



Department of Energy

Washington, DC 20585

December 18, 2013

The Honorable Ed Whitfield
Chairman
Subcommittee on Energy and Power
Committee on Energy and Commerce
U. S. House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

On September 18, 2013, Secretary Ernest Moniz testified regarding "The Obama Administration's Climate Change Policies and Activities."

Enclosed are the answers to 17 questions that were submitted by Representatives Barton, Gardner, and Dingell to complete the hearing record.

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

Sincerely,

A handwritten signature in blue ink that reads "Christopher E. Davis".

Christopher E. Davis
Principal Deputy Assistant Secretary
for Congressional Affairs
Congressional and Intergovernmental Affairs

Enclosures

cc: The Honorable Bobby L. Rush, Ranking Member



QUESTIONS FROM REPRESENTATIVE BARTON

Q1. According to an Aug. 29 Bloomberg press report, certain EU Members sought to exclude from the final summary document for the upcoming IPCC assessment any reference to the global warming “hiatus” or “pause” that has occurred over the last 15 years. According to that article, U.S. regulators are also trying to make certain changes to the summary document.

a. What is DOE’s role with regard to the development of the IPCC assessment?

A1a. The Department of Energy supports a significant amount of climate research that is pertinent to the IPCC. For the IPCC Fifth Assessment Report (AR5), Working Group 1 (WG1), DOE staff, DOE Laboratory staff and academic researchers funded by DOE served in roles of Lead Authors, Contributing Authors, and Reviewer Editors. In addition, experts from DOE contributed to the U.S. Government review of the report in its draft form.

b. Did DOE participate with other U.S. regulators in developing comments on the summary document?

A1b. The Department of Energy participated in the interagency effort that developed the U.S. Government response to the AR5 WG1 report . DOE employees and DOE national laboratory scientists reviewed both the Second Order Draft and Final Government Distribution of the WG1 report that included the Summary for Policy Makers.

c. What changes to the summary document did DOE and U.S. regulators propose?

A1c. The U.S. Government provided numerous comments and suggestions to the IPCC . These comments sought to clarify and improve the accuracy of the document. All U.S. agency comments to the IPCC were coordinated and submitted by the Department of State

Q2. For the President's Climate Action Plan, has there been an assessment done of the costs to the government to fully implement the plan? If yes, what is the estimated cost?

A2. The President's Climate Action plan consists of actions implemented by multiple departments and agencies under existing executive authorities. Many activities will be undertaken within existing budgetary levels, including by reprioritizing current spending. DOE has not conducted a comprehensive assessment of the costs to the government to fully implement the plan.

Q3. For the President's Climate Action Plan, has there been an assessment done of the costs to consumers to fully implement the plan? If yes, what is the estimated cost?

A3. The President's Climate Action plan consists of actions implemented by multiple departments and agencies under existing executive authorities. Many of the elements of the Plan are explicitly designed to save consumers money (see, for example, the section entitled "Cutting Energy Waste in Homes, Businesses, and Factories") or to reduce costs to consumers through better preparation for the inevitable impacts of climate change (see, for example, the section on "Building Stronger and Safer Communities and Infrastructure"). Where specific elements of the plan call for new standards, the costs and benefits of those standards will be analyzed and balanced through existing provisions of law requiring regulatory analysis and reasoned decision making that takes that cost-benefit analysis into account. Because the implementation of the plan involves decisions that will be taken only after notice and public comment, as well as savings and avoided costs through adaptation, it is not possible to determine a precise cost to consumers, which might well be negative.

Q4. Describe the climate change related research and technology programs or activities engaged in by your agency, including programs or activities undertaken with other Federal agencies?

A4. Many DOE science and technology programs are related to climate change, even if climate change is not the primary focus. For example, increasing the energy efficiency of appliances both saves consumers money and reduces carbon pollution. Work in support of natural gas development can promote national energy security as well as lead to reduced emissions. Support for nuclear power – both full scale reactor work and new work on small modular reactors – can lead to energy diversification and job opportunities and also benefit the climate. Similarly, basic scientific research can grow US competitiveness, have benefits for clean energy development, and also provide other societal benefits. It is therefore not possible to determine which share of a given program is climate change related and which is not.

Q5. Describe the climate change adaptation, mitigation or sustainability related activities engaged in by your agency, including activities undertaken with other Federal agencies.

