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CUTTER,A.B. Carolina Power & Light Co.
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SUBJECT: Application for amend to License DPR-23,revising TS to incorporate surveillance requirements for RVLIS & CETs.

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A. B CUTTER
Vice President
Nuclear Services Department

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23
REQUEST FOR LICENSE AMENDMENT
INADEQUATE CORE COOLING INSTRUMENTATION

Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Parts 50.90 and 2.101, Carolina Power & Light Company (CP&L) hereby requests a revision to the Technical Specifications (TS) for the H. B. Robinson Steam Electric Plant, Unit No. 2.

The revision consists of incorporating surveillance and operability requirements for the Reactor Vessel Level Instrumentation System (RVLIS) and Core Exit Thermocouples (CETs) into TS Table 3.5.5 and 4.1-1. The present submittal supercedes amendment requests dated September 16, 1987 (RVLIS) and August 9, 1988 (CETs).

DISCUSSION

The present request recognizes that the CETs and RVLIS are basically complementary systems which provide information regarding the adequacy of core cooling. Both systems as installed conform to the guidance of NUREG-0737 to the extent discussed in our implementation letter dated September 16, 1987. The CETs are installed and are currently used routinely to monitor core conditions. The RVLIS is installed but is not being used pending NRC approval as requested by our September 16, 1987 implementation letter, Enclosure 1, Item 5.

The core exit thermocouples have been considered the primary indication with the RVLIS as the backup and verification as discussed in Regulatory Guide 1.97 compliance submittal dated December 31, 1984:

Core Exit Temperature

"The core exit temperature variable is assigned as Category 1 for the core cooling safety function of the Type B variables. This variable is considered to provide the most direct and most unambiguous indication that core cooling is being accomplished and is, therefore, assigned as the primary variable. RCS pressure and hot and cold leg temperatures can only infer that core cooling is being accomplished by providing the basis of

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the subcooling margin. Thus, these variables are included as backup variables to the core exit temperature."

and

Reactor Vessel Water Level

"This variable is used for backup/verification and is considered to be Category 3. The most direct indication of core cooling is provided by the core exit thermocouples which are shown as Category 1. The Reactor Vessel Level Instrumentation system (RVLIS) is being installed by Mod-526 and is designed to comply with the RG 1.97 requirements for Category 3 variables. The system will measure collapsed liquid water level and relative void content. The proposed design will meet the requirements of RG 1.97 Category 3."

In recognition of the primary importance of the CETs, TS are proposed which are consistent with the guidance of Generic Letter 83-37 (GL 83-37) modified to be consistent with the HBR2 TS format. However, commensurate with the backup/verification function of the RVLIS, the proposed TS deviate from the GL 83-37 guidance in that shutdown is not required in the event of inoperable RVLIS channels if an alternate method of monitoring reactor vessel inventory is available. The proposed TS also require submittal of a Special Report to the NRC discussing actions taken, the cause of the inoperability, and the plans and schedule for restoring operability. This TS would obviate unnecessary plant shutdown for the repair of non-accident mitigating systems while providing adequate assurance that the intent of the NUREG-0737, Item II.F.2 is met. In addition, this TS is similar to TS approved for several other plants.

Alternate monitoring of reactor vessel inventory is accomplished through the use of reactor coolant system subcooling, core exit thermocouple temperatures, and pressurizer level behavior. Dependent upon the specific application, either individually or a combination of these parameters provide adequate monitoring of reactor vessel inventory. This is consistent with the guidance provided by the Westinghouse Owners' Group Emergency Response Guidelines that provide the basis for the plant-specific Emergency Operating Procedures.

SIGNIFICANT HAZARDS ANALYSIS

Carolina Power & Light Company has reviewed the subject TS change request in accordance with the standards set for the in 10CFR50.92 and determined that this change does not constitute a significant hazard based upon the following considerations:

1. Operation of the facility, in accordance with the proposed amendment, would not involve a significant increase in the probability or consequences of an accident previously analyzed because the RVLIS and CETs is neither credited nor required for the mitigation of any previously evaluated accident, and is not relied upon for reactor trip or initiation of any plant safety system. The systems merely provide the operators with additional corroborative information and do not initiate any automatic actions. Further, the RVLIS sensing line meets the design requirements of the Reactor Coolant Pressure Boundary, and if a leak or rupture of this line does occur, the

reactor coolant flow would be limited orifices to that flow which is within the makeup capability of the existing ECCS. Therefore, the proposed change does not affect the probability or consequences of an accident previously evaluated.

2. Operation of the facility, in accordance with the proposed amendment, would not create the possibility of a new or different kind of accident from any accident previously evaluated because the proposed change is intended solely to enhance the ability of the operator to manage accidents and transients by providing the operator with additional corroborative information; the systems do not initiate any automatic actions. Further, the CETs and RVLIS do not alter any thermohydraulic characteristics of the reactor. The equipment does not have the potential to create new or different accidents from any accident previously evaluated.

3. Operation of the facility, in accordance with the proposed amendment, would not involve a significant reduction in a margin of safety because existing TSs continue to provide assurance that adequate core cooling is maintained during normal operation. The specific purpose of the proposed amendment is to enhance accident and transient monitoring capabilities.

ADMINISTRATIVE

The TS pages reflecting changes are provided for your use; changes are indicated by a single bar in the right margin.

If you have any questions concerning this request, please contact Mr. L. I. Loflin at (919) 546-6242.

Yours very truly,

A. B. Cutter

ABC/JSK/crs (331CRS)
Enclosure

cc: Mr. S. D. Ebneter
Mr. L. Garner (NRC - HBR)
Mr. R. Lo
Mr. Heyward G. Shealy (SC)
Attorney General (SC)

A. B. Cutter, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief; and the sources of his information are officers, employees, contractors, and agents of Carolina Power & Light Company.

Lisa M. Randall
Notary (Seal)

LISA RANDALL NOTARY PUBLIC WAKE COUNTY, N.C.

My commission expires: 6-7-93