STATEMENT OF

ROLF MOWATT-LARSSEN

DIRECTOR OF THE OFFICE OF INTELLIGENCE AND COUNTERINTELLIGENCE

UNITED STATES DEPARTMENT OF ENERGY

BEFORE THE

HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS COMMITTEE

UNITED STATES SENATE

APRIL 2, 2008

Chairman Lieberman, Ranking Member Collins, distinguished members of the committee, thank you for the invitation to appear before you on a subject of critical importance: "The Threat of Nuclear Terrorism." I am addressing you today as the Director of the Department of Energy's (DOE) Office of Intelligence and Counterintelligence.

The 20th century was defined by a nuclear arms race between states but it is the view of the Department of Energy's Office of Intelligence and Counterintelligence that the 21st century will be defined first by the desire and then by the ability of non-states to procure or develop crude nuclear weapons. In the early years of the 21st century, we will likely be tested in our ability to prevent non-state efforts to develop and detonate a nuclear weapon.

Prior to the attacks of 9/11, we had only limited information on al-Qa'ida's long term strategic plan, and it was not clear at that time that al-Qa'ida had serious nuclear ambitions. The threat of non-state use of a nuclear weapon was viewed by the intelligence community in the context of the non-governmental organization Umma Tameer-e-Nau, which was run by two nuclear scientists, and where it could have intersected with al-Qa'ida or the now-dismantled nuclear technology network built by A.Q. Khan.

The intelligence community prior to 9/11 remained concerned about the security of former Soviet nuclear weapons and nuclear materials, but there was no coherent look at the idea of terrorist use of weapons of mass destruction. Many people in the intelligence community believed that it was too hard for terrorists to develop a nuclear bomb. There was an assumption within the intelligence community that nuclear material was too hard to acquire and that even if they had material, nuclear weapons are too sophisticated to be built without an industrial complex supporting the effort.

We should not, however, assume that the technology of a nuclear weapon is beyond the capability of a terrorist group. There are several differences between a state nuclear weapons program and one that a terrorist group might pursue. A state would want a regular supply of uranium or plutonium that it controls. A state would want a reliable weapon that would detonate only where and when the state chooses. A terrorist group does not need the kind of surety and consistency that a state desires. A terrorist group needs only to produce a nuclear yield once to change history.

The post - 9/11 successes against the Taliban in Afghanistan yielded volumes of information that completely changed our view of al-Qa'ida's nuclear program. We learned that al-Qa'ida wants weapons to use, not a program to sustain and build a stockpile, as most states would. The nuclear threats that surfaced in June 2002 and continued through the fall of 2003 demonstrated that al-Qa'ida's desire for a nuclear capability may have survived their removal from their Afghanistan safehaven.

Today, al-Qa'ida's nuclear intent remains clear. Al-Qa'ida obtained a fatwa in May 2003 that approved of the use of weapons of mass destruction. Al-Qa'ida spokesman Suleyman abu Ghayth said in 2003 that it is al-Qa'ida's right to kill 4 million Americans in retaliation for Muslim deaths that al-Qa'ida blames on the United States. Usama bin Laden said in 1998 that it was an Islamic duty to acquire weapons of mass destruction. In 2006, bin Laden reiterated his statement that al-Qa'ida will return to the United States. Al-Qa'ida has a track record of returning to finish the job they started. They failed at the World Trade Center in 1993. They came back in 2001. Al-Qa'ida canceled plans for chemical attacks in the United States in 2003. We do not yet know when and where they intend to strike us next, but past experience strongly suggests that they are seeking an attack more spectacular than 9/11.

At any given moment, al-Qa'ida probably has attack plans in development. 9/11 was being planned when the USS Cole was attacked in Yemen and when our embassies in Dar es Salaam and Tanzania were attacked in Africa. An al-Qa'ida nuclear attack would be in the planning stages at the same time as several other plots, and only al-Qa'ida's most senior leadership will know which plot will be approved. In keeping with al-Qa'ida's normal management structures, such as the role of Khalid Shaykh Muhammad in the 9/11 attacks, there is probably a single individual in charge, overseeing the effort to obtain materials and expertise. Some experts may have joined al-Qa'ida years ago, long before the world began paying attention to the proliferation of the kinds of technology that could yield a terrorist nuclear weapon.

The 9/11 plot was operationally very straight-forward. It had a very small footprint and was highly compartmented. Al-Qa'ida's nuclear effort would be just as compartmented and probably would not require the involvement of more than the number of operatives who carried out 9/11. A prototypical al-Qa'ida nuclear attack plot would have the following components:

• Approval and oversight from al-Qa'ida's senior leadership, with possible assistance from other groups;

- The planner responsible for organizing the material, expertise, and fabrication of the device;
- The operational support facilitator, responsible for arranging travel, money, documents, food and other necessities for the cell;
- Assets in the United States or within range of other Western targets to case locations for the attack and then help move the attack team into place;
- The attack team itself.

The task for the Intelligence Community is not easy. We must find something that is tactical in size but strategic in potential impact. We must find a plot with its networks that cut across traditional lines of counterterrorism and counterproliferation. We must stop something from happening that we have never seen before. Beyond the basics I have outlined here, we do not know what a terrorist nuclear plot might look like.

