

LOUISIANA / 142 DELARONDE STREET POWER & LIGHT / PO. BOX 6008 • NEW ORLEANS. LOUISIANA 70174 • (504) 366-2345

July 3, 1980

D. L. ASWELL Vice President-Power Production

TIC

LPL 14415 Q-3-A20.03.14

Mr. Karl V. Seyfrit, Director, Region IV U. S. Nuclear Regulatory Commission Office of Inspection and Enforcement 611 Ryan Plaza Drive, Suite 1000 Arlington, Texas 76012

SUBJECT: Waterford 3 SES Docket No. 50-382 IE Bulletin 80-08

Dear Mr. Seyfrit:

We have reviewed the subject IE Bulletin concerning the containment pressure boundary welds between the piping penetration assemblies flued head and the penetration sleeve. We have reviewed the design of Waterford's penetrations with regard to NRC's concerns outlined in the bulletin and submit the following:

- The design of Waterford's containment piping penetration assemblies is of the type described in the bulletin.
- a. The assemblies were designed and fabricated to the 1971 Edition of the ASME B&PV Code, Section III, up to and including the Winter 1973 Addenda. The NRC Regulatory Guide 1.19 does not apply to Waterford 3 (Reference FSAR Section 1.8.1.19).
  - b. The design of the majority of Waterford's assemblies employs a flued head in which the guard or process pipe welds directly to the containment vessel nozzle. This design includes a guard or process pipe to flued head weld, guard or process pipe to containment nozzle weld and, in some instances, a transition piece is welded to the guard pipe to enable the welding of the penetration to the containment nozzles. The remaining penetration designs are similar to those shown in Figure NE-1120-1 of the ASME Section III. The design requires that all containment boundary butt welds

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Mr. Karl V. Seyfrit LPL 14415 Page 2

> be radiographed per applicable codes. Other NDE performed on these welds include, ultrasonic, magnetic particle, liquid penetrant and/or visual examinations as required by specification and code.

- c. All but two welds are either consumable insert or open root. The remaining two welds, used to weld Penetrations 1 and 2 to the containment nozzle, are non-butt corner welds which will be magnetic particle tested per NE-5262. Table 1, attached, identifies by penetration number, the size and material composition pressure boundary welds.
- d. Temp Flex, a penetration fabricator, performed the nondestructive examinations, including radiography, on all containment pressure boundary shop welds. The results of the nondestructive examination of field welds are indicated on Table 2. Please note that since construction is under way, some welds have yet to be completed or examined, but examination will be in accordance with codes.
- 3. This item is not applicable to Waterford 3.

If you have any questions on the above, please contact us.

Yours very truly,

Sh aswell

D. L. Aswell

DLA/IH/ddc

Attachments

cc: Director U. S. Nuclear Regulatory Commission Division of Reactor Construction Inspection Washington, D. C. 20555

		Guard	Pipe	Containment	Nozzle	
Pene No.	Туре	Nom Pipe Dia/Sch	Material	Nom Pipe Dia/Sch	Material	Flued Head Mat
1	I	61/1/2" 66" OD End Ring	SA-155-KCF-70 CL 1 SA-516-GR-70	66/3"	SA-516-CR-70	SA-350-LF2
2	I	61/1/2" 66" OD End Ring	SA-155-KCF-70 CL 1 SA-516-GR-70	66/3"	SA-516-GR-70	SA-350-LF2
3	I	42-3/4/3/4"	SA-155-KCF-70	44/1-1/4"	SA-216-GR-70	SA-350-LF2
4	I	42-3/4/3/4	SA-155-KCF-70	. 44/1-1/4"	SA-516-GR-70	SA-350-LF2
5	111	14/80	SA-106B	14/80	SA-333-GR-6	SA-350-LF2
6	III	14/80	SA-106B	14/80	SA-333-GR-6	SA-350-LF2
7	III	8/40	SA-106B	8/80	SA-333-GR-6	SA-182-F304
8	III	8/40	SA-106B	8/80	SA-333-GR-6	SA-350-LF2
9	III	8/40	SA-106B	8/80	SA-333-GR-6	SA-350-LF2
10	II (Mod)	48/1"	SA-155-KCF-70 CL 1	Flanged Joi Cont Nozzle	nt to	SA-350-LF2
11	II (Mod)	48/1"	SA-155-KCF-70 CL 1	Flanged Joi Cont Nozzle	nt to	SA-350-LF2
12	Not App	plicable				
13	Not App	plicable				
14	III	8/40	SA-106B	8/80	SA-333-GR-6	SA-350-LF2
15	111	14/40 14/140	SA-106B SA-106B	14/140	SA-333-GR-6	SA-350-LF2

