Chairman Lamar Alexander Opening Statement Committee on Appropriations Subcommittee on Energy and Water Development

Hearing to Review the FY2020 Budget Request for the U.S. Department of Energy

March 27, 2019

(As prepared for delivery)

The Subcommittee on Energy and Water Development will please come to order. Today's hearing will review the administration's fiscal year 2020 budget request for the Department of Energy.

Earlier this week I proposed a New Manhattan Project for Clean Energy, a five year project with Ten Grand Challenges that will use American research and technology to put our country and the world firmly on a path toward clean, cheaper energy.

Meeting these Grand Challenges would create breakthroughs in advanced nuclear reactors, natural gas, carbon capture, better batteries, greener buildings, electric vehicles, cheaper solar and fusion.

To provide the tools to create these breakthroughs, the federal government should double its funding for energy research and keep the United States number one in the world in advanced computing.

This strategy takes advantage of the United States' secret weapon, our extraordinary capacity for basic research especially at our 17 national laboratories. It will strengthen our economy and raise our family incomes.

As we review the Department of Energy's fiscal year 2020 budget request today and work on drafting the Energy and Water Development Appropriations bill, I will be keeping these Ten Grand Challenges in mind.

I would like to thank Secretary Perry for being here today. This is Secretary Perry's third year to testify before the subcommittee.

I also want to thank Senator Feinstein, with whom I have the pleasure to work with again this year to draft the Energy and Water Development Appropriations bill.

Our subcommittee has a good record of being the first of appropriations bills to be considered by the Committee and by the Senate each year. For each of the past four years, Senator Feinstein and I have been able to have our bill signed into law.

Last year, we worked together in a bipartisan way on the fiscal year 2019 Energy and Water Development Appropriations bill that was signed into law before the start of the fiscal year – the first time that happened since 2000.

We provided \$6.585 billion for the Department's Office of Science, the fourth consecutive year of record level funding, which supports basic science and energy research at our 17 national laboratories and is the nation's largest supporter of research in the physical sciences.

The bill also provided \$366 million for ARPA-E, to continue the important research and development investments into high-impact energy technologies – another record funding level in a regular appropriations bill.

We also provided \$1.3 billion for Department's Office of Nuclear Energy, which is responsible for research and development of advanced reactors and small modular reactors.

Finally, the bill we passed last year provided \$15.2 billion for the National Nuclear Security Administration, including record funding levels for our Weapons Program and Naval Reactors.

This year, the Department of Energy's budget request is about \$3.9 billion below what Congress provided last year.

I'm pleased that the Department's budget request prioritizes supercomputing, and includes approximately \$809 million to deploy exascale systems in the early 2020's.

Unfortunately, the budget request this year again proposes to decrease spending on federally funded research and development, terminates ARPA-E and the loan guarantee programs, and cuts other funding, specifically: the Office of Science by \$1 billion; Energy Efficiency and Renewable Energy by \$2 billion; Nuclear Energy by \$502 million; and Fossil Energy by \$178 million.

And that is why we are holding this hearing: to give Secretary Perry an opportunity to discuss the Department's priorities, so Senator Feinstein and I can make informed decisions as we begin to write the fiscal year 2020 Energy and Water Development Appropriations bill over the next few weeks.

Governing is about setting priorities, and we always have to make some hard decisions to ensure the highest priorities are funded.

Today, I'd like to focus my questions on five main areas, all with an eye toward setting priorities: prioritizing federal support for science and energy research; maintaining a safe and effective nuclear weapons stockpile; demonstrating that we can build safe, affordable advanced reactors; keeping America first in supercomputing; and solving the nuclear waste stalemate.

The Department of Energy's research programs have made the United States a world leader in science and technology, and these programs will help the United States maintain its brainpower advantage to remain competitive at a time when other countries are investing heavily in research.

Today, nuclear power accounts for 60% of our carbon-free electricity and, if we are going to slow the effects of climate change, nuclear power will be necessary into the future.

However, the cost to build and operate today's large nuclear reactors is too high.

If we don't do something soon, nuclear power will not have a future in the United States.

Advanced reactors have the potential to be smaller, cost less, produce less waste, and be safer than today's reactors.

