

June 9, 2000

Mr. H. L. Sumner, Jr.
Vice President - Nuclear
Hatch Project
Southern Nuclear Operating
Company, Inc.
Post Office Box 1295
Birmingham, Alabama 35201-1295

SUBJECT: THIRD 10-YEAR INTERVAL INSERVICE INSPECTION PROGRAM PLAN
REQUESTS FOR RELIEF FOR EDWIN I. HATCH NUCLEAR PLANT UNITS 1
AND 2 (TAC NOS. MA6489 AND MA6490)

Dear Mr. Sumner:

The staff has reviewed and evaluated the information provided in your letter dated September 16, 1999, which proposed four relief requests for the third 10-year inservice inspection (ISI) interval. The staff has reviewed and evaluated the information provided in the relief requests (relief request numbers RR-9, RR-28, RR-29, and RR-30) and concluded that the alternatives discussed in the enclosed safety evaluation will provide an acceptable level of quality and safety. Therefore, the proposed alternatives for relief request numbers RR-9, RR-28, RR-29 and RR-30 are authorized pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a(a)(3)(i) for the third 10-year ISI interval.

Sincerely,

RA by H. Berkow for

Richard L. Emch, Jr., Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-321 and 50-366

Enclosures: As stated

cc w/encls: See next page

June 9, 2000

Mr. H. L. Sumner, Jr.
Vice President - Nuclear
Hatch Project
Southern Nuclear Operating
Company, Inc.
Post Office Box 1295
Birmingham, Alabama 35201-1295

SUBJECT: THIRD 10-YEAR INTERVAL INSERVICE INSPECTION PROGRAM PLAN
REQUESTS FOR RELIEF FOR EDWIN I. HATCH NUCLEAR PLANT UNITS 1
AND 2 (TAC NOS. MA6489 AND MA6490)

Dear Mr. Sumner:

The staff has reviewed and evaluated the information provided in your letter dated September 16, 1999, which proposed four relief requests for the third 10-year inservice inspection (ISI) interval. The staff has reviewed and evaluated the information provided in the relief requests (relief request numbers RR-9, RR-28, RR-29, and RR-30) and concluded that the alternatives discussed in the enclosed safety evaluation will provide an acceptable level of quality and safety. Therefore, the proposed alternatives for relief request numbers RR-9, RR-28, RR-29 and RR-30 are authorized pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a(a)(3)(i) for the third 10-year ISI interval.

Sincerely,
RA by H. Berkow for
Richard L. Emch, Jr., Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-321 and 50-366

Enclosures: As stated

cc w/encls: See next page

Distribution:

PUBLIC	CHawes (paper copy)	RidsAcrcAcrcnMailCenter
PDII-1 R/F	RidsNrrPmLOlshan	RidsRgn11MailCenter
RidsNrrDlpmpdii	RidsOgcRp	RHaag
RidsNrrDlpmpdii1	GHill(4)	

Accession Number ML003722246 *See previous concurrence

OFFICE	PDII-1/PM		PDII-1/LA		OGC*		PDII-1/SC	
NAME	LOlshan:cn		CHawes		SUttal		REmch HB	
DATE	06/07/00		06/07/00		06/05/00		06/07/00	

OFFICIAL RECORD COPY

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
OF THE
THIRD 10-YEAR INTERVAL INSERVICE INSPECTION PLAN
REQUESTS FOR RELIEF
FOR
SOUTHERN NUCLEAR OPERATING COMPANY, INC.
EDWIN I. HATCH NUCLEAR PLANT UNITS 1 AND 2
DOCKET NOS. 50-321 AND 50-366

1.0 INTRODUCTION

By letter dated September 16, 1999, the Southern Nuclear Operating Company (the licensee), submitted four relief requests for the third ten-year inservice inspection (ISI) interval. The licensee is seeking relief from the requirements of the American Society of Mechanical Engineers (ASME) Code, Section XI for the Edwin I. Hatch Nuclear Plant, Units 1 and 2.

The information provided by the licensee in support of the requests for relief from Code requirements has been evaluated and the basis for disposition is documented below.

