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(TEMPORARY FORM)

CONTROL NO: 9386

FILE: _____

FROM: Florida Power Corp St. Petersburg, Fla J.T.Rodgers		DATE OF DOC 8-26-75	DATE REC'D 9-4-75	LTR xxx	TWX	RPT	OTHER
TO: Mr. A. Schwencer		ORIG 1-signed	CC	OTHER	SENT NRC PDR <u>xxx</u>		SENT LOCAL PDR <u>xxx</u>
CLASS	UNCLASS xxx	PROP INFO	INPUT	NO CYS REC'D	DOCKET NO: 50-302		

DESCRIPTION:

Ltr furn addl info concerning the missile shields that cover the spent fuel pools trans the following:

PLANT NAME: Crystal River #3

ENCLOSURES:

Proposed FSAR Revision to be Included in Amdt 47 ...

ACKNOWLEDGED

DO NOT REJECT

FOR ACTION/INFORMATION

9-6-75 JGB

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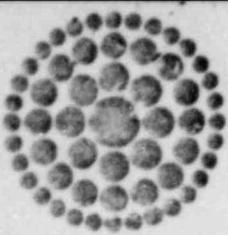
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llh to Ltr

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**Florida
Power**
CORPORATION

Regulatory File 574

August 26, 1975

Mr. A. Schwencer, Chief
Light Water Reactor Branch 2-3
Directorate of Licensing
Office of Regulation
Washington, D.C. 20545

In Re: Florida Power Corporation
Crystal River Unit #3
Docket No. 50-302

Dear Mr. Schwencer:

In a recent phone conversation with Mr. Leon Engle, he requested that Florida Power Corporation supply the staff with additional information concerning the missile shields that cover the spent fuel pools.

Specifically, Mr. Engle requested that we respond to the following questions:

1. Will the missile shields be in place routinely?
2. What will be the frequency and duration of removal of the missile shields for routine operation and/or maintenance of the spent fuel pools?
3. What are the proposal procedures and precautions to be implemented prior to removal of the missile shields (i.e. contact National Weather Service (NWS) for weather conditions expected during the time shields are off, contact NWS should conditions change unexpectedly, etc.).

Our response to Mr. Engle's requests are as follows:

1. The missile shields will be in place at all times except when handling fuel in the spent fuel pools. Attached is a proposed FSAR revision to reflect this commitment.

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2. Three routine operations will require the removal of the missile shields from the spent fuel pools. These are: refueling, shipment of spent fuel, and storage of new fuel. During each refueling operation, the missile shields will be removed for approximately one week. Routine maintenance on the pools will be performed during the refueling outage. For shipment of spent fuel off site, the missile shields will be removed as required to access the spent fuel elements for one 8-hour shift for each shipment. Approximately 6 to 7 shipments of spent fuel will be required between refueling operations. The storage of new fuel elements will require the shields to be removed for the same amount of time as required for spent fuel shipment (i.e. one 8-hour shift per shipment, 6 to 7 shipments).
3. We receive weather information from the National Weather Service via teletype located in our System Control Center. All weather advisories regarding severe thunder storm activity, hurricane information, etc., are received directly through this system.

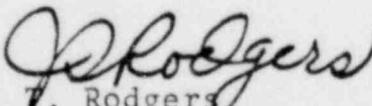
Upon receipt of such an advisory, the System Control Center will contact the shift supervisor on duty at Crystal River Unit #3.

Prior to initiating any fuel handling operation, a Radiation Work Permit must be approved by the shift supervisor. If he has been notified by the System Control Center of a severe weather advisory, this approval will not be granted.

If a fuel handling operation is in progress and a severe weather advisory is received, the shift supervisor, as directed by procedure AP-104 Violent Weather, will order all fuel handling operations suspended and the missile shields installed over the spent fuel pool immediately.

Should additional discussion be required concerning our response to the Mr. Engle's concerns, please do not hesitate to contact this office.

Very truly yours,


J. T. Rodgers
Asst. Vice President

JTR/iw
Attachment.

- e. The crane is designed such that it is capable of inching the maximum load and controlling the maximum load within 1/32 of an inch on both lifting and lowering operations. The crane is also designed to operate continuously under maximum loads with no adverse effects due to over-heating.
- f. The crane is designed to ensure no loss of function from seismic disturbance while lifting rated maximum capacity loads. The crane and all supporting structure are designed to Seismic Class I.
- g. Prior to the actual handling of the spent fuel cask, the crane and associated systems are thoroughly tested for any possible defects or inadequacies.
- h. A check-off list and stringent administratively controlled operating procedures are strictly adhered to during all spent fuel cask handling operations.

The new and spent fuel storage racks are anchored to the floor of their respective storage areas. The uplift force of the fifteen ton auxiliary hook of the fuel handling crane, which is utilized for the transfer of new fuel, does not exceed the yield strength of the storage rack anchors. The uplift force of the spent fuel handling bridge is restricted to 200 pounds due to load limit switches installed on the mechanism.

New fuel is moved from the transporter (truck or rail) to the new fuel racks, adjacent to the decontamination pit, thence into the pool.

The spent fuel pit is designed to withstand tornado generated missiles in accordance with Section 5.2.1.2.6 of the FSAR, and is covered with missile shields at all times except when handling fuel in the pool. In addition, should a tornado warning be received during a fuel handling operation, the shields would be installed immediately.

Because of the lack of substantiated evidence of the occurrence of any type of pool suction due to the three psi pressure drop caused by a tornado, and with substantial analytical evidence ⁽¹⁾ that it would not occur; therefore, the amount of water removal, if any, will not prevent the water contained from maintaining its normal protection capability. Therefore, concluded that dewatering of the fuel pool due to high wind action is not a cause of concern.

The heaviest loads, other than the fuel cask, are the missile shield members. Their design is such that if dropped in the water, they will float and will not damage the spent fuel elements or cause substantial loss of pool water.

9.6.2 SYSTEM DESCRIPTION AND EVALUATION

9.6.2.1 Receiving and Storing Fuel

New fuel assemblies are received in shipping containers inside the fuel handling area of the auxiliary building. The new fuel containers are unloaded from the shipping conveyance by the traveling hoist on the overhead crane. The shipping containers are placed on the loading dock. The containers are then opened and the new fuel elements within them are rotated to the vertical position. The new fuel elements are then removed by means of a manually operated tool suspended from the overhead crane. The new fuel element is