A5. Many DOE science and technology programs are related to climate change mitigation, even if climate change is not the primary focus. In addition, DOE has been engaged in a number of climate change adaptation related activities, including: conducting an assessment of climate change impacts on the energy sector; conducting an assessment of climate-change impacts on DOE's operations and identifying actions to enhance operational sustainability; supporting the development of the third U.S. National Climate Assessment; and developing actionable climate science information for projecting the impacts of climate change.

Q6. Identify all climate change related interagency task forces, advisory committees, working groups, and initiatives in which you agency currently participates or has participated since January 2005.

A6. Since 2005, the Department of Energy has participated in several climate change interagency activities, including the Committee on Climate Change Science and Technology Integration (CCCSTI) and its subsidiary bodies; the Interagency Climate Change Adaptation Task Force; the Department of State-led delegations to the United Nations Framework Convention on Climate Change (UNFCCC) and preparatory meetings of the delegation; the State Department's Interagency Adaptation Committee; the United States Global Change Research Program (USGCRP) Working Group; the Department of Interior Climate Change Adaptation Working Group – Advisory Committee on Water Information; the Interagency Working Group on the Social Cost of Carbon; Review Committees for the IPCC 4th and 5th assessment reports; and interagency led meetings related to the development of the President's Climate Action Plan.

Q7. Identify all climate change or clean energy related funding, grants or financial assistance programs in which your agency currently participates or has participated, and the amounts of climate change or clean energy related funding, grants, or financial assistance distributed agency, if any, since January 2005.

A7. Many DOE programs are related to climate change, even if climate change is not the primary focus. For example, increasing the energy efficiency of appliances both saves consumers money and reduces carbon pollution. Similarly, basic scientific research can have benefits for clean energy development, along with other societal benefits. As such, it is not possible to determine which share of a given program is climate change related and which is not.

Q8. Identify all climate change related regulations or guidance documents, including regulations or standards to reduce greenhouse gas emissions, issued, or proposed by your agency since January 2005, and/or under development by your agency.

A8. Detailed regulatory notices and impact assessments are provided on the relevant DOE program webpage. However, it is impossible to separate DOE's regulatory actions into those that are related to climate change and those that are not.

Q9. Identify all climate change related international negotiations, agreements, partnerships, working groups, or initiatives in which your agency currently or has previously participated, and the role of your agency in those activities, since January 2005.

A9. The Department of Energy coordinates a number of energy initiatives through bilateral and multilateral forums; a number of these also include climate change related work.

The Department's bilateral relationships and agreements involve a range of countries including: Argentina, Australia, Brazil, Canada, Chile, China, France, India, Indonesia, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, and the United Kingdom. Specific bilateral initiatives include the U.S.-Brazil Strategic Energy Dialogue (SED), the U.S.-China Clean Energy Research Center, the U.S.-India Partnership to Advance Clean Energy – Deployment (PACE-D), and the Turkey Near Zero Zone and Industrial Energy Efficiency Training.

The Department works on a number of longstanding multilateral processes, including:

- The Asia-Pacific Economic Cooperation (APEC), which DOE uses to coordinate on energy efficiency, renewable energy, clean fossil energy, and energy data and analysis issues for the region.

- The Clean Energy Ministerial, for which DOE serves as the Secretariat, has current initiatives that focus on transforming the global power sector, driving equipment and appliance efficiency, and transferring best practice policy solutions for clean energy.
- The Energy and Climate Partnership of the Americas (ECPA) which is working on energy efficiency, renewable energy, a more resilient and modern energy infrastructure, and energy poverty.
- G20 initiative on Fossil Fuel Subsidy Reform, which DOE, in coordination with the Department of Treasury, spearheads the initiative for G20 countries to phase out inefficient fossil fuel subsidies over the medium term.
- International Energy Agency, where DOE leads interactions on oil markets, and also participates in discussions on global energy supply and demand and technology.
- Major Economies Forum on Clean Energy and Climate, a group led by the State Department, but where DOE provides technical inputs on issues such as energy efficient buildings, renewable energy technology, carbon capture and storage.
- Carbon Sequestration Leadership Forum, an international group of large fossil fuel users working together to promote carbon capture and storage technologies.
- United Nations Framework Convention on Climate Change, where DOE participates as a member of the State Department-led delegation to negotiations.

Q10. Provide the approximate amount of annual agency funds attributed to climate change activities for each of the years 2005 through 2012.

A10. Many DOE science and technology programs are related to climate change, even if climate change is not the primary focus. For example, increasing the energy efficiency of appliances both saves consumers money and reduces carbon pollution. Similarly, basic

scientific research can have benefits for clean energy development, along with other societal benefits. As such, it is not possible to determine which share of a given program is climate change related and which is not.

