ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9201150140 DOC.DATE: 92/01/08 NOTARIZED: NO DOCKET #
FACIL:50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397
AUTH.NAME AUTHOR AFFILIATION
SORENSEN,G.C. Washington Public Power Supply System
RECIP.NAME RECIPIENT AFFILIATION
Document Control Branch (Document Control Desk)

SUBJECT: Responds to NRC 901228 ltr transmitting SER on util responses to Generic Ltr 88-01 re intergranular stress corrosion in piping.Requests that NRC reconsider NRC positions contained in SER re leak detection.

DISTRIBUTION CODE: A001D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 24
TITLE: OR Submittal: General Distribution

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD5 LA	1	1	PD5 PD	1	1
	ENG,P.L.	2	2			
INTERNAL:	ACRS	6	6	NRR/DET/ECMB 7D	1	1
	NRR/DET/ESGB	1	1	NRR/DOEA/OTSB11	1	1
	NRR/DST 8E2	1	1	NRR/DST/SELB 7E	1	1
	NRR/DST/SICB8H7	1	1	NRR/DST/SRXB 8E	1	1
	NUDOCS-ABSTRACT	1	1	OC/LFMB	1	0
	OGC/HDS1	1	0	REG FILE 01	1	1
	RES/DSIR/EIB	1	1			
EXTERNAL:	NRC PDR	1	1	NSIC	1	1

R
I
D
S
/
A
D
D
S

R
I
D
S
/
A
D
D
S

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK, ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 24 ENCL 22

MAY

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352

Docket No. 50-397

January 8, 1992
G02-92-004

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Gentlemen:

Subject: NUCLEAR PLANT NO. 2, OPERATING LICENSE NPF-21
RESPONSE TO NRC SER ON GENERIC LETTER 88-01 (TAC No M69161)

References:
1) Letter, G02-88-164, GC Sorensen (SS) to NRC, "Supply System Response to NRC's Generic Letter 88-01," dated July 26, 1988
2) Letter, G02-89-123, GC Sorensen (SS) to NRC, "Supply System's Response to Generic Letter 88-01 Request for Additional Information," dated July 20, 1989
3) Letter, PL Eng (NRC) to GC Sorensen (SS), "Response to Generic Letter 88-01, Intergranular Stress Corrosion in Piping (TAC No. M69161)," dated December 28, 1990
4) Letter, G02-91-088, GC Sorensen (SS) NRC, "Response to Generic Letter 88-01, Intergranular Stress Corrosion in Piping (TAC No. M69161)," dated May 3, 1991

This submittal provides the Supply System's response to NRC's December 28, 1990, letter and associated Safety Evaluation (Reference 3). The NRC's letter identified certain outstanding issues related to the Supply System's responses to Generic Letter 88-01 for its WNP-2 facility. The Supply System initially responded to Generic Letter 88-01 on July 26, 1988 (Reference 1). Additional information was provided to the Staff on July 20, 1989 (Reference 2).

In summary, the Supply System agreed to implement the majority of the recommendations contained in Generic Letter 88-01. However, our responses proposed alternatives to the Staff's position on leak detection and its request to revise applicable Technical Specifications. Regarding leak detection, the Supply System's responses indicated that the WNP-2 leak detection system currently meets Position C of Regulatory Guide 1.45, and that the corresponding Technical Specifications were developed in accordance with the applicable Standard Technical specifications contained in NUREG-0123 (see Reference 2, Table 4). Concerning the Staff's request to reference Generic Letter 88-01 in the Technical Specifications, the Supply System proposed instead to include the reference in a revision to its NRC-approved Inservice Inspection (ISI) Program Plan (Reference 1).

A001 1/1

The NRC reviewed the Supply System's responses to Generic Letter 88-01, and in its December 28, 1990, letter stated that they were "acceptable" with four "exceptions" (Reference 3). The four exceptions are related to the alternative approaches referenced above. Specifically, NRC requested that the Supply System respond to the following exceptions:

1) A Technical Specification change should be submitted to "include a statement that the inservice inspection program conforms with the NRC staff positions on inspection schedules, methods and personnel, and sample expansion."

2) A Technical Specification change should be submitted to "include a requirement to shut down the plant when the rate of unidentified leakage increases by more than 2 gallons per minute within a 24-hour period."

3) As opposed to "performing channel checks at 12-hour intervals," the Supply System must "revise [the] leak rate monitoring frequency...[such that] leakage rates may be measured every 8 hours."

4) The Supply System "must review the weld records and provide revised inspection plans if the use of Inconel materials is not as required in Generic Letter 88-01".

Response

Based on a review of the exceptions, the Supply System concludes that certain circumstances exist at the WNP-2 facility which do not appear to have been considered in the Staff's development of Generic Letter 88-01. Therefore, the Supply System requests that NRC reconsider the issues raised by exceptions 1 and 4 in light of the unique circumstances discussed below. Furthermore, the Supply System believes that exceptions 2 and 3 should also be reconsidered. In this regard, the Supply System understands that the Staff is currently preparing a supplement to Generic Letter 88-01 which may provide additional flexibility in responding to exceptions 2 and 3. Accordingly, the Staff is requested to consider the Supply System's response to these two exceptions in light of the anticipated supplement.

Technical Specification References: Response to Exceptions 1 and 4

In response to exception 4, the Supply System reviewed weldments originally classified as Category A pursuant to Generic Letter 88-01 to determine the type of Inconel material used at the WNP-2 facility. This review involved original fabrication records which had not been readily available during the initial review. As a result of this review, the Supply System determined that 14 nozzle to safe-end welds, originally classified as Category A, required redesignation. An additional 11 nozzle to safe-end welds in the feedwater and ECCS systems, constructed of carbon steel were included in the scope of Generic Letter 88-01.

Twenty five nozzle to safe-end welds have Inconel 182 weld metal buttering exposed to the fluid media. Eight were originally classified as Category A and are now classified as Category D because of previous inspections. Six others, and the 11 added to the scope, are now classified as Category G and will be inspected during the next refueling outage. Upon completion of the inspection they will be reclassified as Category D. Additionally, 17 other welds involving safe-end extensions have been added to the scope of Generic Letter 88-01 as Category A because of conforming configuration and Inconel 82 weld material exposed to the fluid media.

The Supply System has revised Tables 2 and 3, as originally provided to the NRC in Reference 2, to reflect these changes. Copies are provided as requested in Attachments 1 and 2.

The weld reclassification will result in an increased inspection frequency. Under ASME Section XI, the Supply System is required to inspect the welds once every 10 years. However, Generic Letter 88-01 requests that welds classified as Category D be inspected every two refueling outages (see Generic Letter 88-01, Table 1). Because the Supply System operates the WNP-2 facility on a 12-month refueling cycle (as opposed to the typical 18-month cycle for other BWRs), the Generic Letter 88-01 inspection schedule will require the welds to be inspected every two years - an increase of four additional inspections over a ten year period.

The increased inspection frequency will result in a corresponding significant increase in occupational exposure. The WNP-2 facility's design is such that access to 15 of the 25 nozzle to safe-end welds requires movement of the sacrificial shield nozzle doors. Discussions with several other BWRs have led to the conclusion that this installation and the resultant occupational exposure is unlike that at those facilities. As a consequence, the Supply System has estimated that the change from inspection under ASME Section XI to that of Generic Letter 88-01 involves an increase of approximately 250 man-rems per inspection. With four additional inspections over each 10-year ISI inspection interval, implementing the inspection schedules recommended by Generic Letter 88-01 will increase occupational exposure by approximately 1000 man-rems.

We do not believe that this increase in occupational exposure was anticipated by the Staff in developing the inspection schedules contained in Generic Letter 88-01. The Generic Letter, its underlying regulatory analysis (see Internal NRC Memorandum from H. Denton to J. Sniezek, dated April 9, 1986), and its associated technical evaluations (see NUREG-0313, Rev. 2 and NUREG-1061, Rev. 1) do not address occupational exposure associated with increased inspection frequency. The Staff's regulatory analysis (at pp. 5-6) acknowledges that "accurate quantitative assessments of all plants affected would be extremely difficult...[and] [e]ven if predicted, the calculated cost in dollars and person-rem would be very uncertain."

Considering the unique, plant-specific circumstances at the WNP-2 facility that result in a significant increase in occupational exposure, the Supply System proposes the following alternatives to meet the intent of Generic Letter 88-01.

