016 timeframe. In contrast, although the original FutureGen approach anticipated demonstration operations in 2012, it did not expect commercial operations to occur until around the 2020 timeframe. So, while the restructured program does start at a later point in time, it is expected to effect an earlier widespread commercial deployment.

QUESTION FROM CHAIRMAN DINGELL

Clean Coal and FutureGen Project

Q21. As configured, the FutureGen project involved 13 industrial participants doing business on 6 continents. In total they were intending to contribute approximately $400 million toward the project costs. As of the end of November 2007, the Department stated in writing that the project was full-speed-ahead and on track to complete site selection by 2007. Yet it was instead unceremoniously killed. What message does this send to domestic and international partners in major long-term energy-related research projects administered by the Department of Energy?

A21. As a result of comments submitted under DOE's Request for Information (RFI), the Department believes that both international and domestic partners understand that the restructured approach could lead to early deployment of carbon capture and geologic sequestration with demonstrations at commercial power plants. Multi-national corporations can still propose (or team with proposers) under the restructured program. Multiple commercial demonstrations in the U.S., instead of a single research and development test demonstration envisioned under the original approach, may encourage more rapid deployment of the technology in other countries, the same as in the U.S.

We are engaged in a continuing dialogue with our domestic and international energy research partners. To help meet the rapidly growing demand for energy worldwide, international engagement in FutureGen remains important to its global success since the development of advanced coal-based electricity generation technology, coupled with carbon capture and storage, will continue to be of interest on a global scale.

QUESTION FROM CHAIRMAN DINGELL

Clean Coal and FutureGen Project

Q22. What new factors arose at the end of 2007 to lead to the decision to drop the FutureGen project that were not and could not be taken into account earlier during the five-year period from the first announcement of that project?

A22. The Department first became concerned about cost increases in April 2007. It was at this point that updated cost estimates pointed to cost escalation at an alarming rate, particularly when considering the cost share percentage of the Government (up to 74%) under the agreement with the FutureGen Alliance. In addition to cost escalation considerations, we had seen technological advances in CCS through federal and private R&D work and changes in the marketplace including more IGCC projects proposed for construction. Concerns over cost escalations prompted a series of meetings between the Department and the FutureGen Alliance in an attempt to resolve the cost containment issues. As late as November 2007, the Department had hoped that a suitable arrangement with the Alliance could be worked out. Unfortunately, an agreement could not be reached, and we decided to restructure the FutureGen project.

QUESTION FROM CHAIRMAN DINGELL

Clean Coal and FutureGen Project

Q23. To what extent were project sponsors and supporters alerted during that five-year period to the emergence of such risks that the project would not go forward? Were these sponsors and supporters wrong to have claimed that they were surprised by the decision to cancel the FutureGen project?

A23. In April 2007, the Department was frank with the FutureGen Alliance in stating that it was concerned about the rising cost estimates for this project and the impact on the Department's budget and other activities. The Alliance member companies were also well aware of the seriousness of the Department's concern. The Department and the Alliance engaged in negotiations that continued into December 2007 in order to discuss these concerns and attempt to secure a mutually agreeable solution. In December, the Department issued a statement that it would provide details on the restructuring of FutureGen in January 2008. On January 30, 2008, DOE advised the Alliance of the restructuring and issued a Request for Information seeking industry comment on the restructured project.

QUESTION FROM CHAIRMAN DINGELL

Climate Change Policy and Energy Efficiency

Q24. The Department of Energy Budget documents suggest that there are two primary activities you undertake that support the Administration's climate change agenda: (1) research in clean coal and other low-carbon energy sources such as nuclear power, and (2) participation in the Asia-Pacific Partnership. However, there appears to be a broad consensus that the lowest-cost, quickest, and most effective strategy for mitigating climate change remains a strategy to maximize cost-effective energy efficiency in all sectors of our economy. Do you disagree?

A24. I agree that energy efficiency is integral to any realistic and economically sustainable climate change mitigation strategy. It also has important ancillary benefits, such as enhancing energy security. Modeling work done for the Climate Change Technology Program (detailed in its Strategic Plan), the Climate Change Science Program (detailed in its Scenarios of Greenhouse Gas Emissions and Atmospheric Concentrations report), and the International Energy Agency (detailed in its Energy Technology Perspectives 2008, Scenarios and Strategies to 2050), among others, all show that energy efficiency provides early opportunities to achieve significant and relatively low-cost emissions reductions across broad sectors of the economy. The Save Energy Now program, for example, is working with energy-intensive industries to drive significant reduction in U.S. industrial energy efficiency. We are working to transform the built environment and reduce its carbon footprint through zero energy buildings, R&D for enabling technologies such as solid state lighting and advanced windows, improving codes and appliance standards, modernizing the ENERGYSTAR® program, and targeting the civic infrastructure (e.g., schools, hospitals, libraries, municipal facilities) to invest in Energy Smart solutions. In the transportation sector, we are supporting R&D on lithium-ion batteries, plug-in hybrids, and drive-train

electrification to diversify and make our nation's vehicles more efficient and to help reduce petroleum dependency. These and other technologies we are supporting will be very important in reducing greenhouse gas emissions.

Another example of how DOE is leading the effort towards greater energy efficiency is our internal Transformational Energy Action Management (TEAM) Initiative, a plan to have all of DOE's national facilities reduce their energy consumption by 30 percent and water consumption by 16 percent by the end of fiscal year 2009. The TEAM Initiative will leverage public and private resources, including Energy Savings Performance Contracts, to improve performance and reduce energy and water costs at DOE facilities.

QUESTION FROM CHAIRMAN DINGELL

Climate Change Policy and Energy Efficiency

Q25. If not, would you agree that the Department of Energy's programs to promote and achieve energy efficiency should be publicly identified as a third major element of the Department's contribution to meeting the climate change challenge?

A25. DOE's Budget Highlights document identifies energy efficiency as one of the two key investment areas for the Department in combating climate change. The Budget Highlights note: "In support of the administration's climate change technology initiatives and to implement the U.S. Climate Change Technology Program's Strategic Plan, the FY 2009 budget emphasizes a two-pronged strategy for its climate change technology programs: invest in long-lead, high-risk, high carbon dioxide (CO_2) mitigation technologies in coal with carbon capture and storage (CCS) and in nuclear power, and invest in near-term, lower risk, high CO_2 mitigation technologies focused on improving energy efficiency." Energy efficiency, therefore, is one of the pillars of the Department's climate change mitigation strategy.

QUESTION FROM CHAIRMAN DINGELL

Climate Change Policy and Energy Efficiency

Q26. You propose increases for building technology research, including upgrading energy efficiency building codes for new buildings. What confidence do you have that code-setting authorities in States and localities will adopt and enforce the higher energy-efficiency codes you create? What recommendations do you have for Congress to assure that such codes are adopted and implemented?

A26. States and localities have increased support for higher energy efficiency codes. For example, the National Governors Association recommends that states adopt more stringent building energy codes to achieve significant gains in energy efficiency and save consumers money on their energy bills in its Call to Action to Secure a Clean Energy Future.[8] Also, in July 2007, the Western Governors' Association convened expert stakeholders from building and energy industries, government, public interest groups, and utilities to discuss the best practices for generating greater returns on energy savings in homes and public buildings. These policy recommendations focus broadly on efforts to make the Western region a leader in energy efficiency by exceeding International Energy Conservation Codes (IECC) by at least 30 percent. The Building America and High Performance Building research and demonstration projects have also demonstrated that it is feasible and cost effective to build buildings that are 30 percent more energy efficient than Standard 90.1-2004 for commercial buildings and the 2004 IECC for residential buildings.

[8] "Securing a Clean Energy Future: A Call to Action," National Governors Association, 2008, http://www.nga.org/Files/pdf/0712SCEFCALLTOACTION.PDF.

QUESTION FROM CHAIRMAN DINGELL

Yucca Mountain Nuclear Waste Storage

Q27. I received a letter on February 23, 2007, from Ward Sproat, the Director of the Office of Civilian Radioactive Waste Management, that stated:

"Stable and adequate funding for the Program is necessary to meet the best achievable repository opening date of 2017. FY 2007 funding levels approved by Congress are causing redeployment of the limited resources to the critical path activities needed to submit the license application by June 30, 2008."

Unfortunately, the FY2008 Omnibus Appropriations bill provided only $386.5 million of the Administration's $494.5 million budget request for this program, and recent press reports quote Director Sproat as saying that as a result these dates have slipped. Are you fully confident that DOE will be still able to file a license application with the Nuclear Regulatory Commission during 2008?

A27. With appropriation reductions in FY 2007 and FY 2008, the Department will not be able to meet the best achievable opening date of March 2017. However, because of reallocation of resources and improvements in management practices and processes, the Department will be able to submit the License Application to the Nuclear Regulatory Commission this June.

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QUESTION FROM CHAIRMAN DINGELL

Yucca Mountain Nuclear Waste Storage

Q28. What is your present "best case" estimate for opening the repository, assuming the Commission issues a license?

A28. The Department is currently developing a revised program baseline based on a new set of assumptions which include flat funding over the next three to four years and a subsequent ramping up of funding to support construction of the repository. We expect to complete the Department's baselining effort later this year and will revise our estimated best achievable opening date following completion of that process.

QUESTION FROM CHAIRMAN DINGELL

State-Federal Cooperation on Energy RD&D

Q29. State energy offices, research and development authorities, and other State institutions have informed us that they spend upwards of $1 billion per year on energy research, development, and demonstration projects. They have also told us that they have been frustrated in recent years when they sought to coordinate those efforts and research priorities with those of the Department of Energy. Does DOE plan to invite States and regional organizations that engage in energy-related research and development to collaborate and communicate about their respective research agendas? Does the Department of Energy have any formal or informal mechanisms to assure that such collaboration and communication takes place every year?

A29. The Department partners with all State energy offices, and many State research, development, and demonstration (RD&D) organizations, industry, and national laboratories to develop plans and conduct peer reviews of the DOE research and development agenda. DOE works closely with the National Association of State Energy Officials, Association of State Energy Research and Technology Transfer Institutions, as well as many individual State R&D organizations and universities to conduct RD&D supported by the Department through solicitations managed by individual technology programs. The Department always welcomes the opportunity to explore ways to improve collaboration between Federal and State activities, within the limits of Federal acquisition regulations.

QUESTION FROM CHAIRMAN DINGELL

State-Federal Cooperation on Energy RD&D

Q30. Would you need any additional appropriations or authority before you could undertake such collaboration and communication?

A30. No. The Department coordinates research and development priorities at the individual technology program level. For example, our Hydrogen Technology Program is partnering with 19 members, including the auto industry, in the California Fuel Cell Partnership which aims to achieve a common vision in commercializing vehicle technologies for the 21st century. Likewise, our FreedomCAR and Fuel Partnership Program is coordinating with the 21st Century Partnership, to establish its research and development objectives in the use of lightweight, high-performance materials that will contribute to the development of vehicles that provide better fuel economy.

QUESTION FROM CHAIRMAN DINGELL

Implementing the Energy Independence and Security Act of 2007

Q31. Was it too late in your cycle of preparing the FY 2009 budget proposals when the Energy Independence and Security Act (EISA) was passed for you to make explicit reference to its provisions in proposing the budget?

A31. Yes. By the time the Energy Independence and Security Act (EISA) was enacted (December 19, 2007), the Department's final budget deliberations with the Office of Management and Budget were nearly completed.

QUESTION FROM CHAIRMAN DINGELL

Implementing the Energy Independence and Security Act of 2007

Q32. Does the budget authority you have requested for Departmental "corporate management" include sufficient funds for initial steps to implement EISA?

A32. The initial analysis and planning that is needed to implement the Energy Independence and Security Act is being done within funds budgeted for analytical activities and as part of ongoing budgeting and planning efforts. Any significant funding requirements required for implementation will be identified as part of this review and incorporated into the Department's annual budget formulation process.

QUESTION FROM CHAIRMAN DINGELL

Implementing the Energy Independence and Security Act of 2007

Q33. The Department has been working to meet a court-approved schedule of deadlines for the adoption of updated appliance efficiency standards. The new law adopted a number of consensus standards directly into statute and also changed the process requirements in order to simplify and expedite new rulings. Do you have sufficient appropriations for 2008 and have you requested sufficient budget authority for 2009 to assure that all deadlines can be met?

