

**Testimony of Secretary Jennifer M. Granholm**

**U.S. Department of Energy**

**Before the**

**U.S. House Committee on Appropriations  
Subcommittee on Energy and Water Development**

**April 28, 2022**

Chairwoman Kaptur, Ranking Member Simpson, and Members of the Committee, it is an honor to appear before you today to discuss the President’s FY 2023 Budget request for the Department of Energy (“the Department” or “DOE”).

It is a privilege to serve as the 16<sup>th</sup> Secretary of Energy and have the responsibility of leading the Department in delivering technological advancements and scientific discoveries, advancing the energy, economic, and national security of the United States, and combatting the climate crisis. DOE is committed to securing and advancing environmental justice and equity and spurring economic opportunity for disadvantaged communities that have been historically marginalized and overburdened by pollution and experience underinvestment in essential services. DOE supports these missions through transformative science and technology solutions, partnerships with states, Tribes, municipalities, communities, and other nations, and the Nation’s best scientists and scientific facilities at the National Laboratories.

**Budget Topline and the Passage of the BIL**

DOE’s FY 2023 Budget Request is \$48.2 billion, an increase of \$8.6 billion or +21.7 percent over the FY 2021 Enacted Level, and an increase of \$3.3 billion (+7.4%) over the FY 2022 enacted level. The request helps to build a better, stronger, more secure, and more inclusive America by creating jobs through investments in clean energy and infrastructure. The

Investments proposed in the FY 2023 Budget Request are necessary for the long-term transition of most of the economy from fossil fuels to domestically produced renewable energy. This will end our dependence on volatile fossil fuels to drive our cars, transport our goods, heat and cool our homes, and much more. It will also help us slow the destructive impacts of climate change.

I would like to highlight that resources provided through the FY 2023 Budget will complement, not duplicate, the \$62 billion Congress provided the Department in the Bipartisan Infrastructure Law, or BIL. This \$62 billion is a down payment that will supercharge DOE's work on clean energy demonstrations, advanced manufacturing, grid infrastructure, and low-income home weatherization. The FY 2023 Budget complements the BIL to bolster the Department's resources to cut energy costs for households and businesses, advance clean energy innovation, and generate good-paying, union jobs.

### **Ukraine and the Need to Continue the Clean Energy Transition**

I am appearing before you at a troubling, shocking time in world history. The bravery of the Ukrainian people should inspire all of us to do our part. In addition to the tragic impact on the people of Ukraine, I am focused on the enormous consequences of Russia's invasion on the future of energy. I appreciate the strong message Congress has sent, stating clearly along with President Biden to ban Russian oil imports. Vladimir Putin's actions have sent the oil market reeling, raising oil prices and the price of gas at the pump, and affecting our daily lives, which underscores the need for clean energy deployment to increase national security through further energy independence. Stated bluntly, the situation in Ukraine and the impact on gas prices has highlighted the national security importance of our energy investments. We must rapidly deploy homegrown clean energy technologies like renewable energy and energy efficient electric appliances to stop relying on the volatile oil market and create price stability for American households and businesses. The FY 2023 request includes new and expanded investments to increase our energy security and deploy domestically manufactured clean energy.

## **Moving Beyond the COVID-19 Pandemic**

Additionally, DOE's FY 2023 request will not only move DOE, its workforce, and the Nation toward a clean energy future, but also serve as a brick in the path to help the Nation move beyond the COVID-19 pandemic and build a better, stronger, more secure, and more inclusive America. DOE's 17 National Laboratories have and will continue to play a foundational role in U.S. leadership in science and technology and in tackling the pandemic and the most pressing challenges of our time as they emerge. They are our solutions factories where scientific collaboration takes place, where world-leading experimental tools provide crucial insights into nature, and where solutions to our most urgent challenges are being developed. It was at DOE's scientific user facilities where researchers from the National Laboratories, universities, and industry collaborated to reveal the structure of the spike protein on SARS CoV-2, the virus that causes COVID-19, using X-ray and neutron sources, and where vaccine binding was modeled using DOE's high-performance computers.

Seeking to return to yesterday's normal is not realistic, nor is it enough. It is time to use the science and solutions from DOE's laboratories and help the Nation address our challenges while reimagining our energy economy. And, as America goes back to work, we are going to help rebuild and refocus by creating millions of good-paying energy jobs in communities all over the country. The FY 2023 Budget Request will continue to advance our core science and security missions and create jobs supporting our clean energy infrastructure.