2.0 BACKGROUND

An ISI of the ASME Code Class 1, 2, and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel (B&PV) Code and applicable addenda as required by Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50.55a(6)(g)(i). 10 CFR 50.55a(a)(3) states in part that alternatives to the requirements of paragraph (g) may be used, when authorized by the NRC, if (i) the proposed alternatives would provide an acceptable level of quality and safety or (ii) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) shall meet the requirements, except the design and access provisions and the pre-service examination requirements, set forth in the ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the first ten-year interval and subsequent intervals comply with the requirements in the latest edition and

addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(b) twelve months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein. For Edwin I. Hatch Nuclear Power Plant Units 1 and 2, the applicable edition of Section XI of the ASME Code for the third ten-year ISI interval is the 1989 Edition.

3.0 EVALUATION

3.1 Licensee's Request Number RR-9

The Components for Which Relief is Requested:

All ASME Code Class 1, 2, and 3 piping and components included within the scope of the ISI Program.

Applicable Code Requirement from Which Relief is Requested:

ASME Section XI components require a hydrostatic pressure test after welded repairs or installation of replacement items by welding, as noted in IWA-4000.

Licensee's Basis for Requesting Relief:

Pursuant to 10 CFR 50.55a(a)(3)(i), relief is requested on the basis that the proposed alternative would provide an acceptable level of quality and safety. Relief is requested from performing the required hydrostatic test for Section XI components after welded repairs or installation of replacement items by welding.

ASME Section XI Code Case N-416-1 was issued on February 15, 1994. This Code Case has been approved by the NRC staff for use at Plant Hatch and other plants, and has been formally endorsed by inclusion in NRC Regulatory Guide (RG) 1.147 Revision 12 in May 1999. It was previously approved for Plant Hatch by letters dated June 15, 1995, and June 16, 1997.

Licensee's Proposed Alternative Provisions (as stated):

Southern Nuclear Operating Company (SNC) will comply with the pressure testing requirements of ASME Section XI Code Case N-416-1 for welded repairs or installation of replacement items by welding. In addition to the alternative rules of Code Case N-416-1, SNC proposes to augment the alternative tests by performing an additional surface examination on the root pass layer of butt and socket welds on the pressure retaining boundary of Class 3 components. Plant Hatch has been granted permission to use ASME Code Case N-532 and, as a result, is not required to use the Form NIS-2. Therefore, Code Case N-416-1 will be documented in the Repair/Replacement Plan in lieu of the Form NIS-2.

Licensee's Justification for Granting Relief (as stated):

The proposed alternative testing requirements have been evaluated by the ASME Code Committee and the NRC and have been deemed acceptable for determining the pressure boundary integrity of the affected components.

Implementation of pressure testing in accordance with the subject Code Case will ensure an acceptable level of quality and safety, does not decrease the margin of public health and safety and is thus authorized pursuant to 10 CFR 50.55a(a)(3)(i). By implementing the alternative examinations, reduction in costs, personnel radiation dose, and outage time can be realized by Southern Nuclear Operating Company at Plant Hatch.

Staff Evaluation and Conclusion

The ASME Code Section XI requires a hydrostatic pressure test after welded repairs or installation of replacement items by welding, as contained in IWA-4000. In lieu of the Code requirements, the licensee proposed to implement Code Case N-416-1, "Alternative Pressure Test Requirements for Welded Repairs or Installation of Replacement Items by Welding, Class 1, 2 and 3, Section XI, Division 1." In addition to the requirements in Code Case N-416-1, the licensee proposes to augment the alternative tests by performing an additional surface examination on the root pass layer of butt and socket welds on the pressure retaining boundary of Class 3 components. Plant Hatch has been granted permission to use ASME Code Case N-532 in a letter from the NRC dated June 16, 1997, and as a result, is not required to use the Form NIS-2. Therefore, the licensee proposes to document the use of Code Case N-416-1 in its Repair/Replacement Plan in lieu of the Form NIS-2.

