

ONE HUNDRED FOURTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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March 16, 2015

The Honorable Ernest J. Moniz
Secretary
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Dear Secretary Moniz:

Thank you for appearing before the Subcommittee on Energy and Power on Wednesday, February 11, 2015, to testify at the hearing entitled "Fiscal Year 2016 Department of Energy Budget."

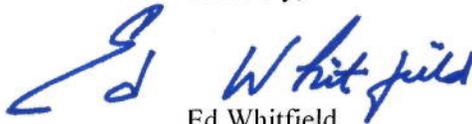
Pursuant to the Rules of the Committee on Energy and Commerce, the hearing record remains open for ten business days to permit Members to submit additional questions for the record, which are attached. The format of your responses to these questions should be as follows: (1) the name of the Member whose question you are addressing, (2) the complete text of the question you are addressing in bold, and (3) your answer to that question in plain text.

Also attached are Member requests made during the hearing. The format of your responses to these requests should follow the same format as your responses to the additional questions for the record.

To facilitate the printing of the hearing record, please respond to these questions and requests with a transmittal letter by the close of business on Thursday, March 30, 2015. Your responses should be mailed to Nick Abraham, Legislative Clerk, Committee on Energy and Commerce, 2125 Rayburn House Office Building, Washington, D.C. 20515 and e-mailed to Nick.Abraham@mail.house.gov.

Thank you again for your time and effort preparing and delivering testimony before the Subcommittee.

Sincerely,



Ed Whitfield
Chairman
Subcommittee on Energy and Power

cc: The Honorable Bobby L. Rush, Ranking Member, Subcommittee on Energy and Power

Additional Questions for the Record

The Honorable Ed Whitfield

1. Last May, you requested a National Coal Council review of the value of the agency's carbon capture and sequestration program. The advisory panel makes some troubling observations about the status of DOE's clean coal research. It notes, for example, that "it is impossible to objectively assess progress against the DOE program goals" – that program goals need "far greater clarity." We are a decade and \$6 billion into the CCS related research and we are no closer to achieving CCS deployment on a commercial scale. DOE has to do something to reform the management of this program.
 - a. I don't see anything in your budget about reforming the program measures and goals. What are you going to do about the advisory panel recommendations?
 - b. Will you commit to working with the Committee to ensure this program is managed so that it may achieve measurable results?

2. Over the past four or five budget requests, DOE has consistently requested cuts in funding for coal related R&D, and each year, Congress has to put upwards of \$100 million back into the program. This year you appear to be requesting an increased budget for the Coal CCS, but this increase appears to come at the expense of coal related CCS R&D as nearly all of the requested increase would fund CCS for natural gas systems.
 - a. Please explain this shift in focus to CCS for natural gas power plants.
 - b. Given EPA's approach to require CCS on all new coal units and NOT on natural gas systems, why is DOE funding CCS for gas – and doing so out of funds that could otherwise be for the coal R&D program budget?
 - c. Why are you cutting back on coal funding?

3. Your budget requests nearly \$500 million for wind and solar programs but only \$34 million for advanced (non-CCS) coal technologies. That's a big difference. What is the basis for the disproportionate treatment?

4. The budget proposes cutting funding in other important coal related R&D areas, such as the Advanced Energy Systems program, where technologies are being developed to explore significantly new and transformational coal conversion technologies.
 - a. Why are you proposing to cut back funding for new, transformational technologies that could help ensure continued coal use with significantly lower GHG emissions?

5. During the hearing you said, in response to my question concerning the commercial readiness of CCS for power plants, that "there is no question that all of the technologies have been demonstrated, including in an integrated fashion, for example in the Boundary Dam project in Canada..."

- a. Is it correct that the Boundary Dam project in Canada is a 110 MW retrofit to an existing pulverized coal plant and the spending on this project has surpassed \$1 billion?
 - b. Is it correct that this project, which has only been in operation for less than one year, has been identified by NETL as a technical readiness level of 7? And if not, what is the technical readiness level?
 - c. When will the project reach a technical readiness level of 9?
 - d. What other carbon capture and storage (CCS) technologies have been demonstrated at commercial scale – greater than 100 MW -- at coal based power plants integrated into an electricity transmission system?
6. During the hearing you also said, in response to my question, that “the key point is if one were to go out right now to build an ultra-supercritical plant, and they exist, and use conventional capture there, one is talking only about 30 percent.”
- a. Has CCS at 30% been successfully demonstrated at a commercial scale ultra-supercritical power plant, integrated into an electricity transmission system? If so, please list all such plants DOE has identified.
 - b. Is it DOE’s view that, should EPA set a standard for 30% capture at an ultra-supercritical power plant, such a standard has been adequately demonstrated at commercial scale in commercial service in electric power generation? If so, identify where such a standard has been demonstrated at commercial scale, in power applications.
7. As part of your Quadrennial Energy Review, DOE has been evaluating energy transmission, distribution and storage, correct? So what critical findings and recommendations can you share with this committee with respect to:
- a. Natural gas infrastructure?
 - b. Oil infrastructure?
 - c. Electricity infrastructure?
8. One of the goals of your FY 2016 budget request is “modernizing our domestic energy infrastructure for the 21st century economy.” What are DOE’s top recommendations for achieving this objective?
9. Would you agree that improved information sharing between federal agencies and owners and operators of critical energy infrastructure would be a valuable tool in protecting these assets? Would you be willing to work with us to develop practical solutions – such as information sharing and emergency preparedness and restoration – to address and respond to energy infrastructure security issues?
10. What is the Department’s strategy for addressing potential cybersecurity challenges presented by existing and future grid and energy infrastructure technologies?
- a. What programs or research and development efforts does the Department intend to pursue to understand potential cybersecurity vulnerabilities created by networked or digitally connected energy technologies?

