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KOLEVAR NOMINATION

HEARING

BEFORE THE

COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

ON

THE NOMINATION OF KEVIN M. KOLEVAR TO BE ASSISTANT SECRETARY OF ENERGY FOR ELECTRICITY DELIVERY AND ENERGY RELIABILITY

NOVEMBER 16, 2006

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KOLEVAR NOMINATION

THURSDAY, NOVEMBER 16, 2006

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

The committee met, pursuant to notice, at 10:07 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 nomination of Kevin M. Kolevar to be the Assistant Secretary for Electricity Delivery and Energy Reliability at the Department of Energy.

First, I note with pleasure the presence in the audience of the Secretary of Energy, Sam Bodman. Mr. Secretary, it's a pleasure to have you here. I note, for the record, that you have been present for a number of the confirmation hearings of your deputies and assistants, and I think it should serve well, in terms of the relationship that exists, and will exist, in your office.

We are here today to consider the nomination of Kevin Kolevar to be Assistant Secretary for Electricity Delivery and Energy Reliability at the Department of Energy.

Mr. Kolevar, I also welcome you to the committee for this hearing to consider your nomination. As you know, we spent significant time and effort fashioning the electricity provisions of the Energy Policy Act last year. And FERC has expended a like amount of effort in producing implementing regulations since the bill's enactment. That's because our electricity system is the bedrock of our country's economy and our citizens' well-being. So, the issues you will be charged with administering are very important to all of us on this committee, and I encourage you to keep that in mind as you fulfill your duties, if you are confirmed in this position.

Now, before we begin, do you have family or other guests present who you would like to introduce?

Mr. KOLEVAR. Yes, Mr. Chairman. Thank you.

I have with me today my wife, Stephani.

The CHAIRMAN. Stephani, would you stand, please? Thank you.

Mr. KOLEVAR. And my son, Jake.

The CHAIRMAN. And would you stand, please? And how old are you?

Jake KOLEVAR. Six.

The CHAIRMAN. Six. Well, we welcome you, and thank you very much for coming. Now, do you have any others, sir?

Mr. KOLEVAR. No, sir.

The CHAIRMAN. Fine.

And the rules of the committee—which apply to all nominees—require that they be sworn in connection with their testimony. Please rise and raise your right hand.

Do you 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. KOLEVAR. I do.

The CHAIRMAN. Please be seated.

Before you begin your statement, I will ask you three questions that are addressed to each nominee before this committee.

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

Mr. KOLEVAR. 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 to which you have been nominated by the President?

Mr. KOLEVAR. Mr. Chairman, 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.

The CHAIRMAN. Are you involved—or do you have any assets held in blind trust?

Mr. KOLEVAR. No, sir.

The CHAIRMAN. Now, there are two Senators present. I assume, Senators, we will proceed in the normal manner. All right.

And, sir, would you proceed to give your testimony to the committee?

TESTIMONY OF KEVIN M. KOLEVAR, NOMINEE TO BE ASSISTANT SECRETARY FOR ELECTRICITY DELIVERY AND ENERGY RELIABILITY, DEPARTMENT OF ENERGY

Mr. KOLEVAR. Thank you, Mr. Chairman, Senator Bingaman, and members of the committee. It is a great honor for me to appear before you today as the President's nominee to be Assistant Secretary for Electricity Delivery and Energy Reliability at the U.S. Department of Energy. I appreciate the committee holding this hearing and for considering my nomination. I also want to thank Secretary Bodman for being here this morning and for recommending me to the President for this position. If confirmed, it would be my privilege to work with this committee and with Congress, as well as my colleagues within the Bush administration, to carry out the Department of Energy's many important responsibilities in electricity and energy reliability.

I'd like to introduce my wife, Stephani, my son, Jake, and my daughter, Jessica. Stephani is my partner and best friend, and I would not be here today were it not for her constant encouragement and support.

I want to, again, thank President Bush and Secretary Bodman for the trust they have placed in me, and the committee, for holding this hearing and considering my nomination. If confirmed, I commit that I will do everything I can to help the Department accomplish its missions, which are so critical to the Nation's safety and security. It would be an honor and privilege for me to serve the American people as an Assistant Secretary for the U.S. Department of Energy.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Kolevar follows:]

PREPARED STATEMENT OF KEVIN M. KOLEVAR, NOMINEE TO BE ASSISTANT SECRETARY FOR ELECTRICITY DELIVERY & ENERGY RELIABILITY, DEPARTMENT OF ENERGY

Mr. Chairman, Senator Bingaman, and members of the committee, it is a great honor for me to appear before you today as the President's nominee to be Assistant Secretary for Electricity Delivery and Energy Reliability at the U.S. Department of Energy. I appreciate the committee holding this hearing and for considering my nomination. I also want to thank Secretary Bodman and Deputy Secretary Sell for being here this morning, and for recommending me to the President for this position. If confirmed, it would be my privilege to work with this Committee and the Congress, as well as my colleagues within the Bush Administration, to carry out the Department of Energy's many important responsibilities in electricity and energy reliability.

I would like to introduce my wife, Stephani Kolevar, my son Jake and my daughter Jessica. Stephani is my partner and best friend, and I would not be here today were it not for her constant encouragement and support. I would like to also introduce my parents, Robert and Judy Kolevar, and my siblings Brian and Kristin Kolevar. My mother and father spent their entire careers in service to the public; my father dedicated himself to law enforcement as a federal agent with the FBI, while my mother chose a career in medicine as a pediatric nurse. They instilled in me from my earliest memory a sense of civic duty and responsibility. It is because of them that I entered public service and why I seek to continue and help take on the great challenge of meeting this nation's energy needs reliably, efficiently, and with sensitivity to the environment.

I currently serve as the Director of the Office of Electricity Delivery and Energy Reliability, which was established in 2005 to lead the national efforts to modernize the electric grid; implement national policy to increase grid capacity and reliability; improve the security and resiliency of the energy infrastructure; and facilitate the recovery from disruptions in the energy sector.

Prior to this position, I served at the Department of Energy as the Chief of Staff to then Deputy Secretary Kyle McSlarrow and as a Senior Policy Advisor to Secretary Abraham. Before joining the Department of Energy, I spent over ten years serving as U.S. Senate staff in the offices of Senators Spencer Abraham and Connie Mack. My work at the Department of Energy has given me a great appreciation for the importance and difficulty of the national missions undertaken by the Department. My decade of work in the Senate has ingrained in me the deepest respect and honor for this great institution.

In each of these capacities, I have worked with the staff of this Committee and some of the Committee's Members on a variety of matters. I look forward to continuing to work with the Committee, in my present position and in the position of Assistant Secretary should I be confirmed. If confirmed as Assistant Secretary, I am committed to doing everything I can to work both within the Administration, with this Committee, and with the Congress to help the Department succeed in carrying out its missions.

In closing, I want to again thank President Bush and Secretary Bodman for the trust they have placed in me. I also want to thank the Committee for holding this hearing and considering my nomination. It would be an honor and a privilege for me to serve the American people in this position.

Mr. Chairman, this concludes my prepared statement. I would be glad to answer the Committee's questions at this time.

The CHAIRMAN. Thank you, sir.

Senator Bingaman.

Senator BINGAMAN. Thank you very much, Mr. Chairman. I join in welcoming the nominee and congratulating him on his nomination.

I know that Mr. Kolevar has held senior positions in the Department during the last 6 years and has been the Director of the Office of Electricity Delivery and Energy Reliability for the past 2 years. So, I have no doubt that he's qualified to perform the functions that are intended here.

I do still have concerns about the need to have an Assistant Secretary performing these functions. The Department, of course, has seven Assistant Secretary positions. One of these has traditionally been responsible for overseeing the Department's environment, health, and safety responsibilities, and those functions have now been moved to a new office that's headed by an office director not subject to Senate confirmation. I understand that that change was made in order to give the "Assistant Secretary" title to Mr. Kolevar, to the position that he is now being nominated for. I have concerns about the reorganization of the Department's environment and safety and health programs. And I do believe those are issues we should look into.

So, I do have some questions. Should I proceed with those questions at this point?

The CHAIRMAN. Senator, I apologize for sort of going in improper order. And, yes, you should proceed with your questions at this point.

Senator BINGAMAN. Okay. I'll be glad to ask a few questions.

Mr. Kolevar, let me just ask you: Why do the functions of the Office of Electricity Delivery and Energy Reliability need to be performed by an Assistant Secretary rather than by an Office Director, in your view? I assume that these are essentially the same functions that you have been performing as the Office Director, and, now that change is being made, perhaps you could explain the reasons for that.

Mr. KOLEVAR. Thank you, Senator.

Of course, the decision to elevate the office was not mine, and was made without input from me, or a recommendation to that effect. I do, however, believe that the duties carried out by this office, and the significance of electricity as a driving force for our economy, make an elevation of this office to an assistant-secretary level appropriate. We have seen a number of instances over the last several years where the interuption of electricity—the lack of reliable electricity—has been a national issue, certainly in the cases of the blackout of 2003 and in the wake of the hurricanes last year. It's my opinion that the electricity title included in the 2005 Energy Policy Act recognized these concerns and spoke very well to the need for additional involvement by the Federal Government to help ensure electricity delivery as a fundamental component of our national economy.