## **Cutting Energy Costs for Households and Businesses**

The FY 2023 budget request bolsters DOE's efforts to cut energy costs for households and businesses while making the Nation more resilient to geopolitical disruptions that hurt Americans at the pump and in the pocketbook. Funding for the Weatherization Assistance Program (WAP) including for a new pilot initiative to drastically reduce costs for households in need, will save low-income households money on their home energy bills.

The budget request includes \$100 million for this new pilot program, known as the Low-Income Home Energy Assistance Program (LIHEAP) Advantage Pilot, to invest in home energy efficiency and energy cost-saving retrofits, including distributed energy solutions. The LIHEAP Advantage Pilot program will use innovative ways to design and expand the combined impact of WAP, the Department of Health and Human Service's LIHEAP program, and related low-income energy assistance programs. More than 33 million households are eligible for energy assistance through LIHEAP to help them cover often-burdensome energy bills. These households could save significant money on their bills if they had access to energy-saving retrofits. The LIHEAP Advantage Pilot will save low-income households money on their bills through energy efficiency and clean energy, thereby reducing the demand for LIHEAP bill assistance and enabling taxpayer dollars to support even more people in need. The upgrades will also make the homes more comfortable and reduce harmful indoor air pollution.

Additionally, programs like the State Energy Program and Energy Future Grants will help communities, states, municipalities, and Tribes improve energy planning and meet energy needs with low-cost clean energy. Robust funding for the Office of Energy Efficiency and Renewable Energy will help cut energy bills by expanding access to rooftop solar and cost-saving energy efficiency upgrades. Moreover, the request expands DOE's efforts to support resilient supply chains and domestic manufacturing for critical clean energy materials and technologies. A new Solar Manufacturing Accelerator will help DOE shore up supply chains for solar energy and make us more resilient to geopolitical disruptions. The new Global Clean Energy Manufacturing initiative will enable DOE to partner with friendly and allied nations to develop secure supply chains for critical materials.

### **FY 2023 President's Budget Request**

President Biden's proposed FY 2023 Budget request for the Department of Energy invests \$48.2 billion in discretionary funding to advance key priorities including creating jobs through clean energy projects, bringing America to the forefront of clean energy innovation, tackling the climate crisis with the urgency that science demands, investing in communities that have been

left behind, cleaning up the environmental legacy of the Manhattan Project and Cold War, and ensuring the safety and security of the nuclear stockpile.

In addition to the \$2.1 billion for the new Under Secretary for Infrastructure, the request includes \$14.7 billion for the Under Secretary for Science and Innovation focused on fundamental science, clean energy innovation and our core research, development, and demonstration (RD&D) missions across existing programs and our National Labs. Of the \$14.7 billion, \$7.8 billion is for the Office of Science (SC) for increased investments in Administration priorities including basic research on climate change and clean energy, artificial intelligence (AI) and machine learning (ML), and bio preparedness.

The request includes \$21.4 billion for the Under Secretary for Nuclear Security and Administrator, National Nuclear Security Administration to pursue three major national security missions: maintain a safe, secure, reliable, and effective nuclear weapons stockpile; reduce global nuclear threats and keep materials out of the hands of terrorists; provide safe and effective integrated nuclear propulsion systems for the U.S. Navy. These missions all require strong science, technology and engineering capabilities and a modern, revitalized infrastructure.

The Budget request also invests \$7.6 billion through the Office of the Environmental Management to continue cleanup of sites resulting from six decades of nuclear weapons development and production and Government-sponsored nuclear energy research. This sustains our investment in the EM mission to clean up World War II and Cold War nuclear sites.

### **Modernizing Energy Infrastructure through a New Under Secretary**

To implement the BIL, the FY 2023 Budget Request reflects DOE's February 2022 realignment to better execute DOE's mission and ensure that the Department has the structure needed to effectively implement the clean energy investments prescribed in the BIL and the Energy Act of 2020. The new organizational structure establishes two Under Secretaries: one focused on fundamental science and clean energy innovation and the other focused on deploying clean infrastructure. This new structure will maximize the effectiveness of BIL programs and support

DOE's ongoing work to reduce energy costs through low-cost clean resources and achieve carbon-free electricity in the U.S. by 2035 and a net zero economy by 2050. These structural changes set DOE up for success in carrying out all our missions – and to carry them forward for the coming years and decades. Our strategic realignment optimizes the world-class expertise of our talented staff and will maximize our ability to accelerate the technologies needed to grow clean energy jobs and fight the climate crisis.