1) During the next refueling outage (R7) currently scheduled for April 1992, the Supply System will inspect the 17 Category G and 7 Category D safe-end welds in accordance with the recommendations in Generic Letter 88-01 (one of the eight redesignated Category D welds was inspected during R6).

2) The occupational radiation exposure received during the performance of the inspections will be measured and, as appropriate, factored into the Supply System's final response.

3) A sampling inspection plan to meet the intent of Generic Letter 88-01 will be developed considering the following factors: weld distribution by pipe size and system service; the actual exposure data obtained from the R7 inspections; the potential for implementing design changes to the access doors; and the possibility for implementing other appropriate recommendations in Generic Letter 88-01 for mitigating IGSCC.

4) The results of the IGSCC inspections during the next refueling outage for the nozzle to safe-end welds, and the sample inspection plan will be submitted to the NRC within 90 days following the completion of R7.

5) The Supply System is evaluating mitigating techniques, including stress improvement of the buttered joints. The evaluation will consider industry experience, accessibility and exposure.

Therefore, the need for Technical Specification changes (and thus the final response to exception 4) will be considered following resolution of the foregoing issues.

In summary, although the Supply System is proposing an alternative method of complying with Generic Letter 88-01, the WNP-2 facility currently complies with applicable NRC regulations and licensing commitments.

Leak Detection: Response to Exceptions 2 and 3

The Supply System understands that the NRC staff is preparing a supplement to Generic Letter 88-01 (see Internal NRC Memorandum from E.L. Jordan (CRGR Chairman) to J.M. Taylor, entitled "Minutes of CRGR Meeting No 209," issued September 3, 1990) that provides additional flexibility beyond that contained in the December 28, 1990 letter. Apparently, the supplement will specifically address the issues raised in Exception 2 (i.e., Technical Specification allowed outage time and action statements), and exception 3 (i.e., the leak detection surveillance frequency). Therefore, the Supply System proposes to wait until after the issuance of the supplement to Generic Letter 88-01 to finalize its response to the two exceptions (Reference 4).

The Supply System believes that the delay in responding is justified because it is currently in compliance with applicable NRC regulations. The redundant design features of the WNP-2 leak detection system meet the intent of the Staff's guidance contained in Regulatory Guide 1.45, Position C and were reviewed and approved in the WNP-2 Safety Evaluation Report [SER section 5.2.5]. Furthermore, the operability of the leak detection system is verified once every 12-hour shift in accordance with the WNP-2 facility Technical Specifications [Tech. Spec. 3/4.4.3.1.a]. The Technical Specifications were prepared in accordance with the Standard Technical Specifications (i.e., NUREG-0123).

In view of the impending supplement, the Supply System requests that the NRC Staff reconsider the positions contained in exceptions 2 and 3. Following the issuance of the supplement, the Supply System will reevaluate its leak detection system and the need to revise any corresponding Technical Specification changes. In this regard, the Supply System will provide a final response to exceptions 2 and 3 within 60 days after receipt of the supplement to Generic Letter 88-01. Included in that submittal will be a revised copy of Table 4, as originally provided to the Staff in Reference 2. Certain provisions within Table 4 need revision to reflect the identification of welds in Categories D and G.

Conclusion

The Supply System requests that the NRC reconsider the exceptions contained in its December 28, 1990 letter in light of the plant-specific information discussed above, as well as the pending issuance of a supplement to Generic Letter 88-01. While the Supply System believes that it currently is in compliance with the applicable NRC regulatory requirements and guidance regarding IGSCC, the alternatives presented above will ensure that operations at the WNP-2 facility continue to meet the intent of Generic Letter 88-01.

Very truly yours,

G. C. Sorensen, Manager
Regulatory Programs

bk
Attachments

cc: JB Martin - NRC RV
NS Reynolds - Winston & Strawn
PL Eng - NRC
DL Williams - BPA/399
NRC Site Inspector - 901A

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	TABLE 1															
2	INSPECTION SCHEDULE CATEGORY D/G															
3	EXAMINATIONS COMPLETED															
4	CAT.	ISI IDENT. NO.	Drawing	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13
5	D(1)	10LPCS(1)-4	LPCS-101-2		1					1						
6	G(1,2)	10HPCS(1)-4	HPCS-101-2							1						
7	D(1)	12LPCI(1)A-6	RHR-101		1					1						
8	G(1,2)	12LPCI(1)B-6	RHR-102							1						
9	G(1,2)	12LPCI(1)C-6	RHR-103							1						
10	G(1,2)	4JP(NZ)A-1	RPV-101							1						
11	G(1,2)	4JP(NZ)B-1	RPV-101							1						
12	D(1)	12RFW(1)AC-13	RFW-101-3	1						1						
13	D(1)	12RFW(1)AB-11	RFW-101-4		1					1						
14	D(1)	12RFW(1)AA-11	RFW-101-5			1				1						
15	D(1)	12RFW(1)BD-11	RFW-102-3				1			1						
16	D(1)	12RFW(1)BE-11	RFW-102-4					1		1						
17	D(1)	12RFW(1)BF-14	RFW-102-5						1							
18	G(1,2)	12RRC(1)-N2E-6	RRC-101-4							1						
19	G(1,2)	12RRC(1)-N2D-6	RRC-101-5							1						
20	G(1,2)	12RRC(1)-N2C-6	RRC-101-6							1						
21	G(1,2)	12RRC(1)-N2B-6	RRC-101-7							1						
22	G(1,2)	12RRC(1)-N2A-6	RRC-101-8							1						
23	G(1,2)	12RRC(1)-N2K-6	RRC-102-4							1						
24	G(1,2)	12RRC(1)-N2J-6	RRC-102-5							1						
25	G(1,2)	12RRC(1)-N2H-6	RRC-102-6							1						
26	G(1,2)	12RRC(1)-N2G-6	RRC-102-7							1						
27	G(1,2)	12RRC(1)-N2F-6	RRC-102-8							1						
28	G(1,2)	24RRC(2)A-1	RRC-101-1							1						
29	G(1,2)	24RRC(2)B-1	RRC-102-1							1						
30		TOTAL	25	1	3	2	1	1	1	24						
31																
32	1 Added to GL 88-01 scope															
33	2 Will be reclassifed as category D after R7 examination															
34																

	A	B	C	D	E	F	G	H
1				TABLE 2				
2				WELD HISTORY				
3								
4	IGSCC	WELD	DRAWING			TREATMENT		
5	CATEGORY	NUMBER	NO.	CONFIGURATION	MATERIAL(1)	SHT	CRC	SI
7	G(11,17)	4JP(NZ)A-1	RPV-101	N9 NZ-SE @ 105	Non-conforming (2)			
8	A	4JP(NZ)A-2	RPV-101	N9 SE-PN SL @ 105	Conforming (3)			
9	G(11,17)	4JP(NZ)B-1	RPV-101	N9 NZ-SE @ 285	Non-conforming (2)			
10	A	4JP(NZ)B-2	RPV-101	N9 SE-PN SL @ 285	Conforming (3)			
11	B	20RHR(2)-1	RHR-104	VALVE TO SE	Non-conforming			IHSI 9/83
12	B	20RHR(2)-2	RHR-104	SE TO VALVE	Non-conforming (4)			IHSI 9/83
13	B	12RHR(1)A-14	RHR-105	VALVE TO SE	Non-conforming (4)			IHSI 9/83
14	B	12RHR(1)A-15	RHR-105	SE TO PIPE	Non-conforming			IHSI 9/83
15	B	12RHR(1)A-16	RHR-105	PIPE TO EL	Non-conforming			IHSI 9/83
16	B	12RHR(1)A-17	RHR-105	EL TO PIPE	Non-conforming			IHSI 9/83
17	B	12RHR(1)A-18	RHR-105	PIPE TO VALVE	Non-conforming			IHSI 9/83
18	B	12RHR(1)B-10	RHR-106	VALVE TO SE	Non-conforming (4)			IHSI 9/83
19	B	12RHR(1)B-11	RHR-106	SE TO EL	Non-conforming			IHSI 9/83
20	B	12RHR(1)B-12	RHR-106	EL TO PIPE	Non-conforming			IHSI 9/83
21	B	12RHR(1)B-13	RHR-106	PIPE TO VALVE	Non-conforming			IHSI 9/83
22	G(11,17)	24RRC(2)A-1	RRC-101	NOZ TO SE	Non-conforming (5)			
23	B	24RRC(2)A-2	RRC-101	SE TO PIPE	Non-conforming			IHSI 9/83
24	B	24RRC(2)A-3	RRC-101	PIPE TO EL	Non-conforming			IHSI 9/83
25	B	24RRC(2)A-4	RRC-101	EL TO PIPE	Non-conforming			IHSI 9/83
26	B	24RRC(2)A-5	RRC-101	PIPE TO PIPE	Non-conforming			IHSI 9/83
27	B	24RRC(2)A-6	RRC-101	PIPE TO TEE	Non-conforming			IHSI 9/83
28	B	24RRC(2)A-7	RRC-101	TEE TO PIPE	Non-conforming			IHSI 9/83
29	B	24RRC(2)A-8	RRC-101	PIPE TO EL	Non-conforming			IHSI 9/83
30	B	24RRC(2)A-9	RRC-101	EL TO VALVE	Non-conforming			IHSI 9/83
31	B	24RRC(2)A-10	RRC-101	VALVE TO PIPE	Non-conforming			IHSI 9/83
32	B	24RRC(2)A-10/4RRC(8)-4S	RRC-101	PIPE TO SWL	Non-conforming			IHSI 5/86
33	B	4RRC(8)2A-1	RRC-101	SWL TO PIPE	Non-conforming			IHSI 9/83
34	B	4RRC(8)2A-2	RRC-101	PIPE TO FLANGE	Non-conforming			IHSI 9/83
35	B	24RRC(2)A-10/4RRC(4)-4S	RRC-101	PIPE TO SWL	Non-conforming			IHSI 5/86