Senator BINGAMAN. Let me just follow up on that. As I understand the Energy Policy Act that we passed last year, it is—we did have in there various provisions assigning, to the Secretary of Energy, responsibility for coordinating Federal authorizations and environmental reviews for the development of new electric transmission facilities. And the Secretary then delegated those authori-

ties to FERC, the Federal Energy Regulatory Commission. Would you expect the Secretary to withdraw that—those functions from FERC and have them assigned to you? If not, what would be your role in the position as Assistant Secretary for those subject matters that were delegated to FERC?

Mr. KOLEVAR. Sir, I believe the delegation you are referring to is a new one that was passed to FERC wherein applications for transmission lines which were located within national interest electric transmission corridors would be coordinated by the FERC, and appropriate NEPA review would be conducted by the FERC as well. As we anticipate the provision of section 1221(a) working the Department has completed its study, has taken comments, and has announced recently that any draft designations that come from the Department would be published in draft form, with an additional comment period to allow additional stakeholder input.

Should the Secretary ultimately decide to designate one or more corridors, then most of the action will then turn over to the FERC, should there be an applicant to cite a new project within that transmission corridor. The reasons for that, sir, were because the Commission has a long and well-established process of coordinating permits for long line infrastructure. Their duties under chapter 7 of the Natural Gas Act are the best example. And so, the FERC has announced that they would intend to implement the relevant delegations in much the same fashion as they do chapter 7 of that Act, and that would involve coordinating the appropriate NEPA review in the event an application be made for a transmission line in that corridor.

Senator BINGAMAN. Let me ask, on another issue. I note your office is—will share jurisdiction over some programs that have previously been under the Energy Efficiency and Renewable Energy Office, and that some programs that have been under that office will be transferred to your office. At least that's what I've been informed. An example here is the Wind System Integration Program. I'd like to be sure that the important work that's been going on at this Energy Efficiency and Renewable Energy Office in support of wind development in connection with the—with this project is continued. Could you tell us about any plans you have to be sure that vital parts of that program are not lost in the transition to your office, and any comments you could give us, in general, about how you would plan to coordinate with that office to be sure that the overlap between your offices preserves the important goals of renewable energy projects?

Mr. KOLEVAR. Yes, sir.

I should note that the decision to transfer some portions of that program has not been made by the Congress. The provision that you speak of was included in the Senate- passed appropriations mark. And so, while we have seen that there was at least an intent, or a consideration, on the part of the Congress to move functions from the wind program into the electricity program, that has not yet happened.

That said, Senator, I will tell you that the Assistant Secretary for Energy Efficiency and Renewable Energy and I have taken it upon ourselves to work very closely together and to construct a pro-

gram which truly utilizes all of the benefits of the current wind technologies and seeks to integrate them into the grid.

Without speaking to any specific levels of funding that might or might not move, it is my opinion that close cooperation between the programs is absolutely imperative. Wind energy is commercially viable now, and we need to be giving more attention on how to integrate it into a grid—in a responsible manner that does not upset the balance. And Assistant Secretary Karsner and I are committed to doing that. Our staffs have been working cooperatively to fashion a joint committee to really decide how best to make that happen. And I have to say, I am very pleased with the progress that has been made thus far. And the commitment of all the staff is to really work together to break ground on some new relationships and break out of the stovepipes that we occasionally see at the Department.

Senator BINGAMAN. Mr. Chairman, I'll stop with that. Thank you very much.

I'll have a few other questions that I'll submit for the record, if I could.

The CHAIRMAN. All right.

Senator Salazar.

Senator SALAZAR. Thank you very much, Chairman Domenici and Ranking Member Bingaman.

I very much have enjoyed working on this committee, and working with the spirit of bipartisanship that you have brought to it, Chairman Domenici and Senator Bingaman. And certainly the efforts of the passage of the 2005 Energy Policy Act could not have happened without the great leadership from both of you, and I very much appreciate both of you in that regard, and also as just wonderful friends from the Land of Enchantment.

To you, Secretary Bodman, and to Assistant Secretary Sell, thank you for being here, and thank you for your continuing support of the National Renewable Energy Lab in Colorado.

And, to Mr. Kolevar, I congratulate you on your nomination.

I have a couple of questions for you. The first has to do with a provision that was in the 2005 Energy Policy Act, on the designation of the energy corridors around the country. In my State, there are a number—we have tried to work with the Department of Energy to get the corridor maps given to us so that we can understand what areas of the State will be impacted. And, as I have understood what those corridors look like, they are more than half a mile wide, and have enough a number—will affect a number of different areas in the State of Colorado. Can you provide me with an update on what the status is of the designation of those energy corridors at this point and will have more specific information as to the description of those corridors within my State, as well as within other States?

Mr. KOLEVAR. Yes, sir.

The corridors that I think you are referring to are those provisions under section 368 requiring the Department to work with other land management agencies to identify energy corridors through which not just transmission, but natural-gas pipelines, product pipelines, and the like, can run. I have been very pleased with the close cooperation that has taken place between the De-

partment and the other agencies. In this respect, the Department shares a co-chair lead with the Department of the Interior. And we have been working very closely with all of the relevant agencies within that Department and the Forest Service and others to cooperatively identify corridors across the West. We are looking at it from a very high-level system view, if you will, so that we can do our very best to identify those corridors most necessary, but, at the same time, do so with intrusion upon the least amount of Federal lands as possible.

The corridors, sir, as you mention, are around 3,500 feet wide, as currently envisioned. And, a draft map of these corridors was released in June of this year. We are working with our partners right now to identify additional steps that need to be made before we can release any final version.

Senator SALAZAR. Can you tell us—or can you tell me and the committee when you expect that to happen?

Mr. KOLEVAR. Yes, sir. I think that that will happen in the spring of 2007. We had hoped to be able to produce that faster, but this is a significant action by the land management agencies, and——

Senator SALAZAR. Just because of our time constraints here, let me just ask you another question—once the—once those maps are published to show these energy corridors for the country, what is the process that you anticipate to move forward with, in terms of finalizing those energy corridors?

Mr. KOLEVAR. An entire package for proposed final corridors will include a programmatic EIS, and additional public comment will be invited on those corridors.

I should note, Senator, that all agencies have been working very hard to identify the corridors most necessary to facilitate continued growth in the West, at the same time being very sensitive to all of the lands out there. Ninety percent of the corridors we have identified this way are located using existing rights-of-way across Federal lands.

Senator SALAZAR. It'll be very important to maintain communication, I'm sure, with all of the Senators, on those corridors within our respective States, and I look forward to working with you on that in connection with the Colorado corridors.

Let me ask you a second question relative to the integration of renewable energy into the electric grid. The—wherever I go in Colorado, whether it's in the eastern plains or up in the northern part of Colorado, where we now have significant wind energy being produced, one of the major concerns that I hear from people who are interested in the subject is the fact that they have no access to the grid. We can produce all of the—all of the electricity—a lot of electricity from wind, but our challenge, then, is access to the grid. Give us, in a 1-minute summation, 2- minute summation, what you think we ought to be doing to enhance that access to the grid for renewable energy from wind.

Mr. KOLEVAR. I think there are two primary lines of pursuit, and these are those that would be done in the cooperative working group that, Senator Bingaman, I described to you just a little earlier. The first is that there are interconnection barriers that need to be overcome, and that is to make sure that when wind is intro-

duced into a system, it is not doing it to the detriment of reliability of the system. And the variable nature of wind can make balancing some grids very difficult. And so, that is a technological challenge that we will continue to work on, and will do so through research and development, but within the Electricity Office and in the wind program.

The second area, Senator, is that I believe that there needs to be significant outreach efforts—and this is really going to involve the States, who are the primary regulators of the electric grids—to make sure that we can work with utilities to appropriately incentivize their greater inclusion of wind assets into the grid. It is oftentimes the case that the potential risks of introducing that new variable in are such that utilities or regional organizations may be trepid and not want to pursue that. So, that is an area where we really need to sit down with the States, with the RTOs, ISOs, and the utilities themselves, and developers, and see what we can do to overcome and address some of those fears. And, to the extent that the States can introduce some new policies by regulation or statute to help overcome those barriers, the Department would like to do what we can to assist them.

Senator SALAZAR. I look forward to working with you on that issue, and with Secretary Bodman, because I know it's a very major issue in my State.

I have a number of other questions, Mr. Chairman, but I will just submit those for the record and for response along the timelines that you've set.

Thank you very much.

The CHAIRMAN. Thank you very much.

Both of you have asked great questions this morning, because you've asked the questions that I was going to ask.

[Laughter.]

The CHAIRMAN. Obviously there's nothing left. But I will submit mine anyway and let them—let the young man answer them again. So, I'll submit mine, and you can rethink between what you gave you and what he's going to give me in writing, and see how that turns out. And we won't "catch him," I don't think, since he'll have plenty of time to think. Looks like he is not very easily "caught." Would that be fair? Whatever that means.

[Laughter.]

The CHAIRMAN. Anyway, we're glad to have you. Unless Senator Bingaman has anything further—we know we've got a few wires, one ahead of the others, that we ought to get straightened out here, Mr. Secretary, before too long, if we can, so as to implement his being moved along, rather than being a deterrent. And you are well aware of that. Working with a rather fairminded minority for the next couple of weeks, we want to get it done, work well with them. If not, we'll be into next year, and we'll see what happens.

