LONG ISLAND LIGHTING COMPANY
SHOREHAM NUCLEAR POWER STATION
P.O. BOX 618, NORTH COUNTRY ROAD • WADING RIVER, N.Y. 11792

SNRC-485

July 10, 1980

Mr. Boyce H. Grier, Director
Office of Inspection and Enforcement, Region 1
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pa 19406

I&E Bulletin 80-08
SHOREHAM NUCLEAR POWER STATION - UNIT 1
Docket No. 50-222

Dear Mr. Grier:

Enclosed is our response to I&E Bulletin 80-08 concerning the examination of certain containment liner penetration welds. This report contains our response to each of the actions requested in I&E Bulletin 80-08 by item number.

If you require any further information regarding the enclosed report, we will be pleased to discuss it with you.

Very truly yours,

J. P. Novarro

J. P. Novarro
Project Manager
Shoreham Nuclear Power Station

CKS:mc
enc.
cc: Mr. Victor Stello, Director
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

cc: J. Higgins, NRC Site

RESPONSE TO I&E BULLETIN 80-08

EXAMINATION OF CONTAINMENT LINER PENETRATION WELDS

I&E Bulletin 80-08 raises questions with regard to the examination of containment liner penetration welds. The following items are in response to these inquiries.

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 and later editions of the ASME B&PV Code.

Response: Flued head penetration connections are utilized in the Shoreham design. The design of the connection between the flued head and the sleeve is shown on Figure 3.8.1-13 of SNPS-1 FSAR. The design is similar to those as 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.

Response: As stated in the SNPS-1 FSAR, Appendix 3B:

"The primary containment liner field erection utilized procedures, personnel, and nondestructive examination methods in accordance with the requirements of Regulatory Guide 1.19. The Applicant utilized pertinent sections of ASME III, Class MC, Summer 1972 Addenda in lieu of ASME Section V. The major portion of the shop fabrication of the liner was accomplished prior to the issuance of Regulatory Guide 1.19. Nondestructive examination for shop fabrication was accomplished utilizing as a guide ANSI B 31.1, ANSI B31.7, and the ASME III, Class B, 1969 Summer Addenda Code."

The certified date for construction of the penetrations is shown on Table 1.

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 magnetic particle testing.

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

Response: The weld joints consisted of full penetration butt welds with backing bars as shown in Figure 3.8.1-13 of SNPS-1 FSAR. The pipe materials and sizes are as listed in Table 1.

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

Response: A random review of the vendors shop NDT documentation records shows that no rejectable defects were encountered during the NDT examination.

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: As stated in Appendix 3B of SNPS-1 FSAR, (see Item 2a) the ASME III, Class B, 1969 Summer Addendum Code was used only as a guide and the Shoreham Nuclear Power Station has not committed to volumetric examination of the welds in question.