Q11. Describe the actions your agency has undertaken to respond to the Executive Order 13514 including the approximate costs, personnel, and other resources dedicated by your agency to implementing this executive order.

A11. The DOE Sustainability Performance Office (SPO) ensures Departmental compliance with Federal and Departmental sustainability requirements, including mandates from the Energy Policy Act of 2005, the Energy Independence and Security Act of 2007 and Executive Orders 13514 and 13423. These activities further the Department's strategic goal of advancing the Nation's energy and economic security by ensuring that DOE increases its energy productivity and energy diversity, while reducing GHG emissions and energy use.

The SPO coordinates data collection, reporting, and analysis of departmental energy, water, and resource data and manages and implements the Department's annual Strategic Sustainability Performance Plan. Technical assistance is provided to DOE's 47 major sites throughout the U.S. in support of sustainability goal progress and achievement. SPO also supports the Department's effort to increase the use of alternative financing and performance contracting to fund many of the improvements associated with meeting the statutory efficiency goals. To date, the Department has utilized performance contracts for approximately \$512.6 million in project investment, including the largest wind farm on Federal land at the Pantex Plant in Amarillo, Texas, saving taxpayer dollars while improving the environment. Additionally, SPO provides oversight and execution of energy, water, and resource assessments. These assessments, coupled with the

implementation of cost-effective energy conservation measures and efficiency improvements, reduce the Department's operating expenses, overall energy use, and GHG emissions.

The SPO is funded from the DOE Specific Investments line item in the Federal Energy Management Program (FEMP) budget. The FY 2013 appropriations level was \$3.774M.

The Federal Energy Management Program provides access to public data illustrating the progress made by Federal agencies toward meeting greenhouse gas reduction targets required under E.O. 13514. It also collects and reports to Congress annually on the activities of Federal agencies to improve water efficiency and management.

Q12. Provide a list of each sub-agency, division and/or program office within your agency that is currently engaged in climate change related activities, and provide an estimate of the approximate number of your agency employees and/or contractors currently engaged part-time or full-time in climate change related activities.

A12. Many DOE science and technology programs are related to climate change, even if climate change is not the primary focus. For example, the nuclear energy program is working to make nuclear energy safer and more affordable, which will also have climate change mitigation benefits. Similarly, scientific research provides a foundation for future economic growth and may also lead to breakthroughs in clean energy. As such, it is not possible to determine which program offices and employees are working on climate change related activities.

QUESTION FROM REPRESENTATIVE GARDNER

1. The Energy Star program has been used by consumers for many years as a guide to purchase sensible, energy efficient products. In Administrator McCarthy's previous role as Assistant Administrator for Air, she oversaw the entire Energy Star program. Historically, industry and retailers in the Windows, Doors and Skylights sector have strongly supported the program. However, today virtually all are questioning both the process for revising product standards and, as a result, the standards themselves.

Manufacturers and retailers believe that, in the name of saving the most energy possible, the EPA proposed Energy Star standards can only be met by products too expensive for consumers to justify the added expense. This is especially true when the payback period is significantly longer than the average length of time a homeowner stays in their house.

Q1. If Manufacturers and retailers, who are closer to the consumer than energy star technicians, believe there is a problem, how can the program be successful?

A1. ENERGY STAR is a voluntary partnership among consumers, manufacturers, and government, united in the pursuit of a common goal: to protect our environment for future generations by changing energy efficient practices today. ENERGY STAR's use of two core principles – transparency and maintaining a collaborative relationship with both industry and other stakeholders – has led to the program's success.

Consistent with these principles, when establishing new criteria, or revising existing criteria, ENERGY STAR works in close collaboration with stakeholder groups, including manufacturers, retailers, energy efficiency program sponsors and interested non-governmental organizations.

Technical and economic analysis is performed and shared to ensure that the criteria are established in a manner that highlights cost-effective products available to consumers.

Q2. Isn't it in the interest of the retailers and manufacturers to promote the most energy efficient AND economically efficient product possible?

A2. ENERGY STAR is a voluntary partnership that includes retailers, manufacturers and government, among others. In addition to its primary energy-savings goal, the partnership also seeks to reduce greenhouse gas emissions and other pollutants caused by the inefficient use of energy, and it aims to make it easy for consumers to identify and purchase energy-efficient products. Products that have earned the ENERGY STAR designation meet strict criteria for energy efficiency set by EPA according to the test methods developed by DOE in support of the ENERGY STAR product designations (the Energy Star program for windows, skylights, and doors was previously managed by the Department of Energy, but is now managed by EPA). Participation in the ENERGY STAR program is in the interest of retailers and manufacturers, as it enables them to differentiate their products in the marketplace and benefit from an increasingly recognized and sought-after symbol. ENERGY STAR partners can join national campaigns supporting key product areas and add their products to a Qualified Products listing for consumers to consult when shopping for energy efficient products.