But, in any event, we're finished with you for the day, and glad to have your family up here. We are glad that they are interested in your moving ahead in an area like this and that they're willing to come up here today. And that little guy is going to do okay, it looks like to me.

[Laughter.]

Mr. KOLEVAR. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.
We're in recess.
[Whereupon, at 10:32 a.m., the hearing was adjourned.]

APPENDIX

RESPONSES TO ADDITIONAL QUESTIONS

RESPONSES OF KEVIN KOLEVAR TO QUESTIONS FROM SENATOR DOMENICI

NATIONAL INTEREST ELECTRIC TRANSMISSION CORRIDORS NIETCS

Section 1221 of EPAct directed the Department of Energy (DOE) to conduct a national study of electric transmission congestion and to issue a report designating a National Interest Electric Transmission Corridor—or NIETC—for "any geographic area experiencing electric energy transmission capacity constraints or congestion that adversely affects consumers." Once an NIETC is identified, EPAct provided FERC with "backstop" siting authority, if certain conditions are met.

The DOE report, released in August, found southern California and the area between New York City and northern Virginia to be the most severely congested regions in the country. The public comment period closed this fall and DOE is set to release draft NIETC designations by the end of this year. Those draft designations will also be open to public comment.

Question 1. DOE's congestion study identified southern California and the Atlantic coastal area from metropolitan New York through northern Virginia as "critical congestion areas." These areas will likely receive an NIETC designation correct? How does DOE plan to deal with the "congestion areas of concern" like New England; Seattle/Portland; Phoenix/Tucson; and the San Francisco Bay area?

Answer. The Department of Energy (DOE or the Department) is presently evaluating comments it has received on its congestion study and other relevant information to determine whether to designate one or more National Corridors in the classes of congestion areas that were identified in the congestion study. The Secretary has not yet made a determination as to whether or where National Corridors will be designated. In making those decisions, I believe the Department will consider all comments and feedback from potentially affected States and stakeholders in those regions.

Question 2. I understand that draft designations may be out by the end of this year. When does DOE anticipate designating final corridors?

Answer. At this time I cannot estimate precisely when any final designations of National Corridors may occur. I can say, however, that the Department is proceeding as expeditiously as possible. The Department expects that it will decide whether or not to designate any final National Corridors at an appropriate time after it issues any draft designations, allows for a comment period, and considers all comments submitted.

Question 3. Given the long lead times necessary for transmission construction, is there an assumption that these designated corridors will be in place for a significant period of time?

Answer. The Energy Policy Act of 2005 is silent as to whether National Corridor designations should be permanent, terminate at some time, or terminate upon the occurrence of some event or condition. The Department has not yet determined how it will deal with this issue. The point you raise is significant, however, and the Department did request public comment on this question.

Question 4. There is already some concern in the state of Virginia that a potential corridor could encompass historic battlefields. Are state or federally-owned lands subject to eminent domain for NIETC corridors?

Answer. Pursuant to Section 1221(a) [FPA Section 216(e)], property owned by the United States or a State is not subject to the exercise of the right of federal eminent domain, even if such lands are encompassed within a National Corridor.

Question 5. Similarly, my colleagues from Maine have expressed concern about the requirement that DOE consult with the States. Will DOE consult with affected states prior to issuing the draft transmission corridor designations? On what basis

did DOE find that the Maine-New Hampshire interface is a congested area of concern?

Answer. DOE consulted extensively with many State officials, such as state regulatory commissioners and their staff and officials from State energy agencies, before completing and issuing the *National Electric Transmission Congestion Study* in August 2006. The Department repeatedly sought input from States and other parties, and many of them responded to these invitations by supplying useful comments, information, and analysis. Others affirmatively sought to meet or talk with the Department to make their views known. After issuing the study, DOE again invited public comment and has received much useful and relevant input.

In addition, DOE has announced its intention to issue draft designations of National Corridors in order to engage in public comment and consultative discussions with affected States and other stakeholders prior to any final designations. Section 1221 does not require DOE to seek public comment on draft designations, but we believe that doing so will be beneficial to DOE and to stakeholders.

The DOE historical document which references the congestion on the Maine-New Hampshire flows is the ISO-NE Regional System Plan 2005. The interface in question is the Northern New England Scobie Interface. The Department's conclusion was based on historical market data for that interface, which showed that the interface reached the limits of its safe load-carrying capacity during more than 1600 hours in the 2004-2005 time period.

DOE's independent modeling results were based on simulations using the GE MAPS model utilizing the CRA proprietary generation database and transmission configuration from the NERC MMWG load flow. Those models served to further verify the facts contained in the earlier noted analysis.

I look forward to working with your office, the Maine delegation, and other interested Members to ensure that DOE addresses concerns such as those expressed by the State of Maine.

ENERGY CORRIDORS ACROSS FEDERAL LANDS

Question 6. EPAct directed DOE and the land management agencies to designate corridors for energy rights-of-way across federal land in the West for new infrastructure. I understand that this has been an enormously complex undertaking, given the number of jurisdictions and stakeholders involved.

What kind of consultation process has DOE undertaken to identify these corridors and work through these complex issues? What remains to be done? Will DOE meet the August 2007 deadline?

Answer. You are correct. The tasks required by EPAct Section 368 are complex, but agencies continue to work together and make progress. The agencies began work shortly after the Energy Policy Act of 2005 was enacted in August 2005. At that time, an interagency team was established with the Department of Energy (DOE) as the lead agency. The Bureau of Land Management is a co-lead, and the Forest Service, the Department of Defense, the Fish and Wildlife Service and the States of California and Wyoming are cooperating agencies. The Coeur de'Arlene tribe is also a cooperating agency. In addition, the Department of Commerce is involved as a consulting agency. Pursuant to EPAct Section 372(a), a Memorandum of Understanding (MOU) was signed by the four main agencies in February 2006 with respect to cooperative implementation of Section 368.

Involvement from the States, tribes and various stakeholders throughout the energy right-of-way corridor designation on Federal lands is ongoing. The Federal agencies have conducted joint public scoping meetings concerning the designation of such corridors in each of the eleven contiguous Western States.

A draft Programmatic Environmental Impact Statement (PEIS) for the proposed action is expected to be published in the spring of 2007. The agencies anticipate there will be a 90-day comment period, including hearings in each of the eleven western states. After the final PEIS is issued, the relevant land use plans are expected to be amended by a record of decision to be issued by approximately December 2007.

Question 7. There has been much debate as to the areas these energy corridors may cross. There are numerous environmentally sensitive areas throughout the West. Will it be possible to designate such corridors while avoiding areas such as wilderness areas and wildlife refuges?

Answer. The agencies are seeking to avoid wilderness areas, wildlife refuges, and other sensitive environmental areas. The agencies are going through a laborious process with webcasts, field meetings, and various face to face discussions regarding the best routes for energy right-of-way corridors. The objective is to facilitate additional infrastructure to support demand and supply resources, while protecting the

environment. About 90 percent of the currently designated energy corridors on federal lands build upon existing rights of way.

BLACKOUTS

Question 8. Last summer's record temperatures and electricity demands certainly taxed our nation's grid. Are we at risk today for a significant blackout like the one we experienced in August 2003?

Answer. Last summer's record temperatures and electricity demands greatly stressed our Nation's grid, and significant weather events continue to have the potential to cause a significant blackout. However, things have improved since 2003, largely as a result of our having identified the causes of that blackout and the progress being made to implement the recommendations made by the U.S.-Canada Power System Outage Task Force (Task Force).

The fact that some of the causes of the August 2003 blackout were seen in previous blackouts led to a strong emphasis in the Task Force's final report on the long-term need to track implementation of the report's 46 recommendations, monitor compliance with standards, and maintain vigilance.

The first and most important recommendation of the Task Force was that the U.S. Congress should enact legislation to make compliance with reliability standards mandatory and legally enforceable, which the Congress did in the Energy Policy Act of 2005. That policy is being implemented by the Federal Energy Regulatory Commission through its approval and continuing oversight of the North American Electric Reliability Council to be the Nation's "Electric Reliability Organization." Utilities, RTOs and ISOs have been working for over a year to prepare for these new standards, and this preparation is doing a great deal to improve reliable electric service.

While much progress has been made since August 2003, there is still much work to be done. By its very nature, the electric grid is complex and is subject to mechanical and human failures. Thus, we cannot eliminate the possibility of future blackouts.

Question 9. The North American Electric Reliability Council—the new ERO—recently released its long-term reliability assessment. NERC warned that we need to invest in power plants and transmission lines to accommodate an expected 19% increase in demand over the next decade. How do you respond to this report?

Answer. We embrace this report. NERC's recent long-term reliability assessment is consistent with the President's statements, those of the Department, and that of Congress by its enactment of the Energy Policy Act of 2005, that our nation needs to modernize and expand our electricity infrastructure. The Department shares NERC's call for more generation and transmission, as well as NERC's call for more energy efficiency and demand response, all of which are essential parts of modernizing our Nation's electric grid.

COAL DELIVERIES VIA RAIL

Question 10. As Assistant Secretary, one of your primary responsibilities will be to help ensure a reliable supply of electricity for the nation. Last May, this Committee conducted a hearing on rail deliveries of coal used to generate electricity. At the hearing, we learned that even though our country is the "Saudi Arabia of coal," a number of electric utilities are importing coal from South America and Indonesia to make up for inadequate rail deliveries of domestic coal.

