

**U.S. Senate Committee on Energy and Natural Resources**  
**September 26, 2017 Hearing: Pending Nominations**  
**Questions for the Record Submitted to Mr. Steven E. Winberg**

**Questions from Chairman Lisa Murkowski**

**Questions:** The Strategic Petroleum Reserve is sometimes seen as a convenient way to fund other endeavors. For example, Congress has passed legislation requiring the sale of SPR crude to fund unrelated legislation. And the President’s proposed FY 2018 budget request advocates for selling half the SPR to raise more than \$16 billion.

In the wake of the disastrous hurricanes, the Secretary authorized releases from the SPR. In addition, the Secretary commented that he disagrees with the Budget request and is a “big believer that it makes sense for us to have a Strategic Petroleum Reserve.”

- a. Do you believe the Strategic Petroleum Reserve is a national asset?

Answer: I support the President’s budget, but I understand Congress’ role in the appropriations process. I also agree with the Secretary regarding the value of the SPR. It is noteworthy that, today, the United States is producing oil and gas at unprecedented levels. The SPR is a product of the 1970s, an era when the United States imported 5-6 million barrels of oil per day from the Organization of Petroleum Exporting Countries (OPEC). Today our imports from OPEC countries are roughly half that amount, despite our significantly larger economy.

- b. How will you approach the management Reserve, if you are confirmed?

Answer: If Congress appropriates money to manage the SPR, I will follow the law and will adhere to all relevant Departmental policies and procedures.

**Questions from Ranking Member Maria Cantwell**

**Question 1: Natural gas exports**

Do you think the Department should take into account the environmental impacts of greenhouse gas emissions from natural gas when it makes export licensing decisions?

Answer: Minimizing our impact on the environment is important with any energy development and policy. It is my understanding that FERC typically has the primary role in the environmental review for the siting of LNG export facilities, but that DOE also has a role in participating in FERC’s analysis. I will ensure that I am more fully briefed on the issue should I be confirmed.

**Question 2: Strategic Petroleum Reserve**

How much oil do we need to retain in the SPR to meet our international obligations and ensure that we have an adequate supply to meet our needs in the event of a major supply disruption? In light of all the sales Congress has already ordered to fund other priorities, can we afford to make any further sales without falling below the minimum amount we need to keep in the Reserve?

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Answer: I have not been fully briefed on the specifics regarding our domestic needs and international obligations surrounding the reserve. If confirmed, I look forward to learning more about this issue and working with Congress to address this issue consistent with any legislation that is passed.

**Question 3: Regional Petroleum Reserves**

The President's budget proposed eliminating the Northeast Gasoline Supply Reserve, which was established after Hurricane Sandy. In light of Hurricanes Harvey, Irma, and Maria, do you think eliminating the Gasoline Reserve is a good idea? Do you think other regional reserves are needed?

Answer: Recent severe weather events have inflicted serious damage in many parts of the country, and I believe maintaining strategic reserves is vital for consumer protection. The President's budget proposal prioritizes the nation's energy security by enabling and increasing American energy production rather than the government storing large amounts of gasoline. Congress and the President will ultimately decide the issue and I will implement policies consistent with the law.

**Question 4: Fossil energy R&D**

President Trump proposed a 55.7 percent budget cut for fossil energy research and development overall in this year's budget request, including a 69.5 percent budget cut for carbon capture and storage programs. If confirmed, how would you prioritize fossil energy research programs to accomplish the most good with a limited budget?

Answer:

Fossil energy sources constitute more than 80% of the country's total energy use, and are important to the nation's security, economic prosperity, and growth. The budget focuses on cutting edge, early-stage R&D that will prepare innovative new technologies for the private sector to further develop, scale up, and deploy. If confirmed, I look forward to being involved in the fossil innovations of the future.

**Question 5: Oil train research**

Will you commit to prioritizing the research being conducted by DOE and the Pipeline and Hazardous Materials Safety Administration to better understand the characteristics of crude oil, particularly how volatility and other characteristics may the transportation of crude oil by rail?

Answer: If confirmed, I look forward to being briefed on this issue and working with you to improve the safe transport of crude oil.

**Questions from Senator Ron Wyden**

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**Question 1:** The 17 DOE laboratories make up a federal research powerhouse, providing the United States with the best in energy technology innovation and scientific research. Would you agree that the national labs, like the National Energy Technology Lab facility located in Albany, Oregon, represent crucial one-of-a-kind assets to this country, which should be maintained and invested in? And will you commit to maintaining the existing network of labs?

Answer: Our National Labs are critical assets that enable us to achieve energy security and global energy leadership. I commit to working with your office and all relevant stakeholders regarding the existing network of labs and the future deployment of our research assets.