	A	B	C	D	E	F	G	H
1				TABLE 2				
2				WELD HISTORY				
3								
4	IGSCC	WELD	DRAWING			TREATMENT		
5	CATEGORY	NUMBER	NO.	CONFIGURATION	MATERIAL(1)	SHT	CRC	SI
36	B	24RRC(2)A-11	RRC-101	PIPE TO EL	Non-conforming			IHSI 9/83
37	B	24RRC(2)A-12	RRC-101	EL TO PUMP	Non-conforming			IHSI 9/83
38	B	24RRC(1)A-13	RRC-101	PUMP TO PIPE	Non-conforming			IHSI 9/83
39	B	24RRC(1)A-13/8CAP	RRC-101	PIPE TO SWL	Non-conforming			IHSI 5/86
40	B	24RRC(1)A-13/8CAP-1	RRC-101	SWL TO PIPE	Non-conforming (6)		X	IHSI 9/83
41	B	24RRC(1)A-13/4RRC(8)-4S	RRC-101	PIPE TO SWL	Non-conforming			IHSI 5/86
42	B	4RRC(8)1A-1	RRC-101	SWL TO PIPE	Non-conforming			IHSI 9/83
43	B	4RRC(8)1A-2	RRC-101	PIPE TO FLANGE	Non-conforming			IHSI 9/83
44	B	24RRC(1)A-14	RRC-101	PIPE TO VALVE	Non-conforming			IHSI 9/83
45	B	24RRC(1)A-15	RRC-101	VALVE TO PIPE	Non-conforming			IHSI 9/83
46	B	24RRC(1)A-16	RRC-101	PIPE TO EL	Non-conforming			IHSI 9/83
47	B	24RRC(1)A-17	RRC-101	EL TO PIPE	Non-conforming			IHSI 9/83
48	B	24RRC(1)A-18	RRC-101	PIPE TO VALVE	Non-conforming			IHSI 9/83
49	B	24RRC(1)A-19	RRC-101	VALVE TO EL	Non-conforming			IHSI 9/83
50	B	24RRC(1)A-20	RRC-101	EL TO PIPE	Non-conforming			IHSI 9/83
51	B	24RRC(1)A-20/12RRC(7)-4S	RRC-101	PIPE TO SWL	Non-conforming			IHSI 5/86
52	B	24RRC(1)A-20/12CAP	RRC-101	PIPE TO SWL	Non-conforming			IHSI 5/86
53	B	24RRC(1)A-20/12CAP-1	RRC-101	SWL TO CAP	Non-conforming (6)		X	IHSI 9/83
54	B	24RRC(1)A-21	RRC-101	PIPE TO CROSS	Non-conforming			IHSI 9/83
55	B	24RRC(1)A-22	RRC-101	CROSS-REDUCER	Non-conforming			IHSI 9/83
56	B	16RRC(1)A-1	RRC-101	CROSS TO PIPE	Non-conforming			IHSI 9/83
57	A	16RRC(1)A-1/12RRC(1)-N2D	RRC-101	PIPE TO SWL	Conforming (7)	X		
58	A	16RRC(1)A-1/12RRC(1)-N2E	RRC-101	PIPE TO SWL	Conforming (7)	X		
59	B	16RRC(1)A-2	RRC-101	PIPE TO CAP	Non-conforming			IHSI 9/83
60	B	16RRC(1)A-3	RRC-101	CROSS TO PIPE	Non-conforming			IHSI 9/83
61	A	16RRC(1)A-3/12RRC(1)-N2B	RRC-101	PIPE TO SWL	Conforming (7)	X		
62	A	16RRC(1)A-3/12RRC(1)-N2A	RRC-101	PIPE TO SWL	Conforming (7)	X		
63	B	16RRC(1)A-4	RRC-101	PIPE TO CAP	Non-conforming			IHSI 9/83
64	B	12RRC(1)-N2A-1	RRC-101	SWL TO PIPE	Non-conforming (8)			IHSI 9/83

	A	B	C	D	E	F	G	H
1				TABLE 2				
2				WELD HISTORY				
3								
4	IGSCC	WELD	DRAWING			TREATMENT		
5	CATEGORY	NUMBER	NO.	CONFIGURATION	MATERIAL(1)	SHT	CRC	SI
65	B	12RRC(1)-N2A-1A	RRC-101	PIPE TO PIPE	Non-conforming			IHSI 9/83
66	A	12RRC(1)-N2A-2	RRC-101	PIPE TO EL	Conforming (7)	X		
67	A	12RRC(1)-N2A-3	RRC-101	EL TO PIPE	Conforming (7)	X		
68	A	12RRC(1)-N2A-4	RRC-101	PIPE TO SE	Conforming (9)	X	X	
69	G(11,17)	12RRC(1)-N2A-6	RRC-101	SE TO NOZ	Non-conforming (10)			
70	B	12RRC(1)-N2B-1	RRC-101	SWL TO PIPE	Non-conforming (8)			IHSI 9/83
71	B	12RRC(1)-N2B-1A	RRC-101	PIPE TO PIPE	Non-conforming			IHSI 9/83
72	A	12RRC(1)-N2B-2	RRC-101	PIPE TO EL	Conforming (7)	X		
73	A	12RRC(1)-N2B-3	RRC-101	EL TO PIPE	Conforming (7)	X		
74	A	12RRC(1)-N2B-4	RRC-101	PIPE TO SE	Conforming (9)	X	X	
75	G(11,17)	12RRC(1)-N2B-6	RRC-101	SE TO NOZ	Non-conforming (10)			
76	B	12RRC(1)-N2C-1	RRC-101	REDUCER TO PIPE	Non-conforming (8)	X	X	IHSI 9/83
77	B	12RRC(1)-N2C-1A	RRC-101	PIPE TO PIPE	Non-conforming			IHSI 9/83
78	A	12RRC(1)-N2C-2	RRC-101	PIPE TO EL	Conforming (7)	X		
79	A	12RRC(1)-N2C-3	RRC-101	EL TO PIPE	Conforming (7)	X		
80	A	12RRC(1)-N2C-4	RRC-101	PIPE TO SE	Conforming (9)	X	X	
81	G(11,17)	12RRC(1)-N2C-6	RRC-101	SE TO NOZ	Non-conforming (10)			
82	B	12RRC(1)-N2D-1	RRC-101	SWL TO PIPE	Non-conforming (8)	X	X	IHSI 9/83
83	B	12RRC(1)-N2D-1A	RRC-101	PIPE TO PIPE	Non-conforming			IHSI 9/83
84	A	12RRC(1)-N2D-2	RRC-101	PIPE TO EL	Conforming (7)	X		
85	A	12RRC(1)-N2D-3	RRC-101	EL TO PIPE	Conforming (7)	X		
86	A	12RRC(1)-N2D-4	RRC-101	PIPE TO SE	Conforming (9)	X	X	
87	G(11,17)	12RRC(1)-N2D-6	RRC-101	SE TO NOZ	Non-conforming (10)			
88	B	12RRC(1)-N2E-1	RRC-101	SWL TO PIPE	Non-conforming (8)	X	X	IHSI 9/83
89	B	12RRC(1)-N2E-1A	RRC-101	PIPE TO PIPE	Non-conforming			IHSI 9/83
90	A	12RRC(1)-N2E-2	RRC-101	PIPE TO EL	Conforming (7)	X		
91	A	12RRC(1)-N2E-3	RRC-101	EL TO PIPE	Conforming (7)	X		
92	A	12RRC(1)-N2E-4	RRC-101	PIPE TO SE	Conforming (9)	X	X	
93	G(11,17)	12RRC(1)-N2E-6	RRC-101	SE TO NOZ	Non-conforming (10)			

