

USNRC REGION II
ATLANTA, GEORGIA
VIRGINIA ELECTRIC AND POWER COMPANY

RICHMOND, VIRGINIA 23261

82 MAY 18 AIO: 38

WILLIAM C. SPENCER
VICE PRESIDENT

May 13, 1982

Mr. James P. O'Reilly
Regional Administrator
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Serial No. 275
PSE&C/TAE:bw

Docket No. 50-404

Dear Mr. O'Reilly:

IE BULLETIN 80-08
EXAMINATION OF CONTAINMENT LINER PENETRATION WELDS
NORTH ANNA UNIT 3

This letter is intended to meet the requirements of the IE Bulletin 80-08, as it pertains to North Anna Unit 3. This letter also supersedes letter Serial No. 347/040780 dated May 28, 1980, in which Vepco stated that review of this Bulletin was suspended pending the feasibility study of North Anna Units 3 and 4.

Listed below are the three actions required of the licensee and the Vepco response for each one:

Item 1: Determine if your facility contains the flued head design for penetration connections, or other designs with containment boundary butt weld(s) between the penetration sleeve and process piping as illustrated in Figure NE 1120-1, Winter 1975 Addenda to the 1974 edition of the ASME B&PV Code.

Response: The design of the connection between the flued head and the sleeve is shown in Attachment 1. Although the flued heads are not of the integral forging type, the butt welds in question are similar to those shown in Figure NE 1120-1, Winter 1975 Addenda to the 1974 ASME B&PV Code.

Item 2: If an affirmative answer is reached for Item 1, determine the following:

Item 2a. Applicability of the ASME Code including year and addenda and/or Regulatory Guide 1.19.

8206070545 820513
PDR ADOCK 05000404
Q PDR

IE11

Response: The North Anna Power Station Unit 3 complies with positions C.2a and C.2b of Regulatory Guide 1.19, "Nondestructive Examination of Primary Containment Liner Welds". References to the ASME Code in Regulatory Guide 1.19 are general. The ASME code in effect and used for North Anna 3 design is the 1971 ASME Code including 1972 Summer Addenda.

Item 2b: Type of nondestructive examinations performed during construction.

Response: The welds, as described in question 1, were all shop fabricated. Nondestructive examination of the welds consisted of 100 percent isotope radiographic examination.

Item 2c: Type of weld joint (including pipe material and size) and whether or not backing bars were used.

Response: The weld joints consist of full penetration butt welds with backing bars as shown in Attachment 1. The pipe materials and sizes are listed in Table 1 (Attachment 2).

Item 2d: Results of construction nondestructive examination, i.e., if repairs were required, this should be identified including extent of repairs and description of defects encountered during repair, if known.

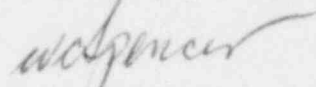
Response: Upon review of the vendor's radiographic examination reports, 8 of the 22 installed sleeved penetrations showed at least one unacceptable radiograph. All of the listed defects were categorized as gas, slag, or porosity type defects. Each unacceptable weld was repaired and reradiographed verifying acceptability of the weld.

Item 3: For those facilities committed during construction to perform volumetric examination of such penetrations through SAR commitments which have not performed radiography, justify not performing radiography or submit plans and schedules for performing radiographic examinations.

Response: The North Anna 3 Power Station has radiographed the welds in question as reflected in the response to Item 2b.

In summary, all welds of the type addressed in this Bulletin received 100 percent isotope radiographic examination during fabrication and were reradiographed after any rework.

Very truly yours,

A handwritten signature in cursive script, appearing to read "W. C. Spencer".

