Advance Policy Questions for William Bookless,
Nominee to be Principal Deputy Administrator,
National Nuclear Security Administration

Duties

Section 3213 of the National Nuclear Security Administration Act states that the Principal Deputy Administrator shall be appointed "from among persons who have extensive background in organizational management and are well qualified to manage the nuclear weapons, nonproliferation, and materials disposition programs of the Administration in a manner that advances and protects the national security of the United States."

What background and experience do you possess that you believe qualifies you to perform these duties?

I have spent more than 35 years supporting and enhancing our national security. The majority of my work over the past 35 years has been focused on nuclear security, including nuclear weapons design and testing, environmental health and safety management, and nuclear security policy development.

I began my career working as a physicist at Lawrence Livermore National Laboratory investigating the effects of pulsed, high-current electron beams and the effects of X-ray lasers. My work continued as leader of one of the laboratories' nuclear weapons design divisions and in their nuclear test program. Based on my experience, I was given the opportunity to become the Associate Director for the Safety and Environmental Protection Directorate at Lawrence Livermore National Laboratory. There, I was responsible for providing the laboratory with leadership, cost-effective services, and support in environmental, safety, and health activities. I was directly responsible for executing the Department of Energy's environmental management program activities in waste management and environmental restoration.

Later on, I served as a senior advisor to the Administrator of the National Nuclear Security Administration (NNSA) where I received awards for my work supporting the 2010 Nuclear Posture Review and the New START Treaty.

Finally, I was given the opportunity to become the Assistant Laboratory Director for Policy and Planning at Brookhaven National Laboratory where I worked on a wide range of science, technology, and nuclear security issues.

I believe that based on my operational, laboratory, and management experience I am ready to assume the responsibilities of the Principal Deputy Administrator of NNSA.

Do you believe that there are actions you need to take to enhance your ability to perform the duties of the Principal Deputy Administrator?

I believe that based on my 35 years of experience in the nuclear security enterprise, I am ready to perform the duties of the Principal Deputy Administrator. If confirmed, I will

surround myself with a team of highly-qualified men and women from NNSA, the laboratories, plants, and sites. I will be dedicated to continually learning and improving my understanding of our nation's nuclear security to ensure that the United States has modern, flexible, and resilient nuclear capabilities that are safe and secure.

Section 3213 also states that the Principal Deputy Administrator "shall perform such duties and exercise such powers as the Administrator may prescribe, including the coordination of activities among the elements of the Administration."

If confirmed, what duties and functions do you expect that the Administrator of the National Nuclear Security Administration (NNSA) would prescribe for you? What is your understanding of the role you would play in the overall administration of the NNSA?

I believe that the Principal Deputy Administrator would assist the Administrator in overseeing all NNSA programs including field office management of the nuclear weapons production facilities, national security laboratories, and the Nevada National Security Site. This includes overseeing the establishment of appropriate policy and guidance, strategic planning, program management, budgeting, resource allocation, safeguards and security, emergency management, contracts, and hiring of personnel.

To your knowledge, are there any special projects or tasks on which you would focus?

If confirmed, I will work closely with the Administrator to determine what special projects and assignments I would be responsible for. I expect that some of those assignments would include supporting her initiatives to improve NNSA's roles and responsibilities within the nuclear security enterprise and ensuring that there is appropriate national leadership focus, direction, and follow-through with respect to NNSA's nuclear security missions.

Challenges and Priorities

In your view, what are the current major challenges and priorities for the NNSA broadly?

Over the decades, the United States has fallen short of investing the necessary amount of funds to sustain a modern, flexible, and responsive infrastructure. Most of NNSA's facilities are over 40 years old and nearly 30 percent date back to the Manhattan Project era of the 1940s. The Administrator has indicated on multiple occasions that recapitalizing and modernizing our nuclear security enterprise's infrastructure are essential for the United States to adapt and respond to the shifting geopolitical environment. If confirmed, I look forward to assisting her in the continued execution of recapitalizing the physical infrastructure needed to produce strategic materials and components for the United States' nuclear weapons.