11. Your budget requests \$10 million for “transformer resilience and advanced components.” This is a new line item in the DOE budget. What is the purpose of this request? Would you be willing to work with us to develop practical solutions to address spare transformer issues?
12. What steps is DOE taking to better integrate advanced energy technologies, such as energy storage and micro-grids, into the electric grid? What about utilizing “big data” and energy information technologies? Would you be willing to work with us to develop practical solutions to addressing the needs of the 21st century electric system?
13. As the electric grid becomes increasingly digital and utilities integrate more communications technologies into their systems, are you fearful that the grid is becoming increasingly vulnerable to cyber threats?
 - a. What steps is DOE taking to ensure that these new technologies do not weaken the security of the grid?
 - b. We want to work with DOE to protect the grid. But we are wary of stifling innovation through heavy-handed regulation. So would you be open to voluntary supply chain programs? Public-private partnerships? Improved information sharing?
14. Part of the stated goal of the White House "Strategy to Reduce Methane Emissions" is to stop leaks of methane from natural gas pipelines. This Committee is drafting legislation to modernize infrastructure, and one of our goals is to bring certainty to the natural gas permitting process.
 - a. Do you agree that it's difficult to build new pipelines to reduce flaring or upgrade existing sections to eliminate leaks with a complicated and unpredictable regulatory regime in place?
 - b. Will DOE's Quadrennial Energy Review propose ways to streamline the federal permitting process to accelerate the modernization of our natural gas supply infrastructure?
15. This Committee has heard from several witnesses, such as Dr. Daniel Yergin, that the U.S. natural gas market is demand-constrained, rather than supply-constrained. We have also heard that the lack of market demand may be contributing to the flaring of natural gas.
 - a. Do you believe that U.S. LNG exports would provide a new demand outlet that would have a net-positive impact on our economy?
 - b. Do you believe there would also be environmental benefits?
 - c. Regardless if some of the LNG ships to Asia, do you believe it would still help our European allies?
16. The House recently passed H.R. 351, the LNG Permitting Certainty and Transparency Act, to require DOE to issue a decision on an LNG export application within 60 days following the publication of the final environmental review document. The House bill is very similar to a Senate bill which DOE stated was workable. Do you support the House bill, H.R. 351?
17. The Strategic Petroleum Reserve was envisioned in an era of energy scarcity, designed as a tool to mitigate the impacts of a supply disruption like the Arab oil embargo. Times have changed drastically since its creation in 1975. Now that the U.S. is producing more oil and importing less, it may be time to re-examine some aspects of the SPR.

- a. Last year’s test sale of crude oil from the SPR highlighted vulnerabilities in the distribution network of pipelines and marine terminals needed during an emergency. What steps need to be taken to modernize the SPR’s distribution network?
 - b. Do you think it is time to re-examine the role of the SPR in this new age of energy abundance?
 - c. There is no hard and fast decision rule or trigger mechanism for an SPR release. Do you think the SPR should be used to mitigate global supply shocks?
18. Should the federal government use a coordinated process to assess the impact of policy decisions on national security and foreign policy? Would you agree that federal decisions, from rulemakings to project reviews and export licenses, impact energy diplomacy?
19. The U.S. is currently the world’s largest producer of natural gas and will likely surpass Russia and Saudi Arabia as the world’s largest oil producer.
- a. Would you agree that this new age of energy abundance will significantly benefit our global competitiveness, and allow the U.S. to position itself as a global energy superpower?
 - b. Under your leadership, how will DOE facilitate this energy transition in a manner that takes full advantage of the nation’s new energy abundance, including development of offshore resources?
20. You recently stated with respect to Canada and Mexico, that DOE will “have a very strong focus on . . . integrated infrastructure development.”
- a. Why is it important to improve coordination and integration of U.S. energy infrastructure with Canada and Mexico?
 - b. If the Keystone XL pipeline is any indicator, it seems that your goal of increased cross-border “integrated infrastructure development” may prove difficult? How can we – Congress and DOE – better educate the White House on the importance of a better integrated North America?
21. In your view, how has the President’s failure to render a timely decision on the Keystone XL pipeline impacted diplomacy with Canada? Are there lessons-learned from this example that the Department will include in the Quadrennial Energy Review?
22. Will U.S. LNG exports improve the efficiency and transparency of international natural gas markets?
23. Does a diverse source of natural gas and oil supply provide both economic and strategic benefits to the United States and our allies?
24. EPA’s FY 2016 budget requests tens of millions of dollars to implement its Clean Power Plan because, according to EPA, “Evaluating and capturing these [compliance] strategies requires the agency to tap into technical and policy expertise not traditionally needed in EPA regulatory development (for example, nuclear, wind, solar, hydroelectric, and demand-side energy efficiency), and to understand and project system-wide approaches and trends in areas such as electricity transmission, distribution, and storage.”
- a. It sounds like EPA plans to extend its jurisdiction over nuclear, wind, solar, hydro, energy efficiency and electricity transmission, distribution and storage. I thought these were areas in which DOE has jurisdiction and expertise. If EPA is asserting authority here, why should Congress support DOE’s

request for increases for its Offices of Nuclear, Energy Efficiency and Renewables, Fossil and Electricity?

- b. Your first Quadrennial Energy Review – expected any day now – is focused on “transmission, distribution and storage,” correct? If I have questions about these topics, should I go to you or Administrator McCarthy given EPA’s clear interest in DOE’s areas of jurisdiction and expertise?
25. DOE is charged with setting effective and comprehensive national energy policy. And yet America’s *de facto* energy policy is being set by agencies like the Environmental Protection Agency through its Clean Power Plan.
- a. How will you facilitate the development and implementation of a coordinated national energy policy that actually helps the private sector and the states promote dependable, affordable, and environmentally sound production and distribution of energy?
 - b. Will you commit to challenging other federal agencies if their rules and regulations raise energy prices, limit energy production, or hurt consumers?
26. In a classic example of “the right hand not knowing what the left hand is doing,” the EPA is proposing rules to prohibit the use of some refrigerants commonly used in refrigerators and home air conditioning. Meanwhile, DOE has set costly new efficiency standards for these same products. EPA and DOE have apparently acted independently of each other and made no attempt to coordinate the implementation deadlines of rules affecting the same products.
- a. Were you notified by EPA prior to the commencement of its rulemaking?
 - b. Are you aware the EPA proposed alternative refrigerants are flammable and will be used in millions of restaurant businesses and near open flames?
 - c. Are you aware the EPA proposed alternative refrigerants will decrease the energy efficiency of residential refrigerators?
27. In 2014, DOE issued 10 new energy efficiency standards for various appliance and product categories. And you recently stated that DOE plans to hold itself to an even higher standard in 2015. Indeed, your budget requests \$69 million for appliance and equipment standards activities.
- a. You say you will test at least 100 products for compliance for the ENERGY STAR program; how much of the \$69 million is for that testing?
 - b. At what point will DOE realize we may be fast approaching “the law of diminishing returns” when it comes to energy efficiency standards for appliances?
28. At times it seems the regulatory process for establishing DOE efficiency standards is overly burdensome to manufacturers. Below are comments submitted by industry during the rulemaking process and I would like to get your thoughts.
- a. “...the general increase in the volume of regulatory activity in recent years, we believe it’s time for the Department to evaluate its processes to determine if a better way of soliciting and obtaining meaningful, data-driven public feedback is appropriate. It is our view that significant room for process improvement exists and would help the Department, regulated entities and even the public at large because a better process will produce better rules.”