A33. The President's budget adequately funds DOE's commitment to existing appliance standards requirements. In January 2006, the Department released its plan to eliminate a 30-year backlog on appliance standards by issuing one new or amended standard for each of the 18 products in the backlog over the next five years. Since adoption of this schedule for the standards program, the Department has met 100 percent of its commitments, a trend we intend to maintain. In less than two years, DOE has completed four energy efficiency standards, six test procedure rulemakings, and begun eight standard-setting rulemakings. Additionally, while addressing the products in the backlog, the Department's multi-year schedule addresses the first cycle of standards that DOE must develop to comply with EPACT 2005.

The Energy Independence and Security Act of 2007 (EISA 2007) amended the Energy Policy and Conservation Act of 1975 to give DOE authority to accelerate the rulemaking process where consensus among stakeholders and industry already exists; this could eliminate approximately ten months from the timeline for each consensus rule, usually a three-year process. In addition, EISA 2007 added new test procedure, standards and reporting requirements for certain appliances and

equipment. DOE is currently evaluating the impacts of EISA 2007 to determine the additions and deletions from the list of required rulemakings.

QUESTION FROM CHAIRMAN DINGELL

Advanced Vehicle Research

Q34. Thirty-two million dollars in hydrogen energy research programs have been moved from that line-item into the advanced vehicle technologies research program. According to the Budget Highlights document (p. 24) and Volume III of the Budget Request documents (p. 243), this program is proposed to receive an $8 million increase in funding from $213 million lo $221 million including that $32 million; this would amount to a $24 million decrease on the non-hydrogen research aspects vehicles. According to the Budget Appendix (p. 393), however, the vehicle technology program is proposed to have its budget reduced from $223 million to $221 million, presumably also including the effects of incorporating these programs from the hydrogen program. That would amount to a net reduction for non-hydrogen vehicular research of $34 million. Please clarify this seeming discrepancy.

A34. Approximately $31.5 million of DOE's Hydrogen Technology program is proposed to be moved to the Vehicle Technologies Program in the FY 2009 budget request. The activities transferred – Education; Safety, Codes and Standards; and Technology Validation –are synergistic with similar activities for alternative fuel and plug-in hybrid vehicles and can be better managed by the Vehicle Technologies Program.

Excluding activities transferred from the Hydrogen Program, the FY 2009 budget request for the Vehicle Technologies Program is $189.5 million ($221 million minus $31.5 million), which is $13.5 million more than the FY 2008 request of $176 million. In FY 2008, Congress provided $213 million for the Vehicles program, an additional $36.9 million above the FY 2008 request.

Please refer to the table below for additional Vehicle Technologies Program funding information:

	FY 2008 Request	FY 2008 Appropriation[a]	FY 2009 Request
Vehicle Technologies			
Hybrid Electric Systems	80,664	94,135	103,361
-Vehicle and Systems Simulation and Testing	21,087	28,201	21,126
-Technology Validation	N/A	N/A	14,789[c]
-Energy Storage R & D	41,805	48,236	49,457
-Advanced Power Electronics and Motors R & D	15,626	15,462	15,604
-SBIR/STTR	2,146	2,236	2,385
Vehicle Systems	0	0	0
Hybrid and Electric Propulsion	0	0	0
Advanced Combustion Engine R&D	34,550	44,591	33,600
Materials Technology	33,382	39,636	36,903
Fuels Technology	13,845	17,836	16,122
Technology Integration	13,697	16,845	31,100[b]
-Graduate Automotive Tech Education (GATE)	500	496	700
-Advanced Vehicle Competitions	1,300	1,387	1,500
-Education	N/A	N/A	4,000[c]
-Safety, Codes & Standards	N/A	N/A	12,238[c]
-Legislative & Rulemaking	1,804	1,986	1,804
-Vehicle Technologies Deployment	9,593	12,481	10,096
-Biennial Peer Reviews[d]	500	495	500
-SBIR/STTR	N/A	N/A	262
Innovative Concepts	0	0	0
Technology Introduction	0	0	0
Total, Vehicle Technologies	176,138	213,043	221,086

[a] Post rescission
[b] Includes proposed FY 2009 transfer activities from Hydrogen Program
[c] Proposed FY 2009 program transfer from Hydrogen Program. Transfer totals $31.5M (including SBIR/STTR): $15M Technology Validation, $4M Education, and $12.5M Safety, Codes & Standards.
[d] This program moved to the Technology Integration program in FY 2008

QUESTION FROM CHAIRMAN DINGELL

Advanced Vehicle Research

Q35. Does the move of these hydrogen programs into the vehicle research budget and the reduction of the other parts of that budget mean that the Department is deemphasizing non-hydrogen vehicular research?

A35. No. The Department is providing greater emphasis to the non-hydrogen vehicular research while sustaining a balanced effort in Hydrogen R&D. The Hydrogen program is dependent on the success of many of the R&D activities undertaken within the Vehicle Technologies Program, as well as throughout the Department. R&D activities on batteries, power electronics and electric motors, vehicle materials, and others support achieving many of the goals of a hydrogen fueled hybrid fuel cell vehicle. The purpose of the move was not to shift emphasis, but to place under one management activities that share common or similar objectives and achieve synergistic benefits.

QUESTION FROM CHAIRMAN DINGELL

Energy Information Administration

Q36. In 2005 the Petroleum Division analyzed the resources required to address the quality control issues as well as the need to expand data collection efforts in response to increased demands for information. It identified a need for an additional $29 million in development funding plus an additional $5 million in ongoing funding for data collection, processing, dissemination, and quality assurance. The division determined it needed to hire an additional 23 full-time employees as well. The Energy Independence and Security Act requirements to address quality concerns in the Petroleum and Natural Gas Division were cited in the Energy Information Administration's budget request for fiscal 2009. The budget request, however, would only add $6.1 million to Oil and Gas. How can EIA meet the identified needs with an increase of $6 million when its 2005 estimate put the amount needed for the Oil and Gas Division much higher. Have staffing levels increased for Oil and Gas and if so by how much?

A36. The Petroleum Division's 2005 paper was a useful summary of the resources needed over time to resolve quality control issues and expand data collection efforts in response to increased demands for information about oil and oil products in the context of EIA's funding history. Recent budgets have attempted to begin the process of acquiring these resources while meeting other priority needs. Full funding of EIA's FY 2009 budget request would be a significant step in meeting the petroleum data quality needs.

For the FY 2008 budget, EIA requested a total of $105.1 million, an increase of $ 14.4 million over the FY 2007 budget, including in the request a significant increase for the Petroleum Division. EIA was given a budget of $95.5 million, and has directed some of its $4.8 million increase over FY 2007 toward efforts in the Petroleum Division, though largely to implement additional requirements mandated in the Energy Policy Act of 2005 to collect information on renewable fuels data (including ethanol and biodiesel). The FY 2008 budget did

not permit an increase in federal staff. Outside minimal ongoing improvements, any attempt to take on the additional, needed work on analysis and quality issues as described in the Petroleum Division's 2005 paper was delayed.

EIA's FY 2009 budget request is for $110.6 million, which would be an increase of $15.1 million over FY 2008 levels. While the additional requested monies would not add to federal staff totals, the request would allow resumption of efforts to address critical petroleum data quality problems ($2.7 million) and continue implementation of ethanol and biodiesel surveys, including weekly surveys ($3.4 million).

QUESTION FROM CHAIRMAN DINGELL

Energy Information Administration

Q37. EIA acknowledges a growing concern about its data. For example, it references an Oil Daily article of August 2, 2007, that implied EIA's over-estimate of weekly demand for gasoline contributed to price volatility in gasoline markets by exaggerating demand growth. EIA's budget request talks about "deteriorating survey frames" and "reducing large unaccounted for crude oil statistics, missing gasoline production data, its inability to track blending activity and eroding quality of gasoline import data." Can you assure us that the budget request would provide resources sufficient to avoid any such concerns?

A37. Full funding of its FY 2009 budget request would allow EIA to begin work on resolving these issues. EIA's $110.6 million request for FY 2009 would increase its funding by $15.1 million over FY 2008 levels. The request includes funding for efforts to address critical petroleum data quality problems (+$2.7 million) and to continue implementation of ethanol and biodiesel surveys, including weekly surveys (+$3.4 million). Some work on data quality is included in the ethanol survey effort. EIA's efforts in this area would permit investment in data quality and systems improvement and maintenance, as well as the development of additional analytic capability needed to maintain quality over time.

QUESTION FROM CHAIRMAN DINGELL

Energy Information Administration

Q38. Does EIA's budget request include funding the EIA needs to comply with the other requirements in Section 805 of the Energy Independence and Security Act?

A38. EIA's $110.6 million FY 2009 budget request does not include funding to comply with Section 805 of the Energy Independence and Security Act (EISA). EIA's FY 2009 request had already been proposed and reviewed within the Administration by the time EISA was enacted. The majority of the increase ($12.2 million) above the FY 2008 level supports critical activities to improve energy data and analysis programs that were deferred in FY 2008. The remaining $2.9 million provides for promotions and general pay increases and for increases in goods and services provided through the DOE Working Capital Fund.

Specifically, the $12.3 million increase in support services would allow EIA to resume addressing critical petroleum data quality problems to reflect changes in the industry and assure statistical validity, accuracy, and reliability (+$2.7M); implement monthly ethanol and biodiesel surveys mandated by the Energy Policy Act of 2005 (+$3.4M); resume replacing the aging National Energy Model which is critical to improving our ability to assess and forecast supply, demand, and technology trends impacting U.S and world energy markets (+$3.3M); enhance availability and timeliness of international oil, gas, and coal markets data and analyses (+$1.1M); provide for mandatory Information Technology infrastructure upgrades and strengthen cyber-security to protect market-sensitive data (+$0.8M); and address data essential to the Environmental Protection Agency, States and other stakeholders ($1.0M).

QUESTION FROM CHAIRMAN DINGELL

Superconductivity Research

Q39. Is superconductivity still considered by DOE as a major potential solution to meet many of the critical challenges of grid transmission and distribution efficiency improvements and enhanced security?

A39. Yes, high-temperature superconducting power equipment has the potential to become a key twenty-first century technology for improving the capacity, efficiency, reliability, and security of the electric delivery system. For example, higher-capacity HTS power lines could provide a new approach to building transmission and distribution systems that will reduce the footprint and allow additional capacity to be placed in service within existing rights-of-way.

QUESTION FROM CHAIRMAN DINGELL

Superconductivty Research

Q40. When did DOE funding for Superconductivity R&D start? How much has been spent in total to date? What is the total cost share to date from corporate partners in the superconductivity demonstration projects?

A40. DOE funding for Superconductivity R&D started in fiscal year 1987. To date (through FY 2008), approximately $602.8 million has been appropriated for Superconductivity R&D. The total cost share to date from corporate participants in the superconductivity demonstration projects has been approximately $147 million.

QUESTION FROM CHAIRMAN DINGELL

Superconductivity Research

Q41. How much funding as a percentage of total Superconductivity R&D was provided during FY2007 to each of the following groups: private corporations; national laboratories; universities; and the Office of Electricity? How much is being provided to each in FY2008? How much is proposed for each in FY2009? What cost share from industry is expected in each of those periods?

A41. Superconductivity R&D Funding Percentage

	FY 2007	FY 2008	FY 2009 (estimate)
Private Corporations	58	35	38
National Labs	33	55	54
Universities	1	1	1
Office of Electricity	8	8	8

Cost Share for the HTS Program has been at 50% and comes from Cooperative Research and Development Agreements with National Labs, cooperative agreements for demonstration projects, and subcontracts on HTS wire manufacturing.

Expected Industry Cost Share ($ Million)

FY 2007	31.0
FY 2008	13.7
FY 2009	13.8

QUESTION FROM CHAIRMAN DINGELL

Superconductivity Research

Q42. How many corporate cost share programs have been initiated? How many have met all the initial objectives and what were they? How many have failed and what were they? Have companies that failed to deliver been awarded subsequent contracts?