TABLE 1

		Guard	Pipe	Containment Nozzle		
Pene No.	Type	Nom Pipe Dia/Sch	Material	Nom Pipe Dia/Sch	Material	Flued Head Mat.
16	III	14/40	SA-106B SA-106B	14/140	SA-333-GR-6	SA-350-LF2
17	111	14/140	SA-106B	14/140	SA-333-GR-6	SA-350-LF2
18	111	14/140	SA-106B SA-106B	14/140	SA-333-GR-6	SA-350-LF2
19	111	14/40	SA-106B	14/140	SA-333-GR-6	SA-350-LF2
20	111	14/40	SA-106B	14/140	SA-333-GR-6	SA-350-LF2
21	111	14/140	SA-106B SA-106B	14/140	SA-333-GR-6	SA-350-LF2
22	111	14/40	SA-106B SA-106B	14/140	SA-333-GR-6	SA-350-LF2
23	111	14/40 14/140	SA-106B SA-106B	14/140	SA-516-GR-70	SA-350-LF2
24	111	14/40	SA-106B SA-106B	14/140	SA-516-GR-70	SA-350-LF2
25	VI	48-1/4"/1-1/4"	SA-516-GR70	48/1-1/4	SA-516-GR-70	N/A
26	ш	10/140	SA-106B	10/120	SA-333-GR-6	SA-182-F304
27	III	10/120	SA-106B	10/120	SA-333-GR-6	SA-182-F304
28	111	10/140	SA-106B	10/120	SA-333-GR-6	SA-182-F304
29	111	10/140	SA-106B	10/120	SA-333-GR-6	SA-182-F304

N/A - Not Applicable

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Guard Pipe			Containment Nozzle			
Pene No.	Type	Nom Pipe Dia/Sch	Material	Nom Pipe Dia/Sch	Material	Flued Head Mat.
30	111	10/140	SA-106B	10/120	SA-333-GR-6	SA-182-F304
31	III	8/40	SA-106B	8/80	SA-333-GR-6	SA-350-LF2
32	IV	36/1-1/2"	SA-106B	36/1-1/2"	SA-516-GR-70	N/A
33	IV	36/1-1/2"	SA-106B	36/1-1/2"	SA-516-GR-70	N/A
34A	11	10/40	SA-312-TP-304	10/160	SB-168	SA-182-F304
354	II	10/40	SA-312-TP-304	10/160	SB-168	SA-182-F304
36	111	18/120	SA-106B	18/120	SA-333-GR-6	SA-182-F304
37	111	18/120	SA-106B	18/120	SA-333-GR-6	SA-182-F304
38	111	18/120	SA-106B	18/120	SA-333-GR-6	SA-182-F304
39	111	18/120	SA-106B	18/120	SA-333-GR-6	SA-182-F304
40	111	24/120	SA-106B	24/120	SA-516-GR-70	SA-182-F304
41	111	∋≟/120	SA-106B	24/120	SA-516-GR-70	SA-182-F304
. 42	III	20/40	SA-106B	10/80	SA-333-GR-6	SA-182-F304
43	v	8/100	SA-106B	8/160	SA-333-GR-6	N/A
- 44	111	6/120	SA-106B	6/120	SA-333-GR-6	SA-182-F304
45	111	8/40	SA-106B	8/160	SA-333-GR-6	SA-350-LF2
46	111	8/40	SA-106B	8/160	SA-333-GR-6	SA-350-LF2
47	111	8/40	SA-106B	8/160	SA-333-GR-6	SA-350-LF2