- i. Are you evaluating any process improvements at this time?
 - b. "...DOE relies too heavily on manufacturers having to be familiar with the content of all NOPRs, Final Rules, Technical Support Documents, Transcripts of Public Meetings, and other related documents which DOE has issued *during more than 20 years of the rulemaking process*. The information manufacturers need should be clearly stated in 10 CFR."
 - i. Can you pledge to this committee to make improvements in your internal processes so that our constituents can be better served?
29. Describe the coordination between EPA and DOE with respect to the Significant New Alternative Policy (SNAP) regulatory proposal published in the Federal Register on August 6, 2014.
- a. List all meetings between EPA and DOE with respect to the SNAP proposal, the attendees, and the topics discussed.
 - b. Did EPA ask DOE for information about the cost and timing of re-designing refrigeration equipment? Did DOE provide such information? What other questions did EPA ask DOE before presenting the SNAP delisting proposal?
 - c. Provide copies of all materials that DOE provided to EPA in connection with the SNAP proposal.
 - d. Is any consultation between DOE and EPA still ongoing with respect to the EPA SNAP proposal? And in light of reports that EPA may be planning additional SNAP proposals for other industrial sectors later this year? If yes, please list and describe all such meetings.
30. Did DOE take any position with EPA about the adequacy of publicly-available data on the design, construction, and operation of equipment featuring alternative refrigerants that is needed to analyze equipment performance for standard-setting purposes?
31. Considering that the SNAP proposal could affect many energy efficiency decisions for equipment manufacturers and other users with respect to the change of status of certain materials, has the level of EPA consultation with DOE been adequate to ensure that energy efficiency issues are properly addressed in the EPA SNAP proposal?
32. Has DOE calculated the effect on energy efficiency of food equipment if refrigerants are changed as set out in the SNAP proposal? If so, please provide the estimates. If not, what is the level of confidence that a change in refrigerants will reduce climate risks?
33. Has DOE calculated, in light of all constraints on design and usage, the effect on energy efficiency of insulated products if foam blowing agents are changed as set out in the SNAP proposal? If so, please provide the estimates. If not, what is the level of confidence that a change in foam blowing agents will reduce climate risks?
34. In promulgating its 2014 efficiency standards for the commercial refrigeration industry, DOE appeared to discount the possibility of an immediate mandated change in refrigerants. On the contrary, DOE attempted to be consistent with an HFC phasedown pursuant to the Montreal Protocol. Specifically, the Department found as follows:

While DOE appreciates the input from stakeholders at the public meeting and in subsequent written comment, DOE does not believe that there is sufficient specific, actionable data presented at this juncture to warrant a change in its analysis and assumptions regarding the refrigerants used in commercial refrigeration applications. As of now, there is inadequate publicly-available data on the design, construction, and operation of equipment featuring alternative refrigerants to facilitate the level of analysis of equipment performance which would be needed for standard-setting purposes. DOE is aware that many low-GWP refrigerants are being introduced to the market, and wishes to ensure that this rule is consistent with the phase-down of HFCs proposed by the United States under the Montreal Protocol. DOE continues to welcome comments on experience within the industry with the use of low-GWP alternative refrigerants. Moreover, there are currently no mandatory initiatives such as refrigerant phase-outs driving a change to alternative refrigerants. Absent such action, DOE will continue to analyze the most commonly-used, industry-standard refrigerants in its analysis. 79 Fed. Reg. 17,726, 17,754 (March 28, 2014) (cols. 2-3).

42. How does EPA's SNAP proposal affect DOE's conclusions about the technological feasibility of its commercial refrigeration efficiency standards, the resulting expected energy savings, the economic impact on manufacturers and customers, the effect on operating costs, the lessening of utility or performance, the cumulative burden on the regulated community, and the time needed to comply with the standards?
43. How have lifecycle costs been addressed in the EPA SNAP proposal? From a DOE and energy efficiency perspective does the proposal accurately and adequately address potential higher capital spending and reduced energy efficiency trade-offs that may result from the proposed change in status for certain refrigerant and foam blowing products and materials?
44. Considering that the extruded polystyrene industry switched to HFC-134a as a foam blowing agent in 2009, is it reasonable to expect the industry to restrict the use of this material so soon after this recent market switch?
45. What is more important: complying with EPA SNAP change of status dates or DOE standards? Why?
46. What is DOE's cost estimate (including both direct and indirect costs) for a foam blowing operation to switch blowing agents? Same question for a producer of reach-in coolers to switch refrigerants?
47. Describe what actions DOE has taken to review and analyze the effects that its energy efficiency regulations and the EPA SNAP proposal will have on state and local building code requirements. What impacts will the EPA SNAP proposal have on companies in terms of compliance with state and local building codes?
48. One of the stated priorities in your FY 2016 budget request is to "continue to implement the President's Climate Action Plan through the development and deployment of clean energy technologies that reduce carbon pollution."
 - a. What specific actions is DOE undertaking to further the President's climate goals?
 - b. If you had to estimate, what percentage of DOE's \$30 billion budget request will go toward furthering the President's climate goals?

49. Wouldn't you agree that DOE's pursuit of the President's climate change agenda could conflict with DOE's statutory duty under the DOE Organization Act to "promote the interests of consumers through the provision of an adequate and reliable supply of energy at the lowest reasonable cost?"
- a. Would you challenge the President if you believed his climate policies would negatively impact households and businesses by increasing energy prices?
50. DOE has the following active solicitations under its section 1703 loan guarantee program: \$4 billion for renewables and energy efficiency; \$8 billion in loan guarantees for advanced fossil energy projects; and \$12 billion for advanced nuclear technologies.
- a. What has been the response to the renewable energy solicitation so far? The fossil energy solicitation? The advanced nuclear solicitation?
51. Since January 2014, DOE has issued \$1.5 billion in grants and other financial support, primarily renewables, efficiency and advanced fuels and vehicles.
- a. What mechanisms and metrics does DOE have in place to track this spending and measure the success of the support provided?
 - b. How often do these projects receiving taxpayer support become replicable at commercial scale? Seems to me these are nothing more than pet projects that will have a limited return on investment, if any, for US taxpayers.
52. One of the goals of your FY 2016 budget request is "educating and training the workforce for tomorrow's energy economy." What are DOE's top recommendations for achieving this objective?
53. Since you became Secretary, you have pursued a number of organizational and management reforms to improve the operations of the Department.
- a. What is the current status of these efforts and what additional steps do you intend to pursue in the coming years?
 - b. What reforms or organizational changes, in your view, are most necessary to modernize DOE and ensure its continued success in coming decades?
54. The FY2013 National Defense Authorization Act (NDAA) established the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise to evaluate and make recommendations about "the most appropriate governance structure, mission and management of the nuclear security enterprise." The panel, Chaired by The Honorable Norman Augustine and Admiral Richard Mies (Ret.), recently delivered their report to Congress and DOE. Among the many recommendations included in the report, the Panel recommended a reorganization of the nuclear security enterprise, including amending the NNSA Act and related legislation to clarify Departmental leadership roles.
- a. What are your views on the recommendations of this report, including its recommendations concerning strengthening national leadership and solidifying the DOE Secretary's "ownership" of the nuclear security mission?
 - b. Please explain how you intend to address the Panel's recommendations?

