

JARRETT AND SPROAT NOMINATIONS

HEARING
BEFORE THE
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
ONE HUNDRED NINTH CONGRESS
FIRST SESSION

TO

CONSIDER THE NOMINATION OF JEFFREY D. JARRETT, TO BE ASSISTANT SECRETARY FOR FOSSIL ENERGY, DEPARTMENT OF ENERGY, AND EDWARD F. SPROAT III, TO BE DIRECTOR, OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT, DEPARTMENT OF ENERGY

NOVEMBER 10, 2005



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CONTENTS

STATEMENTS

	Page
Domenici, Hon. Pete V., U.S. Senator from New Mexico	1
Jarrett, Jeffrey D. Jarrett, Nominee to be Assistant Secretary for Fossil Energy, Department of Energy	3
Sproat, Edward F., III, Nominee to be Director, Office of Civilian Radioactive Waste Management, Department of Energy	6

APPENDIX

Responses to additional questions	15
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JARRETT AND SPROAT NOMINATIONS

THURSDAY, NOVEMBER 10, 2005

U.S. SENATE,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 10:37 a.m. in room SD-366, Dirksen Senate Office Building, Hon. Pete V. Domenici, chairman, presiding.

OPENING STATEMENT OF HON. PETE V. DOMENICI, U.S. SENATOR FROM NEW MEXICO

The CHAIRMAN. The hearing will please come to order.

We're here this morning to consider the following nominations for positions with the Department of Energy: Jeffrey Jarrett, to be Assistant Secretary for Fossil Energy, and Edward Sproat III, to be the Director of the Office of Civilian Radioactive Waste Management.

I welcome both of you to the committee. If either of you have members of your family present, if you'd like to introduce them now, you could begin.

Mr. Jarrett, do you have anybody here?

Mr. JARRETT. Yes, I do. I'd like to introduce my wife, Janet Goodwin, and my son, Tyler Jarrett. My oldest daughter, Sarah, was not able to be here, but now would probably be a good time for me to thank both of them, as well as my daughter, for all of the support and encouragement and love that they've shown me not only recently, with this nomination, but ever since.

The CHAIRMAN. Thank you. And thank them.

Mr. Sproat?

Mr. SPROAT. I'd like to introduce my family, Senator. My wife, Heidi Sproat, who likes to refer to herself as a native Californian transplanted by marriage to the East Coast. She's been my best friend and companion through 26 years of marriage and really has done a superb job in holding our family together while I spent my time in South Africa over the past several years. Our three children here today: our oldest, Kristen, who's a third-class midshipman at the U.S. Naval Academy; Eric, who is a junior at Conestoga High School; and Keith, who is a freshman at Malvern Prep School. Obviously, Heidi and I are very proud of all three of them.

The CHAIRMAN. Terrific. Terrific. Thanks to all of you.

Midshipman, I have a grandson in your class, Peter Goretz. No? Okay. You might write that down.

[Laughter.]

The CHAIRMAN. If you want my version, he's a terrific-looking guy.

[Laughter.]

The CHAIRMAN. I'll tell him you are, too.

[Laughter.]

The CHAIRMAN. Okay. I'd also note that Clay Sell is here, Senator Bingaman. Clay, thank you for coming. And I think it's nice for us to know that you have enough support in these candidates that you would take time out of your schedule. I think it's good for them to know that, too.

Now, the committee rules apply to all nominees, and that requires that you be sworn in. Would you both rise and raise your right hands, please?

Do you solemnly swear that the testimony you are about to give to the Senate Committee on Energy and Natural Resources shall be the truth, the whole truth, and nothing but the truth?

Mr. JARRETT. I do.

Mr. SPROAT. I do.

The CHAIRMAN. Please be seated.

Before you begin your statements, I would ask three questions, which we ask of every nominee.

One, would you be available to appear before this committee and other congressional committees to represent departmental positions and respond to issues of concern to the Congress?

Mr. JARRETT. I will.

Mr. SPROAT. I will.

The CHAIRMAN. Are you aware of any personal holdings, investments, or interests that could constitute a conflict, or create the appearance of such a conflict, should you be confirmed and assume the office that you've been nominated to by the President?

Mr. JARRETT. My investments, personal holdings, and other interests have been reviewed both by myself and the appropriate ethics counselors within the Federal Government. I have taken appropriate action to avoid any conflicts of interest. There are no conflicts of interest or appearances thereof, to my knowledge.

Mr. SPROAT. I, also, Senator, my investments, personal holdings, and other interests have been reviewed by both myself and the appropriate ethics counselors within the Federal Government, and I have taken appropriate action to avoid any conflicts of interest. There are no conflicts of interest, or appearances thereof, to my knowledge.

The CHAIRMAN. Are you involved with, or do you have, any assets that you hold in blind trust?

Mr. JARRETT. I do not.

Mr. SPROAT. I do not.

The CHAIRMAN. Now, each of you could make a brief statement. I encourage you to summarize your statements that you have prepared and they will be filed and made a part of the record.

We will start with Mr. Jarrett, and then we'll proceed with you, Mr. Sproat. And, after that, we'll have questions by the Senators, if any.

Please proceed.

TESTIMONY OF JEFFREY D. JARRETT, NOMINEE TO BE ASSISTANT SECRETARY FOR FOSSIL ENERGY, DEPARTMENT OF ENERGY

Mr. JARRETT. Mr. Chairman, Senator Bingaman, and members of the committee, it's a great honor to appear before you today as the President's nominee for the position of Assistant Secretary for Fossil Energy for the Department of Energy.

As you know, I was before this committee in December 2001, when my nomination to my current position as Director of the Office of Surface Mining was pending, and it's a pleasure to be back before you.

President Bush has paid me the highest compliment by nominating me for this position, and I very much appreciate Secretary Bodman recommending me to the President.

I've enjoyed a 30-year career of involvement with energy and related environmental issues as a coal-industry executive and as a State and Federal public-policy decisionmaker. Four years ago, I began my service as the Director of the Office of Surface Mining. These have been some of the most exciting, challenging, and rewarding years of my career. During the past few years, OSM has achieved the highest level of stability it has ever enjoyed, and it has achieved respect with States, industry, and a large segment of the environmental community. I have learned what it takes to work within the administration, the Office of Management and Budget, and Congress to advance important public-policy issues.

I have been very fortunate to have these opportunities which became excellent learning experiences. I learned, firsthand, the need for our government to be effective and responsive to the legitimate needs of citizens and the business community. I learned, firsthand, the need of—for our Government to make wise policy decisions to meet changing world conditions. I learned that decisions by government agencies must be not—must not be made in a vacuum without real-world considerations. I learned the value of early involvement of all the stakeholders in the decisionmaking process. And I have learned that our country needs, and expects, public servants who will work with integrity and in the public interest.

