



Carolina Power & Light Company

SEP 27 1988

SERIAL: NLS-88-230
10CFR50.90
TSC 88TSB17

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

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT
MAIN STACK RADIATION MONITOR (TAC NOS. 65316/65317)

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 for the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

The NRC Staff issued a Safety Evaluation Report (SER), dated March 5, 1987, which approved Carolina Power & Light Company's (CP&L) proposed design to meet the requirements of NUREG-0737, Item II.E.4.2(7), at the Brunswick Steam Electric Plant. However, two conditions were imposed. They were: (1) to provide operability Technical Specifications for the main stack radiation isolation signal circuitry; and (2) to establish setpoints on the stack monitor for the purge and vent line isolation signal. On April 23, 1987, CP&L submitted justifications for not making the required Technical Specification additions. On June 3, 1988, the NRC, based on another Safety Evaluation Report, required that the Technical Specification changes be accomplished. This submittal provides proposed Technical Specification revisions to meet the imposed conditions.

Enclosure 1 provides a detailed description of the proposed changes and the basis for the changes.

Enclosure 2 details the basis for the Company's determination that the proposed changes do not involve a significant hazards consideration.

Enclosure 3 provides instructions for incorporation of the proposed changes into the Technical Specifications for each unit.

Enclosure 4 provides a summary of the proposed Technical Specification changes for each unit on a page by page basis.

Enclosure 5 provides the proposed Technical Specification pages for Unit 1.

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Enclosure 6 provides the proposed Technical Specification pages for Unit 2.

In accordance with the requirements of 10CFR170.12, a check for \$150 is also enclosed.

In order to allow time for procedure revision and orderly incorporation into copies of the Technical Specifications, CP&L requests that the proposed amendments, once approved by the NRC, be issued with an effective date to be no later than 60 days from the issuance of the amendment.

Please refer any questions regarding this submittal to Mr. Stephen D. Floyd at (919) 836-6901.

Yours very truly,



M. A. McDuffie
Senior Vice President

PDM/ (\cor\88TSB17A)

Enclosures:

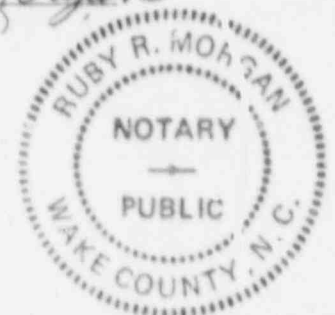
1. Basis for Change Request
2. 10CFR50.92 Evaluation
3. Instructions for Incorporation
4. Summary List of Revisions
5. Technical Specification Pages - Unit .
6. Technical Specification Pages - Unit 2

cc: Mr. Dayne H. Brown
D. J. Nelson Grace
Mr. W. H. Ruland
Mr. B. C. Buckley

M. A. McDuffie, 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.


Notary (Seal)

My commission expires: 11/27/89



ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
NRC DOCKETS 50-325 & 50-324
OPERATING LICENSES DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT
MAIN STACK RADIATION MONITOR

BASIS FOR CHANGE REQUEST

Proposed Change 1

Revise BSEP TS 3/4.3.2 to include Limiting Conditions for Operation and Surveillance Requirements to ensure the capability of the main stack monitor signal circuitry to isolate containment purge and vent valves.

Proposed Change 2

Revise pages affected by Proposed Change 1 as necessary to correct editorial errors and to conform to formatting requirements such as repagination.

Basis

NUREG-0737, Item II.E.4.2, "Containment Isolation Dependability," states that containment isolation dependability should include Position 7, "Containment Purge and Vent Valves must close on a high radiation signal." Additionally, 10 CFR Part 50.34a and Part 50, Appendix I require that radioactive material in effluents released to unrestricted areas be kept as low as reasonably achievable.

Primary containment isolation would normally occur from safety-related low reactor water level and high containment pressure isolation signals which are already addressed in Technical Specifications. However, the nonsafety-related main stack monitor provides another means to detect and indicate a significant abnormal degradation of the reactor coolant pressure boundary. Also, the stack monitor signal is one of several signals that can initiate isolation of containment purge and vent valves (which are fission product barriers) and the stack monitor isolation function provides another level of assurance that the consequences of a loss of coolant accident will be mitigated. Thus, the nonsafety-related main stack monitor signal to close containment purge and vent isolation valves on a high radiation signal is additional assurance that containment isolation will occur when necessary.