Having an effective, responsive, and resilient nuclear weapons infrastructure is necessary for maintaining a credible nuclear deterrent, assuring our allies and partners, and ensuring the capacity to hedge against an uncertain future.

Along with this physical infrastructure, the Administrator firmly believes NNSA needs a workforce with the unique skillsets to execute the challenging nuclear security missions. If confirmed, I look forward to supporting her efforts to attract, train, and retain the wide set of skills needed.

In your view, what are the major challenges for the Principal Deputy Administrator specifically?

If confirmed, I would work closely with the Administrator to execute the priorities she has identified and possibly develop others, too. During her congressional testimony earlier this year, the Administrator indicated that a top priority of hers is to ensure that NNSA recruits and retains a workforce that is second-to-none and can compete with the private sector. I believe it is necessary for NNSA to partner with colleges and universities around the country who can provide talent pipelines for the future generations of people necessary for ensuring NNSA's mission success. To recruit the critical expertise needed at NNSA, I will explore opportunities to strengthen academic alliances.

Additionally, I think it is important that NNSA develops the appropriate governance and management structures to accomplish NNSA's nuclear security missions. If confirmed, I will work with the Administrator to ensure clear accountability on mission deliverables throughout NNSA.

If confirmed, how would you address these challenges?

If confirmed, it will be important for me to work with the Administrator, the Secretary of Energy, and Deputy Secretary of Energy to identify and prioritize the root causes of these challenges and then aid in the development of appropriate plans and timelines to resolve them.

In your view, what should be the main priorities for the Principal Deputy Administrator specifically?

If confirmed, I will focus on the challenges identified above, as well as any assigned to me by the Administrator. It will require patience and persistence to understand and address these challenges. This will require me to develop close working relationships with people at NNSA, the laboratories, plants, sites, the interagency, and Congress.

Relationships

Please describe your understanding of the relationship of the Principal Deputy Administrator with the following Officials:

A. The Secretary and Deputy Secretary of Energy

If confirmed, I will report through the Administrator to the Deputy Secretary of Energy and the Secretary of Energy and represent NNSA in the absence of the Administrator.

B. The Administrator of the NNSA

If confirmed, I will report directly to the Administrator of NNSA.

C. The Deputy Administrators of the NNSA

If confirmed, I will work closely with the Deputy Administrators to ensure they can execute missions under their cognizance.

D. The Assistant Secretary of Energy for Environmental Management

The Assistant Secretary of Energy for Environmental Management reports directly to the Under Secretary for Science at the Department of Energy. If confirmed, I would interact with the Under Secretary for Science on environmental management issues as well as the Assistant Secretary.

E. The Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs

The Deputy Administrator for Defense Programs serves as the primary point of contact with the Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs. If confirmed, I would support the interests of the Administrator and NNSA with the Assistant Secretary, as appropriate.

F. The Chairman of the Nuclear Weapons Council

The Administrator of NNSA is a member of the Nuclear Weapons Council. If confirmed, I would represent and support the interests of the Administrator and the NNSA to the Chairman of the Nuclear Weapons Council.

G. The Commander of United States Strategic Command

The Deputy Administrator for Defense Programs serves as the primary point of contact with the Commander of the United States Strategic Command. If

confirmed, I would represent the interests of the Administrator and NNSA with the Commander of the United States Strategic Command.

H. The nuclear directorates of the Air Force and Navy

If confirmed, I would represent the interest of the Administrator and of NNSA to the nuclear directorates of the Air Force and Navy.

I. The Associate Administrator of NNSA for Acquisition and Project Management

If confirmed, I would serve as the immediate supervisor for the Associate Administrator for Acquisition and Project Management.

J. The Defense Nuclear Facilities Safety Board

If confirmed, I would represent the interests of the Administrator and the NNSA with the Defense Nuclear Facilities Safety Board.

