



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

June 1, 1994

CHAIRMAN

Mr. Victor G. Bar'yakhtar  
Vice President  
Academy of Sciences of Ukraine  
Kiev, Ukraine

Dear Mr. Bar'yakhtar:

Thank you for your recent letter requesting that the U.S. provide a modest grant to create a small international working group that could coordinate and finance research leading to plans for stabilizing the Cover for Chernobyl Unit 4. The Commission agrees with you that the condition of Unit 4 should be closely monitored, but we do not believe that NRC is in a position to support such a working group; NRC's limited resources must first be used to assist the Ukrainian regulatory body to improve the safety of new and currently operating nuclear power plants under our cooperative program with Ukraine. In addition, we believe that the Cover is less a problem of scientific understanding than one of engineering and financial support.

A joint U.S.-Ukrainian study will soon be underway to investigate energy-related options in Ukraine that would permit the shutdown and decommissioning of the Chernobyl power plant. Assessment of Unit 4 problems is expected to be part of this study, which is planned for completion in time for the G-7 meeting this summer. We hope the joint study will assist the G-7 in preparing recommendations on a future course of action with regard to the Chernobyl site.

Sincerely,

Kenneth C. Rogers  
Acting Chairman

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PDR COMMS NRCC  
CORRESPONDENCE PDR

Dear Dr. Selin:

The catastrophe at the Chernobyl Nuclear Power Plant and its direct consequences are well known to the whole world. The energetic efforts made to localize its consequences and for the most rapid construction of a "Cover" above the destroyed power unit are also well known.

The real danger of serious contamination of large territories due to the collapses inside the "Cover" and the possibility of a spontaneous chain reaction occurring in the residues of fuel-containing materials, however, are not obvious to all.

Understanding that this danger is of international importance and that knowledge of the entire world community is needed to resolve it, the Ukraine is constantly cooperating with many states and is participating in all international initiatives on the Chernobyl topic. Thus, as a result of the international competition to work out a solution on problems of the "Cover", general understanding of the problem emerged, which could be formulated as a set of sequentially resolvable tasks:

1. Stabilization of the existing condition of the "Cover".
2. Construction of "Cover-2."
3. Removal of radioactive wastes from the "Cover" and their monitorable storage.

Of course, solution to the entire set of tasks requires many years of work and extensive financial resources which it is too early to speak about in a practical sense. Nevertheless, Russia and the Ukraine are looking for ways to solve task No. 1, Stabilization of the "Cover." This is discussed in the letter of Academician Ye. Velikhov (President of the Russian Scientific Center Kurchatov Institute) to US Vice-President A. Gore, a copy of which you have. In order to resolve this task, it is first of all necessary to work on

studying the designs of the "Cover", both the "new" ones, considering the unique conditions of their construction and operation, and the "old" (remaining from the destroyed reactor), often serving as the support for the "new" ones. It is also necessary to constantly conduct research on radioactive fragments, dust and fuel-containing materials directly at the accident site. In order to conduct this unique research, it is necessary to rely on the techniques available in world practice and tested under similar conditions, and to use the instruments and equipment created for these purposes. It is known that the richest experience in solving such tasks has been accumulated in the United States, Russia and the Ukraine.

We are therefore requesting that the United States provide a modest grant to create a small international Working Group made of famous experts that could coordinate and finance a cycle of similar research, and use its results to develop a further plan of measures to stabilize the "Cover."

As you recall, the decision on the need to create the Working Group was supported at a meeting of experts conducted in Washington on January 21, 1994. Our representative, Dr. A. Borovoy who is the director of the Department of Nuclear and Radiation Safety in the Intersector Scientific and Technical Center "Ukrytiye" [Cover] of the Ukrainian Academy of Sciences and the most informed person in the United States on the Chernobyl "Cover", Mr. G. Danbar, who is the Executive Vice-President of LATA who provided the meeting with all the necessary additional information on the "Cover" participated in this meeting. Before this meeting discussions of the aforementioned experts in the Sandia and Los Alamos National Laboratories, as well as in the Ukrainian Academy of Sciences and the Russian Scientific Center Kurchatov Institute led to a decision that it is necessary to create such a Working Group.

We ask you to examine this suggestion in light of the existence of a real danger for contamination of large territories so that the United States focuses its efforts precisely on solving this top priority task.

Respectfully,  
[signature]

Chairman of the Commission on Questions of Nuclear Policy  
under the President of the Ukraine, Academician V. G.  
Bar'yakhtar