April 17, 1990

Dockets Nos.: 50-369
and 50-370

Mr. H. B. Tucker, Vice President
Nuclear Production Department
Duke Power Company
422 South Church Street
Charlotte, North Carolina 28242

Dear Mr. Tucker:

SUBJECT: ISSUANCE OF AMENDMENT NO.107 TO FACILITY OPERATING LICENSE NPF-9 AND AMENDMENT NO. 89 TO FACILITY OPERATING LICENSE NPF-17 - MCGUIRE NUCLEAR STATION, UNITS 1 AND 2 (TACS 75995/75996)

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 107 to Facility Operating License NPF-9 and Amendment No. 89 to Facility Operating License NPF-17 for the McGuire Nuclear Station, Units 1 and 2. These amendments consist of changes to the Technical Specifications (TSs) in response to your application dated February 15, 1990, as supplemented March 19, 1990.

The amendments change TS 4.4.5 to allow use of the Babcock and Wilcox kinetic sleeving process for steam generator tube repair as an alternative to plugging.

The amendments include minor clarifications to the TS Basis as proposed in your letters of February 15, 1990, and March 19, 1990. These clarifications are in accordance with discussions with Mr. S. LeRoy of your company on March 27, and April 2, 1990.

A copy of the related Safety Evaluation supporting the amendments is enclosed. Notice of issuance of amendments will be included in the Commission's biweekly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY

Darl Hood, Project Manager
Project Directorate II-3
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment No.107 to NPF-9
2. Amendment No. 89 to NPF-17
3. Safety Evaluation

cc w/enclosures: See next page

OFFICIAL RECORD COPY * See previous concurrence.

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DATED: April 17, 1990

AMENDMENT NO. 107 TO FACILITY OPERATING LICENSE NPF-9 - McGuire Nuclear Station, Unit 1
AMENDMENT NO. 89 TO FACILITY OPERATING LICENSE NPF-17 - McGuire Nuclear Station, Unit 2

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

DUKE POWER COMPANY

DOCKET NO. 50-369

McGUIRE NUCLEAR STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 107
License No. NPF-9

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment to the McGuire Nuclear Station, Unit 1 (the facility) Facility Operating License No. NPF-9 filed by the Duke Power Company (the licensee) dated February 15, 1990, as supplemented March 19, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations as set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-9 is hereby amended to read as follows:

   Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 107 , are hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Darl Hood

for David B. Matthews, Director
Project Directorate II-3
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: April 17, 1990

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

DUKE POWER COMPANY

DOCKET NO. 50-370

McGUIRE NUCLEAR STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 89
License No. NPF-17

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment to the McGuire Nuclear Station, Unit 2 (the facility) Facility Operating License No. NPF-17 filed by the Duke Power Company (the licensee) dated February 15, 1990, as supplemented March 19, 1990, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations as set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is hereby amended by page changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-17 is hereby amended to read as follows:

    Technical Specifications

    The Technical Specifications contained in Appendix A, as revised through Amendment No. 89 , are hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

for David B. Matthews, Director
Project Directorate II-3
Division of Reactor Projects-I/II
Office of Nuclear Reactor Regulation

Attachment:
Technical Specification
Changes

Date of Issuance: April 17, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 107

FACILITY OPERATING LICENSE NO. NPF-9

DOCKET NO. 50-369

AND

TO LICENSE AMENDMENT NO. 89

FACILITY OPERATING LICENSE NO. NPF-17

DOCKET NO. 50-370

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages and new page are identified by Amendment number and contain vertical lines indicating the areas of change.

Remove Pages	Insert Pages
3/4 4-14	3/4 4-14
3/4 4-15	3/4 4-15
B 3/4 4-3	B 3/4 4-3
	B 3/4 4-3a (new page)

4.4.5.4 Acceptance Criteria

a. As used in this specification:

1) Imperfection means an exception to the dimensions, finish or contour of a tube or sleeve from that required by fabrication drawings or specifications. Eddy-current testing indications below 20% of the nominal tube or sleeve wall thickness, if detectable, may be considered as imperfections;

2) Degradation means a service-induced cracking, wastage, wear or general corrosion occurring on either inside or outside of a tube or sleeve;

3) Degraded Tube means a tube or sleeve containing imperfections greater than or equal to 20% of the nominal tube or sleeve wall thickness caused by degradation;

4) % degradation means the percentage of the tube or sleeve wall thickness affected or removed by degradation;

5) Defect means an imperfection of such severity that it exceeds the repair limit. A tube or sleeve containing a defect is defective;

6) Repair Limit means the imperfection depth at or beyond which the tube or sleeve shall be removed from service by plugging or repaired by sleeving and is equal to 40% of the nominal tube or sleeve wall thickness. This definition does not apply to the area of the tubesheet region below the F* distance provided the tube is not degraded (i.e., no indications of cracking) within the F* distance. If a tube is sleeved due to degradation in the F* distance, then any defects in the tube below the sleeve will remain in service without repair.