The NRC staff has found Code Case N-416-1 to be acceptable subject to the following condition as stated in RG 1.147, Revision 12, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1". Additional surface examinations should be performed on the root (pass) layer of butt and socket welds of the pressure retaining boundary of Class 3 components when the surface examination method is used in accordance with Section III. The licensee has incorporated this additional requirement into its proposed alternative. The staff also notes that in lieu of utilizing Form NIS-2 as stated in Code Case N-416-1, the licensee will document the use of this Code Case in its Repair/Replacement Plan as specified in Code Case N-532. The staff finds that the use of Code Case N-532 in conjunction with Code Case N-416-1 is consistent with the authorizations to use these Code Cases individually. Therefore, the staff concludes the licensee's proposed alternative provides an acceptable level of quality and safety, and is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the licensee's third ten-year ISI interval.

3.2 Licensee's Request Number RR-28

The Components for Which Relief is Requested:

Systems and Components applicable to the requirements of Tables IWB-2412-1, IWC-2412-1, IWD-2412-1, IWE-2412-1, and ASME Code Case N-491 Table -2410-2 used in selecting the maximum percentages of examinations credited for each period.

Applicable Code Requirement from Which Relief is Requested:

Tables IWB-2412-1, IWC-2412-1, IWD-2412-1 of the 1989 Edition of ASME Section XI, Table IWE-2412-1 of the 1992 Edition of ASME Section XI, 1992 Addenda, and ASME Code Case N-491 Table -2410-2 require the following:

Inspection Period, Calendar Years of Plant Service Within the Interval	Minimum Examinations Completed, %	Maximum Examinations Completed, %
3	16	34
7	50	67
10	100	100

Relief is requested from selecting the maximum percentages of examinations credited for each period as required by Tables IWB-2412-1, IWC-2412-1, IWD-2412-1, IWE-2412-1 and ASME Code Case N-491 Table-2410-2. Relief is also requested to use the exceptions found in the 1996 Addenda of the 1995 Edition of ASME Section XI, IWB-2412, IWC-2412, IWD-1412, IWE-2412, and IWF-2410.

Licensee's Basis for Requesting Relief (as stated):

Code Case N-598 which was approved March 2, 1998 by ASME addresses an alternative to the requirements in Tables IWB-2412-1, IWC-2412-1, IWD-2412-1, IWE-2412-1, and starting with the 1990 Addenda, IWF-2410-2. This same alternative was incorporated into the 1998 Edition of ASME Section XI Code, not as an alternative, but as the code requirement. Southern Nuclear Operating Company (SNC) uses ASME Code Case N-491, which has been approved for use by Regulatory Guide 1.147, in lieu of the selection criteria found in IWF. Therefore ASME Code Case N-491 Table -2410-2 will be substituted for Table IWF-2410-2 referenced in the ASME Code Case N-598. A copy of Code Case N-598 is provided as an attachment to this request for relief. As for the exceptions, the 1996 Addenda of the 1995 Edition of ASME Section XI is the edition of the code included in the latest NRC proposed revision of 10 CFR 50.55a.

Licensee's Proposed Alternative Provisions (as stated):

Southern Nuclear Operating Company will comply with the requirements of ASME Section XI, Code Case N-598 except Table IWF-2410-2 will be substituted with ASME Code Case N-491 Table -2410-2. In addition, SNC will incorporate the following exceptions:

- (a) The required percentage of examinations in each Examination Category shall be completed in accordance with the table contained in ASME Code Case N-598 with the following exceptions:
 - (1) Examination Categories B-N-1, B-P, and B-Q;
 - (2) examinations partially deferred to the end of an inspection interval, as allowed by Examination Categories B-A, B-D, and B-F;

- (3) examination deferred to the end of an inspection interval, as allowed by Examination Categories B-A, B-L-1, B-M-1, B-N-2, B-N-3, and B-O;
 - (4) examination deferred until disassembly of a component for maintenance, repair/replacement activity, or volumetric examination, as allowed by Examination Categories B-G-1, B-G-2, B-L-2, and B-M-2;
 - (5) welded attachments examined as a result of component support deformation under Examination Categories B-K, C-C, or D-A.
- (b) If items or welds are added to the Inspection Program, during the service lifetime of the plant, examinations shall be scheduled as follows:
- (1) When items or welds are added during the first period of an interval, at least 25% of the examinations required by the applicable Examination Category and Item Number for the added items or welds shall be performed during each of the second and third periods of that interval. Alternatively, if deferral of the examinations is permitted for the Examination Category and Item Number, the second period examinations may be deferred to the third period and at least 50% of the examinations required by the applicable Examination Category and Item Number for the added items or welds shall be performed during the third period.
 - (2) When items or welds are added during the second period of an interval, at least 25% of the examinations required by the applicable Examination Category and Item Number for the added items or welds shall be performed during the third period of that interval.
 - (3) When items or welds are added during the third period of an interval, examinations shall be scheduled in accordance with (a) above.
- (c) If there are less than three items or welds to be examined in an Examination Category, the items or welds may be examined in any two periods, or in any one period if there is only one item or weld, in lieu of the percentage requirements contained in ASME Code Case N-598.