A42. Under the Superconducting Partnership with Industry (SPI) program and follow-on Superconducting Power Equipment (SPE) program, over 20 cooperative agreements for design, development and demonstration of high temperature superconducting (HTS) equipment have been initiated. The programs covered HTS equipment such as fault current limiters, motors, transformers, flywheel energy storage, power cables, generators, magnetic separators, and magnetic resonance imaging (MRI) scanners. Three of these projects were terminated due to unfavorable economics – mainly due to the cost of the HTS first generation wire. The funding for two projects was discontinued by DOE after the HTS program was aligned with the mission of the Office of Electricity Delivery and Energy Reliability because these projects were not appropriate after review of the projects in light of their potential benefits to modernizing the grid. One project failed due to technical issues related to installation of the cable and could not be repaired without substantial expense. Parts of the cryogenic system for this project were salvaged and used in a subsequent cable project. This project provided the Program with valuable lessons for future cable projects and led to instituting "Readiness Reviews teams" for subsequent projects to reduce risk. The company involved in this project was not awarded any subsequent projects. The remaining projects have met and are expected to meet objectives to develop high

temperature superconducting equipment with reduced energy losses and reduced footprint.

QUESTION FROM CHAIRMAN DINGELL

Superconductivity Research

Q43. Has industry sold superconductivity products commercially that were developed or demonstrated as a function of the DOE program?

A43. The only superconductivity products that have been developed for the DOE program and are being commercially sold are first generation (1G) and second generation (2G) superconducting wire.

QUESTION FROM CHAIRMAN DINGELL

National Nuclear Security Administration

Q44. The Department's FY2009 budget request for the National Nuclear Security Administration (NNSA) includes funding for the Global Nuclear Energy Partnership (GNEP) in five separate nuclear nonproliferation programs.

Please specify levels of budget funding for GNEP-related activities within each of the five NNSA nonproliferation accounts listed below. Please compare these with the level of funding on GNEP-related projects for FY2008 in each of these accounts.

NNSA Program Name	FY2009 request (millions) [thousands]
a. Global Initiatives for Proliferation Prevention	$ 23,844
b. International Regimes and Agreements	35,267
c. Nuclear Safeguards Program	11,286
d. International Nuclear Security	4,584
e. Treaties and Agreements	15,760

A44. The international aspects of GNEP related activities cover an array of initiatives, including potential development of advanced nuclear energy systems, grid appropriate reactors for aspiring nuclear energy states, reliable fuel services, and advanced safeguards. DOE's Office of Nuclear Energy has primary responsibility for evaluation of the domestic reactor and fuel cycle development aspects of GNEP. NNSA has supported development of the international aspects of GNEP, including reliable fuel services concepts and safeguards, but these areas are not exclusive to GNEP. These efforts address Presidential nuclear energy and nonproliferation initiatives and would be supported by NNSA irrespective of GNEP. This is especially the case for international safeguards, which are needed to deal with expected nuclear energy challenges, and not simply those involving GNEP technologies.

Global Initiatives for Proliferation Prevention (GIPP) allocated $576,000 to scientist engagement projects that would directly or indirectly support GNEP goals in FY2008. Projects specific to GNEP fuel cycle technology are on hold pending further discussion with the U.S. agencies.

International Regimes and Agreements, of which Nuclear Safeguards and International Nuclear Security are sub-programs, will expend approximately $1.3M in FY2008 on safeguards approaches for advanced fuel cycle facilities, such as those envisioned under GNEP and for conducting proliferation risk assessments of GNEP technologies. A similar budget level is anticipated for FY2009 to continue these activities.

The Treaties and Agreements program anticipates FY2008 expenditures specific to GNEP of approximately $270,000, primarily for technical analytical support related to a GNEP Nonproliferation Impact Assessment that NNSA is conducting in parallel with preparation of a draft GNEP Programmatic Environmental Impact Statement. A similar level of funding is anticipated for FY2009.

QUESTION FROM CHAIRMAN DINGELL

National Nuclear Security Administration

Q45. Please list the contractors, governments, institutes, universities, or non-governmental organizations and the amount that is budgeted for each organization in FY2009 for each of the five programs listed above.

A45. NNSA's Office of Nonproliferation and International Security conducts an annual request for proposals for portions of its funding. This process is not yet complete for FY2009, so it is not yet possible to estimate budgets for each organization that receive funding from the office. Typically, the great majority of funding is allocated to DOE national laboratories. A smaller amount is awarded as grants or contracts to universities and non-governmental organizations. Previous awardees have included Texas A&M University, Monterey Institute of International Studies, University of Georgia, Naval Postgraduate School, University of Washington, the National Bureau of Asian Research, Carnegie Endowment for International Peace, the Center for Strategic and International Studies, Nautilus Institute, and the Henry L. Stimson Center. Only the Carnegie grant has any relation to GNEP goals.

QUESTION FROM CHAIRMAN DINGELL

National Nuclear Security Administration

Q46. Please explain why the "Treaties and Agreements" account is budgeted to grow fourfold from $3.8 million in FY2008 to $15.7 million in FY2009. Is this to support increased international activities for GNEP?

A46. The substantial increase in funding for "Treaties and Agreements" is related solely to new work scope and activities associated with the Next Generation Safeguards Initiative. Except for a minor amount of funding to support a GNEP Nonproliferation Impact Assessment as noted in response to question 44, it is not anticipated that any of this funding will support international activities specific to GNEP.

QUESTION FROM CHAIRMAN DINGELL

National Nuclear Security Administration

Q47. The Department's FY2009 budget request for the Office of Nuclear Energy includes a new line item for funding for GNEP "Global Partnership Development" totaling $4.5 million. This was not contained in the FY2007 or FY2008 budget requests. Activities cited in the budget justification include engagement of international partners on GNEP.

(a) Please itemize how funds will be spent within this line item. How much is allocated for staff? Contractors? Travel/meals?

(b). How do the GNEP activities in this account differ from the work with international partners within the NNSA budget accounts cited in question 46?

(c). Is there any duplication or overlap between activities funded with this $4.5 million line item, and those funded in NNSA?

A47(a). All Federal staff expenses are paid out of the Office of Nuclear Energy's program direction account and therefore are not covered in this line item. A total of $2,910K is budgeted for contractor staff positions for program technical support. An additional $1,590K is to support GNEP international partnership activities such as the GNEP Working Groups and the GNEP Multi-Lateral Steering Group and various program coordination needs. Contractor travel expenses, including meals, required to support the GNEP program will be funded out of the above contractor allocations.

A47(b). There is no connection between these activities and those funded by NNSA's "Treaties and Agreements" account, and specifically the Next Generation Safeguards Initiative. However, as noted in response to question 44, a minor amount of funding under the "Treaties and Agreements" account has supported studies on proliferation impacts of GNEP.

A47(c). NNSA is not funding activities that would duplicate those taking place under GNEP Global Partnership Development. Where NNSA is involved in international activities associated with the expansion of nuclear energy, it has focused on nonproliferation elements, such as promoting strong nuclear safeguards and security infrastructures.

QUESTION FROM CHAIRMAN DINGELL

National Nuclear Security Administration

Q48. Congress cut funding for the deployment of GNEP technologies in the FY2008 Consolidated Appropriations Act because of concerns over the issues such as technological maturity, costs, and radioactive wastes. Further, deployment is limited under the Energy Policy Act of 2005. DOE is, however, seeking $10.3 million in FY 2009 for an Advanced Fuel Cycle Facility, and $18 million to establish Consolidated Fuel Treatment Center. Is this inconsistent with Congressional direction to refrain from deployment of GNEP technologies and to focus on research?

A48. The planned work for the requested budget in FY 2009 for the Advanced Fuel Cycle Facility (AFCF) and the Consolidated Treatment Center (CFTC) is consistent with Congressional direction to refrain from deployment of GNEP technologies. Design activities are considered to be part of research until the conceptual phase has been completed and the effort moves to engineering design.

Planned budget activities for the AFCF in FY 2009 include limited conceptual design work that supports the GNEP vision. The AFCF will provide advanced research development and demonstration capabilities to support Advanced Fuel Cycle Initiative/Global Nuclear Partnership (AFCI/GNEP) activities and goals.

For CFTC, the budget request contains continuation funding for industry engagement efforts. The industry teams would continue efforts to develop conceptual designs for one or more separations processes that could result in economically viable and technically feasible approaches that would attract private investment. The Government has benefited from the insights gained from these

industry interactions and will utilize this knowledge to inform next steps and improve planning.

QUESTION FROM CHAIRMAN DINGELL

National Nuclear Security Administration

Q49. The DOE's Initiatives for Proliferation Prevention (IPP) program funds institutes in Russia and other counties of the Former Soviet Union.

(a) Please explain whether DOE provides funds for overhead at Russian institutes in connection with IPP projects?

(b) What is the amount of overhead paid for each project? Is it a percentage of project cost?

(c) Has DOE funded any IPP or GNEP projects with the Scientific Research Institute for Measuring Systems (NIIIS)?

(d) Are any new IPP or GNEP projects at the NIIIS under review at this time? Please itemize these projects.

(e) Has DOE funded any IPP or GNEP projects in the Federal Scientific and Industrial Center for Nuclear Machine Building (OKBM)?

(f) Are any new IPP or GNEP projects at OKBM under review at this time? Please itemize these projects.

A49(a). Minimal overhead payments are made to supporting Russian institutes in amounts of 10% or less of the total project cost in Russia.

A49(b). In accordance with GIPP program guidance, overhead rates are limited to no more than 10% of each project's total cost in Russia and are specified in the project contracts.

A49(c). GIPP has funded two GIPP scientist engagement projects at NIIIS. They are focused on radar mapping technology for fossil fuel exploration, not any technologies related to GNEP or nuclear energy.

A49(d). There are no new GIPP projects involving NIIIS under review at this time. GIPP will not fund GNEP-specific projects, but will leave open the possibility of

funding a small number of scientist engagement projects in partnership with Russia that advance our nonproliferation objectives, including advanced fuel cycle efforts and strengthened international safeguards. The program has not considered any such projects with NIIIS.

A49(e). One GIPP project was identified for approval at OKBM. However, it was cancelled in August 2007, before a contract was awarded or funding provided to OKBM. In addition, OKBM was listed as a secondary project participant in a prior proposal regarding development of waste treatment technologies, but the institute did not participate in project implementation and received no funding.

A49(f). There are no new GIPP projects involving OKBM under review at this time. As mentioned in the response to question 49 (d), GIPP will not fund GNEP-specific projects, but will leave open the possibility of funding a small number of scientist engagement projects in partnership with Russia that advance our nonproliferation objectives, including advanced fuel cycle efforts and strengthened international safeguards.

QUESTION FROM CHAIRMAN DINGELL

National Nuclear Security Administration

Q50. DOE e-mailed talking points to House Committees regarding the IPP program stating, "Consistent with U.S. Government policy, the fact of a Russian institute's participation in the Bushehr project does not automatically disqualify it from participating in the Department's scientist redirection program."

(a) Please provide the title and date of the U.S. Government document that contains this policy?

(b) Does this U.S. Government policy also apply to the State Department?

(c) Is there any reason that a Russian institute could not use overhead funds provided by the U.S. Government as an indirect subsidy for its work on the Bushehr reactor in Iran? What financial controls are in place to preclude overhead money from being used to subsidize activities in Iran? Or is money fungible?

(d) Has DOE conducted an audit of the bookkeeping in Russian institutes to ascertain whether its overheads are used to subsidize nuclear projects? If not, how can it conclude that funds are walled off?

(e) Are U.S. companies prohibited under Federal law from selling nuclear technology or enriched uranium to Iran for the Bushehr reactor? What penalties are applied to companies attempting to sell technology or fuel for this reactor project?

A50(a). We are not aware of a document articulating this position. Nor does the Department have a policy of funding projects at Russian institutes doing work on Bushehr. Rather, each project proposal is reviewed to ensure consistency with U.S. nonproliferation policy and regulations, including whether the project involves individuals or organizations subject to U.S. sanctions or whether those individuals or organizations are known to support programs of proliferation concern. The fact of a Russian institute's support to Bushehr has not been a determinative factor in these reviews.

A50(b). It is the policy of both the Departments of Energy and State not to fund projects that involve institutes doing work that contributes to the weapons program of a country of proliferation concern. To ensure consistency with U.S. nonproliferation policy and regulations, the Departments of Energy and State use similar procedures to review scientist engagement project proposals. This includes review by U.S. Government agencies to determine whether project participants are subject to U.S. sanctions or are known to support programs of proliferation concern. Project proposals also are subject to review by relevant U.S. export control committees in cases where a U.S. license or authorization may be required.

To strengthen the current review process, the Departments of Energy and State, in coordination with other U.S. agencies, have agreed to evaluate and update project review procedures and criteria to ensure consistency across U.S. scientist engagement programs.

