



The Secretary of Energy
Washington, DC 20585

OCT 18 1989

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Admiral Kenneth M. Carr
Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Carr:

We are in the process of following through on our Vienna discussion with Chairman Protsenko of the USSR State Committee for Utilization of Atomic Energy. As you recall, I made a point with Protsenko that it was imperative that the operational safety aspects of Soviet commercial powerplants be significantly improved. I further indicated that we would be prepared to assist actively in this matter under the proper circumstance, which included developing mutually agreed objectives, and milestones for their accomplishment.

Examples of specific areas for discussion with the Soviets are:

- o Clear and validated procedures, including development of symptoms-oriented emergency procedures instead of the event-oriented procedures that existed before the Three Mile Island accident, and training in and adherence to such procedures.
- o A configuration management system - making sure that all drawings reflect the as-built condition, and use of a disciplined change process to keep drawings and procedures up to date.
- o Analysis to identify tools, skills, and knowledge needed by operations and maintenance personnel, with this analysis factored into the training program.
- o Performance indicators - internal and external evaluation of performance based on indicators, followed by direct feedback to management.
- o Internal and external sharing of operational data and experience based on accident precursor and root-cause analysis.
- o Management involvement and attention at all levels, along with internal and external oversight of plant operations.

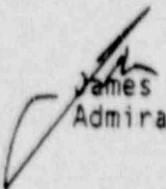
We would welcome Nuclear Regulatory Commission (NRC) participation in this initiative should you be willing to commit resources beyond your ongoing effort to convey U.S. regulatory philosophies and practices to the Soviets.

I had asked Dr. Protsenko to be sure that his delegation to the October 30-31, 1989, meeting of the Joint Coordinating Committee for Civilian Nuclear Reactor Safety include staff with whom we can open this dialogue and I plan to confirm this by cable. Meanwhile, my staff is preparing for a November 1, 1989, meeting on this initiative, and I hope your people can join us. In any event, we will closely coordinate our activities with your organization as I believe the new initiative should be conducted under the Nuclear Safety Memorandum of Cooperation.

I am planning to invite Zack Pate to have his staff participate in the November 1, 1989, meeting. Indeed, we would like to have the primary operational safety exchange be between U.S. industry representatives, such as the Institute of Nuclear Power Operations or utility officials, and those in the Soviet Union responsible for plant operations.

We welcome any suggestions you might have on how we best proceed with this vitally important initiative.

Sincerely,


James D. Watkins
Admiral, U.S. Navy (Retired)

P.S. Please find attached all related DOE internal and external correspondence to date in follow-up to the Vienna Confer and Soviet Bi-lateral - sent to you as promised in today's telephone exchange with you.

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USDOE/IE:H JAFFE:KMM
10-18-89:586-6777
OES/SCT:F KINNELLY

EUR/SOV:S SMITH

IMMEDIATE MOSCOW FOR SCICOM GOSNELL

E.O 12356: N/A

TAGS: UR, XG, ZH, ZC

SUBJECT: DOE SECRETARY WATKIN'S LETTER TO SCUAE
CHAIRMAN PROTSENKO

REF: VIENNA 02197

1. PER REF CABLE DOE SECRETARY WATKINS DISCUSSED ENHANCED SAFETY COOPERATION WITH SCUAE CHAIRMAN PROTSENKO ON SEPTEMBER 26, 1989. ADMIRAL WATKINS WANT TO BE SURE THAT SOME MEMBERS OF SOVIET NUCLEAR SAFETY DELEGATION DUE IN WASHINGTON FOR OCTOBER 30-31 JOIN COORDINATING COMMITTEE ON CIVILIAN NUCLEAR REACTOR SAFETY ARE PREPARED TO DISCUSSED THIS MATTER WITH DOE AND OTHERS ON NOVEMBER 1, 1989. TO THIS END PLEASE DELIVER FOLLOWING LETTER FROM ADMIRAL WATKINS TO DR. PROTSENKO AT EARLIEST POSSIBLE TIME. EMBASSY REQUESTED TO OFFER ALL ASSISTANCE POSSIBLE SHOULD LETTER NECESSITATE VISA ACTION BEYOND THAT CURRENTLY IN THE MILL.

