your energy partner
OPPD
Omaha Public Power District

444 South 16th Street Mall
Omaha NE 68102-2247

October 24, 2003
LIC-03-0146

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

References:
1. Docket No. 50-285
2. American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, 1989 Edition and 1998 Edition through 2000 Addendum
3. ASME Section XI, Appendix VIII

Subject: Relief Request Pertaining to Reactor Vessel Nozzle Inspections for Third 10-Year Interval

In accordance with 10 CFR 50.55a(a)(3)(i), FCS is requesting relief for the third ten-year interval from inservice inspection requirements of the 1989 Edition no Addenda, Section XI of the ASME Boiler and Pressure Vessel Code for the surface examination of Class 1, Reactor Pressure Vessel (RPV) nozzle-to-safe end welds. The examination requirement is for a surface and volumetric examination of ASME Section XI, Examination Category B-F, "Pressure Retaining Dissimilar Metal Welds", Item No. B5.10, "Reactor Vessel NPS 4 or Larger."

FCS proposes to implement the requirements consistent with ASME Code Case N-615, "Ultrasonic Examination as a Surface Examination Method for Category B-F and B-J Piping Welds." FCS would implement the Code Case N-615 for the surface examinations for the six (6) Reactor Pressure Vessel nozzle-to-safe end dissimilar metal welds, category B-F, item B5.10 for nozzle inspections performed during the 2003 refueling outage.

Pursuant to 10 CFR 2.790, OPPD requests that the proprietary information herein be withheld from public disclosure. Framatome ANP, INC considers this information to be proprietary as justified in the supporting affidavit (Attachment B). Attachments C and D are the Framatome proprietary documents. The non-proprietary versions of Attachments C and D, Attachments E and F, and Attachments C and D with the proprietary information enclosed in brackets are in preparation and will be submitted separately by November 24, 2003.

A047

FCS requests approval of the proposed Relief Request, RR-9, by May 15, 2004.

Commitments made to the NRC in this letter are listed in Attachment G. If you have any questions or require additional information, please contact Dr. R. L. Jaworski at (402) 533-6833.

Sincerely,

R J Phelps 10-24-03

R. L. Phelps
Division Manager
Nuclear Engineering

RLP/rlj

Attachments:
A) Fort Calhoun Station Relief Request
B) Affidavit from Framatome ANP, Inc Supporting Proprietary Nature of Referenced Documents
C) Proprietary Version of Framatome Report 54-PQ-189-01, Results from ID & OD Clad Safe-end Mockup Block Demonstration for Fort Calhoun
D) Proprietary Version of Framatome Procedure Number 54-ISI-189-00 ID Automated Ultrasonic Examination of Welds for Detection of OD Initiated Flaws
E) Non-Proprietary Version of Framatome Report 54-PQ-189-01, Results from ID & OD Clad Safe-end Mockup Block Demonstration for Fort Calhoun
F) Non-Proprietary Version of Framatome Procedure Number 54-ISI-189-00 ID Automated Ultrasonic Examination of Welds for Detection of OD Initiated Flaws
G) Commitment Summary

c: B. S. Mallett, NRC Regional Administrator, Region IV (w/o attachments)
A. B. Wang, NRC Project Manager
J. G. Kramer, NRC Senior Resident Inspector (w/o attachments)

ATTACHMENT A

Fort Calhoun Station
Relief Request

Use of Code Case N-615
Surface Examination Method
for
RPV Nozzle-to-Safe End Welds

ISI Relief Request RR-9

Use of Code Case N-615 Surface Examination Method for RPV Nozzle-to-Safe End Welds

System: Reactor Vessel **Class 1**
Category: B-F **Item No.: B5.10**

ALTERNATIVE EXAMINATION REQUIREMENTS:

In accordance with 10 CFR 50.55a(a)(3)(i), FCS is requesting relief for the third ten-year interval from inservice inspection requirements of the 1989 Edition no Addenda, Section XI of the ASME Boiler and Pressure Vessel Code for the surface examination of Class 1, Reactor Pressure Vessel (RPV) nozzle-to-safe end welds. The examination requirement is for a surface and volumetric examination of ASME Section XI, Examination Category B-F, "Pressure Retaining Dissimilar Metal Welds", Item No. B5.10, "Reactor Vessel NPS 4 or Larger."

FCS proposes to implement the requirements consistent with ASME Code Case N-615, "Ultrasonic Examination as a Surface Examination Method for Category B-F and B-J Piping Welds." FCS would implement the Code Case N-615 for the surface examinations for the six (6) Reactor Pressure Vessel nozzle-to-safe end dissimilar metal welds, category B-F, item B5.10 for nozzle inspections performed during the 2003 refueling outage.

