

Guy G. Campbell  
Vice President - Nuclear

419-321-8588  
Fax: 419-321-8337

Attachment Contains Restricted  
Material Per 10 CFR 2.790

Docket Number 50-346

License Number NPF-3

Serial Number 2744

October 30, 2001

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

Subject: Transmittal of Results of Reactor Pressure Vessel Head Control Rod Drive  
Mechanism Nozzle Penetration Visual Examinations for the Davis-Besse  
Nuclear Power Station

Ladies and Gentlemen:

During a public meeting between the Davis-Besse Nuclear Power Station (DBNPS) staff and the Nuclear Regulatory Commission (NRC) staff on October 24, 2001, concerning the FirstEnergy Nuclear Operating Company (FENOC) response (letter Serial Number 2731, dated September 4, 2001) to NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles," the DBNPS staff committed to provide pictorial documentation of the visual examinations of the reactor pressure vessel head performed during the DBNPS 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> refueling outages. This documentation is provided in Attachment 1 as the DBNPS report, "Results of Visual Examination of Reactor Head CRDM Nozzle Penetration Performed During 1996, 1998, and 2000."

This report is considered to be restricted by the FENOC and is requested to be withheld from public disclosure pursuant to 10 CFR 2.790. An affidavit complying with the requirements of 10 CFR 2.790 is provided in Attachment 2 citing the basis for this report to be withheld from public disclosure.

The inspections performed during the 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> Refueling Outage (10RFO, conducted April 8 to June 2, 1996; 11RFO, conducted April 10, to May 23, 1998; and,

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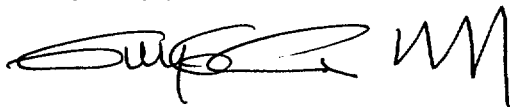
12RFO, conducted April 1 to May 18, 2000) consisted of a whole head visual inspection of the RPV head in accordance with the DBNPS Boric Acid Corrosion Control Program pursuant to Generic Letter 88-05, "Boric Acid Corrosion of Carbon Steel Reactor Pressure Boundary Components in PWR Plants." The visual inspections were conducted by remote camera and included below insulation inspections of the RPV bare head such that the Control Rod Drive Mechanism (CRDM) nozzle penetrations were viewed. During 10RFO, 65 of 69 nozzles were viewed, during 11RFO, 50 of 69 nozzles were viewed, and during 12RFO, 45 of 69 nozzles were viewed. It should be noted that 19 of the obscured nozzles in 12RFO were also those obscured in 11RFO. Following 11RFO, the RPV head was mechanically cleaned in localized areas as limited by the service structure design. Following 12RFO, the RPV head was cleaned with demineralized water to the extent possible to provide a clean head for evaluating future inspection results.

The affected areas of accumulated boric acid crystal deposits were video taped, and have subsequently been reviewed with specific focus on boric acid crystal deposits with reference to the CRDM nozzle penetration leakage as previously observed at the Oconee Nuclear Station, Unit 3 (ONS-3) and at Arkansas Nuclear One, Unit 1 (ANO-1). During the 12RFO inspection, 24 of the 69 nozzles were obscured by boric acid crystal deposits that were clearly attributable to leaking motor tube flanges from the center CRDMs. A further subsequent review of the video tapes has been conducted and the results of this review did not identify any boric acid crystal deposits that would have been attributed to leakage from the CRDM nozzle penetrations, but were indicative of CRDM flange leakage.

The aforementioned video taped images of areas of accumulated boric acid crystal deposits have been converted to photographic images and are contained in the attached report.

If you have any questions or require further information, please contact Mr. David H. Lockwood, Manager-Regulatory Affairs at (419) 321-8450.

Very truly yours,



Enclosure  
Attachments

cc: J. E. Dyer, Regional Administrator, NRC Region III  
S. P. Sands, DB-1 NRC/NRR Project Manager  
D. S. Simpkins, DB-1 Acting Senior Resident Inspector  
Utility Radiological Safety Board

Docket Number 50-346  
License Number NPF-3  
Serial Number 2744  
Attachment 2  
Page 1 of 1

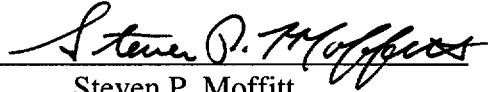
10 CFR 2.790 Affidavit

(2 pages follow)