Nuclear Posture Review

The Department of Defense released a new Nuclear Posture Review (NPR) in February 2018. While much of the new NPR was consistent with previous nuclear policy as outlined in the 2010 NPR, the 2018 NPR recommended a few changes to U.S. nuclear force structure and reinforced the broader requirements for modernization of U.S. nuclear weapons and infrastructure laid out previously. The 2018 NPR also contained an extensive list of tasks for the NNSA, including the life extension program of record and a number of major infrastructure projects related to strategic materials.

Do you support the changes to U.S. nuclear force structure recommended by the 2018 NPR, including the low-yield submarine-launched ballistic missile (now the W76-2) and the possible future return of a nuclear sea-launched cruise missile?

Given my prior experience working on the 2010 Nuclear Posture Review (NPR), I believe the recommended changes from the previous program of record – for a low-yield submarine-launched ballistic missile and the pursuit of a sea-launched cruise missile – are correctly tailored to the current threat environment, which has significantly changed since 2010. I also believe the NPR's emphasis on NNSA's aging infrastructure is welcome after many years of insufficient funding.

If confirmed, do you commit to keeping Congress, and in particular the congressional defense committees, informed regarding NNSA's progress toward the goals laid out in the 2018 NPR?

Yes.

Relationship with the Department of Defense

If confirmed, you will support the Administrator of the NNSA in her role as a member of the Nuclear Weapons Council, which also includes a number of civilian and military officials at the Department of Defense. The Council sets requirements for nuclear forces, which form the basis of the core mission of the NNSA. The Department of Defense has been described as NNSA's primary customer as well as its partner.

How would you describe the relationship between NNSA and the Department of Defense?

NNSA is a partner with DoD through its role as a Member of the Nuclear Weapons Council in coordination of the nation's nuclear stockpile activities. Moreover, DoD is NNSA's primary customer in meeting established military requirements.

How would you assess the health of that relationship at senior levels and working levels?

From what I have observed, the relationship today is healthy and, if confirmed, I will work to support the Administrator in continuing to strengthen this relationship.

What steps would you recommend to improve this relationship?

If confirmed, I will commit to keeping an open mind on opportunities to improve further enhance this relationship. I will work collaboratively with the Administrator on these efforts.

Defense Programs

The Stockpile Stewardship Program has supported the annual nuclear weapons certification effort for the last 20 years.

Do you believe that we currently have the capabilities to ensure that the stockpile is safe, secure, and effective without nuclear weapons testing?

NNSA must pursue all capabilities that ensure the stockpile is safe, secure, and effective without nuclear weapons testing. If there is a capability that is insufficient, I will work to ensure it is included in future budget requests. This includes not only scientific capabilities but also infrastructure and investments in our people. If confirmed, I will support the Administrator and review the last several years of Director's Annual Certification Statements and engage the laboratory directors personally to evaluate this further.

The Nuclear Weapons Council has laid out a schedule for the next 20 years that includes the completion of four life extension programs (LEPs), as well as multiple refurbishment programs and the maintenance of the existing stockpile.

Do you have any concerns with this ambitious schedule?

In reviewing the 2018 NPR, I believe it lays out the correct priorities for the future of the stockpile. If confirmed, I will work with the Administrator and the Programs to minimize risks to meeting schedule requirements.

Congress has authorized the Stockpile Responsiveness Program for the last several years in order to exercise design and engineering skills in support of the nuclear weapons mission, but this authority has not been fully utilized by NNSA.

Now that the program has been funded at slightly higher levels, how would you support it going forward and make full use of the authorities it provides NNSA?

I agree that the lab, plants, and sites must utilize their workforce to maintain capabilities that have not been exercised in many years. I understand that these efforts depend on consistent and predictable funding and, if confirmed, I will work to ensure these efforts are appropriately balanced with other NNSA priorities.