During the past few weeks, I have been able to meet with several members of this committee and staff and hear some of your concerns and issues. I've also learned much about the activities of the Fossil Energy Program within Department of Energy. From what I've seen so far, it is clear that there is critically important work being done in the Department by extremely talented engineers, scientists, and other staff. The research, development, demonstration, and deployment activities being carried out are critically important to the Nation's energy future. And they are not, nor should they be, pursued in a vacuum. Technology cannot be deployed unless crosscutting issues are also understood and addressed.

But, of course, DOE is not just research. It is charged with the responsibility of assuring coordinated and effective administration of Federal policy and programs. Critical to advancing energy policy that is reasonable, achievable, and durable are the budget choices we make today regarding research, development, and demonstration, because those decisions will significantly affect our energy choices of the future. Budget choices are always difficult, because

Federal dollars are a finite resource, and there is certainly not unanimous agreement among all the stakeholders about how those dollars should be spent. But decisions must be made, and it's the responsibility of the Federal Government to make them.

If I am confirmed, you have my promise that I will work within the administration, with this committee, and with the appropriations committees so that we can, together, make the wisest spending choices.

Mr. Chairman and members of the committee, I sat before you 4 years ago and made a promise that, if confirmed as the Director of the Office of Surface Mining, I would work in a bipartisan way with both houses of Congress and with all stakeholders. For 4 years, I have worked hard to live up to that commitment, and have been rewarded with tremendous cooperation and great partnerships that have allowed OSM to be successful. Today, I repeat that promise, if I am confirmed as the Assistant Secretary of Fossil Energy.

Thank you for the opportunity to make that statement.
[The prepared statement of Mr. Jarrett follows:]

PREPARED STATEMENT OF JEFFREY D. JARRETT, NOMINEE TO BE ASSISTANT
SECRETARY FOR FOSSIL ENERGY, DEPARTMENT OF ENERGY

Mr. Chairman, Senator Bingaman, and members of the Committee, it is a great honor to appear before you today as the President's nominee for the position of Assistant Secretary for Fossil Energy, for the Department of Energy. As you know I was before this Committee in December of 2001 when my nomination to my current position as the Director of the Office of Surface Mining was pending, and it is a pleasure to be back before you. President Bush has paid me the highest compliment by nominating me for this position and I very much appreciate Secretary Bodman recommending me to the President.

I also want to thank my family. My parents, Leslie and Agatha, were a formidable team and two of the hardest working, most honest people I have ever known. They never procrastinated, and they never shirked responsibility. They set an incredible example for me. Both of my parents served during World War II: my father as a marine in the South Pacific, and my mother as a naval officer. I have always tried to make them as proud of me as I am of them. My children, Sarah, age 19, and Tyler, age 11, are the pride of my life. Sarah has become an incredible young adult, and Tyler is the responsible "man of the house" when I am away on business. They are both extremely helpful members of the family, and that is a tremendous help to me. My hope for the kind of world I want them to live in motivates me as a public servant. My wife, Janet Goodwin, is my most trusted friend and adviser. I can always count on her to be pointedly honest when necessary, but most of all, I can always count on her. I want to thank all of them for the support, encouragement and love they have always shown to me.

My career began over thirty years ago in the coal industry. While a very young man, in my 20's, I was made an environmental manager, and during my 13 year tenure in industry, became a general manager and then an executive. I was involved in almost every aspect of the coal mining business, learning about what it takes to manage a large organization, make payroll, comply with complicated and sometimes even conflicting government regulations, plan for the future by securing coal reserves and contracts, and still make a profit. Throughout these early years of my career I was substantially involved in state and national industry associations to keep abreast of emerging issues and to provide corporate perspective and input into public policy decisions. During this time I learned how critically important it is for industry to be able to rely on public policies that are clear, reasonable, and durable in making strategic business decisions.

It was my in-depth understanding of the industry and the specific interface of business and government that I brought to my next career as a public servant. For seven years I was the Deputy Assistant Director of Program Operations with the Office of Surface Mining, U.S. Dept. of the Interior. In that capacity I was primarily responsible for working with and conducting oversight of the eastern states in implementing the mandates of the Surface Mining Control and Reclamation Act. In

that position I tried to minimize the ambiguities in government regulation that I knew were plaguing both industry and state regulatory agencies.

For the next six years I was a senior public policy decision maker for the Pennsylvania Department of Environmental Protection, first as the Director of District Mining Operations, then as Deputy Secretary for Mineral Resources Management. By this time in my career I was ready for the leadership role in the mineral extraction programs in a state with a large industry. It was also my first significant exposure to other industries in addition to the coal industry, including the oil and gas industry, the insurance industry and the explosives industry. It was a great opportunity to make a real difference, and I think I did. For example, during my tenure I was able to implement a new surface coal mine bonding program that provides the highest level of assurance that adequate funds will be available to complete reclamation plans on future forfeited sites, and established the first comprehensive program in the nation to provide the financial resources for the perpetual treatment of acid mine drainage on sites where operators default on their obligations to treat water. A significant point is that the program was implemented with the complete support of all stakeholders including industry and the state legislature. That support was the direct result of our willingness to involve the stakeholders in the development of the program, and to address their legitimate concerns.

In 2002 I left the state leadership role and, after being considered by this Committee and confirmed by the U.S. Senate, I began my service as the Director of the Office of Surface Mining (OSM), Department of the Interior. These have been some of the most exciting, challenging and rewarding years of my career. During the past few years OSM, a relatively young agency, has achieved the highest level of stability it has ever enjoyed, and has achieved respect with states, industry, and a large segment of the environmental community. I have learned what it takes to work within the Administration, the Office of Management and Budget and Congress to advance important public policy issues.

Mr. Chairman and members of the Committee, I bring a unique perspective earned and learned over a career of involvement with energy and environmental issues because of my years as a coal industry executive and as a state and Federal public policy decision maker. But I also bring a more important perspective gained from the length of time I have been involved in energy and environmental issues: three decades. As much as I have always tried to bring certainty to the programs I managed, things do change. The nature of environmental concerns and the energy industry have changed, the technology has changed, the science we all rely upon has gotten better, and most important the concerns of the citizens we have a duty to protect have changed, and will continue to change. In a world of new information and shifting viewpoints, the person who is fortunate enough to lead the Department of Energy's Fossil Energy program must be a good listener—someone who listens to the concerns and viewpoints of all stakeholders. I am a good listener, and I understand the challenge of finding common ground and common interests upon which to build solutions to the daunting problems we face together regarding this nation's energy security. Communication—the listening side every bit as much as the talking side—is the key to understanding the complicated issues this nation faces.

I have been very fortunate to have opportunities which became excellent learning experiences. I learned first-hand the need for our government to be effective and responsive to the legitimate needs of citizens and the business community. I learned first-hand the need for our government to make wise policy decisions to meet changing world conditions. I learned that decisions by government agencies must not be made in a vacuum without real-world considerations. I learned the value of early involvement of all stakeholders in the decision making process. And I have learned that our country needs and expects public servants who will work with integrity and in the public interest.

