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Administrator D'Agostino on Nuclear Forces and Nonproliferation

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Good morning, and thank you for the opportunity to join you today. Once again, Los Alamos and the Woodrow Wilson Center have done an outstanding job bringing together some of the leading voices in nuclear security to take a look at where things stand today and look ahead to the challenges we continue to face.

A lot has changed since we gathered here last year. In fact, I think it is safe to say that this has been one of the most eventful, important and rewarding years in NNSA's history. It will be remembered as one of the key moments in the 65-year history of the nation's nuclear deterrent.

Earlier this year, we saw the release of a Nuclear Posture Review that adopts a 21st century approach to nuclear security and brings renewed emphasis to reducing global nuclear dangers.

We saw the signing of the New START Treaty that will reduce U.S. and Russian deployed strategic nuclear weapons to their lowest levels in decades. We hope that treaty will be ratified soon. We saw the completion of an historic Nuclear Security Summit – which gathered the leaders of close to 50 countries to take concrete steps toward securing all vulnerable nuclear material around the world within four years.

We saw the release in February of the President's FY2011 Budget Request, which includes a 13 percent increase for NNSA, including a 25.7 percent increase in our nuclear nonproliferation programs and a significant long-term commitment to many of our key initiatives in Defense Programs.

Of course, all of this follows the President's decision to use his first foreign policy speech, during his first trip abroad to highlight the need for a global nuclear security agenda. That "Prague Agenda" is a core part of NNSA's national and international security mission.

Taken together, all of these developments point to the emergence of a new national consensus on the importance of our mission and the need to invest in the resources and infrastructure required to transform a Cold War nuclear weapons complex into a modern, 21st Century Nuclear Security Enterprise. For too long, our nation lacked that consensus, and as a result our enterprise lacked clear direction. Now, thanks to the hard work of many people – including many here in this room – we have a clear path forward.

I also think this has been a year of impressive accomplishments across our enterprise. As President Obama said in his Prague speech, the threat of a terrorist acquiring nuclear weapons "is the most immediate and extreme threat to global security." The President has outlined an ambitious, three-pronged strategy for addressing this threat:

- Reduce nuclear arsenals;
- Halt the proliferation of weapons to additional states; and
- Prevent terrorists from acquiring weapons or the materials to build them.

In each of those areas, NNSA has taken impressive steps forward. Our Defense Nuclear Nonproliferation Program has removed or disposed of 613 kilograms of nuclear weapons-usable highly enriched uranium fuel

and plutonium (enough for over 24 nuclear weapons) from 12 countries. This included the complete removal of all weapons-usable HEU from 5 countries.

In order to minimize the use of HEU in civilian nuclear programs, NNSA and its international partners have converted or verified the shutdown of 9 research reactors that were using HEU. In order to prevent terrorists from acquiring materials that could be used in a so-called “dirty bomb,” NNSA recovered approximately 4,000 radiological sources containing more than 50,000 decayed curies in 2009.

In addition, in September we reached the 400MT milestone of Russian weapons-origin HEU converted to LEU under NNSA’s HEU Transparency Program. That HEU is downblended into LEU fuel for domestic energy production here in the U.S. Russian HEU is responsible for approximately 10% of all electricity produced in this country. We remove approximately 82kgs of HEU per day from Russian stockpiles and when the Program ends in 2013, we will have removed 500MT of HEU, all used to produce electricity in the U.S.

As part of our global campaign to strengthen international capabilities to prevent nuclear smuggling, NNSA upgraded physical security at more than 185 vulnerable buildings around the world that contained high-priority nuclear and radioactive material. We have provided radiation detection equipment to 334 sites around the world and have equipped 31 major ports with equipment to detect dangerous nuclear and radiological material. We are working in over 55 countries.

Through our Next Generation Safeguard Initiative we are working to develop new techniques and technologies to modernize those international safeguards and make them more effective in preventing countries from diverting nuclear materials and technologies to military purposes.

