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SUBJECT: Forwards technical info requested re 941024 amend request re relocation of TSS in accordance w/NUREG-1431.

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Carolina Power & Light Company
PO Box 165
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William R. Robinson
Vice President
Harris Nuclear Plant

JUL 21 1995

File: HO-950554

Serial: HNP-95-051
10 CFR 50.36(a)

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/LICENSE NO. NPF-63
REQUEST FOR LICENSE AMENDMENT
AREA TEMPERATURE MONITORING SUPPLEMENTAL INFORMATION

Gentlemen:

By letter dated October 24, 1994, Carolina Power & Light Company (CP&L) submitted a Request for License Amendment to the NRC relative to the relocation of selected Technical Specifications (TS) in accordance with NUREG-1431, the new Standard Technical Specifications for Westinghouse Plants. During a subsequent telephone conversation between CP&L and the NRC staff, CP&L was requested to provide additional technical information related to the Area Temperature Monitoring TS (3/4.7.12.) The Enclosure to this letter provides the requested information.

CP&L's 10 CFR 50.92 Evaluation submitted on October 24, 1994, remains valid and is unaffected by the submittal of the enclosed supplemental information.

Questions regarding this matter may be referred to Mr. R. W. Prunty at (919) 362-2030.

Sincerely,

MGW

Enclosure

W. R. Robinson, 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 that the sources of his information are officers, employees, contractors, and agents of Carolina Power & Light Company.

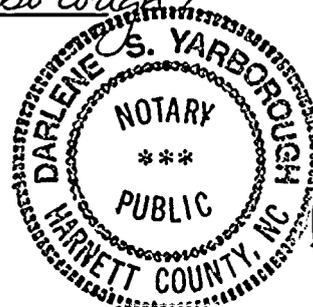
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Darlene S. Yarborough
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My commission expires: 2-6-2000

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c: Mr. S. D. Ebnetter (NRC-RII)
Mr. S. A. Elrod (NRC-SHNPP)
Mr. N. B. Le (NRR)

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/LICENSE NO. NPF-63
REQUEST FOR LICENSE AMENDMENT
AREA TEMPERATURE MONITORING

3/4.7.12 AREA TEMPERATURE MONITORING

1.0 INTRODUCTION

By letter dated October 24, 1994, as supplemented December 6, 1994, Carolina Power & Light Company (CP&L) submitted a request for changes to the Shearon Harris Nuclear Power Plant (SHNPP) Technical Specifications (TS). The proposed amendment would revise the TS to allow the relocation of TS 3/4.3.3.4, Turbine Over Speed Protection; 3/4.3.7.12, Area Temperature Monitoring; and 3/4.11.2.6, Gas Storage Tanks; and the associated Bases in the TS to licensee-controlled documents. Subsequent to the October 24, 1994 submittal, CP&L requested that the staff consider the request for the relocation of TS 3/4.3.3.4 first because that change would provide some flexibility to implement the manufacturer's recommendations for turbine steam valve surveillance test requirements. Consequently, the NRC issued Amendment No. 55 to Facility Operating License No. NPF-63 on March 22, 1995. The other changes proposed in CP&L's letters of October 24, 1994 and December 6, 1994 are still under staff review.

Section 182a of the Atomic Energy Act (the Act) requires that TS be included as part of a licensee's nuclear power plant operating license. The Commission's regulatory requirements related to the content of the TS are set forth in 10 CFR 50.36. That regulation requires that the TS include items in five specific categories including: (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. It also states that the Commission may include such additional TS as it finds appropriate. However, the regulation does not specify the particular TS to be included in a plant's license.

The Commission has provided guidance for the contents of TS in its "Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" (Final Policy Statement), issued on July 22, 1993 (58 FR 39132), in which the Commission indicated that compliance with the Final Policy Statement satisfies Section 182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TS to licensee-controlled documents, and consistent with this approach, the Final Policy Statement identified four criteria to be used in determining whether a particular matter is required to be included in the TS, as follows: (1) installed instrumentation that is used to detect and indicate in the control room a significant abnormal degradation of the reactor coolant pressure boundary; (2) a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that assumes either the failure of, or presents a challenge to, the integrity of a fission product barrier; (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (4) a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety. As a result, the existing Limiting Condition for Operation (LCO) requirements that fall within or satisfy any of the criteria in the Final Policy Statement must be retained in the TS, while those LCO requirements which do not fall within or satisfy these criteria may be relocated to other appropriate licensee-controlled documents.

