

Appropriations Subcommittee on Energy & Water Development
U.S. Department of Energy Budget Hearing
Prepared Remarks, Senator Lamar Alexander (R-Tenn.), Chairman
March 25, 2015

We're here today to review the president's fiscal year 2016 budget request for the Department of Energy, a federal agency with three critical missions: nuclear security, science and energy, and environmental management.

This is the subcommittee's fourth and final hearing this year on the president's budget request, and I look forward to hearing what Secretary Moniz has to say about the department's priorities.

The Department of Energy's budget request for fiscal year 2016 is about \$30.5 billion. This is an increase of about \$2.5 billion over the amount Congress appropriated last year.

Governing is about setting priorities, and given our current fiscal constraints – especially on non-defense spending – we are going to have to make some tough decisions this year to make sure the highest priorities are funded.

The president's entire discretionary budget request this year exceeds the Budget Control Act spending caps by about \$74 billion. This is not realistic.

In fact, if we were to fully fund just the Department of Energy's budget request of \$30.5 billion, our subcommittee would need almost the entire increase available – about \$3 billion – in both defense and non-defense for fiscal year 2016 under the Budget Control Act's spending caps.

The real driver of our federal debt is out-of-control mandatory spending on entitlement programs.

I plan to work with our Republican majority – and, I hope, the president and Senate Democrats who share the same concerns – to make tough choices so we can pass a real plan to fix the debt while supporting other priorities like national defense and national labs and medical research.

And that is why we are holding this hearing: to give Secretary Moniz an opportunity to talk about the Department of Energy's most urgent priorities, so Senator Feinstein and I can make informed decisions as we begin to put together the Energy and Water Appropriations bill over the next several weeks.

Today, I'd like to focus my questions on four main areas, all with an eye toward setting priorities:

1. Doubling basic energy research;
2. Reducing federal spending on mature technologies;

3. Leading the world in advanced scientific computing; and
4. Solving the stalemate over what to do with our country's nuclear waste

Doubling Basic Energy Research

Doubling basic energy research is one of the most important things we can do to unleash our free enterprise system to help provide the clean, cheap, reliable energy we need to power our 21st-century economy.

It's hard to think of an important technological advance since World War II that has not involved at least some form of government-sponsored research. Take, for example, our latest energy boom: natural gas.

The development of unconventional gas was enabled in part by 3D mapping at Sandia National Lab in New Mexico and the Department of Energy's large-scale demonstration project. Then our free enterprise system, and our tradition of private ownership of mineral rights, capitalized on the basic energy research.

Another example is the work being done to develop small modular reactors, which would allow nuclear power to be produced with less capital investment and to be accessible in more places.

That's why it's so important that we work to double the more than \$5 billion the U.S. Department of Energy spends on basic energy research. We set out on this goal with America COMPETES, legislation that was first passed under President Bush with overwhelming bipartisan support.

America COMPETES grew out of the "Rising Above the Gathering Storm" report on American competitiveness, written by Norm Augustine. The goal was to double the federal government's investment in basic research, including math, the physical sciences and engineering.

Two of the ways we have increased investment in basic energy research is through our national laboratory system and the Advanced Research Projects Agency-Energy (ARPA-E), which Congress created as part of America COMPETES to fund transformational energy technology projects.

The Office of Science manages 10 of the 17 Department of Energy national laboratories, including Oak Ridge National Laboratory in Tennessee. These national laboratories are critical to our nation's competitiveness and our way of life.

The laboratories are also home to the world's largest collection of scientific user facilities operated by a single organization, used by more than 31,000 researchers each year.

Since 2009 Congress has provided about \$1 billion in appropriations for ARPA-E, which has resulted in more than 400 projects. ARPA-E is successful because it stops funding projects that don't meet their research milestones and funding is limited to five years.

Reducing Federal Spending on Mature Technologies

That brings me to the next priority I'd like to discuss, which is to reduce federal spending on mature technologies. Washington has a bad habit of picking winners and losers, and an addiction to wasteful subsidies of all kinds – we need to end these policies.

The most conspicuous example of this addiction is the wasteful wind subsidy – which costs taxpayers about \$6 billion every year we extend it, enough to double basic energy research at the Department of Energy.

President Obama's former Energy Secretary, Stephen Chu, said in 2011 that wind energy is a "mature technology."

There is a place for limited, short-term subsidies to jumpstart new technologies, but it is long past time for wind to stand on its own in the marketplace.

The subsidy for Big Wind has been renewed 9 times since 1992 and is so generous that in some markets, wind producers can literally give their electricity away and still make a profit.

This is called "negative pricing" and it shows that the wind subsidy isn't just wasting money that could go toward other priorities – it's distorting the market and undercutting other forms of clean, reliable energy like nuclear power.

Leading the World in Advanced Scientific Computing

Supercomputing is critical to our economic competitiveness and a secure energy future.

The United States faces a choice between falling further behind competitors like China, or advancing technology that can make the United States safer and more competitive in a global, 21st-century economy.

In November of last year, I was glad to announce with you, Secretary Moniz, that by 2017 the world's fastest supercomputer would again be in the United States, and that it would again be at Oak Ridge National Laboratory.

That computer will be called Summit, and it will help researchers better understand materials, nuclear power, and new energy breakthroughs. I am glad to have your support for this initiative, and I appreciate that the president's budget request includes funding to make Summit ready for users by 2018 and also for the next generation of supercomputers.

Funding this next generation, known as exascale, is essential to U.S. national security, competitiveness in science and technology and to enable our free enterprise system to create the good-paying jobs of the future.

Supercomputing has helped maintain our nuclear stockpile, allowed manufacturers to make better products and save money and even allowed scientists to map the human heart at one beat per second.

Solving the nuclear waste stalemate

I'd also like to discuss solving the 25-year-old stalemate about what to do with used fuel from our nuclear reactors, to ensure that nuclear power has a strong future in this country.

Federal law makes the government responsible for disposing of used nuclear fuel. Yet the government has failed in this responsibility, even though ratepayers have deposited billions into the Nuclear Waste Fund to pay for it.

The government's failure to follow the law not only imperils the future of nuclear power in our country, but it also results in wasting billions of hard-earned taxpayer dollars to settle lawsuits by utilities, who are stuck with the used fuel until the government takes it.

To help solve this stalemate, Senator Feinstein and I will again include a pilot program for nuclear waste storage in the Energy and Water Appropriations bill, as we have for the past three years.

We also introduced bipartisan legislation yesterday with Senator Lisa Murkowski and Senator Maria Cantwell to create both temporary and permanent storage sites for nuclear waste.

The new sites we are seeking to establish would not take the place of Yucca Mountain — we have more than enough used fuel to fill Yucca Mountain to its legal capacity — but rather would complement it.

Our legislation is consistent with the president's Blue Ribbon Commission on America's Nuclear Future, and is the result of many meetings with experts like Secretary Moniz, who served on the Blue Ribbon Commission.

I should note that federal law designates one repository for our country's used nuclear fuel, Yucca Mountain. After years of delay, I want to be clear: Yucca Mountain can and should be part of the solution to our nuclear waste stalemate.

The Nuclear Regulatory Commission recently completed the Safety Evaluation Report that said Yucca Mountain met all of the safety requirements through "the

period of geologic stability.” The commission and the Environmental Protection Agency define the “period of geologic stability” as one million years.

To continue to oppose Yucca Mountain because of radiation concerns is to ignore science – as well as the law.

Secretary Moniz, we are going to need your help to set priorities and make tough funding decisions for the department this year, and I look forward to your testimony.

With that, I would recognize Senator Feinstein to make her opening statement.

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