Licensee's Justification for Granting Relief (as stated):

ASME Code Case N-598 provides an alternative to the inspection Program B Tables in order to eliminate redundancy and provide more flexibility for scheduling examinations. This code case does not eliminate examinations and does not allow examinations to be extended past the code allowable ten year sequence, it simply allows the owner to schedule examinations more effectively. This code case has been evaluated by the ASME Code Committee and has been deemed acceptable. In addition, the proposed exceptions found in the

1996 Addenda of the 1995 Edition of ASME Section XI, IWB-2412, IWC-2412, IWD-2412, IWE-2412, and IWF-2410 are contained in the edition of the code included in the latest NRC proposed revision to 10 CFR 50.55a. Thus an acceptable level of quality and safety will have been achieved and public health and safety will not be endangered by allowing the proposed alternative and exceptions in lieu of the Code requirements. Therefore, it is requested that the proposed alternative and exceptions be authorized pursuant to 10 CFR 50.55a(a)(3)(i).

Staff Evaluation and Conclusion

The Code requires that the sequence of component examinations established during the initial ISI interval be repeated during each successive inspection interval to the extent practical. In addition, Tables IWB-2412-1, IWC-2412-1, IWD-2412-1 of the 1989 Edition of ASME Section XI, Table IWE-2412-1 of the 1992 Edition of ASME Section XI, 1992 Addenda, and ASME Code Case N-491 Table -2410-2 require a distribution of examinations each inspection period. The licensee proposes to comply with the requirements of ASME Section XI, Code Case N-598 except Table IWF-2410-2 will be substituted with ASME Code Case N-491 Table -2410-2. In addition, SNC will incorporate the above listed exceptions which include categories that are to be examined following criteria that is specific to the subject category as stated in the 1989 Edition of the Code in lieu of the percentage requirements contained in ASME Code Case N-598 or in the 1989 Edition of the Code Tables IWB-2412-1, IWC-2412-1, and IWD-2412-1. The exemptions listed above also includes direction for items or welds added to the Inspection Program during the service lifetime of the plant. In addition, the exceptions listed above also provide direction on the inspection of Examination Categories which contain less than three items or welds to be examined, the items or welds may be examined in any two periods, or in any one period if there is only one item or weld.

The Code scheduling philosophy requires periodic examination of selected areas to assure continued system operability and integrity. Modifying the schedule of examination areas for the licensee's third ISI interval provides the licensee with a means to enhance the overall efficiency of the ISI program. The staff has endorsed Code Case N-491-1 in Regulatory Guide 1.147, Revision 12, and the subject table in Code Case N-491 is the same as the subject table in Code Case N-491-1. Therefore, the staff finds the use of Table -2410-2 in lieu of Table IWF-2410-2 acceptable. Code Case N-598 and Section XI of the Code both require the same minimum percentage of examinations be completed each inspection period, but the Code Case allows a greater maximum percentage of examinations to be performed early in the interval.

The use of Code Case N-598 will establish a new sequence of component examinations. Because Code Case N-598 allows the license to perform examinations earlier in the interval, 10 years will not be exceeded between component examinations. Consequently, the use of Code Case N-598 will provide an acceptable level of quality and safety. In addition, the licensee's listed exceptions from following Code Case N-598 are for items that are to be examined following criteria that is specific to the subject category/item number and the licensee will follow the requirements listed in the 1989 Edition of the Code for the specific category/item number. In addition, the licensee's exceptions define additional guidance for items or welds added during the interval and when there are less than three items or welds in a specific category/item number. The staff finds the licensee's exceptions acceptable because they provide direction

on handling items that are not applicable to the Code required distribution of examinations and on handling situations not covered by Code rules. Therefore, the licensee's proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(i).