AFFIDAVIT OF STEVEN P. MOFFITT

- A. My name is Steven P. Moffitt. I am Director – Technical Services for FirstEnergy Nuclear Operating Company (“FENOC”) at the Davis-Besse Nuclear Power Station, Unit 1 (“DBNPS-1”), and as such, I am authorized to execute this Affidavit.
- B. I am familiar with the criteria applied by FENOC to determine whether certain FENOC information is proprietary and I am familiar with the procedures established with FENOC to ensure the proper application of these criteria.
- C. I am familiar with the FENOC information included in the DBNPS-1 Tenth Refueling Outage, Eleventh Refueling Outage, and Twelfth Refueling Outage Reactor Vessel Head Inspection photographs and hereto referred to as “Photographs”. Information contained in these Photographs has been classified by FENOC as **Restricted** in accordance with the policies established by FENOC for the control and protection of confidential and proprietary information.
- D. These Photographs are being made available to the U.S. Nuclear Regulatory Commission in confidence with a statement that it is **Restricted** information and a request that the information contained in these Photographs be withheld from public disclosure.
- E. The following information is provided to demonstrate that the provisions of the Code of Federal Regulations, Title 10 – Energy, Part 2, Section 790 have been considered in the confidential and commercial classification of these Photographs as **Restricted**:
- (i) These Photographs have been held in confidence by FENOC. Copies of these Photographs are clearly marked as **Restricted**.
  - (ii) These Photographs contain information of a proprietary and confidential nature and is of the type customarily held in confidence by FENOC and not made available to the public.
  - (iii) These Photographs are being transmitted to the U.S. Nuclear Regulatory Commission in confidence.
  - (iv) These Photographs are not available in public sources.
  - (v) These Photographs contain confidential and commercial information regarding the material condition of certain components of the DBNPS-1 that can be subject to future negotiated commercial purchase agreements with a vendor(s) external to FENOC. The information provided on these Photographs is of a nature that cannot be acquired or duplicated by others.
- F. In accordance with FENOC’s policies governing the protection and control of information, **Restricted** information contained in these Photographs has been made available, on a limited basis, outside FENOC only as required and under suitable non- disclosure agreement providing limited use of the information.

- G. FENOC requires that **Restricted** information contained in these Photographs be kept in a secured file or area and distributed only on a need-to-know basis.
- H. The foregoing statements are true and correct to the best of my knowledge, information, and belief.

By:   
Steven P. Moffitt

Affirmed and subscribed before me this 30th Day of October, 2001.

  
Notary Public, State of Ohio  
My Commission Expires August 16, 2006

Docket Number 50-346  
License Number NPF-3  
Serial Number 2744  
Attachment 3  
Page 1 of 1

**Commitment List**

The following list identifies those actions committed to by the Davis-Besse Nuclear Power Station (DBNPS) in this document. Any other actions discussed in the submittal represent intended or planned actions the DBNPS. They are described only for information and are not regulatory commitments. Please notify the Manager - Regulatory Affairs (419-321-8450) at the DBNPS of any questions regarding this document or associated regulatory commitments.

**COMMITMENTS**

**DUE DATE**


None

Docket Number 50-346  
License Number NPF-3  
Serial Number 2744  
Enclosure  
Page 1 of 1

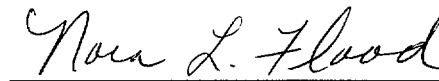
SUPPLEMENTAL INFORMATION  
IN RESPONSE TO  
NRC BULLETIN 2001-01  
FOR  
DAVIS-BESSE NUCLEAR POWER STATION  
UNIT NUMBER 1

This letter is submitted pursuant to 10 CFR 50.54(f) and contains supplemental information concerning the response (Serial 2731, dated September 4, 2001) to NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles," for the Davis-Besse Nuclear Power Station, Unit Number 1.

I, Guy G. Campbell, state that (1) I am Vice President - Nuclear of the FirstEnergy Nuclear Operating Company, (2) I am duly authorized to execute and file this certification on behalf of the Toledo Edison Company and The Cleveland Electric Illuminating Company, and (3) the statements set forth herein are true and correct to the best of my knowledge, information and belief.

By:   
Guy G. Campbell, Vice President - Nuclear

Affirmed and subscribed before me 30th day of October, 2001.

  
Notary Public, State of Ohio - Nora L. Flood  
My commission expires September 4, 2002.