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

APR 8 1980

Docket No. 50-10

The Honorable Vince Demuzio Illinois Senate 4 Valley Lane Carlinville, Illinois 62626

Dear Mr. Demuzio:

Your letter to President Carter has been referred to the Nuclear Regulatory Commission (NRC), by the White House, for direct response to your concerns.

We have been reviewing Commonwealth Edison's proposed chemical decontamination of Dresden Unit No. 1 since 1974. Our initial review of the cleaning project, completed in 1975, concluded that there would be no adverse environmental impact caused by the operation, that the health and safety of the public would not be endangered by the proposed cleaning, and that the Commonwealth Edison radiological safety program was adequate to assure that the general public and the onsite personnel would not be endangered by the Dresden 1 decontamination project.

A copy of our Safety Evaluation in support of this action is enclosed for your information.

Since our 1975 authorization Commonwealth Edison has completed its materials test program and construction of the necessary support facilities to carry out the project in a safe and environmentally acceptable manner. Our review of the testing program and the facility construction is continuing and will be completed prior to the chemical cleaning that is currently scheduled for the first half of 1980.

The NRC is fully committed to satisfying all requirements of the National Environmental Policy Act (NEPA). Our regulations which implement the NEPA requirements are contained in Title 10, Part 51.5, of the United States Code of Federal Regulations. These regulations are in conformance with guidelines issued by the President's Council on Environmenal Quality (CEQ) which were in effect prior to July 30, 1979. They identify the types of actions for which NRC must prepare an environmental impact statement. The Honorable Vince Demuzio

The Commission is presently in the process of modifying our Environmental Protection regulations to take into account, voluntarily, the regulations promulgated by CEQ which became effective July 30, 1979. We have concluded that this action is not one of these actions requiring an environmental impact statement under current Commission regulations.

While our regulations do not require the preparation of an environmental impact statement, we are evaluating the environmental impact of the proposed action to determine whether an environmental impact statement should be prepared because of specific circumstances related to this particular action. If it is determined that an environmental impact statement need not be prepared, a negative declaration and environmental impact appraisal will be prepared in accordance with Sections 51.7 and 51.5(d) of our procedures for environmental protection. We will complete our review and issue the appropriate statement or appraisal prior to the Dresden decontamination.

In your letter to President Carter, you referred to a letter from students of the American Medical Student Association, University of Illinois, Urbana/ Champaign. For your information, we have enclosed a copy of the NRC response to that letter.

I hope this letter is responsive to your request.

Sincerely,

Crisical Signed by H. R. Benton

Harold R. Denton, Director Office of Nuclear Reactor Regulation

Enclosures: 1. Safety Evaluation 2. Letter to AMSA

NUCLEAR REGULATORY COMMISSION

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AUTHORIZATION TO CHEMICALLY DECONTAMINATE THE PRIMARY COOLING SYSTEM AT DRESDEN UNIT 1

COMMONWEALTH EDISON COMPANY

DRESDEN NUCLEAR POWER STATION UNIT 1

DOCKET NO. 50-10

INTRODUCTION

By letters dated December 16, 1974, April 1, 1975 and April 14, 1975, the Commonwealth Edison Company (CECo) requested authorization to carry out a chemical decontamination of the interior surfaces of the Dresden Unit 1 primary coolant system.

The purpose of the decontamination is to remove a deposition of activated corrosion products which is tightly bonded to the primary coolant system piping and components. The presence of the corrosion products in the system results in high levels of radiation in adjacent areas and limits access to these areas for the purpose of in-service inspection, routine maintenance and plant modifications.

CECo has tentatively scheduled the chemical cleaning project to begin in January 1977 with an anticipated return to service scheduled for July 1977.

EVALUATION

The staff's review of CECo's proposed chemical decontamination of the interior surfaces of the Dresden Unit 1 primary coolant system has been completed. The results of this review are as follows:

1. Environmental Impact

2. Materials Compatibility

The staff has reviewed the results of the material testing program that has been carried out in support of the proposed Dresden 1 decontamination program. The test program was organized to look at corrosive effects during the decontamination process and possible residual effects during subsequent reactor operation.

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Based upon our review of the results of the testing program completed to date, we have concluded that the test program adequately evaluated those aspects of the materials compatibility that we consider to be those aspects of the materials compatibility that we consider to be important. As a result of our discussions with CECo's consultant, Dr. Craig Cheng of Argonne National Laboratory, we find that the premaining program will be conducted in a manner that will answer our remaining program will be conducted in a manner that will be adequately interpreted and reported.

We conclude that upon the successful completion of the testing program described in the submittals and with an adequate surveillance and inspection program, the Dresden Nuclear Power Station Unit 1 can be subjected to the described chemical cleaning process without undue corresion or other deleterious materials compatibility effects that would adversely effect the integrity of the primary coolant system and connected systems.

A small number of items of concern have not been resolved to the staff's full satisfaction at this time. However, we conclude that authorization to carry out the chemical decontamination should be granted in anticipation of the successful resolution of these open granted in the near future. The following open items are identified items in the near future. The following open items are identified at this time as requiring resolution to the staff's satisfaction:

- (a) The materials test program will be completed and the test results will be analyzed and reviewed prior to the beginning of the cleaning process.
- (b) Surveillance specimens in addition to those now planned will be determined by mutual agreement with the applicant and a schedule for specimen withdrawal will be stated.
- (c) A pre-service inspection program for the primary coolant boundary and safety related systems will be formulated and performed prior to return to power.



3. Effluent Treatment Systems

We have determined that the effluent treatment system, if constructed as described in the CECo submittals, is capable of handling the types and quantities of effluents expected to be generated by the decontamination program. Our review was limited to the use of the system for chemical decontamination only, and use of the system for any other purpose subsequent to that program must be reviewed prior to such use.

4. Radiological Safety

We have further concluded that the radiological safety program described in the submittals is adequate to assure that the health and safety of the public and the onsite personnel will not be endangered by the Dresden 1 decontamination project.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) because the chemical cleaning does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the cleaning project does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: December 9, 1975