How do you think that the design laboratories could best use the funding and authority provided by the program?

In most cases, the design laboratories themselves understand best which capabilities have atrophied since the end of the Cold War. If confirmed, I will work with the laboratories and the Deputy Administrator for Defense Programs to make sure that we allocate our resources to our most urgent needs.

NNSA Budget

In 2015, then-Secretary of Energy Ernest Moniz wrote in a letter to the Director of the Office of Management and Budget (OMB) regarding NNSA's budget allocation for the next five years that "an additional $5.2 billion over FY 2018-2021 [was] needed to establish a viable and sustainable program portfolio" and that "[f]ailure to address these requirements in the near term will put the NNSA budget in an untenable position beginning in FY 2018." He added that, uncorrected, the budget proposal would "lack credibility." The Consolidated Appropriations Act for 2018 and the Administration's Fiscal Year 2019 Budget Request both included increased topline amounts for NNSA above the projections about which Secretary Moniz objected.

Do you believe that the increases in 2018 appropriations and the 2019 request have restored the NNSA budget, particularly for defense programs, to a credible level in

order to support stockpile stewardship and the Nuclear Posture Review recommendations?

I believe that we live in an evolving national security environment that is just as challenging, if not more so, than during the Cold War. I believe the President's budget requests and Congress' appropriations for FY 2018 and FY 2019 reflected their strong support for NNSA's missions and also reinforced the President's National Security Strategy and DoD's Nuclear Posture Review.

After 2019, do you believe the NNSA mission is executable while the Budget Control Act remains in place?

I believe it is essential that NNSA have stable and predictable funding levels to ensure it continues to execute program requirements, as laid out by the President in his National Security Strategy and the Department of Defense's Nuclear Posture Review.

Personnel

Do you believe that NNSA has the appropriate number of civilian employees to perform its mission?

While NNSA's mission and budget have grown significantly over the last several years, the number of federal workforce has increased only gradually. If confirmed, I will work with the Administrator to review staffing needs and challenges across NNSA to ensure the appropriate skills mix and number of personnel are in place to accomplish its national security missions.

If not, what would be the appropriate size of the civilian staff and what would the additional personnel be able to accomplish that NNSA is unable to accomplish today? Which components, specific skill sets, or areas of expertise would you recommend growing?

If confirmed, I will work with the Administrator to ensure that NNSA is equipped to accomplish its missions. I understand that NNSA's mission has been steadily increasing and I will work to ensure staffing levels are commensurate with the expanding workload.

If confirmed, what specific steps would you recommend for the NNSA to retain critical nuclear weapons expertise, particularly design capabilities, in the federal NNSA workforce and at the labs and the plants?

From my experience at the labs, I am acutely aware that a substantial share of the NNSA workforce, specifically scientists, engineers and technicians, are approaching retirement eligibility in the next five years. To retain critical nuclear weapons expertise, working with the Administrator, I will explore opportunities to support the NNSA workforce through strengthening academic alliances and professional development initiatives. In

order to meet future NNSA mission requirements, it will be necessary to challenge the workforce to cross-train and develop these critical competencies.

If confirmed, what specific steps would you recommend for the NNSA to ensure that adequate and appropriate technical skills are maintained in NNSA workforce and at the labs and the plants?

Without the expertise and efforts of the nuclear security enterprise workforce, the complex would be unable accomplish its essential missions. If confirmed, maintaining the core competencies of the workforce will be one of my priorities for NNSA. Working closely with the Administrator, I will work to ensure that NNSA continues to recruit and retain the highly skilled professionals needed to execute its missions.

Construction and Project Management

NNSA has been plagued by cost overruns, schedule delays, and project cancellations related to the construction of nuclear facilities, including the Uranium Processing Facility, the Chemistry and Metallurgy Research Replacement project, the Mixed Oxide Fuel Fabrication Facility, and others.

In your opinion, what are the primary causes of these repeated failures in project management?

