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May 11, 1982

Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Docket No. 50-352
50-353

SUBJECT: Limerick Generating Station Units 1 and 2
Request for Additional Information-
Confirmatory Piping Analysis

Dear Mr. Schwencer:

Pursuant to requests for additional information from your Mechanical Equipment Branch (MEB) made at our March 3, 1982 meeting in Pottstown, Pa., enclosed are four copies each of the following:

1. Details of Spring Hanger Supports for Main Steam Line "A".
2. Specification P-360, describing ASME code effective dates for nuclear piping systems and supports.

The Dynamic Forcing Function for safety/relief valve discharge line "A", also requested by MEB, will be provided in early July, 1982.

Very truly

E. J. Bradley
E. J. Bradley,

HDH/cam V/4
See Attached Service List

Boo1
5111
Add: NRR/CIB
NRR/KRAD

Copy to: Judge Lawrence Brenner
Judge Richard F. Cole
Judge Peter A. Morris
Troy B. Conner, Jr., Esq.
Stephen H. Lewis, Esq.
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Mr. Charles B. Taylor
Mr. Robert L. Anthony
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Mr. W. Wilson Goode
Atomic Safety and Licensing Appeal Panel
Atomic Safety and Licensing Board Panel
Docketing and Service Section

GENERAL ELECTRIC

DR OR CONT. NO. 205-AE-805

JOB NAME LIMERICK 1 & 2

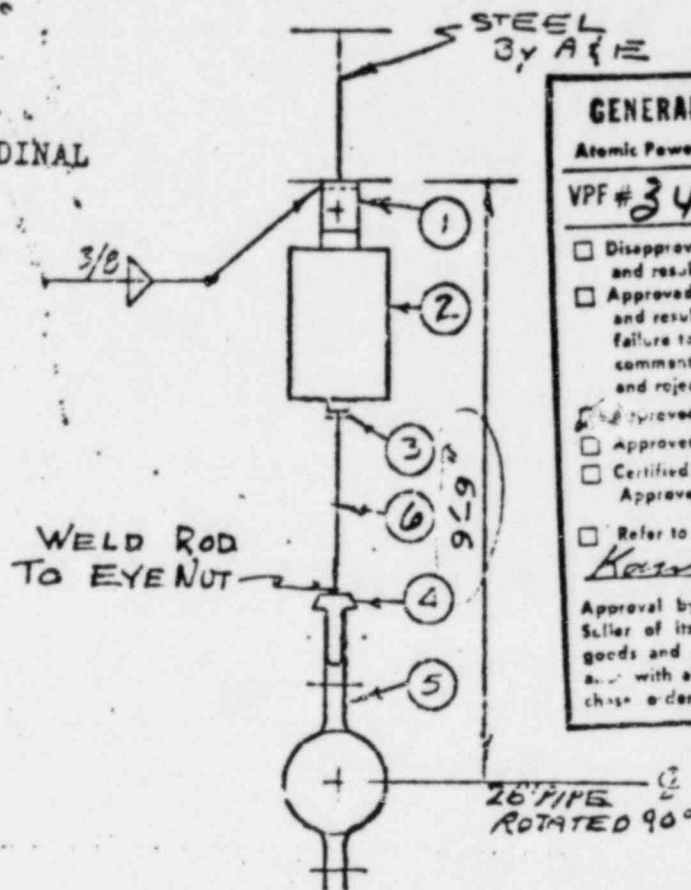
PIPE HANGER DEPARTMENT

DRAWN BY TL DATE 7-7-73

REVISED BY WM DATE 4/12/73

LIMERICK I & II
MPL # B21-6002

WELD ONLY ON LONGITUDINAL
AXIS OF BEAM



GENERAL ELECTRIC

Atomic Power Equipment Department

VPF # 3480-16-2

- ☐ Disapproved per comments. Revise and resubmit for approval.
- ☐ Approved with Comments. Revise and resubmit. **NOTE:** Seller's failure to comply with Buyer's comments constitutes disapproval and rejection of item(s) affected.
- ☒ Approved. No further action req'd.
- ☐ Approved. Submit certified copy
- ☐ Certified by Seller and Approved by Buyer.

Refer to EDS No. 2/4/73
Kam B. H. 1200

Approval by Buyer does not relieve Seller of its obligation to furnish all goods and services in strict conformity with all of the terms of the purchase order.

