Union Electric

One Ameren Plaza
1901 Chouteau Avenue
PO Box 66149
St. Louis, MO 63166-6149
314.621.3222

February 15, 2001

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Station P1-137
Washington, D.C. 20555-0001

Gentlemen:

ULNRC- 4391

DOCKET NUMBER 50-483
CALLAWAY PLANT
UNION ELECTRIC COMPANY
REVISION TO TECHNICAL SPECIFICATION 5.5.9
"STEAM GENERATOR (SG) TUBE SURVEILLANCE PROGRAM"

References:
1) ULNRC-03910, dated October 27,1998
2) ULNRC-3948, dated January 11, 1999
3) ULNRC-3955, dated January 29, 1999
4) ULNRC-03970, dated February 25, 1999
5) ULNRC-04004, dated April 7, 1999
6) ULNRC-04005, dated April 7, 1999
7) ULNRC-04034, dated May 17, 1999
8) NRC letter dated May 21, 1999

References 1 thru 7 transmitted an amendment request to revise Callaway Technical Specifications (TS) to use Electrosleeves to repair steam generator tubes. Reference 8 issued Amendment No. 132 to Facility Operating License No. NPF-30 for the Callaway Plant revising the TS to allow the repair of steam generator tubes with the Electrosleeve tube repair method. Because of the staff concerns with the qualification of non-destructive examination (NDE) techniques proposed for inservice examination of the Electrosleeves, the amendment included a two cycle operating limit that requires all steam generator tubes repaired with Electrosleeves to be removed from service at the end of two operating cycles following installation of the first Electrosleeve. Section 3.10 of the NRC Staff's Safety Evaluation for Amendment No. 132, under "Future Consideration", indicates that in order for the staff to approve Electrosleeving without limitations, another license amendment request must be submitted addressing the staff's concerns regarding the qualification of NDE techniques used for inservice examination of Electrosleeves.

In light of the above, AmerenUE herewith transmits an application for amendment to Facility Operating License No. NPF-30 for the Callaway Plant.

A001

This proposed license amendment request (LAR) would revise Technical Specification 5.5.9 to remove the two cycle operating limit and allow all steam generator tubes repaired with Electrosleeves to remain in service. The proposed change to allow the Electrosleeved tubes to remain in service is based on the evaluations and justifications presented in the attached Framatome Technologies, Inc. (FTI) topical report BAW-10219P, Revision 4. Revision 4 of this report addresses the staff concerns with the qualification of NDE techniques used for inservice examination of Electrosleeves. Section 11.0 of this report presents the NDE technologies evaluated to perform the examinations of an Electrosleeve and the procedures used to perform these examinations which were qualified using EPRI Appendix J peer reviews. It should be noted that other areas of the topical report were revised in revision 4, however AmerenUE request that the staff focus their review for this LAR submittal on Section 11.0 of the report and the Appendix J qualified NDE techniques for examination of the Electrosleeves that will remain in service.

Attachments 1 through 5 provide the required affidavit, description and assessment, markup of TS page, retyped TS page, and topical report.

It has been determined that this amendment application does not involve a significant hazards consideration as determined per 10 CFR 50.92. Pursuant to 10 CFR 51.22(b), no environmental assessment need be prepared in connection with the issuance of this amendment.

FTI has determined that information associated with the installation process for Electrosleeves is proprietary, and is thereby supported by an affidavit signed by FTI, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR 2.790. Accordingly, it is respectfully requested that the information that is proprietary to FTI be withheld from public disclosure in accordance with 10 CFR 2.790.

If you have any questions on this amendment application, please contact Mr. Dave Shafer at (314) 554-3104.