In many cases these problems stem from insufficient requirements on the front end. From my observations, the creation of NNSA's Acquisition and Program Management office has been positive and resulted in a more rigorous project management process. The creation of this office, as well project management reforms across the Department, have resulted in more effective cost estimating and project management.

Are the changes in NNSA project management practices in the last few years sufficient to address these problems?

I believe these practices have been very beneficial. If confirmed, I will look closely at the sufficiency of these reforms and address any gaps that might still exist.

What steps will you take, if confirmed, to ensure they are not repeated in the future? Would you recommend any additional changes in practice, organization, or regulation?

If confirmed, I will work with the Administrator to develop a sustainable approach and, if changes are necessary, I will work to implement them.

In 2014, Congress mandated the creation of the Office of Cost Estimation and Program Evaluation (CEPE), modeled off the Department of Defense's Office of Cost Assessment

and Program Evaluation (CAPE), largely in response to the recent history of large project management failures.

Is CEPE sufficiently staffed (in terms of billets allocated and billets filled) to provide independent cost estimates and other additional costing and project management advice within NNSA?

The functions of CEPE are important to ensuring accuracy in complex cost estimates. It is my understanding that CEPE balances its staffing targets to fulfill its statutory requirements within NNSA's Federal Full Time Equivalent staffing cap. If confirmed, I will work with the Administrator to determine if CEPE is sufficiently staffed.

Does CEPE have sufficient authority and access to serve its purpose?

I understand Congress has granted CEPE additional authorities in recent years. If confirmed, I will need to review whether this is sufficient or if access can be improved.

If confirmed, will you support CEPE in budget, personnel, and independence, as a critically important capability to build and maintain NNSA's ability to accomplish its mission while being a responsible steward of taxpayer dollars?

Yes.

Safeguards and Security

What role, if any, will you have in ensuring safety and security in the nuclear weapons complex?

If confirmed, I will work with the Administrator to identify problems within the nuclear security enterprise's security culture and ensure that we have systems and processes in place to prevent security lapses. I anticipate being engaged on all initiatives to improve the security at NNSA's facilities and ensure that we have the proper governance and management of the nuclear security enterprise.

Additionally, I will work with NNSA's Management and Operating partners to make sure we are sustaining safety performance and emphasizing continuous improvement to achieve our vital national security missions.

In your opinion, what are the biggest safety and security threats to the facilities and materials in the nuclear weapons complex?

It is essential that NNSA maintains the safety and security of its facilities and materials and that it has the necessary authorities and funding from Congress to mitigate these threats. If confirmed, I will work with the Administrator to emphasize NNSA's commitment to mitigating cyber, material, transportation, and physical threats to NNSA's operations around the country.

What role, if any, will you have in the NNSA's interactions with the Defense Nuclear Facilities Safety Board?

It is my understanding that the Deputy Secretary of Energy manages the Department's overall interface with the DNFSB and provides advice and direction in resolving identified safety issues. If confirmed, I will work through the Administrator and Deputy Secretary on the DNFSB's recommendations and advice regarding public health and safety issues at NNSA's facilities. I am well aware of the DNFSB's statutory responsibilities to review the design and ensure adequacy of operational nuclear safety controls at NNSA's facilities, and how critically important it is for NNSA to work closely with the DNFSB to understand and resolve safety issues identified by them.

The Defense Nuclear Facilities Safety Board and NNSA's Office of Enterprise Assessments have reported a number of accidents at the national laboratories in recent years that put both personnel and mission at risk. Yet, while personnel safety is critically important, the nuclear mission by definition involves some of the most hazardous materials with which we work in this country, and risk cannot be eliminated completely at the labs while continuing to accomplish the mission.

How should we balance safety, risk, and mission at the national laboratories?

