TIE

ARKANSAS POWER & LIGHT COMPANY
POST OFFICE BOX 551 LITTLE ROCK, ARKANSAS 72203 (501) 371-4000

August 31, 1979

1-089-17

Mr. K. V. Seyfrit, Director
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011

POOR ORIGINAL

Subject: Arkansas Nuclear One-Unit 1
Docket No. 50-313
License No. DPR-51
IE Bulletin 79-14
(File: 2-1510)

Gentlemen:

The following is provided in response to your IE Bulletin 79-14.

All systems requiring inspection under Items 2 and 3 of I&E Bulletin 79-14 have been inspected. The inspection results have been documented, initial engineering evaluation has been performed, and corrective action has been taken on all items judged to effect system operability in the above mentioned initial engineering evaluation. Enclosure one (1) has been included to document the disposition of all nonconformances identified during our initial engineering evaluation. These nonconformances along with the as-built discrepancies which were judged not to be nonconformances are being subjected to a detailed review in compliance with Item 4B of I&E Bulletin 79-14.

The accelerated schedule which Arkansas Power and Light aggressively pursued has resulted in completing all of the required inspections and correction of all identified nonconformances having a negative affect upon safety ahead of the deadlines in I&E Bulletin 79-14. However, it has also resulted in a massive amount of in-field data which now must be further evaluated. Enclosure (2) outlines a proposed schedule for completing this detailed review and analysis. We feel that this schedule meets the intent of IE Bulletin 79-14 as supplemented by your August 15, 1979 letter.

Very truly yours,

David C. Trimble

David C. Trimble
Manager, Licensing

1072 066

DCT:MOW:nak
Enclosure
cc: Mr. Victor Stello
Mr. Darrel G. Eisenhut

7910020512

ENCLOSURE 1
IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 1 (2)

POOR ORIGINAL

Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
LW-220H	None	Changed ELL to TEE, Added Line	1	
7-DH-1	DH-169	I.P. Suppt. used to suppt S.P.	3 Stiffen existing brace by welding 2"x2"x¼" angle back to embed	1-1 (2)
	DH-167	Deficient Clearance	3 Provide 1" Min. gap on both north-south side of pipe.	1-2
13-SW-149	MU-175	Clearances	1	
	MU-188	Clearances	1 (1)	
	MU-189	Clearances	1	
	MU-182	Part of Pipe Rstn. Removed	3 Re-instl. removed part. if interf exists, redesign. "0" Gap is O.K	1-2
	MU-161	Deficient Clearance	3 As long as a 1/16" min gap exists the other side end.	1-3
	MU-178	Redesigned to Seism. reqm't.	5 Install knee brace to reduce moment.	1-4
	MU-176	"0" Gap on one side of Pipe	5 Ensure a max. gap of 1/16" on each side of pipe exists bet. pipe & restn. (N-S Dir)	1-5
	MU-184	"0" Gap on both sides of pipe	3 Provide Gap (1/16")	1-6
	MU-163			1-7
16-RC-4	SK-6-263	Shorter HGR Instl. Distance	3 Ensure snubber setting is correct & compatible w/one called in dwg.	1-8
	HS-12	Revised Design	1	
	H-A-1	Shorter HGR Instl. Distance	3 Ensure snubber setting is correct & compatible w/one called in dwg.	1-9
	HS-13	Pipe Suppt. Stl. Missed Embd.	1	
		(Used baseplate on one side welded to embd. & 1 side bolted		
	H-A-2	Shorter HGR Instl. Distance	3 Ensure snubber setting is correct & compatible w/one called in dwg.	1-10
13-SW-128	HBD-21-H47	Added Stl. on Existing pipe suppt. to carry another pipe	3 Hng. Loads minimal. Ensure 1/16" clr. exists top & both sides	1-11

DISPOSITION CODE:

EVALUATED BY: G. F. POSKAS, AC DATE: 7-26-79

CHECKED BY: JOHN M. PUSKAR DATE: 7-27-79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

1072 067

(1) Revised as indicated 7/30/79 JMP (2) Revised as Installed 8/5/79

IE 79-14 WALKDOWN SUMMARY

SMITTAL: 2 ⚠2

POOR ORIGINAL

Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
SK-2-207	MU-115	Bolt not installed properly	1 (Refer to FIR & Surveillance Data)	
7-DH-23	SK #1	Additional Hanger installed	3 Provide 1/16" clr. top & 2 sides. This SK. replaces	2-1
		Missing Hanger	CCB-1-H17 which is the so-called missing hanger.	
7-DH-23	CCB-1-H17	Not Installed	1 (Replaced by SK-1 above)	
17-MU-3	MU-111	Additional Guides	3 Provide 1/16" clr. top & 2 sides.	2-2
	MU-112			2-3
3-EFW-2	-	Branch line added (w/M.O. vlv)	1 Resolved by addition/modification of hangers (Pk. Items 2-8 thru 2-11)	2-4 ⚠2
3-EFW-2	EFW-86	Clearance	3 Provide clr. per Hanger Detail Reqm't.	2-5
3-EFW-2	EFW-89	Clearance	3 " " " " " " " " "	2-6
7-DH-22A	CCB-1-H1	Clearance	3 No clr. permitted. All 4 stanchions to be welded to steel (Anchor).	2-7
3EFW2	EFW-24A	Added to resolve Pk. 2-4	As Designed Install New Hngr	2-8 ⚠1
3EFW104	EFW-15	Added to resolve Pk 2-4	Re-design/Modify Existing Hngr	2-9 ⚠1
3EFW1	EFW-9A	Added to resolve Pk 2-4	Design & Install New Hngr	2-10 ⚠1
3EFW106	EFW-25	Added to resolve Pk 2-4	Re-design/Modify Existing Hngr	2-11 ⚠1
	⚠2 Revised as indicated 8/9/79			