The FY 2023 Budget Request includes \$2.1 billion for the new Office of the Under Secretary for Infrastructure focused on clean energy infrastructure — large-scale demonstration and deployment. The new office centralizes existing program offices focused on major demonstration and deployment with newly created offices. The existing offices that moved to the new Under Secretary include DOE's Loan Programs Office, Office of Indian Energy, Office of Clean Energy Demonstration, Office of Cybersecurity, Energy Security, and Emergency Response (CESER), and the Federal Energy Management Program.

Funding for the Under Secretary for Infrastructure's programs is critical to reducing energy costs for households and businesses, rounding out DOE's portfolio of innovation investments, and ensuring a clean, safe, resilient, and secure energy system. The FY 2023 budget request includes:

- \$90 million for the Grid Deployment Office to catalyze the development of new and upgraded high-capacity electricity transmission and distribution systems nationwide, working with electricity system partners and stakeholders to ensure a reliable, resilient, and equitable grid that connects consumers to lower-cost and cleaner electricity options. The FY 2023 request supports two new programs, the Wholesale Electricity Market Technical Assistance and Grants, to improve electricity markets, and the Interregional and Offshore Transmission Planning programs, which will address barriers to offshore wind deployment.
- \$727 million for the State and Community Energy Program to work more closely with states, localities, and communities to reduce energy costs for households and businesses,

deploy low-cost clean energy solutions, weatherize at least 50,000 homes through the Weatherization Assistance Program, and improve energy system planning;

- \$27 million for Manufacturing and Energy Supply Chains to support U.S. competitiveness in manufacturing next-generation energy technologies, ensure a strong energy industrial base, build resilient domestic supply chains, and help small- and medium-sized manufacturers improve productivity and competitiveness, reduce waste, and save energy;
- \$214 million for the Office of Clean Energy Demonstrations (OCED) to initiate a new program to support full-scale and commercial-scale demonstrations that address integration issues of renewable energy into the U.S. transmission and distribution grids. OCED will also house the Advanced Reactor Demonstration Program, which focuses on the construction of demonstration reactors in the near- and mid-term that are safe and affordable to build and operate;
- \$170 million for the newly established Federal Energy Management Program (FEMP) to help federal agencies meet their building infrastructure and fleet modernization needs, by accelerating the implementation of energy and water conservation measures and improving energy resilience, including by funding the Assisting Federal Facilities with Energy Conservation Technologies (AFFECT) program and launching the Net-Zero Labs Initiative to support the National Laboratories in decarbonization projects.
- \$150 million for the Office of Indian Energy Policy and Programs for financial and technical assistance to promote energy development, efficiency, and use, reducing or stabilize energy costs, strengthening energy and economic infrastructure, transitioning the national Tribal Colleges and Universities to renewable energy, and bringing electrical power and service to Indian land, homes, and Alaskan Native communities;

- \$162 million, net of offsetting collection, for the Loan Programs Office, which includes \$150M for the Title 17 Innovative Technology Loan Guarantee Program credit subsidy costs, associated with an additional \$5 billion of loan guarantee authority open to a range of eligible projects that will help drive innovation, increase U.S. competitiveness, and support domestic manufacturing and supply chains; and
- \$202 million for the Office of Cybersecurity, Energy Security, and Emergency Response (CESER), which leads the Department's efforts to secure U.S. energy infrastructure against all hazards, reduce the risks of and impacts from cyber events and other disruptive events, and assist with restoration activities.

### **Office of Clean Energy Demonstrations**

DOE's FY 2023 Budget Request supports the BIL-established Office of Clean Energy Demonstrations (OCED), which will accelerate clean energy innovation through major demonstrations of the clean energy technologies that have been invented and improved by the National labs and DOE's R&D programs. OCED will support scale-up of technologies including clean hydrogen, carbon capture, grid-scale energy storage, advanced nuclear reactors, and more. The FY 2023 Budget Request provides \$214 million for OCED, which will serve as a project management center of excellence supporting the applied programs and other offices as needed to ensure a consistent approach to implementing capital-intensive late-stage technology demonstrations across DOE. OCED is implementing the more than \$20 billion appropriated in the BIL for the new office to deliver cutting edge clean technologies to communities and businesses across the country. These demonstrations will fund projects totaling hundreds of millions or multiple billions of dollars in scale and will unlock massive follow-on investment from the private sector to deploy these technologies, delivering clean energy to communities across the country.