2.0 EVALUATION

In November 1987, the Westinghouse Owners Group submitted to the NRC, WCAP-11618, "Methodically Engineered, Restructured and Improved Technical Specifications, MERITS Program - Phase II Task 5, Criteria Application." That topical report applied the Commission's screening criteria to the Westinghouse Standard Technical Specifications (NUREG-0452, Revision 4 and Draft Revision 5). The NRC staff documented the results of their review of WCAP-11618 in a letter dated May 9, 1988 to R. A. Newton, Chairman of the Westinghouse Owners Group. Among the Specifications to which the screening criteria were applied was Standard TS 3/4.7.13, Area Temperature Monitoring. Based upon that application, the following determination was made:

- Area temperature monitoring is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. Thus, Area Temperature Monitoring does not satisfy Criterion 1 for retention;
- Area temperature monitoring is not a process variable that is an initial condition of a Design Basis Accident (DBA) or Transient Analysis that assumes either the failure of or presents a challenge to the integrity of a fission product barrier. Area temperature monitoring does not satisfy Criterion 2;
- Area temperature monitoring is not a structure, system or component that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Area Temperature Monitoring does not satisfy Criterion 3.
- Based upon a Probabilistic Risk Assessment (PRA) Summary Report for the MERITS Program contained in Section 4 of WCAP-11618, Area Temperature Monitoring was not identified as a significant risk contributor. Therefore, Area Temperature Monitoring does not satisfy Criterion 4 for retention in the TS.

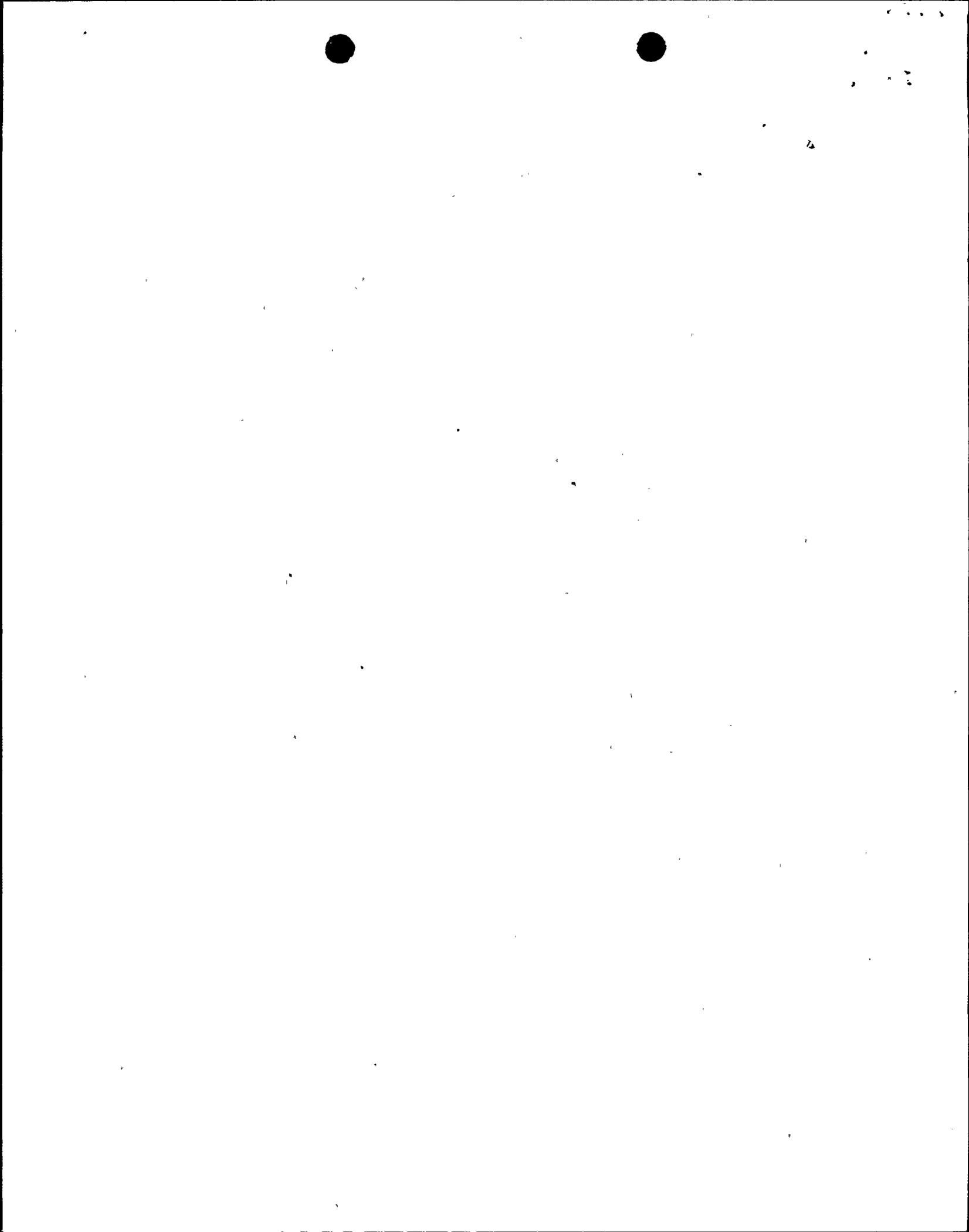
The screening criteria applied in WCAP-11618 were subsequently sanctioned in the Commission's Final Policy Statement issued in July 1993.