POSITION CODE:

EVALUATED BY: O. B. POSLUNS DATE: 7-26-79

CHECKED BY: JOHN W CHENG DATE: 7-27-79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

⚠1 Revised as shown 8/5/79

1072 068

IE 79-14 WALKDOWN SUMMARY

SMITTAL: 3 Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
6-CF-1	-	Piping resting against wall penetration	1	
6-CF-1	DH-197	Changed pipe to steel attachment	1	
6-CF-1	DH-176	Hgr. not installed	3 Re-instl.Hgr. per orig. design	3-1
5-BS-102	BS-82	Clearance	1	
5-BS-102	BS-84	Clearance	1	
5-BS-102	BS-85	Clearance	3 Provide 1/16" clr. on one side (E-W)	3-2
5-BS-102	BS-87	Clearance	1	
5-BS-102	BS-89	Clearance	1	
5-BS-102	BS-90	Clearance	1	
5-BS-102	BS-91	Clearance	3 Provide 1/16" clr. on one side (E-W)	3-3
5-BS-102	BS-92	Clearance	1	
5-BS-102	BS-94	Clearance	1	
5-BS-102	BS-95	Clearance	3 Provide 1/16" clr. on one side (E-W)	3-4
5-BS-102	BS-96	Clearance	1	
5-BS-102	BS-97	Clearance	1	
5-BS-102	BS-98	Not Installed	1 This hanger is installed	
5-BS-102	BS-99	Clearance	3 Provide 1/16" clr. on one side (E-W)	3-5
5-BS-102	BS-102	Not Installed	1 This hanger is installed	

SPOSITION CODE:

EVALUATED BY: O.B. POSADAS DATE: 7-27-79

CHECKED BY: JOHN W CHENG DATE: 7-28-79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

1072 069

IE 79-14 WALKDOWN SUMMARY

SMITTAL: 4 Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
7-DH-1	DH-271	HGR. Not Installed	3 Re-instl. Hgr. New Hot Load 4200#	4-1
13-SW-129	HBD-21-H34	Struct'l Attach. Revised	1	
3-EFW-1	EFW-2	Added Hanger	1 This Hgr. OK. It was included in the original stress calc.	
SA-235-H	SA-235-H1	Spr. Hgr. Not carrying load	1 S.H. carries load. The restn. 5" away from it is a horiz. restn. only.	
	(SK #1)			
SA-236-H	-	ELL. changed to TEE and added test valve.	1	

SPOSITION CODE:

EVALUATED BY: O. B. POSADAS DATE: 7-27-79

CHECKED BY: JOHN W. CHENG DATE: 7-28-79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

1072 070

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 5 (1)

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
5-BS-103	BS-126	Rev. Suppt. Struct. Attchmt.	(1) ~~As-Built Design does not carry~~ ~~X-load. Redesign using S.H.~~	5-1
		Rev. Type of Support		
5-BS-103	BS-123	Clearance	1	
5-BS-103	BS-124	Welding	1	
5-BS-103	BS-132	Clearance	3 Provide 1/16" clr. on both N-S & E-W	5-2
5-BS-103	BS-131	Clearance	3 Verify the 11/16"clr. if so, shim to reduce clr to 1/16"	5-3
5-BS-103	BS-120	Clearance	3 Provide 1/16" clr. on NW-SE Dir.	5-4
5-BS-103	BS-119	Clearance	3 Provide 1/16" clr. on E-W Dir.	5-5
5-BS-103	BS-118	Clearance	3 Provide 1/16" clr. on NE-SW Dir.	5-6
5-BS-103	BS-117	Clearance	1	
5-BS-103	BS-115	Clearance	3 Provide 1/16" clr. on top of pipe.	5-7
5-BS-103	BS-114	Clearance	3 Provide ~~1/16~~ 5/8" clr. on SE-NW Dir.	5-8
5-BS-103	BS-112	Clearance	3 Provide 1/16" clr. on SE-NW Dir.	5-9
5-BS-103	BS-111	Clearance	3 Provide 1/16" clr. on SE-NW Dir.	5-10
5-BS-103	BS-110	Clearance	3 Provide 1/16"clr. on SE-NW Dir Reduce ½" clr. to 1/16"by shimming.	5-11
5-BS-103	BS-109	Clearance	3 Maintain 1/16" clr. present clr. excessive.	5-12
5-BS-103	BS-108	Clearance	3 Provide 1/16" clr. on SE-NW Dir.	5-13
5-BS-103	BS-107	Clearance	3 Provide 1/16" clr. all around	5-14

DISPOSITION CODE:

EVALUATED BY: O.B. ROSADAS DATE: 7-26-79

CHECKED BY: JOHN W. CROWL DATE: 7-27-79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

