

Needed: A treaty that gets rid of plutonium

By Neil J. Numark

There was good news for world citizens Wednesday when Presidents Clinton and Yeltsin announced they would accelerate START II cuts in nuclear weapons arsenals. But unfortunately, the agreement lacked any plan for ultimately getting rid of the nuclear materials contained in weapons.

These materials are too dangerous to be simply stored indefinitely. The recent seizure by German authorities of plutonium cargo smuggled out of the former Soviet Union made the problem abundantly clear. If the nuclear powers do not act swiftly, terrorists or rogue states could get hold of enough plutonium for a nuclear weapon and in a worst case scenario use it for nuclear blackmail.

Russian authorities insist that they provide excellent security over nuclear weapons materials and argue that the West exaggerates the extent of the problem. However, the growing grip of Russian organized crime and corruption, and the potential for cash-starved Russian nuclear weapons workers to sell materials, leave no room for error. Meanwhile, U.S. security may not be leak-tight either.

It is essential that we continue dismantling nuclear weapons. But doing this without also destroying their contents has created the potential for "loose nukes." To their credit, Mr. Clinton and Mr. Yeltsin agreed to cooperate in enhancing nuclear security and preventing possible smuggling of weapons materials. But the plans they announced were sketchy and said nothing about the safe, final elimination of weapons-grade materials.

Besides the risk of theft, the

Neil J. Numark is President of Numark Associates, Inc., which specializes in nuclear safety and security issues and the environmental impact of energy production.

other reason to get rid of nuclear weapons materials is to demonstrate to each other and to the world that we are not holding them for possible future military use. Only when we begin to destroy our nuclear arsenal in a safe and irreversible manner will we be in a good position to preach nuclear non-proliferation to others.

What the United States and Russia need is a plutonium elimination treaty, establishing the framework and timetable for destroying the vast majority of weapons-grade plutonium. The goal should be to

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achieve an agreed-upon residual inventory within 20 years — from the current inventory of about 100 tons per side to, say, 10 tons each. Each country could comply by whatever method or combination of methods it chose as long as the aggressive treaty goal is met.

Mr. Yeltsin told the United Nations on Monday he wants the five nuclear powers to sign an international treaty on nuclear security. But including Britain, France and China at this stage would severely slow the process, and in any case the priority at the moment is for the United States and Russia to enhance security and reduce their stockpiles, which are by far the world's largest. The United States and Russia should reach agreement first, and encourage the others to sign on later.

We can begin destroying weapons plutonium on a small scale within one year without building any new facilities and without nec-

essarily selecting a particular long-term strategy. This could be achieved by burning plutonium (in addition to uranium) as fuel in one or two existing nuclear power plants. The benefit of using existing facilities is that we could get the process of disarmament rolling immediately. There are no technical obstacles to the concept, which is already applied widely in commercial power plants in Europe. The waste produced in the reactor would be practically indistinguishable from the waste normally produced in nuclear power plants and would be similarly difficult to use in a nuclear weapon.

Beyond this initial phase of treaty implementation, several options could be considered. We could continue using existing power plants but on a larger scale. If special plutonium-burning reactors are built in the future for the purpose of producing electricity, they too could be fueled with weapons-grade plutonium. Alternatively, facilities that must be built anyway to process certain nuclear wastes could be used to process weapons plutonium too.

The selection of a long-term plutonium disposition method calls up the perennial debate in civilian nuclear policy circles over whether plutonium should be considered a valuable fuel resource or a liability to be gotten rid of. We must resolve this question to determine a long-term course but should not let it get in the way of at least beginning the process of getting rid of plutonium ~~elimination process~~ by using existing facilities.

If feasible, the United States and Russia could approach the entire plutonium disposition enterprise as partners, possibly with jointly-owned facilities. We could also seek a multilateral disarmament framework involving other countries and an international verification system if that would expedite the process.

Whatever methods are selected, it will be several years before we have put a dent in weapons plutonium inventories. But this does not justify our de facto policy of storing the materials without taking any action to get rid of them, which is dangerous and sends the wrong signal to the world. Mr. Clinton and Mr. Yeltsin last week took steps in the right direction, but they still need to establish a framework for final elimination of the most dangerous vestiges of the Cold War.