55. While the Committee is supportive of National Nuclear Security Administration's modernization efforts, NNSA's proffered plans have frequently changed (UPF, plutonium capability, IW-1/3+2 Strategy) making it difficult to commit to a long-term funding strategy. When can the Committee expect NNSA's modernization plans to stabilize?
56. What are the key factors that have affected the stability of these plans, and what steps is NNSA taking to address them?
57. For fiscal years 2008 through 2014, administrative costs for DOE's Title XVII Loan Guarantee Program have totaled about \$251 million. DOE has collected fees from borrowers worth a little over three quarters of costs--\$196 million. Administrative costs not covered by borrowers' fees are paid for with taxpayers funds. In 2009 and 2011, the fees DOE collected from borrowers exceeded the appropriated limits set in those years. As a result of this federal budget accounting situation, about \$47 million of the \$196 million have not been applied to administrative costs and are sitting unused in a Treasury account. They cannot be used unless they are appropriated.
- What steps has DOE taken to gain access to those unused funds, in the event that fee collections do not cover administrative costs again this year?
58. To date, fee collections for DOE's Title XVII Loan Guarantee Program have not been sufficient to fully cover administrative costs. DOE has 3 solicitations out for new loan guarantees.
- Does DOE think the fees specified in these solicitations will be sufficient to cover the administrative costs for those loans? Why or why not?
59. The EPA and the Corps of Engineers have jointly proposed a rule to modify the definition of what is a "water of the U.S." for purposes of determining the scope of federal jurisdiction under the Clean Water Act. While EPA continues to assert that they are not expanding federal jurisdiction, most everyone else believes they are. Based on a plain reading of the regulatory text, energy producers throughout the country are seriously concerned that a final rule – that has not been substantially changed – will make it more difficult to expand, upgrade, and even decommission energy facilities necessary to assure safe, reliable, affordable, and resilient energy supplies to consumers of electricity, natural gas, renewables and other energy resources.
- I assume DOE participated in the interagency process on the proposed rule. Can you provide your analysis of how the proposed rule would affect energy infrastructure?
 - Are you preparing to participate in the interagency process on the final rule? (EPA/Corps want to finalize as early as April) If so, who will participate for DOE? Have you or your senior staff met with energy infrastructure stakeholders regarding their concerns with the rulemaking?
 - Will you object to finalization of a rule that will adversely affect energy infrastructure? At a minimum, will you support reproposal of the rule so the public can see whether the agencies have in fact addressed the serious concerns with the rule in an appropriate way?
60. As you know, on October 21, 2014, DOE and the United States Enrichment Corporation (USEC) successfully transferred the Paducah Gaseous Diffusion Plant leased facilities from USEC back to DOE. At the same time, the DOE deactivation contractor officially began its work preparing for decontamination and decommissioning at the site.

- a. Considering it took nearly 18 months to award the deactivation contract, what is the timeframe for extending or awarding a new contract?
 - b. Do you anticipate a gap in contracts since the current deactivation contract expires in July of 2017?
61. The deactivation contract for the site was awarded on July 23, 2014. Have there been any changes to the project work scope? If so, please describe.
 62. How many workers does the deactivation contract currently employ and what is the hiring schedule going forward?
 63. Is DOE through the deactivation contract engaging the local subcontracting community?
 64. Is DOE developing an acquisition strategy based on the final end state for the site?
 65. The community has mentioned their interest in a recycling program through the local Paducah Area Community Reuse Organization (PACRO). How is DOE encouraging the recycle and reuse of these materials?

The Honorable John Shimkus

1. The Waste Treatment Plant (WTP), at the Hanford Site, is a \$13 billion facility being constructed to treat the waste and prepare it for final, long-term disposal is a key part of DOE's strategy for treating 56 million gallons of hazardous and radioactive waste held in underground tanks at the Richland Site in Washington State. The WTP is being constructed under a design-build contract and has a history of technical and management challenges. DOE has stopped construction on parts of the WTP pending resolution of these challenges and has stated that several milestones for the waste treatment mission will likely be missed. This project—one of the largest nuclear waste cleanup facilities in the world—was originally scheduled for completion in 2011 at an estimated cost of \$4.3 billion. Since its inception in 2000, DOE's estimated cost to construct the WTP has tripled and the scheduled completion date has slipped by nearly a decade.
 - a. When construction of the WTP began, Congress committed to funding the WTP at \$690 million per year until the project was complete. Over the past few years, construction on key facilities has slowed, and for the past several years, DOE has not spent the full \$690 million that has been allotted annually for construction the WTP. Furthermore, the current cost and schedule to complete the WTP is unknown, and the contract for its construction is under re-negotiation. What is the justification for DOE to continue to request the \$690 million under these circumstances, which suggest that far less than \$690 million in work is scheduled to be accomplished in FY2016?
 - b. Were there any unobligated funds for the WTP carried over from FY2014 to FY2015? If so, how much?
 - c. How much is DOE projecting to obligate from WTP funding (i.e. carryover plus FY15 appropriation) this year?
2. Some of the most dangerous hazardous and radioactive waste at the Hanford site is stored in 177 large underground storage tanks. The underground tanks currently hold more than 56 million gallons of this waste. DOE spends over \$1 billion each year—through its Office of River Protection in Richland, WA—on its tank waste retrieval and treatment program at Hanford. Nearly half of this amount is spent

managing the underground waste storage tanks. DOE is requesting \$179 million more in FY16 for tank waste management to cover ramp-up of design activities for the Low Activity Waste Pretreatment System (LAWPS) project and activities in the tank farms required to support the direct feed of low activity waste initiative and A/AX single-shell tank retrievals.

