

UNITED STATES NUCLEAR REGULATORY COMMISSION
ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT
REGARDING PROPOSED ORDER APPROVING DECOMMISSIONING PLAN
AND AUTHORIZING DECOMMISSIONING
BRIGHAM YOUNG UNIVERSITY
DOCKET NO. 50-262

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an Order authorizing Brigham Young University (BYU) to decommission and dismantle their BYU L-77 Research Reactor located on the licensee's campus in Provo, Utah, and to dispose of the components in accordance with the application dated June 28, 1990, as supplemented on July 2, 1991 and March 9, 1992.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action:

By application dated June 28, 1990, as supplemented, BYU requested authorization to decommission, decontaminate and dismantle the BYU L-77 Research Reactor, to dispose of its component parts in accordance with the proposed Decommissioning Plan for the L-77 Research Reactor (Decommissioning Plan), and to terminate Facility License No. R-109. The BYU L-77 Research Reactor was shut down in May 1982, and has not operated since then. Following the reactor shutdown, the fuel was removed from the reactor and transferred offsite to the Department of Energy. Opportunity for hearing was afforded by

a "Notice of Proposed Issuance of Orders Authorizing Disposition of Component Parts and Terminating Facility License" published in the FEDERAL REGISTER on August 1, 1991, (56 FR 36851). No request for a hearing or petition for leave to intervene was filed following notice of the proposed action.

Need for Proposed Action:

The proposed action is needed in order to terminate the facility license and transfer the area to the university for unrestricted use.

Environmental Impact of the Proposed Action:

All proposed operations in connection with decommissioning and decontamination of the BYU reactor will be carefully planned and controlled, all contaminated components will be removed, packaged, and shipped offsite, and radiological control procedures will be in place and implemented to ensure that releases of radioactive wastes from the facility are within the limits of 10 CFR Part 20 and are as low as reasonably achievable (ALARA).

All decontamination will be performed by trained personnel in accordance with previously reviewed procedures and will be overseen by experienced health physics staff. Solid and liquid waste will be removed from the facility and managed in accordance with NRC requirements. The NRC staff has calculated that the collective dose equivalent to the BYU staff and public for the project will be less than 0.5 person-rem.

Based on the review of the specific proposed activities associated with the dismantling and decontamination of the Brigham Young University L-77 Research Reactor, the staff has determined that there will be no significant

increase in the amounts of effluents that may be released offsite, and no significant increase in individual or cumulative occupational or population radiation exposure.

The staff has also determined that the proposed activities will not result in any significant impacts on air, water, land, or biota in the area or have any other significant environmental impact.

Alternatives Use of Resources:

The only alternative to the proposed decommissioning, dismantling and decontamination activities is to have BYU maintain possession of the reactor. This approach would include monitoring and reporting for the duration of the safe storage period. However, Brigham Young University intends to use the area for other purposes. The alternative of not decommissioning reactors was rejected in the Generic Environmental Impact Statement on Decommissioning, NUREG-0586. No alternative appears that will have different or lesser effect on the use of available resources, and other alternatives need not be evaluated.

Agencies and Persons Consulted:

The Idaho National Engineering Laboratory, under contract to the NRC, assisted in the preparation of the Safety Evaluation Report for the decommissioning of the BYU L-77 Research Reactor.

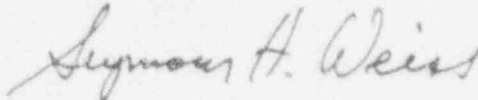
FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed action based upon the foregoing environmental assessment. The Commission concludes that the proposed action will not have a significant effect on the quality of the human environment for the reasons set out above.

For detailed information with respect to this proposed action, see the application for decommissioning, dismantling, decontamination and license termination dated June 28, 1990, as supplemented, and the Safety Evaluation prepared by the staff. These documents are available for public inspection at the Commission's Public Document Room, 2120 L Street, N.W., Washington, D.C. 20555.

Dated at Rockville, Maryland this 17th day of July 1992.

FOR THE NUCLEAR REGULATORY COMMISSION



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