	A	B	C	D	E	F	G	H
1				TABLE 2				
2				WELD HISTORY				
3								
4	IGSCC	WELD	DRAWING			TREATMENT		
5	CATEGORY	NUMBER	NO.	CONFIGURATION	MATERIAL(1)	SHT	CRC	SI
94	G(11,17)	24RRC(2)B-1	RRC-102	NOZ TO SE	Non-conforming (5)			
95	B	24RRC(2)B-2	RRC-102	SE TO PIPE	Non-conforming			IHSI 9/83
96	B	24RRC(2)B-3	RRC-102	PIPE TO EL	Non-conforming			IHSI 9/83
97	B	24RRC(2)B-4	RRC-102	EL TO PIPE	Non-conforming			IHSI 9/83
98	B	24RRC(2)B-5	RRC-102	PIPE TO PIPE	Non-conforming			IHSI 9/83
99	B	24RRC(2)B-6	RRC-102	PIPE TO EL	Non-conforming			IHSI 9/83
100	B	24RRC(2)B-7	RRC-102	EL TO VALVE	Non-conforming			IHSI 9/83
101	B	24RRC(2)B-8	RRC-102	VALVE TO PIPE	Non-conforming			IHSI 9/83
102	B	24RRC(2)B-8/4RRC(8)-4S	RRC-102	PIPE TO SWL	Non-conforming			IHSI 5/86
103	B	4RRC(8)2B-1	RRC-102	SWL TO PIPE	Non-conforming			IHSI 9/83
104	B	4RRC(8)2B-2	RRC-102	PIPE TO FLANGE	Non-conforming			IHSI 9/83
105	B	24RRC(2)B-8/4RRC(4)-4S	RRC-102	PIPE TO SWL	Non-conforming			IHSI 5/86
106	B	24RRC(2)B-9	RRC-102	PIPE TO EL	Non-conforming			IHSI 9/83
107	B	24RRC(2)B-10	RRC-102	EL TO PUMP	Non-conforming			IHSI 9/83
108	B	24RRC(1)B-11	RRC-102	PUMP TO PIPE	Non-conforming			IHSI 9/83
109	B	24RRC(1)B-11/8CAP	RRC-102	PIPE TO SWL	Non-conforming			IHSI 5/86
110	B	24RRC(1)B-11/8CAP-1	RRC-102	SWL TO CAP	Non-conforming (6)		X	IHSI 9/83
111	B	24RRC(1)B-11/4RRC(8)-4S	RRC-102	PIPE TO SWL	Non-conforming			IHSI 5/86
112	B	4RRC(8)1B-1	RRC-102	SWL TO PIPE	Non-conforming			IHSI 9/83
113	B	4RRC(8)1B-2	RRC-102	PIPE TO FLANGE	Non-conforming			IHSI 9/83
114	B	24RRC(1)B-12	RRC-102	PIPE TO VALVE	Non-conforming			IHSI 9/83
115	B	24RRC(1)B-13	RRC-102	VALVE TO PIPE	Non-conforming			IHSI 9/83
116	B	24RRC(1)B-14	RRC-102	PIPE TO EL	Non-conforming			IHSI 9/83
117	B	24RRC(1)B-15	RRC-102	EL TO PIPE	Non-conforming			IHSI 9/83
118	B	24RRC(1)B-16	RRC-102	PIPE TO VALVE	Non-conforming			IHSI 9/83
119	B	24RRC(1)B-17	RRC-102	VALVE TO EL	Non-conforming			IHSI 9/83
120	B	24RRC(1)B-18	RRC-102	EL TO PIPE	Non-conforming			IHSI 9/83
121	B	24RRC(1)B-18/12RRC(7)-4S	RRC-102	PIPE TO SWL	Non-conforming			IHSI 5/86
122	B	24RRC(1)B-18/12CAP	RRC-102	PIPE TO SWL	Non-conforming			IHSI 5/86

	A	B	C	D	E	F	G	H
1				TABLE 2				
2				WELD HISTORY				
3								
4	IGSCC	WELD	DRAWING				TREATMENT	
5	CATEGORY	NUMBER	NO.	CONFIGURATION	MATERIAL(1)	SHT	CRC	SI
123	B	24RRC(1)B-18/12CAP-1	RRC-102	SWL TO PIPE	Non-conforming (6)		X	IHSI 9/83
124	B	24RRC(1)B-19	RRC-102	PIPE TO CROSS	Non-conforming			IHSI 9/83
125	B	24RRC(1)B-20	RRC-102	CROSS-REDUCER	Non-conforming			IHSI 9/83
126	B	16RRC(1)B-1	RRC-102	CROSS TO PIPE	Non-conforming			IHSI 9/83
127	A	16RRC(1)B-1/12RRC(1)-N2G	RRC-102	PIPE TO SWL	Conforming (7)	X		
128	A	16RRC(1)B-1/12RRC(1)-N2F	RRC-102	PIPE TO SWL	Conforming (7)	X		
129	B	16RRC(1)B-2	RRC-102	PIPE TO CAP	Non-conforming			IHSI 9/83
130	B	16RRC(1)B-3	RRC-102	CROSS TO PIPE	Non-conforming			IHSI 9/83
131	A	16RRC(1)B-3/12RRC(1)-N2J	RRC-102	PIPE TO SWL	Conforming (7)	X		
132	A	16RRC(1)B-3/12RRC(1)-N2K	RRC-102	PIPE TO SWL	Conforming (7)	X		
133	B	16RRC(1)B-4	RRC-102	PIPE TO CAP	Non-conforming			IHSI 9/83
134	B	12RRC(1)-N2F-1	RRC-102	SWL TO PIPE	Non-conforming (8)			IHSI 9/83
135	B	12RRC(1)-N2F-1A	RRC-102	PIPE TO PIPE	Non-conforming			IHSI 9/83
136	A	12RRC(1)-N2F-2	RRC-102	PIPE TO EL	Conforming (7)	X		
137	A	12RRC(1)-N2F-3	RRC-102	EL TO PIPE	Conforming (7)	X		
138	A	12RRC(1)-N2F-4	RRC-102	PIPE TO SE	Conforming (9)	X	X	
139	G(11,17)	12RRC(1)-N2F-6	RRC-102	SE TO NOZ	Non-conforming (10)			
140	B	12RRC(1)-N2G-1	RRC-102	SWL TO PIPE	Non-conforming (8)			IHSI 9/83
141	B	12RRC(1)-N2G-1A	RRC-102	PIPE TO PIPE	Non-conforming			IHSI 9/83
142	A	12RRC(1)-N2G-2	RRC-102	PIPE TO EL	Conforming (7)	X		
143	A	12RRC(1)-N2G-3	RRC-102	EL TO PIPE	Conforming (7)	X		
144	A	12RRC(1)-N2G-4	RRC-102	PIPE TO SE	Conforming (9)	X	X	
145	G(11,17)	12RRC(1)-N2G-6	RRC-102	SE TO NOZ	Non-conforming (10)			
146	B	12RRC(1)-N2H-1	RRC-102	SWL TO PIPE	Non-conforming (8)			IHSI 9/83
147	B	12RRC(1)-N2H-1A	RRC-102	PIPE TO PIPE	Non-conforming			IHSI 9/83
148	A	12RRC(1)-N2H-2	RRC-102	PIPE TO EL	Conforming (7)	X		
149	A	12RRC(1)-N2H-3	RRC-102	EL TO PIPE	Conforming (7)	X		
150	A	12RRC(1)-N2H-4	RRC-102	PIPE TO SE	Conforming (9)	X	X	
151	G(11,17)	12RRC(1)-N2H-6	RRC-102	SE TO NOZ	Non-conforming (10)			

