



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

ENVIRONMENTAL ASSESSMENT
BABCOCK & WILCOX CO.
LICENSE NO. CX-10 - AMENDMENT NO. 13
DOCKET NO. 50-13

Description of Proposed Action

This Environmental Assessment is written in connection with the proposed amendment for cutting CX-10 fuel pins, as described in submittals from Babcock & Wilcox (B&W) dated January 6, 1984 and October 1, 1984.

Need For Proposed Action

B&W has removed all of the fuel pins from the CX-10 critical facility. Ten thousand of the fuel pins have been shipped to the Oak Ridge National Laboratory (ORNL). Approximately 200 contaminated or deformed fuel pins could not be shipped in the ORNL shipping cask used for transporting the others. Since these fuel pins are contaminated or deformed, B&W was not able to locate any lightweight shipping containers for non-irradiated fuel that could accept full-length pins. Although contaminated fuel can be shipped in irradiated fuel containers, these have extensive shielding, are on the order of 15-25 tons in weight, and would result in relatively high costs for facility modification and for fuel handling. The overhead crane in the reactor room has a maximum capacity of 10 tons. Use of the 15-25 ton shipping cask would entail extensive modifications to the crane and the reactor room.

Accordingly, the fuel pins must be cut and capped to enable shipment in relatively lightweight casks. The 6M-type containers proposed for use with the remaining fuel pins are suitable and approved by NRC for handling these fuel pins.

Alternative to Proposed Action

The only alternative to the above action is to not perform the cutting operation. This would preclude shipment of the fuel pins offsite until extensive modifications to the B&W facility were made or procedures developed for moving the fuel to shipping casks located outside the building.

Environmental Impact of Proposed Action

A special fuel cutting box has been constructed to cut the fuel pins. This box will contain any fines from the cutting operation. The box is equipped with its own HEPA filter. In addition, the exhaust from this HEPA filter flows to the upstream side of another HEPA filter used to process exhaust from the bay. The exhaust from this system is vented from an elevated point above the roof into the atmosphere at a significant distance from the property line.

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The fuel has been removed from the core for at least one year and most of the short-lived radioactivity has decayed. The assigned personnel have extensive experience in fuel fabrication safety. The fuel cutting box is under negative pressure and there are two HEPA filters in series. On the basis of these factors, it is concluded that this fuel cutting operation with its control of radiological effluents can be conducted to ensure that releases from the facility are within the limits of 10 CFR Part 20 and are as low as is reasonable achievable (ALARA).

Agencies and Persons Consulted

The Commission has not obtained any technical assistance from other agencies or persons in performing the environmental assessment for this amendment.

Conclusion and Basis for Final No Significant Impact Finding

Based on the foregoing considerations, the staff has concluded that there will be no significant environmental impact attributable to this amendment. Having reached this conclusion, the staff determined not to prepare an Environmental Impact Statement for the proposed action and that a Final No Significant Impact Finding is appropriate.

Dated: December 10, 1984