



Center for Strategic & International Studies
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**Comments on the Status of the National Nuclear
Security Administration Department of Energy**

**Before the U. S. House of Representatives
Armed Services Committee
Special Oversight Panel on Department of Energy Reorganization**

**Washington, D. C.
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Thank you, Mr. Chairman. My name is Robert Ebel, and I direct the Energy and National Security program at the Center for Strategic and International Studies, a not-for-profit public policy research institution. I welcome this opportunity this morning to offer my thoughts on the status of the National Nuclear Security Administration.

CSIS perhaps surprisingly has had a long-standing involvement in nuclear issues, dating back to 1978 with the publication of a report entitled *International Politics of Nuclear Energy*. Our interests have been broad-ranging in recent years. In 1994 we completed a report on *Chernobyl and Its Aftermath*, followed by a report on *Nuclear Energy Safety Challenges in the former Soviet Union* which was released in 1995. That was followed by a report on *U.S.-China Commercial Nuclear Commerce*, released in 1997, and by a study which undertook to provide guidance on *Disposing of Weapons-Grade Plutonium*, released in 1998.

Last year, 1999, we undertook a review of the Nuclear Regulatory Commission, with the impetus growing out of a confluence of events confronting the industry and the strategic influence of energy issues on the nation. We are all aware that achieving and maintaining an efficient and effective regulatory structure of the nuclear industry is important, for three key reasons.

First, some 20 percent of our electricity is supplied by nuclear reactors.

Second, non-emitting nuclear power assumes greater importance as the world tries to respond to growing concerns over global warming.

Third, the ability of the United States to influence the control of proliferation of nuclear weapons derives from our ability to influence the policies and practices of other nations as they develop their own nuclear power industry. But our ability to influence depends very much on the state of our own nuclear industry.

Our findings were released in August 1999 under the title *The Regulatory Process for Nuclear Power Reactors: a Review*.

At the same time we were bringing that review to a successful conclusion, we had a much broader nuclear project under way, with the title **Global Nuclear Materials Management**, chaired by former Senator Sam Nunn. Our written report was released in January of this year. This morning, with your permission, Mr. Chairman, I would like to share with you certain of our findings and recommendations which, I believe, have relevance to the subject of this hearing.

Let me begin by summing up in brief what this report, entitled *Managing the Global Nuclear Materials Threat*, is all about.

The risk of increased proliferation of nuclear weapons and materials is one of the most important security threats facing the United States and the world. To ensure the safe, secure, and legitimate use of nuclear materials, the United States must work with other states and international organizations to create a new global approach to both the traditional threats of nuclear weapons and the challenges of the emerging new nuclear era.

We reviewed 5 key areas: funding nuclear security; creating an international spent fuel facility to aid the Russian nuclear complex; commercializing the excess defense infrastructure; using transparency to ensure the safe management of nuclear materials worldwide; and maintaining the U.S. leadership in nuclear technology.

Our Senior Policy Panel, among other things, called for:

- The United States, with an international consortium of nuclear countries if possible, to buy an additional 50 tons of Russian highly enriched uranium at a cost of \$1 billion, and make the existing U.S.-Russian agreement a higher priority;
- Consolidating Russian nuclear materials in fewer sites to increase security, and to lower costs;
- Developing an international management standard for nuclear materials transparency;
- Russia to work with Western governments and business to accelerate the process of commercializing the excess nuclear infrastructure;
- Europe and Asia to increase their contributions to enhancing nuclear security;
- The United States to renew its commitment to nuclear power as a way to meet future energy needs while protecting the environment; and
- Increasing funding for nuclear research and development and nuclear engineering education.

Mr. Chairman, the end of the Cold War and the dissolution of the Soviet Union brought many changes to the world, but none more important and hopefully more lasting than a reduction in the prospect of nuclear war between the two nuclear super powers. Yet we have to recognize that the nuclear standoff that existed before the breakup had also provided a degree of stability, in that a confrontation that could lead to a nuclear clash between the United States and the Soviet Union presented risks clearly unacceptable to both.