Correspondence related to this issue is listed and annotated in the references portion of this enclosure. The balance of the changes are editorial and make no changes to the technical content or requirements of the Technical Specifications.

In summary, the NRC has determined that the main stack radiation monitor and associated logic circuitry, as nonsafety-related equipment performing a safety related function, should be addressed in Technical Specifications.

References

1. CP&L letter (NLS-86-256) dated August 26, 1986
This letter stated that, on December 16, 1983, CP&L committed to provide drywell vent and purge valve isolation on primary containment high radiation signals in accordance with NUREG-0737, Item II.E.4.2(7). It also provided a description of the modifications to be performed and a schedule.
2. CP&L letter (NLS-86-439) dated December 17, 1986
This letter responded to NRC questions from NRC/CP&L November 13, 1986 and December 1, 1986 conference calls that requested additional information concerning separation of safety from nonsafety portions of the isolation circuitry, a relay used, and cables in the circuit.
3. NRC letter dated March 5, 1987
This letter transmitted the Safety Evaluation Report and the NRC's acceptance of CP&L's method for compliance with NUREG-0737, item II.E.4.2(7). However, two requirements were imposed: (1) add TS for operability of the main stack monitor isolation signal circuitry and (2) add TS for the stack monitor setpoints and surveillance.
4. CP&L letter (NLS-87-088) dated April 23, 1987
CP&L submitted justifications for not making the required TS additions.
5. NRC letter dated June 3, 1988
After reviewing CP&L's April 23, 1988 letter, the NRC transmitted another Safety Evaluation Report that required the TS additions.
6. CP&L letter (NLS-88-159) dated July 22, 1988
This letter stated that CP&L plans to submit the required TS additions no later than September 30, 1988.

ENCLOSURE 2

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
NRC DOCKETS 50-325 & 50-324
OPERATING LICENSES DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT
MAIN STACK RADIATION MONITOR

10CFR50.92 EVALUATION

The Commission has provided standards in 10CFR50.92(c) for determining whether a significant hazards consideration exists. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety. Carolina Power & Light Company has reviewed this proposed license amendment request and determined that its adoption would not involve a significant hazards consideration. The bases for this determination are as follows:

Proposed Change 1

Revise BSFP TS 3/4.3.2 to include Limiting Conditions for Operation and Surveillance Requirements to ensure the capability of the main stack monitor signal circuitry to isolate containment purge and vent valves.

Basis

The change does not involve a significant hazards consideration for the following reasons:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed changes do not affect the function or physical nature of any component or system associated with the probability of a Design Basis Accident (DBA) or Transient Analysis. The nonsafety-related main stack radiation monitor signal circuitry to isolate the containment purge and vent valves is in addition to safety related signals from the low reactor water level instrumentation and high containment pressure instrumentation for which there are existing Technical Specifications. Thus, the main stack monitor signal provides additional assurance that, when necessary, primary containment will be isolated. Further, this function provides additional assurance that the consequences of an accident will be mitigated such that radiological effluents released to unrestricted areas will be kept as low as is reasonably achievable.

2. The main stack radiation monitor and associated signal circuitry are nonsafety-related. The nonsafety-related circuitry is electrically isolated from the existing safety related isolation logic circuitry. Thus, a failure of the nonsafety-related main stack monitor and/or the associated nonsafety-related circuitry will not affect the existing safety-related isolation signals and therefore, will not create the potential for a new or different kind of accident from any accident previously evaluated.
3. The proposed amendment does not involve a significant reduction in the margin of safety. The main stack radiation monitor signal setpoints are listed and controlled in the Brunswick Offsite Dose Calculation Manual (ODCM). Changes to this document are submitted to the Staff as part of the Semi-Annual Radioactive Effluent Release Report in accordance with BSEP TS 6.13.2. As noted in an NRC letter dated June 3, 1988, the setpoints are based on the guideline values of 10 CFR Parts 20 and 50, which are more conservative than those of 10 CFR Part 100. Based on this fact, the proposed amendment actually augments the margin of safety.

Proposed Change 2

Revise pages affected by Proposed Change 1 as necessary to correct editorial errors and to conform to formatting requirements such as repagination.

Basis

The change does not involve a significant hazards consideration for the following reasons:

1. The changes are editorial only and make no changes to the technical content or requirements of the Technical Specifications. Therefore, the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.
2. The changes do not affect the function or physical nature of any component or system. Therefore, the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.
3. The changes are administrative only and as such are not applicable to any safety parameter. Therefore, the proposed amendment does not involve a significant reduction in the margin of safety.