Area temperature limits for the SHNPP have been established to ensure that environmentally qualified equipment will not be exposed to temperatures beyond that to which they were originally qualified. These limits and their corresponding plant locations are presently contained in SHNPP TS 3/4.7.12. The consequences of exceeding the area temperature limits are that extended exposure to elevated temperatures could contribute to equipment degradation that exceeds the rate assumed by the facility environmental qualification (EQ) program.

The EQ program at SHNPP is based on NUREG-0588, "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment" and the Institute of Electrical and Electronics Engineers (IEEE) Standard IEEE-323-1974. The SHNPP EQ program is described in detail in Section 3.11 of the SHNPP Final Safety Analysis Report (FSAR). Additionally, the formal plant program is currently delineated in plant procedure PLP-108, "Environmental Qualification Program," which is subject to the requirements of 10 CFR 50.59. This procedure explains and documents methods for compliance with 10 CFR 50.49, describes the EQ program elements and their controls to ensure consistent application, and assigns responsibilities for implementation of the EQ program elements.

The NRC's review of the SHNPP program is documented in NUREG-1038, Supplement 4, "Safety Evaluation Report Related to the Operation of the Shearon Harris Nuclear Power Plant, Unit No. 1." On the basis of that review, the NRC concluded that the SHNPP program has demonstrated full compliance with the requirements for environmental qualification as detailed in 10 CFR 50.49, the relevant parts of General Design Criteria 1 and 4, Sections III, XI, and XVII of Appendix B to 10 CFR 50, and with the criteria specified in NUREG-0588.

The primary basis for the qualified life for environmentally qualified equipment is the Technical Specification temperature limit for each plant area, or if applicable, the process temperature of the medium associated with a particular device. In the absence of more definitive data, the highest applicable temperature is conservatively assumed to be the continuous temperature to which the equipment is exposed. Qualified life is documented in the appropriate equipment EQ data package in accordance with procedure PLP-108. Beyond the normal monitoring required by Technical Specification 3/4.7.12, long-term studies were completed for the Containment Building and Main Steam Tunnel to determine daily changes in temperature, if any, in those areas. Further, a repetitive failure program is in place to trend and identify common cause equipment failures. If it appears that high temperatures are a contributing factor to premature equipment failure, local temperature monitoring equipment may be utilized.



Adherence to the FSAR and regulatory documents is controlled by ensuring that any changes to the EQ program, including the affected equipment or changes in the plant environment, are documented through the site Engineering Service Request (ESR) process. In compliance with the ESR process, changes to the EQ program or engineering evaluations that affect the EQ program are reviewed in accordance with 10 CFR 50.59.

The TS requirements for the current TS 3/4.7.12, "Area Temperature Monitoring" will be relocated to plant procedure PLP-114, "Relocated Technical Specification Requirements." In relocating Area Temperature Monitoring to a plant procedure, CP&L will continue to maintain appropriate controls to ensure that evaluations are performed if applicable area temperatures are exceeded. Changes to this procedure, if necessary, will be subjected to the requirements of 10 CFR 50.59.

TS 6.5.2, "Plant Nuclear Safety Committee (PNSC)," requires that the PNSC review proposed changes to the SHNPP TS. The PNSC is composed of seven to nine members representing the engineering, operations, maintenance, health physics/chemistry, nuclear assessment, and regulatory affairs functions. A quorum consists of the Chairman or his designated alternate and four members, including alternates. PNSC review and approval of the proposed TS change was completed on September 30, 1994. PNSC representation consisted of the Chairman (Plant General Manager), operations, engineering, technical support, environmental & radiation control, nuclear assessment, regulatory affairs, work control, and training. TS 6.5.3, "Nuclear Assessment Section Independent Review Program," requires that the Nuclear Assessment Section review proposed changes to the Technical Specifications or the Operating License prior to implementation. The independent review was completed on November 22, 1994 in accordance with the existing TS 6.5.3 (prior to Amendment No. 57 to the Operating License which revised the Quality Assurance Program).

3.0 CONCLUSION

Carolina Power & Light Company has concluded, based on the considerations discussed above, that the existing TS 3/4.7.12, Area Temperature Monitoring, Limiting Condition for Operation (LCO) requirements do not fall within or satisfy any of the four criteria in the Commission's Final Policy Statement. The applicable provisions of this Specification may therefore be relocated to a licensee-controlled document, subject to the provisions of 10 CFR 50.59.