The Babcock & Wilcox process (or method) equivalent to the method described in Topical Report BAW-2045(P)-A will be used.

7) Unserviceable describes the condition of a tube or sleeve if it leaks or contains a defect large enough to affect its structural integrity in the event of an Operating Basis Earthquake, a loss-of-coolant accident, or a steam line or feedwater line break as specified in 4.4.5.3c, above;

8) Tube Inspection means an inspection of the steam generator tube from the point of entry (hot leg side) completely around the U-bend to the top support of the cold leg; and

9) Preservice Inspection means an inspection of the full length of each tube in each steam generator performed by eddy current techniques prior to service to establish a baseline condition of the tubing. This inspection shall be performed after the field hydrostatic test and prior to initial POWER OPERATION using the equipment and techniques expected to be used during subsequent inservice inspections.

10) F* Distance is the distance into the tubesheet from the top face of the tubesheet or the top of the last hardroll, whichever is lower (further into the tubesheet) that has been conservatively chosen to be 2 inches.

11) F* TUBE is a tube with degradation equal to or greater than 40%, below the F* distance and not degraded (i.e., no indications of cracking) in the F* distance.

b. The steam generator shall be determined OPERABLE after completing the corresponding actions (plug or repair all tubes exceeding the repair limit and all tubes containing through-wall cracks) required by Table 4.4-2.

4.4.5.5 Reports

a. Within 15 days following the completion of each inservice inspection of steam generator tubes, the number of tubes plugged in each steam generator shall be reported to the Commission in a Special Report pursuant to Specification 6.9.2;

b. The complete results of the steam generator tube inservice inspection shall be submitted to the Commission in a Special Report pursuant to Specification 6.9.2 within 12 months following the completion of the inspection. This Special Report shall include:

1) Number and extent of tubes inspected,

2) Location and percent of wall-thickness penetration for each indication of an imperfection, and

3) Identification of tubes plugged or repaired.

c. The results of inspections of F* tubes shall be reported to the Commission in a report, prior to the restart of the unit following the inspection. This report shall include:

1) Identification of F* tubes, and

2) Location and size of the degradation.

3/4.4.4 RELIEF VALVES

The power-operated relief valves (PORVs) and steam bubble function to relieve RCS pressure during all design transients up to and including the design step load decrease with steam dump. Operation of the PORVs minimizes the undesirable opening of the spring-loaded pressurizer code safety valves. Each PORV has a remotely operated block valve to provide a positive shutoff capability should a relief valve become inoperable.

3/4.4.5 STEAM GENERATORS

The Surveillance Requirements for inspection of the steam generator tubes ensure that the structural integrity of this portion of the RCS will be maintained. The program for inservice inspection of steam generator tubes is based on a modification of Regulatory Guide 1.83, Revision 1. Inservice inspection of steam generator tubing is essential in order to maintain surveillance of the conditions of the tubes in the event that there is evidence of mechanical damage or progressive degradation due to design, manufacturing errors, or inservice conditions that lead to corrosion. Inservice inspection of steam generator tubing also provides a means of characterizing the nature and cause of any tube degradation so that corrective measures can be taken. The B&W process (or method) equivalent to the inspection method described in Topical Report BAW-2045(P)-A will be used. Inservice inspection of steam generator sleeves is also required to ensure RCS integrity. Because the sleeves introduce changes in the wall thickness and diameter, they reduce the sensitivity of eddy current testing, therefore, special inspection methods must be used. A method is described in Topical Report BAW-2045(P)-A with supporting validation data that demonstrates the inspectability of the sleeve and underlying tube. As required by NRC for licensees authorized to use this repair process, McGuire commits to validate the adequacy of any system that is used for periodic inservice inspections of the sleeves, and will evaluate and, as deemed appropriate by Duke Power Company, implement testing methods as better methods are developed and validated for commercial use.