I believe that NNSA needs sustained safety performance to achieve its vital national security missions. Risk is inherent in the work performed at the national laboratories, and the key to success is getting NNSA's mission work done safely. NNSA and its Management and Operating partners use an Integrated Safety Management system to evaluate the scope of mission requirements, understand the hazards associated with the scope, and develop appropriate controls and reliably implement those controls. If confirmed, I will be committed to reinforcing the Administrator's ongoing efforts to support employees by empowering them to anticipate, identify, report, and resolve safety issues. I will also be committed to working with our Management and Operating partners to emphasize continuous improvement to NNSA's record of mission success and safety.

What steps would you recommend to improve safety culture at the labs while still meeting mission requirements?

I believe there needs to be the proper balance between safety and mission execution. This can be achieved by ensuring that NNSA and its Management and Operating partners are committed over the long-term to safe operations and continuous training and monitoring of the safety culture. This is the only way we can make sure that our laboratories are safe for NNSA's people, the public, and the environment. To accomplish this, our workforce must feel empowered and fully supported to identify concerns and suggest opportunities for improvement.

Plutonium Strategy

The 2018 NPR noted that "the United States does not have a sustained plutonium pit manufacturing capability needed to avoid stockpile age-out, support life extension programs, and prepare for future uncertainty." While Plutonium Facility 4 (PF-4) at Los Alamos National Laboratory will be modernized over the next five years and will support a substantial part of the pit manufacturing requirement, most agree that PF-4 alone is insufficient to meet the statutory requirement (in section 4219 of the Atomic Energy Defense Act) to "demonstrate the capability to produce war reserve plutonium pits at a rate sufficient to produce 80 pits per year" by 2029. The NNSA's preferred path forward, termination of the Mixed Oxide Fuel Facility (MOX) project at the Savannah River Site and the repurposing of the half-built building for pit production, is currently delayed by litigation over the termination of the MOX project. Regardless of the path chosen, there remains less than 11 years to meet the statutory requirement.

Are you concerned that NNSA may be unable, under any of the possible paths forward, to meet the pit production milestones in statute?

If confirmed, I will closely review the program of record and assist the Administrator in pursuing any efficiencies needed to meet DoD's requirements.

What steps would you recommend to mitigate this risk?

Pit manufacturing is one of the most important capabilities not only for NNSA, but for the credibility of our nation's deterrent. If confirmed, I will work with the Administrator and the Nuclear Weapons Council, as directed by the Administrator to ensure that NNSA is able to meet the statutory requirements and meet DoD's requirements for pit manufacturing to support our nation's stockpile. A mature design prior to proceeding will be essential.

The 2018 NPR directed NNSA to "[p]rovide the enduring capability and capacity to produce plutonium pits at a rate of no fewer than 80 pits per year by 2030," and added that a "delay in this would result in the need for a higher rate of pit production at higher cost."

Do you agree that delays in meeting the pit production milestones will result in cost growth as well as risk to the mission?

I agree that the time to pursue new plutonium pit production is now. If confirmed, I will work with the Administrator to ensure that pit production milestones are not delayed.

What steps would you recommend to help recruit and retain the extremely specialized personnel that will be required to meet the plutonium mission as NNSA ramps up production capability throughout the 2020s at PF-4 and prepares to staff the preferred alternative by 2030?

An adequately trained workforce is absolutely essential to pit production, as well as other capabilities across the nuclear security enterprise, which have not been exercised in recent years. NNSA relies on a dedicated workforce that brings together expertise in many disciplines. If confirmed, I will pursue opportunities to recruit and retain expertise through initiatives that support the workforce, including those that will be necessary for the pit production mission.

Defense Nuclear Nonproliferation

What do believe should be the highest priorities of the nuclear nonproliferation programs at NNSA?

I believe the proliferation and global security threats posed by North Korea and Iran affect every nation, and that the need to keep materials out of the reach of non-state actors is critically important. Terrorist groups have demonstrated interest in nuclear and radiological materials as well as the expertise needed to weaponize them. If confirmed, I believe preventing nuclear smuggling and securing radioactive and nuclear materials should remain top NNSA nuclear nonproliferation priorities.