With FY 2023 funding, OCED will initiate a new \$150 million program to support full-scale and commercial-scale demonstrations that address integration issues of renewable energy into the U.S. transmission and distribution grids. OCED will also provide \$25 million for the Advanced

Reactor Demonstration Program, which focuses on the construction of demonstration reactors in the near- and mid-term that are safe and affordable to build and operate.

Demonstration projects prove the effectiveness of innovative technologies in real-world conditions at scale in order to pave the way towards widespread adoption and deployment. The founding of this office represents a new chapter that builds on DOE's expertise in clean energy research and development. OCED expands DOE's scope to fill a critical innovation gap on the path to net-zero emissions by moving clean energy technologies out of the lab and into local and regional economies across the country, proving the value of technologies that can deliver for communities, businesses, and markets.

OCED's BIL programs also include billions of dollars to invest in demonstration projects in rural areas and economically hard-hit communities that are experiencing the first and worst impacts of climate change. The office will consistently engage environmental groups, labor, and communities to help shape program development and execution. In addition to the large-scale projects, DOE will continue to support many smaller-scale pilots and demonstrations that are needed to meet the Administration's climate goals.

### **Supporting Innovation through Research, Development, and Demonstration**

In FY 2023, DOE will continue to play an important role in advancing and shaping clean energy innovation. Through its applied sciences offices, the Department catalyzes the discovery and development of new clean energy technologies and prioritizes scientific innovation as a cornerstone of U.S. economic prosperity.

In order to support the innovation efforts of DOE's applied offices, the FY 2023 Budget Request includes:

- \$4.0 billion for the Office of Energy Efficiency and Renewable Energy (EERE) to accelerate the research, development, demonstration, and deployment (RDD&D) of technologies and solutions to reduce energy costs for households and businesses, increase

U.S. competitiveness, create good-paying union clean energy jobs, and equitably transition America to net-zero greenhouse gas emissions economy-wide by no later than 2050;

- \$297 million for the Office of Electricity (OE) to lead the Department’s efforts to strengthen, transform, and improve electricity delivery infrastructure so consumers have access to resilient, secure, and clean sources of electricity;
- \$1.675 billion for the Office of Nuclear Energy (NE) supports the diverse civilian nuclear energy programs of the U.S. Government and Federal efforts to research and develop nuclear energy technologies, including generation, safety, and security technologies. The Request consolidates and focuses nuclear energy related research and development (R&D) activities conducted by small businesses and supports university level engineering and science through competitively awarded, university led research and development and infrastructure, universities’ research reactor fuel services, scholarships, and fellowships;
- \$893.2 million for the Fossil Energy and Carbon Management (FECM) office to conduct research, development, demonstration and deployment (RDD&D) that focuses on technologies to reduce carbon emissions and other environmental impacts of fossil fuel production and use, particularly the hardest-to-decarbonize applications in the electricity and industrial sectors; and
- \$700 million for the Advanced Research Projects Agency – Energy (ARPA-E) to identify and promote revolutionary advances in energy and climate-related applied sciences, translating scientific discoveries and cutting-edge inventions into technological innovations.

### **Progressing Scientific Research**

The FY 2023 Budget Request includes \$7.8 billion for the Office of Science (SC) to increase investments in Administration priorities including basic research on climate change and clean

energy, fundamental science to transform manufacturing, bio-preparedness, and participation and retention of underrepresented groups in research activities. SC's core mission is to deliver both the scientific discoveries and major scientific tools that will transform our understanding of nature and advance the energy, economic, and national security goals of the U.S. It is the largest Federal sponsor of basic research in the physical sciences and the lead in supporting fundamental scientific research for our energy future. Over decades, the investments and accomplishments in basic research and enabling research capabilities we have made have provided the foundation for countless new technologies that have benefited large and small businesses and launched new industries. These investments have contributed immensely to our Nation's economy, national security, and quality of life.

SC continues this work today, and the FY 2023 Request also supports ongoing investments in priority areas including clean energy, microelectronics, critical materials, quantum information science (QIS), artificial intelligence (AI) and machine learning (ML), and exascale computing, while managing the risks that certain foreign governments, including the People's Republic of China, Russia, Iran, and others, seek to acquire our technologies, using both illicit strategies and legal means that pose unacceptable risks to research security and integrity. DOE manages these risks while maintaining an open, collaborative, and world-leading enterprise.