FOR LITERARY PLAN
SEE SKETCH

ITEM No.	MATERIALS AND OPERATIONS	QUAN.	SHIP.
	HANGER ASSEMBLY CONSISTING OF:		
1	2 1/2" Fig. 66 w/Std & 2 Hex Nuts Steel Attachment	FOUR	
2	#20, "B". Fig. B-268 w/TS & LL, IL=20,999#, CL=21,293#	4	
3	2 1/2" Hex Nuts	4	
4	2 1/2" Fig. 290 Eye Nuts	8	
5	H.S. 41, C.S., 26" Pipe, DL/MC=5'-7 3/8", E=2'-3 1/2"	4	
6	F-2 1/2" x 4", G=1" x 8", H=2'-0 1/4", S=4 1/4", K=10 7/8" TL=759"	4	
	2 1/2" x 4'-3", Fig. 140 w/TFL	4	
	Material furnished in accordance with specifications shown on Sketch #109		
	Bundle & Tag	4	
	* INDICATES NEW Mark: 1-FA2, 1-HD2		
	MATERIAL REQ'D 2-FA2, 2-HD2		
	ALL COAT OF RED CHROMATE TO ALL SURFACES EXCEPT THREADS.		
	STEEL SHALL BE COATED WITH A HOT SPRADE COATING.		

REF. DRAWING NO. PIPE 212-101
STEEL

MARK NO. 205-AE-805 SKETCH NO. 103

REV 1
PRINTED BY G. A. A.

CIRCUIT

VPE # 3480-1-3

GENERAL ELECTRIC

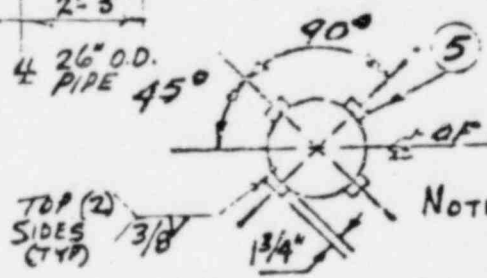
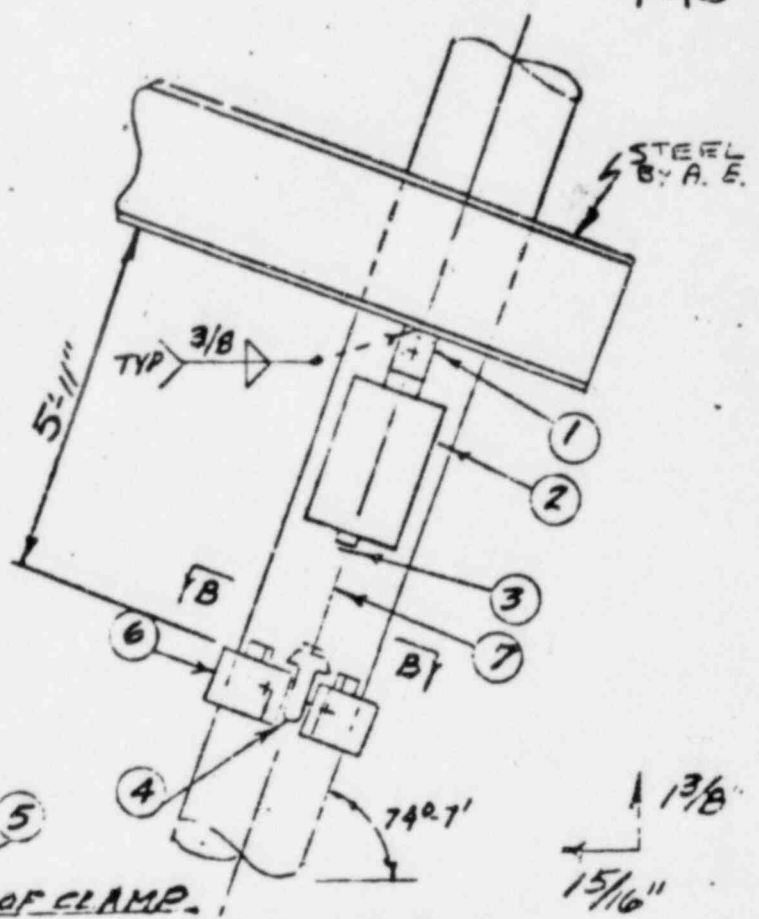
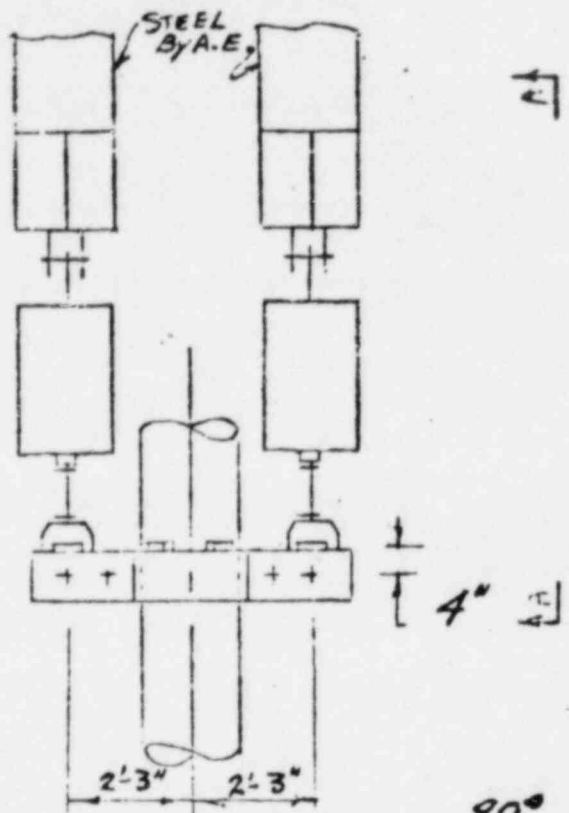
PIPE HANGER DEPARTMENT

