

Log # TXX-99121
File # 10119
Ref. # Bulletin 88-02

July 21, 1999

C. Lance Terry
*Senior Vice President
& Principal Nuclear Officer*

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) - UNIT 1
DOCKET NOS. 50-445
NRC BULLETIN 88-02
RAPIDLY PROPAGATING FATIGUE CRACKS IN STEAM GENERATOR TUBES

- REF: 1) NRC Bulletin 88-02, "Rapidly Propagating Fatigue Cracks in Steam Generator Tubes", dated February 5, 1988.
- 2) TXU Electric letter, logged TXX-88330, from C. L. Terry to the NRC dated March 23, 1988

TXU Electric¹ responded to the NRC Bulletin 88-02 (Reference 1) via Reference 2. The response to Item B stated that, "[F]uture eddy current test results for the Unit 1 steam generators will be examined for denting at the upper tube support plate as defined in Item A of the bulletin. These eddy current inspections will be conducted as per the requirements of the CPSES Technical Specifications. Should evidence of denting be found, the requirements of Bulleting Item C will be implemented".

TXU Electric wishes to supplement Reference 2 with the following information:

An evaluation of the potential for high cycle fatigue rupture of a steam generator tube, similar to that which occurred at North Anna Unit 1, has been performed for Comanche Peak Unit 1 [CPSE's Unit 2 steam generators are D5, and were not included in this evaluation]. Consistent with the requirements of NRC Bulletin 88-02, the anti-vibration bar configuration of the ruptured tube in North Anna, R9C51 S/G C, is used as the reference case for the tube fatigue usage calculations for Comanche Peak Unit 1. The acceptability of unsupported tubes in the steam generators is based on tube specific analysis relative to the North Anna Unit 1 R9C51 tube, including the relative flow peaking factors. This evaluation was documented in WCAP-15009, Revision 0,

¹ TXU Electric was formerly TU Electric. A license amendment request (LAR 99-003) was submitted per TXX-99122, dated May 14, 1999, to revise the company name contained in the CPSES operating licenses.

COMANCHE PEAK STEAM ELECTRIC STATION
Glen Rose, Texas 76043-1002

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"Comanche Peak Unit 1 Evaluation for Tube Vibration Induced Fatigue". Based upon the results of the fatigue analysis, all steam generator tubes except for two tubes in steam generator 3 are shown by calculation not to have the potential to experience high cycle fatigue failure similar to that which occurred at North Anna Unit 1. Those two tubes, R10C109 and R11C109, had cable dampers and plugs installed during the last refueling outage, which was the sixth refueling outage (1RF06). As a result of installing these cable dampers and plugs, no additional action is required for these tubes. This completes all the actions required by TXU Electric for the steam generators in CPSES Unit 1 as required by reference 1.

WCAP-15009, Revision 0, and WCAP-15010, "Comanche Peak Unit 1 Evaluation for Tube Vibration Induced Fatigue," which are the proprietary and non-proprietary versions of the evaluation are being forwarded for your review.

Additionally, enclosed as Attachment 1 is a Westinghouse proprietary authorization letter CAW-99-1342, accompanying affidavit, Proprietary Information Notice, and Copyright Notice.

As Enclosure 2, WCAP-15009 contains information proprietary to Westinghouse Electric Company, LLC, ("Westinghouse"), it is supported by an affidavit signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the NRC and addresses with specificity the consideration listed in paragraph (b)(4) of Section 2.790 of the 10CFR50.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10CFR50 Section 2.790.

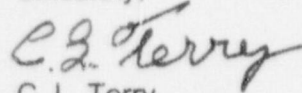
Correspondence with respect to the copyright or proprietary aspects of the enclosed WCAP's or the supporting Westinghouse affidavit should reference CAW-99-1342 and should be addressed to J. S. Galembush, Acting Manager of Regulatory and Licensing Engineering, Westinghouse Electric Company, LLC ("Westinghouse"), P.O. Box 355, Pittsburgh Pennsylvania 15230-0335.

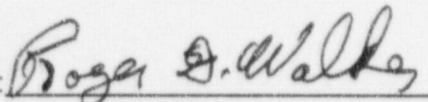
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Should you have any questions regarding this matter, please contact Obaid Bhatti at (254) 897-5839 to coordinate this effort.

This communication contains no new licensing basis commitments regarding CPSES Units 1.

Sincerely,


C. L. Terry

By: 
Roger D. Walker
Regulatory Affairs Manager

OAB/oab
Attachment 1. Westinghouse Affidavit CAW-99-1342
Enclosures 1. TXX-88330
2. WCAP-15010
3. WCAP-15009

cc: E. W. Merschoff, Region IV
J. I. Tapia, Region IV
D. H. Jaffe, NRR
Resident Inspectors, CPSES

Attachment 1

Westinghouse Letter CAW-99-1342

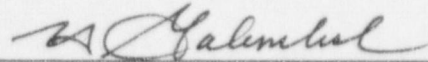
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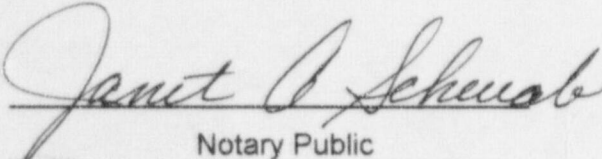
COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared J. S. Galembush, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC ("Westinghouse"), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

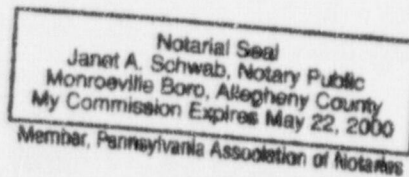


John S. Galembush, Acting Manager
Regulatory and Licensing Engineering

Sworn to and subscribed
before me this 1st day
of July, 1999



Notary Public



- (1) I am Acting Manager, Regulatory and Licensing Engineering, in the Nuclear Services Division, of the Westinghouse Electric Company LLC ("Westinghouse"), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rulemaking proceedings, and am authorized to apply for its withholding on behalf of the Westinghouse Electric Company LLC.
- (2) I am making this Affidavit in conformance with the provisions of 10CFR Section 2.790 of the Commission's regulations and in conjunction with the Westinghouse application for withholding accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by the Westinghouse Electric Company LLC in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
 - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.
- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
 - (b) It is information which is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
 - (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.
 - (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10CFR Section 2.790, it is to be received in confidence by the Commission.
 - (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.

- (v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in "Comanche Peak Unit 1 Evaluation for Tube Vibration Induced Fatigue, "WCAP-15009 (Proprietary), December, 1997 for the Comanche Peak Unit 1 Nuclear Plant, being transmitted by TU Electric letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk, Attention Mr. Samuel J. Collins. The proprietary information as submitted for use by TU Electric Company for the Comanche Peak Unit 1 Nuclear Plant is expected to be applicable in other licensee submittals in response to certain NRC requirements for justification of the use of tube vibration induced fatigue analysis in steam generators.

This information is part of that which will enable Westinghouse to:

- (a) Provide documentation of the methods for the application of tube vibration induced fatigue evaluation.
- (b) Establish applicable testing methods.
- (c) Establish applicable codes and standards which are to be applied to the process.
- (d) Assist the customer to obtain NRC approval.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for purposes of meeting NRC requirements for licensing documentation.
- (b) Westinghouse can sell support and defense of the technology to its customers in the licensing process..

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar services and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the developing testing and analytical methods and performing tests.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.790 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) contained within parentheses located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.790(b)(1).

COPYRIGHT NOTICE

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.790 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.