TERMER ENERTHERIT BURGELISTS

EDISON DRIVE . AUGUSTA, MAINE 04330 . (207 322-4868

aine Vankee

January 5, 1994 MN-94-02 JRH-94-02

UNITED STATES NUCLEAR REGULATORY COMMISSION Attention: Document Control Desk Washington, DC 20555

References:

- (a) License No. DPR-36 (Docket No. 50-309)
  - (b) Letter, MYAPCo to USNRC, "Proposed Technical Specification Change No. 177: Maine Yankee Spent Fuel Pool Reracking", MN-93-09, January 25, 1993.
  - (c) Letter, MYAPCo to USNRC, "Response to USNRC Request for Additional Information: Proposed Change No. 177 (Spent Fuel Pool Reracking", MN-93-97, November 3, 1993.

Subject: Clarification of Temporary Gantry Crane and Vertical Lift Rig Descriptions

## Gentlemen:

In response to the USNRC's verbal request of December 30, 1993, Maine Yankee is providing additional clarification to the temporary gantry crane description given in section 9 of the Licensing Report, Reference (b). This clarification is provided as an Attachment to this letter.

Additionally, during the same conversation with the USNRC, some confusion was noted with regard to the description of the vertical lifting rig. The lifting rig described in Section 9 of the Licensing Report, Reference (b), will be used during the installation of the proposed racks. When lifting the existing racks, the long lifting rods shown in Figure 9-7 of Reference (b) will be replaced with shorter lifting rods of approximately 4 feet in length. The lifting rig, with either set of lifting rods, is designed to the criteria specified in Reference (b) and remains capable of lifting 150 tons before exceeding the ultimate strength and 90 tons before exceeding the yield strength of any component part, as specified in Reference (c).

We hope that this information clarifies the descriptions of these two items. Please contact us if there are any additional questions.

Very truly yours,

James Q. Debert

101117

James R. Hebert, Manager Licensing and Engineering Support

Attachment

c: Mr. Thomas T. Martin Mr. J. T. Yerokun Mr. E. H. Trottier Mr. Patrick J. Dostie Mr. Thomas R. Dignan, Esq. Mr. Paul Stern, Esq.

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## ATTACHMENT

## <u>Clarification to the Description</u> <u>of the</u> <u>Temporary Gantry Crane</u>

The braking system of the temporary gantry crane is composed of a total of four separate and independent brakes, a load equalizing bar between the power transmission lines, redundant wire drum revolution counters, and a hook block paddle switch. Each of the two drum power transmission lines (consisting of the motor, transmission/speed reducer and wire drum) contains a regenerative brake, a disc brake, and a mechanical wire drum revolution counter. The regenerative brake is designed to act on the motor; the disc brake on the wire drum. Both the mechanical wire drum revolution counters and the hook block paddle switch serve to restrict the hook and block operation to within the design movement limitations. The load equalizing bar, common to both lines, ensures that the loads experienced by each power transmission line remain the same while the wire ropes are loaded. The braking system components are designed to act together to prevent a loss of control of the load under a wide variety of postulated failures and normal braking requirements. A number of these conditions, ard their associated combinations are provided below:

## Normal Braking Functions

1. Start and/or stop of the motor	Disc brakes (both power transmission lines). Engages automatically on stop command.
<ol> <li>Load equalization (no load protection)</li> </ol>	Equalizing bar and disc brake (one power transmission line, as required).
3. Speed control	Regenerative brakes (both power transmission lines).
Failure Mode Braking Functions	
1. Overspeed	Regenerative brakes (both power transmission lines).
2. "Two blocking"	Disc brakes, hook block paddle switch, and mechanical counters (both power transmission lines).
3. Over extension of the hook	Disc brakes, and mechanical counters (both power transmission lines).
4. Loss of power	Disc brakes (both power transmission lines).
5. Wire rope break	Disc brakes, load sensors, and equalizing bar (both power transmission lines).
6. Overload or no load	Disc brakes, load sensors, and equalizing bar (both power transmission lines).