N/A - Not Applicable

		Guard	Pipe	Containment 1	Nozzle	
Pene No.	Туре	Nom Pipe Dia/Sch	Material	Nom Pipe Dia/Sch	Material	Flued Head Mat.
48	111	8/40	SA-106B	8/160	SA-333-GR-6	SA-350-LF2
49	11	10/80 10/80 Weld Cap	SA-106B SA-234-WPB	10/80	SA-333-GR-6	SA-350-LF2
50	Not App	plicable				
51	111	10/40	SA-106B	10/80	SA-333-GR-6	SA-182-F-304
52	111	8/80	SA-106B	8/80	SA-333-GR-6	SA-350-LF2
53	II (Mod)	6/80 6/80 Weld Cap	SA-106B SA-234-WPB	6/80	SA-333-GR-6	SA-350-LF2
54	II	6/80 6/80 Weld Cap	SA-106B SA-234-WPB	6/80	SA-333-GR-6	SA-350-LF2
55	(HOG) III	14/60	SA-106B	14/140	SA-333-GR-6	SA-182-F-304
56	111	14/80	SA-106B	14/140	SA-333-GR-6	SA-182-F-304
57	111	14/80	SA-106B	14/140	SA-333-GR-6	SA-182-F-304
58	111	14/80	SA-106B	14/140	SA-333-GR-6	SA-182-F-304
50	111	8/100	SA-106B	8/160	SA-333-GR-6	SA-182-F-304
		8/40	SA-106B	8/80	SA-333-GR-6	SA-182-F-304
60	111	8/40	SA-106B	8/80	SA-333-GR-6	SA-350-LF2
01	111	10/40	SA-106B	10/80	SA-333-GR-6	SA-182-F-304
63	II	10/80	SA-106B	10/80	SA-333-GR-6	SA-350-LF2

		Guard	Pipe	Containmen	t Nozzle	
Pene No.	Туре	Nom Pipe Dia/Sch	Material	Nom Pipe Dia/Sch	Material	Flued Head Mat.
64	Not Ap	plicable				
65	II (Mod)	8/80 8/80 Weld Cap	SA-106B SA-234-WPB	8/80	SA-333-GR-6	SA-350-LF2
66	(Nod)	6/80 6/80 Weld Cap	SA-106B SA-234-WPB	6/80	SA-333-GR-6	SA-350-LF2
67	II	6/80 6/80 Weld Cap	SA-106B SA-234-WPB	6/80	SA-333-GR-6	SA-350-122
68	111	8/80	SA-106B	8/80	SA-333-GR-6	SA-350-LF2
69	111	14/140	SA-106B	14/140	SA-333-GP-6	SA-182-F-304
70	III	14/140	SA-106B	14/140	SA-333-GR 6	SA-182-F-304
71	111	8/80	SA-106B	8/80	SA-333-GR-6	SA-182-F-304

72 Not Applicable

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TABLE 2

ne	NDE Method	Type of Weld	Extent of Repairs/Type Defects	Remarks
1	MT	Corner Weld		In process Scheduled completi date 6-15-80
2	MT	Corner Weld		Weld to be complet 8-80
3	RT	Insert		In process Information expect by 7-80
4	RT	Insert		Weld to be complet by 8-80
5	RT	Insert	No Repairs	Complete
6	RT	Insert	No Repairs	Complete
7	RT	Insert	No Repairs	Complete
8	RT	Insert	No Repairs	Complete
9	RT	Insert	No Repairs	Complete
0				N/A
1				N/A
2			: : : : : : : : : : : : : : : : : : :	N/A
2				N/A
4	RT (PT of excav.	Insert	RO Porosity Rl No Repairs	Complete
5	area)			Complete
5	RT	Insert	No Repairs	Comproto
6	RT (PT of excav. area)	Insert	RO - Slag inclusion RI - Slag inclusion R2 - No Repair	Complete
.7	RT (PT of excav. area)	Insert	RO - Slag R1 - Slag & Porosity R2 - No Repair	Complete
.8	RT	Insert	No Repair	Complete