To demonstrate their potential, we need to build some of these advanced reactors, enable them to get licensed, and make sure they are available to replace the existing reactors when they come offline.

Secretary Perry, I'd like to hear your views on this, including whether you think it would be helpful for the Department of Energy, working with the private sector and the National Laboratories, to manage a program that would build and demonstrate current advanced reactor technologies.

A key pillar of our national defense is a strong nuclear deterrent. Last February, the administration issued an updated nuclear policy, called the Nuclear Posture Review.

The updated Nuclear Posture Review recommends continuing many of the things Congress has been working on for the last several years—things that I support, including continuing Life Extension Programs to make sure our current nuclear weapons remain safe and effective; and continuing to invest in the facilities we need to maintain our nuclear weapons stockpile. This includes the Uranium Processing Facility, the Plutonium Facility, and the facilities to process lithium and tritium.

I'm pleased to know the Department continues to make progress on construction of the nuclear buildings for the Uranium Processing Facility, and I'll be asking some questions about that project today.

The Nuclear Posture Review also calls for two low yield warheads to be added to the stockpile, largely in response to capabilities being developed by Russia and other countries, and I know the Department is working on this important issue.

I'd like to hear more about that today, and look forward to hearing about the progress being made on the Uranium Processing Facility.

China, Japan, the U.S. and the European Union all want to be first in supercomputing.

The stakes are high because the winner has an advantage in advanced manufacturing, simulating advanced reactors and weapons before they are built, finding terrorists and saving billions of Medicaid waste, and simulating the electric grid in a natural disaster, and other progress.

The U.S. regained the number one spot last year, thanks to sustained funding by Congress during both the Obama and Trump administrations.

I am pleased that this budget request proposes to continue development of exascale supercomputers – the next generation of supercomputers – that will develop a system a thousand times faster than the first supercomputer the U.S. built in 2008.

To ensure that nuclear power has a strong future in this country, we must solve the decades' long stalemate over what to do with used fuel from our nuclear reactors.

Senator Feinstein and I have been working on this problem for years, and I'd like to take the opportunity to compliment Senator Feinstein on her leadership and her insistence that we find a solution to this problem.

To solve the stalemate, we need to find places to build geologic repositories and temporary storage facilities so the federal government can finally meet its legal obligation to dispose of nuclear waste safely and permanently.

This year's budget request for the Department of Energy includes \$110 million to restart work for Yucca Mountain repository and \$6.5 million to study ways to open an interim storage site or use a private interim storage site.

I strongly believe that Yucca Mountain can and should be part of the solution to the nuclear waste stalemate. Federal law designates Yucca Mountain as the nation's repository for used nuclear fuel, and the Commission's own scientists have told us that we can safely store nuclear waste there for up to one million years.

But even if we had Yucca Mountain open today, we would still need to look for another permanent repository. We have more than enough used fuel to fill Yucca Mountain to its legal capacity.

So Senator Feinstein and I, working with the leaders of the Committee on Energy and Natural Resources, Senator Murkowski and then Senators Bingaman, Wyden, Cantwell, and now Senator Manchin, have a bill to implement the recommendations of the President's Blue Ribbon Commission on America's Nuclear Future, which we're working to reintroduce this year.

The legislation complements Yucca Mountain, and would create a new federal agency to find additional permanent repositories and temporary facilities for used nuclear fuel.

But the quickest, and probably the least expensive, way for the federal government to start to meet its used nuclear fuel obligations is for the Department of Energy to contract with a private storage facility for used nuclear fuel.

Two years ago, you told this subcommittee that the Department of Energy has the authority to take title to used nuclear fuel, but you were hesitant to agree that it has the authority to store the used fuel at a private facility without more direction from Congress.

I understand that two private companies have submitted license applications to the NRC for private consolidated storage facilities, one in Texas and one in New Mexico, and that the NRC's review is well underway.

I look forward to working with Secretary Perry as we begin putting together our Energy and Water Development Appropriations bill for fiscal year 2020 and hearing what Secretary Perry's priorities are.

I also expect that the Department will continue to fund projects consistent with Congressional intent in the fiscal year 2019 Consolidated Appropriations Act.

I will now recognize Senator Feinstein for her opening statement.

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