



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

OFFICE OF THE
SECRETARY OF DEFENSE

January 22, 1993 93 JAN 26 PM 2:28

*les - FYI - J.
Wisner has received
a copy already.*

RECEIVED

JAN 27 1993

The Honorable Les Aspin
Secretary of Defense
Washington, D. C. 20301

Dear Les:

We talked Tuesday about the challenges that Russia's nuclear programs still offer the West. Enclosed in telegraphic form is an outline of the issue and its security implications.

Frank Wisner is, of course, up to date on this and has been my principal point of contact at State in the development of the nuclear safety parts of the US position.

Best of luck in your daunting tasks.

Sincerely,

Ivan
Ivan Selin

Enclosure:
As Stated

*Give copy to
Ash Carter and
one to Graham
Allison*

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THEMES FOR CONCERN IN THE FORMER SOVIET UNION
Ivan Selin

I. THE BACKGROUND

1. There have been a large number of positive developments in nuclear security issues in the FSU:
 - The two START agreements
 - Shipment of tactical weapons from Ukraine and Belarus to Russia
 - Agreement of Russia to sell weapons-grade highly enriched uranium (HEU) to the US. (500 metric tons over 5 years could bring the ex-Soviets at least \$5BB and up to \$10BB, depending on the market.)
 - Nunn-Lugar program to deal with storage and dismantlement of nuclear weapons, including a Material Controls and Accounting (MC&A) component
 - Ukraine, Belarus decisions to be non-nuclear states under the NPT
 - The recent Yeltsin-Kravchuk agreement on security guarantees

2. There has also been some progress on nuclear safety issues, though not as much:
 - Lisbon initiative to provide some short term safety assistance
 - SEED legislation
 - EC programs for assistance to FSU
 - G-7 decisions in principle in July
 - OECD commitments, not all finalized, for a total of \$300 MM in safety related assistance over the next three years
 - World Organization of Nuclear Operators (WANO) and certain individual Western utilities have delivered useful training and assistance directly to the operators

- NRC programs directly with the regulators, and some of the NRC and DOE programs with the operators, have been quite effective
3. The nuclear safety problems, and the approach to a solution, are well understood in principle:
- Follow a triage approach:
 - short term emergency aid for all reactors, on the grounds that their owners will not close them down immediately regardless of what we say;
 - Improvement in the mid-term of those that can be rescued (some 440 MW and all 1000 MW PWRs);
 - replacement in the longer term of those that are too sick to recover (Chernobyl-type RBMKs and 440/230s)
 - Build the confidence and mechanisms in the short run which will make the mid-and long-term steps feasible, since they require painful economic decisions in both East and West
 - Concentrate short-term aid to the FSU into forming model plants which the Russians and Ukrainians can then try to replicate, rather than spreading a band-aid on each patient
4. The FSU is also facing a set of nuclear-related environmental issues which dwarf those that we usually discuss:
- Chernobyl clean-up is often discussed
 - Problems around former weapons plants near Chelyabinsk in the Urals are much worse
 - Problems in Siberia, around Krasnoyarsk are also severe.
 - We are just now starting to realize the enormous potential problems involved in the contamination of the Arctic Sea and the north Russian coasts.

These problems should give us pause before trying to rush in to help clean up the after-effects of Chernobyl.

II. THE SECURITY PROBLEM

1. Authority is breaking down in Russia

- There are voices in the military and the Parliament who claim that Yeltsin has gone too far towards meeting the US's demands
 - The hassle over the Department of Commerce's dumping action on raw uranium, and the impasse on paying generous prices for the HEU, have cost momentum to this program of significant importance for foreign policy and economic assistance
 - There are second thoughts about selling us HEU at any price
 - The military are playing a much larger role on the Russian side of the Nunn-Lugar initiatives.
- Rumors persist concerning the sale of nuclear materials and, less often, nuclear weapons to third countries. In any event, the ability of the KGB to guarantee security of weapons has clearly decreased
- Progress towards a science and technology center in Moscow has slowed down

2. The desirability of keeping nuclear weapons is under active reconsideration

3. More and more, Russia is conditioning its ratification of agreements on actions in Ukraine and the other nuclear successor republics. Ukraine, however, is withholding its support at least until it gains compensation and guarantees.

Unfortunately, and in spite of the Yeltsin-Kravchuk understanding, the dynamics between Russia and these republics could be troublesome:

- The weapons and materials have significant financial value. Many Ukrainians argue that they should receive some significant compensation for giving them up. Also, many Ukrainians argue against joining the NPT in the perceived lower status of non-nuclear states without compensation.
- What start out to be Ukrainian positions to use as bargaining chips, have a way of becoming strongly held positions for their own sake.
- To add fuel to the fire, Ukraine and, to a lesser extent, Kazakhstan have some doubts about Russia's

trustworthiness, given troubling statements about Russia's obligation to protect ethnic Russians in the other republics. Do they want Russia to have a monopoly on nuclear weapons, especially in the absence of Western security guarantees?

When you add this all together, you can see how a number of understandable and innocent events can lead to an unstable situation -- Ukraine holds out for assurances and compensation before surrendering their last weapons and ratifying START and NPT, Russians hold up until the Ukrainians do ratify the treaties, the Russians make statements designed to support ethnic Russians in Crimea and elsewhere, Ukrainians react to these statements with alarm and start believing their own public positions...

4. The problem in Ukraine is also very severe

- The interactions with ethnic Russians living in Ukraine are fraught with possibilities for split Ukraine, inflaming relations with the Russian Federation
- Political dynamics in Kiev may be as bad as in Moscow
 - The government is not strong or effective, and will not be until role of president and parliament is settled
 - The nationality problem, and the need to maintain unity, hangs over all other decisions. This makes tough decisions unlikely to be taken
 - The economy is very weak, making any potential source of funds very attractive.
 - Underlying all this is a chauvinistic desire to be a nuclear state and the concern about being non-nuclear but bordering on a potentially unfriendly nuclear state.

III. THE SAFETY PROBLEM

1. Problems exist on the eastern front.

- The Russian nuclear energy program is in the nuclear ministry, not the energy ministry, which in turn is under military domination. Both nuclear safety and the admission of the seriousness of the problem receive low priority. The Ukrainian ministry involved deals only with nuclear power, but it also soft-pedals the safety question.

- Regulators in both countries are very poorly funded and in a very weak political position.
- Both countries, and Lithuania as well, feel that economic necessity is much more pressing than safety considerations.
- Although I am skeptical that the recently announced Russian nuclear power program is a serious decision, nevertheless it is discouraging on its face: finish three reactors in the near term (including a Chernobyl-type RBMK at Kursk); authorize all the unfinished reactors, including the dangerous (RBMKs), the unnecessary (fast breeder reactors) as well as the arguably justifiable (modern 1000 MW pressurized water reactors); worry about funding and local approvals later.

2. Problems exist in the West.

- Although assistance programs are considerable, they have fallen short of the acknowledged need or of the intentions of Germany and the US as recently as last July
- Too much of the European assistance has been spent by the West and in the West, for projects and equipment chosen by the West, rather than bringing in the host countries and letting them take responsibility and the lead.
- The EC countries, until recently, insisted on multilateral assistance which involved yet another balky institution (the CEC), further slowing down the short-term assistance process.
- Coordination of the Western efforts has been inadequate, although there has been some progress here
- We have not even begun to address the political and economic issues which will be involved in the mid- and longer term issues.

3. Predictably, this has led to problems between the East and the West

- There is little mutual confidence between the high-level Eastern and Western organizations. Some high profile, short-term successful assistance programs are badly needed, both for their own value and as confidence building measures