JUSTIFICATION FOR GRANTING RELIEF

The Ultrasonic examination techniques utilized for this examination are qualified by demonstration to meet the requirements of Code Case N-615. The use of these qualified techniques assures that the dissimilar metal welds remain free of service related flaws thus enhancing quality and ensuring plant safety and reliability.

The work required to support these surface examinations without implementing Code Case N-615 includes labor to remove/replace the cover plates over the six (6) reactor nozzles, and labor to remove/replace the sand above the nozzles. The surface inspections of the outside weld surfaces are limited due to the tight space and no access to the very bottom of the welds. The area dose rate is estimated to be about 120 mr/hr with the head on. The dose in the cavity surrounding the nozzles is unknown. An ex-core detector was removed from one of the nozzle boxes last outage and read 40,000 mr/hr. The surface dose rate near the welds would be very close to these detectors. Therefore, the implementation of this Code Case reduces the radiation exposure by several man-rem while providing an acceptable level of quality and safety.

Background

The qualification documentation and the procedure for the qualification of the Ultrasonic Examination Technique used at the Fort Calhoun Station during the 2003 refueling outage to perform the surface examinations of the reactor vessel B-F welds are included in Attachment B and Attachment C respectively.

The ultrasonic examinations were performed during the fall 2003 refueling outage and no surface indications were identified.

Attachment B

Affidavit from Framatome ANP, Inc Supporting Proprietary Nature of Referenced Documents

AFFIDAVIT

COMMONWEALTH OF VIRGINIA)
) ss.
CITY OF LYNCHBURG)

1. My name is Gayle F. Elliott. I am Manager, Product Licensing, for Framatome ANP ("FANP"), and as such I am authorized to execute this Affidavit.

2. I am familiar with the criteria applied by FANP to determine whether certain FANP information is proprietary. I am familiar with the policies established by FANP to ensure the proper application of these criteria.

3. I am familiar with the FANP reports 54-ISI-189-00 and 54-PQ-189-01 and referred to herein as "Document." Information contained in this Document has been classified by FANP as proprietary in accordance with the policies established by FANP for the control and protection of proprietary and confidential information.

4. This Document contains information of a proprietary and confidential nature and is of the type customarily held in confidence by FANP and not made available to the public. Based on my experience, I am aware that other companies regard information of the kind contained in this Document as proprietary and confidential.

5. This Document has been made available to the U.S. Nuclear Regulatory Commission in confidence with the request that the information contained in the Document be withheld from public disclosure.

6. The following criteria are customarily applied by FANP to determine whether information should be classified as proprietary:

(a) The information reveals details of FANP's research and development plans and programs or their results.

(b) Use of the information by a competitor would permit the competitor to significantly reduce its expenditures, in time or resources, to design, produce, or market a similar product or service.

(c) The information includes test data or analytical techniques concerning a process, methodology, or component, the application of which results in a competitive advantage for FANP.

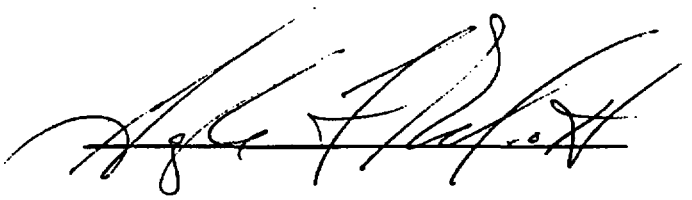
(d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for FANP in product optimization or marketability.

(e) The information is vital to a competitive advantage held by FANP, would be helpful to competitors to FANP, and would likely cause substantial harm to the competitive position of FANP.

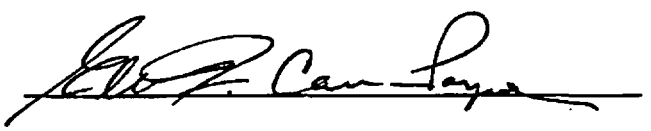
7. In accordance with FANP's policies governing the protection and control of information, proprietary information contained in this Document has been made available, on a limited basis, to others outside FANP only as required and under suitable agreement providing for nondisclosure and limited use of the information.

8. FANP policy requires that proprietary information be kept in a secured file or area and distributed on a need-to-know basis.

9. The foregoing statements are true and correct to the best of my knowledge, information, and belief.



SUBSCRIBED before me this 24th day of October, 2003.



Ella F. Carr-Payne
NOTARY PUBLIC, STATE OF VIRGINIA
MY COMMISSION EXPIRES: 8/31/05