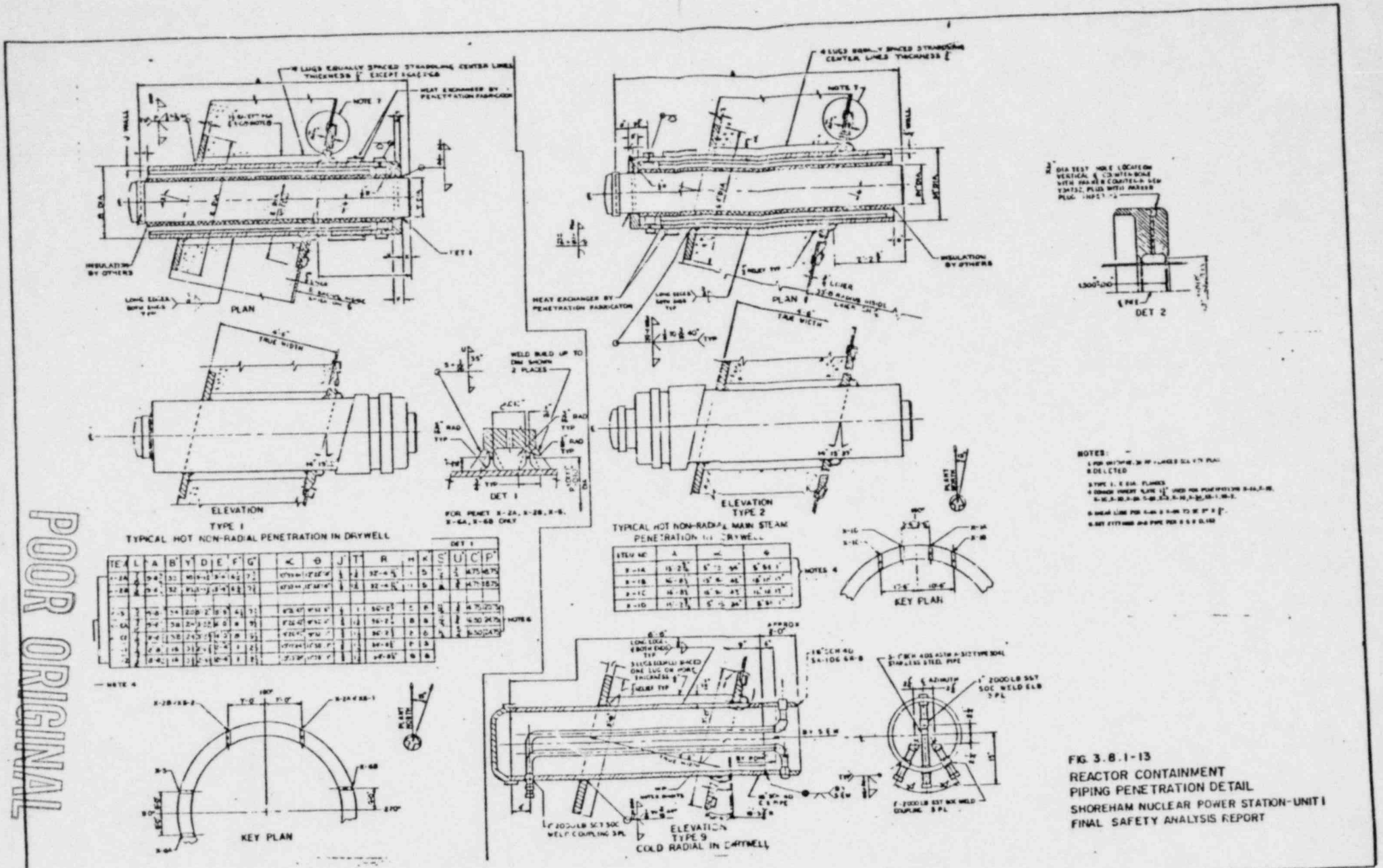

FIG. 3.8.1-13
REACTOR CONTAINMENT
PIPING PENETRATION DETAIL
SHOREHAM NUCLEAR POWER STATION-UNIT I
FINAL SAFETY ANALYSIS REPORT

TABLE 1

PENETR. NO.	SLEEVE SIZE	SLEEVE SCH.	SLEEVE MAT'L	PIPE SIZE	PIPE SCH.	PIPE MAT'L	CERTIFIED FOR CONSTRUCTION DATE	NDT
X-1A	36"	3/4"	C. S.	24"	80 (1.218")	C. S.	5/13/71	M.T.
X-1B	36"	3/4"	C. S.	24"	80 (1.218")	C. S.	5/13/71	M.T.
X-1C	36"	3/4"	C. S.	24"	80 (1.218")	C. S.	5/13/71	M.T.
X-1D	36"	3/4"	C. S.	24"	80 (1.218")	C. S.	5/13/71	M.T.
X-2A	32"	1/2"	C. S.	18"	100 (1.156")	C. S.	4/13/71	M.T.
X-2B	32"	1/2"	C. S.	18"	100 (1.156")	C. S.	4/13/71	M.T.
X-3	16"	30 (.375")	C. S.	3"	80 (.300")	C. S.	5/13/71	M.T.
X-4	20"	20 (.375")	C. S.	6"	80 (.432")	C. S.	8/30/71	M.T.
X-5	34"	1/2"	C. S.	20"	80 (1.031")	C. S.	5/06/71	M.T.
X-6A	38"	3/4"	C. S.	24"	80 (1.218")	C. S.	5/06/71	M.T.
X-6B	38"	3/4"	C. S.	24"	80 (1.218")	C. S.	5/06/71	M.T.
X-11	18"	STD (.500")	C. S.	4"	80 (.337")	C. S.	5/24/71	M.T.
X-12	24"	20 (.375")	C. S.	10"	100 (.718")	C. S.	4/15/71	M.T.
X-13	32"	3/4"	C. S.	18"	20 (.312")	C. S.	4/15/71	M.T.
X-14	16"	30 (.375")	C. S.	2"	80 (.218")	C. S.	4/15/71	M.T.
X-16	16"	30 (.375")	C. S.	3"	80 (.300")	C. S.	5/13/71	M.T.
X-17	24"	20 (.375")	C. S.	8"	40 (.322")	C. S.	4/15/71	M.T.
X-18	16"	30 (.375")	C. S.	2"	80 (.218")	C. S.	4/15/71	M.T.
X-20A	24"	20 (.375")	C. S.	10"	80 (.593")	C. S.	5/24/71	M.T.
X-20B	24"	20 (.375")	C. S.	10"	80 (.593")	C. S.	5/24/71	M.T.
X-40	16"	30 (.375")	C. S.	3"	80 (.300")	C. S.	4/16/73	M.T.
X-30	14"	30 (.375")	C. S.	1"	80 (.179")	St. St'l	8/30/71	M.T.
X-36	16"	30 (.375")	C. S.	1 1/2"	80 (.200")	St. St'l	8/30/71	M.T.

N O T E S

C. S. Carbon Steel

St. St'L Stainless Steel

M.T. Magnetic Particle

MATERIALS

Carbon Steel Pipe Sleeves	SA-537 Gr B
Carbon Steel Pipe	SA-333 Gr 6
Carbon Steel Forging	SA-181 GRII
Stainless Steel Pipe	SA-312 Type 304L 316L

PENETR. NO.	SLEEVE			PIPE			CERTIFIED FOR CONSTRUCTION DATE	NDT
	SIZE	SCH.	MAT'L	SIZE	SCH.	MAT'L		
XS-1	16"	30 (.375")	C. S.	3"	80 (.300")	C. S.	5/13/71	MT
XS-2	16"	30 (.375")	C. S.	3"	80 (.300")	C. S.	5/13/71	MT
XS-3	16"	30 (.375")	C. S.	3"	80 (.300")	C. S.	5/13/71	MT
XS-4	16"	30 (.375")	C. S.	3"	80 (.300")	C. S.	5/13/71	MT
XS-5	24"	20 (.375")	C. S.	10"	40 (.365")	C. S.	4/15/71	MT
XS-6	24"	20 (.375")	C. S.	10"	40 (.365")	C. S.	4/15/71	MT
XS-15	20"	20 (.375")	C. S.	6	40 (.280")	C. S.	5/24/71	MT
XS-16	24"	20 (.375")	C. S.	10"	40 (.365")	C. S.	5/24/71	MT

S P A R E S