(1) Revised as indicated 7/30/79

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 6 ⚠1

ISO. NO.	HGR. NO. IF APPL.	COMMENT		DISPOSITION/ACTION	P/L #
7-DH-3	None	Added hanger not called for in original design	⚠1	This hanger is DH-155 (See P/L Item 15-3) Verify.	6-1 ⚠1
13-SW-121	HBD-4-H2	As-Built Design	1		
13-SW-121	HBD-4-H5	Modified Design, Clearance Uninstalled Bolt	3	Replace 2½x2½x1'4" with 4"x4" x1'6" & use 4 bolts	6-2
2-MFW-1	HS-30	Gap deviations, Design deviation clamp around pipe not installed	3	Ensure snubber setting is in accordance w/hgr. details	6-3
15-FPC-20	HCB-3-H2	Clearance	1		
16-RC-8	HS-66	Baseplate Changed from 4 bolt	1		
"	HS-68	to 2 bolt pattern			
2-MFW-2	H-20	Clearance pipe suppt. Restn. bent due to pipe thermal mvt.	3	Move stl.item 1 further out Allowing pip & stl. clr. of at least 1"	6-4
2-MFW-2	H-21	HGR type not instld. per design revised pipe suppt. design, rod dia. used smaller than design	3	Ensure H_L & C_L setting are compatible w/those called in dwg. & same size. Use 1¼" rod Ø rod instead of 1".	6-5
2-MFW-2	2 Struts per SK. 1	Hanger looks welded to Stm. Generator	3	Can't be right. Clear any insul & ensure a clr. of at least 2" exists.	6-6

DISPOSITION CODE:

1 - Satisfactory

2 - Requires SFHO Commerts

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

EVALUATED BY: O.B. POSADAS DATE: 7-26-79

CHECKED BY: JOHN W. CHENG DATE: 7-27-79

⚠1 Revised as indicated 8/8/79 M. Bedford

1072 072

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 7 ⚠1

Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
5-BS-102	None	Piping overspan. Need one additional hanger	Agree. ~~One hgr. req'd where noted.~~ Design Hgr. subj. to stress approval.	7-1
			Two hangers required (Sketches 15-364 & 15-365)	⚠1

DISPOSITION CODE:

EVALUATED BY: O. R. POSADAS DATE: 7-26-79

CHECKED BY: JOHN W. CHENG DATE: 7-27-79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

⚠1 Revised as indicated 8/9/79 M L Bedford

1072 073

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 8 (i)

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
-CF-2	DH-178	Clearances	3 Provide Clearance noted on dwg	8-1
2-CON-1	-	Vent added and grouted floor opening	3 Remove grout	8-2
-DH-5	DH-9	Clearance	3 Ensure 1/16" clr. top & 2 sides	8-3
	DH-8	Clearance	3 Provide 1/16" gap (E-W)	8-4
	DH-10	I-Beam supports loose	3 Install I-beam rigidly to floor	8-5
	DH-21	Clearance	3 Re-design to an axial rstn.	8-6
-DH-9	-	Pipe rerouted. New	1 Changed in accordance with DCR 574	(1)
	DH-66 SK #1	hgr. reqm'ts & details		
-DH-6	-	Pipe rerouted. New	1 Changed in accordance with DCR 574	8-7 (1)
	SK #1	hgr. reqm'ts & details		
-DH-7	-	Seismic guide replaced	1 Changed in accordance with DCR 574	(1)
	DH-93	with spring hgr.		
7-DH-10	SK #1	Nut Loose	3 Tighten nut	8-8
7-DH-15	SK #3	Clearance	3 Provide 1/16" clr. top & 2 sides.	8-9
	DH-144	Clearance	1	
	DH-146	Clearance	1	
7-DH-103	DH-85	Nut Loose	3 Tighten Nut	8-10
3-EFW-107	-	Piping grouted to wall	3 Remove grout	8-11
	SK #1	Clearance	1	
	SK #2	Clearance	1	
	SK #3	Support not carrying load.	3 Adjust hgr. to carry load	8-12
EFW-10-3	EFW-50	Clearance	1	

EVALUATED BY: O. B. POSADAS DATE: 7-30-79

CHECKED BY: JOHN M. CHEVALIER DATE: 7-31-79

DISPOSITION CODE:

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

(i) Revised as indicated 8/9/79 M.K. Bedford

1072 074

IE 79-14 WALKDOWN SUMMARY

SMITTAL: 8 ⚠1 Sht. 2/2

SO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
	EFW-49	Clearance	Provide 1/16" clr. on 3 hor. side	8-13
4-GX-101	-	Clearance	Provide 1/16" clr. on both 3 horiz. sides	8-14
101-53-1	BS-113	Clearance	Shim & weld shim to top of beam 3(clamp to rest on top of shim)	8-15
EFW-106	EFW-24	Loose nut and hgr. installed at an angle	3 Tighten nut	8-16
EFW-106	EFW-26	Pipe suppt. dim. change	1	
EFW-106	EFW-31	Pipe suppt. assy. loose	3 Tighten bolts to unistrut	8-17
EFW-106	DET. 2	Clearance	Ensure 1/16" clr. top & 3 2 sides.	8-18
6-RC-6	RC-45		1 Same as P/L 20-3	8-19 ⚠1
3-SW-122	HBD-4-H12	Loose nuts	3 Tighten nuts	8-20
3-SW-122	HBD-4-H14	Loose nuts	3 Tighten nuts	8-21
3-SW-128	HBD-21-H46	Clearances	3 Ensure 1/16" top & side clr.	8-22
13-SW-128	HBD-21-H47	Clearances	3 " " " " " "	8-23
13-SW-128	HBD-21-H48	Clearances	3 " " " " " "	8-24
13-SW-128	HBD-21-H49	Clearances	3 Ensure 1/16" clr. top & 2 sides	8-25
13-SW-4	SK #1	Clearances	5 " " " " " " "	8-26
13-SW-157	-	Pipe re-routing	1 Routing changed per DCR 589	8-27 ⚠1
13-SW-119	SK #1	Clearance	1	
	SK #2			
M101-53-1	SK 15-835, 840,839,842,	Clearances	No action req'd on this. These were duplicated in this package and were taken care of in Transmittal #5	
	843,845,846, 847,848,850,			
	853,856,857, 858,859,860			
13-SW-4	-	Valve Leak	This work is outside the scope of stress analysis work	