- a. This request includes \$75 million for LAWPS design activities. In DOE's FY2015 request, DOE stated that the full amount needed for design was \$60 million, and received \$23 million towards that amount in their FY15 appropriation. Adding the \$23 million from the FY15 enactment to the \$75 million in the FY16 request gives us \$98 million for design of the LAWPS facility, up \$38 million from the FY15 estimate of \$60 million. What is the reason for the increase?
 - b. The request also includes \$5 million for "other" costs for the LAWPS system. What are these other costs?
 - c. What is the total estimated cost of the LAWPS project, inclusive of all costs to bring the project into operation? Is the \$75 million part of the total cost of the project, or is it in addition to the total cost? Is the \$5 million part of the total cost of the project, or is it in addition to the total cost?
 - d. What portion of the remaining \$99 million increase (\$179-\$75-\$5) is for tank farm activities to support the direct feed of low activity waste? Are these operational costs or equipment costs? Will they be included in the total estimated cost of the LAWPS project or will they be in addition to it?
 - e. What is the basis for shifting this LAWPS funding from the WTP budget account (ORP-0060) to the tank waste management budget account (ORP-0014) and why is the increased funding in the tank waste management account not offset by a similar decrease in the WTP account?
3. The Government Accountability Office (GAO) recently reported that the underground tanks are in a worse conditions that previously understood—many are leaking—but DOE's current schedule for managing the tank waste does not consider the worsening conditions of the tanks or the delays in the construction of WTP. Although DOE has efforts underway to empty the aging tanks, this process has been slower than expected. GAO recommended that DOE further assess the condition of the tanks and alternatives for creating additional double-shell tank space (such as building new tanks).
- a. DOE has emptied 17 underground tanks since it began the retrieval work 10 years ago (less than 2 tanks emptied per year). In order to meet its regulatory agreements, DOE must empty 19 additional underground tanks by 2022. How does DOE plan to meet its regulatory requirements and how much additional funding is required to increase the rate of the retrievals?
 - b. GAO pointed out in 2014 that DOE lacks sufficient tank space to hold the waste being emptied from failing underground tanks until the WTP comes online. However, DOE's FY16 request does not include any plans to provide additional tank space. Why not? What is DOE's plan to store the tank waste until the WTP can begin treating it?
 - c. If another double-shell tank leaks, does DOE have the tank capacity and technical capability to respond? If this occurred, how long would it take to empty the tank as called for by federal and state requirements?
4. DOE's Office of Environmental Management (EM) has responsibility for cleaning up the radioactive and chemical waste left from the cold war legacy at the Savannah River Site (SRS). DOE has agreed upon a plan for cleaning up SRS. The SRS Cleanup Project includes safely storing, treating, and disposing of a variety of radioactive and hazardous waste streams, cleaning up the environment, deactivating and

decommissioning unneeded facilities, stabilization and immobilization of high level waste, and the secured storage of foreign and domestic nuclear materials, including spent nuclear fuel, and waste through safe stabilization, treatment, and/or disposition. All EM-owned facilities will be decommissioned once work is complete, except those identified to transfer to another office.

According to EM's November 2014 monthly project performance report, the SRS recently completed projects and ongoing projects are all within cost and schedule baselines. However, at the January 26, 2015 SRS Citizen's Advisory Board meeting, DOE reported that the SRS lifecycle cleanup estimate has increased by \$25 billion over an additional 23 years. What factors have contributed to the revised life-cycle cost estimate for EM's mission to clean up the site? Please describe the risk assessments DOE has performed to identify the vulnerabilities to cost and schedule and identify actions that can be taken to mitigate the risk.

- a. Is the SRS Cleanup Project under baseline change control? Why was there such a large change in the cost of lifecycle cost of the project and what is DOE doing to better understand the factors leading to the increased cost and schedule and to mitigate the impact of those factors?
 - b. Are these additional costs incorporated into the fiscal year 2016 budget request? What will the future budget request profile look like to address these additional costs?
 - c. Do any of these additional costs reflect potential penalties that could be assessed against DOE by the state of South Carolina for missing clean up milestones? What are the potential costs in penalties, if any?
5. Part of the clean-up at SRS involves 37 million gallons of waste containing approximately 287 million curies of radioactivity stored in aging and degrading tanks. These tanks represent the single largest environmental threat in South Carolina, according to the South Carolina Department of Health and Environmental Control. DOE entered into an agreement with the state of South Carolina to meet certain milestones for cleanup. According to the South Carolina Department of Health and Environmental Control, DOE has not adequately prioritized clean-up of the tanks in fiscal years 2014 and 2015, leaving DOE behind in meeting its milestones.
- a. What has DOE's response been to the South Carolina Department of Health and Environmental Control? Is DOE behind in meeting the milestones agreed upon and, if so, what factors have contributed to the delays and have the delays impacted DOE's budget?
 - b. Is the cleanup of the waste a project that is under baseline change control? How have changes to the baseline been managed, particularly to address the factors that may have adversely affected schedule and cost?
6. In a June 2014 letter to DOE, the South Carolina Department of Health and Environmental Control stated that DOE's missed commitments "will be met with penalty assessments" under the agreement. The South Carolina Department of Health and Environmental Control said that the potential penalties against DOE through the end of fiscal year 2016 could be assessed at more than \$193 million.
- a. What are DOE's potential liabilities at SRS? What plans is DOE developing with the South Carolina Department of Health and Environmental Control to address meeting the agreed-upon milestones and to minimize penalties?
 - b. If South Carolina assesses penalties, what part of the federal government will be responsible for paying the penalties?

