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PREPARED REMARKS BY IVAN SELIN
CHAIRMAN, U.S. NUCLEAR REGULATORY COMMISSION
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ISSUES OF NUCLEAR SAFETY IN THE GLOBAL VILLAGE

Good morning. This is my fourth annual roundtable discussion with the news media. I would like to start off with some observations on the present state of nuclear safety in the global village and then cover nuclear issues on the domestic side. Afterwards I will take questions.

In addition to our statutory responsibilities for nuclear safety in the United States, the NRC, since the fall of the Soviet Union, has become increasingly involved in a number of important projects abroad. For what happens in one corner of the world can impact on us all. There are four critical issues on the world stage and, if you wish to explore them further, we can do so during the question and answer period.

First is the control of plutonium and weapons grade uranium. We have all been rivetted by the recent spate of stories out of Germany, and now Hungary, on the smuggling of plutonium and uranium for sale to the highest bidder. So far the quantities have been small, and there is some question about the actual status of the individual arrests that have been made, but this is a wake-up call. Unless virtually airtight control is imposed on weapons grade fissile material in the former Soviet Union today, tomorrow rogue states or terrorists could threaten any of us. That's a challenge the civilized world must engage promptly and effectively.

This leads to my second point. In the Russian Federation there is a major struggle going on that deals with nuclear safety and physical security. The struggle is between those who genuinely want to control nuclear material and safety, on the one hand, and those determined to create a plutonium economy for

future power reactors, regardless of the risks this might entail for diversion and proliferation, on the other hand.

Huge vested interests are at stake. The Russian agency with the assigned responsibility to inspect and regulate civilian nuclear power plants has not been given the resources, the clout nor the laws necessary to carry out its mission. This issue goes far beyond the borders of the Russian Federation. The U.S. has a vital interest in assuring vigorous controls over weapons-usable material not only in Russia, but also in Ukraine, Kazakhstan and, for that matter, everywhere in the world where such material is found.

The third international issue is the closure of Chernobyl. This is more than just one of a class of reactors that pose inherent safety concerns. I believe Chernobyl is probably the single most dangerous reactor site in the world, not only because of its design, but because the Ukrainian government lacks the resources to operate it with the necessary degree of safety. This is why the Group of Seven nations has undertaken a huge program in order to help the Ukrainians shut down the Chernobyl reactor and deal with all of the contamination and some of the social problems that would be left at the site.

Operators are not being paid for months and many are leaving for better jobs. Fuel is being scavenged from a closed reactor. Those of you who follow these issues closely know that one of the safety steps in the RBMK reactors is to use more poison in the core so more highly enriched fuel can be used. The scavenged fuel does not have this high level of enrichment.

The site of the 1986 Chernobyl accident remains contaminated and continues to deteriorate. Storage of spent fuel is inadequate. That is only the top of the list of concerns.

All of the issues involve cleaning up some of the safety problems that have been growing in the former Soviet Union over a long time.

The fourth issue focuses on the growth side of the world's nuclear economy -- nuclear safety on the western side of the Pacific Rim. The area of greatest growth in nuclear power is in East Asia. The programs in some of these countries, especially Japan, are in excellent shape, but unfortunately others are ill-prepared for a major expansion of nuclear power.

China is planning huge developments in the next few years. North Korea seeks access to western nuclear technology as a trade-off for scrapping its graphite reactors and reprocessing plant. However, I should stress that the dealings between the U.S. and North Korea go far beyond reactor issues. Even South

Korea, which has a very good program, may be moving a bit faster than is be prudent.

These countries must establish conditions to make their programs both economically sound and inherently safe -- including the establishment of strong, independent regulatory agencies. China, in particular, needs to examine the benefits of standardized reactor designs to simplify the process of managing safety, given its limited resources.

ISSUES OF NUCLEAR POWER PLANT SAFETY IN THE U.S.

I would like to turn now to the domestic side and share some brief observations on the present state of nuclear reactor safety in the United States.

First the good news. Unlike the case in some of the countries that I have just mentioned, the underlying fundamentals in the U.S. are sound as far as reactor safety and operations go. We clearly have an advanced nuclear safety culture and infrastructure that provide the foundation for adequate safety. Our tools for detecting trends in safety performance are providing good news. We see continuing improvement in overall safety performance as measured by NRC's key performance indicators. For example, significant events are down, scrams are down, and more plants are on our good performers' list than anytime in the past.