A50(c). We have no basis for believing, nor do we think it is likely, that GIPP funds are diverted to subsidize work on the Bushehr reactor in Iran. All GIPP contracts with Russian institutes are based on pay for performance and funds are only released after confirmed delivery of an acceptable product. Moreover, the minimal GIPP overhead payments would appear unlikely to make a meaningful contribution to a billion-dollar civilian power project in Iran or any other country. Financial controls for GIPP projects are based on fixed-price contracts consistent with Federal Acquisition Regulations used throughout the U.S. Government.

A50(d). DOE uses the U.S. Defense Contract Audit Agency (DCAA) to conduct financial audits at GIPP project sites in Russia. Additionally, the International Science and Technology Center (ISTC), which administers payments in Russia for GIPP projects, conducts its own on-site project monitoring. These audits verify that GIPP project dollars are spent in accordance with project contract provisions. The ISTC and its operations are also the subject of annual audits performed by a major international financial accounting firm. The GAO report, dated December 2007, found no evidence of misuse of GIPP project overhead funds.

Moreover, GIPP overhead rates of 10% or less are extremely modest compared to typical overhead rates in the United States and abroad. They are stipulated in the project contract and offset some of the Russian cost for incidental charges, such as utilities, and consequently cannot be considered as a source of profit.

A50(e). U.S. companies are prohibited under several federal laws and applicable export control regulations from selling nuclear technology and/or any form of uranium to Iran for the Bushehr reactor. Primary U.S. sanctions-relevant laws that have been enacted and specifically apply to Iran's nuclear program include: the Iran-Libya Sanctions Act of 1996 and its extension in 2001, the Iran Nonproliferation Act of 2000, the Iran Freedom Support Act of 2006, which replaced the ILSA Extension Act of 2001, and section 632 of the Energy Policy Act of 2005 (the Cox-Markey

amendment), which amended section 129 of the Atomic Energy Act of 1954. In addition, section 123 of the Atomic Energy Act of 1954 mandates that a bilateral government-to-government agreement must be in place before the Nuclear Regulatory Commission can authorize a transfer of nuclear material to any foreign partner. The United States does not have such a "123 Agreement" with Iran; thus, export of nuclear material is not permissible. Other export control regulations such as 10 CFR Part 810 and the Department of Commerce's export control regulations either prohibit or severely restrict licensing of nuclear and nuclear-related commodities to Iran. The penalties for violation of the foregoing prohibitions and restrictions range from the loss of the right to export to imprisonment.

QUESTION FROM CHAIRMAN DINGELL

National Nuclear Security Administration

Q51. The November 2007 National Intelligence Estimate (NIE), *Iran: Nuclear Intentions and Capabilities*, judged that Iran had ended its weapons program in 2003, but cautioned that "Iranian entities are continuing to develop a range of technical capabilities that could be applied to producing nuclear weapons, if a decision is made to do so."

(a) Is Iran acquiring any of [its] technical capabilities from Russia in the form of scientific knowledge, engineering exchanges, or training that could be used to produce nuclear weapons?

(b) Given that the NIE concluded that Iran poses a threat of latent proliferation, why is it prudent for the U.S. to fund Russian institutes that are working with Iran on its civilian nuclear program?

A51(a). Russian nuclear cooperation with Iran is focused on construction and fueling of the Bushehr Nuclear Power Plant. The transfer of additional light water reactors has been discussed in the press, including a second unit at Bushehr, though only the first unit has been put to a contract. The United States has advocated, and Russia will implement, added measures that minimize the latent proliferation threat of the Bushehr reactor. This includes, for example, the provision for fuel supply and take-back, which eliminates any need for Iran to pursue its own enrichment and reprocessing capabilities. The United States also has expressed concern to Russia that the Bushehr project could be used by Iran to obtain equipment, materials, and technology of serious proliferation significance under the guise of this civil use of nuclear energy. The Russian Government has responded positively to U.S. concerns and demonstrated a willingness to work with the United States and others to seek a resolution of the issues raised by Iran's nuclear programs. Further information is available in classified channels.

A51(b). U.S. nonproliferation programs with Russia are designed to reduce proliferation dangers through security of nuclear materials, technology and know-how. All such programs apply rigorous review procedures and financial controls to ensure that the work we pay for accomplishes the intended purpose. We have no evidence that U.S. funds or technology have been diverted to Iran by Russian entities that receive our assistance. In the case of the Global Initiatives for Proliferation Prevention (GIPP) program, a thorough review was completed of all Russian institutes and individuals who have participated in GIPP-sponsored scientist engagement projects. This review concluded that no payments were made to Russian individuals known to have any involvement with Iran.

QUESTION FROM CHAIRMAN DINGELL

National Nuclear Security Administration

Q52. Do you agree that even a country in good standing under the Nonproliferation Treaty and subject to International Atomic Energy Agency (IAEA) safeguards is able, under the cover of a civilian nuclear program, to move to the edge of a nuclear weapons capability, and be situated only months away from nuclear weapons production once a decision was made?

A52. Without violating its NPT or IAEA safeguards obligations, a country could only be months away from nuclear weapons production if it had either an enrichment plant for the production of highly enriched uranium or a reprocessing plant for the separation of plutonium contained in spent fuel. This is why the United States has strongly opposed the spread of enrichment and reprocessing capabilities, and continues to oppose enrichment and reprocessing related activities in Iran. The question also presumes that the country in question had mastered the art of nuclear weapons manufacture, which itself requires sophisticated material processing and industrial capability.

QUESTION FROM CHAIRMAN DINGELL

National Nuclear Security Administration

Q53. You testified that (1) the Bushehr reactor will be under IAEA safeguards; (2) Russia has a commercial transaction for this project with Iran; and (3) there is a fuel supply and take back arrangement with Russia.

(a) Do these three elements mean that the activities related to the construction and operations of the Bushehr reactor cannot pose a proliferation risk? Are the safeguards, in your view, infallible, and that the diversion of fresh fuel, spent fuel, or partially burned fuel is impossible?

(b). The Natanz centrifuge facility in Iran is also under IAEA safeguards, yet the U.S. considers this facility to be a proliferation threat. Please explain why IAEA safeguards are sufficient with respect to the Bushehr reactor, but are not sufficient for the Natanz facility.

A53(a). Given the dual nature of nuclear technology, no system of controls can *eliminate* proliferation risk. Instead, international safeguards and the fuel service arrangements in place for the Bushehr project can significantly *reduce* proliferation risks by deterring the diversion of nuclear material through the threat of international detection and by eliminating any rationale Iran may have to pursue indigenous enrichment and reprocessing.

A53(b). The Natanz enrichment plant represents a more direct proliferation threat than the Bushehr reactor because Natanz could be modified to produce material directly usable in weapons, or the gas centrifuge technology could be used at another, clandestine facility to produce such material. The Bushehr fuel would require additional processing to produce material potentially usable in nuclear weapons. In addition, because of the large throughput, material forms, and complex facility architecture, enrichment plants pose a greater challenge to safeguards than do nuclear power reactors. In addition, whereas the IAEA, assisted by Russia, has been able to integrate complete and modern safeguards

arrangements for the Bushehr reactor, safeguards measures for the indigenous Natanz plant were applied only after the design and construction effort, already well underway, were revealed to the IAEA. This is disadvantageous from the standpoint of effective safeguards.

QUESTION FROM REPRESENTATIVE DINGELL

National Nuclear Security Administration

Q54. The Office of Nuclear Energy budget proposes to continue collaborative electrochemical processing (pyroprocessing) R&D with South Korea, Japan, and possibly Canada and Russia, with focus on off-gas treatment methods.

a. How much is DOE proposing to spend in FY2009 on these international collaborative pyroprocessing projects as part of the $34.2 million line item for "Other Separations Processes"? Please provide how much will be spent in the following countries: South Korea; Japan; Canada; Russia.

b. Is pyroprocessing a form of reprocessing technology that can be used to separate plutonium into a form that can be further treated and is usable as a nuclear explosive?

A54(a). The proposed funding for U.S. based electrochemical processing R&D is $1.2 million for FY2009. The budget request also includes $8 million for electrochemical treatment of EBR-II used nuclear fuel at the Fuel Conditioning Facility in Idaho. None of these funds will be given to other countries but will support U.S. national laboratory staff.

A fundamental basis for our collaboration with South Korea, Japan, Canada and Russia is that the exchange be open and benefit all participants. Further, no appropriated funds have gone to the countries in question from the Office of Nuclear Energy. All collaborative funding supports U.S. researchers who are involved in the information exchange.

A54(b). Electrochemical separation of spent fuel, commonly known as "pyroprocessing," involves dissolving spent fuel in molten salt and applying an electrical potential to separate fissionable materials from fission products. Electrochemical processes under development in the United States would not

separate plutonium or any other transuranic element completely from fission products or from each other. In general, electrochemical separations processes such as electrorefining provide incomplete separations, and separated transuranics such as plutonium usually are accompanied by other actinides and certain lanthanide fission products. However, recent U.S. advances in pyroprocessing technology have demonstrated improved methods that greatly reduce the quantity of fission products in the product. Furthermore, experiments in other countries have been reported in open literature stating that plutonium can be separated from molten salts, but that has not been verified in the United States.

QUESTION FROM CHAIRMAN DINGELL

Loan Guarantees

Q55. Under the DOE Loan Guarantee Program, what specific method is DOE planning to use to ensure that the fees collected from borrowers for the credit subsidy is not underestimated and economic risk is not transferred to taxpayers?

A55. Mitigating financial risk to taxpayers is of utmost importance to the Department of Energy in implementing the Title XVII Incentives for Innovative Technologies Loan Guarantee Program. A number of measures are being taken to ensure risks are properly mitigated for each project prior to approval for closing of a loan guarantee. Experienced Loan Guarantee Program Office staff will perform rigorous due diligence and underwriting of loan guarantee applications to ascertain key risks, develop appropriate risk mitigation measures, and ensure that risk is fully reflected in the fees for credit subsidy costs to be collected from applicants.

QUESTION FROM CHAIRMAN DINGELL

Loan Guarantees

Q56. What happens if the economics of a project changes after the loan is granted, and the risk of default goes up? Will DOE require additional credit subsidy payments to mitigate potential affects on the Treasury?

A56. To the extent that the risk of default and expected cost of a loan guarantee increases after the loan guarantee is made, the taxpayer would bear the cost. This is why the Loan Guarantee Program office will carefully evaluate all projects, and work to ensure that the credit subsidy cost fully reflects the risks.

QUESTION FROM CHAIRMAN DINGELL

Loan Guarantees

Q57. What is the threshold for credit worthiness of a borrower? Will a loan applicant with a CCC credit rating from Standard & Poors qualify for a loan under this program?

A57. Each loan guarantee application submitted to the Department of Energy for review will be evaluated on the basis of its own unique risk characteristics and financial and technological profile However; the Secretary must make a determination that there is a reasonable prospect of repayment before making a loan guarantee. Unless other external factors, such as unconditional third party support for example, were offered to the Department and served to enhance the overall credit quality of the project, it is unlikely that there would be a reasonable prospect of repayment by a loan applicant with a ccc credit rating. Moreover, the amount of the credit subsidy cost calculated and required to be paid by such an applicant prior to the issuance of any DOE guarantee would be so substantial that it is unlikely the applicant would wish or could afford to proceed.

QUESTION FROM CHAIRMAN DINGELL

Loan Guarantees

Q58. You testified that the amount of loan guarantees provided for new nuclear plants was only $18.5 billion, and if a new nuclear power plant cost as much as $10 billion, there may only be sufficient funds for 2 plants. To support more projects, you indicated that DOE would guarantee 40 percent of a plant cost. Nuclear industry executives have said that no new plants would be built unless DOE guaranteed 100 percent of the financing. Do you agree with the industry's assessment, or do you believe that they will build new plants with financing for only 40 percent of the plant's cost?

A58. Based on current market conditions and given detailed discussions with the financial community, the willingness and ability of the private financial sector to take on the risk of new nuclear power facilities may in fact be constrained. The Department of Energy is confident that the precedent it establishes by financing the first several such plants will encourage private sector participation in the future, as time and financial strength permit. In the interim, the Department is exploring opportunities to engage Export Credit Agencies, such as those of our strategic partners in Japan and France, as co-lenders or co-guarantors to help promote nuclear and other projects. Further, there may be acceptable credit structures that would allow participation of strong municipal power entities as co-lenders or investors to these projects. These co-lender and co-guarantor opportunities may provide solutions for availability of necessary financing while at the same time reducing the Department's percentage exposure to any one plant and diversifying its risk over a number of projects of varying technologies.

