

NNSA's Priorities for Weapons Dismantlement and Nonproliferation
International Nuclear Materials Policy Forum
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Thank you, Ed, for bringing this group together. This is a well-informed audience; your interest in the work of the National Nuclear Security Administration, and the steps we're taking to combat proliferation threats, is well known and I very much appreciate it.

I want to talk about what the NNSA is doing to help prevent proliferation, but I also want to talk about NNSA's role in helping to combat the threat of terrorism. Our efforts, in cooperation with our friends in Russia and other countries, to secure nuclear materials and to protect sensitive technologies, are an essential part of a global effort. Indeed the events of September 11 should energize us all to redouble our efforts to remove any prospect by a terrorist that they could use or successfully attack, nuclear materials. Terrorists respect no boundaries or rules of engagement; they resort to any available means to secure objectives, and place no value on human life. All of us here need to be committed to ensuring that terrorism does not take on an even more deadly level by acquiring, making, or using weapons of mass destruction.

The bipartisan Baker-Cutler task force concluded that "the most urgent unmet national security threat to the United States today is the danger that weapons of mass destruction or weapons-usable material in Russia could be stolen and sold to terrorists or hostile nation states, and used against American troops abroad or our citizens at home. This threat is a clear and present danger to the international community as well as to American lives and liberty." Unfortunately, because of the events of September 11, I propose that the threat has become a little more clear, a little more present, and very much more dangerous and real.

The Administration recognizes this danger; and it is clear that Congress recognizes this danger. I want to thank Senators Domenici, Landrieu, and so many other friends on the Hill for their strong support. And in that context, let me review how NNSA contributes to our security and to worldwide nonproliferation objectives we all share.

NNSA Nonproliferation Programs

To carry out its critical nonproliferation mission, the NNSA makes available and builds on its unique background in nuclear weapons and nuclear power, especially the expertise of the national laboratories. Our job is to integrate our technical and policy expertise with that of other U.S. agencies promoting non-proliferation objectives. Our nonproliferation programs have three main objectives:

1. Detect the proliferation of weapons of mass destruction worldwide;
2. Prevent the spread of WMD material, technology and expertise, and
3. Reverse the proliferation of nuclear weapons capabilities.

Detection, including developing the ability to detect and characterize the production and diversion of nuclear, chemical, and biological materials and weapons, is a big part of what we do. We're conducting applied research and development to produce technologies that strengthen the U.S. response to current and projected threats to national security.

Almost uniquely, NNSA and its laboratories invest in high-risk, long-term technical solutions to proliferation problems, and I'm proud of our long record of success in providing technology to end users throughout the US Government. It is the unique nature of our laboratories that permits their long-term involvement in high risk/high payoff technologies and approaches where they can operate without the immediate demand for a product and a profit. This does not remove the requirement to exercise good judgment in choosing projects nor does it allow us to ignore the need for results-oriented project management, but it does mean we can pursue promising technologies and approaches where they can operate for a substantial period of time, with individuals of great expertise and experience.

I'll return to these issues in a moment, in the context of my discussion on how we're addressing terrorist activities. First, though, I want to turn my attention to prevention and reversal, specifically in the context of our cooperation with Russia.

With respect to Russia, the U.S. is motivated in part by our concerns over the potential threat of under-secured nuclear material and technology, and underemployed expertise. Four broad objectives guide U.S. efforts; we want to: 1) reduce the threat from nuclear delivery systems; 2) reduce the potential for diversion of Russian materials and warheads; 3) make downsizing irreversible; and 4) reduce the potential for diversion of nuclear weapon/dual-use technologies and expertise. We work with our colleagues in the Department of Defense. Sometimes we do well, sometimes we need to work on it some more.

As you know, the Bush Administration has undertaken a comprehensive review of U.S. nonproliferation programs and our cooperation with Russia. While there are some areas where the review is still not complete, in general the Administration has concluded that current programs are working well and supporting the goals of both countries. We remain committed to implementing our activities aggressively and to strengthening our working relationship with our Russian counterparts to address nonproliferation problems of concern to both of us. But I would suggest that the events of the past two weeks tell us we aren't doing enough, and we aren't doing it fast enough.

Reducing the Potential for Diversion

Reducing the potential for diversion of nuclear warheads and materials remains a high priority for the United States. The best way to do that is to help Russia and others to ensure that nuclear weapons and materials are securely stored and properly accounted for. While there remain many challenges ahead of us, we've made some important headway on this task.