EVALUATED BY: O. K. [illegible] DATE: 7-31-79

CHECKED BY: [illegible] DATE: 8-1-79

POSITION CODE:

1 - Satisfactory

2 - Requires SFHC Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

⚠1 Revised as indicated 8/9/79 MR Redford

1072 075

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 9 (1) (2)

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
LW-227-H	None	PG-11 straps not shown on detail as well as clearances	3 Ensure straps are instld. with 1/16" clr. top & 2 sides	9-1
LW-223-H	None	Missing Handwheel	1	
MU-206H	MU-206H1	Spring Hgr. rod not connected S.H. Load & Mvt. revised	3 Connect the rod and reset spring load & mvt. CL = 22 lbs Mvt. = 1" up	9-2
MU-228H	PG-11	Pipe suppt. welded across axis of beam. U-bolts & clr. not verified because of insulation	3 Reinforce flg. w/¼" thk. plates where wldg. across flg. was made Ensure nuts instld, top & bottom of plate to maintain 1/16" gap	9-3
MU-228-H	PG-11	Pipe strap & clr. not verified due to pipe insulation	1 Clearances verified and documented by FIR	9-4 (1)
	PG-11	Strap & clearance not verified. (Pipe is insulated)	3 Verify if strap or U-bolt is installed. Ensure 1/16" clr.	9-5
MU-230-H	PG-11	Loose Anchor Bolts	3 Tighten bolts & nuts.	9-6
229-H	-	Expansion loops reversed	1	
SA-211-H	PG-11	Hanger Missing	3 Install guide using PG-11	9-7
SA-213-H	PG-11	Loose Anchor bolt & bolt missing	3 Install new anchor bolt & tighten anchor bolt.	9-8
SA-254-H	None	Using Cold Load 23 lbs. Mvt. = 1½" down Missing Spring Hanger	3 Relocate spring hanger (Noted as additional hanger) to the original location (where noted missing on drawing).	9-9
SW-243-H	None	Dimension changed	1	
SW-248	None	Piping re-routed. New hgr. requirements.	1	
SW-249-H	None	Pipe re-routed and re-adjusted hgrs.	1	
SW-251-H	None	Pipe cut-off	1	
LW-215-H	None	Pipe re-routed	1	
LW-334	SK #1	Pipe re-routed and pipe hgrs. re-adjusted	1	
LW-200	None	U-Bolt missing	3 Add U-bolt on H2 using anchor bolt for H1	9-10
K-#13-136	DH-70	Missing info. about spring hgr.	1 Spring is installed and set per design	9-11 (2)

DISPOSITION CODE:

EVALUATED BY: JOHN W CHENG- DATE: 8/1/79

CHECKED BY: O.P. POSADAS DATE: 8/2/79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

1072 076

(1) Revised as indicated 8/9/79 M Rheaffer

(2) Revised as indicated 8/27/79 M Rheaffer

IE 79-14 WALKDOWN SUMMARY

SMITTAL: 9 (1)

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
7-DH-11	DET. B	Support does not carry load	3 Re-adjust hgr. to carry load.	9-12
	EFW-103	Clearance	Maintain 1½" clr. top & bottom 3 Also this is an E-W & N-S restraint. Maintain 1/16" gap.	9-13
MFW-206	None	Reducer does not exist.	1 Relocated to another location.	

SPOSITION CODE:

EVALUATED BY: JOHN W. CRAIG DATE: 8/1/79

CHECKED BY: O.B. ROSADINI DATE: 8/2/79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

(1) Revised sheet 1 as indicated 8/1/79 M.R. Kadyan

1072 077

IE 79-14 WALKDOWN SUMMARY

SMITTAL: 10

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
RC-207-H	None	Dim. Changes	1	
7-DH-21	DH-F8	Loose Rod	3 Tighten rod to bear load.	10-1
7-DH-21	DH-F2	Lo se Rod	3 Tighten rod to bear load	10-2
13-SW-133	HBD-2-H3	Stanchions used instead of vertical channels as shown in SK 12-202 and SK-12-203	1	
13-SW-133	HBD-2-H4			
13-SW-133	HBD-2-H2	Should be a guide instead of a rigid hgr. only	3 Add clip angles per attached sketch.	10-3
13-SW-133	HBD-2-H5	Spring Hangers (SK 12-204) Replaced w/rigid hanger	1	
3-EFW-102	EFW-47	Clearance	3 Provide ½ " clr top & bottom	10-4
7-MU-12	HCC-17-H5	Added Stiffener	1	
7-MU-12	HCC-17-H6	Clearance	1	
-DH-14	DH-136	Clearance	3 Provide 1/16" clr. top side.	10-5
-DH-14	DH-140	Pipe lugs not verified because of insulation	1	
K-M-724	HS-4	Dim. changes	3 Ensure snubber setting compatible w/hgr. dwg.	10-6
K-M-724	N/A	Bypass piping dim. changes	1	
SK-M-724	HS-51	Relocated snubber	1	
SK-M-724	HS-55	Relocated snubber	1	
LWA-204-H	None	Piping rerouted & dim. changes	1	

SPOSITION CODE:

EVALUATED BY: JOHN W. [illegible] DATE: 7/31/79

CHECKED BY: C.S. HAYNES DATE: 8/1/79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