Very truly yours,

Alan C. Passwater
Manager, Corporate Nuclear Services

JMC/

Attachments: 1) Affidavit
2) Description and Assessment
3) Markup of Technical Specification page
4) Retyped Technical Specification page
5) a) Topical Report (Proprietary)
b) Topical Report (Non-proprietary)
c) Proprietary Affidavit

cc: M. H. Fletcher
Professional Nuclear Consulting, Inc.
19041 Raines Drive
Derwood, MD 20855-2432

Regional Administrator
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 400
Arlington, TX 76011-8064

Senior Resident Inspector
Callaway Resident Office
U.S. Nuclear Regulatory Commission
8201 NRC Road
Steedman, MO 65077

Mr. Jack Donohew (2)- **OPEN BY ADDRESSEE ONLY**
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
1 White Flint, North, Mail Stop OWFN 7E1
11555 Rockville Pike
Rockville, MD 20852-2738

Manager, Electric Department
Missouri Public Service Commission
P.O. Box 360
Jefferson City, MO 65102

Ron Kucera
Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

Denny Buschbaum
TU Electric
P.O. Box 1002
Glen Rose, TX 76043

Pat Nugent
Pacific Gas & Electric
Regulatory Services
P.O. Box 56
Avila Beach, CA 93424

STATE OF MISSOURI)
) S S
CITY OF ST. LOUIS)

Alan C. Passwater, of lawful age, being first duly sworn upon oath says that he is Manager, Corporate Nuclear Services for Union Electric Company; that he has read the foregoing document and knows the content thereof; that he has executed the same for and on behalf of said company with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By _____
Alan C. Passwater
Manager, Corporate Nuclear Services

SUBSCRIBED and sworn to before me this 15th day of February, 2001.

_____

GLORIA J. TAYLOR
NOTARY PUBLIC
STATE OF MISSOURI - CALLAWAY COUNTY
NOTARY SEAL
MY COMMISSION EXPIRES JUNE 21, 2003

ULNRC-4391

ATTACHMENT 2

DESCRIPTION AND ASSESSMENT

DESCRIPTION AND ASSESSMENT

1.0 INTRODUCTION

1.1 This proposed License Amendment Request (LAR) is a request pursuant to 10 CFR 50.90 to revise Technical Specification (TS) 5.5.9, "Steam Generator (SG) Tube Surveillance Program" for Callaway Plant.

1.2 Final Safety Analysis Report (FSAR) Section

There are no changes to the Callaway Plant FSAR associated with this LAR submittal.

2.0 DESCRIPTION

The proposed License Amendment would revise Administrative Controls TS 5.5.9 to remove the restriction that requires all steam generator tubes repaired with Electrosleeves to be removed from service at the end of two operating cycles following installation of the first Electrosleeve. This would allow all steam generator tubes repaired with Electrosleeves to remain in service.

3.0 BACKGROUND

The NRC issued Amendment No. 132 on May 21, 1999 to Facility Operating License No. NPF-30 for Callaway Plant revising the TS to allow the repair of steam generator tubes with the Electrosleeve tube repair method. This amendment contained a stipulation that all steam generator tubes repaired with Electrosleeves would be removed from service at the end of two operating cycles following installation of the first Electrosleeve. The reason for the two cycle operating limit was the staff concern with the qualification of non-destructive examination (NDE) techniques proposed for inservice examination of the Electrosleeves. A significant issue to be dealt with in order for the staff to approve Electrosleeving without limitations is the ultrasonic testing (UT) technique's ability to reliably depth size stress corrosion cracks to assure that structural limits are maintained. Framatome Technologies, Inc. (FTI) recently revised the topical report that was reviewed by the NRC and was the basis for Amendment No 132, i.e. BAW-10219P, Revision 3. Revision 4 of this topical report addresses the issues discussed in Section 3.10 of the NRC Staff's Safety Evaluation for Amendment No. 132 and provides the evaluation and justification for this proposed LAR.

4.0 TECHNICAL ANALYSIS

The proposed change to TS 5.5.9 is made based on the justifications and evaluations provided in topical report BAW-10219P, Revision 4. Listed below are, the remaining NRC issues that were originally raised in their May 20, 1998 letter to AmerenUE and again cited in the safety evaluation for Amendment No. 132 to be resolved and the sections of the revised report that resolve them:

- (RAI Question # 1) The UT technique's ability to reliably depth size stress corrosion cracks. - The NDE technologies evaluated to perform the examinations of an Electrosleeve are presented in Section 11.0 of the topical report. NDE inspection is required to provide specific dimensional information of an installed sleeve as well as

inservice monitoring. The NDE inspection technique must provide a means to determine the sleeve thickness, the position of the sleeve relative to the intended repair location, the presence of the sleeve-to-tube bond, quality of the sleeve installation and depth/extent of flaws in the parent tube. Taking into account the above requirements, an evaluation was performed to select and qualify an inspection technique. Ultrasonic testing (UT) was selected as the NDE inspection method for the Electrosleeve. The examination modes used during the sleeve examinations are longitudinal wave normal beam and shear wave angle beam testing. The longitudinal wave UT is used for detection and sizing of volumetric flaws, disbonds, profilometry, and combined wall thickness. ASME Code Case N-504-1, (Reference 1) was used as a reference in developing the qualification of UT as a method of Electrosleeve inspection. Samples with manufactured flaws were used to study the capabilities of UT. The electro-deposition was performed to the nominal thickness values with tapers that were approximately ½ inch in length. The various longitudinal wave UT procedures were qualified using EPRI Appendix J peer reviews. Since the volumetric flaw and disbond qualifications require the technique to accurately measure combined wall thickness, a separate Appendix J peer review was not conducted for combined wall thickness. See Section 11.0 for additional information on this issue.

- (RAI Question # 4) UT inspections from only one direction. – As part of Appendix J qualification work at EPRI, FTI demonstrated that examination data developed inspecting from one direction did not differ significantly from that developed when the inspection was performed from two directions. Based on the evidence presented and the qualification efforts at EPRI, all techniques passed industry qualification and are now qualified for use by the Appendix J program.

  The seven undersized flaws referred to in Question 4 were not used for further qualification work. The same is true of the Salem pulled tube data referenced. These samples were used to develop understanding of the problems experienced during early UT technique testing in order to aid the development of improved methods. New samples were fabricated and used for the later work, which ultimately led to Appendix J approval of the techniques.

- (RAI Question # 6) Establish a tube pull program that is both condition-based and time-based. – If any unanticipated degradation is detected in any Electrosleeve base material, AmerenUE will remove the tube for destructive examination. AmerenUE has committed to replace the current steam generators in October 2005 (Refuel 14, the first outage following the 5 EFPY timeline recommended by the NRC staff). Therefore, no time-based tube pull program will be implemented.

- (RAI Questions # 9 and 10) Limits on the size of dent that can be reliably inspected and the UT technique's ability to inspect dented intersections. – Sections 11.4.2 discusses inspection of dented tubes and concludes that the outside diameters of the UT probe and the plating anode prevent their use in severely dented tubes. The most restrictive dented condition is a single sided 0.023 inch dent deformation in a ¾ inch x 0.048 inch wall tube with an average 0.031 inch Electrosleeve. A dent which exceeded these parameters would restrict the UT probe. The ultrasonic system has been qualified for profilometry and can be used to verify acceptable free path prior to plating. The dent deformation does not affect the ability of the ultrasonic system to

detect cracking within the region surrounding the dent. See Section 11.4.2 for additional information on this issue.

Section 11.9.1 discusses outside diameter stress corrosion cracking (ODSCC) detection and extent sizing. The sample set used consisted of 18 axial and 18 circumferential ODSCC cracks. The axial cracks samples were 7/8" x 0.050" wall Alloy 600 tubes with dented tube support plate regions. The circumferential crack sample set was comprised of 10 circumferential cracks samples of 7/8" x 0.050" wall Alloy 600 tubes with dented tube support plate regions and 8 circumferential crack samples of ¾" x 0.043" wall Alloy 600 tubes with expansion transitions. The dented tube support samples and the expansion transition samples were examined before and after the application of a thin Electrosleeve repair. Both pre-sleeve and post-sleeve results were presented at the peer review to qualify the procedure for either condition. See Section 11.9.1 for additional information on this issue.

- (RAI Question # 13) Additional UT data on pits and disbonds. – The UT Appendix J qualification work required a demonstration that the techniques were applicable and accurate for the flaws represented in the EPRI database. In addition, the pitting and disbond datasets used for qualification met the requirements of the EPRI Appendix J program.