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2. DEAR MR. CHAIRMAN:

I VERY MUCH APPRECIATED THE OPPORTUNITY TO MEET WITH YOU ON SEPTEMBER 26, 1989 AND TO DISCUSS NUCLEAR ENERGY, PARTICULARLY THE AREA OF NUCLEAR SAFETY THAT IS SO VITAL TO BOTH OF OUR COUNTRIES.

AS WE DISCUSSED IN VIENNA, THERE ARE MANY AREAS OF COOPERATION WHICH ARE OF MUTUAL INTEREST. A NUMBER OF THESE ARE ALREADY UNDERWAY TO SOME EXTENT UNDER THE EXISTING JOINT COORDINATING COMMITTEE ON CIVILIAN NUCLEAR REACTOR SAFETY (JCCCNRS). OTHERS MAY BE WORTHY OF INITIATION AT AN EARLY DATE. THE FIRST ORDER OF PRIORITY, HOWEVER, AS WE DISCUSSED, IS TO WORK TOGETHER AS MUCH AS POSSIBLE ON UPGRADING THE OPERATIONAL SAFETY OF EXISTING CIVILIAN NUCLEAR POWERPLANTS.

I WISH TO REITERATE THE U.S. GOVERNMENT'S WILLINGNESS TO INITIATE A NEW COOPERATIVE EXCHANGE FOCUSED ON THE SAFE MANAGEMENT AND OPERATION OF EXISTING PLANTS. I INTEND TO ASSURE THE PARTICIPATION OF THE ACTUAL OWNERS, MANAGERS AND OPERATORS OF U.S. NUCLEAR PLANTS IN THIS EXCHANGE AND BELIEVE THAT IT IS ESSENTIAL THAT THE SOVIET SIDE DO LIKEWISE. AS WE DISCUSSED IN VIENNA, ANOTHER ESSENTIAL ELEMENT IN THIS EXCHANGE IS THE DEVELOPMENT OF A MUTUALLY AGREEABLE SET OF SAFETY-RELATED MILESTONES TO MARK PROGRESS IN IMPROVING OPERATIONAL SAFETY.

(I ANTICIPATE THAT THIS EXCHANGE WILL BE A NEW ITEM UNDER THE EXISTING JCCCNRS. ACCORDINGLY, I REQUEST THAT YOU ENSURE, AS WE AGREED, IN VIENNA, THAT THE SOVIET DELEGATION TO THE JCCCNRS OCTOBER MEETING IN WASHINGTON, D.C. INCLUDE OFFICIALS PREPARED TO DISCUSS THE CRITICAL IMPORTANCE OF MANAGEMENT ATTENTION TO THE USE OF CLEAR AND VALIDATED PROCEDURES, PROPER TRAINING, TECHNICAL SUPPORT FOR OPERATIONS AND MAINTENANCE, INVESTIGATION OF OPERATING INCIDENTS AND PERFORMANCE INDICATORS, AND INTERNAL AND EXTERNAL OVERSIGHT OF PLANT OPERATIONS. THIS NEW OPERATIONAL SAFETY INITIATIVE CAN BE DISCUSSED AT THE DEPARTMENT OF ENERGY HEADQUARTERS ON NOVEMBER 1, FOLLOWING THE JCCCNRS MEETINGS.)

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I WOULD WELCOME YOUR CONFIRMATION OF THE ABOVE APPROACH BY RETURN CABLE, ALONG WITH THE NAME OR NAMES AND ORGANIZATIONAL AFFILIATION OF THOSE THAT WILL REPRESENT YOUR POWERPLANT OPERATORS.