	A	B	C	D	E	F	G	H
1				TABLE 2				
2				WELD HISTORY				
3								
4	IGSCC	WELD	DRAWING			TREATMENT		
5	CATEGORY	NUMBER	NO.	CONFIGURATION	MATERIAL(1)	SHT	CRC	SI
152	B	12RRC(1)-N2J-1	RRC-102	SWL TO PIPE	Non-conforming (8)			IHSI 9/83
153	B	12RRC(1)-N2J-1A	RRC-102	PIPE TO PIPE	Non-conforming			IHSI 9/83
154	A	12RRC(1)-N2J-2	RRC-102	PIPE TO EL	Conforming (7)	X		
155	A	12RRC(1)-N2J-3	RRC-102	EL TO PIPE	Conforming (7)	X		
156	A	12RRC(1)-N2J-4	RRC-102	PIPE TO SE	Conforming (9)	X	X	
157	G(11,17)	12RRC(1)-N2J-6	RRC-102	SE TO NOZ	Non-conforming (10)			
158	B	12RRC(1)-N2K-1	RRC-102	SWL TO PIPE	Non-conforming (8)			IHSI 9/83
159	B	12RRC(1)-N2K-1A	RRC-102	PIPE TO PIPE	Non-conforming			IHSI 9/83
160	A	12RRC(1)-N2K-2	RRC-102	PIPE TO EL	Conforming (7)	X		
161	A	12RRC(1)-N2K-3	RRC-102	EL TO PIPE	Conforming (7)	X		
162	A	12RRC(1)-N2K-4	RRC-102	PIPE TO SE	Conforming (9)	X	X	
163	G(11,17)	12RRC(1)-N2K-6	RRC-102	SE TO NOZ	Non-conforming (10)			
164	B	20RRC(6)-1	RRC-105	PIPE TO RED TEE	Non-conforming			IHSI 9/83
165	B	20RRC(6)-2	RRC-105	PIPE TO EL	Non-conforming			IHSI 9/83
166	B	20RRC(6)-3	RRC-105	EL TO PIPE	Non-conforming			IHSI 9/83
167	B	20RRC(6)-4	RRC-105	PIPE TO EL	Non-conforming			IHSI 9/83
168	B	20RRC(6)-5	RRC-105	EL TO PIPE	Non-conforming			IHSI 9/83
169	B	20RRC(6)-6	RRC-105	PIPE TO EL	Non-conforming			IHSI 9/83
170	B	20RRC(6)-7	RRC-105	EL TO PIPE	Non-conforming			IHSI 9/83
171	B	20RRC(6)-7A	RRC-105	PIPE TO PIPE	Non-conforming			IHSI 9/83
172	B	20RRC(6)-8	RRC-105	PIPE TO VALVE	Non-conforming			IHSI 9/83
173	B	12RRC(7)A-1	RRC-106	VALVE TO PIPE	Non-conforming			IHSI 9/83
174	B	12RRC(7)A-2	RRC-106	PIPE TO EL	Non-conforming			IHSI 9/83
175	B	12RRC(7)A-3	RRC-106	EL TO PIPE	Non-conforming			IHSI 9/83
176	B	12RRC(7)A-4	RRC-106	PIPE TO EL	Non-conforming			IHSI 9/83
177	B	12RRC(7)A-5	RRC-106	EL TO PIPE	Non-conforming			IHSI 9/83
178	B	12RRC(7)A-6	RRC-106	PIPE TO SWL	Non-conforming			IHSI 9/83
179	B	12RRC(7)B-1	RRC-107	VALVE TO PIPE	Non-conforming			IHSI 9/83
180	B	12RRC(7)B-2A	RRC-107	PIPE TO PIPE	Non-conforming			IHSI 9/83

	A	B	C	D	E	F	G	H
1				TABLE 2				
2				WELD HISTORY				
3								
4	IGSCC	WELD	DRAWING			TREATMENT		
5	CATEGORY	NUMBER	NO.	CONFIGURATION	MATERIAL(1)	SHT	CRC	SI
181	B	12RRC(7)B-2	RRC-107	PIPE TO EL	Non-conforming			IHSI 9/83
182	B	12RRC(7)B-3	RRC-107	EL TO PIPE	Non-conforming			IHSI 9/83
183	B	12RRC(7)B-4	RRC-107	PIPE TO EL	Non-conforming			IHSI 9/83
184	B	12RRC(7)B-5	RRC-107	EL TO PIPE	Non-conforming			IHSI 9/83
185	B	12RRC(7)B-6	RRC-107	PIPE TO SWL	Non-conforming			IHSI 9/83
186	B	4RRC(4)A-1	RRC-108	SWL TO PIPE	Non-conforming			IHSI 5/86
187	B	4RRC(4)A-2	RRC-108	PIPE TO TEE	Non-conforming			IHSI 5/86
188	B	4RRC(4)A-3	RRC-108	PIPE TO REDUCER	Non-conforming			IHSI 5/86
189	B	4RRC(4)A-4	RRC-108	PIPE TO TEE	Non-conforming			IHSI 5/86
190	B	4RRC(4)A-5	RRC-108	TEE TO PIPE	Non-conforming			IHSI 5/86
191	B	4RRC(4)A-6	RRC-108	PIPE TO EL	Non-conforming			IHSI 5/86
192	B	4RRC(4)A-7	RRC-108	EL TO PIPE	Non-conforming			IHSI 5/86
193	B	4RRC(4)A-8	RRC-108	PIPE TO EL	Non-conforming			IHSI 5/86
194	B	4RRC(4)A-9	RRC-108	EL TO PIPE	Non-conforming			IHSI 5/86
195	B	4RRC(4)A-10	RRC-108	PIPE TO VALVE SE	Non-conforming			IHSI 5/86
196	B	4RRC(4)A-11	RRC-108	SE TO VALVE	Non-conforming			IHSI 5/86
197	B	4RRC(4)B-1	RRC-109	SWL TO PIPE	Non-conforming			IHSI 5/86
198	B	4RRC(4)B-2	RRC-109	PIPE TO TEE	Non-conforming			IHSI 5/86
199	B	4RRC(4)B-3	RRC-109	PIPE TO REDUCER	Non-conforming			IHSI 5/86
200	B	4RRC(4)B-4	RRC-109	PIPE TO TEE	Non-conforming			IHSI 5/86
201	B	4RRC(4)B-5	RRC-109	TEE TO PIPE	Non-conforming			IHSI 5/86
202	B	4RRC(4)B-6	RRC-109	PIPE TO EL	Non-conforming			IHSI 5/86
203	B	4RRC(4)B-7	RRC-109	EL TO PIPE	Non-conforming			IHSI 5/86
204	B	4RRC(4)B-8	RRC-109	PIPE TO PIPE	Non-conforming			IHSI 5/86
205	B	4RRC(4)B-9	RRC-109	PIPE TO EL	Non-conforming			IHSI 5/86
206	B	4RRC(4)B-10	RRC-109	EL TO PIPE	Non-conforming			IHSI 5/86
207	B	4RRC(4)B-11	RRC-109	PIPE TO VALVE SE	Non-conforming			IHSI 5/86
208	B	4RRC(4)B-12	RRC-109	SE TO VALVE	Non-conforming			IHSI 5/86
209	D(13)	12RFW(1)AC-13	RFW-101	NZ TO SE	Non-conforming(14)			