- (RAI Question # 14) The effects of honing on the Electrosleeve. – Section 10.1.5 provides additional information on the effects on honing on the Electrosleeve. If the surface is unacceptable, a honing process has been qualified. The objective of the honing process is to improve the surface finish in order to reduce the attenuation in the UT signal to acceptable levels. The surface finish has been qualified using a flexible honing tool. The average material removed equates to less that 0.0001 inch of wall thickness. Thus the hone "deburs" the peaked finish very rapidly without significant metal removal. See Section 10.5.1 for additional information on this issue.

- (RAI Question # 15) UT procedures and peer review report. – Section 11.10 provides the information on the EPRI Appendix J peer reviews for the ultrasonic procedures used to detect and size the various pre and post installation defect mechanisms.

AmerenUE believes that the additional evaluations and justifications made by Revision 4 of the topical report adequately address the NRC staff concerns with the qualification of the NDE techniques used for inservice examination of the Electrosleeved steam generator tubes. Because the ultrasonic testing procedures were qualified using EPRI Appendix J peer reviews, we feel that the UT method of inservice inspection of Electrosleeved steam generator tubes provides the degree of assurance necessary to allow the steam generator tubes repaired with Electrosleeves to remain in service beyond the two cycle operating limit.

REGULATORY ANALYSIS

5.1 No Significant Hazards Determination

AmerenUE has evaluated whether a significant hazards consideration is involved with the proposed change by focusing on the three standards set forth in 10 CFR 50.92 as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

   Response: No

   The proposed change would remove the restriction that requires all steam generator tubes repaired with Electrosleeves to be removed from service at the end of two operating cycles following installation of the first Electrosleeve. This would allow all steam generator tubes repaired with Electrosleeves to remain in service. Reference 2 concluded that there was no significant increase in the probability or consequences of an accident previously evaluated when using the Electrosleeve repair method. The two operating cycle restriction was invoked because the NRC staff concluded that the UT methods used to perform NDE for inservice examinations of the Electrosleeved tubes could not reliably depth size stress corrision cracks to ensure that structural limits are maintained.

   Revision 4 to topical report BAW-10219P has addressed the concerns that resulted in the restriction of two operating cycles and consequently, the probability of an accident previously evaluated is not significantly increased. As a result, the consequences of any accident previously evaluated are not affected.

   Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

   Response: No

   The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or a change in the methods governing plant operation. Reference 2 concluded that the use of the Electrosleeve repair method did not create the possibility of a new or different kind of accident from any accident previously evaluated when using this method to repair steam generator tubes. This proposed change removes the two operating cycle limit for the Electrosleeved tubes based on the evaluations and justifications of the NDE techniques used to perform inservice examinations of the Electrosleeved steam generator tubes provided in Revision 4 of the topical report.

   Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

   Response: No

   The proposed change does not affect the acceptance criteria for an analyzed event. The margin of safety presently provided by the structural integrity of the steam generator tubes remains unchanged. Reference 2 concluded that the use of the Electrosleeve repair method did not involve a significant reduction in a

margin of safety when using this method to repair steam generator tubes. The proposed change removes the two operating cycle limit based on the evaluations and justifications presented in Revision 4 of the topical report.

Therefore, the proposed change does not involve a reduction in a margin of safety.

Based on the above evaluations, AmerenUE concludes that the activities associated with the described change present no significant hazards consideration under the standards set forth in 10 CFR 50.92 and accordingly, a finding by the NRC of no significant hazards consideration is justified.

5.2 Regulatory Safety Analysis

Applicable Regulatory Requirements/Criteria

The regulatory basis for TS 5.5.9 is to ensure a program exists for performing inspections of the steam generator tubes to ensure the structural integrity of this portion of the reactor coolant pressure boundary will be maintained.

General Design Criterion 32, "Inspection of Reactor Coolant Pressure Boundary," of Appendix A to 10 CFR Part 50, requires that components that are part of the reactor coolant pressure boundary be designed to permit periodic inspection and testing of critical areas to assess their structural and leaktight integrity.

Regulatory Guide 1.83, Revision 1, "Inservice Inspection of Pressurized Water Reactor Steam Generator Tubes," describes a method acceptable to the NRC staff for implementing General Design Criterion 32 by reducing the probability and consequences of steam generator tube failures through periodic inservice inspection for early detection of defects and deterioration. Per FSAR Section 5.4.2.4.2 the program for inservice inspection of steam generator tubing is in accordance with the recommendations of this regulatory guide.