However, we still have plenty to worry about. In spite of good news in general, safety problems can and do develop at particular places and times, usually due to poor management. I continue to be quite concerned at the wide range of performance between the best reactors, the pretty good reactors and the weakest reactors in the U.S.

The NRC is working very hard to sharpen its tools for early warning of declining performance in specific plants. At the same time we need to eliminate unnecessary regulatory requirements which not only squander resources of licensees but more importantly, those that undercut safety.

The NRC is trying to modify its safety approach to incorporate risk and safety performance alongside the more traditional deterministic approach to regulation, where it makes sense. We need to ensure that regulation focuses licensees' priorities where they belong -- on maintaining the highest degree of safety.

We currently have underway a number of initiatives to put our efforts where risk is the highest. I will briefly go over these programs and discuss whichever of them you are interested in afterwards.

First is the Inspection Program Improvements. We have learned from inspections at South Texas, Quad Cities, Salem, and Cooper that we need to put together the inspection findings earlier. Individual plant inspections appear to be adequate--although even this is under review -- but we need to integrate the results of the various inspections to obtain an overall picture, before performance problems develop rather than after they have started to affect the performance of the plants. The staff is developing a more rigorous and comprehensive periodic inspection to detect deteriorating licensee performance earlier. This program is being pilot tested at four plants: Point Beach, South Texas, Salem, and McGuire.

The second initiative is the review and approval of both generic and individual licensing amendments. This is intended to expedite processing of license amendments that would eliminate unnecessary requirements and to focus NRC efforts on safety-significant issues.

Third is enforcement discretion. This is a highly misunderstood policy. In a world of black-and-white rules but gray reality, rigid adherence to enforcement of all regulatory requirements, in certain circumstances, could actually have adverse safety implications. Through enforcement discretion, we recognize special situations in which short-term regulatory relief from certain requirements could actually enhance safety.

The fourth initiative I would like to cover briefly is improved use of enforcement tools, which includes the possibility of significantly higher civil penalties. We hope to determine how to achieve better deterrence, providing incentives for licensees to identify and correct violations themselves. Our aim is to limit our regulations to those that are safety-significant, then enforce to the hilt. This would help reduce the frequency of using discretion in the enforcement area as is currently necessary.

There is a large issue on the horizon that I would like to mention and that's retail wheeling. From an economic point of view, retail wheeling may be very good. I do not know -- that is not my business. But from a safety point of view, it may pose unprecedented competitive pressures on all utilities which could lead to significant safety concerns at some nuclear power plants.

The courts and public utility commissions appear on the verge of opening up the entire country to lowest-cost competition in the sale of electricity to all consumers, including

homeowners. Retail wheeling involves providing competition in the distribution of electricity to commercial and residential sectors, not just to large industries.

As you know, in the past, public utility commissions would essentially allow utilities to fold their costs into their rate base and get a margin of profit above costs. There would always be some bargaining and negotiations, but, for all intents and purposes, rates were set as a cost-plus basis rather than a competitive basis. In effect, we had local and regional monopolies. Under retail wheeling, all this may change. Low cost electricity may compete for customers hundreds of miles away.

Retail wheeling is an issue that faces all utilities. However, there are special aspects to it when it comes to the nuclear power industry. Even compared to other utilities, the nuclear industry has enormous capital investments which have to be recaptured over time in the rate base, and pressures are likely to mount to cut costs in order to meet the new competition.

We are concerned that management in a number of utilities -- not across the board -- will be tempted to cut corners or not make capital investments necessary to maintain equipment in top shape. The recent struggle between Virginia Power, a well-run nuclear utility, and Dominion Resources, Inc., its parent company, reportedly centered in part on the parent's pressures to cut costs further than Virginia Power thought prudent.

These pressures have been one of the reasons we have been trying improve our diagnostic tools to give us more lead time for focusing on utilities where we see problems before we see technical deterioration and to head off problems that we see coming.

We recognize that we are moving toward a new situation somewhat different from the past in which the NRC has had to operate. The nuclear utilities have been in a stable economic situation and our regulation has been stable -- but this is changing. On the one hand, we believe that it is imperative to reduce those regulation-associated costs that are not related to safety, while, on the other hand, we believe it necessary to increase our vigilance and rigorously enforce against any parsimonious measures that utilities may take that would threaten public health and safety.