- Since 1993, we've worked with Russia to improve security at 95 weapons-usable material storage sites, both civilian and military.
- In this effort, we've improved the security for 220 metric tons of HEU and plutonium in Russia and other newly independent states – enough material for roughly 20,000 nuclear devices.
- We're working with Russia's Navy to upgrade the security at naval nuclear weapons storage facilities, and to secure HEU reactor fuels at storage sites, and aboard nuclear powered Russian service ships.
- In a program we implement jointly with our DOD colleagues, Russia and the U.S. exchange unclassified information to increase the safety and security of nuclear warheads and fissile material. We and Russia recently agreed significantly to expand our cooperation in this area.

Over the next year, we want to complete security upgrades at an additional thirteen sites, bringing the total number of completed sites to fifty. Thinking further out, we hope to complete security upgrades on storage sites for approximately 4,000 Russian Navy nuclear warheads as early as 2007 and for over 600 metric tons of weapons-usable nuclear material by 2010. I would like to be able to shorten that date as well.

We're also taking a number of steps to help ensure sustained long-term operation of these improved security measures, including support for personnel training and the production of essential equipment in Russia. To support strengthened physical security systems, we are assisting with the consolidation of Russian nuclear materials into fewer buildings at fewer sites, and converting some materials to forms less attractive to potential proliferators. And while we're disposing of our own inventories of surplus weapons-usable plutonium, we're also finding ways to work with Russia to help it dispose of its own excess materials.

Plutonium disposition is, with some understatement, a matter of interest to this group. Senator Dominici has been more than clear on the need to get this program on track. From NNSA's perspective we are now in early discussions with MinAtom to examine how we could proceed – within the framework of the existing bilateral agreement – with approaches that would be more efficient, more effective, and perhaps even faster. We are asked to examine whether we can be more cost-effective, gather greater international support, and perhaps strengthen the long-term national energy policies of our countries as well.

At the same time, the NNSA budget request does continue funding of the Mixed Oxide Fuel Fabrication design here with related MOX fuel qualification activities. We will also continue work on the Pit Disassembly and Conversion Facility – albeit at a slower rate – and have suspended work on the current immobilization plant design. This strategy reduces the peak funding requirements for the U.S. disposition facilities, but to keep on line the MOX program as a whole and, importantly, maintains

a “way out” for the plutonium that would come to the state of South Carolina.

That said, we more than recognize that we must bring closure and much greater coherency to this program, and get on with the huge and important tasks ahead of us.

We’re continuing to work with Russia to convert HEU from its military stockpile into non-weapons-usable forms. The Purchase Agreement which has been in effect for many years remains important. More than 135 metric tons of HEU - enough to make roughly 5,500 nuclear devices -- has been removed from Russia’s military program. Our goal for 2001 is to convert another 30 metric tons.

We’re also working with Russia to improve its ability to detect and interdict nuclear materials at border checkpoints and airports. Some borders are thousands of miles long and some are with countries whose policies keep us up late at night. We need to find more and better ways in this area.

Enhancing Irreversibility of Nuclear Downsizing

As I mentioned, the U.S. wants to enhance the irreversibility of steps taken to downsize Russia’s nuclear weapons complex. But as we do so, are cognizant of legitimate Russian concerns over the human costs of such downsizing. We’re trying to reduce the risk that individuals or institutes will be tempted to sell their nuclear expertise to a higher bidder, and to transform Russia’s so-called “closed” nuclear cities by helping to move displaced workers into civil employment.

NNSA has just signed an agreement in which MinAtom commits eventually to cease any further nuclear weapons activities at Avangard, one of its four nuclear weapons production facilities.

On September 17th, the first joint civilian company involving a former Russian nuclear weapons manufacturer and a U.S. partner came into being. Avangard and Fresenius Medical Care have now agreed to open a medical equipment manufacturing facility in the Russian closed nuclear city of Sarov. The new company will produce high-quality, low-cost kidney dialysis equipment for worldwide use.

The resources, buildings and personnel that previously produced nuclear weapons now will manufacture life-saving medical devices.

Non-Proliferation Programs Outside Russia

I want to mention briefly a number of activities that do not involve cooperation with Russia, that also contribute to the goal of preventing proliferation.

We’ve undertaken a joint program for the long-term, secure and safe disposition of the spent fuel from Kazakhstan’s BN-350 fast breeder reactor. The packaging campaign for nearly 3000 spent fuel was completed in June 2001.