QUESTION FROM CHAIRMAN DINGELL

Other Programs

Q59. Last year, $15 million was appropriated to restart the Distributed Generation/Clean Heat and Power (DG/CHP) program at the Industrial Technologies Program, yet the FY2009 Budget request is only $1.5 million. The explanation offered is that a reduction in the request happened because the Congressional direction came quite late in the budget planning process, yet the program (Industrial Distributed Energy) is supported by a fairly expansive and inclusive budget justification for this budget line. Why did the Department significantly reduce its request for DG/CHP at Energy Efficiency and Renewable Energy, when Congress has specifically directed the strengthening of this program and DOE has admitted more needs to be done?

A59. The EERE budget development process was informed by the Administration's R&D investment criteria, including the costs and potential benefits of all activities, in proposing a balanced portfolio of activities. The requested funding level reflects the relative priority of this activity. Moreover, this activity is closely related to work funded in the Office of Electricity Delivery and Energy Reliability.

QUESTION FROM CHAIRMAN DINGELL

Other Programs

Q60. How will regional clean energy application centers develop reciprocating engines, alternative fuel capabilities, systems integration, efficiency improvements, thermal activated technologies and emissions reductions on a budget of $1.5 million when historic levels are in the $60 million range?

A60. The Energy Independence and Security Act of 2007 renames the Combined Heat and Power Regional Application Centers as the Clean Energy Application Centers. Currently, these Centers do not develop technologies. Each Clean Energy Application Center funds technology transfer and deployment of advanced clean energy technologies through targeted education and outreach, as well as specialized project technical assistance that goes beyond the capabilities of the State Energy Program offices.

QUESTION FROM CHAIRMAN DINGELL

Other Programs

Q61. The Federal Energy Management Budget request is increased, however, it seems much of this funding is focused on internal DOE activities (25 percent of total budget) – that is, improving efficiency of DOE'S own building stock – while reducing Technical Guidance and Assistance to other agencies. Especially in the wake of congressional enactment of a provision requiring Federal Energy Management Program to offer contract training assistance, what is the rationale for reducing interagency support?

A61. DOE has focused a portion of the Federal Energy Management Program's (FEMP) budget on improving the efficiency of DOE's own building stock, consistent with the requirements of the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007 (EISA), which directs all agencies to achieve a significant increase in energy efficiency and renewable energy utilization. FEMP has long served the dual role of leading DOE's own departmental energy management efforts as well as supporting the broader efforts of all Federal agencies in their efforts to achieve these critical goals. DOE's efforts are encompassed in the Transitional Energy Action Management (TEAM) Initiative. Under this initiative, DOE hopes to develop and implement models to transform energy management practices that will be of benefit to other Federal agencies.

QUESTION FROM CHAIRMAN DINGELL

Other Programs

Q62. Additionally, it appears most of the increase over last year is going towards Federal fleet activities. Please explain the rationale for this.

A62. Fiscal Year 2009 is the second year that the Federal Fleet activity is included in the FEMP budget; previously, the activity was funded in the Vehicle Technologies Program. Funding allocated to the Federal Fleet work is used to support efforts in six areas: technical analysis, compliance support, legislative/regulatory analysis, database management and enhancement, outreach, and reporting.

During FY 2009, DOE's efforts will incorporate new requirements on Federal fleets. Sections 141, 142, 246, and 526 of EISA each impact federal fleets. Moreover, the existing Federal fleet requirements and those established in EISA will need to be considered in the context of the definition of "alternative fuel vehicle," as amended by the National Defense Authorization Act of 2008.

For FY 2009, DOE will continue efforts to increase alternative fuel use in vehicle fleets throughout the Federal government. In addition, FEMP proposes to demonstrate opportunities for increased petroleum displacement to increase alternative fuel and its fueling infrastructure, use of plug-in hybrid electric vehicles; and proposes to look specifically at issues related to use of renewable electricity generation, utility integration, time-of-day charging, and potential impacts on Federal facilities.

QUESTION FROM CHAIRMAN DINGELL

Other Programs

Q63. Please explain the rationale for the significant reduction in the hydrogen and Fuel Cell program.

A63. Approximately $31.0 million of DOE's Hydrogen Technology Program is proposed to be moved into the Vehicle Technologies Program in the FY 2009 budget request. The items that were transferred – Education; Safety, Codes and Standards; and Technology Validation – are synergistic with similar activities for alternative fuel and plug-in hybrid vehicles. The Vehicle Technologies Program can better manage these synergies within a technology-neutral portfolio that is aimed at gasoline displacement in our light duty transportation sector.

DOE is not requesting funding for Hydrogen Production and Delivery R&D to allow the Hydrogen Program to focus on the critical path research and development to (1) reduce the cost and improve the durability of fuel cells, and (2) increase the capacity of low-pressure hydrogen storage systems for on-board use. DOE plans to stay on schedule for achieving technology readiness in 2015.

Hydrogen production R&D is funded by other areas of the Department, particularly the Office of Basic Energy Sciences, where research is focused on direct water splitting using solar energy, and microbial hydrogen production processes. Work on coal-to-hydrogen and nuclear-to-hydrogen pathways is also ongoing in Fossil Energy and Nuclear Energy, respectively.

QUESTION FROM CHAIRMAN DINGELL

Other Programs

Q64. With the recent focus at EERE on getting technologies into the market more quickly, why is funding not being allocated on the Market Transformation Program authorized under Section 783 of EPACT 2005?

A64. The Department is focusing on hydrogen and fuel cell research and development to overcome the critical path barriers of fuel cell cost and durability as well as hydrogen storage, as these are higher priorities than market transformation.

The Office of Science and Technology Policy formed – and the Department currently leads – the Hydrogen and Fuel Cell Interagency Task Force to foster collaboration and facilitate Federal adoption of fuel cell technologies for stationary and other applications. The task force has shared lessons-learned and experiences that some agencies have had with fuel cells for back-up power, fork lifts and other applications. Several agencies have expressed interest in installing fuel cells to meet energy efficiency and renewable targets under Executive Order 13423. As fuel cell technology becomes more reliable and affordable, many agencies could choose to become early adopters.

QUESTION FROM REPRESENTATIVE MARKEY

Q1. Secretary Bodman, the Bush Administration's budget request contains a number of provisions that deal with our nation's energy situation and energy efficiency. I want to address a couple of energy efficiency and transmission issues that affect the Northeast broadly.

In designating the Mid-Atlantic National Interest Electric Transmission Corridor (NIETC) as provided for under section 1221 of the Energy Policy Act of 2005, did the Department of Energy take into account the overall net impact of such a designation on greenhouse gas emissions? If so, can you please provide me with that analysis?

A1. The Department did not undertake an analysis of the "overall net impact of [designating the Mid-Atlantic National Interest Electric Transmission Corridor] on greenhouse gas emissions." In issuing the designation, the Department noted that "designations do not direct the construction of any new transmission facilities, they do not decide whether or where any new electric transmission facilities should be built, and they do not approve or disapprove the construction of any particular proposed new facilities." In short, the Department believes that designation of a National Corridor has no environmental impact. A National Corridor is only the designation of a geographic area in which DOE has identified electric congestion or constraint problems.

QUESTION FROM REPRESENTATIVE MARKEY

Q2. In making the Mid-Atlantic NIETC designation, did the Department of Energy take into account existing programs at the state-level designed to increase energy efficiency and reduce energy consumption or promote the increased use of renewable electricity? Did the Department consider how those existing state programs might affect the need for an NIETC designation? If so, can you please provide me with that analysis?

A2. The Department noted that additional efforts to increase energy efficiency in urban areas experiencing transmission congestion could help to reduce congestion, and should be considered as one way to address the problem. The Department also noted that increased reliance on renewable generation may increase the need for transmission capacity, depending on the location of the renewable resources, and that undeveloped renewable resources are often located in remote areas. In designating the Mid-Atlantic National Corridor, the Department saw its role as limited to the identification of a broad and important transmission congestion problem. It did not attempt to assess the merits of alternative solutions to that problem.

QUESTION FROM REPRESENTATIVE MARKEY

Q3. In making the Mid-Atlantic NIETC designation, did the Department of Energy take into account the potential impacts on the Regional Greenhouse Gas Initiative (RGG1), and whether leakage from outside the RGG1 system stemming from the NIETC designation might lead to additional greenhouse gas emissions? If so, can you please provide me with that analysis?

A3. As noted in response to Question 1, the Department believes that designation of a National Corridor has no environmental impact: it neither permits nor precludes the construction of any transmission projects or other ground-disturbing activity. Moreover, the Department has made it clear that in designating a National Corridor, the Department is expressing no opinion about how the identified congestion problems should or will be addressed (see, e.g., 72 FR at 57010, October 5, 2007).

QUESTION FROM REPRESENTATIVE MARKEY

Q4. Inasmuch as the $10M FY08 appropriation for DOE/EE&RE "Water Power Energy R&D" gave DOE considerable discretion in using those funds, please explain how DOE is allocating those FY08 funds among the various water energy technologies. In particular, how does DOE plan to advance R&D on ocean thermal energy conversion (OTEC) technology, which has the potential to become a major global energy source that can help mitigate global warming?

A4. DOE's FY 2008 appropriation provides approximately $9.9 million (post-rescission) for water power energy research and development. In accordance with the appropriation, DOE recently released a competitive funding opportunity announcement (FOA) for research and development related to water power technologies, including ocean thermal energy conversion. DOE will provide up to $7.5 million for this FOA, which was released on April 15 and will be open until June 16, 2008. The balance is being spent on awards for a competitively-solicited CRADA, preparing a report on the environmental impacts of marine and hydrokinetics, identifying and characterizing the new and emerging technologies, and collaborating with the international community on the development of standards.

QUESTION FROM REPRESENTATIVE MARKEY

Q5. During the 1972 to 1995 period, DOE and its predecessors expended over $200M for R&D on OTEC technology, but stopped short of attaining a cost-shared commercial OTEC prototype plant. The program was recently restarted after shutting down more than a decade ago. However, the FY 2009 budget request cuts funding 70% below its FY 2008 request for all "water power" programs. OTEC is just one of many "water power" technologies vying for just $3 million in the President's FY 2009 budget. How will DOE develop its in-house OTEC expertise, and how will it gather, utilize, and promulgate the OTEC research data it previously acquired?

A5. The FY 2008 appropriations language directs DOE to research a number of water power technologies, including wave, current (ocean, tidal and river), conventional hydropower, and ocean thermal energy conversion. Previously collected OTEC data will be one of many sources of information for a new program. All technologies in our water power portfolio, including any OTEC projects established in FY 2008, will be assessed and evaluated to establish priorities for FY 2009 funding allocations following the enactment of the FY 2009 appropriation.

QUESTION FROM REPRESENTATIVE MARKEY

Q6. The Cox-Markey amendment to the Energy Policy Act of 2005 (Section 632 of PL 109-58) states that, "no nuclear materials and equipment or sensitive nuclear technology, including items and assistance authorized by section 57 b. of this Act and regulated under part 810 of title 10, Code of Federal Regulations, and nuclear-related items on the Commerce Control List maintained under part 774 of title 15 of the Code of Federal Regulations, shall be exported or reexported, or transferred or retransferred whether directly or indirectly, and no Federal agency shall issue any license, approval or authorization for the export or reexport, or transfer, or retransfer, whether directly or indirectly, of these items or assistance (as defined in this paragraph) to any country whose government has been identified by the Secretary of State as engaged in state sponsorship of terrorist activities." The Department of Energy's Initiatives for Proliferation Prevention program has been funding two Russian research institutes involved in nuclear-related work for Iran's nuclear program, in potential violation of the Cox-Markey Amendment.

(a) Has the Department of Energy Initiatives for Proliferation Prevention program acted in violation of the Cox-Markey amendment? If so, why? If not, please explain why the program complies with the law.

(b) Did the Department of Energy study, in advance of awarding the contracts in question, whether funding Russian scientists who are involved in nuclear activities in Iran would violate the Cox-Markey amendment? If not, why not? If so, please provide copies of all legal analysis associated with your determinations.