The plant is expected to be operated in a manner such that the secondary coolant will be maintained within those chemistry limits found to result in negligible corrosion of the steam generator tubes. If the secondary coolant chemistry is not maintained within these limits, localized corrosion may likely result in stress corrosion cracking. The extent of cracking during plant operation would be limited by the limitation of steam generator tube leakage between the Reactor Coolant System and the Secondary Coolant System (reactor-to-secondary leakage = 500 gallons per day per steam generator). Cracks having a reactor-to-secondary leakage less than this limit during operation will have an adequate margin of safety to withstand the loads imposed during normal operation and by postulated accidents. Operating plants have demonstrated that reactor-to-secondary leakage of 500 gallons per day per steam generator can readily be detected by radiation monitors of steam generator blowdown. Leakage in excess of this limit will require plant

3/4.4.5 STEAM GENERATORS (Continued)

shutdown and an unscheduled inspection, during which the leaking tubes will be located and plugged.

Wastage-type defects are unlikely with proper chemistry treatment of the secondary coolant. However, even if a defect should develop in service, it will be found during scheduled inservice steam generator tube examinations. Repair will be required for all tubes with imperfections exceeding the repair limit of 40% of the tube nominal wall thickness. Installed sleeves with imperfections exceeding 40% of the sleeve nominal wall thickness will be plugged. Defective steam generator tubes can be repaired by the installation of sleeves which span the area of degradation, and serve as a replacement pressure boundary for the degraded portion of the tube, allowing the tube to remain in service. Steam generator tube inspections of operating plants have demonstrated the capability to reliably detect wastage type degradation that has penetrated 20% of the original tube wall thickness. For tubes with degradation below the F* distance, and not degraded within the F* distance, repair is not required. If a tube is sleeved due to degradation in the F* distance, then any defects in the tube below the sleeve will remain in service without repair.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 107 TO FACILITY OPERATING LICENSE NPF-9

AND AMENDMENT NO. 89 TO FACILITY OPERATING LICENSE NPF-17

DUKE POWER COMPANY

DOCKETS NOS. 50-369 AND 50-370

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2

1.0 INTRODUCTION

By letter dated February 15, 1990, as supplemented March 19, 1990, Duke Power Company (the licensee) proposed amendments for McGuire Nuclear Station, Units 1 and 2. The proposed amendments would change Technical Specification (TS) 4.4.5.4 to allow the use of Babcock and Wilcox (B&W) sleeves for steam generator tube repair as an alternative to tube removal from service by use of plugs. Specifically, the repair alternative would be implemented by changing "tube" to "tube or sleeve" in the definitions and acceptance criteria of "Imperfection" (TS 4.4.5.4.a.1), "Degradation" (TS 4.4.5.4.a.2), "Degraded Tube" (TS 4.4.5.4.a.3), "% Degradation" (TS 4.4.5.4.a.4), "Defect" (TS 4.4.5.4.a.5), "Plugging Limit" (TS 4.4.5.4.a.6), and "Unserviceable" (TS 4.4.5.4.a.7). The term "Plugging Limit" (TS 4.4.5.4.a.6) would be changed to "Repair Limit", and its present definition (which refers to removal from service by plugging) would be supplemented to include repair by sleeving. Corresponding changes regarding plugging "or repairing" would be made to TS 4.4.5.4.b. Similarly, the contents of the Special Report required by TS 4.4.5.5 to be submitted to the Commission would be expanded to include identification of the tubes plugged "or repaired." The new definition and acceptance criteria for "Repair Limit" (TS 4.4.5.4.6) would also specify that "if a tube is sleeved due to degradation in the F* distance, then any defects in the tube below the sleeve will remain in service without repair," and that "The Babcock & Wilcox process (or method) equivalent to the method described in Topical Report BAW-2045(P)-A will be used."

The proposed changes to the TS also include corresponding changes to Bases 3/4.4.5. By letter dated March 19, 1990, the licensee clarified the proposed Bases by identifying the method of inservice inspection to be used for sleeved tubes, and by reflecting the commitment (1) to validate the adequacy of any system used for periodic inservice inspections of the sleeves, and (2) to evaluate and, as deemed appropriate by Duke Power Company, implement testing methods as better methods are developed and validated for commercial use. These commitments are in accordance with preconditions for users of Topical Report BAW-2045(P)-A which were established by the NRC during its prior approval of the topical report. The clarifications and commitments in the TS Bases are consistent with the changes noticed in the Federal Register on March 14, 1990, and do not alter the initial determination of no significant hazards consideration.