If confirmed, will you focus on this important issue and keep the Committee informed as to whether federal policy in this area is adequate or whether legislative or administrative action is needed?

Answer. I agree that the reliable delivery of coal is an important factor affecting the reliability of our nation's electricity supply. If confirmed as Assistant Secretary, I will continue to track this issue and keep the Congress informed, as well as inform you if it appears additional actions are needed.

POLE ATTACHMENTS

Pursuant to current federal law, cable and certain telecommunications companies attach their wires to electric utility poles at subsidized, mandated rates originally instituted to promote the deployment of nascent video and telecommunications services.

Senator Bingaman and I recently sent a letter to the Federal Communications Commission (FCC) expressing our concern about the effect of current pole attachment subsidies, as well as two new proposals related to pole attachment rates and engineering standards, on the electric rates paid by electricity consumers.

Question 11. Are you aware of the relationship between pole attachments and the safety, integrity, reliability and cost of electric distribution infrastructure? Would you agree that the FCC should refrain from taking action on any proposed changes to pole attachment regulations in order to avoid any further negative effects on electricity consumers, and also to allow time for Congress to consider these issues in a comprehensive manner?

Answer. I am aware that pole attachments have the potential to affect the reliability of our Nation's electricity infrastructure. I cannot address what the FCC should or should not do under the laws it administers. I can say, however, that I believe it would be appropriate for DOE to make sure the FCC is aware of any potential concerns, such as common point of failure issues, in connection with pole attachments.

Question 12. As Assistant Secretary, will you be willing to assist the committee in addressing these critical reliability issues relating to pole attachments?

Answer. If confirmed, I would look forward to discussions with the Committee regarding how I might assist in addressing these issues.

DOE LEAD AGENCY AUTHORITY

Question 13. Pursuant to new Section 216(h) of the Federal Power Act, what steps has the Department taken to implement its lead-agency role for transmission-related permits, and how have those steps improved the permitting process to date? What more can the Department do, and when can we expect further action in this area?

Answer. On August 8, 2006, the Department of Energy (DOE) and eight other Federal agencies signed a *Memorandum of Understanding (MOU)* on Early Coordination of Federal Authorization and Related Environmental Reviews Required in Order to Site Transmission Facilities on Federal Lands. Since that time, DOE has assembled a team to implement Section 216(h), and is finalizing the Department's procedures, including the roles and responsibilities of Federal agencies and transmission project applicants. I am encouraged by the potential benefits of systematic coordination among Federal agencies and appropriate State agencies, Indian tribes, and multi-state entities to prepare the initial calendars with milestones and deadlines for the Federal authorizations and related reviews required for the siting of transmission facilities.

To date, no Federal agency has notified DOE that it has received a transmission line permit application relating to an electric transmission line. Preparations are now in place to begin to aggressively work with other Federal agencies to fulfill the provisions of the MOU and Section 216(h).

TRANSMISSION EXPANSION

Question 14. I understand that in some states, such as Indiana, Georgia, Minnesota, and Vermont, municipal electric systems and rural electric cooperatives have jointly funded transmission upgrades. Is this an effective model for getting new transmission funded and built?

Answer. I believe that joint ownership is one of several effective models for getting new transmission facilities funded and built, as it promotes joint planning, brings new investment money to the table and broadens the base of support for construction of new transmission facilities.

EMERGENCY REPLACEMENT TRANSFORMERS

Question 15. One of the more vulnerable points in the electric system are the high-voltage transformers that step voltage down from transmission levels, typically above 100 kilovolts, to distribution voltages in the tens of kilovolts. In 2004, both the Congressional Research Service and the Congressional Budget Office concluded that high-voltage transformers are uniquely important facilities for electric reliability that are generally not produced in the United States. Recently, the investor rating service Fitch noted that 70 percent of transformers are at least 25 years old, and that the availability of spare parts was generally a problem in the utility industry.

Are you aware of the Electric Power Research Institute's design for an emergency replacement transformer that could be built in the United States, easily transported when and where needed, and used either until a permanent replacement was available, or for up to 30 years? If so, what are the Department's views on this design? Should the federal government be assisting in this effort?

Answer. I am familiar with the Electric Power Research Institute's (EPRI) effort to develop a "Recovery Transformer." This project was performed in partnership with the Department of Homeland Security. It is an example of a longer-term ap-

proach to make large transformers easier to replace by designing modular transformers that can be more easily transported.

The Department of Energy's Office of Electricity Delivery and Energy Reliability is sponsoring complementary research that will improve the compactness of distribution substation transformers. This research is focused on increasing the flux density in the core steel and materials research in high temperature superconductivity (HTS). HTS will enable the transformers to be cooled without oil, making them more resistant to acts of sabotage.

PMAS

Question 16. Section 1222 of EPAct authorized the Western Area Power Administration and the Southwestern Power Administration to accept non-federal funds to build transmission facilities in certain circumstances to resolve congestion situations. Is DOE aware of any plans by WAPA and SWPA to exercise this authority?

Answer. I am not aware of any plans by WAPA and SWPA to exercise this authority. It is my understanding that, to date, WAPA has not received any financial offers to help build transmission facilities in congested areas.

EPACT SECTION 1813

Question 17. I know you are working on the EPAct Section 1813 study regarding rights of way over tribal lands, which I authored. Because of its importance, I want to make sure that you are looking at all perspectives—economic, legal, regulatory, social, and historical. The study should also be forward-looking. Further, I want to make sure that the final report is going to give us some solid recommendations on how to best address these issues.

Answer. DOE's Office of Electricity Delivery and Energy Reliability is working with the Department of Interior (Departments) to complete the EPAct Section 1813 study regarding energy rights-of-way (ROW) over tribal lands. The Departments have also consulted with the Federal Energy Regulatory Commission and numerous tribal, industry, and public participants in the course of this study. A draft report was released for public comment in August 2006. In the past few months, the Departments have been reviewing comments and making revisions to the draft.

I agree with you about the importance of the study, including the economic, legal, regulatory, social, and historical aspects of this important issue. I anticipate that the final report will consider each of these issues in relation to energy ROW negotiations on tribal lands. In addition, I anticipate that the report will provide data and analysis with respect to energy ROW negotiations.

The draft report currently contains a variety of alternatives that could be implemented by parties to particular energy ROW negotiations or by Congress should any specific public interest concerns arise from the failure of parties to reach an acceptable agreement. The Departments are also considering whether to make specific policy recommendations in the final report.

The Departments are considering publishing the current staff draft for additional public comment and I look forward to discussing this new draft with your staff to ensure that your concerns are appropriately addressed before the report is issued in final form.

RESPONSES OF KEVIN KOLEVAR TO QUESTIONS FROM SENATOR THOMAS

Question 1. Under Section 216(h) of the Federal Power Act, as added by Section 1221(a) of the Energy Policy Act of 2005, the Department of Energy (DOE) is directed to act as the lead agency for coordinating required Federal agency authorizations and related environmental reviews with respect to the siting of electric transmission facilities. Under this authority, DOE has executed a Memorandum of Understanding with other Federal agencies on early coordination and cooperation. Under Section 216(h)(4)(B), the Secretary of Energy is to ensure that, once an application has been submitted, all permit decisions and related environmental reviews under all applicable Federal laws are to be completed within 1 year. How does the Department intend to assure that all permit decisions by Federal agencies are completed within 1 year, and what steps will you take if a federal agency delays action on a completed application?

The statute authorizes DOE to issue any regulations necessary to implement the lead agency authority within 18 months, or by February 2007. Is the Department planning to issue any such regulations?

Answer. As you indicated, on August 8, 2006, the Department of Energy (DOE) and eight other Federal agencies signed a Memorandum of Understanding (MOU) on Early Coordination of Federal Authorization and Related Environmental Reviews

Required in Order to Site Transmission Facilities on Federal Lands. Since that time, DOE has assembled a team to implement Section 216(h), and is finalizing the Department's procedures, including the roles and responsibilities of Federal agencies and transmission project applicants. I am encouraged by the potential benefits of systematic coordination among Federal agencies and appropriate State agencies, Indian tribes, and multi-state entities to prepare the initial calendars with milestones and deadlines for the Federal authorizations and related reviews required for the siting of transmission facilities.

To date, no Federal agency has notified the DOE that it has received a transmission line permit application. The preparations are now in place to begin to aggressively work with other Federal agencies to fulfill the provisions of the MOU and Section 216(h).

Question 2. Section 1815(b) of the Energy Policy Act of 2005 requires an interagency task force to study and report on competition within wholesale and retail markets for electricity in the U.S. The task force was required to report to Congress within 1 year of the date of enactment of the Energy Policy Act of 2005. A draft of the study was published for comment in June, but to date, the final study has not been submitted to Congress. When can we expect to see this study?

Answer. A draft of the report to Congress is in interagency review. I hope that the Department will be able to send you the final report within a few weeks.

Question 3. Under the Federal Power Act Section 216(a), as added by Section 1221(a) of the Energy Policy Act of 2005, DOE is charged with the designation of National Interest Electric Transmission Corridors (NIETC). I am aware that DOE has completed a congestion study that is a prerequisite to NIETC designations. Why is DOE requesting yet another public comment process on yet to be proposed NIETC designations?

