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Docket No.: 50-261

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MEMORANDUM FOR: Steve Varga, Chief  
Operating Reactors Branch #1  
Division of Licensing

FROM: R. Wayne Houston, Chief  
Accident Evaluation Branch  
Division of Systems Integration

SUBJECT: H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2 - SPENT  
FUEL STORAGE CAPACITY EXPANSION (TAC. #42415)

Plant Name: H. B. Robinson Steam Electric Plant Unit No. 2  
Docket No.: 50-261  
Responsible Branch: ORB-1  
Project Manager: W. Ross  
Review Status: AEB-Complete

The Accident Evaluation Branch has completed its review and evaluation of the December 1, 1980 letter from Carolina Power and Light Company which contains information on the proposed expansion of the storage capacity of the spent fuel pool (SFP) at H. B. Robinson Steam Electric Plant Unit No. 2.

Enclosure 1 is AEB's input for the Safety Evaluation for this spent fuel pool storage modification action. Enclosure 2 is our input for the Environmental Impact Appraisal.

This review was performed by M. Wohl, AEB/DSI.

Original signed by:  
R. Wayne Houston, Chief  
Accident Evaluation Branch  
Division of Systems Integration

Enclosures:  
As stated

cc: R. Mattson  
W. Gammill  
W. Kreger  
T. Quay  
W. Ross

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*XA*

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OFFICE	DSI:AEB	DSI:AEB	DSI:AEB			
SURNAME	MWohl:ye	WPasedag	RWHouston			
DATE	11/17/81	11/17/81	11/17/81			

## ENCLOSURE 1

For the Robinson Unit 2 Safety Evaluation Related to the Spent Fuel Storage Capacity Modification.

### 2.1 Fuel Handling

The NRC staff has underway a generic review of load handling operations in the vicinity of spent fuel pools to determine the likelihood of a heavy load impacting fuel in the pool and, if necessary, the radiological consequences of such an event. Because Robinson-2 will be required (by Technical Specification) to prohibit loads greater than the nominal weight of a fuel assembly and handling tool to be transported over spent fuel in the SFP, we have concluded that the likelihood of a load handling accident is sufficiently small that the proposed modification is acceptable, and no additional restrictions on load handling operations in the vicinity of the SFP are necessary while our generic review is underway.

The potential consequences of fuel handling accidents (i.e., rupture of fuel pins in one fuel assembly and subsequent release of the radioactive inventory within the gap) in the spent fuel pool area presented in the SE dated May 18, 1970 are not changed by the use of high density racks, since the amount of fuel damage in this accident remains unchanged.

## ENCLOSURE 2

### For the Robinson Unit 2 Environmental Impact Appraisal Related to the Spent Fuel Pool Modification

#### 5.0 Environmental Impact of Postulated Accidents

Although the new high-density racks will accommodate a larger inventory of spent fuel, we have determined that the installation and use of the racks will not change the radiological consequences of a postulated fuel handling accident in the SFP area from those values reported in the Robinson-2 FES dated April, 1975 , since the amount of fuel damage in the accident remains unchanged.

Additionally, the NRC staff has underway a generic review of load handling operations in the vicinity of spent fuel pools to determine the likelihood of a heavy load impacting fuel in the pool and, if necessary, the radiological consequences of such an event. Because Robinson-2 will be required (by Technical Specification) to prohibit loads greater than the nominal weight of a fuel assembly and handling tool to be transported over spent fuel in the SFP, we have concluded that the likelihood of a load handling accident is sufficiently small that the proposed modification is acceptable, and no additional restrictions on load handling operations in the vicinity of the SFP are necessary while our review is underway.