**Question 2:** The Office of Fossil Energy coordinates DOE's development of Carbon Capture and Storage (CCS) technologies. I favor a technology-neutral approach to transition to a low-carbon economy; CCS could be a component of that transition, though some technical and economic challenges remain. How would you, as Assistant Secretary for Fossil Energy, continue DOE's development of early-stage R&D of advanced carbon capture technologies and larger-scale demonstration of more mature technologies?

Answer: Over my nearly 40-year career in the fossil fuel industry, I have focused on the development of innovative technologies and bringing those to commercial viability. If confirmed, I will bring that experience to bear on future initiatives. The President's budget focuses on early-stage R&D, but if a final agreement between Congress and the President appropriates funds for large-scale demonstrations, I will execute the law.

**Question 3:** Natural gas is an abundant, domestic fuel for electricity production. There has been lots of back and forth over the proposed Methane Waste Prevention Rule finalized November 2016. The rule updated 30-year old regulations governing venting, flaring, and leaks of natural gas extracted on public lands managed by the BLM. Then there was a push earlier in the year via the Congressional Review Act, to repeal a host of Obama-era regulations including the methane rule. While this push was narrowly defeated in the Senate, a month later BLM published a Federal Register notice suspending the implementation of the second phase of regulations slated to go into effect January 1, 2018.

What is DOE doing to increase the capability to detect methane? Do you think there are methane leaks happening right now in the United States that we are unaware of? Are you committed to looking for ways to cut natural gas waste and greenhouse gases to make the natural gas industry more efficient?

Answer: I am not fully aware of the specifics regarding DOE's efforts in methane detection and reduction. Methane leaks and similar issues generally are under the jurisdiction of the Environmental Protection Agency. If confirmed, I commit to working towards more efficient use of fossil fuels.

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**Question 4:** Researchers at Oregon State University are working with DOE to develop a range of technologies for advanced power systems. These DOE-funded projects support our next generation of scientists, and the general public. How will you strengthen ties between DOE and university researchers?

Answer: Utilizing relationships with experts at universities across the country can lead to technological breakthroughs, innovations and efficiencies. If confirmed, I look forward to working with industry, the national labs, and universities to deliver reliable, affordable, and clean fossil fuels.

**Questions from Senator Bernard Sanders**

**Climate Change**

**Question 1:** President Trump has suggested in the past that climate change is a hoax. Is the President correct? Is climate change a hoax?

Answer: The climate is changing and human activity does have some impact. We must address the issue in a thoughtful way that does not compromise economic growth or jobs.

**Question 2:** Do you agree with the vast majority of scientists that climate change is real, it is caused by human activity, and that we must aggressively transition away from fossil fuels toward energy efficiency and sustainable energy like wind, solar, and geothermal?

Answer: I believe that the climate is changing and human activity does have some impact. We must address the issue in a thoughtful way that does not compromise economic growth or jobs.

**Question 3:** Do you agree with the vast majority of scientists that the combustion of fossil fuels contributes to climate change?

Answer: Fossil fuel resources play a crucial role in delivering affordable, reliable electricity and energy to people across the globe. Fossil fuels do emit greenhouse gases, primarily carbon dioxide and methane that contribute to atmospheric concentrations of greenhouse gases. At the same time, fossil energy is crucial for electricity production, transportation and our overall economy and must be managed accordingly. Advancing technology is the best way to address human contribution to atmospheric greenhouse gas concentrations.

**Question 4:** If confirmed, how will you work to address climate change?

Answer: If confirmed, I will make sure to follow all the relevant Departmental policies and applicable laws passed by Congress. I will also bring my nearly 40-year career in the fossil fuel industry with me where I have focused on development of innovative technologies to address environmental and other issues relating to the use of our energy resources.

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**Fossil Fuels**

**Question 5:** How important do you think it is to reduce the amount of fossil fuels that we use to support our energy needs?

Answer: I believe the Department should pursue policies that ensure affordable, reliable electricity and energy prices for all Americans. That includes an “all of the above” approach to energy and the responsible use of fossil fuels.

**Question 6:** In 2013, you stated that you believed the Obama administration was not investing enough money in coal and gas. Do you still believe the federal government needs to invest more in polluting, finite resources like fossil fuels? Do you believe that renewable energy research and development deserve increased federal funding?

Answer: The federal government should continue investing in early-stage research for fossil fuels because these resources will continue to be a part of our energy infrastructure for decades to come. I support an “all of the above” energy policy. There are opportunities to make progress in early-stage research across all energy sources.

**Question 7:** You spent your time as Vice President for Consol Energy Inc. promoting expanded fossil fuel extraction and production. Given your history of promoting fossil fuel interests, how are you qualified to help the American people move their energy economy away from dirty fossil fuels and toward clean, renewable sources of energy?