Unfortunately, today much of that stability has disappeared, replaced by new challenges of how to avoid the spread of nuclear weapons material and how to keep nuclear weapons out of the hands of terrorist groups and rogue nations. As an aside, I understand that we should no longer use the term "rogue nation." Perhaps "sanctioned nation" would be more palatable.

Of the many approaches which we examined in our report, two stand out in terms of urgency. First, we need a new and comprehensive program embracing additional purchases of highly enriched uranium and plutonium for the purposes of converting these materials to nuclear fuel.

Second in terms of urgency, we must expand our cooperative efforts with Russia to consolidate nuclear materials at fewer locations. These efforts are designed to improve security, accounting, and consolidation and to keep nuclear materials from falling into undesirable hands.

I would like to add a third, perhaps of less urgency than the first two, but nonetheless important to the continuing leadership of the United States in terms of nuclear matters, both civil and military.

On all fronts—industry, government, and university—the technical strength of the United States in nuclear matters is continuing to weaken, making it more difficult to provide knowledgeable and credible leadership to support the global and largely bipartisan nuclear policies which the United States espouses. The United States has lost the lead in many areas of nuclear energy technology. The combined leadership of the U.S. government and industry has deteriorated, weakening the negotiating ability of the United States to build a fully effective international nuclear weapons control regime and to continue to ensure safe and proliferation-resistant nuclear power throughout the world.

Mr. Chairman, I have described for you a world which simply cannot afford delay in addressing the urgent security hazards posed in large part by nuclear insecurity in the former Soviet Union. There are more than 1,000 tons of plutonium and uranium now scattered in 300 buildings and 50 sites across Russia. There is little remaining margin for continued decay of the U.S. nuclear infrastructure if the United States is to be technically credible in nonproliferation leadership in the twenty-first century. The fundamental requirement is leadership, and the time to act is now, before a catastrophe occurs.

The United States must respond now, not later, to those threats to our national security which our report isolated. And we must begin by ensuring that our own house is in order. Is it? Are we properly organized to act, not only in our own national interests but in the interests of the world as a whole? The NNSA holds the promise of giving us that leadership, leadership which in the past has seemed somewhat confused as to priorities and how to respond.

The Department of Energy must have in place clear lines of authority and accountability if those concerns which I have outlined for you—and those recommendations which I listed earlier—are to be addressed in a timely fashion. Expert panels have concluded that these clear lines of authority and accountability have not been in place. Out of the efforts of many, including members of this Panel, the NNSA was created. Unfortunately, a number of deficiencies have emerged regarding the implementation plan.

NNSA must have in its portfolio responsibility for both domestic and global nuclear materials. But the civilian nuclear electric power program should be kept outside its purview.

We all recognize that the issues at hand are so many in number, so diverse in content, that it has been quite difficult to grasp them as a whole. But we must try, and NNSA is the organizational answer. But is it itself organized in a way to touch all those issues which must be reflected in our national policies? In this regard, care must be taken not to replace multiple stovepipes with one huge stovepipe.

Mr. Chairman, I urge you to work to remedy the observed shortcomings of NNSA. We have lost too much time already. Unfortunately, the nuclear world is not prepared to wait for us. The vision of global nuclear materials management is of a world in which all nuclear materials are safe, secure, and accounted for, from cradle to grave, with sufficient transparency to assure the world that this is the case. That is a daunting goal, which must be approached step by step, within a well-defined strategic framework. I applaud this Panel for the work it has done to help secure that vision for us.

Finally, Mr. Chairman, with your permission I would like to submit for the record a copy of our report *Managing the Global Nuclear Materials Threat* and as well a 14-minute video which summarizes a conference we held at CSIS last summer where our findings and policy recommendations were presented to the general public.

Thank you, Mr. Chairman.