



ARKANSAS POWER & LIGHT COMPANY

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May 10, 1985

1CAN058503

Director of Nuclear Reactor Regulation
ATTN: Mr. J. F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, DC 20555

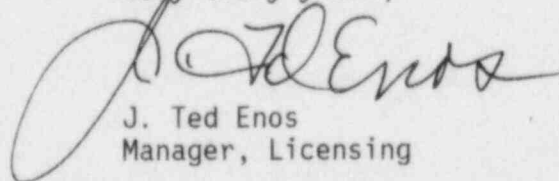
SUBJECT: Arkansas Nuclear One - Unit 1
Docket No. 50-313
License No. DPR-51
OTSG Sleeved Tube Inspection

Gentlemen:

In response to your letter of February 28, 1985 the attached information is provided pertaining to Once Through Steam Generator (OTSG) sleeved tube inspection.

A portion of the attached information (B&W document 1154552, Rev. 0) is considered proprietary to Babcock & Wilcox and per the provisions of 10CFR2.790 they have requested that it be withheld from public disclosure. To accommodate this request, we have included five copies of both a proprietary and non-proprietary version of this material and an affidavit from B&W identifying their reasons for considering this material proprietary.

Very truly yours,



J. Ted Enos
Manager, Licensing

JTE/DEJ

Attachments

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PDR ADOCK 05000313
P PDR

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Attachment

Question 1

Describe the research and development programs that AP&L will use to ensure that state of the art technology will be utilized in the inspection program for the sleeved tubes.

Response:

Since it is highly desirable, from an enhanced detection standpoint, to maintain continuity of Eddy Current Test (ECT) analysis, AP&L intends to coordinate the evaluation of ECT techniques for the inspection of sleeved tubes with Babcock and Wilcox (B&W), our primary vendor for these services. However, AP&L plans to stay abreast of other ECT vendors' capabilities, and of the industry's efforts in this area to provide input into the B&W evaluation and to identify alternate inspection vendors, particularly if proprietary methods/equipment are involved.

On behalf of AP&L and its other clients, B&W has begun a Research and Development Project entitled "Development of ECT Techniques for OTSG Sleeve/Tube." This program, which AP&L will actively be participating in, is summarized as follows:

Phase 1

- 1) Review drawings and critical dimensions regarding the geometry of the parent tube/sleeve configuration.
- 2) Design calibration standards and inspection samples to be used for technique evaluation and/or development.
- 3) Obtain samples and review as-built dimensions.
- 4) Survey probe and equipment vendors for the best suited hardware for this application. Identify the equipment most appropriate for further detailed evaluation. At this point, the leading contenders for this evaluation are cross wound probes and larger ferrite core probes.
- 5) Obtain probes as identified in 4 above.
- 6) Perform evaluations using hardware obtained in 5 above and modified techniques. Improvements to be evaluated here include such areas as optimization of two frequency mixes, and evaluation of three frequency mixes.
- 7) Evaluate results and document. Identify further evaluations which may be necessary on additional equipment, including design of new equipment and modification of existing components (Phase II).

- 8) Obtain an Independent Review of evaluations performed in Phase I.

This portion of the program is anticipated to be completed in late summer (1985).

If improved methods of evaluating sleeved tubes are not identified during Phase I the following Phase II will be implemented.

Phase II

- 1) Define specifications of new probe design and/or identify other enhancement and/or equipment available from outside vendors.
- 2) Construct probes and/or obtain equipment identified from 1 above.
- 3) Perform evaluations of equipment obtained from 2 above.
- 4) Obtain Independent Review of Phase II.

This phase, if necessary, is tentatively scheduled for completion during the Fall of 1985.

Question 2

Discuss the anticipated problem areas in the inspection of the sleeves and describe work which will be done to mitigate these problem areas.