There is, however, a chokepoint in a terrorist effort to develop a nuclear capability. It is impossible to build a nuclear weapon without fissile material. A state has the time and resources to build the large infrastructure required to make its own nuclear material. A terrorist group needs to steal it or buy it. Nearly every month there is a new instance of someone trying to smuggle real or purported nuclear or radioactive materials. Although many of these incidents do not involve weapons-usable nuclear materials, the continuing occurrence of incidents means that we collectively have not done enough to suppress trafficking and ensure the security of all nuclear materials worldwide.

Along with the other members of the U.S. Intelligence Community, DOE's Office of Intelligence and Counterintelligence recognizes the urgency of the nuclear terrorism threat. A terrorist organization's acquisition of an improvised nuclear device would be an event of unprecedented significance. It would give them a weapon genuinely capable of producing mass casualties. Our office has made preventing nuclear terrorism our top priority and we have reallocated resources to increase support for our key nuclear counterterrorism initiatives.

On August 28, 2006, the national-level Nuclear Materials Information Program (NMIP) was established via National and Homeland Security Presidential Directive (NSPD-48/HSPD-17). NMIP is an interagency effort managed by the Department of Energy's Office of Intelligence and Counterintelligence, in close coordination with the Departments of State, Defense, Homeland Security, Justice, the Nuclear Regulatory Commission, and agencies under the Director of National Intelligence.

While the specifics of NMIP are classified, the goal of NMIP is to consolidate information from all sources pertaining to worldwide nuclear materials holdings and their security status into an integrated and continuously updated information management system. This will help us understand the gaps in our current knowledge and ensure that such information is available to support all appropriate Federal departments' and agencies' nonproliferation, counterproliferation and counterterrorism efforts. NMIP also is developing a national registry for identifying and tracking nuclear material samples that are held throughout the U.S. to support the information needs of the United Stated Government.

DOE's work to combat the threat of nuclear terrorism is not limited to the Office of Intelligence and Counterintelligence. Several offices within the National Nuclear Security Administration dedicate significant effort and resources to understanding the improvised nuclear device threat; to securing nuclear materials and eliminating excess stockpiles worldwide; to deterring, detecting, and interdicting illicit trafficking of nuclear materials, and should the unthinkable happen, to ensuring that we stand ready to disarm a nuclear device, manage the consequences of an event, and to conduct forensic analysis to identify those responsible.

Working through the Nuclear Counterterrorism Division in the Office of Emergency Operations, DOE uses its nuclear weapons expertise to understand possible technical paths a terrorist group might pursue. This technical analysis supports DOE's intelligence assessments, nuclear detector development, security enhancements at nuclear facilities, and nuclear render-safe operations.

One of the largest programs in the National Nuclear Security Administration's Office of Defense Nuclear Nonproliferation, the Material Protection, Control, and Accounting (MPC&A) program, works to upgrade security at nuclear sites, particularly those in Russia and other states of the Former Soviet Union (FSU). In line with our view that preventing terrorist access to nuclear materials remains the most effective way of preventing nuclear terrorism, we continue to give very high priority to these efforts to bolster nuclear security. Throughout its nearly 15 year history, the MPC&A program worked with Russian and other FSU counterparts to secure nuclear material through upgrades to physical protection as well as material accounting methods. In addition to work at 50 nuclear material sites in Russia and other FSU countries, DOE has also helped upgrade security at all 39 Russian Navy sites, all 25 Strategic Rocket Forces Nuclear Weapons sites, and has begun upgrading nine 12th Main Directorate nuclear weapons sites. Work to secure nuclear material was accelerated after 9/11, and in 2005, the United States and Russia agreed under their Bratislava initiative to further accelerate those efforts. Work is complete on 85 percent of the Bratislava sites, and is underway at the balance of those sites, to be completed by the end of 2008.

In 2004, the National Nuclear Security Administration began the Global Threat Reduction Initiative to accelerate efforts to address the dangers posed by nuclear and radiological materials located at civilian sites worldwide through conversion of research reactors from highly enriched uranium to low enriched fuel, removal of excess nuclear and radiological materials, and protection of at-risk nuclear and radiological materials from theft and sabotage.

Other efforts focus on bolstering border security overseas through the Second Line of Defense program, which installs radiation detection equipment at fixed borders on land, sea, and in airports as well as equips major shipment ports with detection equipment via the Megaports Initiative. SLD and Megaports also are training border guards and

customs officials to use this equipment. These efforts build upon a necessary solid foundation of strong policies and best practices worldwide to prevent nuclear proliferation. We are working with foreign government partners to strengthen standards for physical protection of nuclear material and nuclear facilities, with the Nuclear Suppliers Group to strengthen export controls, and with the International Atomic Energy Agency to strengthen safeguards on nuclear material worldwide. NNSA's International Nonproliferation Export Control Program conducts additional training in dual-use commodity identification to further enhance our efforts in this area. Various parts of NNSA also play key roles in international efforts and contribute to the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism.

In closing, we must get nuclear materials off the black market and take every possible step to stop global trafficking in these materials. It must be a global effort incorporating police, intelligence services, militaries, government agencies and ministries, and dedicated citizens across the world. In addition, we need broad information sharing across every front—between government and private sector, and among foreign partners, including those who previously were our adversaries. Al-Qa'ida thinks and plans dynamically and they rarely follow straight-forward, linear paths to their targets. We need to be just as flexible and dynamic in our efforts to stop them.

Thank you. I would be pleased to answer any questions that you may have.