W. C. Spencer

cc: Mr. Robert L. Tedesco
Division of Licensing

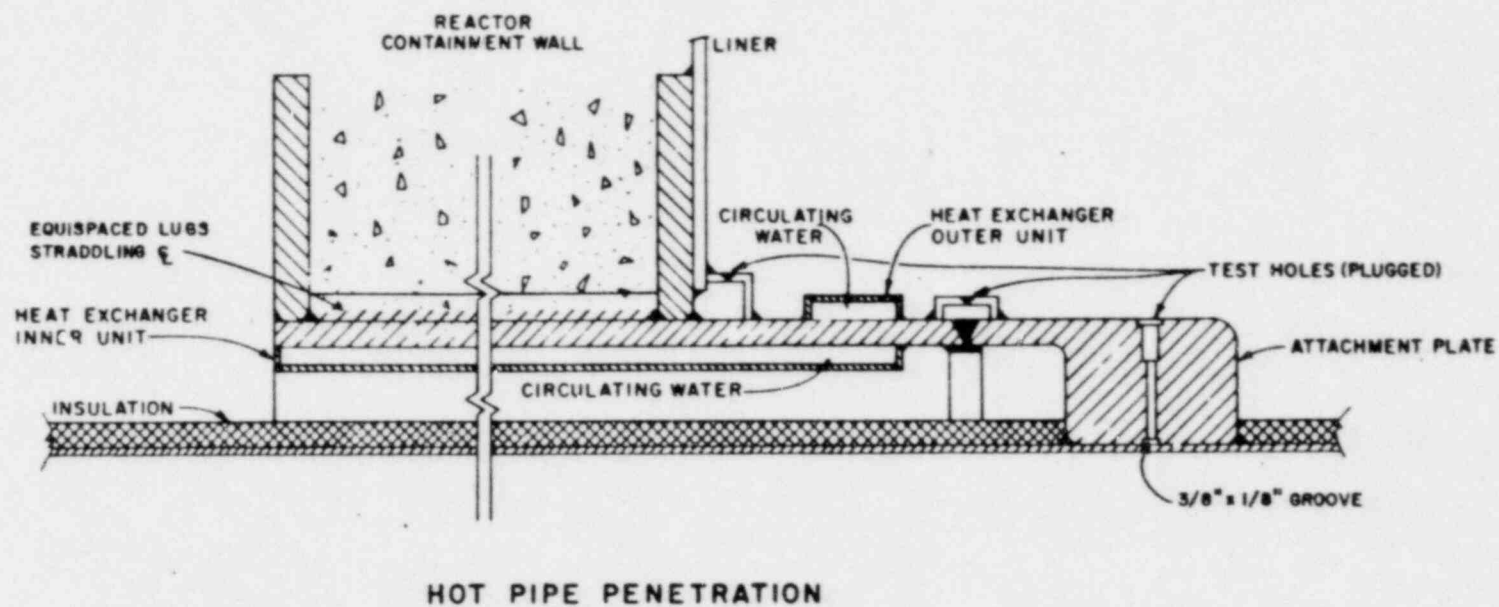


FIGURE 15.5.1.8-5a
TYPICAL PIPING PENETRATION
NORTH ANNA POWER STATION
UNITS 3 AND 4

REVISION - 0-10/81

TABLE 1
VEPCO-NORTH ANNA NUCLEAR POWER STATION UNIT NO. 3 INSTALLED SLEEVED PENETRATIONS

Penetration No.	Size	Sleeve Schedule	Material	Size	Pipe Schedule	Material	Notes
1	50"	7/8"	TP.304SST	33"	1 1/2"	C.S.	
2	50"	7/8"	TP.304SST	33"	1 1/2"	C.S.	
3	50"	7/8"	TP.304SST	33"	1 1/2"	C.S.	
4	50"	7/8"	TP.304SST	33"	1 1/2"	C.S.	
5	34"	3/4"	TP.304SST	18"	100	C.S.	
6	34"	3/4"	TP.304SST	18"	100	C.S.	
7	22"	1/2"	TP.304SST	6"	80	C.S.	
8	22"	1/2"	TP.304SST	6"	80	C.S.	
27	24"	1/2"	TP.304SST	10"	160	TP.316SST	
28	24"	1/2"	TP.304SST	10"	160	TP.316SST	
29	26"	1/2"	TP.304SST	12"	405	TP.304SST	
49	8"	40	C.S.	1/4", 1/4", 1/4", 1/4"	805	TP.316SST	Multiple (2 Spares)
50	8"	40	C.S.	1/4", 1/4", 1", 1"	805/80	TP.316SST/C.S.	Multiple
51	10"	40	TP.304SST	3/8", 3/8", 1/4", 1/4"	805	TP.316SST	Multiple (1 Spare)
73	22"	1/2"	TP.304SST	6"	40	C.S.	
80	14"	3/8"	TP.304SST	2"	160	TP.316SST	
94	8"	40	C.S.	3/4", 3/4", 3/4", 3/4"	160	TP.316SST	Multiple (2 Spares)
96	14"	3/8"	TP.304SST	-	-	-	Spare Sleeve Only
100	8"	40	C.S.	1/4", 1/4", 1/4", 1/4"	805	TP.316SST	Multiple (3 Spares)
108	18"	3/8"	TP.304SST	-	-	-	Spare Sleeve Only
112	14"	3/8"	TP.304SST	-	-	-	Spare Sleeve Only
126	26"	1/2"	TP.304SST	12"	405	TP.304SST	