In addition, supporting the President's objectives of maintaining a balance between promoting legitimate nuclear commerce and controlling the spread of weapons-usable material, equipment, technology, and expertise is vitally important.

In your view, are any policy or management improvements needed in the Defense Nuclear Nonproliferation Programs? If so, what improvements would you recommend?

If confirmed, I will evaluate strategic reviews to assess progress and determine strategic direction, and then work with the Administrator to standardize policy and management of the respective Defense Nuclear Nonproliferation (DNN) programs, as needed.

What improvements do you recommend for NNSA's efforts in verification and monitoring?

It is my understanding that NNSA has the responsibility to develop technical detection capabilities that address current and projected threats to national security posed by the diversion of special nuclear material.

NNSA must continue to prioritize the development of the nation's nuclear proliferation detection and monitoring mission capabilities. If confirmed, I will work with the Administrator and DNN to evaluate investing in efforts that advance innovative capabilities in industry, academia, and the national laboratories to support and sustain solutions for the difficult challenges ahead. NNSA must continue its support for investments in research and development of technology to support detection and verification efforts for nonproliferation and arms control regimes and renew its

commitment to harnessing the power of science to minimize nuclear threats around the world.

In your view, what are the three greatest unmet nuclear nonproliferation needs? How would you propose to address these needs if confirmed? What resources or cooperation would you need to meet such needs?

First, I believe there is an ongoing need to confront the threats posed by North Korea and Iran. Second, there is an enduring need to secure nuclear and radiological materials. And third, several countries retain inventories of separated plutonium and excess highly enriched uranium (HEU), which the United States is unable to remove, or confirm the disposition of, due to lack of a political path forward.

If confirmed, I look forward to reviewing areas in which NNSA's work can be improved to better secure the United States.

What do you think are the five greatest lessons learned for NNSA from the mismanagement of the MOX project? How will those lessons learned be implemented in future NNSA projects?

I believe NNSA has learned lessons from the MOX project, from which it has already begun to make significant improvements.

1. Clear lines of authority and accountability for federal and contractor personnel must be established.
2. NNSA must identify full requirements before starting construction.
3. NNSA must establish dedicated acquisition, project management, and oversight that aligns contract incentives with fiscal responsibility.
4. Designs must be sufficiently complete before committing to a budget.
5. Independent cost estimates should be rigorous and follow NNSA protocols.

Also, it is my understanding that NNSA's Office of Acquisition and Project Management has implemented several policies to facilitate quality construction on budget via best value solutions.

Regulation and Oversight

Staff at NNSA's national laboratories often complain that they are overburdened by regulation and oversight, both internal and external, and that this contributes to the challenges in staying under cost and on schedule for major projects.

Do you believe that environmental, safety, and construction regulations are properly applied to NNSA projects and operations? Do you believe these regulations serve the labs and the mission well?

As environmental, safety, and construction standards have evolved, the NNSA regulatory system has evolved to address expectations. Overseeing the projects and operations of the laboratories and plants is critical to ensuring the work entrusted to them is being carried out with the application of best practices and appropriate controls. I believe in recent years the NNSA system has matured and the stability provided by that maturation has improved the performance of the entire enterprise. However, further improvement is always possible and, if confirmed, I will be committed to the safety of NNSA facilities, workforce, and surrounding communities and to the continuous improvement of our regulatory functions to ensure that they reflect the best practices of our partners.

I believe that clear expectations and prudent oversight give the laboratories clear pathways to successful execution and make mission success much more likely.

Do you believe the labs are subject to the appropriate level of oversight from the NNSA, DOE, the Defense Nuclear Facilities Safety Board, GAO, and/or Congress?