Response:

There are two problem areas in the inspection of sleeved tubes, whether installed in OTSG or U-tube generators, the first is the rolled transition zones where the joints are made and the second is the parent tube at the sleeve's end. Both problems are related to the change in tube/sleeve diameters. The main problem area is the inspection of the parent tube at the sleeve's end, due to the abruptness of this transition. However, this is an area that is not mechanically affected by the installation of sleeves and which has historically, in the case of ANO-1, not experienced defects.

The primary purpose of the R&D effort described above in response to question 1 will be to address these areas. The methods being explored are specifically targeted at suppressing the effects of diameter transition so that it does not interfere with the tube/sleeve inspection.

Question 3

Provide the reference for the data cited in the attachment to your December 14, 1984, letter concerning the Babcock and Wilcox demonstration of the capabilities of the MIZ 18 System.

Response:

The data cited in our December 14, 1984 response, pertaining to the capabilities of the MIZ 18 system, was obtained from the attached B&W document 1154552, Rev. 0, "Baseline Inspection of OTSG Sleeved Tubes."

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AFFIDAVIT OF JAMES H. TAYLOR

- A. My name is James H. Taylor. I am Manager of Licensing Services in the Nuclear Power Division of Babcock & Wilcox, and as such I am authorized to execute this Affidavit.
- B. I am familiar with the criteria applied by Babcock & Wilcox to determine whether certain information of Babcock & Wilcox is proprietary and I am familiar with the procedures established within Babcock & Wilcox, particularly the Nuclear Power Division, to ensure the proper application of these criteria.
- C. In determining whether a Babcock & Wilcox 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 Licensing personnel and other management within Nuclear Power Division as designated by the Manager of Licensing Services 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 the Babcock & Wilcox Company. Copies of the document are clearly identified as proprietary. In addition, whenever Babcock & Wilcox 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 following

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provision is included in all proposals submitted by Babcock & Wilcox, and an applicable version of the proprietary provision is included in all of Babcock & Wilcox's contracts:

"Purchaser may retain Company's Proposal for use in connection with any contract resulting therefrom, and, for that purpose, make such copies thereof as may be necessary. Any proprietary information concerning Company's or its Suppliers' 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.

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

- (ii) The following criteria are customarily applied by Babcock & Wilcox 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 Babcock & Wilcox, its customers or suppliers.
 - b. The information reveals data or material concerning Babcock & Wilcox research or development plans or programs of present or potential competitive advantage to Babcock & Wilcox.
 - 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 Babcock & Wilcox.
 - 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 Babcock & Wilcox.
 - f. The information contains ideas for which patent protection may be sought.

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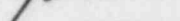
The document(s) listed on Exhibit "A", which is attached hereto and made a part hereof, has been evaluated in accordance with normal Babcock & Wilcox procedures with respect to classification and has been found to contain information which falls within one or more of the criteria enumerated above. Exhibit "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 Combustion Engineering, EXXON, General Electric, Westinghouse or other current or potential domestic or foreign competitors of B&W.
- (v) Specific information with regard to whether public disclosure of the information is likely to cause harm to the competitive position of Babcock & Wilcox, taking into account the value of the information to Babcock & Wilcox; the amount of effort or money expended by Babcock & Wilcox 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 Babcock & Wilcox 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 Babcock & Wilcox. This report comprises information utilized by Babcock & Wilcox in its business which afford Babcock & Wilcox an opportunity to obtain a competitive advantage over

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those who may wish to know or use the information contained in the document(s).


JAMES H. TAYLOR

State of Virginia)
City of Lynchburg) SS. Lynchburg

James H. Taylor, 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.

James H. Taylor
JAMES H. TAYLOR

Subscribed and sworn before me
this 7th day of May 1985.

Naomi N. Cox

Notary Public in and for the City
of Lynchburg, State of Virginia

My Commission Expires April 15, 1988

EXHIBIT A

"Baseline Inspection of
OTSG Sleeved Tubes"

Document No. 1154552A-0, 11/26/84

EXHIBIT B

<u>Document</u>	<u>Criteria</u>
1154552A-0, 11/26/84	b, c, d, e, f