



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 125 TO FACILITY OPERATING LICENSE NO. DPR-31
AND AMENDMENT NO. 119 TO FACILITY OPERATING LICENSE NO. DPR-41

FLORIDA POWER AND LIGHT COMPANY

TURKEY POINT UNIT NOS. 3 AND 4

DOCKET NOS. 50-250 AND 50-251

I. BACKGROUND

By letter dated July 18, 1986, as supplemented on February 20, 1987, Florida Power and Light Company (the licensee) requested changes to the Technical Specifications for the Turkey Point Plant, Units 3 and 4. The proposed amendments would incorporate plant specific Technical Specifications for the Reactor Vessel Level Monitoring System (RVLMS). The RVLMS has been installed and tested on Turkey Point Units 3 and 4, and is a portion of the Inadequate Core Cooling System (ICCS). The NRC staff reviewed and approved the ICCS for Turkey Point Units 3 and 4. The details and basis for the approval are documented in the staff's Safety Evaluation dated January 28, 1985. The RVLMS portion of the ICCS was approved for implementation prior to the licensee requesting Technical Specifications for the RVLMS. The Technical Specifications are proposed to comply with the NUREG-0737, Item II.F.2, and the staff's Safety Evaluation referenced above. The proposal is also based on the Technical Specifications approved by the NRC for the Palo Verde Nuclear Generating Station Unit 1.

The RVLMS is neither given credit nor is required in the evaluated accidents for the Turkey Point Plant, and is not relied upon for reactor trip or initiation of any plant safety systems. It is intended solely to enhance the operator's ability to understand and manage transients and events by providing additional corroborative information.

II. DISCUSSION

The criteria for determining if a channel is operable is based on the quality of information which can tell an operator whether he has a void forming and the extent of the void. A channel of level measurement consists of eight heated junction thermocouples. Two are located in the reactor head and six are in the upper plenum region. The staff has determined that if half of these sensors are functioning, the operator can determine if a void has formed, if it is growing or if the corrective action is succeeding in reducing the void. The Palo Verde Technical Specifications, upon which this submittal is patterned, require that as a minimum, four out of eight sensors must be functioning to declare a channel operational. A minimum of one channel must be operational to declare the system operational. These requirements are considered adequate to track the course of an accident.

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III. EVALUATION

The staff originally took the position that the licensee's submittal dated July 18, 1986, was satisfactory in all respects with the exception of Action Statement 9. As stated this Action Statement would have allowed restart after a scheduled refueling outage with one of the two channels failed. This would force operation for a complete fuel cycle with the imposition of Action Statement 8 (operation with one failed channel). Although operation in this condition is feasible, it was not considered prudent to encourage restart with known defective equipment. In response to our concern, the licensee's submittal dated February 20, 1987, required restoration of the system (both channels) to operable status prior to restart from a scheduled refueling outage. Subsequent to our position requiring that both channels be operable and the licensee's response to our concern, the Commission has issued a Generic Letter (GL) relating to the applicability of Limiting Conditions of Operations (LCO). GL 87-09 "Sections 3.0 and 4.0 of the Standard Technical Specifications (STS) On the Applicability of Limiting Conditions for Operation and Surveillance Requirements," dated June 4, 1987, addressed LCOs and action requirements. One area addressed is directly applicable to Action Statement 9 discussed above.

One of the technical positions stated in the GL is that facility operation is unduly restricted when startup is delayed under conditions in which conformance to the Action Requirements establishes an acceptable level of safety for unlimited continued operation of the facility.

For an LCO that has Action Requirements permitting continued operation for an unlimited period of time, entry into an operational mode or other specified condition of operation should be permitted in accordance with those Action Requirements. This is consistent with NRC's regulatory requirements for an LCO. The restriction on a change in operational modes or other specified conditions should apply only where the Action Requirements establish a specified time interval in which the LCO must be met or a shutdown of the facility would be required.

As previously stated, the RVLMS is neither given credit nor is required in the evaluated accidents for the Turkey Point Plant, and is not relied upon for reactor trip or initiation of any plant safety systems. It is intended solely to enhance the operator's ability to understand and manage transients and events by providing additional corroborative information. The facility may continue to operate if both channels are lost if an alternate method of monitoring the reactor vessel inventory is initiated and a Special Report is provided to the Commission. Therefore, based on the guidance in the GL, it would be unduly restrictive to require both channels be operable prior to startup and the requirement to restore at least one channel, as originally proposed, is acceptable.

We conclude that the proposed Technical Specifications provide reasonable assurance that the RVLMS information will be available to the operator to enhance the operator's ability to understand and manage transients and events when needed.

These proposed amendments were initially noticed in the Federal Register on September 24, 1986 (51 FR 33949) and renoticed on May 6, 1987 (52 FR 16946). The renotice was to identify the February 20, 1987 submittal and the change proposed for Action Statement 9. However, the basis for the determination of significant hazards was unchanged in the renotice. The final determination of the required number of operational channels prior to startup has no impact on the significant hazards determination.

IV. ENVIRONMENTAL CONSIDERATION

These amendments involve changes in the installation or use of the facilities components located within the restricted areas as defined in 10 CFR 20. The staff has determined that these amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

V. CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Dated: July 28, 1987

Principal Contributors:

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