We shut down the last plutonium-producing reactor in Russia with assistance from six international donors, and continue to monitor over 10 metric tons of weapons-grade plutonium that was produced by these, now shut down, reactors.

I am proud that NNSA continues to lead the way in keeping the American people safe from global nuclear threats.

That same commitment drives our work in Defense Programs, as well. As you know, the NPR highlighted our commitment to move toward the peace and security of a world without nuclear weapons, as well as our responsibility to ensure that the United States nuclear stockpile remains safe, secure and effective, for as long as nuclear weapons exist.

We have made tremendous progress in reducing the stockpile and in increasing transparency about the size of the stockpile. The stockpile will be less than one-quarter of what it was at the end of the Cold War—the lowest level in more than 50 years.

These stockpile reductions send the right message to the rest of the world that the U.S. is committed to Article VI of the NPT, and helped create positive momentum for the 2010 NPT Review Conference.

However, as our stockpile gets smaller, it becomes increasingly important that remaining forces are safe, secure and effective, and, to mitigate future technical and geopolitical risks, that our nuclear infrastructure is able to respond.

That is why is it is critical that we complete the design and construction of key facilities like the Uranium Processing Facility at Y-12 and the Chemistry and Metallurgy Research Replacement (CMRR) project at Los Alamos.

That is why we need to continue to push the frontiers of science and discovery. We are leading the way on exa-scale computing, improving our understanding of the behavior of materials in extreme environments, and pioneering inertial fusion energy. These are ground breaking developments that are supporting our stockpile requirements, while also providing the nation the tools to tackle broader challenges.

Finally, we need to ensure we are attracting the best and brightest to our field. The nuclear security

laboratories, the complex of supporting facilities, and the scientists and engineers across our enterprise constitute a very unique and critical set of skills and capabilities that ensure our nation's security. These capabilities are not only essential for maintaining the nuclear stockpile, but also addressing the broader array of nuclear security challenges.

At their core, these capabilities come down to one thing: our people. In order to execute the President's vision, both for stockpile stewardship and nonproliferation, the science, technology and engineering base at the labs must be reinvigorated.

We need to retain the skills and capabilities we currently possess, and we need to attract the next generation's most promising scientists, engineers and technicians. We must give them state of the art facilities in which to work. And we must continue to give them a clear mission and a clear governance model that maximizes the amount of resources directed toward mission work.

As an enterprise, we must rise to meet these challenges together. In the coming months, we will be issuing a new NNSA strategic plan that builds around five core commitments. We are going to:

- Implement the nonproliferation elements of the President's Nuclear Security Strategy;
- Assure the safety, security, and effectiveness of the nation's nuclear stockpile;
- Recapitalize the nuclear infrastructure and deterrent capability;
- Strengthen the science, technology, and engineering base that underpins everything we do in NNSA; and
- Continue NNSA management reforms, so we can to improve our cost effectiveness.

Together, these five commitments represent a clear path forward for our enterprise. And that brings me to the topic of today's discussion.

As you may remember, when we met last year, I closed my remarks by challenging you to take a hard look at some key questions in your panel discussions. I would like to do the same today. For Panel I:

- The President has described his vision of a world without nuclear weapons. What are the functions the nuclear deterrent provides the nation today, and how will the nation accomplish those functions in the absence of nuclear weapons?
- What parts of our current nuclear weapons infrastructure will be needed in the absence of those weapons to assure that we can reliably detect, understand, and potentially respond to breakout from an adversary?

For Panel II:

- How do the NNSA capabilities affect the nation's efforts in Nonproliferation, Counter Proliferation, Arms Control and Disarmament?
- How do we retain the ability to support verification and intelligence activities for the Nation while reducing our nuclear weapons design and production requirements?

And for both panels: What can NNSA do to assure that we have the skilled people to support the efforts your panels will discuss?

Answers to these questions will build on the thinking that has already been done, and help define the capabilities required to support the U.S. nuclear deterrent, and underpin our nonproliferation, nuclear counterterrorism, and arms control activities.

Thank you again for your time and participation in this valuable effort, I look forward to hearing the rich discussion of your panels.

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