During the past few weeks I have been able to meet with several members of this Committee and staff and hear some of your concerns and issues. I have also learned much about the activities of the Fossil Energy Program within the Department of Energy. From what I've seen so far, it is clear that there is critically important work being done in the Department by extremely talented engineers, scientists and other staff. The research, development, demonstration and deployment activities being carried out are critically important to the nation's energy future. And they are not, nor should they be pursued in a vacuum. Technology cannot be deployed unless cross-cutting issues are understood and also addressed.

But of course DOE is not just research; it is charged with the responsibility of assuring coordinated and effective administration of Federal policy and programs. Critical to advancing energy policy that is reasonable, achievable and durable are the budget choices we make today regarding research, development and demonstration, because those decisions will significantly affect our energy choices of the fu-

ture. Budget choices are always difficult because Federal dollars are a finite resource and there is certainly not unanimous agreement among all stakeholders about how those dollars should be spent. But decisions must be made and it is the responsibility of the Federal government to make them. If I am confirmed, you have my promise that I will work within the Administration, with this Committee and with the Appropriations Committees so that we can together make the wisest spending choices.

Mr. Chairman and members of the Committee, I sat before you four years ago and made a promise that if confirmed as Director of the Office of Surface Mining I would work in a bipartisan way with both houses of Congress and with all stakeholders. For four years I have worked hard to live up to that commitment and have been rewarded with tremendous cooperation and great partnerships that have allowed OSM to be successful. Today I repeat that promise if I am confirmed as the Assistant Secretary of Fossil Energy.

Thank you for the opportunity to make this statement.

The CHAIRMAN. Thank you very much.

Mr. Sproat.

**TESTIMONY OF EDWARD F. SPROAT III, NOMINEE TO BE
DIRECTOR, OFFICE OF CIVILIAN RADIOACTIVE WASTE
MANAGEMENT, DEPARTMENT OF ENERGY**

Mr. SPROAT. Mr. Chairman, Senator Bingaman, and members of the committee, I am sincerely honored to appear before you today as the President's nominee to serve as Director of the Office of Civilian Radioactive Waste Management in the Department of Energy.

I am fully aware of the challenges that face the person who holds this position regarding the disposition of the Nation's spent nuclear fuel and high-level radioactive waste, and I am deeply appreciative of the President's and Secretary Bodman's confidence in my abilities to meet those challenges.

A little about my background. I am a registered professional engineer who has worked in the nuclear energy industry for most of my career. Early in my career, I was in charge of the design and licensing of the electrical systems for the Limerick Nuclear Power Plant. And that gave me the opportunity to develop the design, the licensing strategy, and the documents required by the Nuclear Regulatory Commission to gain an operating license for that nuclear plant.

In the early 1990's, I led a major quality-focused, culture-change initiative across Philadelphia Electric Company as we prepared for deregulation. And that initiative resulted in significant improvements in company performance and culture. I also held the positions of director of engineering and director of maintenance at Limerick, gaining significant experience in nuclear operations and leading technical organizations to high levels of performance.

In the late 1990's, as director of engineering for PECO Nuclear, I was the design authority for our fleet of nuclear plants and was involved in a number of interactions with the NRC on multidisciplinary design issues. As director of strategic programs, one of my responsibilities was the preparation of the license renewal application for our Peach Bottom Nuclear Plant. I was also tasked by our chief executive officer during that time to try and reach a settlement with the Department of Energy regarding the spent-fuel standard contract for our Peach Bottom Plant. I was the lead PECO negotiator in those—in that effort, and it eventually resulted

in the first settlement between the Department of Energy and a nuclear utility.

In 2000, as the vice president of Exelon Generation, I represented Exelon on the board of directors for the Pebble Bed Modular Reactor Corporation in South Africa, or PBMR. This company is currently developing a modular high-temperature gas reactor for electricity generation. And, in 2001, Exelon was asked by the PBMR board to allow me to become the chief operating officer, or COO, for 1 year. I assumed that position in January 2002, and held it until December of that year, when I retired from Exelon.

As the COO of PBMR, I led the organization in finalizing a preliminary design for the standard PBMR Power Plant, along with completing credible cost estimates, project schedules, and a business case for launching the project that has been accepted by the South African Government. Since that time, I've been working with the former chief executive officer of Exelon to lead a consortium to design and build the next-generation nuclear plant.

Senators, I strongly share the belief of President Bush and Secretary Bodman that nuclear energy must be a part of the energy mix for this country in the future. It is the only near-term source of carbon emission-free, base-load electricity that's available to us. This country's ability to continue to use and expand the utilization of this resource in order to enhance our energy security is directly dependent upon establishing and safely operating a national spent-fuel repository, as has been authorized and directed by Congress. That is why I have expressed interest in this position, and I hope to have the opportunity to help the Department of Energy carry out that directive.

If confirmed, I would work with my administration colleagues, the Congress, and other stakeholders to address the challenging issues that confront us with respect to spent nuclear fuel and high-level radioactive waste. Among them are the repository design and license application, a transportation plan, the skills and competencies of the Office of Civilian Radioactive Waste Management, and the accumulating potential government liability associated with the unmet contractual obligations to move spent fuel. Although these issues are difficult, I believe it is critically important to our Nation's energy security that we successfully address them.

If confirmed, I would approach the duties of my position with six values that I believe must be held by any person who is involved with nuclear power: safety, integrity, quality, accountability, teamwork, and continuous improvement. If confirmed, I will enforce those values both within the OCRWM at DOE and its contractors.

Regarding the upcoming licensing activities for this project, the Congress has made it very clear that the stakeholders are to have every opportunity to participate in a transparent process. The people who are going to be affected by this project, both within the State of Nevada and along the transportation routes, have every right to expect that they will get a chance to participate, learn, understand, and influence how the spent-fuel transportation and disposal system is going to work and impact them. My commitment to this committee and to those stakeholders is that, if confirmed, I will ensure that the OCRWM at DOE and its contractors fully embrace the NRC process that allows participation of the stake-

holders and the licensing process, and will be open to their good-faith participation and feedback.

I'm truly honored to have been nominated by the President for this position, and I also recognize that success in this position will only be possible by close collaboration and cooperation with Congress and the States. If confirmed, I pledge to this committee that I will keep you apprised of what's really going on within the Yucca Mountain project, and will welcome your ideas and feedback.

Thank you for the opportunity to appear before you today, and I'd be pleased to answer any questions you might have.

[The prepared statement of Mr. Sproat follows:]

PREPARED STATEMENT OF EDWARD F. SPROAT III, NOMINEE TO BE DIRECTOR, OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT, DEPARTMENT OF ENERGY

Mr. Chairman, Senator Bingaman, and Members of the Committee, I am sincerely honored to appear before you today as the President's nominee to serve as the Director of the Office of Civilian Radioactive Waste Management at the Department of Energy. I am fully aware of the challenges that face the person who holds this position regarding the disposition of the Nation's spent nuclear fuel and high level radioactive waste, and I am deeply appreciative of the President's and Secretary Bodman's confidence in my abilities to meet those challenges.

