

Opening Statement Senator Maria Cantwell (D-Wash.) Hearing on Department of Energy FY 2017 Budget March 3, 2016

"Thank you, Madam Chair, and thank you to the secretary for being here at today's hearing.

"I am very pleased to see that the fiscal year 2017 budget request continues to push for investments necessary for building the future of our economy through science and clean energy. The budget requests greater funding – an overall increase of 10 percent – for the Department of Energy (DOE) in fiscal year 2017 which is appreciated. The total budget request is \$32.5 billion, or \$2.9 billion dollars more than enacted in fiscal year 2016. This increase builds on the successful investments at DOE, under Secretary Moniz's leadership and we thank you for that.

"In particular, the investments in science and energy at DOE have grown 15 percent over just the last five years, acknowledging the crucial role that innovation plays in enhancing our energy security, mitigating and adapting to climate change, boosting manufacturing competitiveness and creating jobs.

"The DOE budget takes a big step forward in fulfilling the U.S.'s pledge to doubling federal clean energy research and development (R&D) investment over the next five years as part of Mission Innovation. In November 2015, President Obama and other global leaders announced the creation of Mission Innovation. This initiative is made up of 20 countries that have committed to doubling the research and development funding over five years, in an effort to spur clean energy innovation. The budget request provides details of the proposal, which would increase federal investment from \$6.4 billion in fiscal year 2016 to \$12.8 billion in fiscal year 2021.

"The budget makes the administration's commitment clear, by providing \$7.7 billion for fiscal year 2017 and funding clean energy R&D across the 12 agencies – roughly 20 percent above fiscal year 2016.

"But what is also key to this effort is successful partnerships with the private sector. At the same time the administration announced Mission Innovation, a private-sector innovation initiative was also announced.



"The Breakthrough Energy Coalition, led by Bill Gates, is made up of 29 investors from 10 countries that have committed to investing significant amounts of capital in a fund that will focus on early-stage, innovative clean energy technologies.

"These partnerships will help entrepreneurs translate investments in fundamental science and applied research and development — ranging from advances in smart buildings, to energy storage and grid modernization — to the kinds of new products and services that help build strong companies and boost America's competitiveness.

"Along these lines, I also want to mention the proposal included in the DOE budget to establish regionally-focused clean energy innovation partnerships around the country. This is a new proposal that Secretary Moniz and I have discussed — along with my colleagues — a number of times about the potential advantages of this.

"The goal of these partnerships is to accelerate the pace of clean energy innovation and technology and address challenges specific to regional energy resources, customer needs and innovation capabilities of various regions of the country.

"Just to be clear, this isn't about new physical infrastructure — it's about partnerships. This is about regional initiatives that help us move faster. I like to say it's almost as if it is 'distributed innovation'. So, we have expertise in universities and research centers across the nation. I know for us in the Pacific Northwest, the fact that the Federal Aviation Administration (FAA) built a Center of Excellence on composite manufacturing took advantage of the industry that was there in aerospace. The research that was done there at the University of Washington and the research capabilities of the federal government allowed us to move faster in something that was game-changing — aerospace manufacturing — to building lighter and more fuel efficient planes. That's the kind of innovation we would like to see in other key sectors.

"I just want to say a few things about the DOE's science budget. The DOE's Office of Science is the single largest federal sponsor of basic research in the physical sciences supporting thousands of investigators at more than 300 academic institutions and DOE laboratories. It also plays an important and sometimes underappreciated role in climate science, as it relates to developing expertise, computing capabilities and data necessary to understand the carbon cycle.

"The fiscal year 2017 budget request provides \$5.67 billion for the Office of Science, which is \$325 million above the fiscal year 2016 level.



"These investments, I believe, allow DOE to lead basic research in the physical sciences and operate cutting-edge scientific user facilities while strengthening the connection between advances in fundamental science and technology innovation. This funding supports initiatives like the Energy Frontier Research Centers, Bioenergy Research Centers and advanced computing research.

"I am also pleased to see the budget request for Energy Efficiency and Renewable Energy increase by 40 percent. For building efficiency, the fiscal year 2017 budget requests an \$83 million dollar increase for a particular emphasis on emerging technologies, including new software, sensors and control technologies to make buildings and systems within buildings smarter.

"Why is this important? Well we spend more than \$400 billion dollars each year to power our homes and commercial buildings in the United States. That's more than 40 percent of our nation's total energy bill and comprises nearly 40 percent of the nation's carbon pollution. So getting smarter about the intelligence of physical structures that consume energy is a very good investment for our nation.

"The global market for smart buildings technologies is an extremely lucrative opportunity for the United States, estimated to grow somewhere between from \$7 billion to \$17 billion in the next four years. The United States being a leader here could help pay off significantly.

"There is an area of the budget that I am concerned about. The president's proposal on the Hanford, Washington budget. I was relieved to see that the proposed budget for the Office of River Protection (ORP) will allow for continued progress on the construction of the Waste Treatment and Immobilization Plant (WTP) and continued stewardship of the tank farm.

"The Hanford cleanup project is still one of the largest cleanup projects in the entire world. I know my colleagues are familiar with the budget as it relates to cleanup projects around the country and we've had some success in areas. But, nothing compares to the task at hand at Hanford.

"It is estimated to cost the U.S. government another \$107 billion to finish this cleanup. This is a massive task and a massive undertaking. So, proper funding also enables that we will continue to make sure that worker safety is a top priority. These workers are doing an incredible job at cleaning up Hanford, which is a monumental task, but also doing it in a safe and secure manner.



"Secretary Moniz, as a nuclear physicist, I know you have a strong appreciation for the complex challenges for cleanup at Hanford and that much remains to be tackled.

"But I am concerned about the implications of the current budget on the cleanup effort in the Columbia River corridor.

"The Energy Department's Richland Office has done an incredible job of decontaminating, demolishing, removing waste and remediating the river corridor.

"To date, 324 of 332 buildings have been decontaminated and demolished, 11.5 million tons of hazardous waste has been moved away from the Columbia River. I invite any my colleagues who ever want to come and visit the history of our nation here as well as the cleanup effort, we welcome them. 574 of the 580 waste sites along the river have been remediated, and all of the regulatory milestones have been completed on-time or ahead-of-schedule.

"But, I am afraid that the Richland Office is a victim of its own success, especially judging by the more than \$190 million proposed cut to its budget for fiscal year 2017. The Tri-Cities community and I view this as the most significant risk to the public in the area.

"The funding shortfall endangers this progress and the continued maintenance of infrastructure – specifically, the groundwater remediation, the completion of the 618-10 waste site, and remediation of the 324 building, which is highly contaminated and only a few hundred yards from the Columbia River. These are projects that are very important and are extremely technically demanding.

"The notion that we are dealing with groundwater remediation so close to the Columbia River — we want to do more and not worry about being cut back from success. We know that this is technically challenging cleanup work, but we know how important it is for us to continue to move forward.

"So I look forward to having that discussion during the Q&A.

"I just wanted to also say that I am concerned with the proposed \$130 million cut to some of the key non-proliferation related programs. Secretary Moniz, your tremendous work on the Iran Nuclear Agreement was a great milestone. It's clear that the Department of Energy will continue to play a leading role in the safeguard technologies that support nuclear nonproliferation and global material strategies. So, we want to make sure that is properly funded.



"And I certainly support the grid modernization increase and thank you for the focus on energy storage.

"So, thank you Madam Chair, I look forward to hearing the secretary's comments."

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