ORDER OR CONT. NO. 205-AE 605

DRAWN BY JW DATE 7-10-72

OS NAME LIMERICK 1 & 2

REVISED BY WAF DATE 9-20-72
WM 1/13/73



FOR LOCATION PLAN
SEE SK-103

SECTION B-B

MATERIALS AND OPERATIONS

ITEM NO	DESCRIPTION	QUAN.	SHIP.
	HANGER ASSEMBLY CONSISTING OF:	FOUR	
1	2 1/4" Fig. 66 w/ 2 1/2"x11 1/4" Stud, w/ 2 Hex Nuts, Stl. Attach.	8	
2	#19 "B", Fig. 3-268 w/TS & LL, HL-14,737#, CL-19,225#	8	
3	2 1/4" Hex Nuts	16	
4	2 1/4" Fig. 290 Eye Nuts	8	
5	1 3/4"x2 1/2" C.S. Lugs 0'-2 1/2" Lg., TW-48#	16	
6	H.S. 40 C.S. 26" C.D. Pipe, DL/HC-6'-4", E-2'-3", FI-1 1/2"x8 3/4"	4	
7	FL-2"x9 1/4", G-1 3/4"x10", S-3 1/2", R-0'-11 1/4", TW-3512#	8	
	2 1/4"x5'-4" Fig. 140 w/TFL	4	
	Bundle & Tag		
	Mat'l furnished in accordance with specifications shown on		
	SK:# 109		
	MK:# 1-HA1, 2-HA1		
	1-HD1, 2-HD1		
	* INDICATE'S NEW		
	MAT'L REQ'D		
	APPLY COAT OF TPO CHEMICAL TO ALL MATTEN, EXCEPT THREADS.		
	WHICH SHALL BE COATED WITH A RUST PREVENTATIVE.		