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2.0 BACKGROUND

By letter dated June 9, 1988, Babcock and Wilcox (B&W) submitted proprietary Topical Report BAW-2054(P) entitled "Recirculating Steam Generator Kinetic Sleeve Qualification for 3/4 Inch OD Tubes" for review and approval by the NRC staff for referencing in licensing actions. A corresponding but non-proprietary version of this topical report, BAW-2045, and responses to NRC requests for additional information were submitted to the NRC December 12, 1988. On January 4, 1989, the NRC staff approved both versions of the topical report as being suitable for referencing, subject to incorporating certain information and republishing so as to constitute "approved" versions of the report. The approved versions are designated BAW-2045(P)-A and BAW-2045-A. The proposed amendments would allow the use of B&W sleeves for steam generator tube repair at McGuire Units 1 and 2 based upon the approved topical report as referenced by revised TS 4.4.5.4.a.6 and discussed in associated Bases 3/4.4.5.

The general tube sleeving procedure involves inserting a tube of smaller diameter (the sleeve) inside the tube to be repaired. Sleeves span a defective or degraded region of a tube and maintain the steam generator tubing primary-to-secondary pressure boundary under normal and accident conditions. Thus, sleeves leave the repaired tube functional. Unlike plugs, which remove the heat transfer surface of the plugged tube from service and reduce the reactor coolant system flow available for core cooling, the installation of a sleeve does not significantly affect the heat transfer removal capability of the tube containing the sleeve. Therefore, a large number of sleeves can be installed without significantly affecting reactor coolant system flow rate and plant operating efficiency, thereby extending the service life of a steam generator that is experiencing degradation.

The B&W sleeve to be used at McGuire is specifically designed to repair 3/4 inch OD tubes that have been fully expanded in the tubesheet and that are exhibiting degradation near the secondary face of the tubesheet. The B&W sleeve design is applicable for repair of Westinghouse Model D steam generator tubes that exhibit intergranular stress corrosion cracking. McGuire Unit 1 uses four Westinghouse Model D2 steam generators and McGuire Unit 2 uses four Westinghouse Model D3 steam generators.

The B&W topical report describes in detail the analytical methods used for design and qualification of the B&W sleeve. The topical report lists the specifications (mainly ASME Boiler and Pressure Vessel Code requirements) used in design, and the procurement and qualification aspects of the sleeve. It also summarizes the transients used to establish sleeve loading.

3.0 EVALUATION

Topical Report BAW-2045(P)-A or BAW-2045-A contains the results of the sleeve design verification, which included analysis and confirmatory testing to demonstrate the acceptability of the steam generator sleeving technique for defective tubes. The design and operating conditions specified in the topical report for the sleeve bound those for McGuire Nuclear Station.

The sleeve design described in the topical report is qualified for two lengths, 11 inches and 17½ inches. The lower end of each sleeve is located approximately 16 inches from the primary face of the tubesheet. The shorter sleeve may be utilized in all the steam generator tubes (including the peripheral tubes, which typically do not permit the introduction of sleeves due to the close proximity of the bowl in that area). The longer sleeve extends further into the tube past the flow distribution baffle.

The sleeve material is thermally treated Alloy 690 Inconel with a specified minimum wall thickness of 0.039 inches. (The required minimum thickness is 0.027 inches based on primary side design pressure.) This material has been demonstrated to be much more resistant to corrosion phenomena as detailed in the topical report.

The upper sleeve-to-tube joint is produced by a kinetic weld or expansion, which is subsequently stress relieved. The joint is qualified as both a strength and seal weld. The lower joint may consist of either a kinetic weld or a mechanically sealed joint produced by rolling the sleeve in the tubesheet. The lower joint is qualified for applicable loads without taking credit for the original strength of the tube rolled into the tubesheet. Therefore, the structural integrity of the tube is maintained by the sleeving process.

The adequacy of the sleeve to withstand cyclic loadings was demonstrated by B&W using fatigue testing. Fatigue testing consisted of cyclic vibration, pressure, thermal, and axial loading. These tests were performed to demonstrate the structual adequacy of the installed sleeve. In all cases, the results of the tests indicated that the sleeve conformed to the design requirements of the steam generators.

Based on Regulatory Guide 1.121 guidelines for tube degradation limits, a plugging limit of 40% of the original sleeve wall has been established. Eddy current techniques are available to perform necessary sleeve and tube inspections for defect detection and to verify proper installation of the sleeve. Available techniques are capable of providing 20% defect sensitivity in the required areas of the tube and sleeve pressure boundary. A proprietary method is described in the topical report with supporting validation data that demonstrates the inspectability of the sleeve and underlying tube. The licensee has provided a commitment to validate the adequacy of any system that is used for periodic inservice inspections. The licensee has also committed to evaluate and, if the licensee deems appropriate, to implement testing methods as better methods are developed and validated for commerical use.