I would like to introduce my wife Heidi Sproat who likes to describe herself as a native Californian transplanted by marriage. She has been a true friend and companion in our 26 years of marriage and deserves my endless devotion and thanks for running our family while I was in South Africa. Also with us are our three children: Kristen who is a third class midshipman at the United States Naval Academy, Eric who is a junior at Conestoga High School, and Keith who is a freshman at Malvern Preparatory School. Heidi and I are very proud of all three of them.

I am a Registered Professional Engineer who has worked in the nuclear energy industry for most of my career. Early in my career, I was in charge of the design and licensing of the electrical systems for the Limerick Generating Station which gave me the opportunity to develop the design, the licensing strategy and the documents required by the Nuclear Regulatory Commission (NRC) to gain an Operating License for that nuclear plant.

In the early 1990's, I led a major quality-focused culture change initiative across Philadelphia Electric Company as we prepared for deregulation that resulted in significant improvements in company performance and culture. I also held the positions of Director of Engineering and Director of Maintenance at Limerick, gaining significant experience in nuclear operations and leading technical organizations to high levels of performance.

In the late 1990's, as the Director of Engineering for PECO Nuclear, I was the Design Authority for our fleet of nuclear plants and was involved in a number of interactions with the NRC on multi-discipline design issues. As Director of Strategic Programs, one of my responsibilities was managing the preparation of the license renewal application for our Peach Bottom nuclear plant, which was one of the first to receive its renewed Operating License from the NRC. I was also tasked by our Chief Executive Officer to try to reach a settlement with the Department of Energy regarding the spent fuel standard contract for our Peach Bottom plant. I was the lead PECO Energy negotiator in that effort which eventually resulted in the first settlement between the Department and a nuclear utility.

In 2000, as a Vice President of Exelon Generation, I represented Exelon on the Board of Directors of Pebble Bed Modular Reactor Pty. Limited (PBMR). This company, located in the Republic of South Africa, is currently developing a modular high temperature gas reactor for electricity generation. In 2001, Exelon was asked by the Board of PBMR to allow me to become the Chief Operating Officer (COO) for one year. I assumed that position in January 2002 and held it until December of that year when I retired from Exelon. As COO, I led the organization in finalizing a preliminary design for the standard PBMR power plant along with completing credible cost estimates, project schedules and a business case for project launch that has been accepted by the South African government. Since that time, I have been working with the former Chief Executive Officer of Exelon to lead a consortium to design and build the Next Generation Nuclear Plant (NGNP).

Senators, I strongly share the belief of President Bush and Secretary Bodman that nuclear energy must be a part of the energy mix for this country in the future.

It is the only near-term source of carbon emission-free base load electricity that is available to us. This country's ability to continue to use and expand the utilization of this resource in order to enhance our energy security is directly dependent upon establishing and safely operating a national spent fuel repository as authorized and directed by Congress. That is why I have expressed interest in this position and I hope to have the opportunity to help the Department of Energy carry out that directive.

If confirmed, I would work with my Administration colleagues, the Congress, and other stakeholders to address the challenging issues that confront us with respect to spent nuclear fuel and high level radioactive waste. Among them are the repository design and license application, the transportation plan, the skills and competencies of the OCRWM organization, and the accumulating potential government liability associated with the unmet contractual obligations to move spent fuel. Although these issues are difficult, I believe it is critically important to our Nation's energy security that we successfully address them.

If confirmed, I would approach the duties of my position with six values that I believe must be held by any person involved with nuclear power: Safety, Integrity, Quality, Accountability, Teamwork, and Continuous Improvement. If confirmed, I will reinforce these values both within the OCRWM organization and its contractors.

Regarding the upcoming licensing activities for the project, Congress has made it clear that the stakeholders are to have every opportunity to participate in a transparent process. The people who are going to be affected by this project both within the State of Nevada and along the transportation routes have every right to expect that they will get a chance to participate, learn, understand and influence how the spent fuel transportation and disposal system is going to work and impact them. My commitment to this Committee and to those stakeholders is that if confirmed, I will ensure that the OCRWM organization and its contractors fully embrace the NRC process that allows participation of the stakeholders in the licensing process and will be open to their good faith participation and feedback.

I am truly honored to have been nominated by the President for this position. I also recognize that success in this position will only be possible by close collaboration and cooperation with Congress and the States. If confirmed, I pledge to this Committee that I will keep you apprised of what is going on with this project and will welcome your ideas and feedback.

Thank you for the opportunity to appear before you today, and I would be pleased to answer any questions you may have.

The CHAIRMAN. Thanks to both of you.

I have a series of questions that I will submit. And we intend to have an executive session next week for the purpose of voting on reporting you out to the Senate for confirmation, so we would appreciate your answering the questions as quickly as possible. We have to have them before that time, so you don't have a lot of time, 3 or 4 days.

With that, I'm not going to ask any questions. I'm just going to make an observation about your job, Mr. Sproat.

First of all, seeing your background, I understand that you are used to challenges. And I, nonetheless, have reviewed the challenges, as I see the job description, and this is the biggest challenge, in my opinion, that you will have decided to undertake. It is a terribly difficult job involving many, many things that are going to require not only science and technology on your part, but also some great skills in working with people and working with us.

Mr. SPROAT. Yes.

The CHAIRMAN. I am very pleased that the President nominated you, because I think you have as good a background and character as anyone we could find. Frequently, we are not so fortunate.

Mr. SPROAT. Thank you.

The CHAIRMAN. And I think we're lucky that you would decide to do that.

Mr. SPROAT. Thank you.

The CHAIRMAN. And I say that to your family, also. It will be a tough job.

Mr. SPROAT. Yes, it will.

The CHAIRMAN. I hope you don't ignore them in the difficulty of this job, because it will consume you. And sometimes you will wonder for what, I assure you.

[Laughter.]

The CHAIRMAN. Mr. Jarrett, you have a great opportunity. We're right on the cutting edge of getting some big things done in this area, and we need some real work. The energy bill gives you some tough things to do, and the Department's committed to do them, so we hope you'll be a leader in that, in trying to see what we decided you should be doing. Some of them will appear onerous, and will have no effect for quite some time, but you have to do them anyway.

With that, I'm going to yield to Senator Bingaman, and I hope you both know that when I leave here, it does not mean I don't have great interest. I just—I have already committed to start home to New Mexico, and I'm going to let Senator Burr take my place while Senator Bingaman and he complete the hearing.

Thank you.

Senator Bingaman.

Senator BINGAMAN. Well, I thank you both very much, and I congratulate you both on your nominations.

Mr. Jarrett, your position as head of—Assistant Secretary for Fossil Energy—the Fossil Energy Program has been an important source of oil and gas research and development, as well as other types of research and development. As I understand it, the request we got earlier this year from the administration was to zero out the funding. It was to essentially shut down the oil and gas research and development work within your office. I would hope that you would be supportive of continuing to do research and development work related to oil and gas in that Department. I don't know if you're in a position to give us any assurance along those lines now, but I think it would be important, at least to me, to know that that kind of activity is going to continue.