3.3 Licensee's Request Number RR-29

The Components for Which Relief is Requested:

This request for relief proposes an alternative to the welding and brazing procedure qualification requirements of IWA-4000.

Applicable Code Requirement from Which Relief is Requested:

The 1989 Edition of the ASME Code, Section XI, IWA-4400(a), requires that all welding shall be performed in accordance with Welding Procedure Specifications that have been qualified by the owner or repair organization in accordance with the requirements of the codes specified in the Repair Program in accordance with IWA-4120. Relief is requested from the welding and brazing procedure qualification requirements of IWA-4000 and an alternative, it is proposed that ASME Section XI Code Case N-573 be utilized.

Licensee's Basis for Requesting Relief (as stated):

ASME Code Case N-573, "Transfer of Procedure Qualification Records Between Owners," which was approved March 12, 1997 by ASME provides an alternative to the welding and brazing procedure qualification requirements of IWA-4000. The code case allows for the use of a welding or brazing procedure qualification record (PQR) qualified by one owner to be used by another owner for the development of the welding procedure specification (WPS). The specific requirements listed in the code case shall be met by the owner that performed the procedure qualification, and by the owner intending to use the PQR. Southern Nuclear Operating Company will comply with requirements of Code Case N-573 in lieu of IWA-4400(a).

Licensee's Proposed Alternative Provisions (as stated):

Southern Nuclear Operating Company will comply with the requirements of Code Case N-573 in lieu of IWA-4000, as an alternative to the welding and brazing procedure qualification requirements. The primary application of this Code Case will be to utilize Weld Procedure Qualification Records developed by industry groups with SNC participation to mitigate or correct generic problems with plant equipment. It may also be used to utilize Weld Procedure Qualification Records from other utilities for new materials, when welding conditions are unusual such as under water or with deletion of post weld heat treatment, when equipment or process not normally used at the plant are required or similar non-standard conditions. Plant Hatch has been granted permission to use ASME Code Case N-532 and, as a result, is not required to use the Form NIS-2. Code Case N-578[3] will be documented in the Repair/Replacement Plan in lieu of the Form NIS-2.

Licensee's Justification for Granting Relief (as stated):

The ASME Code Committee evaluated the proposed alternative contained in Code Case N-573 and determined that it is acceptable. The implementation of the code case will provide an acceptable level of quality and safety by providing reasonable assurance of structural integrity. Therefore, it is requested the proposed alternative be authorized pursuant to 10 CFR 50.55a(a)(3)(i).

Staff Evaluation and Conclusion

The licensee is obligated at this time to follow IWA-4400(a) which states that all welding shall be performed in accordance with WPS that have been qualified by the owner or repair organization in accordance with the requirements of the Codes specified in the repair program, per IWA-4120. The licensee has proposed the use of Code Case N-573, "Transfer of Procedure Qualification Records Between Owners." The Code Case allows for the use of a welding or brazing procedure qualification record (PQR) qualified by one owner to be used by another owner for the development of WPS. The specific requirements listed in Code Case N-573 shall be met by the owner that performed the procedure qualification and by the owner intending to use the PQR. The following requirements are listed in Code Case N-573.

- (a) The owner that performed the procedure qualification test shall certify, by signing the PQR, that testing was performed in accordance with Section XI.
- (b) The owner that performed the procedure qualification test shall certify, in writing, that the procedure qualification was conducted in accordance with a Quality Assurance Program that satisfies the requirements of IWA-1400.
- (c) The owner accepting the completed PQR shall accept responsibility for obtaining any supporting information needed for WPS development.
- (d) The owner accepting the completed PQR shall document, on each resulting WPS, the parameters applicable to welding. Each WPS shall be supported by all necessary PQR's.
- (e) The owner accepting the completed PQR shall accept responsibility for the PQR. Acceptance shall be documented by the owner's approval of each WPS that references the PQR.
- (f) The owner accepting the completed PQR shall demonstrate technical competence in application of the received PQR by completing a performance qualification test using the parameters of a resulting WPS.
- (g) The owner may accept and use a PQR only when it is received directly from the owner that Certified the PQR.
- (h) Use of this Code Case shall be shown on the NIS-2 form documenting welding or Brazing.