(c) If the contracts in question were awarded prior to the passage of the Cox-Markey amendment, did the Department of Energy conduct a review to ensure that existing contracts were in compliance with the requirements of the Cox -Markey amendment? If so, please provide a copy. If not, why was such a review not conducted?

(d) Does the Department of Energy consult with the State Department to ensure that international DOE programs comply with the requirements of the Cox-Markey amendment and other nonproliferation laws and regulations prior to making award decisions? If not, why not?

(e) If the Department of Energy Initiatives for Proliferation Prevention program has violated the Cox-Markey amendment, what actions are you going to take to punish those responsible and ensure that this assistance is brought to an end immediately?

(f) Please provide a list of all foreign entities that have received funding from the Department under the Initiatives for Proliferation Prevention program and other related nonproliferation programs since the enactment of PL 109-58. Please fully describe the process used to ensure that these recipients were eligible for funding under the Cox-Markey requirements.

(g) If no such process exists, why not? Please also provide a list of all entities who were refused funding on the grounds that providing it would have been in violation of the Cox-Markey language.

A6(a). We believe the two institutes referred to in this question are NIIIS and OKBM, as identified in question 49 from Chairman Dingell. As stated in response to that question, funds were not provided to OKBM. We do not believe that GIPP project funding at NIIIS or any other GIPP project violated the Cox-Markey amendment.

As reported to the Committee in response to previous questions for the record, the Department's National Nuclear Security Administration (NNSA) has undertaken a thorough analysis of all GIPP projects and payments. That analysis concludes that no payments were made to Russian scientists funded by GIPP who are known to be supporting Iran's nuclear programs; nor were GIPP payments made to individuals at Russian institutes subject to U.S. sanctions.

Further, GIPP program guidance requires that all project proposals be vetted through an interagency process to determine whether there are proliferation concerns associated with the projects or the entities or individuals proposed to carry out project work. In addition to NNSA, the Departments of State and

Defense and the Intelligence Community participate in the interagency review process.

GIPP projects that require a U.S. export license or authorization are subject to review by the appropriate U.S. interagency export control committees. Such committees address the risks of "direct or indirect" support to governments identified by the Secretary of State as engaged in state sponsorship of terrorist activities. GIPP projects are structured so that the technology flows to the United States from Russia (*vice* from the United States to Russia). Projects that may involve export controlled technology receive necessary export control review and authorizations before work can proceed.

A6(b). Compliance with the Cox-Markey amendment arises in the context of transfers of nuclear and nuclear dual-use materials, equipment, and technology subject to a U.S. export license or authorization to designated state sponsors of terrorism. The applicability of the Cox-Markey amendment might also arise with respect to entities or individuals subject to U.S. sanctions or that are known to have involvement with entities or individuals in third countries subject to U.S. sanctions. Neither case applies to GIPP. As noted above, GIPP projects that may involve export-controlled items receive export control review and authorization before work can proceed. Further, no GIPP projects have been approved that involve the participation of entities or individuals subject to U.S. sanctions or that are known to have involvement with entities or individuals subject to U.S. sanctions.

A6(c). As noted above, NNSA has undertaken an additional, thorough review of all GIPP projects (past / present). This review, the results of which have been shared with staff of the House Committee on Energy and Commerce, concluded that no Russian scientists funded by GIPP are known to have supported Iran's nuclear programs and no payments were made to individuals at Russian institutes subject to U.S. sanctions. Further, concerns pertinent to the Cox-Markey amendment, i.e., direct or indirect transfers or assistance to governments identified as state sponsors of terrorism, are routinely addressed by U.S. export control committees. As noted, under GIPP program procedures, all GIPP projects that require a U.S. export license or authorization are reviewed by the appropriate U.S. agencies, including the Departments of State and Defense, and the Intelligence Community.

A6(d). Yes. As noted in the answers above, NNSA regularly and routinely consults with the State Department, as well as other partiipants in the interagency process.

A6(e). Based on our analysis, GIPP complies with the Cox-Markey amendment.

A6(f). A list of all foreign entities that have received funding from the Department under the Initiatives for Proliferation Prevention program and other related nonproliferation programs since the enactment of PL 109-58 is attached.

The vetting process for all GIPP project proposals is described in response to question 6(a) above.

A6(g). No projects were rejected on the basis of a potential violation of the Cox-Markey amendment. The GIPP program procedures and controls are designed to ensure that collaborations that involve the transfer of nuclear and nuclear dual-use materials, equipment, or technology are reviewed by the relevant U.S. interagency export control committees.

QUESTION FROM REPRESENTATIVE PALLONE

Q1. Mr. Secretary: Since the first two National Interest Electric Transmission Corridors were made final on October 5, 2007, 8 of the 10 States included in the corridor have filed Petitions for Rehearing on the final order, 24 regional and national organizations have filed Petitions for Rehearing, 15 Attorney Generals have signed an Amici Brief against the Federal Energy Regulatory Commission's (FERC) interpretation of its authority under NIETC designation, and currently, there are 4 lawsuits pending against the final designation of the Mid-Atlantic and Southwest Corridors. Over 2,000 comments were received on the draft corridor designations. One week after the designations were made final, 29 members of Congress sent a letter to you requesting that the Department of Energy comply with the law and conduct an alternative analysis in conjunction with any final NIETC designation.

Is it possible that the Department did not comply with the requirements of section 1221 of the 2005 Energy Policy Act in broadly designating the nation's first two National Interest Electric Transmission Corridors?

A1. The Department's Report and Order of October 5, 2007, designating National Corridors is consistent with the authority granted the Secretary in section 216(a) of the Federal Power Act (as amended by the Energy Policy Act of 2005).

QUESTION FROM REPRESENTATIVE PALLONE

Q2. The Department based the nation's first two National Interest Electric Transmission Corridors on the National Electric Transmission Congestion Study of August 8. 2006. The Mid-Atlantic portion of the eastern designation was based on analyses performed by the Department's contractor, CRA International (CRAI), which found significant congestion in west-to-east power flows in that part of the Mid-Atlantic.

If you refer to CRAI's analysis, you will find that the underlying data on powerflows in the Mid-Atlantic portion of the eastern designation came from PJM Interconnection, the organization responsible for operating the high-voltage transmission grid in that portion of the nation. Specifically, CRAI reports that it used power flow studies developed in the PJM regional transmission expansion planning process (RTEP) for the year 2005.

As far as I can ascertain, this 2005 RTEP power flow data is the primary if not sole source of power flow data that informed the Department's August 8,2006 Congestion Study in the Mid-Atlantic. Is that also your understanding? Please get back with me on any other sources of power flow data, aside from CRAI, that informed the Department's 2006 National Electric Transmission Congestion Study.

A2. Appendix I to the *National Electric Transmission Congestion Study 2006* lists all of the documents and data reviewed for the study's analysis of the Eastern Interconnection. A total of 65 sources are cited, and PJM's RTEP for 2005 (Item #39 in Appendix I) was one of them. The analysis also used historical real-time and day-ahead constraint data from PJM and NYISO (and also from MISO and ISO-NE) – see item #40 in Appendix I.

QUESTION FROM REPRESENTATIVE PALLONE

Q3. Have you and the Department followed the results of PJM's new capacity market based on periodic capacity auctions under PJM's new capacity construct? Has CRAI been updating the Department on the power flows that result from this new capacity market that replaced the unjust and unreasonable capacity construct that informed the CRAI's analyses for the Department and the Department's 2006 Congestion Study?

A3. PJM's capacity market has been designed in part to reduce transmission congestion in the PJM footprint, and we would expect it to have some effects. DOE will examine and consider whatever changes have occurred since 2006 in its 2009 Congestion Study.

QUESTION FROM REPRESENTATIVE PALLONE

Q4. The most recent RPM capacity auction resulted in sufficient bids of capacity into the eastern Mid-Atlantic as to completely eliminate material prices differences between western and eastern PJM (with the exception of a small, historically electrically isolated section of the Delmarva Peninsula). Electrically, that means that the congestion produced by an unjust and unreasonable market structure, on which you based the Mid-Atlantic portion of the eastern corridor designation, no longer exists. How does this affect the designation of 8 Mid-Atlantic states as a National Interest Electric Transmission Corridor?

A4. DOE will examine and consider whatever changes have occurred since 2006 in its 2009 Congestion Study. In its Report and Order of October 5, 2007, the Department noted that it retained the right to rescind, renew, or extend a designation after notice and opportunity for comment.

QUESTION FROM REPRESENTATIVE PALLONE

Q5. Lastly, Mr. Secretary, if the recent capacity market history in PJM as I have summarized it in my questions is accurate and according to PJM's own RPM auction there no longer is a congestion basis for the Mid-Atlantic corridor designation, are you prepared to revisit that designation and, if in fact it is no longer warranted under the statute, withdraw it? If not, why not?

A5. As discussed in responding to the preceding question, in DOE's 2009 Congestion Study, the Department will examine and consider whatever congestion-related changes have occurred in the Mid-Atlantic area since 2006. In its Report and Order of October 5, 2007, the Department noted that it retained the right to rescind, renew, or extend a designation after notice and opportunity for comment.

QUESTION FROM REPRESENTATIVE RUSH

Q1. Studies conducted in Delaware, New Hampshire, Vermont, and Iowa among others, all concluded that the Weatherization Program currently produces substantial energy savings for the country and reduces our demand on foreign oil by up to 18 million barrels a year, creates a 25% reduction in primary heating fuel, and saves an annual average of about $400 per home.

The Dept. of Energy has failed to produce the National Evaluation agreed to by the Office of Management and Budget (OMB) and the states, even though funding has been allocated for this purpose, so how can we be sure that the metrics to justify eliminating this program are accurate and when can we expect for this evaluation to be presented?

A1. The last national comprehensive evaluation of the Weatherization program was in 1992-1993 and utilized 1989 data. In the interim, Oak Ridge National Laboratory has conducted several metaevaluations which estimate program results using state-level evaluation studies. Oak Ridge also calculated the energy savings of the Weatherization program grants at a benefit/cost ratio of 1.53 to 1. This ratio is based on past evaluation efforts and Energy Information Administration projected energy prices.

A new strategic management evaluation is being developed. Work proceeded on the evaluation, including establishment of an experts panel to develop a methodology, development of that methodology, development of the request for proposals (RFP), a peer review of the RFP, a formal solicitation for proposals, and evaluations of the proposals. A winner was identified in August of 2007, but the Department decided to stop action on the evaluation until a more fundamental examination of program delivery could be undertaken. DOE is investigating whether there are methods of better serving the low-income community's energy needs so as to potentially produce results comparable to the R&D programs.

Once DOE has developed a set of viable models for improving the efficiency and effectiveness of programs serving this community, DOE will conduct a thorough evaluation in parallel with a comprehensive study of the traditional Weatherization Program to determine the best course of action for meeting the nation's energy needs and challenges. DOE believes that it is necessary to conduct these programs in parallel because the more fundamental programmatic evaluation is likely to inform the nature and structure of the traditional evaluation. Attempting to conduct them simultaneously could waste time and resources.

QUESTION FROM REPRESENTATIVE RUSH

Q2. If a nation's budget is considered a moral document about what the priorities for the country are, what does the President's budget, which seeks to eliminate or cut funding directed towards low-income energy assistance programs say about this Administration's priorities, especially considering how hard it fought to make sure that the tax breaks going to the major oil companies was left intact during the last energy bill discussions?

A2. The Weatherization program is not completely aligned with DOE's core mission. Weatherization Assistance is an important goal, but is an anomaly because it addresses social welfare goals in addition to energy efficiency improvement. Prudent portfolio management requires DOE to focus available resources on its core areas of expertise and mission consistent with the DOE Strategic Plan.

Based on a study by the National Research Council, investments in some energy efficiency applied R&D between 1978 and 2000 resulted in returns 20 times greater than the cost of the investment.[9] In contrast, the energy savings from Weatherization Assistance Program grants result in a significantly lower benefit/cost ratio of 1.53 to 1. This ratio was calculated by Oak Ridge National Laboratory based on past evaluation efforts and Energy Information Administration projected energy prices.[10]

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[9] "Energy Research at DOE: Was It Worth It?" National Research Council (http://www.nap.edu/openbook.php?isbn=0309074487). This study, published in 2001, analyzed investments in 17 energy efficiency R&D activities between 1978 and 2000 costing a total of $1.566 billion (p.23) and representing about one fifth of energy efficiency program spending in that time frame. The NRC found overall net economic returns of about $30 billion (p.29). This is a public return 20 times greater than the cost of the investment within the time period considered. In addition, the NRC calculated net environmental benefits worth $3-20 billion for these activities. As is the case with many diverse R&D investment portfolios, most of the benefits were generated by few – in this case, three of 17 – activities assessed (p. 29).

