

**Florida
Power**
CORPORATION

March 15, 1985
3F0385-16

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
Control of Heavy Loads

Reference: Letter 3F0684-03 dated June 11, 1984 from
G. R. Westafer, FPC, to H. R. Denton, NRC

Dear Sir;

The referenced letter submitted responses to NRC concerns regarding the control of heavy loads. In response to these concerns, Florida Power Corporation (FPC) indicated that certain equipment modifications would be made in order to satisfy the intent of NUREG-0612. Further evaluation of these modifications has resulted in the need to update the previous information regarding these modifications. Therefore, this updated information is provided.

In response to the concern regarding trolley bumper deficiencies, FPC indicated that trolley bumpers would be added to the reactor building polar crane. However, further investigation indicated that an alternative to installing bumpers was to perform analyses to determine the loads that would result from impacting the wheel stops with the trolley and the effects of these loads. The results of the analyses indicate that the existing wheel stops are capable of sustaining full speed impact loading without exceeding acceptable design margins or factors of safety. Therefore, trolley bumpers for the reactor building polar crane are not required and will not be installed.

The status of FPC's action with regard to making the Auxiliary Building Crane (FHCR-5) single failure proof was also addressed in the referenced letter. FPC, at that time, had indicated that the design for making FHCR-5 single failure proof was being developed. However, after further evaluation, the decision has been made not to make FHCR-5 single failure proof. Instead, FHCR-5 will be upgraded to enhance safe operation.

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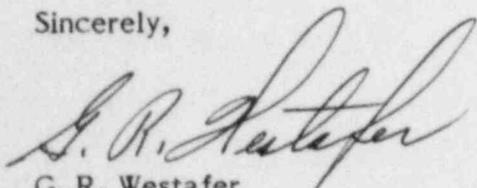
The upgrades are presented below:

- 1) The main hoist (120 ton) and auxiliary hoist (15 ton) will be derated to 50% of the current rating. This will result in the safety factor being doubled.
- 2) Lift height using the third hoist (2 ton), which was recently added for exclusive handling of new fuel elements, will be administratively limited to ensure that a drop of a fuel assembly will not have to have an adverse effect.
- 3) An overload protection device will be added to the hoisting systems to prevent lifting any load heavier than the rated load.
- 4) All single hooks will be replaced with "sister hooks" and all loads will be lifted with redundant slings.
- 5) An additional (redundant) emergency brake will be installed directly to each of the hoisting drums to assure that the load will be safely held in case of a single failure.
- 6) An interlock circuitry will be installed to prevent movement of the trolley and the bridge while hoisting the load to prevent any load hangup.
- 7) A load limiting device will be installed to prevent "two-blocking" events.
- 8) Testing will be done to verify that the added safety features perform adequately.
- 9) All welds whose failure could result in the drop of the new rated maximum load will be non-destructively examined to ascertain that the weldments are acceptable.

The combination of the above restrictions/modifications is considered adequate to meet the intent of NUREG-0612 recommendations.

Should there be any questions, please contact this office.

Sincerely,



G. R. Westafer
Manager, Nuclear Operations
Licensing and Fuel Management

DGG/feb