The staff considers that the qualification of a procedure for the purpose of joining materials by either welding or brazing may be transferred to another owner provided the appropriate

requirements for developing a PQR, documenting a PQR and preparing the resulting WPS are satisfied. To this end, the staff finds it acceptable that owners may use procedures qualified by other owners in accordance with the conditions/requirements listed in Code Case N-573, with the exception of condition (h) discussed below. The provisions of Code Case N-573 address the key factors for ensuring that the applicable technical and documentation requirements noted above are satisfied by specifying the obligations that need to be taken by the owners. The staff notes that in lieu of utilizing Form NIS-2 as stated in Code Case N-573, the licensee will document the use of this Code Case in their Repair/Replacement Plan as specified in Code Case N-532. The staff finds that the use of Code Case N-532 in conjunction with Code Case N-573 is consistent with the authorizations to use these Code Cases individually. Therefore, the staff concludes that the licensee's proposed alternative to use Code Case N-573 in conjunction with Code Case N-532 provides an acceptable level of quality and safety by providing reasonable assurance of structural integrity. The use of Code Case N-573 is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the third ten-year ISI interval at Hatch Units 1 and 2 until such time as Code Case N-573 is incorporated into a future revision of Regulatory Guide 1.147. Upon issuance of the regulatory guide, the licensee will follow all provisions in Code Case, including any exceptions or limitations discussed in the regulatory guide.

3.4 Licensee's Request Number RR-30

The Components for Which Relief is Requested:

Relief from curvature requirements for ultrasonic calibration blocks for Examination Category B-F, Item B5.10, pressure retaining dissimilar metal welds, NPS 4 or larger, nozzle-to-safe end butt welds.

The following is a list of welds and the associated calibration blocks proposed by the licensee and used by the licensee during previous inspection intervals.

Unit	Calibration Block Number	Calibration Block Diameter	Weld Number	Weld Diameter
1	85-H	12"	1B31-1RC-12AR-F-5	14"
1	85-H	12"	1B31-1RC-12AR-G-5	14"
1	85-H	12"	1B31-1RC-12AR-H-5	14"
1	85-H	12"	1B31-1RC-12AR-J-5	14"
1	85-H	12"	1B31-1RC-12AR-K-5	14"
1	85-H	12"	1B31-1RC-12BR-A-5	14"
1	85-H	12"	1B31-1RC-12BR-B-5	14"
1	85-H	12"	1B31-1RC-12BR-D-5	14"
2	78-H	Special 13.2	2B21-1FW-12AA-10	16"
2	78-H	Special 13.2	2B21-1FW-12AB-13	16"

2	78-H	Special 13.2	2B21-1FW-12BC-13	16"
2	78-H	Special 13.2	2B21-1FW-12BD-10	16"
2	85-H	12"	2B31-1RC-12AR-F-5	14"
2	85-H	12"	2B31-1RC-12AR-G-5	14"
2	85-H	12"	2B31-1RC-12AR-H-5	14"
2	85-H	12"	2B31-1RC-12AR-J-5	14"
2	85-H	12"	2B31-1RC-12AR-K-5	14"
2	85-H	12"	2B31-1RC-12BR-A-5	14"
2	85-H	12"	2B31-1RC-12BR-B-5	14"
2	85-H	12"	2B31-1RC-12BR-C-5	14"
2	85-H	12"	2B31-1RC-12BR-D-5	14"
2	85-H	12"	2B31-1RC-12BR-E-5	14"

Applicable Code Requirement from Which Relief is Requested:

Section XI, 1989 Edition, Appendix III, Paragraph III-3410 requires that basic calibration blocks shall be made from material of the same nominal diameter as the pipe to be examined.

Licensee's Basis for Requesting Relief (as stated):

These calibration blocks have been used throughout the plant life. Experience performing exams has been satisfactory.

Licensee's Proposed Alternative Provisions (as stated):

Southern Nuclear Operating Company (SNC) proposes that ultrasonic examinations be conducted using the referenced calibration blocks, which contain variations to 1989 Code specified dimensions.