	A	B	C	D	E	F	G	H
1				TABLE 2				
2				WELD HISTORY				
3								
4	IGSCC	WELD	DRAWING			TREATMENT		
5	CATEGORY	NUMBER	NO.	CONFIGURATION	MATERIAL(1)	SHT	CRC	SI
210	A(13)	12RFW(1)AC-12	RFW-101	SE STUB TO SE	Conforming(12)			
211	A(13)	12RFW(1)AC-11	RFW-101	SE EXT-SE STUB	Conforming(15)			
212	D(13)	12RFW(1)AB-11	RFW-101	NZ TO SE	Non-conforming(14)			
213	A(13)	12RFW(1)AB-10	RFW-101	SE STUB TO SE	Conforming(12)			
214	A(13)	12RFW(1)AB-9	RFW-101	SE EXT-SE STUB	Conforming(15)			
215	D(13)	12RFW(1)AA-11	RFW-101	NZ TO SE	Non-conforming(14)			
216	A(13)	12RFW(1)AA-10	RFW-101	SE STUB TO SE	Conforming(12)			
217	A(13)	12RFW(1)AA-9	RFW-101	SE EXT-SE STUB	Conforming(15)			
218	D(13)	12RFW(1)BD-11	RFW-102	NZ TO SE	Non-conforming(14)			
219	A(13)	12RFW(1)BD-10	RFW-102	SE STUB TO SE	Conforming(12)			
220	A(13)	12RFW(1)BD-9	RFW-102	SE EXT-SE STUB	Conforming(15)			
221	D(13)	12RFW(1)BE-11	RFW-102	NZ TO SE	Non-conforming(14)			
222	A(13)	12RFW(1)BE-10	RFW-102	SE STUB TO SE	Conforming(12)			
223	A(13)	12RFW(1)BE-9	RFW-102	SE EXT-SE STUB	Conforming(15)			
224	D(13)	12RFW(1)BF-14	RFW-102	NZ TO SE	Non-conforming(14)			
225	A(13)	12RFW(1)BF-13	RFW-102	SE STUB TO SE	Conforming(12)			
226	A(13)	12RFW(1)BF-12	RFW-102	SE EXT-SE STUB	Conforming(15)			
227	G(11,13)	10HPCS(1)-4	HPCS-101	NZ TO SE	Non-conforming(14)			
228	A(13)	10HPCS(1)-3	HPCS-101	SE EXT TO SE	Conforming(16)			
229	D(13)	10LPCS(1)-4	LPCS-101	NZ TO SE	Non-conforming(14)			
230	A(13)	10LPCS(1)-3	LPCS-101	SE EXT TO SE	Conforming(16)			
231	D(13)	12LPCI(1)A-6	RHR-101	NZ TO SE	Non-conforming(14)			
232	A(13)	12LPCI(1)A-5	RHR-101	SE EXT TO SE	Conforming(16)			
233	G(11,13)	12LPCI(1)B-6	RHR-102	NZ TO SE	Non-conforming(14)			
234	A(13)	12LPCI(1)B-5	RHR-102	SE EXT TO SE	Conforming(16)			
235	G(11,13)	12LPCI(1)C-6	RHR-103	NZ TO SE	Non-conforming(14)			
236	A(13)	12LPCI(1)C-5	RHR-103	SE EXT TO SE	Conforming(16)			
237								
238								

	A	B	C	D	E	F	G	H
1				TABLE 2				
2				WELD HISTORY				
3								
4	IGSCC	WELD	DRAWING			TREATMENT		
5	CATEGORY	NUMBER	NO.	CONFIGURATION	MATERIAL(1)	SHT	CRC	SI
239	NOTES							
240	1	Unless otherwise noted, all material is regular grade type 304 or 316.						
241	2	SA 508 Cl 2 nozzle, buttered with Inconel 182 weld metal, welded to 336 F8 (0.025 C) Safe end.						
242		with Inconel 82 weld metal						
243	3	SA 336 F8 Safe end with 0.025 % carbon						
244	4	Valve is carbon steel						
245	5	SA 508 Cl 2 nozzle, buttered with Inconel 182 weld metal. Post weld heat treated. Welded						
246		to SA 336 F8 Safe end (with 0.020 carbon content) with Inconel 82 weld metal for root/hot pass						
247		and Inconel 182 for balance.						
248	6	CRC on cap side only						
249	7	Regular grade type 304. Weld was SHT after welding						
250	8	Nozzle side non-conforming. Pipe side solution heat treatment after corrosion resistent cladding.						
251	9	Pipe side SHT after CRC. Safe end Type 316L (<0.025 Carbon)						
252	10	SA 508 Cl 2 nozzle, buttered with Inconel 182. Original Inconel 600 safe-end removed. New 316L						
253		safe end with Inconel 182 butter on the nozzle side of the safe end welded to						
254		original Inconel 182 buttering with Inconel 82 weld metal for the butt weld.						
255	11	After this weld is examined at R7 it will be reclassified as category D						
256	12	Considered conforming, with Inconel 600 safe end and SE stub welded with						
257		Inconel 82 weld material exposed to the fluid media.						
258	13	This weld added to GL 88-01 scope						
259	14	Inconel 182 buttering on safe end welded to Inconel 600 SE with Inconel 182 weld metal						
260		root/hot pass and Inconel 182 for balance.						
261	15	Considered conforming, with Inconel 600 safe end, stub and carbon steel safe end extension						
262		welded with Inconel 82 weld material exposed to the fluid media.						
263	16	Considered conforming, with Inconel 600 safe end welded to carbon steel safe end extension						
264		with Inconel 82 weld material exposed to the fluid media.						
265	17	Weld reclassified from category A to G						
266								
267								

	A	B	C	D	E	F	G	H
1				TABLE 2				
2				WELD HISTORY				
3								
4	IGSCC	WELD	DRAWING			TREATMENT		
5	CATEGORY	NUMBER	NO.	CONFIGURATION	MATERIAL(1)	SHT	CRC	SI
268								
269								
270	ABBREVIATIONS			WELD				
271	SHT	Solution heat treated		NUMBER				
272	CRC	Corrosion resistant cladding		KEY				
273	IHSI	Induction heating stress improvemnet		24RRC(2)A-6	unique ISI weld number			
274	SE	safe-end		24	pipe size (nominal inches)			
275	EL	elbow		RRC(2)	system name and number			
276	NOZ, NZ	nozzle		A	loop of multi-loop system			
277	SWL	sweep-o-let		-6	weld sequence number			

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1							TABLE 3										
2							INSPECTION HISTORY										
3																	
4	IGSCC	WELD		PAST OUTAGES					FLAW			FUTURE OUTAGES (3)					
5	CATEGORY	NUMBER(1)	R1	R2	R3	R4	R5	R6	FOUND(2)	R7	R8	R9	R10	R11	R12	R13	
6																	
7	G(4)	4JP(NZ)A-1						O+		X							
8	A	4JP(NZ)A-2						O+		X							
9	G(4)	4JP(NZ)B-1						O+		X							
10	A	4JP(NZ)B-2						O+		X							
11	B	20RHR(2)-1						X(7)		O-							
12	B	20RHR(2)-2						X(7)		O-							
13	B	12RHR(1)A-14									X						
14	B	12RHR(1)A-15															
15	B	12RHR(1)A-16		X										X			
16	B	12RHR(1)A-17		X										X			
17	B	12RHR(1)A-18		X										X			
18	B	12RHR(1)B-10								X							
19	B	12RHR(1)B-11								X							
20	B	12RHR(1)B-12								X							
21	B	12RHR(1)B-13								X							
22	G(4)	24RRC(2)A-1						O+		X							
23	B	24RRC(2)A-2						O+		X							
24	B	24RRC(2)A-3						O+		X							
25	B	24RRC(2)A-4															
26	B	24RRC(2)A-5															
27	B	24RRC(2)A-6															
28	B	24RRC(2)A-7															
29	B	24RRC(2)A-8															
30	B	24RRC(2)A-9															
31	B	24RRC(2)A-10															
32	B	24RRC(2)A-10/4RRC(8)-4S	X			X										X	
33	B	4RRC(8)2A-1				X										X	
34	B	4RRC(8)2A-2				X										X	
35	B	24RRC(2)A-10/4RRC(4)-4S	X			X										X	
36	B	24RRC(2)A-11															
37	B	24RRC(2)A-12															
38	B	24RRC(1)A-13															