Answer. The Department has announced that, due to the significant public interest in the NIETC (National Corridor) issues, before designating any National Corridor, it will first issue any designations in draft form to facilitate focused review and comment by affected States, regional entities, and the general public. DOE noted, when it announced this process, that a comment period on draft designations is not required by Section 1221(a). I support this process because I believe further public input will inspire greater confidence in the process, and any final National Corridor designation will benefit from comments addressing the specifics in a draft designation.

Question 3a. DOE has not provided a timetable for making the first proposed NIETC designations. Given how badly the nation needs new electric transmission capacity, when will the Department finalize the first set of NIETC designations?

Answer. I do not have a firm timeline, but I can say that I believe the Department is proceeding as quickly as it can. The Department's August 8, 2006 Congestion Study highlighted numerous geographic areas where electric congestion or capacity constraints exist. Fortunately, DOE is not operating in a vacuum—many States and regional planning entities have been active in working with the private sector to address the need for new transmission. Accordingly, I believe that it is important that before DOE makes any final designations, we fully consider the comments and results of consultations with the States and others in order to ensure that the designations, if any, are well grounded. DOE is actively analyzing the comments that were submitted following publication of the Congestion Study.

Question 3b. How does DOE intend to assure that the national interest is paramount in the designation of the corridors in the face of competing local or public interest group pressures?

Answer. Congress has given DOE a significant new authority, and has stated that the Secretary may consider in any designation whether the National Corridor would be in the interest of national energy policy, among other factors. In order that DOE properly and appropriately exercise the authority given it in Section 1221(a), if confirmed as Assistant Secretary, I will ensure that there is a designation process that appropriately considers all relevant factors.

Question 3c. Can entities proposing projects ask that The Department of Energy (DOE) look at specific paths for transmission lines before DOE completes its NIETC designations? If not, why?

Answer. Project sponsors and other entities have been able to submit proposed transmission paths to DOE for its consideration as to whether a National Corridor should be designated. These submissions have been included in the public comments requested by the Congestion Study, and are currently being reviewed as part of the entire record.

Question 3d. Your initial studies did not identify Wyoming as a NIETC but found that, in the future, markets in the southwest will need access to Wyoming coal resources. Transmission lines take a long time to plan and build. Do you believe that

work should begin now by relying on the Rocky Mountain Area Transmission Study, and other studies, which made it clear new transmission lines are needed in the West?

Answer. I agree that transmission projects have long lead times, and that it is vital to plan ahead for future electricity needs in the Southwest, as it is in other current and future high-demand areas. Wyoming is blessed with an extraordinary coal resource that can make an enormous contribution to the future economic growth in large electricity demand centers in the Southwest. Accordingly, I encourage prospective transmission developers to actively pursue their proposals with appropriate State and Federal agencies with siting authority.

Question 4. In terms of an appropriate role for DOE in facilitating major electric transmission construction that affects more than one state and multiple electric utility service territories, should DOE take the lead in bringing stakeholders together to achieve sufficient consensus in order to assure that needed transmission infrastructure is, in fact, completed?

Answer. I agree on the value of consensus among stakeholders on the need for additional transmission infrastructure. If confirmed as Assistant Secretary, I intend to continue DOE's role in supporting and facilitating efforts by States to work together on a regional basis to plan for meeting electricity demand. For example, the assistance DOE offers has included access to experts at DOE national labs and other national experts who can assist with studies and analyses. DOE also continues to assist the Western Governors Association's Committee on Regional Electric Planning Coordination with various studies and related technical assistance to help them improve Western regional grid planning and coordination. And, several years ago, the Department gave the Rocky Mountain Area Transmission Study access to national lab experts on advanced transmission technologies.

I would hope to further advance this work as DOE implements its new authorities under EPAct. These new authorities include calling on DOE to cooperate with the Federal land management agencies to designate specific energy corridors crossing Federal land (Section 386), to coordinate Federal permits required by transmission facilities (FPA Section 216(h)), and to conduct periodic congestion studies to focus national attention on the significant challenges the Nation faces in keeping up with growing electricity demand.

Question 4a. If so, what tools does DOE have to accomplish that objective?

Answer. DOE can provide access to experts at DOE National Labs and other national experts who can assist with studies and analyses, expert facilitation, and related areas of expertise existent in other Departmental programs (e.g., market data in EIA and coal generation information in the Fossil Energy Office).

Question 5. Given that much of the western United States is federal land, what role will DOE play in the selection, permitting and review of major transmission projects that affect federal lands? How will DOE ensure coordination with the Department of the Interior, the Department of Agriculture and other relevant federal agencies?

Answer. The agencies affected by Section 368 began work shortly after the EPAct was enacted in August 2005. At that time, an interagency team was established with DOE as the lead agency. The Bureau of Land Management is the co-lead agency for this project. The Forest Service, the Department of Defense, the Fish and Wildlife Service and the States of California and Wyoming are cooperating agencies. A Memorandum of Understanding (MOU) was signed by the four main agencies in February 2006 with respect to cooperative implementation of Section 368. The Coeur de' Arlene tribe is also a cooperating agency. The Department of Commerce is involved as a consulting agency. DOE, along with the other agencies involved in energy corridors in the West, are not selecting specific projects.

As mentioned above, DOE also will play a role in facilitating transmission projects both on and off of Federal lands. Pursuant to the new FPA Section 216(h), DOE will coordinate Federal permits required for the siting of transmission facilities, as outlined in the Memorandum of Understanding.

Question 6. How will DOE interact with Indian tribes in the decisions on siting and operation of transmission facilities that may impact Indian country?

Answer. DOE has been working on many levels with Indian tribes regarding decisions on siting and operation of transmission facilities. Pursuant to Section 368 of EPAct, DOE is working with an interagency team and conducting outreach to the tribes through regional meetings, conference calls, face to face meetings, and government-to-government consultations. The interagency team has developed a tribal protocol so that all field and headquarter staff would be well prepared when working with the tribes.

DOE and DOI also have been holding discussions and receiving comments from Indian tribes, industry and the general public in developing the report on Indian

Land Rights-of-Way, required by Section 1813 of EPAct. I expect a new draft will be published this year for public comment. Working in conjunction with the Department of the Interior, DOE will examine comments from the Indian tribes and other members of the public on the specifics of this draft once it has been published.

Question 7. How will DOE coordinate with FERC given FERC's "backstop" permitting and eminent domain authorities under the Energy Policy Act of 2005?

Answer. DOE has been coordinating with FERC with respect to implementation of Section 1221. If confirmed as Assistant Secretary, I intend to strengthen that coordination, particularly as it relates to the DOE's FPA Section 216(h) requirements to coordinate Federal permits for transmission facilities, both personally and through recently hired staff who have experience at FERC.

Question 8. Do you believe that the construction of new transmission capacity needs further regulatory or financial incentives to move forward in a timely manner?

Answer. The Energy Policy Act of 2005 included several provisions designed to ease regulatory obstacles and provide additional financial incentives for transmission development, including changes to the Internal Revenue Code and new authority to FERC to grant incentive-based rates to attract new investment. Thus far, I understand that there have been some encouraging responses from the electricity industry, but I believe that it is too soon to know whether or what additional Federal actions might be required to stimulate construction of additional transmission capacity.

Question 9. Currently, IRS "private use" restrictions limit the use of certain tax-advantaged instruments to government owned utilities. There are a number of State infrastructure authorities that are developing public-private partnerships to build transmission. As is provided for in Sec. 3011 of Senate bill S. 2755, do you believe it would be helpful if these entities had the authority to issue tax exempt bonds in order to lower the cost of capital for large scale transmission projects?

Answer. I believe the creation by some States of infrastructure authorities is a good way to help ensure that needed transmission is built. I am aware of the language in Senate bill S. 2755 that would expand the IRS "private use" restrictions to allow State infrastructure authorities to issue tax exempt bonds. However, I defer to the Department of the Treasury for a position on Section 3011 of Senate bill S. 2755.

Question 9a. To what extent is the Department of Energy working with state infrastructure authorities?

Answer. DOE has been in frequent dialogue, attended meetings with, and otherwise consulted with State infrastructure authorities. For example, DOE has worked with the Wyoming Infrastructure Authority as part of its work on the proposed Frontier Line. In addition, DOE has worked with Western entities on regional planning and coordination through groups such as the Western Governors Association's Committee on Regional Electric Power Coordination. Also, the Department's Western Area Power Administration is part of a three-way memorandum of understanding with TransElect and the Wyoming Infrastructure Authority to evaluate various ways of addressing the "TOT-3" transmission congestion that exists between Wyoming and eastern Colorado.

DOE was recently briefed on the newly-created Kansas Infrastructure Authority. If confirmed as Assistant Secretary, I would look forward to meeting with and discussing infrastructure issues, including public-private partnerships, with it, and as well as other State infrastructure authorities.

Question 10. What role do superconductor wires have in increasing the reliability of electric delivery in the United States? Do you believe that western states, over which electricity must travel comparatively longer distances than other areas of the country, are an important place to demonstrate and encourage the advancement of superconductor technologies?

