

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20545

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APR 1 1983

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MEMORANDUM FOR: Darrell G. Eisenhut, Director  
Division of Licensing

FROM: Richard H. Vollmer, Director  
Division of Engineering

SUBJECT: OIL COLLECTION SYSTEM REACTOR COOLANT PUMPS, FLORIDA  
POWER AND LIGHT COMPANY ST. LUCIE 2 - DOCKET NO.  
50-389 FROM J. OLSHINSKI TO D. EISENHUT

By memorandum, dated March 15, 1983, Region II requested the NRC position on the capacity of the container required by Section III.0 of Appendix R to "hold the entire lube oil system inventory."

Section III.0 Oil Collection Systems for Reactor Coolant Pump is written for a single pump. Therefore if there is only one reactor coolant pump, the container is required to hold the entire inventory of the oil system of the pump. If additional pumps are present they would each be provided with a separate collection container. There are usually from 2 to 4 pumps in a plant. Because the oil inventory of one large pump is approximately 275 gallons; some licensees have provided several containers connected in parallel for each pump.

In some cases licensees have provided one container to which all pumps would drain that has the capacity to hold the oil from one pump's oil system with a margin. We find this acceptable if it is located within the containment such that if the container overflows (due to draining from more than one pump) the oil presents no threat to safety components within the containment or to the plants capability to cope with other design basis events.

In summary, the NRC staff position on the capacity of reactor coolant pump oil collection system which meets our guidelines and Section III.0 of Appendix R to 10 CFR 50 is as follows:

1. One or more tanks need to be provided with sufficient capacity to collect the total lube oil inventory from all reactor coolant pumps draining to the container; or
2. One or more tanks need to be provided with sufficient capacity to hold the total lube oil inventory of one reactor coolant pump with margin if the tank(s) are located such that any overflow from the tank(s) will be drained to a safe location where the lube oil will not present an exposure fire hazard to or otherwise endanger safety related equipment; or

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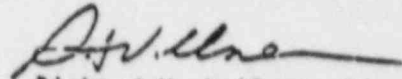
Darrell G. Eisenhut

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3. Where the RCP lube oil system is shown to be capable of withstanding the safe shutdown earthquake (SSE), the container size which satisfies 2 above is deemed acceptable to protect only against possible leakage due to random leaks in the lube oil system.

For those pumps where the lube oil is contained entirely within the pump casing, an oil collection system may not be required and an exemption to Section III.0 may be granted.

This position applies to all plants with oil collection systems for reactor coolant pumps; therefore, all Regions should be informed.



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Enclosure: As stated

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