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1							TABLE 3										
2							INSPECTION HISTORY										
3																	
4	IGSCC	WELD	PAST OUTAGES						FLAW	FUTURE OUTAGES (3)							
5	CATEGORY	NUMBER(1)	R1	R2	R3	R4	R5	R6	FOUND(2)	R7	R8	R9	R10	R11	R12	R13	
6																	
39	B	24RRC(1)A-13/8CAP	X			X										X	
40	B	24RRC(1)A-13/8CAP-1				X										X	
41	B	24RRC(1)A-13/4RRC(8)-4S	X										X				
42	B	4RRC(8)1A-1				X										X	
43	B	4RRC(8)1A-2				X										X	
44	B	24RRC(1)A-14															
45	B	24RRC(1)A-15															
46	B	24RRC(1)A-16															
47	B	24RRC(1)A-17															
48	B	24RRC(1)A-18															
49	B	24RRC(1)A-19															
50	B	24RRC(1)A-20															
51	B	24RRC(1)A-20/12RRC(7)-4S	X					O+			X						
52	B	24RRC(1)A-20/12CAP	X										X				
53	B	24RRC(1)A-20/12CAP-1															
54	B	24RRC(1)A-21															
55	B	24RRC(1)A-22															
56	B	16RRC(1)A-1															
57	A	16RRC(1)A-1/12RRC(1)-N2D					X										
58	A	16RRC(1)A-1/12RRC(1)-N2E					X										
59	B	16RRC(1)A-2					X										
60	B	16RRC(1)A-3					X										
61	A	16RRC(1)A-3/12RRC(1)-N2B					X										
62	A	16RRC(1)A-3/12RRC(1)-N2A					X										
63	B	16RRC(1)A-4					X										
64	B	12RRC(1)-N2A-1					X										
65	B	12RRC(1)-N2A-1A															
66	A	12RRC(1)-N2A-2															
67	A	12RRC(1)-N2A-3					X										
68	A	12RRC(1)-N2A-4															
69	G(4)	12RRC(1)-N2A-6								X							
70	B	12RRC(1)-N2B-1															

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1							TABLE 3										
2							INSPECTION HISTORY										
3																	
4	IGSCC	WELD	PAST OUTAGES						FLAW	FUTURE OUTAGES (3)							
5	CATEGORY	NUMBER(1)	R1	R2	R3	R4	R5	R6	FOUND(2)	R7	R8	R9	R10	R11	R12	R13	
6																	
71	B	12RRC(1)-N2B-1A															
72	A	12RRC(1)-N2B-2															
73	A	12RRC(1)-N2B-3					X			O-							
74	A	12RRC(1)-N2B-4															
75	G(4)	12RRC(1)-N2B-6								X							
76	B	12RRC(1)-N2C-1					X										
77	B	12RRC(1)-N2C-1A					X										
78	A	12RRC(1)-N2C-2															
79	A	12RRC(1)-N2C-3					X										
80	A	12RRC(1)-N2C-4								X							
81	G(4)	12RRC(1)-N2C-6								X							
82	B	12RRC(1)-N2D-1					X										
83	B	12RRC(1)-N2D-1A															
84	A	12RRC(1)-N2D-2															
85	A	12RRC(1)-N2D-3															
86	A	12RRC(1)-N2D-4															
87	G(4)	12RRC(1)-N2D-6								X							
88	B	12RRC(1)-N2E-1															
89	B	12RRC(1)-N2E-1A															
90	A	12RRC(1)-N2E-2															
91	A	12RRC(1)-N2E-3															
92	A	12RRC(1)-N2E-4															
93	G(4)	12RRC(1)-N2E-6								X							
94	G(4)	24RRC(2)B-1						O+		X							
95	B	24RRC(2)B-2															
96	B	24RRC(2)B-3															
97	B	24RRC(2)B-4															
98	B	24RRC(2)B-5															
99	B	24RRC(2)B-6															
100	B	24RRC(2)B-7															
101	B	24RRC(2)B-8															
102	B	24RRC(2)B-8/4RRC(8)-4S	X							X							

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1							TABLE 3										
2							INSPECTION HISTORY										
3																	
4	IGSCC	WELD	PAST OUTAGES						FLAW	FUTURE OUTAGES (3)							
5	CATEGORY	NUMBER(1)	R1	R2	R3	R4	R5	R6	FOUND(2)	R7	R8	R9	R10	R11	R12	R13	
6																	
103	B	4RRC(8)2B-1								X							
104	B	4RRC(8)2B-2								X							
105	B	24RRC(2)B-8/4RRC(4)-4S	X							X							
106	B	24RRC(2)B-9								X							
107	B	24RRC(2)B-10								X							
108	B	24RRC(1)B-11								X							
109	B	24RRC(1)B-11/8CAP	X														
110	B	24RRC(1)B-11/8CAP-1								X							
111	B	24RRC(1)B-11/4RRC(8)-4S	X														
112	B	4RRC(8)1B-1									X						
113	B	4RRC(8)1B-2									X						
114	B	24RRC(1)B-12															
115	B	24RRC(1)B-13															
116	B	24RRC(1)B-14															
117	B	24RRC(1)B-15															
118	B	24RRC(1)B-16															
119	B	24RRC(1)B-17															
120	B	24RRC(1)B-18															
121	B	24RRC(1)B-18/12RRC(7)-4S	X								X						
122	B	24RRC(1)B-18/12CAP	X														
123	B	24RRC(1)B-18/12CAP-1															
124	B	24RRC(1)B-19															
125	B	24RRC(1)B-20															
126	B	16RRC(1)B-1									X						
127	A	16RRC(1)B-1/12RRC(1)-N2G									X						
128	A	16RRC(1)B-1/12RRC(1)-N2F									X						
129	B	16RRC(1)B-2															
130	B	16RRC(1)B-3															
131	A	16RRC(1)B-3/12RRC(1)-N2J									X						
132	A	16RRC(1)B-3/12RRC(1)-N2K									X						
133	B	16RRC(1)B-4															
134	B	12RRC(1)-N2F-1															

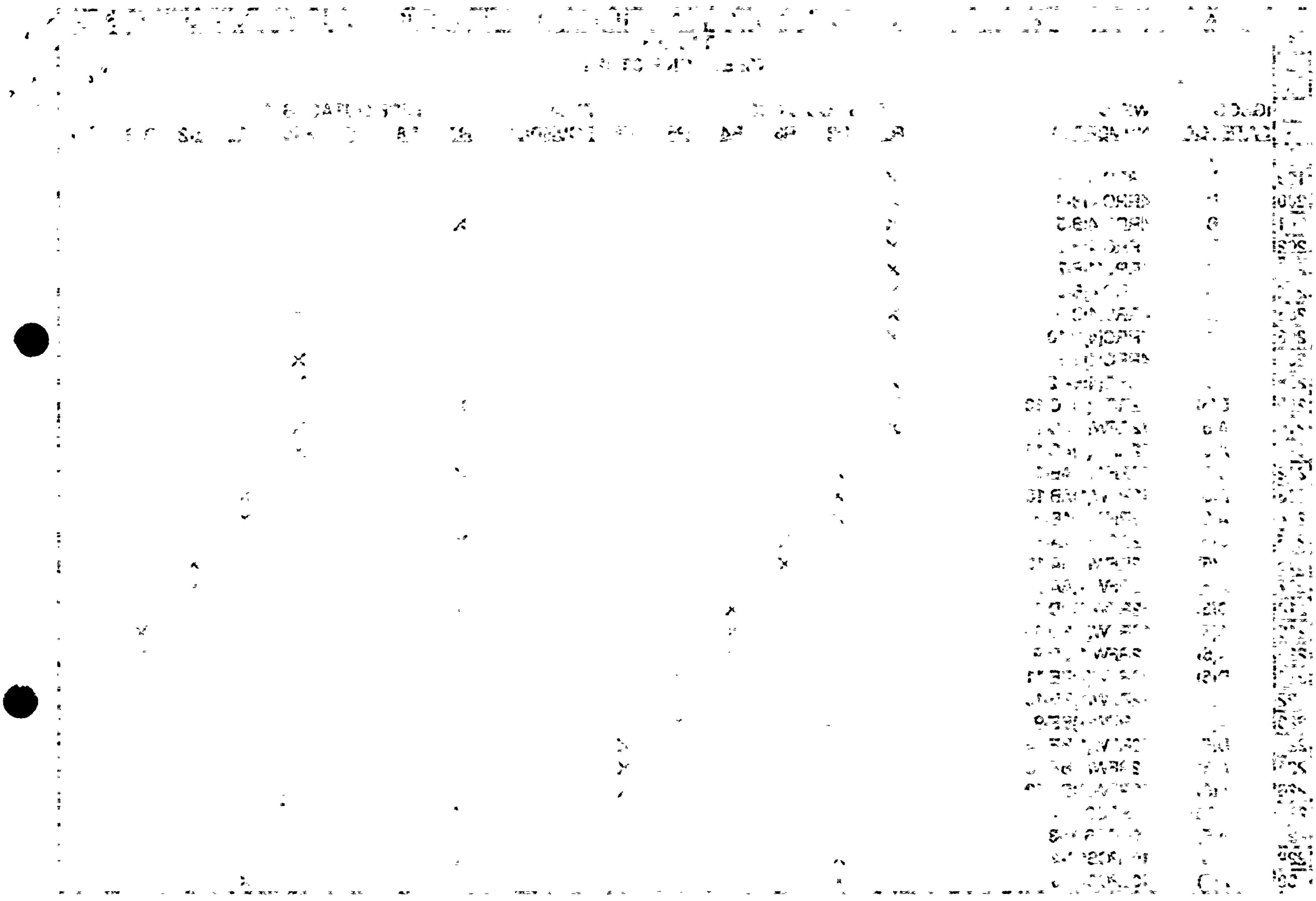
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1							TABLE 3										
2							INSPECTION HISTORY										
3																	
4	IGSCC	WELD	PAST OUTAGES						FLAW	FUTURE OUTAGES (3)							
5	CATEGORY	NUMBER(1)	R1	R2	R3	R4	R5	R6	FOUND(2)	R7	R8	R9	R10	R11	R12	R13	
6																	
135	B	12RRC(1)-N2F-1A															
136	A	12RRC(1)-N2F-2															
137	A	12RRC(1)-N2F-3															
138	A	12RRC(1)-N2F-4															
139	G(4)	12RRC(1)-N2F-6								X							
140	B	12RRC(1)-N2G-1															
141	B	12RRC(1)-N2G-1A															
142	A	12RRC(1)-N2G-2															
143	A	12RRC(1)-N2G-3								X							
144	A	12RRC(1)-N2G-4															
145	G(4)	12RRC(1)-N2G-6								X							
146	B	12RRC(1)-N2H-1								X							
147	B	12RRC(1)-N2H-1A								X							
148	A	12RRC(1)-N2H-2															
149	A	12RRC(1)-N2H-3								X							
150	A	12RRC(1)-N2H-4								X							
151	G(4)	12RRC(1)-N2H-6								X							
152	B	12RRC(1)-N2J-1															
153	B	12RRC(1)-N2J-1A															
154	A	12RRC(1)-N2J-2															
155	A	12RRC(1)-N2J-3															
156	A	12RRC(1)-N2J-4															
157	G(4)	12RRC(1)-N2J-6								X							
158	B	12RRC(1)-N2K-1															
159	B	12RRC(1)-N2K-1A															
160	A	12RRC(1)-N2K-2															
161	A	12RRC(1)-N2K-3															
162	A	12RRC(1)-N2K-4															
163	G(4)	12RRC(1)-N2K-6								X							
164	B	20RRC(6)-1															
165	B	20RRC(6)-2					X										
166	B	20RRC(6)-3		X										X			