Mr. JARRETT. Senator, I'm sure we could have a very long conversation about how this country needs to focus its R&D efforts for our energy security. You know that I was not involved in any of the budget discussions within DOE, although I think a couple of things have happened over the past year that are noteworthy.

I mean, No. 1, we got a little bit of a wake-up call, or quite a bit of a wake-up, with a couple of devastating hurricanes in the gulf region that really should send a signal to all of us just how precarious the supply-and-demand balance is for energy, especially oil and gas, in this country. It's clear to me that one of the first challenges that I will face at the Department of Energy is to work through some budget issues, and my preference would be to try to frame the budget questions. I think it's important that Congress and the administration and other stakeholders are all on the same page, because the nature of the work that we do, of research and development work, is long term. And to be successful and efficient, we're going to need private-sector partners. And it's my belief that there is some hesitation on the private sector to be effective part-

ners, because, before they can make a financial investment as a partner to us, they need to know that the decisions we make are long-term commitments, that they're going to be durable, and that we're not going to change them from year to year.

So, I think there's—you know, the first challenge is going to be, I think, to frame how we make budget decisions. I don't think, on an annual basis, we should be debating what we're going to do research and development work on. That should be agreed up front for the long term, and then, on an annual basis, we can spend time talking about what the budget ought to be so that we can meet whatever the annual milestones are in that particular area. And I think there are a lot of considerations that need to go into that.

I've heard a lot of people opining about the oil and gas industry, for example, with posted record profits today. But I don't think we can make budget decisions based on those sort of broad-brush thoughts. The reality is, if you look at the oil and gas industry, it's not the super-majors who are getting the job done for us, it's the independents. And that represents somewhere in the neighborhood of 75 to 80 percent of our domestic production. And I'm not at all certain that those independents, individually, have the kind of resources that are needed to do the appropriate R&D that we need in this country, especially when you consider that we do have vast reserves, but a lot of it is unconventional oil and gas reserves, and it's going to take some technology to figure out how to get it.

Senator BINGAMAN. Well, thank you for that response, and I do look forward to working with you and trying to see if we can maintain some level of Federal support for these oil-and-gas research-and-development activities out of the office that you're taking over.

Mr. SPROAT, let me ask you just one question, also. You concentrated your comments, or much of your comments, on a major part of what your job is, and that is trying to help with the disposal of this spent nuclear fuel in Yucca Mountain. I notice that the Department is now being asked—this is in the latest appropriation bill—to begin a new program to reprocess spent fuel.

Mr. SPROAT. Yes.

Senator BINGAMAN. I just wondered how you see the relationship between those two programs. I mean, are we going to bury it, or are we going to reprocess it? Or what are we going to do? Are we going to do both?

Mr. SPROAT. Well, in terms of the policy issues associated with reprocessing, that clearly is outside the responsibility of the Office of Civilian Radioactive Waste Management. However, if the country decides to go and close the fuel cycle, go to fuel reprocessing, like our original intent was back in the 1960's and early 1970's, the impact would be a significant reduction in the amount of high-level radioactive waste that would have to be disposed of in a deep geological repository.

The numbers I've seen, based on some work done by one of the national labs, indicates that if we were to go with a full nuclear-fuel recycle program, including fast breeder reactors, that the volume of high-level radioactive waste that would have to be disposed of in a deep geological repository would be reduced by a factor of a hundred. And that also—a byproduct of that would also be that our uranium natural resources as—for using uranium as a natural

resource for nuclear energy in this country, that would be expanded by about a factor of a hundred.

So, if you take a long-term energy perspective on this question, I, personally, believe it makes a lot of sense that we, as a Nation, move toward closing the fuel cycle and moving eventually to a fast-breeder technology that allows us to maximize the availability of the uranium resources, minimize the amount of spent nuclear fuel and high-level radioactive waste.

However, having said that, no matter which way we go, either the once-through fuel-cycle path that we're currently on or a full recycle path, which I believe eventually we should be planning to move toward, in either case you will still need at least one high-level-waste deep geological repository for the waste to be placed in.

Senator BINGAMAN. Thank you very much.

I'll stop with that, Mr. Chairman.

Senator BURR [presiding]. Thank you, Senator Bingaman.

Let me also welcome both of you, and as the chairman did, thank you for your commitment to serve. If we didn't have qualified individuals, we wouldn't have the opportunity to move forward in the ways that I think we're challenged to these days.

Let me, if I could, take this opportunity, Mr. Jarrett, to ask you one question. The energy bill created a new statutory program entitled Clean Coal Power Initiative that authorizes \$1.6 billion in funds over 8 years. Seventy percent of that is designated specifically for gasification projects, and 30 percent for conventional coal-powered generation projects. This provision is not intended, however, to duplicate or to interfere with the Department's existing Clean Coal Power Initiative. Can you share with the committee your thoughts on how and when this new program should be implemented, and how it should be coordinated with the existing program?

Mr. JARRETT. Senator, I would, if confirmed, be happy to meet with you to get some of your ideas on that, but I have, at this point, not had an opportunity to evaluate how those two programs should be integrated.

Senator BURR. I would appreciate it if, once you have an opportunity to look through that, you would share it with me, and hopefully with the entire committee.

Mr. SPROAT, included in the 2006 Energy and Water Conference Report is specific language requiring the Department of Energy to start a nuclear fuel recycling program and to set up a competition to determine if any communities or States will volunteer to host a recycling or reprocessing facility. The bill provides \$50 million for the program, of which \$20 million would be given to four individual sites, at \$5 million each, to demonstrate that they can get through the regulatory, legal, legislative hurdles to host reprocessing. If confirmed, do you promise to fulfill this obligation in the coming fiscal year?

Mr. SPROAT. Senator, I believe that that responsibility would probably not fall under the auspices of the Office of Civilian Radioactive Waste Management. I believe—I'm not absolutely sure of this, and I can check for you afterwards, but I believe that the responsibility would fall under the Nuclear Energy Organization within the Department of Energy.

Senator BURR. Let me ask you to comment on the initiative that Congress has put. If it were under your jurisdiction, is it something that you would support?

Mr. SPROAT. In terms of trying to assist communities to understand and assess the potential impacts of recycling facilities in their area, I believe it's very appropriate.

Senator BURR. If confirmed, what are your plans, as it relates to the implementation of the transportation infrastructure system, so that DOE meets its deadlines?

Mr. SPROAT. I think—as you know, Senator, I'm coming into this project from the outside, so what I know about the project is what I have read in publicly available documents. And there are a number of areas in this program where I clearly need a lot more information to lay out my gameplan of how to move forward with the program, transportation being one of the key ones.