7. At the Idaho National Laboratory, according to DOE's fiscal year 2016 budget justification, DOE missed a milestone to treat liquid radioactive waste by December 31, 2014, a milestone enforceable under the Idaho Settlement Agreement. The Idaho Department of Environmental Quality issued a Notice of Violation with fines starting at \$3,600 per day until DOE treats the waste as required. These fines may increase over time.
 - a. Why has DOE missed this milestone, which had already been revised from an earlier milestone of December 31, 2012?
 - b. When does DOE expect to complete the cleanup required at the tanks holding the liquid radioactive waste? What is likely to be the total amount of money in fines that DOE may pay to Idaho, including potential increases in the fines over time?
 - c. The Idaho Settlement Agreement also requires DOE to remove all spent nuclear fuel from the Idaho National Laboratory by January 1, 2035, or face additional fines of \$60,000 per day. Is DOE on track to meet this milestone? Please describe DOE's progress and potential challenges it may face in meeting this milestone.
8. The Waste Isolation Pilot Plant (WIPP), in New Mexico, has been shut down since February 5, 2014, when a truck fire and a subsequent February 14 release of radiation raised safety concerns and sparked investigations into operations. On September 30, 2014, DOE issued a recovery plan for WIPP, reporting that DOE planned to resume operations in 2016 at a cost of about \$242 million, plus additional capital asset project line items to replace the currently contaminated ventilation system and a supporting exhaust shaft, costing between \$77 million and \$309 million. This brings the total cost of restarting operations at WIPP to between \$319 million and \$551 million. The range is so large because, according to DOE, specific decisions have not yet been made. According to press reports, DOE officials reported at a meeting in Carlsbad with contractor and local officials that the recovery effort is already months behind schedule and plans to re-open WIPP may be delayed until 2018. Amidst DOE's plans, some investigations—such as that by the Defense Nuclear Facilities Safety Board—may continue.
 - a. How realistic are these costs and dates, particularly since key decisions have yet to be made and some investigations—such as that by the Defense Nuclear Facilities Safety Board—may continue?
 - b. Please describe the funding profile for the WIPP recovery effort, including how much money was on hand when WIPP was shut down in February 2014, how much came from supplemental appropriations, and how much is being requested in the fiscal year 2016 budget request. Given the delays, what is DOE's level of confidence in this funding profile and whether mission recovery needs can be accomplished with these funds?
9. The radiation release at WIPP originated at the Los Alamos National Laboratory (LANL) during treatment and handling of waste. The National Nuclear Security Administration (NNSA) stated in a performance evaluation of LANL that the laboratory was noncompliant with proper waste handling requirements.
 - a. Please expand on the uncertainties that have resulted from LANL's action of non-compliance. Specifically, what are the damages to the U.S. government in terms of cost and credibility and how will this affect the cost of doing business in the future?
 - b. What actions has DOE or NNSA taken to address these issues at WIPP, and LANL, or other affected sites?

10. In its performance evaluation of the Los Alamos National Laboratory (LANL), the National Nuclear Security Administration (NNSA) stated that as a direct result of LANL's action of non-compliance with proper handling of transuranic waste, other facilities that generate transuranic waste have been adversely affected across the nation, leading to "large costs that cannot yet be accurately computed, and degrading an important regulatory relationship" with the state of New Mexico. In addition, "there is a very high likelihood that the government will ultimately be responsible for significant fines and penalties."
 - a. What have the costs to the U.S. government been to date as a result of LANL's action of non-compliance? In particular, has the state of New Mexico assessed fines against the federal government and, if so, how much are the fines and how many more can the federal government expect?
11. Some transuranic waste from the Los Alamos National Laboratory—which still must be shipped off site to meet certain milestones agreed to with the state of New Mexico—has to be transported to temporary storage sites in Texas while WIPP is closed.
 - a. What have been the costs of moving transuranic waste to Texas for temporary storage and what will be the likely costs of moving this waste a second time to WIPP once it re-opens?
 - b. Do other sites with transuranic or mixed waste have to move the waste off-site to temporary storage sites? If so, how will such efforts impact cost and schedule of WIPP's disposal mission?
12. In the President's fiscal year 2015 budget request for WIPP, DOE had reported the life cycle cost for WIPP was between \$7 billion and \$7.5 billion and that the completion date was between 2035 and 2039.
 - a. Has DOE revised these life cycle costs or completion date to account for the shut-down and recovery of WIPP and changes in procedures? If so, please describe the factors that DOE has taken into account and how these factors have affected the life cycle cost of and schedule of WIPP.
13. Looking across all of DOE's program offices, what are the highest-risk contaminated facilities and how are they prioritized for deactivation and decommissioning (D&D)?
 - a. To what extent do regulatory drivers and site-specific agreements affect DOE's D&D planning with respect to risk?
 - b. There are hundreds of contaminated facilities across DOE's program offices that are no longer in operation. What is DOE's plan for D&D'ing these facilities—in what order will they be cleaned up and what is the budget plan for EM's requests?

The Honorable Robert E. Latta

As you are undoubtedly aware, Executive Orders 13563 and 12866 were meant to address and reduce redundant and burdensome government regulations that could stymie private sector job growth and innovation. It is confusing, however, that the DOE seems to ignore these Presidential directives and continue to increase the regulatory pressures on businesses. Specifically, failing to rely on long standing, nationally recognized and respected private sector Voluntary Independent Certification Programs (VICP) seems to be a failure to deploy ready-made, cost effective programs to reduce such burdens on regulated businesses. Your counterparts at the Environmental Protection Agency rely on 3rd party testing to more effectively and more efficiently approve products for their ENERGY STAR program, in many cases streamlining the process for businesses to get their products to market.

To assist us in understanding your decisions, I would appreciate responses to the following questions:

1. Congress has already directed DOE to use third party certification for certain products. Both the Energy Independence and Security Act of 2007 and the Energy Policy Act of 2005 clearly instruct the DOE to rely on third party certification programs for commercial refrigerators, furnaces, central air conditioners, and heat pumps when available. Despite this clear direction from Congress, why has DOE not relied on third-party certification programs for verification purposes?
2. Is DOE considering developing a rule that would create a new Department of Energy verification program for HVACR products? Please identify any long standing private sector VICPs that provide testing and certification of HVACR products and explain and document any consideration DOE gave to utilizing existing VICPs to fully ensure verification and compliance with federal energy conservation standards? Additionally, has DOE suggested ways to enhance VICPs to ensure that private sector verifications are conducted in a manner that eliminates the need for a taxpayer-funded verification program?
3. How would a proposed DOE verification program run more effectively, cost less money, and produce better results than the current VICPs? Recent results of DOE verification testing of efficiency ratings of residential tankless and storage water heaters conducted for the ENERGY STAR® program show that not a single test result required further action to verify the rating. The results of these tests support the belief that participants' products in nationally recognized and respected voluntary certification programs are being properly rated and should not be the focus of enhanced federal scrutiny. The water heater tests are an excellent indication that nationally recognized and respected VCIPs should be relied upon by DOE to verify compliance with federal energy efficiency standards.
4. Does maintaining coal as part of the electric generation fleet provide value to consumers?
5. DOE's Office of Electricity website has information on the "Rapid Response Team for Transmission" the Administration formed among nine federal agencies, including DOE, that signed a Memorandum of Understanding in 2009 "increasing their coordination to expedite and simplify building of transmission lines on Federal lands." Of the seven projects listed on the website, six show when the project application was accepted by the lead agency, when the project is expected to begin construction, and when the project is expected to be complete. According to your website, it will take an average of 7 years and 1 month from the time these projects apply to the time construction begins! It will take 9 years 7 months on average – nearly 10 years! – from the time the application is accepted to the time it is expected to be complete. We all know years of planning goes into an application before it even can be filed, so the real time between identifying a need and serving it is even longer. And transmission on private lands can be almost as tricky.
 - a. Would you say the Rapid Response Team is working as intended?
 - b. Is it possible that these lines will take longer than the projected construction completion estimate?
6. Do you believe the world will be burning more coal per year in 2050 than it is today? How much more?
7. What, if any, legal mandate is there for the NRC to work with DOE to develop new regulatory framework to license a Gen IV reactor. If there isn't a mandate, isn't it possible that efforts could be stalled based on future regulatory budgets and leadership?
8. What's the timeline on having the NRC develop new regulatory framework to license a Gen IV reactor? Why can't that time be shorter?

