



“Linking Energy Security and Nuclear Security”

**Remarks by
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I am honored to have the opportunity to join these distinguished officials and guests at this timely and impressive meeting organized by the PIR Center. As you know, the Nuclear Threat Initiative is the primary sponsor of the so-called “Strengthening the Global Partnership” project, led by the Center for Strategic and International Studies, of which this conference is a key element. NTI has invested four million dollars in this multi-year, multilateral project to promote the commitments of the G8 Global Partnership because we strongly share the view expressed in Kananaskis: that the deadly combination of terrorism and nuclear, biological and chemical weapons can and must be prevented, and that close international cooperation is required to do so.

The sad truth is that G8 Summit initiatives tend to fade over time. Each year brings a new initiative or a fresh controversy that distracts from solemn pledges of the year before. We at NTI have noted our discouragement and disappointment at the waning interest shown to the G8 Global Partnership in the 2003, 2004 and 2005 Summits. This year, with Russia in the chair for the first time, offers both an opportunity and a responsibility to break from this trend.

Russia has announced its intent to focus on energy security as a key theme of this G8 summit. This is a natural topic: Russia’s strong oil and gas sector fuels millions around the world as well as a growing stabilization fund in the Russia treasury, and the hunger of developing economies for power is pressing global energy supplies as never before. At the same time, that climate change is resulting from mankind’s dependence on fossil fuels is an accepted fact, evidenced in part by Russia’s ratification of the Kyoto Protocol, finally bringing it into force. The time is clearly ripe for a high-level discussion about how to keep these trends from colliding.

This is why Russia’s recent proposals on nuclear energy are so important. The world envisioned by the pioneers of nuclear power, one in which electricity would be “too

cheap to meter,” will never be realized. Current approaches to nuclear energy are inadequate to the challenge before us: how to harness the beneficial aspects of nuclear technology while limiting its destructive power. The Chernobyl tragedy, whose 20th anniversary we mark next week, demonstrated the terrible consequences of inadequate safety measures and poisoned public attitudes toward nuclear power. The failure to create sustainable waste management approaches creates large stocks of separated plutonium on one hand, and dozens of “temporary” dry storage sites on the other, each with its own dangers. And the spread of enrichment and separation technologies makes it incredibly difficult to distinguish between legitimate fuel cycle activities and illicit weapons programs.

And yet, it is impossible to imagine sustainable international development without an increase in the role of nuclear power in global energy production. Nuclear power has the potential to limit greenhouse gas production, to conserve fossil fuel, and to increase nations’ energy independence. In order to reap these benefits, we need to develop new approaches to nuclear power that solve the safety, waste management, and proliferation risks of we face today. If we are able to accomplish this, we will truly link nuclear security with energy security. This is why Russia is well poised to reinvigorate the Global Partnership agenda through its emphasis on energy security. Without nuclear power, achieving energy security will be much more difficult; and without nuclear security, nuclear power is doomed to failure.

Some projects are already showing us the way. The vaunted Megatons-to-Megawatts program has been amazingly effective by reducing excess quantities of Russian weapon-grade uranium while simultaneously fueling 50% of US nuclear power plants. Even more interesting is that this mission is financed almost completely on a commercial basis. As a result, 10,000 weapons have been destroyed, and their cores turned to peaceful electric production. This program should be expanded in scope and extended in time in order to fully realize the security potential of this model.

Russia’s initiative to develop a network of international fuel cycle centers represents an exciting new way to link nuclear security and energy security. Russia proposes to create internationally owned and managed facilities, under International Atomic Energy Agency safeguards, to provide fuel services to their investors, and to allow their investors to benefit from the sale of fuel services to others. By obviating the need for nations to develop their own fuel cycle facilities—and the inherent risks that come from such facilities—such international fuel centers can support the growth of nuclear power without adding to the proliferation risks. The international spent fuel management centers can consolidate spent fuel into a single, high-quality facility and reduce the costs and risks of reprocessing or national storage sites. And the international training centers can ensure that new entrants to the nuclear power community can operate their reactors safely and reliably.

It must be said that such concepts are not new—they have been discussed for thirty or more years. What has been lacking is someone willing to take the first step. We should applaud Russia for taking this first step and creating a pilot facility, which can help

clarify the many questions that must be answered for such facilities to spread to other fuel cycle states.

Reinforcing of such international fuel centers is the concept of uranium stockpiles, mirroring the established custom of holding national petroleum reserves as a hedge against disruptions of supply. Similar reserves can be imagined in support of nuclear power requirements, whether held at the national level and perhaps, as NTI has proposed, by the International Atomic Energy Agency on behalf of its member states. An international network of reserves will reinforce energy security worldwide, and if these reserves can be created from excess highly enriched uranium, that network can also reinforce nuclear security at the same time. The US proposal to allocate 17 metric tons of excess highly enriched uranium toward security of nuclear fuel supply is a welcome step in this direction.