Licensee's Justification for Granting Relief (as stated):

These calibration blocks have been used throughout plant life. Curvature differences between the blocks and the welds to be examined are minor, and experience performing calibrations using the blocks have been completely satisfactory. Continuing to use the blocks will permit the comparison of future data with historical data and will continue to provide an acceptable level of quality and safety. Therefore, permission to use the calibration blocks should be granted pursuant to 10 CFR 50.55a(a)(3)(i).

Staff Evaluation and Conclusion

The applicable Code requirements for the licensee's third ten-year ISI interval would require that the basic calibration blocks for the subject welds be made from material of the same nominal diameter and nominal wall thickness or pipe schedule as the pipe to be examined. The licensee proposes to continue to use the calibration blocks that have been used throughout the plant life. The staff has approved the use of Code Case N-461, "Alternative Rules for Piping Calibration Block Thickness", in RG 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1." The Code Case allows licensees to use calibration blocks that are within ± 25 percent of the pipe wall thickness being examined. RG 1.147 approves the use of the Code Case provided, "Thickness measurements and weld joint contour of the pipe/component must be known and used by the inspector who conducts the UT examination." The approved Code Case is similar to the licensee's proposed alternative. In addition, technical evaluation of the proposed calibration blocks prior to the preservice and first-interval examination indicated that examination effectiveness would not be reduced by the use of the proposed calibration blocks. These same calibration blocks were also used during the licensee's second ten-year ISI interval. An important feature of the overall ISI program is that past inspections serve as a baseline by which inservice examination results are evaluated. Accordingly, it is appropriate to use methods during ISI which are consistent with those used previously, provided the previous examination methods were technically acceptable.

The staff concludes that the licensee's proposed alternative for the subject welds provides an acceptable level of quality and safety at Hatch Units 1 and 2 and is authorized for the licensee's third ISI interval pursuant to 10 CFR 50.55a(a)(3)(i).

4.0 SUMMARY

The staff has reviewed the licensee's relief requests and determined that the licensee's alternatives will provide an acceptable level of quality and safety. Therefore, the proposed alternatives for relief request numbers RR-9, RR-28, RR-29 and RR-30 are authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the third ten-year ISI interval.

Principal Contributor: A. Keim

Date: June 9, 2000

Edwin I. Hatch Nuclear Plant

cc:

Mr. Ernest L. Blake, Jr.
Shaw, Pittman, Potts
and Trowbridge
2300 N Street, NW.
Washington, DC 20037

Mr. D. M. Crowe
Manager, Licensing
Southern Nuclear Operating
Company, Inc.
P. O. Box 1295
Birmingham, Alabama 35201-1295

Resident Inspector
Plant Hatch
11030 Hatch Parkway N.
Baxley, Georgia 31531

Mr. Charles H. Badger
Office of Planning and Budget
Room 610
270 Washington Street, SW.
Atlanta, Georgia 30334

Harold Reheis, Director
Department of Natural Resources
205 Butler Street, SE., Suite 1252
Atlanta, Georgia 30334

Steven M. Jackson
Senior Engineer - Power Supply
Municipal Electric Authority
of Georgia
1470 Riveredge Parkway, NW
Atlanta, Georgia 30328-4684

Charles A. Patrizia, Esquire
Paul, Hastings, Janofsky & Walker
10th Floor
1299 Pennsylvania Avenue
Washington, DC 20004-9500

Chairman
Appling County Commissioners
County Courthouse
Baxley, Georgia 31513

Mr. J. D. Woodard
Executive Vice President
Southern Nuclear Operating
Company, Inc.
P. O. Box 1295
Birmingham, Alabama 35201-1295

Mr. P. W. Wells
General Manager, Edwin I. Hatch
Nuclear Plant
Southern Nuclear Operating
Company, Inc.
U.S. Highway 1 North
P. O. Box 2010
Baxley, Georgia 31515

Mr. R. D. Barker
Program Manager
Fossil & Nuclear Operations
Oglethorpe Power Corporation
2100 East Exchange Place
P. O. Box 1349
Tucker, Georgia 30085-1349