Answer: Over my nearly-40 year career, I’ve worked to improve efficiency and reduce emissions from fossil fuels. While the office for which I have been nominated focuses on fossil energy, I do believe there are opportunities to make progress in early-stage research across all energy sectors, including renewable sources of energy.

**Energy Future**

**Question 8:** What do you believe is the role of renewable energy in our energy future?

Answer: I support an “all of the above” energy strategy and believe that renewables will play an important role in our energy future.

**Question 9:** If confirmed, how do you plan to work to help DOE achieve a decrease in future extraction and use of fossil fuels?

Answer: I believe the Department should pursue policies that ensure affordable, reliable electricity and energy prices for all Americans. That includes an “all of the above” approach to

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energy and the responsible use of fossil fuels. I will work to ensure the Office of Fossil Energy budget is executed to the letter of the law.

**Question 10:** The availability of cheap natural gas through the process commonly known as fracking has drastically changed the economics of electricity generation. Coal-fired and nuclear power plants are closing because they are unable to economically compete with high-efficiency gas-fired power plants. However, scientists now tell us that methane and carbon dioxide pollution from natural gas are also very dangerous in contributing to global climate change. What DOE efforts or incentives would you consider appropriate to assure that the nation's electricity comes from means other than sources that contribute to carbon pollution, while assuring stable electricity prices?

Answer: I am supportive of all energy sources and, if confirmed, will commit to work with the other DOE Offices to ensure that affordable, reliable, and clean electricity is available for all.

**Question 11:** Oil, gas, and coal are global commodities subject to market supply and demand. Even if the United States completely met its own demand for fossil fuel energy—as it is close to achieving—consumers would remain subject to significant variability in fuel prices. For solar and wind energy, however, the electricity produced by these sources of energy remains in the United States. How do you believe the Office of Fossil Energy can help the Department of Energy prioritize solar and wind-generated electricity that can't be exported from the United States and is invulnerable to global pricing swings?

Answer: I believe we must consider the risks, costs, and the benefits of all energy sources.

**Question 12:** What are the geopolitical consequences of U.S. fossil fuel consumption on our national security?

Answer: I do believe that domestic energy production is important for ensuring our national security, but I believe the State or Defense Departments may be more qualified to address this question in detail. If confirmed, I look forward to working with other agencies to ensure the safety of the nation.

**Question 13:** Several of my colleagues and I recently introduced the 100 by '50 Act to lay out a roadmap for the United States to transition away from fossil fuels and toward 100% clean and renewable energy. This bill includes major investments in clean and renewable energy. If confirmed, do you commit to supporting investments to transition the U.S. away from fossil fuels?

Answer: I commit to following the laws passed by Congress and to promote the responsible use of reliable, affordable fossil fuels.

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**Ethics**

**Question 14:** You were the Vice President of Consol Energy Inc. from 2002-2014. This company made headlines for donating money to special interest groups and politicians. To your knowledge, did this type of corporate bribery occur while you worked at Consol Energy? If confirmed, do you commit to preventing or eliminating this type of behavior in the Office of Fossil Energy? Will you commit to rejecting favors or special attention for the Consol Energy and other actors in the fossil fuels industry? What specific steps will you take to combat it?

Answer: I am not aware of any “corporate bribery” by CONSOL Energy, Inc. during my tenure. If confirmed, I commit to manage the Office of Fossil Energy in a manner that complies with ethics rules and is respectful to the American taxpayer. I also commit to following the law and all relevant Departmental policies and procedures.

**Questions from Senator Al Franken**

**Question 1:** With the threat of climate change, it is clear to me that we need to find ways to reduce greenhouse gas emissions from our coal plants. Carbon capture could help reduce emissions from existing fossil-fuel power plants, and it will be especially important as developing nations continue to invest in coal-fired power plants. Fortunately, the Office of Fossil Energy has for several years now been making targeted investments to accelerate the deployment of this important technology.

- a. What do you see as the major technological roadblocks in developing carbon capture systems that will be economically viable on an industrial scale?

Answer: The major roadblocks for CCS technologies are capital and operating costs. Therefore, more work needs to be done on alternative carbon dioxide capture membranes and sorbents.

- b. And how will the Office of Fossil Energy work to overcome these obstacles under your leadership?

Answer: If confirmed, I will set research priorities given the Congressional funding levels for carbon capture technology research and development.

**Question 2:** The President’s budget has proposed cutting the Office of Fossil Energy’s funding for research and development by \$388 million or 58 percent. If you are going to meet the office’s stated goal of having an advanced carbon capture technology portfolio ready for industrial-scale demonstration by 2020, how would you compensate for this dramatic loss of funding?

Answer: While I was not party to the drafting of the Administration’s FY18 budget, I support its mission of focusing on early-stage R&D. I understand the role of Congress in the budget process and, if confirmed, will execute the law.

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**Question 3:** What do you see as the potential for carbon capture technology deployed in the industrial sector, including ethanol facilities?