It is especially encouraging that Russia's initiative is born just as the US has put forward its Global Nuclear Energy Partnership. The US program envisions a new fleet of reactors and fuel cycle facilities that represent a fundamentally new approach to nuclear power production. This augurs well for a serious discussion of the relationship between energy security and nuclear security at this Summit. It also offers a strong technical basis for a US-Russian Agreement for Cooperation, or 123 Agreement, which would significantly enhance US-Russian collaboration on nuclear energy.

These examples show us that improving nuclear security is an important component of achieving energy security. But in addition to this affirmative link there is a negative link—nuclear insecurity will intensify energy insecurity. A single terrorist attack with nuclear material, or—god forbid—with an improvised nuclear device with the destructive scale of Hiroshima, will destroy public confidence in nuclear energy for generations. A critical prerequisite of a strong nuclear future is effective management of the nuclear present.

Today's nuclear risks are well known: not only the pursuit of nuclear weapons by nations such as Iran and North Korea, but the expressed ambition of terrorists to equip themselves with tools of catastrophic destruction. Eliminating these risks requires close international cooperation, but it can be done. In the case of nuclear terrorism, the prevention prescription is simple: ensure on an urgent basis the highest levels of security for all highly enriched uranium and plutonium, in any form, and reduce their overall quantities. The US and Russia, now joined by other members of the Global Partnership, have been at work on this agenda for over a decade, and important progress has been made. But the pace of activity does not yet match the urgency of the threat, and we all share the blame: Official Russian pronouncements of perfect security for nuclear materials reflect a state of denial about the realities of Russia's uneven security situation, while inflexible US contracting regulations insist on access to even the most sensitive nuclear facilities. European counterparts have been reluctant to address at-risk nuclear materials in their own backyards. And bureaucrats everywhere seem to lack the guidance and oversight that keeps them focused on top priority missions.

Nonetheless, we can and must be serious about reducing these nuclear threats. High-level attention, additional resources, and improved coordination are obvious requirements. Additional steps to reduce access to nuclear weapons and materials will also be required. My top three agenda items would be the following:

- Globalize the effort: UN Security Council Resolution 1540 mandates that all nations take “appropriate, effective” steps to secure their nuclear materials. Some states will have difficulty meeting their requirements through limited resources or expertise. Weapons states are a rich source of both resources and expertise, but other states with developed nuclear industry can also help—in some cases more easily than weapons states. The G8 Global Partnership needs to live up to its name and become truly global, prioritize its actions to nuclear weapons and materials security, and erase boundaries between donors and recipients.
- Minimize highly enriched uranium in civilian applications: Atoms for Peace-era decisions to promote nuclear technology through the provision of research reactors and other facilities that use highly enriched uranium are now shown to be concerning. Over 100 civilian research facilities in 40 nations have enough highly enriched uranium to make a nuclear weapon. Security is often lax—far from comparable to military facilities. In most cases, low enriched uranium alternatives exist or facilities are no longer needed. In a few cases, new fuel types are required to permit conversion to low enriched uranium. We need to globalize a norm that HEU in civil applications, even under IAEA safeguards, represents a potential threat and should be minimized, and accelerate conversion and removal efforts.
- Promote best practices in nuclear security: The Chernobyl tragedy spawned the creation of the World Association of Nuclear Operators, a global network of power plant operators created to increase nuclear safety through sharing best practices. Today we have a similar need to promote nuclear security *before* a catastrophe occurs. Such an organization would be voluntary, industry-led, and could move faster than treaty negotiations and regulatory structure to improve actual security behavior through training, benchmarking, peer reviews, and lessons-learned exercises.

These actions are straightforward and achievable, and NTI has been putting its own analysis, advocacy and action behind them. But Russia is an indispensable player in this agenda, and this—more than anything else—is why Russia’s G8 leadership is so critical. By raising energy security to the top of the agenda, Russia puts nuclear security squarely on the agenda as well. Russian leadership on both the negative and the affirmative links between nuclear security and energy security is the essential element. Nothing serious can be achieved without Russia in this sphere.

Two years ago at this podium, I made the following observation:

“A test of the seriousness of G8 cooperation on the Global Partnership’s agenda will come in June in Sea Island, Georgia, where the leaders of the G8 will meet again. It has been almost two years since the G8 leaders made their pledges and any sense of urgency has been difficult for me to detect. Either the G8 will dramatically expand and refocus its threat reduction efforts, or the Global Partnership will go the way of many G8 initiatives – never reaching its full potential and leaving grave dangers as a result. I suggest that the following outcomes of the Sea Island Summit would be evidence of real G8 commitment:

1. A plan for moving from pledges to project implementation
2. A clear prioritization of the tasks at hand according to the risks they engender
3. An agreed division of labor among the Partners to accomplish the tasks, and coordination structures to govern it
4. Understandings that resolve bureaucratic obstacles to cooperation.
5. Expansion of the Global Partnership to include new members, and a simultaneous statement that the \$20 billion pledged in 2002 represents a floor, rather than a ceiling, on available resources.”

As you can tell, most of this agenda remains to be accomplished. It will be up to the G8 leaders as they convene in St Petersburg in July to prove whether they are prepared to be serious about the Global Partnership and its promises. Russia’s agenda has opened the door—now is the time for us all to walk through it.