My first activities, if confirmed, are, we're going to do a very broad and deep assessment of both the program, the organization, and the license application—and transportation, by my definition, falls under the programmatic assessment—to find out where it really stands, what the gaps are between what's going to be needed for that transportation system to be fully functional in a reasonable period of time, and lay out a very specific game plan with goals and deadlines to go make that happen.

And that's what I commit to you at this stage of the game, is to do that assessment so I fully understand what the shortcomings are today, what the situation is today, and then move forward with fixing those problems that we find in that assessment.

Senator BURR. Given your background, I think you have an understanding of where companies that are affected in the nuclear issue are, their concerns that exist right now, as they relate to the multipurpose canisters.

Mr. SPROAT. Yes.

Senator BURR. How would you envision approaching engaging the private sector on overcoming those concerns and those challenges?

Mr. SPROAT. I would say that, first of all, having not been involved on the DOE side of the program, as of yet, I don't understand what exactly the Department's position is regarding those canisters, nor what the concerns are about them. Now, having said that, though, from just a nuclear-waste transportation and disposal system standpoint—I believe in systems engineering, and this is truly a very complex system—it makes a lot of sense to simplify the transportation aspect of this on the front end as simple as possible and minimize the amount of handling of fuel as much as we can. So, if we can design the system to accommodate those multipurpose canisters, we should be doing that.

Senator BURR. Do you see your job, if confirmed, to try to share with the Department where you think they may be misguided on their policies?

Mr. SPROAT. I would certainly see my role, if confirmed as Director of OCRWM, as an advocate for the policies that I believe are needed to expedite the resolution of the high-level-waste, spent-nuclear fuel problem. I certainly see myself as working with my team, with the Congress, with the stakeholders to try to really under-

stand what we think the best, most productive policy should be to resolve these issues, and then be a strong advocate for those policies to the administration.

Senator BURR. I appreciate that very candid answer. And I'm sorry to ask it in the way that I did, because it might suggest that the administration does not always make the wisest policy decision, and I'm not necessarily implying that. But I think that it's absolutely vital, when we get talented people, that we allow those talents to be used, not just in the execution of a policy, but in the thought of what that policy should be. I think I can speak for many in this Congress that we believe we need to move forward with nuclear generation in this country. We believe we need to move quickly. And I think that's reflective in the energy bill. However, until we resolve the spent-fuel issue, it is very difficult to suggest to the industry that the future is predictable enough for any individual company, or the groupings of companies, to make \$3 billion commitments on behalf of their shareholders or their capital commitments.

I believe that this is absolutely an essential piece for us to sort out, and I think that it will be this Department of Energy, during your time there, that makes decisions as it relates to that one issue that will determine what the future will look like. So, I would strongly encourage you to be a good soldier of the administration and to convey your experiences and your talents as aggressively as you're permitted to do.

Mr. SPROAT. Well, Senator, I fully agree, and we are 100 percent aligned with your judgments regarding the necessity of the resolution of this issue, of spent nuclear fuel and its importance to the future of nuclear energy in this country, and that's exactly the reason why I asked to be considered for this position.

Senator BURR. Once again, I would tell you, on behalf of the Congress, we thank both of you very talented individuals for your willingness to commit to public service and to bring the expertise that both of you do.

At this time, I notice no other members. I ask that any additional questions be filed with the committee staff by the close of business today.

Thank you for enlightening us on your thoughts, your backgrounds. I know that it's the chairman's intention to move very quickly, and we certainly have enjoyed the opportunity to have your families with us today.

This hearing is adjourned.

[Whereupon, at 11:15 a.m., the hearing was adjourned.]

APPENDIX
RESPONSES TO ADDITIONAL QUESTIONS

RESPONSES OF JEFFERY JARRETT TO QUESTIONS FROM SENATOR DOMENICI

Question 1. Mr. Jarrett, we recently passed an energy bill that has a number of provisions that will need to be implemented by DOE's Fossil Energy division that you will manage if you are confirmed.

Could you please identify two of these initiatives that you feel should be the top agency priorities for the Fossil Energy division with respect to implementation of the Energy Bill?

Answer. It is my understanding that the Office of Fossil Energy has nearly 100 actionable items included in the Energy Policy Act of 2005 related to coal, oil, natural gas, the strategic petroleum reserves and loan guarantees. These cover a broad range of topics from research, regulatory issues, and specific analyses and studies. Since there are so many items all important in their own right, it is impossible at this time to just pick two items of greatest importance. If confirmed, I will review all of these items and assure that they are completed in a timely manner.

Question 2. Some have suggested that we should create a strategic natural gas reserve and other product reserves similar to the Strategic Petroleum Reserve.

Please comment on the pros and cons of this idea and give us your opinion on whether this would be a wise thing to do.

Answer. If I am confirmed, I will look closely at this suggestion, including both the technical challenges and the impact on the market. Without a detailed understanding of this issue, it is not possible to adequately respond to your question except to state that I am aware that this is an issue the Administration has been reviewing.

Question 3. I think the Administration is to be commended for the release of crude from the Strategic Petroleum Reserve in the aftermath of the hurricanes. It certainly seemed to relieve pressures and get product to the market. Some argue that this resource should be used more frequently, not only to make up for temporary shortfalls in supply, but to moderate prices as well.

Please share with us your views on the appropriate use of the Strategic Petroleum Reserve.

Answer. I believe the recent use of the Strategic Petroleum Reserve after Hurricanes Katrina and Rita is the type of situation for which it was created, and that it should not be used as a tool to supplant free markets in determining oil prices.

The recent exchanges and sale from the Strategic Petroleum Reserve were proper policy. There were several considerations that support the decision to use the Strategic Petroleum Reserve, all of which are grounded in the principles stated in the Energy Policy and Conservation Act. In this instance we suffered a shortage of petroleum products caused by an unexpected event, Hurricane Katrina, that disrupted supplies. The devastation in the Gulf of Mexico was so complete that the disruption was expected to last for a prolonged period, and could have caused harm to our economy. In addition, the scope of the disruption brought the issue to the attention of the International Energy Agency. That body deemed the disruption so serious that a resolution was passed to respond with a coordinated drawdown by all member countries, which created an obligation for the United States.

Question 4. When the SPR fill is completed, the DOE will have the opportunity to select a site to hold additional crude oil. In the Energy Bill we provided a process for the Department to select sites to meet this new capacity requirement, but we also left the Secretary with certain amount of discretion in selecting the sites. This has the potential of producing jobs and construction dollars to areas selected. Presumably, the Secretary will be seeking your counsel on this issue.

Could you please share with us your thoughts about how this selection process might work and what factors will affect this decision?

Answer. Under the National Environmental Policy Act (NEPA), an expansion of the SPR would be a major Federal action, requiring the preparation of an Environmental Impact Statement. The NEPA process assures the assessment of the potential environmental consequences of a proposed action (and the candidate sites) before making a decision on a proposed action.

In addition to the environmental impacts, the Department will consider three other major factors in the site selection process—how the site enhances the Reserve's distribution plan (i.e. mission value), the development risks and the project costs.

