

**Florida  
Power**  
CORPORATION

December 1, 1982  
3F-1282-02  
File: 3-0-3-a-3

Mr. John F. Stolz, Chief  
Operating Reactor Branch #4  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Subject: Crystal River Unit 3  
Docket No. 50-302  
Operating License No. DPR-72  
NUREG-0612, Control of Heavy Loads

Dear Mr. Stolz:

Florida Power Corporation (FPC) hereby submits the following responses as requested in discussions with your staff concerning NUREG-0612.

Justification of Excluded Overhead Handling Systems

It has been determined by FPC that the hand operated Incore Instrument Container Hoist (ICHT-8), which is rated to 1 ton, is not required to perform lifts in excess of 1000 lb. This hoist is used during the installation and removal of incore instruments to pull and handle the incore instruments, lift miscellaneous tools, and transfer failed instruments to the fuel transfer carriage. None of the above mentioned lifts meet the FPC criteria for a heavy load. Therefore, ICHT-8 will be administratively derated to a capacity of 1000 lb and will be excluded from further NUREG-0612 consideration.

Lifting Devices (Not Specially Designed)

The results of an FPC evaluation of dynamic loads revealed that if a compensation factor of 1/2% of the static load/ftm crane hook speed is incorporated into the sling rating, a sufficient margin of safety will be attained. The hook speeds for non-exempt cranes at Crystal River Unit 3 are as follows:

Spent Fuel Pool Missile Shield Crane	FHCR-7	16.2	ft/min
Fuel Handling Area Crane	FHCR-5	4.8	ft/min
Intake Gantry Crane	CWCR-1	14.3	ft/min
Reactor Bldg. Crane	RCCR-1	4	ft/min
Reactor Vessel Tool Handling Jib Crane	RCCR-2	27	ft/min or 9 ft/min
Spent Fuel Pool Gate	SFHT-7	16.6	ft/min

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RCCR-2 has a high speed switch for its 27 ft./min. speed. The high speed switch will be disconnected to eliminate the effects of dynamic loading during lifts performed by RCCR-2. Based on this data and the FPC evaluation, all slings and other special lifting devices not specially designed have been derated by 10% to compensate for dynamic loading.

### Special Lifting Devices

Florida Power Corporation is currently evaluating a proposal from Babcock & Wilcox to supply information concerning the design of special lifting devices. The analysis of this information will be submitted in conjunction with our nine (9) month report which is currently scheduled to be completed by October 31, 1983.

Because facilities to perform a Non Destructive Examination (NDE) on the reactor vessel head and internals lifting device are not available during Cycle IV, the NDE will not be performed until Cycle V. Several options are currently being considered to provide the necessary facilities to perform the examination.

### Safe Load Paths

As previously discussed in our June 15, 1982 letter, FPC is using a comprehensive set of administrative controls to assure that safe load paths are followed for critical lifts in the reactor building. It was stated in the letter "the Reactor Building Coordinator and the Shift Supervisor will approve all lifts." This should be changed to state: "the Reactor Building Coordinator or the Shift Supervisor will approve all lifts inside the Reactor Building."

Similar administrative controls will be used to control heavy loads in other critical areas. During a refueling outage (or other major outages) an Auxiliary Building Coordinator (ABC) will be present in the auxiliary building to supervise and coordinate operations. The ABC will be familiar with NUREG-0612 requirements and aware of safe load handling practices. During operations when an ABC is not assigned, the Shift Supervisor or a position similarly qualified in NUREG-0612 requirements will assume the same responsibilities. All lifts involving FHCR-5 or FHCR-7 will be approved by the ABC, the Shift Supervisor or his designee prior to the lift. There is only one load path available to SFHT-7; therefore, these administrative controls will not be applied to this crane.

The Maintenance Supervisor or his designee in charge of the work will approve all lifts involving CWCR-1. The Maintenance Supervisor will be aware of NUREG-0612 requirements concerning CWCR-1 and will assure his designee is similarly informed.

### Crane Design

As stated in our June 15, 1982 letter, an analysis of the Intake Structure Gantry Crane, CWCR-1, will be submitted as part of the nine (9) month report.

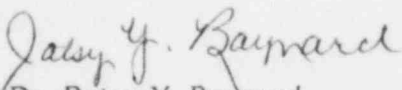
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Requirements for structural changes to the Reactor Building Polar Crane, RCCR-1, and the Auxiliary Building Crane, FHCR-5, will be determined subsequent to Florida Power Corporation's review of the Crane Design Evaluation (submitted June 15, 1982) and the load drop analysis (to be submitted with the nine (9) month report). This will allow FPC to evaluate and schedule all of the proposed modifications in an efficient and cost effective manner.

**Heavy Loads over Spent Fuel**

A detailed analysis to determine whether the spent fuel pool missile shields can withstand the impact of the 5 ton hydraulic jack, used to retension the reactor containment tendons, will be performed and submitted with the nine (9) month report. Tendon inspection is required every five (5) years and was last completed during Refuel III in 1981. Therefore, the hydraulic jack will not have to be used until 1986. Prior to the next use of the 5 ton jack, the analysis will be complete and requirements will be addressed, as necessary, in technical specifications at that time.

Very truly yours,

  
Dr. Patsy Y. Baynard  
Assistant to Vice President  
Nuclear Operations

DP/mlg

cc: Mr. J. P. O'Reilly, Regional Administrator  
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