SINCERELY,

JAMES D. WATKINS
ADMIRAL, U.S. NAVY (RETIRED)

B. DOE WOULD WELCOME IMMEDIATE REPORTING OF ANY REACTION, WITH COPY SLUGGED FOR ASSISTANT SECRETARY JOHN EASTON AND HAROLD JAFFE. WW

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The Secretary of Energy
Washington, DC 20585

OCT 18 1989

Dr. Zack T. Pate
President
Institute of Nuclear Power Operations
Suite 1500
1100 Circle 75 Parkway
Atlanta, Georgia 30339-3064

Dear Dr. ^{Zack} Pate:

The Department of Energy (DOE) is preparing to undertake a new initiative aimed at improving the safety of operating Soviet civilian nuclear powerplants. I have discussed this initiative with Chairman Protzenko of the Soviet State Committee for the Utilization of Atomic Energy, and with Admiral Carr. The ongoing Nuclear Regulatory Commission (NRC) cooperation with the USSR stresses Western regulatory philosophies and practices. I believe the new initiative must stress operational safety and management approaches, and I would welcome the assistance of INPO in this regard.

We envision a long-range effort with two distinct phases; first involving the senior Soviet nuclear operations policymakers, and later the plant managers, operations superintendents, and training managers. Examples of specific areas for further DOE/INPO development are:

- o Clear and validated procedures, including development of symptom-oriented emergency procedures instead of the event-oriented procedures that existed before Three Mile Island accident, and training in and adherence to such procedures.
- o A configuration management system - making sure that all drawings reflect the as-built condition, and use of a disciplined change process to keep drawings and procedures up to date.
- o Analysis to identify tools, skills, and knowledge needed by operations and maintenance personnel, with this analysis factored into the training program.
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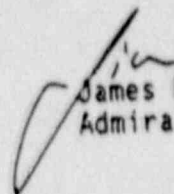
We welcome any INPO suggestions on these or any other proposed areas.

If the Soviets accept my offer of assistance, it is my intent that they agree to a set of mutually acceptable milestones to assure their implementation of the lessons we have learned.

A nuclear safety delegation is to be in Washington on October 30-31, 1989, for the annual meeting of the Joint Coordinating Committee on Civilian Nuclear Reactor Safety. I have asked Chairman Protsenko to be sure the Soviet delegation includes some people to meet on this new initiative at DOE on November 1, 1989. We would like to have INPO participate in this meeting.

Clearly, we need to develop the details of the arrangement between our respective organizations if you can participate in this vital activity. I suggest that you or one of your staff contact Mr. Jerry D. Griffith, Acting Assistant Secretary for Nuclear Energy (202-586-6630) at your earliest convenience to schedule a further discussion of the details of this matter prior to November 1, 1989.

Sincerely,


James D. Watkins
Admiral, U.S. Navy (Retired)

SUMMARY MEMORANDUM

Date: OCT 12 1989

SECRETARIAL ACTION REQUESTED BY:

Orig. Office: IE-1 (IE-1:John J. Easton:586-5800)

Transmittal: ACTION: Plan for Cooperative Activities to Improve the Safety of Soviet Nuclear Reactors

To: The Secretary

Through: The Deputy Secretary

Issue: Revision of the plan to improve the safety of Soviet nuclear reactors.


Timing: Procedural matter to modify a plan previously approved by the Secretary.

Discussion: This memorandum supersedes that on the same referenced subject dated October 5, 1989, and approved by the Secretary on October 6, 1989. It has been modified per the Secretary's request to narrow the scope of the activities planned in the near term. The only change is to delete the last three paragraphs under the Discussion heading in the October 5, 1989, memorandum.

Recommendation: The Secretary approve this modified plan by signing the attached Action Memorandum.



John J. Easton
Assistant Secretary for Energy
International Affairs and
for Energy Emergencies

Concurrence:  NE Griffith 10/12

memorandum

DATE

REPLY TO
ATTN OF IE-1SUBJECT ACTION: Plan for Cooperative Activities to Improve the Safety of
Soviet Nuclear Reactors

TO The Secretary

BACKGROUND

// This memorandum supersedes that on the same referenced subject dated October 5, 1989, and approved by you on October 6, 1989. It has been modified per your request to narrow the scope of the activities planned in the near term. The only change is to delete the last three paragraphs under the Discussion heading in the October 5, 1989, memorandum.