In North Korea, we're helping to secure weapons-grade plutonium contained in spent reactor fuel. Some 8,000 assemblies have been packaged in canisters and placed under IAEA monitoring, in a safe condition appropriate for future shipment.

NNSA provides technical experts, training and equipment to help IAEA meet its vital safeguards missions worldwide, including in Iraq and North Korea.

Let me begin to close by talking briefly about some of the ways in which the NNSA contributes directly to homeland defense and the prevention of terrorism. In a certain sense, the nonproliferation programs I've just described play a vital role in this effort -- certainly the best way to deal with the awful possibility that terrorists could use nuclear weapons is to ensure that they have no access to the weapons or the materials that can be used to build them.

But we are also harnessing the technical capabilities of our laboratories directly to efforts to counter terrorism.

NNSA experts are building technical means to detect lost or stolen nuclear devices or fissile materials. Over the years, we have built a forensic capability to identify the origin of fissile material that can support our law enforcement agencies and our allies worldwide. We will continue to develop innovative technologies to support national intelligence needs, including those related to homeland defense and the prevention of terrorist threats.

We're also developing technologies and systems that will greatly improve our ability to respond to the threat of chemical or biological attacks against civilian populations. NNSA is working with other agencies to develop sensors that could detect the terrorist use of a biological agent and to assist in assessing and characterizing potential biological threats. The successes of this program include the development of a prototype hand-held chemical and biological toxin detector, completion of DNA sequencing of the biological agent that causes anthrax, an extensive field experiment to model flow of a simulated airborne agent release, and development of a decontamination foam effective against chemical agents as well as high-priority biological agents.

Conclusion

We face no greater challenge than preventing weapons of mass destruction or weapons materials from falling into the hands of those who might use them against our citizens. This is not a matter for the U.S. alone. As Secretary Abraham stressed in his address to the IAEA just last week, the new circumstances and new threats that we all face require greatly increased international cooperation and a much stronger focus on physical security for nuclear materials. We will be working with our friends around the world to review, and where necessary upgrade security measures on nuclear facilities in light of today's grim reality of sophisticated, determined, and highly organized international terrorism. Our efforts must include strengthened export controls on sensitive technologies,

and increased cooperation among intelligence and law enforcement agencies, customs services, and border security forces to prevent the theft, diversion, or illicit trafficking in nuclear materials. It must also respond to a broad spectrum of threats against nuclear facilities. This is an area that will be the focus of increased attention in our international interactions and our dialogue with friends around the world.

Our task -- today more than ever -- is to focus and energize our efforts and to bring to them the greatest degree of international cooperation and national commitment. I'd like to speak very personally for a minute or two.

We need to be frank and honest with ourselves. The work we have done with our international friends and colleagues gives a lot to be proud of. We really have done much to better secure nuclear weapons and nuclear materials. We have done a lot to limit the pressures that can lead to the leakage of expertise to proliferant countries. We have done a lot to begin to reshape the Russian nuclear weapons complex and to find commercial opportunities for the facilities and for the scientists and engineers.

But frankly I'm awed by how much more there is to do and how hard it is to make real progress. And it is clear to me that we have lost some momentum lately -- and we have not made progress at the rate that I would like to see. Now, the horrific events of September 11 have only served to make this conclusion, this need, more compelling and more urgent.

We've seen an attack with much, much greater energy than we have seen before. We've seen an attack with a much greater level of planning and coordination than most of us would have imagined. And we saw a terrorist attack conducted with more people than we ever anticipated.

This should be a call to action. We need to bear down on our key priorities and make real and rapid progress securing weapons and material. As an aside, I would say that it is not just weapons material we should worry about -- it is also the material that fuels our reactors, and the nuclear waste from all sources. While the immediate consequences of an attack on such material may be less severe than that surrounding a weapon, it could be devastating to the support our countries need to meet their energy goals and policies.

These efforts need a broad, international basis for greatest success and they need to be well conceived and carefully prioritized. Despite what I see as a compelling demand for new resources, we know that there will now be even stronger competing demands for resources we want to apply to our programs. Obviously, this calls for tighter-run programs and more carefully conceived partnerships. But this isn't a call for study. We just need to get on with it.

The United States needs to rebuild and strengthen our relationship with Russia. We faltered in this area, at least in the programs in DOE & NNSA

We need to rebaseline our program to focus on the most important, achievable goals and get the most leverage from our investments.

We need to partner better – with private programs and with our international partners.

And we need to get on with it now. That's our challenge...

Thank you.