[10] The ORNL analysis can be found on the web (http://weatherization.ornl.gov/pdf/CON-493FINAL10-10-05.pdf). The benefit/cost ratio in the study is 1.34 – the 1.53 ratio cited above uses the same calculations with energy cost data updated for 2006.

QUESTION FROM REPRESENTATIVE RUSH

Q3. Mr. Secretary, I would like further clarification on why Members of the Illinois delegation, as well as other Members of Congress, were misled into believing that the FutureGen project was on track if people in your department were already making plans to restructure the project?

A3. In November 2007, I signed a letter indicating that FutureGen was moving ahead as planned earnestly believing that an acceptable arrangement on FutureGen could be worked out with the FutureGen Alliance. Unfortunately, that did not happen. Once it became clear that an agreement could not be reached with the Alliance, the Department made the difficult decision to restructure FutureGen now rather than have the program suffer worse problems later.

QUESTION FROM REPRESENTATIVE RUSH

Q4. DOE has asserted it wants to control costs, yet your new proposal is advertised as having the same or higher costs. The DOE fact sheet suggests $1.3B in appropriations will be required by the new plan. When asked by a reporter asked what guarantees your department can provide that costs of the alternative plan won't skyrocket, no guarantees could be offered. What is the real motivation for attempting to terminate FutureGen?

A4. The restructured FutureGen approach has been developed to better serve the interests of the public by providing the opportunity for wider and earlier commercialization of carbon capture and storage (CCS) technology as compared to the original FutureGen concept announced in 2003. The Administration has pledged up to $1.3B in support of the FutureGen program, but the DOE investment would be spread among more than one project and capped to help support the CCS portion of each demonstration. This would provide a ceiling on the Federal contributions, limiting taxpayers' financial exposure.

QUESTION FROM REPRESENTATIVE RUSH

Q5. It is widely recognized that there is great urgency in proving the viability of near-zero emission coal-fueled power including carbon capture and sequestration. Your alternative plan throws away nearly five years of excellent work and builds in an extra three years of delay (based on your official announcement). How do you justify such delays?

A5. Under the original FutureGen, the initial experimental phase would have been followed by commercial demonstrations. The Department believes that a number of commercial power producers are ready to move forward with projects that can demonstrate FutureGen's objectives in roughly the same time frame, provided they receive partial support from the Government. The restructured FutureGen project contemplates multiple commercial demonstrations of integrated gasification combined cycle or other advanced technology plants with carbon capture and storage, with operations commencing in the 2015-2016 timeframe. In contrast, although the original FutureGen approach anticipated demonstration operations in 2012, it did not expect commercial operations to occur until around the 2020 timeframe. So, while the restructured program does start at a later point in time, it is expected to effect an earlier widespread commercial deployment.

QUESTION FROM REPRESENTATIVE RUSH

Q6. The handling of FutureGen by DOE has exposed the agency as an entity that does not negotiate in good faith. Why would any utility or community compete for the new, restructured version of "FutureGen" when you have proven you will not hesitate to change the rules of the game at the very last minute, wasting years of effort by many?

A6. The agreement with the Alliance contained clear decision points that envisioned re-assessments as the project progressed. The Department must make sound decisions when determining how to invest taxpayers' funds. The public's interests were not best served by the continuation of the original FutureGen agreement with the Government shouldering up to 74% of the project cost and with estimated cost increasing to $1.8 billion (in escalated dollars) and likely to go higher. FutureGen is being restructured as a commercial demonstration to better serve the interests of both the public and industry. Industry's willingness to partner on the project continues to be strong as the Department has received responses from approximately fifty parties to the Request for Information issued in January on the restructured approach. The Department believes that the restructured FutureGen will have the industry support the project deserves.

QUESTION FROM REPRESENTATIVE RUSH

Q7. The President said in his State or the Union address that he looks for international cooperation in Carbon Capture Sequestration solutions. As currently configured, the FutureGen project involves 13 industrial participants doing business on 6 continents. In total they are contributing approximately $400M. Could you describe to me how you could come anywhere close to the scope of this project with the alternative restructured FutureGen?

A7. The Department believes that both international corporations and domestic partners understand that the restructured approach could lead to early deployment of carbon capture and geologic sequestration with demonstration at commercial power plants. As a result of approximately fifty comments submitted under DOE's Request for Information (RFI) issued in January, DOE expects that there could be significant teaming by multi-national corporations in the applications to be submitted under the restructured FutureGen. Multiple commercial demonstrations in the U.S., instead of a single research and development project as envisioned under the original FutureGen approach, may encourage more rapid deployment of the technology worldwide.

QUESTION FROM REPRESENTATIVE BUTTERFIELD

Q1. Despite across the board agreement by the President and Congress that the country must invest more in renewable technologies, why has the Administration decided to reduce R&D dollars for solar, wind and water power?

A1. The Administration continues to recognize the importance of renewable technologies, including solar, wind, and water power. The FY 2009 funding request for the Wind Energy Program does not propose a decrease. The FY 2009 request is approximately $52.5 million, about $3 million above the FY 2008 appropriation of approximately $49.5 million.

The proposed decrease in Concentrating Solar Power research and development reflects a down-selection of industry projects in trough manufacturing and thermal storage technologies, allowing only the most promising contracts representing the best use of the taxpayer dollar to move into the second phase of funding proposed in FY 2009.

The proposed decrease in the Solar Heating and Cooling Systems within the Solar Energy Program is the result of a transfer of this activity to the Building Technologies Program following the completion of its hybrid solar lighting and solar water heating for nonfreezing locations activities in FY 2008. Within the Building Technologies Program, funding for this activity is proposed to increase from $2.0 million in FY 2008 to $3.7 million in FY 2009. The Solar Decathlon activity is also transferred to the Building Technologies Program, where it is more aligned with the mission of Zero Energy Buildings within the program. Transferring the Solar Decathlon allows more funding to be dedicated to the Solar

America Cities, Solar America Showcases, and Government Solar Installation Program activities within the Solar Program budget.

The FY 2009 request for the Water Power Program of $3 million will provide funding to continue activities of this new program.

QUESTION FROM REPRESENTATIVE BUTTERFIELD

Q2. What was the rationale, in detail, for eliminating and/or reducing funding for programs that have already seen significant reductions, specifically the Weatherization Assistance Program and LIHEAP? These programs support low-income households and it seems that the "least of us" are the ones paying the ultimate price for the Administration's inability to balance a budget.

A2. The program is not completely aligned with DOE's core mission. Weatherization Assistance is an important goal, but is an anomaly because it addresses social welfare goals in addition to energy efficiency improvement. Prudent portfolio management requires DOE to focus available resources on its core areas of expertise and mission consistent with the DOE Strategic Plan.

Based on a study by the National Research Council, investments in some energy efficiency applied R&D between 1978 and 2000 resulted in returns 20 times greater than the cost of the investment.[11] In contrast, the energy savings from Weatherization Assistance Program grants result in a significantly lower benefit/cost ratio of 1.53 to 1. This ratio was calculated by Oak Ridge National Laboratory based on past evaluation efforts and Energy Information Administration projected energy prices.[12]

[11] "Energy Research at DOE: Was It Worth It?" National Research Council (http://www.nap.edu/openbook.php?isbn=0309074487). This study, published in 2001, analyzed investments in 17 energy efficiency R&D activities between 1978 and 2000 costing a total of $1.566 billion (p.23) and representing about one fifth of energy efficiency program spending in that time frame. The NRC found overall net economic returns of about $30 billion (p.29). This is a public return 20 times greater than the cost of the investment within the time period considered. In addition, the NRC calculated net environmental benefits worth $3-20 billion for these activities. As is the case with many diverse R&D investment portfolios, most of the benefits were generated by few – in this case, three of 17 – activities assessed (p. 29).

[12] The ORNL analysis can be found on the web (http://weatherization.ornl.gov/pdf/CON-493FINAL10-10-05.pdf). The benefit/cost ratio in the study is 1.34 – the 1.53 ratio cited above uses the same calculations with energy cost data updated for 2006.

QUESTION FROM REPRESENTATIVE MELANCON

Q1. A senior Department Energy official recently characterized the Department's stance on candidate feedstocks for ethanol production as follows:

"Of all the ways of making cellulosic ethanol, corn byproducts like husks show the greatest potential for a quick breakthrough, along with woody biomass from pulp and paper factories."

I am concerned that such a statement reveals a policy preference by the Department regarding the sources of cellulose for ethanol production upon which the Department's program will focus. My concern was heightened by the Department's January 29th press release naming the initial grant awards for cellulosic ethanol demonstration plants. These sources do not appear to include the very significant cellulosic ethanol potential of subtropical crops such as sugar cane waste and fiber cane.

Do these examples represent a Department stance in opposition to cellulosic technology utilizing sugar and fiber cane? If not, what measures is the Department taking to promote cellulosic ethanol technology that utilizes sugar and/or fiber cane?

A1. The Department agrees that the national effort to develop a biofuels economy must involve all types of biomass feedstocks throughout the United States. There is no policy preference for certain biomass feedstocks. DOE views the effort to develop a diverse, national feedstock resource base as a critical part of meeting the Nation's biofuels targets. The Department's network of Regional Biomass Energy Feedstock Partnerships (including the U.S. Departments of Agriculture and Energy partnership with the Sun Grant Initiative universities) is working to identify the biomass feedstock resources available in each region of the country to meet the Renewable Fuels Standard in the Energy Independent and Security Act of 2007.

On February 26, 2008, the Department announced an investment of up to $33.8 million in four projects focused on developing improved enzyme systems to convert cellulosic material into sugars suitable for biofuels production. Successful completion of this research and development effort will enable more efficient cellulosic ethanol process economics from a wide variety of feedstocks including sugar cane waste.

QUESTION FROM REPRESENTATIVE FERGUSON

Q1. Part of DOE's mission is to promote America's energy security through reliable, clean, and affordable energy. Therefore, what will be the impact of the nation's electric generation, transmission and delivery system that would result from a requirement to retrofit closed-cycle cooling at all existing electric generating facilities that do to currently have closed-cycle cooling? Please include in your answer:

a. The impacts on the existing generating capacity output and the subsequent reductions in electricity reliability, as measured in terms of lower reserve margins and the potential for and consequences of increased service interruptions and premature closures; and

b. The continued viability of existing electric generation facilities as a result of a requirement to install closed-cycle cooling.

A1. At the request of the Ranking Republican on the Senate Subcommittee on Energy and Water Appropriations, the Office of Electricity Delivery and Energy Reliability is undertaking a study of the electricity reliability impacts that could occur if cooling towers were mandated for existing generation facilities as "Best Technology Available" under the Clean Water Act. This study, being prepared in conjunction with the National Energy Technology Laboratory in Morgantown, West Virginia, is scheduled to be completed by the end of June. Pursuant to your question, a copy of this study will be provided to this committee, as well.

QUESTION FROM REPRESENTATIVE ROGERS

The proposed funding amount for transportation fuel cell systems in Hydrogen Technology is 16 percent lower than in FY2008. At the same time, the vehicle technology funding request is up 3.8 percent. The increase in near- to mid-term research and development will help us reach the short-term goals outlined in the Energy Security and Independence Act signed into law last year. However, cutting long-term research will make it difficult to reach the long-term goals of true energy independence.

Q1(a). What is DOE's reasoning for cutting long-term technology research and is the funding requested for vehicle technology sufficient to reach the goals outlined in the new energy bill?

A1(a). DOE proposes to move three Hydrogen Technology activities to the Vehicle Technologies Program in the FY 2009 budget request. Without accounting for the proposed movement, the Vehicle Technologies Program FY 2009 request is approximately 7.9 percent greater than the corresponding FY 2008 request. This increase is largely focused on longer range research that could benefit both fuel cell and combustion hybrids, namely batteries and related technologies that would enable plug-in capability.

The Department's request continues to maintain a balance between what is needed to sustain both mid-term and long-term highway transportation research.