Answer. Superconducting cables have an important role in increasing the reliability of the electric delivery system. Superconducting cables are underground cables that increase the capacity in constrained areas of the transmission and distribution system. These cables have been tested in small lengths at both transmission and distribution voltages. I believe the Western states can take advantage of superconducting systems in congested metropolitan areas, but the cost of putting these cables underground presents a major obstacle that may prevent superconducting cables from being the technology of choice over distances in excess of 100 miles.

Question 11. In what ways does the Department of Energy coordinate with the Department of Transportation on ensuring that the reliability of our nation's electric supply is not jeopardized by insufficient rail delivery of coal? Do you believe there

is room for improvement in this regard and, if so, what do you propose doing about the federal role in remedying the so-called captive shipper' issue?

Answer. I agree that the reliable delivery of coal is an important factor affecting the reliability of our nation's electricity supply. DOE is currently reviewing this issue, and I look forward to working with the Committee on this issue.

DOE has been in discussions with the Department of Transportation regarding the importance of supply assurance to electricity reliability. However, DOE does not have the authority to address railroad rates or pricing policies.

Question 12. As the Department of Energy moves forward with the creation of right-of-way corridors on federal land, pursuant to Section 368 of the 2005 Energy Policy Act, how does the agency intend to protect private property rights in the corridors and the continuance of uses such as grazing and mining?

Answer. It is my understanding that Section 368 only applies to Federal lands, and that it does not address the designation of energy corridors on private, tribal or State lands. Where possible, I believe the Federal agencies are incorporating interagency operating principles (similar to best management practices) which outline various uses, including grazing and mining, and stipulations for the energy corridors.

RESPONSES OF KEVIN KOLEVAR TO QUESTIONS FROM SENATOR ALEXANDER

Question 1. The Office of Electricity Delivery and Energy Reliability was recently formed as a merger of the Office of Electricity Transmission and Distribution and the Office of Energy Assurance at DOE, subsuming newly formed programs and initiatives such as GridWise, GridWorks, and Transmission Reliability. What is the rationale for reorganization now and why will this reorganization serve the goal of the reliable delivery of electricity to our nation.

Answer. I believe this reorganization has made the Office of Electricity Delivery and Energy Reliability (OE) more effective. OE was formed by Congressional direction to build upon the synergies in the Office of Energy Assurance at DOE and newly formed initiatives such as GridWise, GridWorks, and Transmission Reliability.

Question 2. What are the most promising and significant technologies under development for ensuring the reliable delivery of electricity? Do you anticipate a role for innovative materials, such as superconducting wires, to improve the reliability of the electricity grid? Given the impressive results of computer modeling and visualization applied to improve our understanding of other complex systems, do you foresee significant application of computer modeling and visualization to improve the stability of the electricity grid and other critical energy infrastructure? What is the Department of Energy doing to develop, validate, and implement these innovations?

Answer. I believe the most promising and significant technologies under development include superconducting materials, storage, power electronics, load management technologies and visualization/controls. Yes, I do anticipate a role for innovative materials such as superconducting wires to improve the reliability of the electric grid. DOE, partnering with industry, is validating innovations through laboratory scale and commercial scale demonstrations including the superconducting cable demonstrations in Columbus OH, and Albany, NY. I foresee the application of computer modeling and visualization to improve the stability of the electric grid and other critical energy infrastructure. The Office of Electricity Delivery and Energy Reliability (OE) is currently working with the Office of Science on a joint activity that will look at mathematical supercomputing to increase our understanding of grid dynamics and stability. Additionally, OE is developing a departmental visualization tool for increased situational awareness during emergencies.

RESPONSES OF KEVIN KOLEVAR TO QUESTIONS FROM SENATOR BUNNING

Question 1. A number of Kentucky rural electric cooperatives, municipal electric companies and investor owned utilities have been having serious problems with the Tennessee Valley Authority for several years. Specifically, TVA has been unwilling to interconnect with these Kentucky companies and transmit power from suppliers other than TVA. This refusal to cooperate costs these Kentucky communities jobs and millions of dollars a year in extra power costs. TVA's unwillingness to provide interconnection and transmission service may have a significant adverse impact on Kentucky's ability to provide reliable electric power to its communities. What do you foresee your office doing to ensure electricity reliability in situations like this one and what interaction will you have with the TVA?

Answer. If confirmed as Assistant Secretary of Energy, I look forward to working with you to address your concerns. Although DOE does not have jurisdiction over

the Tennessee Valley Authority (TVA), EPAct does require the Department to identify areas of electric transmission congestion (Section 1221(a)). In its August 8, 2006 Congestion Study, DOE's identification of historic electric transmission constraints in the SERC Reliability Corporation region indicated that among the most limited flow directions in the TVA area were from Tennessee to Kentucky (mostly flows from Cumberland into the LGE system in Kentucky). However, in that same study, DOE's independent simulations for the Eastern Interconnection did not identify this flow area as among the most congested paths in the Eastern Interconnection. Accordingly, DOE did not designate any areas in Kentucky or the SERC Reliability Corporation Region as Critical Congestion Areas, Congestion Areas of Concern, or Conditional Constraint Areas. Nevertheless, DOE will continue to review all the identified constraints and congestion areas as it develops its planned progress report on congestion, which is expected to be released in late in 2007.

Additionally, I am cognizant of the potential impact of limited sources of generation for reliability and other adverse affects on consumers. I will, if confirmed, continue to focus on what DOE can do on these issues.

Question 2. Part of the responsibility of your Office is to modernize and enhance the security and reliability of the electric grid. The Energy Policy Act of 2005 gave the Department of Energy the authority to establish National Interest Electric Transmission Corridors. As you know, siting electric transmission lines has traditionally been a state matter. How do you see your office working in consultation and cooperation with the states on the issue of siting high voltage electric transmission lines?

Answer. I recognize that the EPAct provisions are new, and require care as they are implemented. I look forward to working with your office to ensure that DOE addresses these concerns as it works to exercise its statutory authority.

DOE consulted extensively with many State officials, such as state regulatory commissioners and their staff and officials from State energy agencies, before completing and issuing the *National Electric Transmission Congestion Study* in August 2006. The Department repeatedly sought input from States and other parties, and many of them responded to these invitations by supplying useful comments, information, and analysis. Others affirmatively sought to meet or talk with the Department to make their views known. After issuing the study, DOE again invited public comment and has received much useful and relevant input. In addition, DOE has announced its intention to issue draft designations of National Corridors in order to engage in public comment and consultative discussions with affected States and other stakeholders prior to any final designations. Section 1221 does not require DOE to seek public comment on draft designations, but we believe that doing so will be beneficial to DOE and to stakeholders.

Question 3. I understand that a number of new technologies that will allow for the efficient transmission of large amounts of electricity over long distances with little line loss are in the developmental or early deployment states. What is the status of these new technologies and what is your office and the DOE doing to facilitate their deployment?

Answer. Superconducting cables can play an important role in increasing the reliability of the electric delivery system through the efficient transmission of large amounts of electricity with little line losses. Superconducting cables are underground cables that can bring an increased capacity to constrained areas of the transmission and distribution system. These cables have been tested in small lengths at both transmission and distribution voltages in Albany, NY and Columbus, OH. DOE is currently requesting proposals to demonstrate longer lengths at transmission level voltages of superconducting cables.

RESPONSES OF KEVIN KOLEVAR TO QUESTIONS FROM SENATOR BINGAMAN

RELIABILITY OF OIL AND GAS PIPELINE SYSTEMS

Question 1. In September, this Committee held hearings on the failure of a critical oil pipeline in the Prudhoe Bay area of Alaska. Many of us were surprised that such an important piece of our oil supply infrastructure had not been adequately maintained and was not subject to federal safety regulation. DOT pipeline safety regulators apparently do not have a mandate to consider the importance of particular pipelines to supply reliability.

Can you tell us what your approach to energy infrastructure reliability will be? How will your office interact with the Department of Transportation, the Federal Energy Regulatory Commission, and the Department of Homeland Security to assure that we have a reliable and resilient pipeline infrastructure?

Answer. Homeland Security Presidential Directive-7 has designated DOE as the lead energy agency to work with sector security partners to ensure a robust, resilient energy infrastructure. If confirmed as Assistant Secretary of Energy, I would seek to ensure that DOE, through the DHS National Infrastructure Protection Plan (NIPP) and the Energy Sector Specific Plan, continues to collaborate with energy sector security partners to help identify key assets and systems and to encourage collaboration in restoration and recovery activities.

As the Co-Chair of the NIPP Government Energy Coordinating Council, DOE is working closely with federal, State and local governmental representatives, including most particularly with DOT, the Federal Energy Regulatory Commission and DHS Transportation Security Administration, in focusing on pipelines. Identifying vulnerabilities and working with the energy asset owners and operators is a key focus of our efforts. I understand that the DHS-led Transportation Sector Specific Plan will have a Pipelines Modal Implementation Plan which has been developed in close cooperation with DOE and the Oil and Natural Gas Sector Coordinating Council. DOE is also working very closely with FERC and DOT to ensure timely availability of information on pipeline system disruptions.

NATIONAL INTEREST CORRIDORS

Question 2. The Department of the Interior, along with the Department of Agriculture and the Department of Energy, is conducting a programmatic environmental impact statement on the determination of corridors of national interest for transmission lines on public lands in the West. It seems, from DOI's statements in that proceeding, that their belief is that we, in the passage of EPAct 2005, overturned prior law to make it unnecessary for Congress to give specific approval for transmission lines on Park Service lands. My view is that we did not do so. We left prior law in place to continue to require specific legislative approval for transmission lines on Park Service lands. Do you have a view on this question?