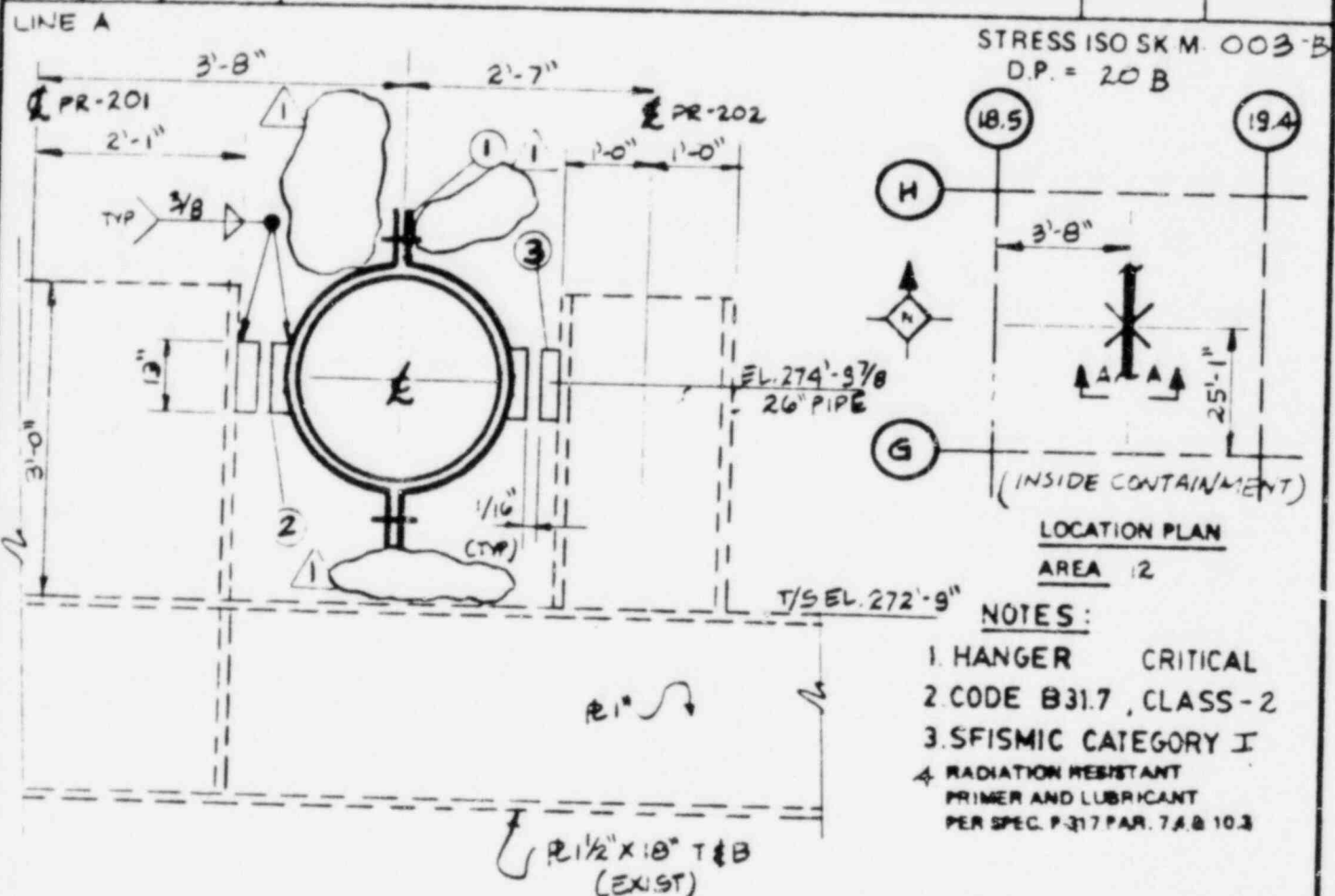
PIPE 762-E-101

MARK NO. 100 SKETCH NO. 100

REV. 2

REF. DWG. NO. STEEL

ITEM NO.	NO. REQ'D	PART NO.	SIZE	DESCRIPTION
1	1	SP-175A	26" (G: 3/4" x 4")	TWO BOLT PIPE CLAMP PROVIDE LOCK NUTS
2	2		13" x 6" x 3"	LUGS (TRIM BY FIELD)
3	2		13" x 6" x 2 1/4"	SHIM PLATE (TRIM BY FIELD)
4			DELETED	



LIMERICK GENERATING STATION UNITS 1 & 2 PHILADELPHIA ELECTRIC COMPANY		SAN FRANCISCO		ISO STG-IMS-LINE	
PIPE SUPPORT REACTOR BLDG.		JOB NO. 8031		DRAWING NO. STG-IMS-H25	
MAIN STEAM UNIT # 1				REV. 1	

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SPECIFICATION
FOR
ASME CODE EFFECTIVE DATES
FOR CONSTRUCTION OF NUCLEAR PIPING SYSTEMS
INCLUDING PIPING SUPPORTS
FOR
LIMERICK GENERATING STATION
UNITS 1 & 2