A guiding principle of the Energy Star program consists in establishing criteria such that consumers will recover their investment in increased energy efficiency through utility bill savings, within a reasonable period of time. Specifically, ENERGY STAR specifications are set so that if there is a cost differential at the time of purchase, that cost is recovered through utility bill savings within the life of the product.

Like the Department of Energy's mandatory federal Appliance and Equipment Efficiency Standards Program, the voluntary ENERGY STAR program seeks to increase the average efficiency of new purchased products. However, instead of prohibiting the manufacture and sale of products that do not meet a certain efficiency threshold, the ENERGY STAR program encourages the voluntary adoption of highly efficient products. Products that meet the ENERGY

STAR efficiency level can be labeled as ENERGY STAR qualified. This process ensures economic efficiency by providing consumers with sufficient information to consider a given product's efficiency (and the resulting operating cost savings) in their voluntary purchasing decision. These two programs are complementary in that they promote energy-efficiency improvements in appliance products over a broad range of price points.

Q3. Energy Star products cost more than other products. So, if the President believes that everyone has a role in reducing greenhouse gases emissions, then how does it make sense to discourage consumers from purchasing Energy Star products, since they won't see that added investment paid back for a decade or more.

A3. A guiding principle of the Energy Star program consists in establishing criteria such that consumers will recover their investment in increased energy efficiency through utility bill savings, within a reasonable period of time. Specifically, ENERGY STAR specifications are set so that if there is a cost differential at the time of purchase, that cost is recovered through utility bill savings within the life of the product.

QUESTIONS FROM REPRESENTATIVE DINGELL

Q1. Does DOE see a future for coal as a viable energy source in light of the impending greenhouse gas regulations?

A1. Today, coal accounts for about 20% of the total energy consumption in the United States, and fuels about 40% of our electricity generation. Coal will continue to be an important part of the Administration's all-of-the-above energy strategy. The current challenge of addressing climate concerns is not a new development for the coal industry insofar as environmental regulations have historically driven the development of new technologies to one degree or another, depending on the requirements of the particular statutory standard at issue.

DOE's research, development, and demonstration of advanced carbon capture and storage (CCS) technologies will enable CCS deployment as rapidly as possible, and allow coal to maintain its role in producing baseload electricity for America while providing the technology development push which will be essential to meeting the President's broad national energy goals. DOE will continue to tackle the technical challenges and reduce costs for advanced clean coal technologies, and to provide key information to decision makers inside and outside government about the current and future opportunities for coal as a competitive clean-energy fuel.

Q2. What is DOE doing on potential shortages of electric power because of the actions being taken on global warming and how that will affect our future regarding the availability and reliability of electric power?

A2. The President's Climate Action Plan, announced in June, calls for upgrading the country's electric grid because it is critical to our efforts to make electricity more reliable, save consumers money on their energy bills, and promote clean energy sources. A nine

member interagency team, known as the Rapid Response Team for Transmission (RRTT), created in 2011, aims to identify ways to improve the overall quality and timeliness of electric transmission infrastructure permitting, review, and consultation by the federal government on both federal and non-federal lands to help ensure transmission projects are not unnecessarily delayed. Under a June 7, 2013 Presidential Memorandum entitled “Transforming our Nation’s Electric Grid through Improved Siting, Permitting, and Review,” the RRTT members were charged with the development of an integrated, interagency pre-application (IIP) process for significant onshore electric transmission projects requiring Federal approval(s).

A formalized pre-application process, with DOE acting as lead coordinating agency (as authorized by Congress in 2005 through Section 216(h) of the Federal Power Act), is expected to result in improvements to efficiency and timing of Federal agency authorization(s). These improvements will, in turn, expedite the construction and provision of transmission capacity necessary to bring electricity generated through renewable and other low-carbon generation sources online as demand is expected to increase. In addition to providing new pathways to bring low-carbon energy to market in the near future, these improvements in siting transmission infrastructure will allow for improvements in grid reliability. Additionally, these improvements will support sustained flexibility in electric markets gained through longer term investments in energy efficiency and conservation efforts, demand-response and micro-grid technologies.