

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

April 1, 1980

Mr. James P. O'Reilly, Director  
Office of Inspection and Enforcement  
Region II  
U. S. Nuclear Regulatory Commission  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

Serial No: 281  
PO/FHT:sh  
Docket Nos: 50-338  
50-339  
Licence Nos: NPF-4  
CPFR-73

IE BULLETIN 79-13, REVISION 2  
NORTH ANNA POWER STATION UNITS 1 and 2

Dear Mr. O'Reilly:

Attached is a summary report of inspections performed at North Anna Power Station Units 1 and 2 in response to the subject bulletin, "Cracking in Feedwater System Piping".

Note that this response repeats information forwarded in our earlier letters (Serial No. 492D, dated December 17, 1979, for Unit 1 and Serial No. 711A, dated September 18, 1979, for Unit 2). In addition to the previous inspection results, the attached report includes the results of 1) visual inspections of piping supports to verify operability and 2) the NDT of the feedwater pipe-to-penetration seal fillet welds. The fillet welds were inspected as requested by your Mr. Crowley.

As stated in the report, there were no indications of cracking in any of the inspections performed and all piping supports were verified operational and in conformance to design.

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

Very truly yours,

ORIGINAL SIGNED BY  
B. R. SYLVIA  
*for*  
C. M. Stallings  
Vice President-Power Supply  
and Production Operations

cc: Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington D.C. 20555

Office of Nuclear Reactor Regulation  
Attn: A. Schwencer, Chief  
Operating Reactors Branch 1  
Division of Operating Reactors

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Feedwater Piping Examination Report  
North Anna Power Station  
Units 1 and 2

Reference: IE 79-13 Cracking in Feedwater System Piping

The following is a list of items that were inspected as required by IE Bulletin 79-13 "Cracking in Feedwater System Piping". The examinations were performed in accordance with Vepco NDT procedures. There were no indications of any cracking problems found in any of the examinations performed.

## UNIT 1

### Loop A

Radiography was performed on 26 welds in containment, including the feedwater nozzle to pipe weld. There were 11 welded supports that were visually examined.

### Loop B

Radiography was performed on 21 welds in containment, including the feedwater nozzle to pipe weld. Visual examinations were performed on 4 welded supports.

### Loop C

Radiography was performed on 17 welds in containment, including the feedwater nozzle to pipe weld. Visual examinations were performed on 6 welded supports.

The above is inclusive of all the feedwater piping welds and welded supports in Unit 1 containment.

In addition to the aforementioned examinations, the following examinations were performed on each of the three loops.

- 1) Radiography was performed on the Main Feedwater pipe, an area of one pipe diameter (16 inches) downstream at the auxiliary feedwater to main feedwater connection.
- 2) An ultrasonic examination was performed on the base metal an area of 1 T around the auxiliary feedwater to main feedwater connection.
- 3) A magnetic particle examination was performed on the auxiliary feedwater to main feedwater connection weld.

- 4) A liquid penetrant examination was performed on the containment penetration weld.

On all the aforementioned examinations there were no rejectable indications.

## UNIT 2

### Loop A

Radiography was performed on 22 welds in containment including the feedwater nozzle to pipe weld. Visual examinations were performed on 10 welded supports. Five of the 22 welds radiographed were rejected. The necessary repairs were made and radiography performed again for final acceptance. The visual examinations performed on welded supports were all acceptable.

### Loop B

Radiography was performed on 16 welds in containment including the feedwater nozzle to pipe weld. Visual examinations were performed on 2 welded supports and were acceptable. All of the 16 welds radiographed were accepted, no indications noted.

### Loop C

Radiography was performed on 24 welds in containment including the feedwater nozzle to pipe weld. Visual examinations were performed on 5 welded supports and were acceptable. Four of the 24 welds radiographed were rejected. The necessary repairs were made and radiography performed again for final acceptance.

The above is inclusive of all the feedwater piping welds and welded supports in Unit 2 containment.

In addition to the aforementioned examinations the following examinations were performed on each of the three loops.

- 1) Radiography was performed on the main feedwater pipe an area of one pipe diameter (16 inches) downstream at the auxiliary

feedwater to main feedwater connection. Some indications were noted, cleared, re-examined and accepted.

- 2) An ultrasonic examination was performed on the base metal an area of 1 T around the auxiliary feedwater to main feedwater connection. No indications were found.
- 3) A magnetic particle examination was performed on the auxiliary feedwater to main feedwater weld. No rejectable indications were found.
- 4) A liquid penetrant examination was performed on the containment penetration weld. No rejectable indications were found.

The examinations performed on Units 1 and 2 were performed by qualified contractors and by qualified Vepco N.D.T. personnel.

All of the film, data and information pertinent to these examinations are on file at North Anna Power Station.

Prepared by Harley L. Travis  
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Mechanical Foreman NDT

Approved E. W. Harrell  
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