



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

TERA

January 2, 1980

Mr. C. William Clark, Jr.
Manager of Engineering
Ederer Incorporated
P. O. Box 24708
Seattle, Washington 98124

Dear Mr. Clark:

SUBJECT: REVIEW AND ACCEPTANCE OF TOPICAL REPORT EDR-1, EDERER'S NUCLEAR
SAFETY RELATED eXtra-Safety And Monitoring (X-SAM) CRANES, REVISION 1

The Nuclear Regulatory Commission staff has completed its review of the Generic Licensing Topical Report EDR-1, "Ederer's Nuclear Safety Related eXtra-Safety And Monitoring (X-SAM) Cranes, Revision 1. The topical report describes the design and testing of the "single-failure proof" features which are included in Ederer's X-SAM cranes intended for handling spent fuel casks and other safety-related loads in a nuclear plant. A summary of our evaluation of the topical report is enclosed.

As a result of our review, we have concluded that the design features described in the topical report are acceptable for assuring that a single failure will not result in the loss of capability to safely retain a critical load. These features are limited to the hoisting system and brake system for trolley and bridge. We also conclude that the features are acceptable because they conform to the guidelines of Regulatory Guide 1.104, "Overhead Crane Handling Systems for Nuclear Power Plants;" and NUREG-0554, "Single-Failure-Proof Cranes for Nuclear Power Plants." Therefore, the Topical Report EDR-1, "Ederer's Nuclear Safety-Related (X-SAM) Cranes, Revision 1, may be referenced as accepted for use in crane systems for nuclear power plants. Both the proprietary and non-proprietary versions of the topical report must be referenced in future license applications.

The topical report and our evaluation describe the degree of conformance of the Ederer X-SAM crane system with each of the regulatory guide positions given in Regulatory Guide 1.104, "Overhead Crane Handling Systems for Nuclear Power Plants." Our safety evaluation notes that the applicant should include the information identified in Appendices B and C of the topical report in the Safety Analysis Report. Furthermore, in the alteration or conversion of an existing crane to provide features found acceptable in the topical report, the acceptability of unreplaced structures and components must be demonstrated.

We do not intend to repeat our review of the safety features described in the topical report and found acceptable in Enclosure 1. Our acceptance applies only to the use of features described in the topical report and does not constitute acceptance of the total overhead crane handling system or the requirements (e.g., limits on loads or load movement) which may be necessary to assure the safe application of the crane system within the nuclear power plant.

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Mr. C. William Clark, Jr.

- 2 -

January 2, 1980

In accordance with established procedure, it is requested that Ederer issue revised versions of these reports within three months of receipt of this letter to include the NRC acceptance letter and the enclosed evaluation. The changes described in your letter dated October 23, 1979 should also be made.

Should Nuclear Regulatory Commission criteria or regulations change, such that our conclusions concerning these reports are invalidated, you will be notified and given an opportunity to revise and resubmit your topical reports, should you so desire.

If you have any questions about our review of this Ederer topical report, please contact us.

Sincerely,



Robert L. Baer, Chief
Light Water Reactors Branch No. 2
Division of Project Management

Enclosure:
Topical Report Evaluation

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