1072 078

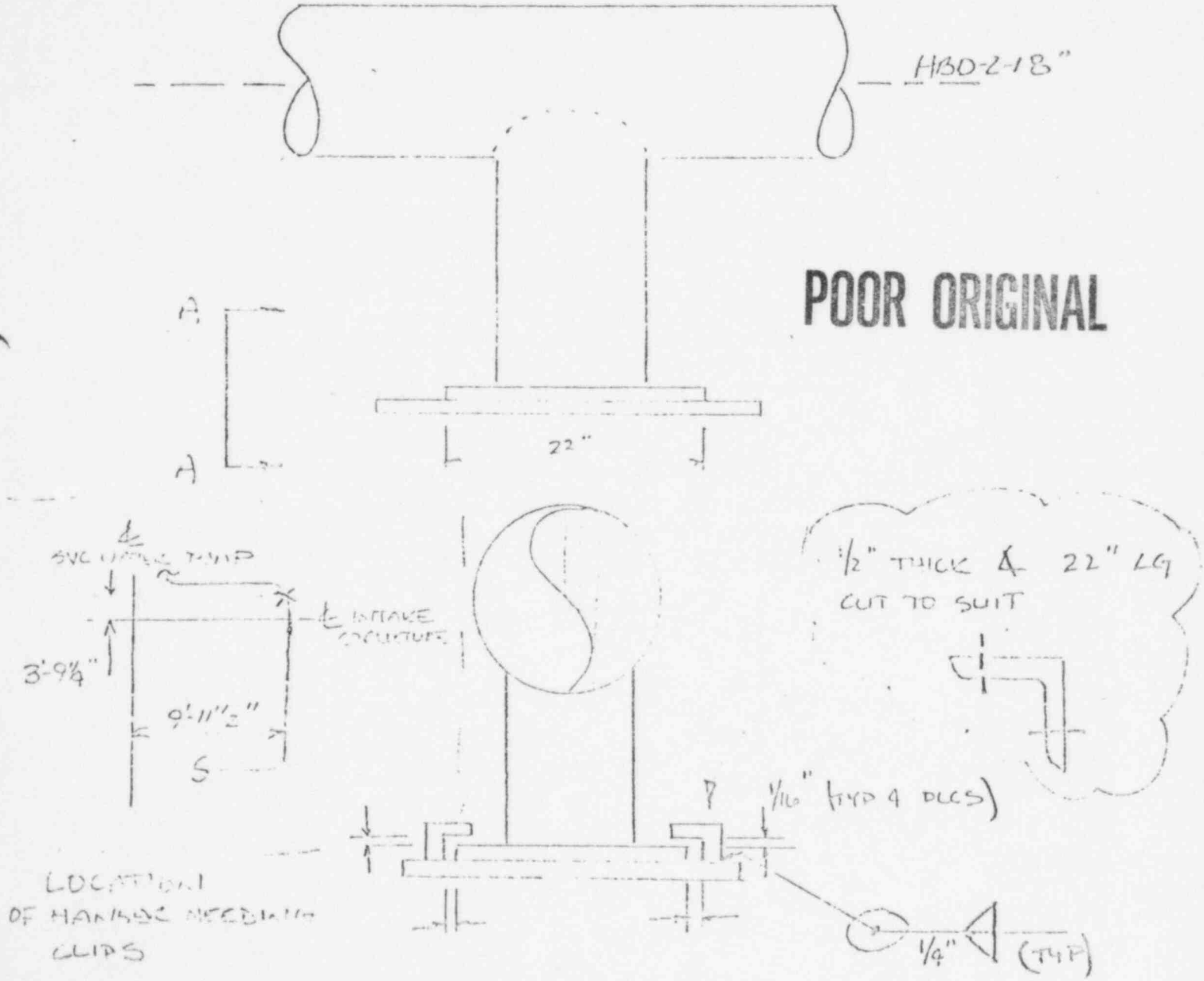
DESIGN BY C S HAMMES DATE 5/2/79 CHECKED BY [illegible] SHEET NO.

DATE 5/2/79

PROJECT A.H.C. JOB NO.

SUBJECT HEIM HBD-2-42 CALCULATION NO. 10 PACKAGE FILE NO. Case 202

ADD ANGLES TO PROVIDE LATERAL & VERTICAL RESTRAINT



SECTION A-A

IE 79-14 WALKDOWN SUMMARY

SMITTAL: 11 ⚠1

Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
34-GX-104	JBD-23-H7	Clearance	3 Provide Min. 1/16" clr. four (4) sides.	11-1
21-LW-2	PS-1 thru PS-4	Rod hangers do not appear to meet seismic requirements	1 Line is not safety-related.	11-2 ⚠1
13-SW-141	H74	Missing bolt	3 Install anchor bolt	11-3
17-MU-19	None	Additional Hanger	3 Reset S.H. to have 1/16" Dn. Mvt. and H.L. = 574 #	11-4
-CPRV-108	HBD-38-H24	Clearance	3 Provide 1/16" clr. 4 sides.	11-5
-CPRV-108	HBD-38-H25	Clearance	3 Provide 1/16" clr. top & two sides.	11-6
-CPRV-108	HBD-38-H27	Clearance	3 Provide 1/16" clr. top & two sides.	11-7
-CPRV-108	SK #2 SK #4	Clearance	3 Provide clearance 1/16" top and both sides.	11-8

SPOSITION CODE:

EVALUATED BY: JOHN W. CHENG DATE: 7/31/79

CHECKED BY: [illegible] DATE: [illegible]