The present McGuire TS 4.4.5.4 requires that tubes with an imperfection depth of 40% of the nominal wall thickness be plugged. This plugging limit does not apply for imperfections located more than two inches below the top face of the tube sheet or the top of the last hardroll (i.e., beyond the so-called F* distance), provided the tube is not degraded within the top 2 inches (i.e., within the F* distance). This exclusion was previously approved by the NRC by McGuire Amendments 89 (Unit 1) and 70 (Unit 2) because defects located within the tubesheet region beyond the F* distance do not affect steam generator integrity or leakage. The proposed change would preserve this existing provision (and recognize that the function of the tube is replaced by the function of the sleeve) by specifying that if a tube is sleeved due to degradation in the F* distance, then any defects in the tube below the sleeve will remain in service without repair. For imperfections located elsewhere, the proposed change would require repair by sleeving or removal by plugging for all tubes or sleeves with imperfections exceeding the repair limit of 40% of the tube or sleeve nominal wall thickness.

Operation of McGuire Units 1 and 2 in accordance with the proposed amendments will not involve a significant reduction in a margin of safety. As noted in the topical reports, the structural integrity of the tube is maintained by the installation of the sleeve, the potential for primary-to-secondary leakage is reduced by the addition of the steam generator tube sleeve, and the sleeve material is less susceptible to the corrosion failure mechanisms than the original tube. A comparison of the effects of sleeve installation and tube plugging on steam generator performance, heat transfer, flow restriction, and steam generation capacity is also given in the topical report. The results show that plugging one tube is equivalent to the heat transfer reduction of sleeving 48 tubes, the primary flow reduction of sleeving 20 tubes, and the loss of steam generation capacity of sleeving 40 tubes. This means sleeving is perferable to plugging when considering core margins for most safety analysis. Moreover, the use of sleeving is bounded by the existing loss of coolant accident analysis. For the purpose of this analysis, 20 sleeves would have the same effect as plugging one tube.

One of the design objectives during development of the sleeve installation tooling was to minimize personnel radiological exposure. This objective was met through the use of remotely operated installation equipment, including a mechanical, multi-functional manipulator known as ROGER. Therefore, the proposed amendments are consistent with the requirements of 10 CFR 50, Appendix I, for maintaining radiological exposures as low as is reasonably achievable, and will not significantly increase individual or cumulative occupational radiation exposures.

The licensee's letter of February 15, 1990, discussed the production and treatment of radioactive waste associated with sleeving:

> "The sleeving process does result in radioactive waste which is considered disposable and cannot be reused. The solid volume produced during the installation of 50 sleeves is approximately 0.75 cubic feet. This waste consists of nylon tubing, stress relief heaters, roll expanders, cleaning hones, and water. The cleaning hones (less than one percent of the waste) are the only components that will come in contact with the primary system. This contact will result in an expected hone radiation reading of approximately 1-2 R/hr after the usable life of the hone. The remainder of the waste is considered to be extremely low level waste. The cleaning water will be retrieved and piped to the station radioactive waste water treatment system. Approximately one gallon per each tube will be required. Additional wastes will be produced consisting of protective clothing, tape, plastic bags, and other materials normally used in a radioactive environment. This waste is also considered extremely low level waste and will be processed and disposed of in a low level waste burial facility."

Therefore, the licensee concluded, and we agree, that the amount of waste created using the sleeving process is comparable to that created by tube plugging, and that the proposed amendments do not increase the types and amounts of effluents or waste that may be released offsite.

Based on the NRC staff's previous review and approval of the B&W topical report and our review of the licensee's submittals of February 15 and March 19, 1990, which we find to be consistent with the prior approval of the topical report, we find the proposed request for Technical Specification changes to be acceptable.

4.0 ENVIRONMENTAL CONSIDERATION

These amendments involve changes in the requirements with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. The staff has determined that the 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 the amendments involve no significant hazards consideration, and there has been no public comment on such finding. Accordingly, the 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.

5.0 CONCLUSION

The Commission's proposed determination that the amendments involve no significant hazards consideration was published in the Federal Register (55 FR 9520) on March 14, 1990. The clarifications and commitments in the associated TS Bases provided by the licensee's subsequent letter of March 19, 1990, do not alter the initial determination of no significant hazards consideration. The Commission consulted with the State of North Carolina. No public comments were received, and the State of North Carolina did not have any comments.

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.

Principal Contributor: D. Hood, PD#II-3/DRP-I/II
H. Conrad, EMCB

Dated: April 17, 1990