△					
△					
△					
△					
△	1/5/82	Issued for use & SIGN OFF (A, 7 or 8)	JES	H.P. RM	J.M.
No.	DATE	REVISIONS	BY	CH'K	APPR
ORIGIN	 PHILADELPHIA ELECTRIC COMPANY LIMERICK GENERATING STATION UNITS 1 & 2		JOB No. 8031		
POWER			Spec. No.		REV.
DIV.			8031-P-360		0
			SHEET 1 OF 8		

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SPECIFICATION
FOR
ASME CODE EFFECTIVE DATES
FOR THE CONSTRUCTION OF NUCLEAR
PIPING SYSTEMS, INCLUDING
PIPING SUPPORTS

1.0 SCOPE

This specification delineates the Code edition and addenda that apply to the construction of ASME Section III piping systems, including piping supports, by Bechtel. Construction is an all inclusive term comprising materials, design, fabrication, examination, testing, inspection, and certification required in the manufacture and installation of items included in these piping systems.

This specification also states the Code edition and addenda applicable to installation of certain piping system items designed and supplied by others for installation by Bechtel.

2.0 MATERIALS

Materials for ASME piping systems are in accordance with edition and addenda of ASME Section III (hereinafter referred to as the Code) listed below for construction or fabrication except that later edition/addenda may be used when approved by Project Engineering.

3.0 BECHTEL DESIGNED SYSTEMS

- 3.1 Piping subassemblies for piping systems covered by the Design Specification in Table 1 are fabricated in accordance with the 1971 Edition of the Code with Addenda through Winter 1971.
- 3.2 Piping systems of Table 1 are analyzed in accordance with the 1971 Edition of the Code with Addenda through Winter 1972.

- 3.3 Field fabrication, installation, examination and testing of piping systems of Table 1 are in accordance with the 1974 Edition of the Code with Addenda through Winter 1974 except that paragraphs NB, NC & ND-4436 of the 1977 Edition of the Code apply.
- 3.4 Piping supports for the piping systems of Table 1 are constructed in accordance with the 1969 Edition of ANSI B31.7 with the Addenda approved March 10, 1971. Snubbers for these systems are constructed in accordance with the 1977 Edition of the Code with Addenda through Winter 1977 except that installation is in accordance with the 1969 Edition of ANSI B31.7 with Addenda approved March 10, 1971.
- 3.5 Containment penetration flued heads are designed and fabricated in accordance with the 1974 Edition of the Code with Addenda through Summer 1974 and installed per 3.3 above.

Diaphragm penetration flued heads are designed and fabricated in accordance with the 1980 Edition of the Code with Addenda through Winter 1981 and installed per 3.3 above.

4.0 INSTALLATION OF SYSTEMS NOT DESIGNED BY BECHTEL

- 4.1 The Control Rod Drive piping systems and supports are constructed in accordance with the 1974 Edition of the Code with Addenda through Summer 1976.
- 4.2 The GE supplied NSSS piping systems are installed in accordance with the 1974 Edition of the Code with Addenda through Winter 1974.

Supports for the GE supplied systems are constructed in accordance with the 1969 Edition of ANSI B31.7 with Addenda approved March 10, 1971 and snubbers are constructed in accordance with the 1977 Edition of the Code with Addenda through Winter 1977.

5.0 CODE CASES

The following Code Cases have been approved for Bechtel constructed piping systems and for the

This specification has been reviewed and found to be acceptable for use on the Limerick Project by the undersigned.

M. J. WCM
for Project Engineer

for 2-17-82 *E. C. Heston* 2-17-82
Philadelphia Electric Company

J. E. Blair
Commonwealth of Pennsylvania

TABLE I
BECHTEL DESIGNED SYSTEMS

<u>Specification</u>	<u>Description</u>
8031-M-167	Control Rod Drive
8031-M-511	Residual Heat Removal Service Water and Emergency Service Water Systems
8031-M-541	Main Steam and Feedwater
8031-M-542	Nuclear Boiler Instrumentation
8031-M-543	Reactor Recirculation System Instrumentation & Cooling
8031-M-548	Standby Liquid Control
8031-M-549	Reactor Core Isolation Cooling
8031-M-551	Residual Heat Removal
8031-M-552	Core Spray
8031-M-553	Fuel Pool Cooling & Cleanup
8031-M-555	High Pressure Coolant Injection
8031-M-557	Containment Atmospheric Control
8031-M-559	Primary Containment Instrument Gas
8031-M-561	Liquid and Solid Radwaste
8031-M-569	Gaseous Radwaste