10 CFR 50.36(c)(5) requires that the TS include a category called "Administrative Control," that contains the provisions relating to organization and management, procedures, record keeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

Analysis

All of the regulatory requirements/criteria described above continue to be met.

Conclusion

The proposed LAR is in compliance with General Design Criterion 32, Regulatory Guide 1.83, Revision 1, and 10 CFR 50.36(c)(5).

6.0 ENVIRONMENTAL EVALUATION

AmerenUE has determined that the proposed amendment would change requirements with respect to the installation or use of a facility component located within the restricted

area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. AmerenUE has evaluated the proposed change and has determined that the change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amount of effluent that may be released offsite, or (iii) a significant increase in the individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed changes is not required.

7.0 REFERENCES

1. ASME Code Case N-504-1, "Alternative Rules for Repair of Class 1, 2, and 3 Austenitic Stainless Steel Piping."

2. ULNRC-03910, dated October 27. 1998.

ULNRC- 4391

ATTACHMENT 3

MARKUP OF TECHNICAL SPECIFICATION PAGE

5.5 Programs and Manuals

5.5.9 Steam Generator (SG) Tube Surveillance Program (continued)

j) Tube Repair refers to a process that reestablishes tube serviceability. Acceptable tube repairs will be performed by the following processes:

1) Laser welded sleeving as described in Westinghouse Technical Report WCAP-14596-P, "Laser Welded Elevated Tube Sheet Sleeves For Westinghouse Model F Steam Generators." March 1996 (W Proprietary)

2) Electrosleeving as described in Framatome Technical Report BAW - 10219P, Revision 3, 10/98, "Electrosleeving Qualifications for PWR Recirculating Steam Generator Tube Repair." The plugging or repair limit for the pressure boundary portion of Electrosleeves is determined to be 20% through wall of the nominal sleeve wall thickness (as determined by NDE). The 20% plugging or repair limit will apply to inner diameter pits in Regions B and C.

~~All steam generator tubes containing an Electrosleeve will be removed from service within 2 cycles following installation of the first Electrosleeve.~~

k) Degraded Sleeve means a sleeve containing imperfections greater than 0% but less than 20% of the nominal wall thickness caused by degradation.

2. The steam generator status shall be determined after completing the corresponding actions (plug or repair by sleeving all tubes exceeding the plugging or repair limit and all tubes containing through-wall cracks) required by Tables 5.5.9-2 and 5.5.9-3.

Reports

The contents and frequency of reports concerning the steam generator tube surveillance program shall be in accordance with Specification 5.6.10.

(continued)

ULNRC- 4391

ATTACHMENT 4

RETYPED TECHNICAL SPECIFICATION PAGE

5.5 Programs and Manuals

5.5.9 Steam Generator (SG) Tube Surveillance Program (continued)

j) Tube Repair refers to a process that reestablishes tube serviceability. Acceptable tube repairs will be performed by the following processes:

1) Laser welded sleeving as described in Westinghouse Technical Report WCAP-14596-P, "Laser Welded Elevated Tube Sheet Sleeves For Westinghouse Model F Steam Generators." March 1996 (W Proprietary)

2) Electrosleeving as described in Framatome Technical Report BAW - 10219P, Revision 3, 10/98, "Electrosleeving Qualifications for PWR Recirculating Steam Generator Tube Repair." The plugging or repair limit for the pressure boundary portion of Electrosleeves is determined to be 20% through wall of the nominal sleeve wall thickness (as determined by NDE). The 20% plugging or repair limit will apply to inner diameter pits in Regions B and C.

k) Degraded Sleeve means a sleeve containing imperfections greater than 0% but less than 20% of the nominal wall thickness caused by degradation.

2. The steam generator status shall be determined after completing the corresponding actions (plug or repair by sleeving all tubes exceeding the plugging or repair limit and all tubes containing through-wall cracks) required by Tables 5.5.9-2 and 5.5.9-3.