e	NDE Method	Type of Weld	Extent of Repairs/Type Defects	Remarks
9	RT	Insert	No Repair	Complete
0	RT	Insert	No Repair	Complete
1	RT (PT of excav. area)	Insert	RO - Slag Ri - No Repair	Complete
2	RT	Insert	No Repair	Complete
3	RT	Insert	No Repair	Complete
4	RT	Insert	No Repair	Complete
5	RT PT Root	Insert	Weld 1 RO PT accept. RT Slag, porosity, low cap	Complete
			Rl Details not available at this time R2 No Repair Weld 2 RWl Crack, Porosity, Tungster Inclusion Slag	Rejected
6	RT	Insert	Porosity	Rejected
7	RT	Insert	No Repairs	Complete
8	RT	Insert	No Repairs	Complete
9	RT	Insert	RO Incomplete penetration Rl Concavity, Burn through	Rejected
0	RT	Insert	No Repairs	Complete
1	RT	Insert	No Repairs	Complete
2	RT UT of repair	Insert	Weld No. 2 R0 Slag, concavity R1 Not available at this time R2 Not available at this time	Complete
			Weld No. 3 RO Incomplete fusion and slag Rl Incomplete fusion and slag R2 Not available at this time R3 Incomplete fusion R4 Unconsumed Insert R5 Concavity R6 Excessive penetration R7 Weld cap R8 Low cap	Complete

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1e	NDE Method	Type of Weld	Extent of Repairs/Type Defects	Remarks
3	RT UT of repair	Insert	Weld No. 2 R0 Burn through R1 Not available at this time	Complete
			Weld No. 3 RO Not available at this time R1 Slag line R2 Porosity & Slag	
4	RT	Insert		No Status
5	RT	Insert		No Status
.6	RT	Insert	No Repairs	Complete
7	RT	Insert	No Repairs	Complete
.8	RT	Insert	RO Slag Rl Slag	Reject
:9	RT	Insert	No Repairs	Complete
0	RT	Insert	RO Slag	Reject
.1	RT	Insert	No Repairs	Weld complete Requires PWHT
12	RT	Insert		Weld Complete Requires NDE
:3	RT	Insert	Weld No. 2 No Repairs	Complete
	RT PT of excav. area		Weld No. 3 RO Porosity R1 No Repairs	
.4	RT	Insert	No Repairs	Complete
.5	RT	Insert	No Repairs	Complete
6	RT	Insert	No Repairs	Complete
.7	RT PT of excav. area	Insert	RO Porosity Rl No Repairs	Complete
:8	RT	Insert	No Repairs	Complete
19	RT	Insert	No Repairs	Complets
50				Spare

.e	NDE Method	Type of Weld	Extent of Repairs/Type Defects	Remarks
51	RT	Insert	No Repairs	Complete
52	RT	Insert	No Repairs	Complete
53	RT	Insert	No Repairs	Complete
54	RT	Insert	No Repairs	Complete
55	RT	Insert	No Repairs	Complete
56	RT	Insert	No Repairs	Complete
57	R.T	Insert	No Repairs	Complete
58	RT	Insert	No Repairs	Complete
59	RT	Insert	NJ Repairs	Complete
50	RT	Insert	No Repairs	Complete
51	RT	Insert	No Repairs	Complete
52	RT	Insert	No Repairs	Complete
53	RT	Insert	No Repairs	Complete
54				Spare
55	RT	Insert	No Repairs	Complete
56	RT	Insert	No Repairs	Complete
67	RT	Insert	No Repairs	Complete
58	RT	Insert	No Repairs	Complete
69	RT	Insert	No Repairs	Complete
70	RT	Insert	RO Porosity Rl No Repairs	Complete
71	RT	Insert		Weld to be comple

Spare



LOUISIANA / 142 DELARONDE STREET POWER & LIGHT / F. O. BOX 6008 . NEW ORLEANS. LOUISIANA 70174 . (504) 366-2345

April 14, 1980

D L ASWELL Vice President-Power Production

> LPL 13628 3-A20.03.14

Mr. R. K. Stampley Ebasco Services, Inc. Two Rector Street New York, New York 10006

Response Req: June 16, 1980

SUBJECT: Waterford SES Unit 3 L E Bulletin No. 30-08

Attached is the IE Bulletin 80-08 sent to LP&L by Nuclear Regulatory Commission. Please review it and forward your recommendations to us no later than June 16, 1980.

If you have any questions, please let us know.