If confirmed, I look forward to working with the Committee as the Department moved forward in the site selection process.

Question 5 The Secretary has initiated an aggressive campaign to encourage conservation of energy resources in the wake of hurricanes Katrina and Rita.

Do you have any other ideas about steps the Department, and particularly the Fossil Energy division, could take to help consumers deal with the higher prices at the pump and in heating their homes this winter?

Answer. Conservation is the best short term opportunity to reduce demand and therefore energy prices. To this end DOE has undertaken an aggressive campaign to educate the public and industrial sectors on energy saving conservation methods. On the supply side, getting natural gas facilities in the Gulf of Mexico region that were damaged by hurricanes Katrina and Rita back on-line as quickly as possible is the best short term way to increase the delivery of natural gas to consumers and to moderate the high prices we are seeing today. The Department is working with industry and other Federal agencies to facilitate this recovery.

New supply options take time, typically 2 to 10 years depending on the resource and location. However, it is also important that we continue to focus on supply to meet demand in the mid to long term.

Question 6. A significant amount of interest has arisen over the past couple of years in using coal as a feedstock to produce liquid fuels, especially clean diesel fuel.

What is your view of expanding the use of coal for this purpose, and do you think the Department of Energy should be creating more opportunities to assist industry in promoting technologies to accomplish this?

Answer. With respect to producing liquid fuels from coal, my understanding is that we have the technology to do that. The current technology can produce liquid fuels from coal at around 35 dollars per equivalent barrel of oil. The challenge that industry faces in investing in the technology has more to do with the uncertainties of the market place due to the volatility of oil prices, notwithstanding the current prices we're seeing now. Given that the investment required is on the order of several billion dollars, it is a difficult challenge for industry to make the investment and secure the financing for such a long term project in light of the uncertainties in future oil prices. I am supportive of assisting industry in developing a domestic coal liquids industry.

Question 7. The Energy Bill also created a new statutory program entitled "Clean Coal Power Initiative" that authorizes \$1.6 billion in funds over eight years—70 percent for gasification projects and 30 percent for conventional coal power generation projects. This provision is not intended to duplicate or interfere with the Department's existing "Clean Coal Power Initiative."

Can you please tell the Committee your thoughts on how and when this new program should be implemented and how it should be coordinated with the existing program?

Answer. If confirmed, I will review both the current program and the provisions of the Energy Bill. Given the intent that the provisions not duplicate or interfere, it would seem to make sense to coordinate and integrate the objectives, strategies and implementation of the two CCPI programs to achieve the overall goals of the clean coal program and to demonstrate the readiness of the latest advances in clean coal technologies for entering the commercial realm.

RESPONSES OF JEFFREY JARRETT TO QUESTIONS FROM SENATOR BINGAMAN

Question 1. Climate change is a serious problem. We know that emissions from fossil fuels are contributing to it and will continue to contribute even more in future years. Do you consider climate change to be problem that we need to address?

Answer. It would be prudent for the Nation to develop technology options to use energy more efficiently and with reduced or no CO₂ emissions. The President has established a robust and flexible climate change policy that harnesses the power of markets and technological innovation, maintains economic growth, and encourages global participation. Major elements of this approach include implementing near-term policies and measures to slow the growth in greenhouse gas emissions, advanc-

ing climate change science, accelerating technology development, and promoting international collaboration. In the case of coal technology, CO₂ capture and storage technology is especially important to develop. If confirmed, I look forward to working on this issue with you and the Committee.

Question 2. What role do you believe that advanced coal technologies should play? In particular, the role of carbon capture and storage as a key technology for the future of coal.

Answer. Advanced technologies will play a crucial role in addressing carbon emissions reductions of coal-based energy production. More efficient advanced technologies will help to reduce the amount of greenhouse gases emitted into the atmosphere, whether from electricity generation and end use, from transportation, or from heavy industry. However, given the rise in human population and the economic growth expected in many nations, coal use is expected to increase dramatically worldwide. Carbon capture and storage can therefore play a critical role in the future of coal, and that is why the Department is committed to developing advanced carbon capture and storage technologies.

Question 3. How do you plan to encourage its deployment on a scale and timeline that will allow coal to contribute to the solution as opposed to the problem?

Answer. Development of advanced technologies is the key to deployment of carbon capture and storage on a scale and timeline that will allow coal to contribute to the solution. In order for carbon sequestration to be deployed, it must first be proven technically achievable and economically feasible. The Office of Clean Coal's ongoing FutureGen project, sequestration research and development, and regional carbon sequestration partnerships are working towards making this a reality. I plan to encourage deployment of sequestration technologies by working to make the required technologies available as soon as it would be economically practical to do so.

RESPONSES OF JEFFREY JARRETT TO QUESTIONS FROM SENATOR BUNNING

Question 1. The DOE clean coal programs are essential to maintaining the viability of coal as a future energy source. How do you plan to ensure that the Fossil Energy Office stays on target in completing timely clean coal research?

Answer. My understanding is that the Office of Clean Coal has a very thorough roadmap for technology development. It is also my understanding that this roadmap has been in existence for many years, and is aligned with other roadmaps for coal technology development from the U.S. coal industry and from the international coal community. If confirmed, I would work to ensure that the Office of Clean Coal continues to base programmatic decisions on how to best achieve the goals stated in its technology roadmaps.

Question 2. The President has committed to making FutureGen a reality. The FutureGen program is supposed to cost \$1 billion, with funding coming from both the private sector and the DOE. Congress has appropriated only \$36 million through Fiscal Year 2005 for FutureGen. Will you work to make sure that the Administration will request enough funding so that this program begins in a timely manner? Will you ensure also that the DOE will not take funding from other coal programs for FutureGen so that the viability of FutureGen does not come at the expense of other coal programs?

Answer. The investment that we as a Nation have made in clean coal technology has now positioned us to be able to technically reach for zero emission coal technology, which, as I understand it, is the focus of the FutureGen project and the overall R&D program. While I am aware that the FutureGen program is a priority for the Department, I have not been a party to DOE's budgetary discussions, and I am not in a position to comment on potential funding requests. I appreciate your interest in the program and if confirmed, I will be happy to discuss this important issue with you and the Committee.

Question 3. The President has pledged to support the Clean Coal Power Initiative, which is a \$2 billion program over 10 years. Over the past couple of fiscal years, the President's budget only asked for \$50 million, which is what Congress appropriated. Are you willing to work to ensure that the Clean Coal Power Initiative is fully funded to meet the President's commitment and to meet the next 2007 timeframe for a new solicitation?

Answer. The Clean Coal Power Initiative (CCPI) is an integral part of our clean coal research program and strategy. We will continue to work towards a meaningful and sensible program in CCPI within the budget constraints and competing priorities that will allow us to proceed with the next round of solicitations at the earliest feasible date to demonstrate the readiness of those advanced technologies for commercial demonstration.