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

⚠1 Revised as indicated 8/9/79 MLedford

1072 080

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 12 Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
5-EFW-101	EFW-53	Clearance	3 Add 1/8" shim on west side to make gap 1/8"	12-1
5-EFW-101	EFW-55	Clearance (SK #1)	3 Provide 3/16" clr. south side	12-2
5-EFW-101	EFW-57	Clearance (SK #2)	3 Provide 1/8" clr. top & 1/8" clr. on north side	12-3
2-DO-102	DF-8	Clearance	3 Provide 1/16" clr. top	12-4
2-DO-102	DF-7	Clearance	1	
2-DO-102	N/A	Wall Penetration Grouted	3 Remove grout	12-5
-BS-2	BS-47	Missing Angle	1	
-BS-2	BS-53	Missing nuts	3 Provide nuts and tighten the double nuts on each end of stud	12-6
-BS-2	BS-48	Hanger not installed	3 Install missing hanger	12-7
-BS-2	BS-52	Missing Vert. Guide	3 Install per SK 9-1224 Rev. 1	12-8
2-DO-103	N/A	Grouted wall penetrations 3 places	3 Remove grout 3 places	12-9
2-DO 103	DF-1	Clearance	3 Provide 1/16" clr. at top	12-10
		Pipe support shimmed w/wool	by using metal shim.	
2-DO-103	DF-2	Existing pipe suppt. is used to support another pipe	1	
2-DO-103	DF-3	Clearance	3 Provide 1/16" clr. top & side	12-11
2-DO-103	DF-4	Missing Bolt	3 Install anchor bolt & tighten nuts.	12-12
2-DO-103	DF-4A	Existing pipe support is used to support another pipe	1	

DISPOSITION CODE:

EVALUATED BY: JOHN W CHENG DATE: 7/31/79

CHECKED BY: C.S. HARRIS / [illegible] DATE: 8/1/79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

1072 081

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 13 Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
7-DH-20	DH-F12	Walkdown was performed using the wrong iso for the specified hanger & Line No.	1 Hanger is installed	
5-BS-8	SK #7	Bolt missing	3 Reinstall Bolt & Torque nut	13-1
55-CPRV-102	HBD-38-12	Bolts defective	3 Replace Bolts & Torque	13-2
13-SW-134	HBD-20-H51	A. ¼" gap bet. base pl. & stanchion plate B. No Bolts	3 A. Shim base plate as req'd to '0' gap B. Install bolts & torque nuts	13-3
13-SW-134	HBD-20-H49	No Bolts	3 Install Bolts and Torque	13-4
13-SW-118	HBD-20-H30A	Missing nut on eye rod	1 Nut not req'd	
5-EFW-105	EFW-34	Bolt missing	3 Reinstall bolt & tighten nut	13-5
5-EFW-105	EFW-33	Hanger not found at specified location	Hanger design was revised & 1 installed at same location	
13-SW-143	HBD-21-H57	Loose Nut	3 Tighten Nut	13-6
13-SW-143	HBD-14-H34	Hanger not found at specified location	ISO #13-SW-143 used for 1 walkdown inspection is not the appropriate iso for Hanger HBD-14-H34	

DISPOSITION CODE:

EVALUATED BY: JOHN W. CHENG DATE: 8/11/79

CHECKED BY: DATE: 8/31/79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

1072 082

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 14 Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/I #
5-CPRV-106	Hanger A	Missing Bolt	3 Replace Bolt & Nut	14-1
17-MV-20	SK-2-704	2" x 4" x ¼" angle 4 9/16" long used instead 4M13	1	
13-SW-145	HBD-21-H65	Clearance	3 Provide 1/16" clr. top & East side	14-2
13-SW-145	HBD-21-H83	Clearance	3 Provide 1/16" clr. top & South side	14-3
13-SW-145	HBD-21-H84	Clearance	3 Provide 1/16" clr. South & West sides	14-4
13-SW-145	HBD-21-H85	Clearance	3 Provide 1/16" clr. South & West sides.	14-5
13-SW-112	HBD-21-H30	Missing Hanger	1 Subsequent check has shown this Hanger to be installed	14-6 △1
	HBD-21-H33	3" channel used instead of 3" x 1 3/4" x 3/8" angle	1	
	N/A	Dimension of isometric 13-SW-112 changed	1	
WA-243H		Rod hanger broken	3 Re-install rod hgr.	14-7

DISPOSITION CODE:

EVALUATED BY: JOHN W. CHENG DATE: 8-1-79

CHECKED BY: MANUEL F. DIAL DATE: AUG-02-79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

△1 Revised as indicated 8/3/79 MFD

1072 083

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 15 Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
3-CH-1	N/A	No suppt. on valve operators required per analysis	1 OK for stress analysis	
-CPRV-101	None	Two 3/4" valves are missing	1 Review by Mech/Istr. Group	
K-12-3856	HBD-38-H48	Braces Not measured	3 Ensure that braces are 5" channels and that gap is 1/16" on SE and SW sides	15-1
K-12-3856	HBD-38-H47	Braces not measured		
K-12-3856	HBD-38-H5	Clearance	3 Provide 1/16" clr. N & W sides.	15-2
-DH-3	DH-155	4 bolts are missing	3 Install 4 bolts & tighten nuts.	15-3
4-GX-102	JBD-23-H4	Could not measure gap due to insulation	3 Ensure 1/16" gap top & one side.	15-4
4-GX-102	JBD-23-H7	Clearance	3 Provide 1/16" clr. top & one side.	15-5
4-GX-102	JBD-23-H2	One Anchor Bolt loose	3 Tighten anchor bolt to flush with beam.	15-6
4-GX-104	JBD-23-H3	Conduit attached to hgr.	1	
4-GX-104	JBD-23-H7	Clearance	3 Provide 1/16" top & side	15-7
0-218-H	Hanger 4	Sketch of Hanger 4 says its a guide. Should be an anchor	3 Secure double bolt pipe clamp to pipe. Torque down nuts to make it an anchor.	15-8

EVALUATED BY: [illegible] W. CHENG DATE: 7/31/79

CHECKED BY: C.C. WAGNER [illegible] DATE: 8/1/79

DISPOSITION CODE:

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

1072 084

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 16 ⚠1 ⚠2 Sht. 1/2

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
-RS-3	BS71	Nut Missing	3 Install one nut on other side of angle and provide 1/16" clr. 4 sides.	16-1
-RS-3		Added banding clamp securing boot to pipe	1	
-RS-3		Flow Orifices Missing	1 To be verified by mech. group. Stress Review OK.	
3-SW-101	HBD-14-H3	Braces Missing	3 Install two braces on east-west as shown on HBD-14-H3 (SK 12-1403). Provide 1/16" clr top & 2 sides.	16-2
2-SW-101	SK #1	Existing pipe support used to support another pipe	1	
2-SW-101	SK #2	Existing pipe support used to support another pipe	1	
K-12-1407	HBD-14-H7	Shims Removed	1 No rework required. Clearance OK for seismic & thermal anal.	16-3 ⚠2
K-12-1409	HBD-14-H9	Missing three way restraint	3 Design and install three way restraint as shown on attached sketch (Sht. 2 of 2)	16-4.
	HBD-14-10	Missing vertical restraint on HBD-14-14"	3 Install vertical restraint as shown on SK-12-1410	16-5
3-SW-106	None	Pipe grouted to wall & floor	3 Remove grout	16-6
F #12-1412	HBD-14-H11	Clearan	3 Remove U-Bolt	16-7
K-12-1411	HBD-14-H12	East Brace grouted to wall	1	
	HBD-14-H11	Spring hgr. position lowered from pipe suppt. attachment	1	
K-1	H-19	Existing pipe suppt. used to support two small pipes	1 Existing loads imposed are minimal. Acceptable "as-is" suppt. for the small pipes.	16-8 ⚠1
3-SW-113	None	Piping resting on a hgr. located adjacent to it.	1	
3-SW-116	SK 12-2127A	Pipe Grouted	3 Remove grout	16-9
	⚠2 Revised as indicated 8/21/79		M.C. Gilland	

DISPOSITION CODE:

EVALUATED BY: JOHN N. CHEVEDDEN DATE: 8/17/79

CHECKED BY: E. MARCUS / [illegible] DATE: 8/21/79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

⚠1 Revised as shown 8/21/79 M.C. Gilland

1072 085

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 17 Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
3SW129	None	Clearance	3 Provide 1/16" clr. top	17-1
3SW130	H40	Clearance	3 Provide 1/16" clr. top	17-2
3SW142	H18	Only 2 bolts existing instead of four (4)	1	
3SW142	DET. "A"	Pipe Rerouted	1	
3SW142	H17	Pipe grouted to wall & hanger not installed	3 Remove grout and reinstall hanger at loc. per dwg.	17-3
3SW142	SW4	Clearance	3 Provide 1/16" clr. top	17-4
3SW142	SW7	Thread not burred	1	
3SW154	H4	Clearance	3 Ensure & maintain 1/16" clr. top and 2 sides.	17-5
3SW154	H5	Clearance	3 Ensure & maintain 1/16" clr. top and 2 sides.	17-6
3SW154	H6	Clearance	3 Ensure and maintain 1/16" clr. top and 2 sides.	17-7
3SW156	HGRS. A & B	Clearance	3 Ensure & maintain clr. called for in the original hgr. dwg.	17-8
3SW156	SK(HGR. B)	Part of channel is not welded to baseplate	3 Weld the unwelded portion.	17-9
3SW156	None	Pipe cap added. Piping discontinued	1	
3SW157	None	Pipe cap added. Piping discontinued.	1	

EVALUATED BY: R. MITCHELL DATE: 8/1/79

CHECKED BY: JOHN W. CHEW DATE: 8/2/79

DISPOSITION CODE:

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

? - More verification & input needed

1072 086

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 18 (1)

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
DH4	DH 120	Shortened Aux. Steel Length	1	
	DH 125	Clearance	3 Maintain 1/16" clr. on two sides & top	18-1
	DH 127	Clearance	1	
	DH 130	Clearance	3 Shim to maintain 1/16" clr. top & bottom.	18-2
	DH 133	Clearance	3 Ensure pipe has a 1/16" clr. on the two horiz. sides.	18-3
	DH 132	Clearance	1	
H 207	DETAIL-1	Bolt Loose	3 Tighten bolt.	18-4
-238-H	N/A	Pipe cap removed to continue piping	1	
-MU-2	N/A	Interference	1 Line 17-MU-33 is small flexible line & will not interfere with 17-MU-2	18-5 (1)
-BS-9	BS 13	Hanger not installed	1 Hgr. does not belong to 5-BS-9 Isometric	
	BS 204	Clearance	1	
	BS 14	Hanger not used	3 Install Hanger	18-6
-237-H	DETAIL-D	U-Bolt Missing	3 Re-instl. u-bolt or revise design to conform w/the attached Sketch Sht. 2 of 2	18-7
(1)	Revised as indicated 8/9/79		MK Redford	

DISPOSITION CODE:

EVALUATED BY: E. MITCHELL DATE: 8/1/79

CHECKED BY: WALDER F. VIAL DATE: 8/2/79

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

1072 087

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 19 Sht. 1/1

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
5-FPC-21	HCB-3-H3	Clearance	3 Shim to 1/16"(Ensure uniform clr. to assure equal load dist)	19-1
	HCB-3-H10	Clearance	3 Shim ⅛" gap to match 1/8" gap	19-2
7-MU-22	MU 254	Clearance	1	
	MU 260	Hanger Re-designed	1	
7-MU-24	MU 217	Hanger missing	3 Install per SK 2-519.	19-3
7-MU-28	MU 235	U-Bolt not attached	3 Attach U-bolt w/nuts on both side of angle. Maintain 1/16" clr	19-4
3-SW-115	SKETCH H-B	Clearance	3 Provide 1/16" clr. top & two(2) sides.	19-5
	H-13	H-13 not installed	/ This hgr. replaced by SK HB	
U-210H	#1	Pipe resting on angle	1	
U-223H	PG-11	Loose Nuts on SK #1	3 Tighten nuts	19-6