Answer: Industries with high concentrations of carbon dioxide emissions are ideally-suited to serve as host facilities for emerging carbon capture technologies and are potential good sources of carbon dioxide for enhanced oil recovery.

**Question 4:** Do you believe that humans are responsible for the majority of climate change occurring since the industrial revolution?

Answer: I believe that the climate is changing and that humans do have an impact. I believe in advancing technology and reducing greenhouse gas emissions in a thoughtful way that doesn't compromise economic growth, the affordability of energy, or American jobs is the correct approach.

**Questions from Senator Mazie Hirono**

**Questions:** In your oral testimony, you described your belief that the proper balance of natural gas exports to domestic gas consumption would be decided by the market. As Assistant Secretary for Fossil Energy, you will have a key role in approving natural gas export terminals to export natural gas to the highest foreign bidder. Do you consider the global natural gas market, which features state-owned companies from China, Venezuela, and other countries as significant buyers and sellers of natural gas, to be a free market? Given current forecasts, what level of U.S. export capacity would you consider as raising an unacceptable risk of natural gas price increases to households and industries in the United States?

Answer: One of the advantages of the growth of American oil and gas development is that the United States is less susceptible to foreign influence on the oil and gas market. I believe that policy decisions about how to interact with foreign state-owned businesses may be in the purview of the State Department. As to the impact of U.S. exports of natural gas, I know that it has had a profoundly positive impact on the American economy and provided the United States and its friends and allies a variety of benefits. Should I be confirmed, I will monitor the impact of exports and their impact on the American economy.

**Questions from Senator Bill Cassidy**

**Question 1:** The first commercial-scale U.S. carbon capture project, PetraNova just outside of Houston, began commercial operations earlier this year. It is designed to capture over 4,000 tons of carbon emissions from a coal plant and use those emissions to produce 15,000 barrels of oil each day, a 50 times increase over the fields status quo. North Dakota is also exploring two innovative "clean fossil fuel" facilities, a 300MW coal-fired plant that would utilize the captured



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carbon for enhanced oil recovery and a CO<sub>2</sub> capture retrofit technology on an existing lignite coal unit that will utilize the CO<sub>2</sub> to develop Bakken oil and gas fields.

The pilot project identified technical issues before commercial deployment and was fundamental in Petra Nova's success. Given the administration's focus on basic research, how will the Department of Energy collaborate with industry on pilot projects?

Answer: The Administration, through the FY18 budget, indicated an increased reliance on the private sector to fund later-stage R&D and commercialization of energy technologies. Collaborating with the private sector, and all the relevant stakeholders in this process, is necessary as the Department transitions early-stage technological breakthroughs to the private marketplace.

**Question 2:** How does the Department's budget aim to leverage federal resources to advance energy innovation and make our vast fossil energy resources cleaner, more reliable, more affordable while creating U.S. jobs?

Answer: By focusing federal taxpayer dollars on early-stage R&D, the President's budget will leverage federal resources in areas where the private sector is not incentivized to do so. In addition, DOE and the Administration have invested millions in CCUS, have authorized numerous exports for LNG, and have increased coal exports from 2016 levels. All of these progressions create jobs and are a benefit to the economy overall, while still addressing the issue of emissions.

**Questions from Senator Tammy Duckworth**

**Question 1:** As you are aware, Illinois is home to an Archer Daniels Midland project that captures carbon dioxide from an ethanol production facility with the capacity to capture up to 1.1 million tons of CO<sub>2</sub> per year. I believe that these CCUS projects like these are critical to helping us reduce greenhouse gas emissions.

**If confirmed, please describe the specific actions you will take to make sure DOE promotes and achieves wide deployment of CCUS?**

Answer: I am supportive of CCUS. The President's budget focuses on early stage R&D and leaves deployment of technologies to the private sector. If confirmed, I will work to ensure that the budget agreement between Congress and the President is executed.

It's also my understanding that Secretary Perry recently reinforced to our international counterparts his interest in reducing emissions and improving all forms of energy use, and that includes fossil energy through CCUS technology.

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**Question 2:** In 2012 testimony to the House Energy and Commerce Subcommittee on Energy and Power, you claimed that CCUS is, “more important than renewable technology development, more important than efficiency improvements and more important than advances in nuclear energy development.”

**Please confirm whether your quote accurately reflects your current position on our energy landscape, or explain how and why your views evolved.**

Answer: That quote accurately reflects my view that CCUS is not just an issue for the United States, but is a global challenge. Developing and underdeveloped countries are increasing their fossil energy use. If we are going to attempt to reach significant reductions of carbon dioxide emissions, CCUS must be a principal contributor to that effort. However, my support for CCUS is not to the exclusion of an “all of the above” view about energy resources, which must include nuclear, renewables and energy efficiency.