Answer. I recognize that the Energy Policy Act of 2005 provisions are new, and require care as they are implemented. I look forward to working with you and the Committee to ensure that DOE addresses these concerns as it works to exercise its statutory authority.

In implementing Section 368 of the EPAct, "Energy Rights-of-Way on Federal Lands," I believe the interagency project team (consisting of the Departments of the Interior, Agriculture, Defense and Energy—Commerce has a consultant role) has worked to understand the importance of avoiding environmentally sensitive areas wherever practicable. However, I cannot speak for the Department of the Interior with regard to the statement you have cited.

CONSERVATION EASEMENTS

Question 3. Again, on the question of determination of transmission corridors of national interest, It would seem to me that the process that you have laid out, coupled with FERC's final siting proceedings, may leave some questions of importance unexamined. The effect of a corridor or a line on state granted conservancy easements, for example, may not have a proper place for consideration without a programmatic environmental impact statement, which you do not intend to conduct for corridor determinations on private lands in the east. Also, the comparative viability of competing or alternative routes may not come to the fore in either your process of determining corridors or in FERC's siting process. Do you believe that issues like these can be adequately addressed in the process that is going forward, and if so how.

Answer. I believe the process DOE has announced regarding how it will consider whether to designate a National Corridor will allow for the important issues that you raise to be appropriately addressed.

As you are aware, in its Congestion Study, DOE invited public comment on the study and on the issues relevant to designation of National Corridors. In my current role as Director of the Office of Electricity Delivery and Energy Reliability, I am participating in the evaluation of these comments, and that work is ongoing.

DOE has decided that, prior to issuing a report that designates any National Corridor, DOE will first issue a designation that it is considering in draft form, so as to allow additional opportunities for review and comment by affected States, regional entities, and the general public. I support this process because I believe public input is crucial. As part of its analysis, I believe that DOE will seriously consider comments relating to potential routes for transmission relief as it considers whether to designate geographic areas experiencing transmission capacity constraints or congestion that adversely affects consumers. However, I believe the designation of a

National Corridor is not a siting process that endorses any particular transmission proposal or route.

Regarding DOE's obligations under the National Environmental Policy Act of 1969, as the director of OE, and if confirmed as Assistant Secretary, I will work to ensure DOE satisfies any NEPA obligations.

PUBLIC PARTICIPATION

Question 4. I also have concerns that the process for development of the corridors rulemaking may not have been as open as it might be. My understanding is that there has been little opportunity for input from states, environmental groups, property owners and consumers. I also understand that you have now determined that any communication with such entities after the closure of the comment period for the rulemaking on October 10, would be ex parte communication and so proscribed. My understanding is that such communication is not considered ex parte communication in the rulemaking context. What has been the process for public input on development of your rule?

Answer. DOE consulted extensively with many State officials, such as state regulatory commissioners and their staff and officials from State energy agencies, before completing and issuing the *National Electric Transmission Congestion Study* in August 2006. The Department repeatedly sought input from States and other parties, and many of them responded to these invitations by supplying useful comments, information, and analysis. Others affirmatively sought to meet or talk with the Department to make their views known. After issuing the study, DOE again invited public comment and has received much useful and relevant input. In addition, DOE has announced its intention to issue draft designations of National Corridors in order to engage in public comment and consultative discussions with affected States and other stakeholders prior to any final designations. Section 1221 does not require DOE to seek public comment on draft designations, but we believe that doing so will be beneficial to DOE and to stakeholders.

RESPONSES OF KEVIN KOLEVAR TO QUESTIONS FROM SENATOR WYDEN

IMPACT OF NEW DOE PREEMPTION AUTHORITY ON SITING ELECTRIC TRANSMISSION IN THE NORTHWEST

Question 1. Our region is served by the Bonneville Power Administration—which is also part of the Energy Department. BPA has very specific statutory responsibilities and roles, including providing much of the region's electric transmission. By federal law, we also have established a regional power planning council, now called the Northwest Power and Conservation Council. How do you intend to coordinate your Energy Policy Act process with the existing planning process in the Northwest? And what assurance can you give me that we won't find our own planning and siting processes preempted by you and the Energy Policy Act process?

Answer. The Energy Policy Act of 2005 directed the Department of Energy (DOE) to study transmission congestion and authorized DOE to designate National Interest Electric Transmission Corridors where appropriate. As a result, DOE needs extensive transmission planning information. I have great respect for the regional transmission planning entities and processes that exist in various parts of the Nation, and if confirmed, would seek to coordinate DOE's efforts with the work those organizations, including BPA, have in process.

RELATIONSHIP OF MR. KOLEVAR'S OFFICE TO BPA AND OTHER DOE POWER MARKETING ADMINISTRATIONS

Question 2a. As you know, DOE runs four major regional electric systems—the Power Marketing Administrations (PMA's)—Bonneville, Southeastern, Southwestern, and the Western Area Power Administrations including significant amounts of electric transmission. These PMA's don't report to you, but your office is supposed to be the Department's expert on what it takes to make sure the electricity system works. I would like to know what role you are going to play in how the Department oversees the PMA's in general.

Answer. Decisions in these matters are vested in the Secretary. The Office of Electricity Delivery and Energy Reliability (OE) supports the Secretary's responsibilities, and in so doing has developed and maintains a strong working relationship with all four PMAs.

Question 2b. Last year, the Administration proposed a budget that would have forced BPA to take its "excess" power revenues—"excess" as defined by OMB—and pay them to the Treasury. As your own transmission report points out, we already have transmission constraints in the Northwest. We also need to build additional

transmission to support the growth of new wind and other energy sources. Plus, BPA has a hydro-based system, and it's often the weather, not BPA, which determines what level of revenues BPA actually has to operate the system from year to year. In other words, the idea that BPA has excess revenues is incorrect. What are you going to do to ensure that the Administration is not going to shortchange BPA in its efforts to operate its system and meet its transmission needs?

Answer. I recognize the importance of improving transmission in the Pacific Northwest. If confirmed, I will work with BPA in its efforts to operate a reliable transmission system. I will seek to work with BPA on a variety of solutions to address these concerns, and ensuring the appropriate funding is secured to operate the grid is essential.

Question 3. Failure of Mr. Kolevar's office to improve transformer standards.

Your office is supposed to be source of expertise on electricity transmission at DOE. Yet, earlier this year, the Department's Office of Energy Efficiency and Renewable Energy finally issued a proposed standard for electric distribution transformers. There are some 40 million of these transformers in the U.S. And the result was a standard that even the electric utilities that need to buy these transformers say isn't good enough. Eight of them wrote to Secretary Bodman in September complaining that the standard DOE proposed would cost American utility companies and their customers an additional $11.1 billion over the lifetime of these transformers, waste 459 billion kilowatt hours of electricity, and increase peak load by 6,600 megawatts over a more efficient standard that DOE considered and rejected. I understand that you and your office didn't have any role in putting this proposal together, but my question to you, is why not?

Answer. The Office of Energy Efficiency and Renewable Energy, and not OE, is responsible for developing energy efficiency standards for consumer appliances, and industrial equipment, including standards for distribution transformers. As a result, I as Director of the Office of Electricity Delivery and Energy Reliability did not play a role in developing that proposed rule. However, I understand your concerns and have discussed this matter with Assistant Secretary Karsner of the Office of Energy Efficiency and Renewable Energy. I am confident that OE will be involved in any future activities relevant to transformers and will have the opportunity to contribute to future work in this area.

Question 4. Role of Mr. Kolevar's office in the integration of renewable resources.

What role are you going to Department policies and programs that are primarily the responsibility of other offices within the Department, such as the transformer example cited above, that impact the ability of our country to keep electricity reliable, viable, and affordable such as the integration of wind and other renewables into the electric grid?

Answer. In my view, a critical mission of the Office of Electricity Delivery and Energy Reliability is to enhance the security and reliability of the nation's energy infrastructure. Potential impacts to the reliability, viability and affordability are first and foremost concerns in all of the work this office does on advanced technologies. OE has developed a partnership with the Office of Energy Efficiency and Renewable Energy to assist that program in assuring that a variable generation source such as wind energy can be reliably integrated onto the US electricity grid. The partnership has examined state of the art integration methods for wind energy, and is developing a plan for disseminating the use of such methods throughout the industry. OE is using wind energy as the pilot for integration of variable technologies onto the electricity grid. I expect this effort will result in lessons learned from wind integration that can be applied to solar energy, hydroelectricity, biomass and other generation sources.

Question 5. Role of Mr. Kolevar's office in addressing "seams" issues

Answer. In September, FERC conditionally approved a proposal by the California Independent System Operator (CAISO) to implement a complex program of market mechanisms, called the Market Redesign and Technology Upgrade (MRTU). Several of the neighboring utilities filed comments with FERC, saying that there are numerous technical "seams" issues that must be addressed before MRTU is adopted. Several Northwest Senators, including me, also sent letters to FERC expressing concerns that seams have not been addressed and urging FERC to ensure that my region will not be harmed as a result of these changes. As you know, "seams" issues occur when one utility, like the CAISO, has different operating protocols than its contiguous neighbor utilities. To address these issues, FERC plans to schedule one or more technical conferences between the CAISO and other regional utilities. What role will your office play in addressing seams issues within the Western electric grid?