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1							TABLE 3										
2							INSPECTION HISTORY										
3																	
4	IGSCC	WELD		PAST OUTAGES					FLAW			FUTURE OUTAGES (3)					
5	CATEGORY	NUMBER(1)	R1	R2	R3	R4	R5	R6	FOUND(2)	R7	R8	R9	R10	R11	R12	R13	
6																	
167	B	20RRC(6)-4		X										X			
168	B	20RRC(6)-5		X										X			
169	B	20RRC(6)-6		X										X			
170	B	20RRC(6)-7					O+	X									
171	B	20RRC(6)-7A					O+	X									
172	F(7)	20RRC(6)-8					O+	X	R6	X							
173	B	12RRC(7)A-1		X										X			
174	B	12RRC(7)A-2		X										X			
175	B	12RRC(7)A-3		X										X			
176	B	12RRC(7)A-4		X		X										X	
177	B	12RRC(7)A-5				X										X	
178	B	12RRC(7)A-6				X										X	
179	B	12RRC(7)B-1						X(7)		O-							
180	B	12RRC(7)B-2A								X							
181	B	12RRC(7)B-2								X							
182	B	12RRC(7)B-3								X							
183	B	12RRC(7)B-4		X										X			
184	B	12RRC(7)B-5		X										X			
185	B	12RRC(7)B-6		X										X			
186	B	4RRC(4)A-1	X										X				
187	B	4RRC(4)A-2	X			X										X	
188	B	4RRC(4)A-3	X														
189	B	4RRC(4)A-4	X														
190	B	4RRC(4)A-5	X										X				
191	B	4RRC(4)A-6	X			X										X	
192	B	4RRC(4)A-7	X			X										X	
193	B	4RRC(4)A-8	X														
194	B	4RRC(4)A-9	X														
195	B	4RRC(4)A-10	X														
196	B	4RRC(4)A-11	X		X										X		
197	B	4RRC(4)B-1	X														
198	B	4RRC(4)B-2	X														

TABLE 3

INSPECTION HISTORY

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1																	
2																	
3																	
4	IGSCC	WELD	PAST OUTAGES						FLAW	FUTURE OUTAGES (3)							
5	CATEGORY	NUMBER(1)	R1	R2	R3	R4	R5	R6	FOUND(2)	R7	R8	R9	R10	R11	R12	R13	
6																	
199	B	4RRC(4)B-3	X														
200	B	4RRC(4)B-4	X							X							
201	B	4RRC(4)B-5	X							X							
202	B	4RRC(4)B-6	X														
203	B	4RRC(4)B-7	X														
204	B	4RRC(4)B-8	X														
205	B	4RRC(4)B-9	X										X				
206	B	4RRC(4)B-10	X								X						
207	B	4RRC(4)B-11	X										X				
208	B	4RRC(4)B-12	X										X				
209	D(5)	12RFW(1)AC-13	X							X							
210	A(5)	12RFW(1)AC-12	X										X				
211	A(5)	12RFW(1)AC-11	X										X				
212	D(5)	12RFW(1)AB-11		X						X							
213	A(5)	12RFW(1)AB-10		X										X			
214	A(5)	12RFW(1)AB-9		X										X			
215	D(5)	12RFW(1)AA-11			X					X							
216	A(5)	12RFW(1)AA-10			X										X		
217	A(5)	12RFW(1)AA-9			X										X		
218	D(5)	12RFW(1)BD-11				X				X							
219	A(5)	12RFW(1)BD-10				X										X	
220	A(5)	12RFW(1)BD-9				X										X	
221	D(5)	12RFW(1)BE-11					X			X							
222	A(5)	12RFW(1)BE-10					X										
223	A(5)	12RFW(1)BE-9					X										
224	D(5)	12RFW(1)BF-14						X									
225	A(5)	12RFW(1)BF-13						X									
226	A(5)	12RFW(1)BF-12						X									
227	G(4,5)	10HPCS(1)-4								X							
228	A(5)	10HPCS(1)-3															
229	D(5)	10LPCS(1)-4		X						X							
230	A(5)	10LPCS(1)-3		X										X			



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1							TABLE 3										
2							INSPECTION HISTORY										
3																	
4	IGSCC	WELD	PAST OUTAGES						FLAW	FUTURE OUTAGES (3)							
5	CATEGORY	NUMBER(1)	R1	R2	R3	R4	R5	R6	FOUND(2)	R7	R8	R9	R10	R11	R12	R13	
6																	
231	D(5)	12LPCI(1)A-6		X						X							
232	A(5)	12LPCI(1)A-5		X										X			
233	G(4,5)	12LPCI(1)B-6								X							
234	A(5)	12LPCI(1)B-5															
235	G(4,5)	12LPCI(1)C-6								X							
236	A(5)	12LPCI(1)C-5															
237																	

238 NOTES

239 (1). See Table 2 for configuration and location

240 (2) One flaw has been found in the welds within the scope of Generic Letter 88-01

241 (3). The Supply System may modify this schedule by substituding welds or changing the outage in which they are examined

242 (4) This weld will be reclassified to category D following examination at R7

243 (5) This weld added to GL 88-01 scope

244 (6) This weld reclassifed to category F pending examination results at R7

245 (7) Weld examined as part of weld 20RRC(6)-8 sample expansion.

246 O+ Examination moved to later outage

247 O- Examiantion moved to earlier outage

248

	Outage	Date	Inspection period	Inspection Interval
249	Outage	Date	Inspection period	Inspection Interval
250	R1	4/1986	1	1
251	R2	4/1987	1	
252	R3	4/1988	1	
253	R4	4/1989	2	
254	R5	4/1990	2	
255	R6	4/1991	2	
256	R7	4/1992	3	
257	R8	4/1993	3	
258	R9	4/1994	3	
259	R10	4/1995	1	2
260	R11	4/1996	1	
261	R12	4/1997	1	
262	R13	4/1998	2	