

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**RICHMOND, VIRGINIA 23261**

November 29, 2001

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

Serial No. 01-638C  
NL&OS/ETS R0  
Docket No. 50-339  
License No. NPF-7

Gentlemen:

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**NORTH ANNA POWER STATION UNIT 2**  
**ALTERNATIVE REPAIR TECHNIQUES-RELIEF REQUESTS NDE-048 AND NDE-049**  
**REQUEST FOR ADDITIONAL INFORMATION**

In an October 18, 2001 letter (Serial No. 01-638) Virginia Electric and Power Company (Dominion) requested relief from specific ASME Code requirements in order to repair penetrations (RVHPs) in the North Anna Unit 2 reactor vessel head. Additional information was provided to support the NRC staff's review in letters dated November 9 and 16, 2001. In a telephone conference call on November 16, 2001, the NRC staff requested additional clarification of the NDE that would be performed on the repair welds. Accordingly, the following clarifications are provided:

- Relative to the required sequence of NDE for the proposed temperbead repairs (NDE-049), when excavations with existing indications are embedded using the temperbead technique the repair weld will be inspected by liquid penetrant (PT) at 1/2 the excavation depth or 1/2 inch, whichever is less, and on the final layer prior to overlaying the J-groove weld with Alloy 52. The PT of the temperbead repair will be conducted no sooner than 48 hours after the weld returns to ambient temperature. The final layer of the Alloy 52 overlay will also be PT inspected.
- The successive examination proposed in the embedded flaw relief request (NDE-048) will include UT examination of the outside diameter of the penetration above the J-groove weld, as well as the portion of the penetration tube along the fusion line between the penetration tube and the J-groove weld.

Also, in our letter dated November 16, 2001 (Serial No. 01-638B), Dominion committed to provide a copy of WCAP-14552, "Structural Integrity Evaluation of Reactor Vessel Upper Head Penetrations to Support Continued Operation: North Anna and Surry Units." Hence, a proprietary (WCAP-14552, Revision 2) and a non-proprietary (WCAP-15770, Revision 0) version of the report are provided in Attachments 1 and 2

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respectively. In order to conform with the requirements of 10 CFR 2.790 concerning the protection of proprietary information, the information which is proprietary in the proprietary version is contained within brackets. Where the proprietary information has been deleted in the non-proprietary version, only the brackets remain (i.e., the information that was contained within the brackets in the proprietary version has 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 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).

Attachment 3 to this letter provides Westinghouse letter CAW-01-1498, dated November 20, 2001, "Application for Withholding Proprietary Information from Public Disclosure," with Affidavit CAW-01-1498 affirming the proprietary nature of the document, and Attachment 4 includes Westinghouse's Copyright Notice for the reports.

If you have any questions or require additional information, please contact us.

Very truly yours,

A handwritten signature in black ink, appearing to read "L. Hartz", with a stylized flourish at the end.

Leslie N. Hartz  
Vice President - Nuclear Engineering

#### Attachments

1. WCAP-14552, Revision 2, "Structural Integrity Evaluation of Reactor Vessel Head Penetrations to Support Continued Operation: North Anna and Surry Units." (Proprietary)
2. WCAP-15770, Revision 0, "Structural Integrity Evaluation of Reactor Vessel Head Penetrations to Support Continued Operation: North Anna and Surry Units." (Non-Proprietary)
3. Application for Withholding Proprietary Information from Public Disclosure, (CAW-01-1498) with Affidavit CAW-01-1498
4. Copyright Notice

cc: U.S. Nuclear Regulatory Commission (Attachments 2, 3, 4)  
Region II  
Sam Nunn Atlanta Federal Center  
61 Forsyth St., SW, Suite 23T85  
Atlanta, Georgia 30303-8931

Mr. M. J. Morgan (Attachments 1, 3, 4)  
NRC Senior Resident Inspector  
North Anna Power Station

Mr. J. E. Reasor, Jr. (Attachments 2, 3, 4)  
Old Dominion Electric Cooperative  
Innsbrook Corporate Center, Suite 300  
4201 Dominion Blvd.  
Glen Allen, Virginia 23060

Mr. M. M. Grace (Attachments 2, 3, 4)  
Authorized Nuclear Inspector  
North Anna Power Station



Westinghouse Electric Company LLC

Box 355  
Pittsburgh Pennsylvania 15230-0355

November 20, 2001

CAW-01-1498

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

Attention: Mr. Samuel J. Collins

APPLICATION FOR WITHHOLDING PROPRIETARY  
INFORMATION FROM PUBLIC DISCLOSURE

Subject: WCAP-14552, Revision 2, "Structural Integrity Evaluation of Reactor Vessel Upper Head Penetrations to Support Continued Operation for North Ann and Surry Units", (Proprietary)  
November 2001

Dear Mr. Collins:

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-01-1498 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, 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 Section 2.790 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying Affidavit by Dominion.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-01-1498 and should be addressed to the undersigned.

Very truly yours,

H. A. Sepp, Manager  
Regulatory and Licensing Engineering

Enclosures

cc: M. Scott/NRR/OWFN/DRPW/PDIV2 (Rockville, MD) 1L

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

ss

COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared Henry A. Sepp, Manager, 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:



A handwritten signature of Henry A. Sepp in black ink.

Henry A. Sepp, Manager

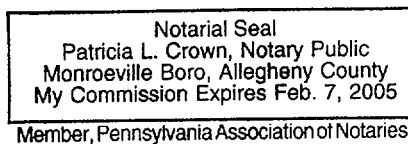
Regulatory and Licensing Engineering

Sworn to and subscribed

before me this 21st day  
of November, 2001

A handwritten signature of Patricia L. Crown in black ink.

Notary Public



- (1) I am Manager, Regulatory and Licensing Engineering, in Nuclear Services 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 WCAP-14552, Revision 2, "Structural Integrity Evaluation of Reactor Vessel Upper Head Penetrations to Support Continued Operation for North Anna and Surry Units". (Proprietary) November 2001. This information is being transmitted by Dominion 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 Dominion for the North Anna and Surry



Units is expected to be applicable in other licensee submittals in response to certain NRC requirements for justification of the use of fracture mechanics analyses to support continued safe operation of North Anna and Surry Units with the presence of a crack in a control rod drive head penetration.

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

- (a) Determine the allowable time of safe operation if cracks are found.
- (b) Assist the customer to obtain NRC approval.

Further this information has substantial commercial value as follows:

- (a) Westinghouse's 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 continued safe operation with the presence of cracks in a control rod drive head penetration.

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 licensing support documentation 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 design programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended for developing testing and analytical methods and performing tests.

Further the deponent sayeth not.

**Attachment 4**

**Westinghouse Copyright Notice**

**North Anna Power Station Unit 2  
Virginia Electric and Power Company  
(Dominion)**

## 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.