### **Energy Earthshots Initiative**

President Biden declared to the world in 2021 that America is back at the table for climate action and followed it up with the FY 2022 request which included new funding opportunities for technologies ranging from carbon capture to geothermal energy to extracting critical minerals from coal waste. The climate crisis is our generation's moonshot. Less than a decade after Kennedy declared our Nation's choice to go to the moon we planted an American flag on that cratered surface, and today we choose to solve the climate crisis.

The FY 2023 Request continues that fight with its inclusion of activities supporting the Energy Earthshots Initiative. DOE's Energy Earthshots Initiative will accelerate breakthroughs of more abundant, affordable, and reliable clean energy solutions within the decade. They will drive the

major innovation breakthroughs that we know we must achieve to solve the climate crisis, reach our 2050 net-zero carbon goals, and create the jobs of the new clean energy economy. The Energy Earthshots Initiative targets the most challenging technical problems across our energy economy and sets ambitious but achievable cost and performance goals to accelerate the necessary innovation. DOE plans to launch additional decadal goals in FY 2023 to address remaining solutions that are critical to the climate goals and require coordinated, targeted efforts from DOE to unlock.

### **Sustaining Investment in Environmental Clean-up**

With the FY 2023 Budget Request, DOE is poised to take its environmental management commitments to the next level. The Office of Environmental Management (EM) supports DOE to meet the challenges of the Nation's Manhattan Project and Cold War legacy responsibilities. The FY 2023 Budget Request includes \$7.6 billion for EM to cleanup millions of gallons of liquid radioactive waste, thousands of tons of spent (used) nuclear fuel and nuclear materials, disposition of large volumes of transuranic and mixed/low-level waste, huge quantities of contaminated soil and water, and deactivation and decommissioning of thousands of excess facilities.

DOE's environmental management mission is about so much more than just knocking down buildings and cleaning waste out of tanks. It's about keeping promises we have made to the American people by addressing the remnants of our nuclear programs. DOE has an obligation to ensure the air, the water, and the communities surrounding our programs are safe, and that the families in those communities can thrive. The FY 2023 Request will also help deepen EM's talent pool in science, technology, engineering, and math to ensure that DOE's environmental management strategy and workforce is at its best to ensure that clean energy technologies we need to overcome climate change — like advanced nuclear — are safe and secure, so we can deploy them on a global scale.

## **Ensuring the Nation's Nuclear Security**

DOE's FY 2023 Budget Request for the National Nuclear Security Administration (NNSA) is \$21.4 billion to support the security and safety of our Nation. The FY 2023 Budget Request ensures that NNSA can:

- Maintain a safe, secure, reliable, and effective nuclear weapons stockpile;
- Reduce global nuclear threats and keep materials out of the hands of terrorists;
- Provide safe and militarily effective integrated nuclear propulsion systems for the U.S. Navy;
- Strengthen key science, technology and engineering capabilities and revitalize the nuclear security infrastructure to be prepared for the future; and
- Modernize the nuclear security infrastructure and provide necessary federal oversight for growing mission requirements.

DOE's priorities for NNSA for FY 2023 reflect the increasingly complex geopolitical environment we face. Regrettably, during the invasion of Ukraine, the Russians announced their nuclear forces were moved to special combat readiness and they also took control of the Chernobyl nuclear exclusion zone and Ukraine's largest nuclear power plant. In other words, the Russians made nuclear threats part of the Ukrainian invasion. In addition, both China and Russia have been deploying more and new kinds of nuclear weapons systems. It is clear that in order to protect the American people and stay ahead of nuclear threats, NNSA must maintain a responsive posture while exercising responsible behavior. This budget request supports those objectives and is fully informed by the 2022 Nuclear Posture Review.

## **Weapons Activities**

NNSA has the responsibility to design, build, and ensure the safety, security, and reliability of the Nation's nuclear stockpile. NNSA achieves this mission using dedicated national laboratories, captive production facilities, and a security site. These facilities provide world-class science and technology program that allows us to design and certify the stockpile without

testing and provide the manufacturing expertise to safely and securely produce weapons and materials needed to modernize the stockpile. The FY 2023 Budget Request provides \$16.5 billion for weapons activities and supports stockpile certification pursued hand-in-hand with weapons modernization programs and the revitalization of Cold War capabilities and infrastructure refurbishment to modernize and address the degradation to NNSA's facilities over the last 30 years.