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This plan follows up on your conversations with A. N. Protsenko, Chairman of the USSR State Committee for the Utilization of Atomic Energy, at the September 1989 General Conference of the International Atomic Energy Agency. In particular, you stated your willingness to invest further resources toward improving the safety of the Soviet's operating reactors. A critical element of this offer was the establishment of a mutually agreeable set of safety-related milestones to provide demonstrable assurance of progress toward safer reactor operations.

DISCUSSION

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1 This new initiative is a fundamental departure from the current activities sponsored by the Nuclear Regulatory Commission (NRC) under the Joint Coordinating Committee for Civilian Nuclear Reactor Safety (JCCCNRS). The current activities are primarily a passive exchange of information on regulatory, design, operational, and research issues. The new plan is proactive and concentrates on the principles which define and govern safe operational practices.

⊗ This plan takes a top down approach and is a multi-year effort. Critical to its success is the commitment of senior Soviet policymakers to assure the participation of the appropriate Soviet nuclear managers and the implementation of the lessons learned by the exchange. Therefore, we propose the development of a protocol describing this effort to be signed by you and your Soviet counterpart at the upcoming Summit in context with the signing of the renewal agreement for the Peaceful Uses of Atomic Energy by President Bush and President Gorbachev.

This plan would augment the current activities of the JCCCNRS. For example, the efforts on the health and environmental effects of Chernobyl and on Soviet reactor pressure vessel annealing are useful information exchanges and should continue. Other areas would be reviewed in light of the new activities, and will be continued in whole or in part as appropriate.

The plan which the Department would propose to the Soviets involves major participation by The Institute of Nuclear Power Operations (INPO) and includes the following features:

- o An initial series of meetings for the senior Soviet nuclear policymakers, "utility" executives and safety officials. INPO, senior U.S. utility executives, and senior DOE and NRC officials would participate and discuss the lessons learned from Three Mile Island in the areas of procedures, operator training, event analysis and feedback, technical support, oversight, and quality assurance.
- o A follow-on series of reciprocal visits and exchanges between the second level Soviet and U.S. reactor operations managers and safety officials. These would focus on the methodology for developing and using as built drawings of safety systems, emergency operations procedures based on as built systems, operator training programs, event analysis and feedback processes, and oversight programs. These exchanges would be segregated according to function and involve senior experts in the respective functional areas.
- o Schedules for implementing specific programs and visits to monitor and assure proper implementation.

SENSITIVITIES/CONCERNS

Improving the ability of the Soviets to safely operate their civilian nuclear powerplants may be viewed by Department of Defense and others as likewise improving the Soviets operating capability for their defense related reactors.

The structure of the Soviet nuclear establishment has undergone major reorganization since the Spring of 1989 and further changes are expected. The intent is to consolidate all nuclear matters, both civilian and military, under one strong management. It may take a few months to identify the proper Soviet officials to participate in the various levels of this new initiative.

NEXT STEPS

1. Arrange a meeting for you with Admiral Carr to discuss this initiative and the NRC role in it.
2. Arrange a meeting for you and Admiral Carr with Mr. Zack Pate to discuss the anticipated INPO role and to further define specific goals and programs.
3. Reiterate to the Soviets your Vienna request that the Soviets be prepared to discuss this initiative at the October 30 JCCCNRS meeting.
4. Brief INPO and possibly the Nuclear Management and Resources Council on our knowledge of Soviet designed reactors.

- 5. Prepare a letter from you to Secretary Baker and National Security Advisor Scowcroft describing the goals and processes of this initiative.

RECOMMENDATION

That you approve the general framework and concept of this plan with the specific programs to be submitted for your approval upon their development.



John J. Easton
Assistant Secretary of Energy
International Affairs and
Energy Emergencies

APPROVED: J. W. Kirk
DISAPPROVED: _____
DATE: 10/12/89