



WHITING CORPORATION

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April 19, 1991

Division of Operating Reactors
USNRC
Washington, DC 20555

Subject: NUREG 0554 - Single Failure Proof Cranes for Nuclear Power Plants

Dear Sirs:

In following NUREG-0554 for upgrades of existing cranes, we have found certain terms of the spec. to be general and desire further clarification.

1. Please refer to the 2nd and 5th paragraph of Section 4.1, Reeving System, & Section 4.3, Head & Load Blocks.

How is the term "balancing" to be interpreted? Does this term require a fully balanced and symmetrical reeving system both for stationary & moving load conditions?

If a perfectly balanced system is not required, we request definition of acceptable tolerances. Further, a balanced system is required during and after a rope failure; however, the degree of balancing is not indicated for this occurrence. We request the acceptable limits of lower block twist & horizontal movement in the event of rope failure.

2. Please refer to overall requirements in Section 4 & 8 requiring safety back-up systems. Under what conditions do safety systems require calibration, and at what frequencies? What are the recommended time intervals for re-calibration of intricate back-up systems? What are the recommended time intervals for reliability testing of back-up systems? What are the specific procedures for reliability testing of back-up systems or is the crane manufacture required to provide this information?

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Page2

3. The 1983 revision of CMAA Spec. #70 has reduced the sheave and drum pitch diameter requirements from 24 to 16 times the rope diameter for Class A service common to Nuclear Power Plant installation. Implementation of this latest revision will reduce rope life. Has the NRC evaluated this change and if so is it acceptable for cranes in this service (NOTE: Paragraph NOG-5427 of NOG1 requires 24:1).
4. The terms "should" or "shall" as used in NUREG-0554 and NUREG-0612 are not defined. Please define your intent or definition of the term "should".

As more and more upgrades (many with limited space) are being considered and planned, your rapid response and clarification to these concerns is appreciated.

Sincerely,

Robert V. Norby
Robert V. Norby
Product Manager
Crane Division

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