Yours very truly,

De aswell

D. L. Aswell

DLA: IH: bms

Attachment

cc: Ebasco (2), J. M. Brooks, J. Crnich (2), L. V. Maurin, D. B. Lester, F. J. Drummond, T. F. Gerrets, C. J. Decareaux, T. K. Armington, P. V. Prasankumar, D. C. Gibbs, C. A. Ponder, Richard Hymes, M. I. Meyer, L. L. Bass, Central Records



UNITED STATES NUCLEAR REGULATORY COMMISSION REGION IV 611 RYAN PLAZA DRIVE, SUITE 1000 ARLINGTON, TEXAS 76012

April 7, 1980

2.45

In Reply Refer To: RIV Docket No. 50-382/IE Bulletin No. 80-08

> Louisiana Power and Light Co. ATTN: Mr. D. L. Aswell Vice President of Power Production 142 Delaronde Street New Orleans, Louisiana 70174

Gentlemen:

The enclosed IE Bulletin 80-08 is forwarded to you for action. A written response is required. If you desire additional information regarding this matter, please contact this office.

Sincerely,

Karl V. Sevfrit Director

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Enclosure:

1. IE Bulletin No. 80-08

2. Listing of IE Bulletins Recently Issued

Dupen 8004220228

SSINS No.: 6820 Accessions No.: 7912190650

UNITED STATES NUCLEAR REGULATORY COMMISSION OFFICE OF INSPECTION AND ENFORCEMENT WASHINGTON, D.C. 20555

> IE Bulletin No. 80-08 Date: April 7, 1980 Page 1 of 2

EXAMINATION OF CONTAINMENT LINER PENETRATION WELDS

Description of Circumstances:

On March 20-23, 1979, an NRC inspection at Nine Mile Point Unit 2, identified that certain nondestructive examinations performed on containment penetration welds did not satisfy the applicable ASME Boiler and Pressure Vessel (B&PV) Code requirements. The welds in question were the primary piping containment penetration flued head (integral fitting) to outer sleeve welds which form a part of the containment pressure boundary. The examinations performed included ultrasonic and surface inspections of the outer surface.

Subsequent to the identification of this code problem at Nine Mile Point Unit 2, three welds previously found to be acceptable using ultrasonics were radiographed and two revealed indications in excess of the code allowable. The indications revealed by radiography were slag and lack-of-fusion. Preliminary NRC review indicates that the probable reason the indications were not detected by ultrasonics was due to masking from signals received from the backing bar. As a result of these findings, a complete re-examination program at Nine Mile Point Unit 2 was initiated, wherein 10 of 17 welds previously examined and found to be acceptable using ultrasonics were re-examined by radiography before rework and found to have indications exceeding ASME Code allowables.

Additional information concerning Beaver Valley Unit 2 and North Anna 3 and 4 has also shown cases of flued head piping penetration weld defects exceeding ASME B&PV Code acceptance criteria when radiographed. Original approved vendor procedures at Beaver Valley Unit 2 did not require volumetric examination. Radiography for information purposes disclosed the unacceptable indications at North Anna 3 and 4. Specification deficiencies have also been discovered at Millstone 3 and River Bend where radiography of these welds was not required.

The ASME B&PV Code requires radiography of the subject welds with specified exceptions. The licensees and their architect-engineer (Stone and Webster) had specified ultrasonics as the volumetric examination method because, in their judgement, radiography was impractical for the penetration geometry. Radiography was successfully performed at North Anna 3 and 4 prior to the identification of this problem, and at Beaver Valley 2 and Nine Mile Point 2 subsequent to NRC inspections. This experience indicates that radiography was meaningful and more practical than UT examination of these penetration welds when backing bars are present.

Dupen 7912190650 3/10

IE Bulletin No. 80-08 Date: April 7, 1980 Page 2 of 2

Action to be Taken by Licensee:

For all power reactor facilities with an operating license or a construction permit:

- 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.
- 2. If an affirmative answer is reached for Item 1, determine the following:
  - Applicability of the ASME Code, including year and addenda and/or Regulatory Guide 1.19,
  - b. Type of nondestructive examinations performed during construction,
  - c. Type of weld joint (including pipe material and size) and whether or not backing bars were used,
  - d. Results of construction nondestructive examinations, i.e., if repairs were required, this should be identified including extent of repairs and description of defects encountered during repair, if known.
- 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.