RESPONSE OF JEFFREY JARRETT TO QUESTION FROM SENATOR SALAZAR

Question 1. I am very interested in pursuing coal gasification and sequestering the resulting carbon dioxide. Can you comment on the research into carbon sequestration and its potential? I know you have had a distinguished career working with coal, and I would appreciate your insight.

Answer. The potential benefits of gasification based systems coupled with low-cost CO₂ capture and storage are great and offer the potential of being essentially zero emission systems. Realistically, fossil fuels will continue to supply a large percentage of our energy needs worldwide into the foreseeable future. Therefore, deployable carbon sequestration technologies will be required to mitigate climate change concerns as we move forward. Developing these advanced carbon sequestration technologies is the key to deploying carbon sequestration and realizing the benefits.

RESPONSES OF EDWARD F. SPROAT III TO QUESTIONS FROM SENATOR DOMENICI

Question 1. This Office of Civilian Radioactive Waste Management (OCRWM) needs what I will call a business plan. A business plan outlines where you are, your goals, expectations, and so on. This committee needs to know what goals the Yucca Mountain program has—what you are going to do, how you are going to do it, what your plans are if you don't meet your own deadlines. I realize that you are not yet working in this office, but you have been associated with its activities over many years from your work in the private sector.

What is your vision for getting this program on track and keeping it there, and how do you think your views differ from the current management of the OCRWM?

Answer. If confirmed, I intend to conduct a thorough review of the current program to ensure that the plans, processes and resources are in place to ensure that the repository can be developed successfully. The results of that review will be used to generate plans that will have specific, measurable goals and objectives for all parts of the OCRWM organization, including contractors. At this time, I have had only limited discussion with the current OCRWM management, and I am not in a position to express an opinion on their views, however, I look forward to working with them and forging a successful team.

Question 2a. The Department signed contracts with the nation's utilities to begin acceptance of their spent fuel in 1998. It's now 2005 and it appears that the Department will not begin taking waste from the utilities until perhaps 2015.

How do you propose to aggressively move forward on the Yucca Mountain project so that the government can meet its contractual obligation?

Answer. It is my intention to aggressively pursue the submittal of the license application for Yucca Mountain, prepare the transportation system for readiness, and ensure that the OCRWM organization has the skills, competencies and culture needed to successfully license, construct and operate the repository.

Question 2b. Do you have any other ideas about how the government might meet its obligation if Yucca Mountain continues to be delayed?

Answer. It is my understanding that settlement negotiations are underway with several utilities. If it is possible to reach settlements with those and other utilities, those settlements should help establish and stabilize the government's financial responsibility relating to the standard contracts while the program works to begin waste acceptance at Yucca Mountain.

Question 2c. Do you think we should be looking for alternatives?

Answer. Under the current law, Yucca Mountain is the course that Congress has prescribed for the program. As is the stated position of the Administration, I am fully committed to the development of a geologic repository at Yucca Mountain.

Question 3. In recent memory, the Department was going to submit a license application to the NRC in December 2003, and then it slipped to 2004, and now I don't know if anyone knows the date for the license application for Yucca Mountain. There is a perception that the program has been "treading water" over the last several years. The dates reported for license application submittal from the DOE to the NRC seemed to change weekly in press stories this past summer. As you know, the License Support Network must be submitted to the NRC and docketed six months in advance of a license application.

Will you make a commitment to me and this committee that you will report back to us one month from today on the status of the submittal of the License Support Network (LSN) to the NRC?

Answer. Yes. If confirmed, I will report back to the committee within one month on the status of the submittal of the License Support Network (LSN) to the NRC.

Question 4. Earlier this week, the energy and water conferees approved a spending bill that allocates \$50 million for the department to begin the development of

an Integrated Spent Fuel Recycling Plan. There is no secret that I am a fan of reprocessing.

While there are future reprocessing technologies that could potentially expand the capacity of Yucca Mountain to dispose of radioactive materials, is there any technology that you are aware of that would eliminate the need for a geological repository at Yucca Mountain?

Answer. No. While there are a number of promising technologies that could minimize the amount of waste requiring disposal in a geologic repository such as Yucca Mountain, I am not aware of any technology that would eliminate the need for Yucca Mountain.

RESPONSES OF EDWARD F. SPROAT III TO QUESTIONS FROM SENATOR BUNNING

Question 1. There has been talk that the Federal government needs to take possession of spent fuel rods and store them at DOE facilities, such as the Paducah plant, instead of at Yucca Mountain. What are your thoughts on this?

Answer. It is my understanding that DOE is not currently authorized to provide interim storage of spent nuclear fuel at DOE sites except under very limited restrictions and for a very limited amount of fuel. Large scale interim storage of spent nuclear fuel at DOE sites would require additional legislation. While I understand there may have been discussions by some Members of Congress to take possession of spent fuel rods for storage at existing DOE facilities, the OCRWM is currently working on a permanent repository at Yucca Mountain pursuant to the Nuclear Waste Policy Act.

Question 2. What are your plans to ensure that Yucca Mountain opens up for waste storage?

Answer. If confirmed, I intend to conduct a thorough review of the current program to ensure that the plans, processes and resources are in place to ensure that the repository can be developed successfully. After I have completed that review, I will be in a better position to discuss those plans with you and the Committee.

Question 3. Yucca Mountain has received limited appropriation funding over the past few fiscal years and a significant reduction is being considered for FY 2006. In your opinion, how does limited funding affect the Yucca Mountain project?

Answer. At this time, I can not speak specifically as to how the limited appropriations over the last few years have affected the Yucca Mountain project. I can say, based upon my years of experience in the nuclear industry, that a steady, secure source of funding is crucial to the successful completion of any complex, long-term project. In this regard, I am sure that the Yucca Mountain project is no different, and that the program's future success will depend upon a reliable, stable source of adequate funding.

RESPONSE OF EDWARD F. SPROAT III TO QUESTION FROM SENATOR SALAZAR

Question 1. My understanding is that Yucca Mountain, even if implemented, is not a long term solution. How much nuclear waste is Yucca Mountain supposed to hold, and how much is awaiting transport across the country right now? Is there a long term solution?

Answer. The capacity of Yucca Mountain is limited by law to 70,000 metric tons of uranium, although I understand that the mountain has the capability of holding significantly more waste. I believe that there are currently over 52,000 metric tons of spent fuel stored at commercial reactor sites around the country, as well as over 10,000 metric tons of spent fuel and high-level waste stored at DOE sites which is also destined for disposal in a geologic repository.

I believe it is important for the Nation to address this situation and for a long-term solution to be provided. Over the long-term, and if nuclear power is to remain a viable source of electric energy, it seems that the Nation will need to expand the capacity of Yucca Mountain, develop an additional repository, pursue methods of closing the nuclear fuel cycle (such as through reprocessing), or pursue a combination of these three actions. I do however believe that Yucca Mountain is a critical part of the long term solution to our nuclear waste situation.