VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

June 20, 1979

Mr. Victor Stello, Jr., Director
Division of Operating Reactors
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Serial No.: 493
PO/FHT:baw
Docket No: 50-338
50-339
License No: NPF-4
CPPR-78

Dear Mr. Stello:

North Anna Power Station Units No. 1 and 2
Information on PWR Feedwater Lines

In response to your May 25, 1979, letter requesting information about feedwater piping, Virginia Electric and Power Company hereby submits the attached documents for North Anna Power Station Units 1 and 2. A supplemental response containing additional information will be forwarded by July 27, 1979.

Very truly yours,

W. L. Stevens for
C. M. Stallings
Vice President-Power Supply
and Production Operations

Attachments

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Note: Drawings Advanced
To Engr Branch

B001
SE 1/1

Add: STELLO
Engr Branch

7906250261 P

North Anna Power Station Units No. 1 and 2
PWR Feedwater Line Information

Information on PWR feedwater piping is attached as indicated below. Item numbers match those in the May 25, 1979, request.

Design

1. Request:
Provide as built piping or isometric drawings of the feedwater line to steam generator sparger within containment. Show details of the design such as dimensions, pipe schedule, support type and locations, pipe restraints and valve(s).

Information Provided: Stone & Webster drawings

Unit 1	Unit 2
11715-FP-2H-2	12050-FP-2G-9
11715-FP-2F-4	12050-FP-2H-3
11715-FP-2G-3	12050-FP-2F-3
11715-FP-2A-13	12050-FP-2A-11

2. Request:
Provide the results of any stress or fatigue analyses which were performed for this system.

Information Provided: Stone & Webster Piping Flexibility Analysis Summary Sheets.

Unit 1

Loop "A" 11715-MSK-102A1-6 (sheet 1 of 7)
Loop "B" 11715-MSK-102B1-6 (sheet 1 of 7)
Loop "C" 11715-MSK-102C1-6 (sheet 1 of 7)

Unit 2

Loop "A" 12050-MSK-102A1-5 (sheet 1 of 8)
Loop "B" 12050-MSK-102B1-4 (sheet 1 of 8)
Loop "C" 12050-MSK-102C1-5 (sheet 1 of 8)

Fabrication History

1. Request:
Supply a list of the materials for the steam generator sparger, steam generator feedwater nozzles and feedwater piping within containment.

Information Provided: Units 1 and 2

Component	Material
Steam generator sparger (feedwater ring)	SA-106 Grade B
Steam generator feedwater nozzles	SA-508 Class 2
Steam generator feedwater piping	SA-106 Grade B

2. Request:
Provide the details of the welding process(es) used to make the nozzle-to-pipe, pipe to sparger and piping welds. Include details of welding such as preheat, joint configuration (include with or without backing ring), and post weld treatment, if any.

Information Provided:

Attached are Stone and Webster welding procedure technique sheets as follows for Units 1 and 2.

Welds	Procedure
piping welds	W40G (W100) Revs. 0-6
piping-to-nozzle	W92 (W100) Revs. 0-2

The feedwater ring (sparger) is welded to a cross-over pipe which slip fits into the steam generator nozzle. Thus, there is no feedwater pipe-to-sparger weld that can constitute a pressure boundary. The sparger-to-crossover weld is entirely within the steam generator pressure boundary.

Details of the steam generator nozzle prep are included in the attached sketch.

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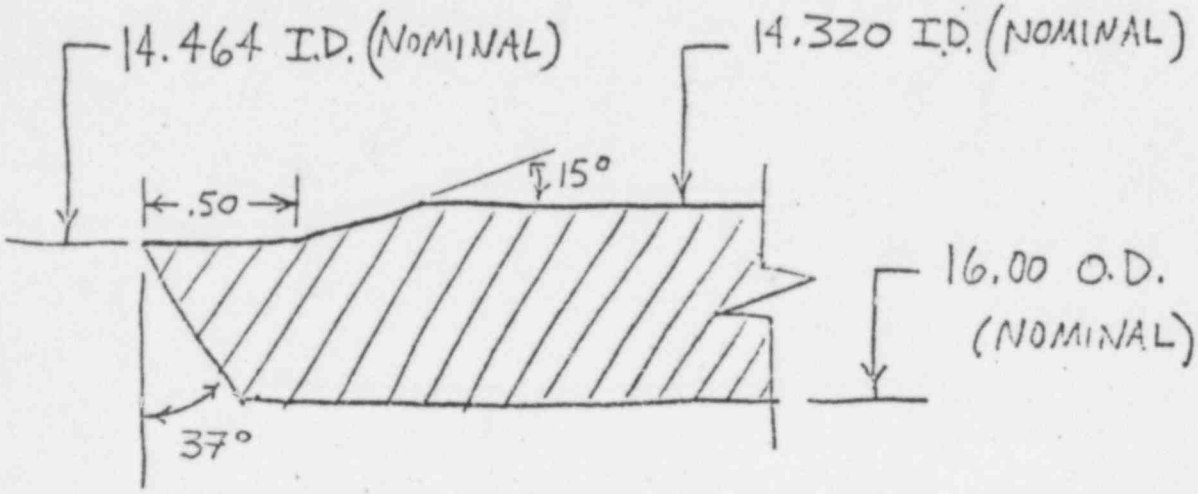
NORTH ANNA UNITS 1 & 2

STEAM GENERATOR FEEDWATER NOZZLE

WELD PREP DETAILS



Model 51 Feedwater nozzle 37° WELD PREP

Not to scale

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