The Honorable Gregg Harper

Mr. Secretary-

1. I noted that recently, the Department announced its intention to cancel funding for the FutureGen 2.0 project in Illinois that was to demonstrate that carbon capture and storage (CCS) technology can be used to preserve coal as an element of our nation’s fuel mix in the future. Kemper County, Mississippi plant is the closest and most immediate project this country has to use carbon capture and storage technology in a commercial-scale power plant demonstration. What are you doing to make sure that the Kemper County facility succeeds in light of the FutureGen announcement?
2. Since the budget request was completed prior to the announcement that the plug is being pulled on FutureGen – are there any changes that you anticipate to reflect a decision to move away from that project and perhaps provide additional support to CCS facilities currently being built like the Kemper facility?
3. Do you believe the small refinery petition process is working as the Energy Policy Act of 2005 intended?
4. It is my understanding that the Addendum to the Small Refinery Exemption Study, released in May of 2014, was not put out for public comment.
 - a. Is that the case?
 - b. This change in the scoring system that determines whether a small refinery is profitable enough to warrant temporary RFS relief had the practical effect of making it much more difficult for a small refinery to qualify.

The Honorable Mike Pompeo

1. How much are you spending to support renewables (wind/biofuels/solar)?
 - a. By line items, how much has been spent on these over the last ten years?
 - b. What is the dollar amount on per BTU/KwH equivalent to dollars spent, either through grants or loan guarantees, from those sources?
 - c. How much electricity has that produced and what is the value for that?
2. New England natural gas prices hit record levels last winter, and the pipeline constraints that lead to those prices haven’t been resolved. According to the Energy Information Administration: “On many days during the winter of 2014, natural gas pipelines filled to capacity, leading to record-high wholesale natural gas prices at several locations. Spot natural gas prices reached \$120 per MMBtu in New York City, \$78 per MMBtu in Boston, and \$34 per MMBtu in Chicago.” Meanwhile, spot natural gas prices at the Henry Hub averaged only \$4.38 per MMBtu in 2014.
 - a. Would you agree that the region needs energy upgrades, including more natural gas pipeline capacity, to deliver gas for home heating and to generate affordable electricity?

- b. Numerous pipeline proposals are under consideration in the Northeast to transport natural gas from the Marcellus shale fields to areas of high demand. Will you agree to do everything in your power to prioritize these reviews?
3. Based on recent history, as well as your budget request and its stated objectives, it appears that DOE is increasingly focused on emissions reductions, as opposed to resource production and an all of the above energy strategy. In fact, sometimes I get the sense that DOE and EPA are merging, with DOE serving merely as a research organization to support EPA's climate agenda.
 - a. Do you agree that the line between DOE and EPA has been blurred?
 4. It is clear from the stated budget priorities that DOE is pursuing administrative remedies to continue furthering the President's Climate Action Plan through the "development and deployment of clean energy technologies that reduce carbon pollution."
 - b. Would you agree that, as elected representatives, Congress speaks for the people?
 - c. Do you think it's appropriate for DOE and the President to bypass the will of the people – i.e., Congress – to unilaterally pursue the President's climate agenda?
 5. The intent of the Energy Policy and Conservation Act with respect to efficiency standards was to "cover major household appliances." Currently on the docket are several rules in various stages.
 - a. Do you consider "hearth heating products" or gas fireplaces a major household appliance?
 - b. For that matter, wine chillers?
 - c. What's next, will you attempt to regulate outdoor gas barbeque grills?
 - d. Is there any appliance you can think of that wouldn't be appropriate to regulate?

The Honorable H. Morgan Griffith

1. Last May, you requested a National Coal Council review of the value of the agency's carbon capture and sequestration program. The advisory panel makes some troubling observations about the status of DOE's clean coal research. It notes, for example, that "it is impossible to objectively assess progress against the DOE program goals" – that program goals need "far greater clarity." We are a decade and \$6 billion into the CCS related research and we are no closer to achieving CCS deployment on a commercial scale. DOE has to do something to reform the management of this program.
 - a. I don't see anything in your budget about reforming the program measures and goal. What are you going to do about the advisory panel recommendations?
 - b. Will you commit to working with the Committee to ensure this program is managed so that it may achieve measurable results?
2. Over the past four or five budget requests, DOE has consistently requested cuts in funding for coal related research and development (R&D), and each year, Congress has to put money back into the program. This year, you appear to be requesting an increased budget for the coal carbon capture and sequestration (CCS), but nearly all of the requested increase would fund CCS for natural gas systems.

- a. Can you explain this shift in focus to CCS for natural gas power plants?
 - b. Given EPA's approach to require CCS on all new coal units and NOT on natural gas systems, why is DOE funding CCS for gas – and doing so out of funds that could otherwise be for the coal R&D program budget?
 - c. Why are you cutting back on coal funding?
3. Your budget proposes cutting funding in important coal related R&D areas, such as Advanced Energy Systems program, where technologies are being developed to explore significantly new and transformational coal conversion technologies. One such technology that I am particularly hopeful about is chemical looping, a new way to “burn” carbon-based fuels such as coal and natural gas. However, this budget would drastically reduce funding for the development of technologies like chemical looping.
 - a. Why is the Administration cutting back funding for new, transformational technologies like chemical looping that will ensure continued coal use with significantly lower GHG emissions?
 4. Another alternative that your budget appears to dismiss is algae, which can be used to convert CO₂ from a waste to an economic opportunity by using captured CO₂ to produce fuels, fertilizers, and other valuable products. Your budget request for the Fossil Energy Carbon Use and Reuse subprogram that supports these technologies is zero.
 - a. Can you explain the rationale for not funding this subprogram?