NNSA conducts its critical national security missions at its laboratories, plants, and sites nationwide. Its Management and Operating partners operate these facilities, and NNSA provides federal oversight. Strong governance and management oversight by NNSA are key pillars in accomplishing the missions and goals of the entire nuclear security enterprise. In addition to NNSA's oversight, I believe that it is important that there is independent oversight as well. If confirmed, I will work to build relationships across the complex with the Defense Nuclear Facilities Safety Board, the Government Accountability Office, and Congress to ensure that there exists a proper balance between oversight and mission execution. Clear roles and responsibilities are essential.

If confirmed, are there any changes in regulatory or oversight structures that you would recommend?

I strongly support the Administration and the Department of Energy efforts to undertake government-wide regulatory reform. Making sure that NNSA's missions are executed in an effective, efficient manner is important to me. If confirmed, I will assess what changes are necessary to ensure mission execution with proper regulations and oversight.

National Ignition Facility

The National Ignition Facility (NIF) supports nuclear weapons experimental work but also has the capability to support a broad range of science and energy research challenges.

What are the future implications to the facility and the stockpile stewardship program if NIF does not achieve sustained ignition?

The NIF facility significantly supports NNSA's understanding of the stockpile, even in the absence of achieving ignition. NIF is a unique facility that provides important scientific understanding and helps to ensure the certification of our nation's nuclear stockpile.

Do you believe NIF should be utilized primarily to support stockpile stewardship activities, energy research, or basic science?

While there is certainly a role for other activities at NIF, its primary use should be to support stockpile stewardship.

Facilities and Infrastructure

More than half of NNSA's infrastructure is over 40 years old, and a quarter dates back to the Manhattan Project. As former Administrator Frank Klotz said in 2017, "If not appropriately addressed, the age and condition of NNSA's infrastructure will put NNSA's missions, safety of its workers, the public, and the environment at risk." In the National Defense Authorization Act for Fiscal Year 2018, Congress directed the NNSA to establish the Infrastructure Modernization Initiative to reduce the backlog of deferred maintenance and repair needs by at least 30% by 2025.

If confirmed, how would you work with the Associate Administrator for Safety, Infrastructure, and Operations in order to prioritize across the NNSA infrastructure requiring maintenance?

If confirmed, I will work closely with the Administrator and the Associate Administrator for Safety, Infrastructure, and Operations to make strategic, prioritized investments in maintenance and repair of facilities, recapitalization, and general purpose line-item construction to extend the life of structures, capabilities, and systems to foster improvements in the safety and quality of NNSA's workplace.

If confirmed, what measures would you recommend in order to reduce risk in future major construction projects, such as the lithium, tritium, and domestic uranium enrichment capabilities?

If confirmed, I will help NNSA ensure that:

- Project requirements are clearly defined and prioritized;
- There are proper cost estimates completed and reviewed independently;
- Sufficient design work and technological development is completed prior to commencing a project's construction; and
- NNSA keeps its projects on schedule and on budget.

Congressional Oversight

In order to exercise its legislative and oversight responsibilities, it is important that this Committee and other appropriate committees of the Congress are able to receive testimony, briefings, and other communications of information.

Do you agree, if confirmed for this high position, to appear before this Committee and other appropriate committees of the Congress?

Yes.

Do you agree, if confirmed, to appear before this Committee, or designated members of this Committee, and provide information, subject to appropriate and necessary security protection, with respect to your responsibilities as the Principal Deputy Administrator?

Yes.

Do you agree to ensure that testimony, briefings and other communications of information are provided to this Committee and its staff and other appropriate Committees in a timely manner?

Yes.

Do you agree to provide documents, including copies of electronic forms of communication, in a timely manner when requested by a duly constituted Committee, or to consult with the Committee regarding the basis for any good faith delay or denial in providing such documents?

Yes.

Do you agree to answer letters and requests for information from individual Senators who are members of this Committee?

Yes.

If confirmed, do you agree to provide to this Committee relevant information within the jurisdictional oversight of the Committee when requested by the Committee, even in the absence of the formality of a letter from the Chairman?

Yes.