Answer. I agree that this issue needs to be comprehensively evaluated and resolutions identified. OE has a variety of analytical tools and talents that we are pre-

pared to offer in support of the efforts by FERC, the ISOs and the States to address "seams" issues.

RESPONSES OF KEVIN KOLEVAR TO QUESTIONS FROM SENATOR CANTWELL

Question 1. You currently serve as the Director of the Office of Electricity Delivery and Energy Reliability for the Department of Energy. Now you are before the Committee to serve as an Assistant Secretary of Energy for Electricity Delivery and Energy Reliability.

If confirmed as Assistant Secretary, will you have greater influence over the administration policies related to electricity delivery and reliability?

Answer. I believe the elevation of this office to an Assistant Secretary level will increase its effectiveness both inside and outside the Federal government.

Question 2. As you know, the Bonneville Power Administration has the ability under federal statute to borrow from the federal treasury to build high-voltage transmission lines. Using this authority, the Bonneville Power Administration has built hundreds of miles of lines in the Northwest. These high-voltage lines have allowed the region to continue economic growth and added to the reliability of the nation's transmission system. The amount of borrowing authority is finite and BPA has sought to partner with non-federal interests to increase the availability of capital for needed transmission investments.

Do you agree that we need to encourage creative and cooperative financing methods to get high-voltage transmission built?

Answer. Yes, I do, to the extent that such creative and cooperative financing methods are consistent with sound financial and operational management, and comply with Federal laws and policies.

Question 2a. Given the superior record of transmission investment in the service area of the Bonneville Power Administration, don't you agree that proposals from the Office of Management and Budget to limit the use of third party financing limits a proven 'creative and cooperative' option for the region's future transmission investments?

Answer. In past budgets, I know that the Administration proposed legislation that it believed would promote the financial transparency of the Bonneville Power Administration and Tennessee Valley Authority. I certainly agree that all four of the Department's PMAs have excellent operational records, including in the area of transmission reliability, and if confirmed, would look forward to working with you and the PMAs to see that excellent record continue.

Question 3. The Pacific Northwest National Laboratory in Richland, WA has created the Electricity Infrastructure Operation Center (EIOC) to provide a unique platform for grid research and development that will collect capabilities to provide the context for technology R&D and quantify the impacts of new technology. I invite you to visit the EIOC in the near future.

Are you familiar with the EIOC? Do you agree there is a federal role to invest in high-risk, high-value R&D that will benefit industry as well as consumers? What role do you see for national laboratories like PNNL and for universities?

Answer. Yes, I have been briefed on the Electricity Infrastructure Operations Center. I agree that there is a federal role to invest in high-risk, high value R&D such as superconductivity, high voltage power electronics, storage and advanced visualization tools that will benefit industry as well as consumers. The National Laboratories and universities have an important role in, among other things, the researching the next generation visualization tools and the mathematical modeling of the grid system for increased reliability. They also provide the opportunity to support the next generation power engineers required by the electric industry.

Question 4. Last Spring, we were very excited about the start of the Northwest Demonstration project which is designed to demonstrate balancing load with demand in real-time on the Olympic Peninsula. This demonstration should be complete by next spring and we look forward to the final results and evaluation with respect to energy savings. I understand the demand side programs such as the NW demo have now been folded into the OE portfolio called Visualization and Controls. Where do you see this portfolio going and will you continue to invest in demand side R&D and technology demonstration programs?

Answer. I am excited about the Olympic Peninsula activity that enables customer choice based on real-time pricing information and grid-friendly appliances. If confirmed, I would seek to focus DOE's future efforts on long-term, high-risk research on visualization and control tools such as communication architecture standards and vulnerabilities of new control systems related to the utility sector. I also would seek to continue DOE's investments to investigate scenarios under Distributed Systems Integration to reduce peak loads by 20 percent on a constrained feeder system.

RESPONSES OF KEVIN KOLEVAR TO QUESTIONS FROM SENATOR SALAZAR

Question 1.: Earlier this year, DOE published a map of the draft designation of energy corridors in Colorado: http://corridoreis.anl.gov/documents/docs/WWEC—PrelimDraftMap—Colorado.pdf

The black lines on the map indicate potential corridors that are 3,500 feet wide. I understand public comments were due by July 10, 2006, but without a better map, I don't know how people could figure out exactly where the corridors would be located.

Please provide me and other members of the Energy Committee with better maps of the proposed corridors. For Colorado, I would like a state-wide map that identifies the specific locations of the proposed energy transmission corridors.

When will the draft EIS be released?

Will there be another opportunity for the public to comment at that point?

Can you assure me that these corridors will not affect private landowners?

Answer. I recognize that the EPAct provisions are new, and require care as they are implemented. I look forward to working with you to ensure that DOE addresses these concerns as it works to exercise its statutory authority.

It is my understanding that Section 368 only applies to Federal lands. The Federal agencies were not given the authority by this provision to designate energy corridors on private, tribal or State lands. Where possible, the Federal agencies are incorporating interagency operating principles (similar to best management practices) which outline various uses and stipulations for the energy corridors. If confirmed, I will work to ensure the interests of private landowners are harmonized with the implementation of Section 368.

We received over 500 comments on the publication of the map, and I understand the interest in a greater level of map detail. However, the agencies are continuing to refine our analysis based in very large part on the comments received to date. Much more information (including GIS data) will be available in spring of 2007, when the entire document is published. Until that time, the agencies cannot release the deliberative body of work currently underway.

A draft Programmatic Environmental Impact Statement for the proposed action will be published in the spring of 2007. The agencies anticipate hosting a 90-day comment period for review-including hearings in each of the 11 western states.

Question 2. Congress took an important step in last year's Energy Policy Act by passing important provisions related to electric grid reliability. If confirmed, what steps do you think are necessary and what steps will you take to ensure the reliability of the Nation's electrical grid?

Answer. If confirmed as Assistant Secretary, grid reliability will continue to be one of my top concerns and I intend to work within DOE to utilize the available tools to ensure grid reliability. There are two principal tools available to the DOE to help ensure grid reliability. The first is the ongoing research and development into new forms of generation, whether produced by fossil fuels, hydro, renewables or nuclear energy, and electric transmission and distribution technologies to help ensure greater control and efficiency of electricity delivery. The second includes the new responsibilities contained in the Energy Policy Act of 2005. The effort to designate corridors on Federal lands for transporting energy (Section 368), the electric transmission congestion studies (Section 1221(a)) to identify significant congestions areas that need to be addressed, and the discretionary authority to designate National Interest Electric Transmission Corridors as appropriate, all significantly enhance the DOE's ability to help improve the reliability of the electric grid.

Question 3. If confirmed, what will you do to integrate more renewable energy into the electric grid while maintaining and improving the grid's reliability?

Answer. I believe that renewable energy must be a major component of our nation's energy strategy if we are to achieve clean, domestically -produced and economical supply sources as a significant component of our nation's energy portfolio. If confirmed, I would seek to continue the partnership between the Office of Electricity Delivery and Energy Reliability and the Office of Energy Efficiency and Renewable Energy to find ways to reduce barriers to renewable energy integration. These barriers include lack of transmission, lack of use of state of the art integration methods within the industry, wind integration studies for system planning, and operational rules within electricity balancing areas.

Question 4. How will you work with the Bureau of Reclamation and other federal agencies to consider how we can use our hydroelectric power sources to balance wind and solar sources for efficiency and reliability?

Answer. If confirmed as Assistant Secretary, I would continue to work to improve DOE's interagency relationships with respect to various electricity projects. I already am working within the Department to coordinate and to implement diverse

energy efficiency technologies to balance the variable technologies with base load, such as hydropower.

Question 5. What role do you see for distributed generation to improve grid reliability and resistance to failure or attack?

Answer. I believe distributed generation has an important role for improving grid reliability and resistance to failure or attack. By having a portfolio of strategically placed distributed generation at critical infrastructure facilities, such as hospitals, military bases, communications centers, emergency shelters, and refining facilities, the United States will reduce the impact of power outages whether natural or malicious. Distributed generation will also be critical at gasoline stations near evacuation routes to ensure the availability of fuel during an evacuation. The Department is working on the study required by Section 1817 of the Energy Policy Act of 2005 regarding the potential benefits of distributed generation. This report will address reducing vulnerability to terrorism and improving infrastructure resilience.

Question 6. Does DOE evaluate the risk of increased vulnerability to our grid from large electric generating plants, in contrast to many smaller sources of generation?

Answer. Yes, and both are important components of a reliable grid. As Director of the Office of Electricity Delivery and Energy Reliability, I have supervised OE's work with electric sector companies and States to identify and address vulnerabilities in certain, critical generating facilities. The office also focuses on R&D to help improve the competitiveness of distributed energy technologies. The presence of backup power can help to improve the resiliency of the grid by decreasing peak load requirements from large electric generating plants.

I believe that distributed technologies are a part of a portfolio of technologies (including large electric generating plants) that could support improved resiliency of the grid. If confirmed as Assistant Secretary, I would hope to continue DOE's work to encourage efforts to improve these distributed technologies and facilitate their commercial penetration so that they can play a larger role in the future.

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