Reports

The contents and frequency of reports concerning the steam generator tube surveillance program shall be in accordance with Specification 5.6.10.

(continued)

FRAMATOME ANP

February 9, 2001
FANP-01-364

Mr. Alan C. Passwater
Manager, Licensing and Fuels - Nuclear
AmerenUE
1901 Chouteau Avenue
P. O. Box 66149
St. Louis, MO 63166

Subject: Topical Report BAW-10219P, Rev 04, "Electrosleeving Qualification for PWR Recirculating Steam Generator Tube Repair," December 2000.

References:
1. AmerenUE's October 27, 1998 Request for Technical Specification Amendment to Approve the Installation of Framatome Technologies Incorporated Electrosleeves "on a 2 cycle basis" in the Callaway Plant Steam Generators (TAC No. M95204).
2. Nuclear Regulatory Commission Letter (Mel Gray, Project Manager, Section 2) to Gary L. Randolph, Union Electric Company, "Amendment No. 132 to Facility Operating License No. NPF-30-Callaway Plant, Unit 1 (TAC No. MA3954)," May 21, 1999.

Dear Mr. Passwater:

This letter transmits Revision 4 of the Electrosleeve Topical which includes the requested qualification of NDE crack depth sizing. All NDE/UT procedures have been reviewed and approved as required under industry accepted EPRI Appendix J requirements. Specifically, the "Future Considerations" identified in Reference 2 (page 19) have been addressed in this revision.

Framatome ANP (formerly Framatome Technologies) has determined that a portion of this information associated with the installation process for Electrosleeves is "Proprietary," and is thereby supported by an affidavit signed by **R.W. Ganthner, Framatome ANP** (the owner of the information). This affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in 10CFR2.790. Accordingly, please submit this affidavit with your transmittal material and request that in accordance with 10CFR2.790, the NRC withhold from public disclosure the information which is Proprietary to Framatome ANP.

Please provide **Framatome ANP** a copy of your transmittal letter to the NRC, which submits this information in order for our file to be complete, and we may reference the transmittal if additional information is required.

If you have any questions, please call me at 804-832-3993.

Very truly yours,

B.S. Humphries
Senior Project Manager

BSH/lbm
Enclosures
cc: Tim Herrmann/AmerenUE
R.W. Ganthner/OF49

EXHIBITS A & B

EXHIBIT A

1. Topical Report BAW-10219P, Rev 04, "Electrosleeving Qualification for PWR Recirculating Steam Generator Tube Repair," December 2000.

EXHIBIT B

The above listed document contains information which is considered Proprietary in accordance with Criteria b, c, d and e of the attached affidavit.

AFFIDAVIT OF RAYMOND W. GANTHNER

A. My name is Raymond W. Ganthner. I am Vice-President of Engineering & Licensing for Framatome ANP, Inc. (FRA-ANP), and as such, I am authorized to execute this Affidavit.

B. I am familiar with the criteria applied by FRA-ANP to determine whether certain information of FRA-ANP is proprietary and I am familiar with the procedures established within FRA-ANP to ensure the proper application of these criteria.

C. In determining whether an FRA-ANP document is to be classified as proprietary information, an initial determination is made by the Unit Manager, who is responsible for originating the document, as to whether it falls within the criteria set forth in Paragraph D hereof. If the information falls within any one of these criteria, it is classified as proprietary by the originating Unit Manager. This initial determination is reviewed by the cognizant Section Manager. If the document is designated as proprietary, it is reviewed again by me to assure that the regulatory requirements of 10 CFR Section 2.790 are met.

D. The following information is provided to demonstrate that the provisions of 10 CFR Section 2.790 of the Commission's regulations have been considered:

(i) The information has been held in confidence by FRA-ANP. Copies of the document are clearly identified as proprietary. In addition, whenever FRA-ANP transmits the information to a customer, customer's agent, potential customer or regulatory agency, the transmittal requests the recipient to hold the information as proprietary. Also, in order to strictly limit any potential or actual customer's use of proprietary information, the substance of the following provision is included in all agreements entered into by FRA-ANP, and an equivalent version of the proprietary provision is included in all of FRA-ANP's proposals:

"Any proprietary information concerning Company's or its Supplier's products or manufacturing processes which is so designated by Company or its Suppliers and disclosed to Purchaser incident to the performance of such contract shall remain the property of Company or its Suppliers and is disclosed in confidence, and Purchaser shall not publish or otherwise disclose it to others without the written approval of Company, and no rights, implied or otherwise, are granted to produce or have produced any products or to practice or cause to be practiced any manufacturing processes covered thereby.