Q1(b). What role is there for component suppliers, whose investment accounts for 40 percent of the total private automotive R&D expenditures, in DOE's transportation research spending?

A1(b). Suppliers play a vital role in the Department's vehicle R&D programs. Currently, the majority of industry R&D funded by the Vehicles Technology Program is for supplier based R&D awarded through competitive solicitations. Additionally,

beginning in FY 2008 the program is supporting a collaborative effort with the state of Michigan and the supplier community to increase emphasis in the area. The new collaboration, the United States Automotive Partnership for Advancing Research and Technologies (USAutoPARTs), is aimed at broadening participation and the research agenda of the supplier community as well as fostering better communication between these manufacturers and DOE's vehicle program.

QUESTION FROM REPRESENTATIVE ROGERS

The recently enacted Energy Independence and Security Act of 2007 authorizes direct loans (Section 136) for an Advanced Technology Vehicles Manufacturing Incentive Program.

Q2(a). When does DOE plan to issue a solicitation for these loans?

A2(a). Under the Federal Credit Reform Act of 1990 additional authority must be enacted in an appropriations act before DOE would have the necessary legal authority to implement this program. Funding was not included in the FY 2008 appropriation and a request for funding was not included in the Department's FY 2009 request. Following deliberations and evaluations, the Administration will determine whether to request funding for this program during the next budget preparation cycle.

Q2(b). What is DOE's timetable for implementing this program?

A2(b). As noted in the answer to Q2(a) DOE has not yet determined whether or not it will request funds to implement this program (EISA section 136.). On April 11, 2008, the Department submitted a FY 2008 Innovative Loan Guarantee Program implementation plan for the EPACT 2005 Title XVII loan guarantee program, as required by the Consolidated Appropriations Act of 2008. The implementation plan outlines the Department's plans to issue loan guarantee solicitations in two stages this summer for up to $38.5 billion for projects that employ advanced technologies that avoid, reduce, or sequester air pollutants or greenhouse gas emissions, including up to $10 billion for Energy Efficiency, Renewable Energy and Electricity Transmission projects. While the solicitation does not specify discrete amounts for particular technologies, projects dealing with alternative

vehicle technologies such as advanced batteries, hydrogen fuel cells, and plug-in hybrids would be eligible to respond to the solicitation.

Q2(c). What further steps, if any, will Congress have to take in order to make this program operational?

A2(c). Following deliberations and evaluations, the Administration will determine whether to request funding for this program during the next budget preparation cycle.

Q2(d). What is DOE's estimating procedure for determining the subsidy costs of this program and would this money need to be appropriated by Congress?

A2(d). DOE would have to develop a credit subsidy model which would have to be reviewed and approved by OMB. Under EISA Section 136, the Advanced Technology Vehicles Manufacturing Incentive Program would have to have its subsidy cost appropriated by Congress.

Q2(e). How soon could the DOE offer direct loans under this program?

A2(e). A timeline for action cannot be established until DOE completes its deliberations on this activity.

QUESTION FROM REPRESENTATIVE ROGERS

The proposed funding amount for transportation fuel cell systems in Hydrogen Technology is 16 percent lower than in FY 2008. At the same time, the vehicle technology funding request is up 3.8 percent. The increase in near- to mid-term research and development will help us reach the short-term goals outlined in the Energy Security and Independence Act signed in law last year. However, cutting long-term research will make it difficult to reach the long-term goals of true energy independence.

Congress also recently authorized the loan guarantee provisions of the Energy Policy Act of 2005 (Title XVII).

Q3a. When does DOE plan to issue a solicitation for these programs?

A3a. On April 11, 2008, the Department of Energy submitted an "FY 2008 Implementation Plan." The Consolidated Appropriations Act, 2008 requires that DOE wait for a period of 45 days from submission of the Implementation Plan to Congress prior to issuing a new loan guarantee solicitation plan. However, the Implementation Plan outlines the Department's plans to issue loan guarantee solicitations in two stages this summer for up to $38.5 billion for projects that employ advanced technologies that avoid, reduce, or sequester emissions of air pollutants or greenhouse gases. These planned solicitations will mark the second and third rounds of solicitations for the Department's Loan Guarantee Program, which encourages the development of new energy technologies and is an important step in paving the way for clean energy projects.

Q3b. Does DOE plan to issue a loan guarantee solicitation for the domestic production of fuel efficient advanced technology vehicles?

A3b. On April 11, 2008, The Department of Energy submitted an "FY 2008 Implementation Plan." The Consolidated Appropriations Act, 2008 requires that DOE wait for a period of 45 days from submission of the Implementation Plan to Congress prior to issuing a new loan guarantee solicitation plan. However, the Implementation Plan outlines the Department's plans to issue loan guarantee solicitations in two stages this summer for up to $38.5 billion for projects that employ advanced technologies that avoid, reduce or sequester emissions of air pollutants or greenhouse gases, including $10.0 billion for Energy Efficiency and Renewable Energy projects. While not specifying discrete amounts for particular technologies, the Loan Guarantee Program Office intends to include alternative vehicle technologies within the suite of EERE eligible technologies. Specific examples might include advanced battery, plug in hybrid, hydrogen fuel cell, or other advanced vehicle manufacturing technologies.

Q3c. Will domestic automakers be eligible for a DOE advanced technology vehicle production loan guarantee program?

A3c. After a thorough technical and financial review of 143 pre-applicants that responded to the Department's 2006 Loan Guarantee Program Solicitation, a domestic automaker, Tesla Motors, was chosen along with fifteen other finalists to submit a full application. Tesla has recently submitted a substantial portion of the application materials required under DOE regulations and DOE is in the initial stages of a full financial, technical, and legal due diligence process to assess the

proposed project. Consistent with practice to date and the final program regulation, in future solicitations, all U.S. companies (as well as foreign companies), including domestic automakers, will be eligible for a Department of Energy loan guarantee and will be evaluated based on the requirements, as outlined in the Energy Policy Act of 2005, the Department of Energy Loan Guarantee Program Final Regulations, and the details of issued solicitations.

Q3d. Will DOE loan guarantees be available through the Federal Financing Bank (FFB)?

A3d. According to the Department of Energy's regulations at 10 CFR 609, "Loan Guarantees for Projects that Employ Innovative Technologies; Final Rule," Section 609.10(d)(4)(i) provides: "Where DOE guarantees 100 percent of the Guaranteed Obligation, the loan shall be funded by the Federal Financing Bank." However, the Department will evaluate, among other things, the requested guarantee percentage in reviewing and making award determinations. As stated in the final rule 10 CFR 609, "Greater weight will be given to applications that rely upon a smaller guarantee percentage, all else being equal," Section 609.7.

Q3e. How and when does DOE intend to estimate default risk costs associated with FFB and other loan guarantee programs?

A3e. Once a loan guarantee application is accepted as substantially complete, the Department of Energy begins a full due diligence process, including extensive financial, legal, and technical reviews. This analysis is an iterative process to define the default risk associated with the project and ultimately provide the project sponsor's with the credit subsidy cost, reflective of the default risk, terms and conditions, debt, the loan guarantee agreement and other relevant factors.

The full credit subsidy fee is paid by the project sponsor prior to or at the time of closing of the loan guarantee agreement.

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QUESTION FROM REPRESENTATIVE BURGESS

Q1. Department of Energy proposes $344 million towards expanding the Strategic Petroleum Reserve (SPR) in fiscal 2009. Has DOE conducted any recent research into the quality and usefulness of the products that are currently stored in the SPR? If so, please provide the Energy and Commerce Committee with a copy of the most recent report and a DOE summary of the findings. If a study has not been conducted, please provide the Energy and Commerce Committee with the Department's best estimation of what percentage of the SPR is actual high quality petroleum, what percentage may be useful but not high quality, what percentage may be useless, and what percentage of the SPR is low quality and is known to be void of useful energy properties.

A1. Oil initially purchased for the SPR was chosen to represent the crudes being processed by U.S. refineries. As a result, the SPR currently contains two grades of "high quality" crude oils. Forty percent of the SPR inventory is low sulfur (sweet) crude having a sulfur content of no greater than 0.5 percent. Sixty percent of the SPR inventory is medium sulfur (sour) crude with a sulfur content of approximately 1.4 percent. Both crude types are classified as "light crudes" having an American Petroleum Institute (API) gravity that ranges from 30 to 37 degrees.

Light crudes were selected because of they offer several significant advantages in the event of a crude import disruption. First, light low sulfur crudes can be refined or processed by all refineries, from the simplest to the most complex. Light crudes are the easiest crudes to refine, requiring only the basic refinery processing units. They do not require all the desulphurization equipment and vacuum distillation, cat cracking, or coking units to handle the heavy bottoms. Second, most refiners can use light low sulfur crudes to increase or maximize their refinery output of light distillates. Low sulfur crudes can be used by many refineries to increase

refinery utilizations beyond normal levels. This is especially important when refined product exports have also been disrupted – creating both crude and product shortages on a world-wide basis. And third, in a disruption where there is a significant shortage of crude supplies, light crudes will produce the maximum volumes of gasoline and naphtha. A barrel of light crude will yield more gasoline and naphtha in refining than would a barrel of medium or heavy crude. This is important to the U.S. whose transportation system and economy is so highly dependent on gasoline.

In 2005, the SPR conducted a comprehensive Crude Compatibility Study of the current SPR crude oil streams. In general, the crudes currently stored in the SPR are compatible and desirable for the majority of the U.S. refineries and are well suited to mitigate most supply disruptions. There are, however, eleven refineries which have been specifically configured for processing heavy crude largely from Latin America that would be impacted in the event of a disruption of foreign crude supplies. However, they would still be able to process a significant quantity of SPR crude and maintain their full production of gasoline.

To address the potential compatibility issues of the eleven heavy crude refiners and provide full protection for the Nation for all disruption scenarios, the SPR has stated that in the planned expansion of the SPR to 1.0 billion barrels, it will be giving consideration to the storage of a quantity of lower gravity crude to address these refiner needs.

QUESTION FROM REPRESENTATIVE BURGESS

Q2. In the past we have heard testimony before the Energy and Commerce Committee regarding the effectiveness of security systems currently employed by the cyber-security program. Please provide this Committee with an update on security improvements to the cyber-security program over fiscal 2008 and the goals of the funding authorized for security improvements to the cyber-security program in fiscal 2009.

A2. The cyber security program continues to make progress in implementing policy, tools, training, and awareness to maintain its capability to protect the Department's information and information systems, even in the face of more pervasive and sophisticated cyber security threats and attacks. In fiscal year 2008, DOE is continuing implementation of projects designed to further enhance its cyber security posture. These efforts include: enterprise licensing for additional network scanning and configuration management tools that can be leveraged for deployment across the enterprise; improving the capability and increasing the coverage of the Cooperative Protection Program (CPP), a network of sophisticated sensors deployed at critical points in the network infrastructure to collect key data about network traffic that contributes to an enterprise view of potential and ongoing attacks; continued acquisition, and deployment of encryption technologies throughout the Department to protect sensitive information, including Personally Identifiable Information (PII); identification, acquisition, and customization of security management tools to assist in the automation of the cyber security Certification and Accreditation (C&A) and security metrics reporting processes under the Federal Information Security Management Act (FISMA), which ensures operational systems contain the necessary controls to maintain confidentiality, integrity, and availability; and the deployment of cyber security awareness and training content on an enterprise

scale. Additionally, we are developing and implementing an enterprise plan to reduce the number of Internet connections by implementing a new Office of Management and Budget (OMB) mandate called the Trusted Internet Connection (TIC), which is part of the National Cybersecurity Initiative. These major efforts augment ongoing cyber security activities that are fundamental to a Department-wide program.

The nature of the worldwide cyber security threat as it continues to evolve means that DOE will have to continue to bolster its defenses, investing in new tools and technologies to protect its systems and data. As a result of the important and very sensitive mission of the Department, it is a high profile target, and experiences cyber attacks millions of times every day. The cyber security threat against our DOE information technology systems continually evolves, becoming ever more sophisticated and aggressive. The technical solutions used to protect systems today will be inadequate tomorrow. Therefore, we must continually update our protections and adapt to the changing threats. The funding requested for fiscal year 2009 is intended to continue the many efforts listed above, most of which are ongoing activities and processes that are key elements of the Department's cyber security program. These funds will permit necessary improvements to the program, taking advantage of the very latest technological advances to keep up with the advances make by our adversaries.