NNSA is making real progress with significant achievements over the past year. In June 2021, NNSA completed the last production unit of the W80-1 Alt 369 warhead for the B-52s' air launched cruise missile, and in July completed the first production unit of the W88 Alt 370 warhead for the Navy's submarine-launched ballistic missile system. In November, NNSA's Weapons Programs reached a major milestone with the first production unit for the B61-12 Life Extension Program. NNSA is committed to working to produce 80 pits per year as close to 2030 as possible by establishing a production capability at two sites: Los Alamos National Laboratory (LANL) and Savannah River Site (SRS). Although there have been challenges with the schedule, we have been completely transparent with the Nuclear Weapons Council and Congress. A two-site approach enhances resiliency and flexibility, and we remain confident that we can mitigate any issues that we will have the capability to produce 80 pits per year by the mid-2030s, 40 years since we were last able to do so. We are working closely with the Department of Defense to make sure the stockpile will be militarily effective as pit production gets established. All these successes are the culmination of extensive collaboration across the Nuclear Security Enterprise.

### **Defense Nuclear Nonproliferation**

The FY 2023 Budget Request supports NNSA's role in the protection of the American people not only through deterrence but also through a strong commitment to nonproliferation and arms control. NNSA has a duty to advance nonproliferation, counterproliferation, and counterterrorism. The FY 2023 Budget Request provides NNSA with \$1.9 billion to support the Office of Defense Nuclear Nonproliferation's efforts, including:

- Securing nuclear and radiological materials both domestically and around the world;

- Minimizing and eliminating weapons-usable materials, including replacing nuclear and radiological materials with viable alternatives wherever feasible;
- Controlling the further spread of proliferation-sensitive materials, technology, and expertise; and
- Advancing monitoring and verification techniques that will help achieve future nuclear nonproliferation and arms control objectives.

NNSA has made significant progress in replacing Highly Enriched Uranium with Low Enriched Uranium for civilian applications, increasing the preparedness to respond and lower the impact of a nuclear incident, and providing increasingly capable space-based sensors to monitor nuclear activities. However, like so much at NNSA, the defense nuclear nonproliferation mission is evolving. Emerging technologies such as additive manufacturing, unmanned aerial systems, advanced nuclear reactors, high-powered computing, and artificial intelligence provide opportunities to enhance the nuclear threat reduction mission by harnessing their capabilities to detect nuclear proliferation and aid other missions. Yet these same technologies also introduce new risks, lowering the barrier to proliferation and making it easier for state and non-state actors to pursue nuclear or radiological devices.

Complementing the work of DNN is the Nuclear Counterterrorism and Incident Response (NCTIR) Program, which includes the Emergency Operations and Counterterrorism and Counterproliferation subprograms. NCTIR provides capabilities to counter and respond to nuclear incidents and accidents worldwide. The FY 2023 request for NCTIR is \$423.97 million, \$46.46 million above the FY 2021 enacted level. The CTCP subprogram sustains the United States' nuclear counterterrorism and counterproliferation activities, enhances nuclear forensic capabilities to attribute the origin of nuclear devices and materials found outside of regulatory control and maintains the Nuclear Emergency Support Team's (NEST) critical nuclear incident and accident response and technical reach back capabilities. The capabilities in this program have been critical to timely assessment and sensor enhancement in Ukraine.

## **Naval Reactors**

The Office of Naval Reactors remains at the forefront of technological developments in naval nuclear propulsion. The FY 2023 Budget Request provides \$2.1 billion for Naval Reactors (NR) to continue NR's core objective of supporting the daily safe and reliable operation of the Nation's nuclear fleet. The request supports NR's responsibilities to refine and improve existing technology to ensure that the U.S. Navy's nuclear propulsion plants are increasingly efficient and effective and will be capable of meeting future threats to national security. NR supports the existing nuclear fleet and three major DOE initiatives—the Columbia-Class Reactor System Development, the Land-based S8G Prototype Refueling Overhaul, and the Spent Fuel Handling Recapitalization Project.

## **NNSA Workforce**

To manage this broad portfolio, NNSA depends upon recruiting, training, and retaining a highly technical Federal and M&O workforce. The NNSA federal workforce consists of a diverse team of scientists, engineers, project and program managers, foreign affairs specialists, and support staff that perform program and project management and appropriate oversight of the national security missions related to Weapons Activities and Defense Nuclear Nonproliferation. The FY 2023 budget request for Federal Salaries and Expenses (FSE) is \$496.4 million, an increase of \$32 million, or 7 percent, above the FY 2022 enacted level.

## **Conclusion**

In conclusion, I reaffirm my commitment to lead the Department of Energy. I look forward to our continued partnership to achieve these ambitious yet necessary goals.

Thank you for the opportunity to be here today. I am happy to answer your questions.