Notwithstanding the above, Purchaser may provide the NRC or any other regulatory agency with any such proprietary information as the NRC or such other agency may require; provided, however, that Purchaser shall first give Company written notice of such proposed disclosure and Company shall have the right to amend such proprietary information so as to make it non-proprietary. In the event that Company cannot amend such proprietary information, Purchaser shall prior to disclosing such information, use its best efforts to obtain a commitment from NRC or such other agency to have such information withheld from public inspection.

Company shall be given the right to participate in pursuit of such confidential treatment."

(ii) The following criteria are customarily applied by FRA-ANP in a rational decision process to determine whether the information should be classified as proprietary. Information may be classified as proprietary if one or more of the following criteria are met:

a. Information reveals cost or price information, commercial strategies, production capabilities, or budget levels of FRA-ANP, its customers or suppliers.

b. The information reveals data or material concerning FRA-ANP research or development plans or programs of present or potential competitive advantage to FRA-ANP.

c. The use of the information by a competitor would decrease his expenditures, in time or resources, in designing, producing or marketing a similar product.

d. The information consists of test data or other similar data concerning a process, method or component, the application of which results in a competitive advantage to FRA-ANP.

e. The information reveals special aspects of a process, method, component or the like, the exclusive use of which results in a competitive advantage to FRA-ANP.

f. The information contains ideas for which patent protection may be sought.

The document(s) listed on Exhibit "A", which is attached hereto and made a part hereof, has been evaluated in accordance with normal FRA-ANP procedures with respect to classification and has been found to contain information which falls within one or more of the criteria enumerated above. Exhibit "B", which is attached hereto and made a part hereof, specifically identifies the criteria applicable to the document(s) listed in Exhibit "A".

(iii) The document(s) listed in Exhibit "A", which has been made available to the United States Nuclear Regulatory Commission was made available in confidence with a request that the document(s) and the information contained therein be withheld from public disclosure.

(iv) The information is not available in the open literature and to the best of our knowledge is not known by General Electric, Westinghouse-CE, or other current or potential domestic or foreign competitors of FRA-ANP.

(v) Specific information with regard to whether public disclosure of the information is likely to cause harm to the competitive position of FRA-ANP, taking into account the value of the information to FRA-ANP; the amount of effort or money expended by FRA-ANP developing the information; and the ease or difficulty with which the information could be properly duplicated by others is given in Exhibit "B".

E. I have personally reviewed the document(s) listed on Exhibit "A" and have found that it is considered proprietary by FRA-ANP because it contains information which falls within one or more of the criteria enumerated in Paragraph D, and it is information which is customarily held in confidence and protected as proprietary information by FRA-ANP. This report

comprises information utilized by FRA-ANP in its business which affords FRA-ANP an opportunity to obtain a competitive advantage over those who may wish to know or use the information contained in the document(s).

RAYMOND W. GANTHNER

State of Virginia)
) SS. Lynchburg
City of Lynchburg)

Raymond W. Ganthner, being duly sworn, on his oath deposes and says that he is the person who subscribed his name to the foregoing statement, and that the matters and facts set forth in the statement are true.

RAYMOND W. GANTHNER

Subscribed and sworn before me
this 9th day of February 2001.

Brenda C. Maddox
Notary Public in and for the City
of Lynchburg, State of Virginia.
(I was commissioned a notary public as Brenda C. Cardona.

My Commission Expires July 31, 2003

EXHIBITS A& B

EXHIBIT A

Topical Report BAW-10219P, Rev. 04, "Electrosleeving Qualification for PWR Recirculating Steam Generator Tube Repair," dated December 2000.

EXHIBIT B

The above listed document contains information, which is considered Proprietary in accordance with Criteria b, c, d and e of the attached affidavit.