The Honorable Bill Flores

1. Part of the stated goal of the White House "Strategy to Reduce Methane Emissions" is to stop leaks of methane from natural gas pipelines. This Committee is drafting legislation to modernize infrastructure, and one of our goals is to bring certainty to the natural gas permitting process.
 - a. Do you agree that it's difficult to build new pipelines to reduce flaring or upgrade existing sections to eliminate leaks with a complicated and unpredictable regulatory regime in place?
 - b. Will DOE's Quadrennial Energy Review propose ways to streamline the federal permitting process to accelerate the modernization of our natural gas supply infrastructure?
2. Your budget requests an increase of 83% for your Office of Electricity; a 42% increase for the Office of Efficiency and Renewables; a 16% increase for ARPA-E; and a 9% increase for the Office of Nuclear Energy. All increases. And yet the Office of Fossil Energy R&D is a net loser, with a decrease in funding, particularly coal funding.
 1. You say DOE supports an all of the above energy strategy. Yet the budget request paints a very different picture. How do you reconcile what you and the President say publicly versus what's in your budget? The numbers don't lie.
 2. Your budget requests nearly \$500 million for wind and solar programs but only \$34 million for advanced (non-CCS) coal technologies. That's a big difference. What is the basis for the disproportionate treatment?

3. The U.S. is currently the world's largest producer of natural gas and oil.
 - a. Would you agree that this new age of energy abundance will significantly benefit our global competitiveness, and allow the U.S. to position itself as a global energy superpower?
 - b. Under your leadership, how will DOE facilitate this energy transition in a manner that takes full advantage of the nation's new energy abundance, including development of offshore resources?
4. A recent EIA report asserted that "The effect that a relaxation of current limitations on U.S. crude oil exports would have on U.S. gasoline prices would likely depend on its effect on international crude oil prices, such as Brent, rather than its effect on domestic crude prices."
 - a. Would increasing the global supply of oil, by lifting the crude oil export ban, bring Brent prices down?
 - b. If Brent prices come down as a result of lifting the ban, is it your opinion that gasoline prices might also come down as well?
 - c. Do you believe that lifting the ban on U.S. crude exports could strengthen U.S. energy security and support our allies?
5. The FY 2016 DOE Budget Request includes substantial increases in the Electricity Delivery and Energy Reliability Program (increase of \$123 million), much of which is designed to better protect our electrical grid. One university in my district, Texas A&M University, a leader in grid security research and development, received ample feedback from industry about the need for such test beds. With so many research programs underway nationally in this area, does DOE plan to fund a large-scale test bed with heavy participation of the industry to examine the interconnected vulnerabilities of our grid?
6. The DOE Budget proposes a substantial increase (+\$23 million, +146%) for a multi-program research effort on the Energy-Water Nexus. Such research has the potential to be very useful to Texas and other states with severe water scarcity issues. Please explain what specifically will be the research focus of this initiative and how DOE is coordinating its initiative with the Food-Energy-Water Nexus research in the National Science Foundation and USDA.

The Honorable Jerry McNerney

1. Is energy storage for intermittent power sources keeping up with the demand and use of these innovations? What is DOE doing in this area?
2. The DOE crosscut budget includes money for its Water-Energy Tech Team.
 - a. Do you believe there could be better coordination across federal agencies in addressing the energy-water nexus?
 - i. Is there an opportunity for additional coordination with states on this effort?
 - b. Should DOE take the lead federal role in the energy-water nexus effort?
 - c. Are there concrete milestones or accomplishments that DOE is working toward, or is the WETT team more in the early stages of pinpointing the issues?

3. Do you believe additional funding is needed, both from an R&D and a systems analysis perspective in order to advance electric grid technological innovations as well as management approaches?
4. What can the Department do to translate all it has learned from the Smart Grid Investment Grants and Smart Grid Demonstration Projects into actionable information for electricity providers and state utility commissions?
5. What do you see as some of the top barriers to modernizing our electric grid for the 21st Century? What do you think a 21st century grid should look like?
6. Can you please discuss how we can better engage stakeholders as we move forward in developing the electric “Grid of the Future” and developing the framework for a future grid that is “actionable” for local stakeholders, and undergo the transition between now and 2030 and beyond?
7. Do you view the Interagency Rapid Response Transmission Team (RRTT), which aims to improve the quality and timeliness of transmission infrastructure permitting, a success?
 - a. Please provide how many projects the RRTT team has worked on and the average timelines for completion.
8. Can deployment of smart grid technologies and practices make our grid more resilient and adaptive with respect to extreme weather events?
 - a. Is this something that DOE is looking at?
9. What does DOE need to do to improve the department’s systems approach to energy policy analysis? What has been lacking in this area to date?
10. Do you judge the Smart Grid Investment Grant Program to have been a success? In what way?
 - a. If you were to receive more funds to use in that program, what would you do differently, if at all, from the last grants you made with funds from ARRA?

The Honorable Mike Doyle

1. This April will mark two years since the sniper attack on the Metcalf Transmission Substation in California. As you recall, 17 electrical transformers were significantly damaged when unidentified assailants shot over 200 rounds into the utility's power station. Although power was rerouted to avoid a blackout, the shooting occurred for 19 minutes. Upon review, records indicate a significant lapse in time occurred between when the communications system was cut, the physical attack occurred and the police were notified. Do you agree that we should move toward a more integrated approach to security as opposed to looking in the silos of cyber, physical, etc... Do you agree that an integrated approach to security and information sharing, where the information technology, operations technology and physical security efforts are aggregated in real time and systematically shared for a holistic approach to help mitigate threats and/or attacks on the bulk electric system?

Attachment 2—Member Requests for the Record

During the hearing, Members asked you to provide additional information for the record, and you indicated that you would provide that information. For your convenience, descriptions of the requested information are provided below.

The Honorable Pete Olson

1. In the 113th Congress, I introduced H.R. 271, Resolving Environmental and Grid Reliability Conflicts Act of 2013, to provide that actions necessary to comply with an emergency order under section 202(c) of the Federal Power Act may not be considered a violation of any conflicting Federal, State, or local environmental law or regulation. Do you support that legislation?

The Honorable Robert E. Latta

1. How long would it take to get a facility up and running that could produce medical isotopes?