EVALUATED BY: [illegible] DATE: 8/1/79

CHECKED BY: [illegible] DATE: 8/2/79

DISPOSITION CODE:

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

1072 088

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 20 (2)

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
3-SW-136	HBD-20-H45	Rod Loose	3.) Adjust Hanger to carry load.	20-1
6-RC-6	RC-35	Clearance	1.)	
6-RC-6	H-B-1	Change of steel size from W4x13 to][3x4.1	1.)	
6-RC-6	RC-37	Clearance	1.)	
6-RC-6	RC-41	Clearance	3.) Shim to 1/16" Clr. N-S& E-W	20-2
6-RC-6	RC-43	Clearance	1.)	
6-RC-6				
6-RC-6	RC-44	Rod slightly bent	1.)	
6-RC-6	RC-45	Clearance	3.) Increase gap to 1/16" for top & 1 side.	20-3
A-233H	Fig.14	Double bolt hole	3.) Fill extra hole w/weld material or weld washer plate to base plate.	20-4
17-MU-11	HCC-17-H1	Anchor bolts missing	3.) Install ½" anchors Bars insure 6x6 plate is welded to 9x9 plate or install anch. bolts through 6x6 plate. (4)	20-5
17-MU-11	H2	Clearance	3.) Increase clearance in E-W Direction to 1/16"	20-6
21-LW-47		Pipe grouted in wall	3.) Remove grout.	20-7
55-CPRV-104	Det.5	Clearance	1.)	
	Det.6	Clearance	3.) Shim ½" Clearance to 1/16"	20-8
	Det.8	Clearance	3.) Increase E or W Clearance to 1/16"	20-

DISPOSITION CODE:

EVALUATED BY: Don Searle DATE: 8/4/79

CHECKED BY: John W. Cahill DATE:

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & inpu needed

(1) Revised sheet 2 as indicated 8/6/79 mcl

(2) Revised sheet 2 as indicated 8/7/79 mcl

T072 089

IE 79-14 WALKDOWN SUMMARY

TRANSMITTAL: 20 (2)

ISO. NO.	HGR. NO. IF APPL.	COMMENT	DISPOSITION/ACTION	P/L #
-MS-5	MS-171	Clearance	3.) Increase Vert. gap to 1/16"	20-10
	MS-172	Clearance	1.)	
-DH-101	DH-32	Clearance	3) 1/16" Clearance required top & 1 side	20-11
	DH-28	Clearance	3) 1/16" Clearance Re'd. on side	20-12
-EFW-104	EFW-20	Pipe grouted @ Pen.	1) Cold pipe $\leq 100^{\circ}F$	
-MS-118	MS-158	Channels rotated from original design	1)	
	Det. A	CV op. orientation	1 Valve installed in vertical 2) position per analysis	20-13 (2)
MU-5	CCB-3-H2	As-Built Rev.	1)	
	H4	Clearance	3) Shim 1" Clr. to 1/16"	20-14
3-SW-114	SK-2	Clearance	3) Increase clr. on 1 side to 1/16"	20-15
236	SK-1	Grouted pen		
		Seismic span	(1) This is small piping OK	(1)
		Adequacy of hanger	per analysis	
2-CON-1	HCB-9-H2	Loose nuts	3) Tighten loose nuts	20-16
2-CON-2	HCB-9-H3	No weld on outside	1) Existing weld adequate	
		of angle iron		
-DH-12	DH-2 DH-3	Hanger shown on "Detail"	1 Existing condition is OK per Stress	20-17 (2)
	"Detail"	installed in lieu of DH-2 & 3	review. There is an other worksheet of this hanger per design	
	HS-2	Bolt Missing	3) Replace bolt	20-18
	DH-103	Clearance	3) Shim to reduce 1/2" Clearance to 1/16" in the E-W direction.	20-19
	DH-134	Nut Missing	3) Install nut	20-20
	DH-110	Dimension Change	1)	
	(2)	Revised as indicated 8/8/79	MR Redford	

DISPOSITION CODE:

EVALUATED BY: Don Seale DATE: 8/4/79

CHECKED BY: DATE:

1 - Satisfactory

2 - Requires SFHO Comments

3 - Restoration or Engineering Evaluation Required

4 - More verification & input needed

1072 090

(1) Revised as indicated 3/6/79 MR Redford

ENCLOSURE 2

1. By September 14, 1979

   Update all stress isometrics for "accessible" piping (Located outside the Reactor Building), make a detailed comparison with seismic calculations and determine whether or not any calculations need to be rerun. Submit a list of items to be reanalyzed and justification for all nonconformances that are satisfactory.

2. By October 12, 1979

   Complete all stress analysis work determined to be necessary under (1) above.

3. By November 12, 1979

   Update all stress isometrics for "inaccessible" piping (Located inside the Reactor Building), make a detailed comparison with seismic calculations, and determine whether or not any calculations need to be rerun. Submit a list of items to be reanalyzed and justification for all nonconformances that are satisfactory.

4. By December 13, 1979

   Complete all stress analysis work determined to be necessary under (3) above, and submit reports required by I&E Bulletin 79-14 Item 4.