Docket No. 50-87

Mr. A. J. Nardi NES License Administrator Nuclear Energy Systems Westinghouse Electric Corporation P. O. Box 355 Pittsburgh, Pennsylvania 15230

Dear Mr. Nardi:

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Region III

The staff of the U. S. Nuclear Regulatory Commission (NRC) has completed its review and evaluation of the revised Emergency Plan for the Westinghouse Nuclear Training Reactor at Zion, Illinois that you submitted on July 14, 1983, in compliance with 10 CFR 50.54(q) and (r). The plan was reviewed against the requirements of Appendix E to 10 CFR Part 50, the guidance criteria set forth in Revision 1 to Regulatory Guide 2.6 and ANSI/ANS-15.16-1982, "Emergency Planning for Research Reactors."

Based on its review, and as discussed in the enclosed safety evaluation, the staff concludes that the emergency plan for the Westinghouse (Zion) reactor facility meets both the requirements of the regulations and the guidelines provided to you, and is, therefore, acceptable. We request that you begin to implement your approved emergency plan immediately, with full implementation to be accomplished within 120 days of the date of this letter. Furthermore, you are requested to inform us by letter of the date on which complete implementation is achieved.

If you have any questions, please contact your Project Manager, Harold Bernard, at (301) 492-9799.

Sincerely,

Cecil O. Thomas, Chief Standardization & Special Projects Branch Division of Licensing

Enclosure: As stated

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NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555 MAY 1 8 1984

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Cecil O. Thomas, Chief Standardization & Special Projects Branch Division of Licensing

ecil O. Thomas

Enclosure: As stated

. cc: See next page

cc w/enclosure(s):

Department of Public Health ATTN: Chief, Division of Radiological Health 535 West Jefferson Springfield, Illinois 62706

Mayor of Zion City Hall Zion, Illinois 60099

Attorney General 500 South 2nd Street Springfield, Illinois 62701

The Honorable Tom Corcoran United States House of Representatives Washington, D. C. 20515

Illinois Department of Nuclear Safety Manager, Office of Nuclear Facility Safety 1035 Outer Park Drive Springfield, Illinois 62704

Director, Illinois Institute of Natural Resources 309 West Washington Chicago, Illinois 60606 SAFETY EVALUATION

INTRODUCTION

The Westinghouse Electric Corporation filed with the Nuclear Regulatory Commission a revised emergency plan for the Nuclear Training Reactor dated July 1983.

The Nuclear Training Reactor is owned and operated by Westinghouse Electric Corporation and is licensed pursuant to 10 CFR Part 50 under License R-119 with an authorized power level of 10 Kw (th). The reactor is housed within a separate reactor room at the Westinghouse Nuclear Training Center located at Zion, Illinois. The reactor is specifically designed for research and training purposes and is used to support the nuclear training programs conducted for Westinghouse customers in the area of reactor physics and reactor operations.

EVALUATION

The revised emergency plan for the nuclear training reactor, dated July 1983, is adequate to demonstrate that the licensee has accomplished the purposes of radiological emergency planning. The plan briefly describes the type of reactor, its major functions and utilization, and its location. The objective of the plan is to provide a generalized series of guidelines and specify areas of responsibility for the reactor staff and support personnel for emergency response to accidents at the reactor facility that may effect the health and safety of employees and students.

The plan identifies offsite support organizations and describes the arrangements and agreements with these organizations to augment the licensee's emergency organization should their services be required. The assistance and support services provided by these offsite organizations include fire fighting, ambulance and emergency medical services, hospital facilities, and police protection. The plan includes drawings that provide additional definitive information on facility location, access routes, facility layout, and areas under the administrative control of the Emergency Director, defined as the Manager, Westinghouse Nuclear Training Center.

The plan describes the Nuclear Training Center emergency organization and includes the responsibilities and authority with a line of succession for key members of the emergency organization. The Nuclear Training Center staff, with augmentation from the offsite organizations, forms the total emergency organization. The emergency organization described in the plan provides assurance that emergency management will exist to meet any foreseeable emergency at the Nuclear Training Reactor. Additionally, the plan describes the criteria for the termination of an emergency, authorization for reentry, and establishes limits of exposure to radiation in excess of normal occupational limits for emergency team members for life saving and corrective actions that mitigate the consequences of an accident.

The plan states that the Nuclear Training Reactor is considered to be a "Negligible - Risk Research Reactor", and no offsite exposures will exist from the postulated credible accidents associated with the operation of the reactor. The plan does include the Notification of Unusual Events and Alert emergency classes. Each emergency class is associated with Emergency Action Levels (EALs) and emergency procedures for emergency response and the initiation of protective actions appropriate for the emergency event in process.

The emergency facilities and equipment available for emergency response include designated Emergency Support Centers (ESCs), radiological monitoring systems, instruments and laboratory facilities for continually assessing the course of an accident, first aid and medical facilities and communication equipment. The provisions for maintaining emergency preparedness include programs for training, retraining, drills, drill critiques, plan review and updates and equipment inventory and calibrations.

SUMMARY AND CONCLUSION

Based on our review and evaluation, the staff concludes that the revised emergency plan, dated July 1983, for the Nuclear Training Reactor demonstrates that the licensee has the capabilities to assess and respond to emergency events. The plan provides assurance that necessary emergency equipment is available and describes a plan of action to protect the health and safety of workers and public. The emergency plan meets the requirements of the regulations and is acceptable.