Within 90 days of the date of this Bulletin, facilities with an operating license or a construction permit shall submit the information requested in Items 1, 2, and 3 of this Bulletin.

Reports shall be submitted to the Regional Director with a copy to the Director, Division of Reactor Construction Inspection, Washington, D. C. 20555.

Approved by GAO, B180225 (R0072); clearance expires 7-31-80. Approval was given under a blanket clearance specifically for identified generic problems.

IE Bulletin No. 80-08 April 7, 1980

## RECENTLY ISSUED IE BULLETINS

Bulletin	Subject	Date Issued	Issued	To
No.				

80-04 Analysis of a PWR Main 2/8/80 Steam Line Break With Continued Feedwater Addition

79-01B Environmental Qualification 2/29/80 of Class IE Equipment

80-05 Vacuum Condition Resulting 3/10/80 In Damage To Chemical Volume Control System (CVCS) Holdup Tanks

80-06 Engineered Safety Feature 3/13/80 (ESF) Reset Controls

79-03A Longitudinal Weld Defects 4/4/80 In ASME SA-312 Type 304 Stainless Steel Pipe

80-07 BWR Jet Pump Assembly 4/4/80 Failure All PWR reactor facilities holding Operating Licenses (OLs) and to those nearing Licensing

All power reactor facilities with an Operating License (OL)

All PWR power reactor facilities holding Operating Licenses (OLs) and to those with a Construction Permit (CP)

All power reactor facilitie with an Operating License (OL)

All power reactor facilitie with an Operating License (OL) or Construction Permit (CP)

All GE BWR-3 and BWR-4 facilities with an Operatin License (OL)

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## EBASCO SERVICES

ENGINEERS - CONSTRUCTORS - CONSULTANTS

TWO RECTOR STRFET NEW YORK, N.Y. 10006

CABLE ADURESS (BASCOE FOR INFORMATION GNLY

June 13, 1980 LW3- 594-80 File: 40-P-4 1-I-8

Mr D L Aswell Vice President - Power Production Louisiana Power & Light Company 142 Delaronde Street New Orleans, LA 70174

Ro: WATERFORD SES UNIT NO. 3 IE BULLETIN NO. 80-03

P.ef: LPL-13628, dated April 14, 1980

Dear Mr Aswell:

We have reviewed the subject IE Bulletin concerning the containment pressure boundary welds between the piping penetration assemblies flued head and the penetration sleeve. We have reviewed the design of Waterford's penetrations with regard to NRC's concerns outlined in the bulletin and submit the following:

- 1. The design of Waterford's containment piping penetration assemblies is of the type described in the bulletin.
- a. The assemblies were designed and fabricated to the 1971
   Edition of the ASME B&PV Code, Section III, up to and including
   the Winter 1973 Addenda. The NRC Regulatory Guide 1.19 does
   not apply to Waterford 3 (Reference FSAR Section 1.8.1.19).
  - b. The design of the majority of Waterford's assemblies employs a flued head in which the guard or process pipe welds directly to the containment vessel nozzle. This design includes a guard or process pipe to flued head weld, guard or process pipe to containment nozzle weld and, in some instances, a transition piece is welded to the guard pipe to enable the welding of the penetration to the containment nozzles. The remaining penetration designs are similar to those shown in Figure NE-1120-1 of the ASME Section III. The design requires that all containment boundary butt welds be radiographed per applicable codes. Other NDE performed on these welds include, ultrasonic, magnetic particle, liquid penetrant and/or visual examinations as required by specification and code.

EBASCO SERVICES

Mr D L Aswell

June 13, 1980

c. All but two welds are either consumable insert or open root. The remaining two welds, used to weld Penetrations 1 and 2 to the containment nozzle, are non-butt corner welds which will be magnetic particle tested per NE-5262. Table 1, attached, identifies by penetration number, the size and material composition pressure boundary welds.

- 2 -

- d. Temp Flex, a penetration fabricator, performed the nondestructive examinations, including radiography, on all containment pressure boundary shop welds. The results of the nondestructive examination of field welds are indicated on Table 2. Please note that since construction is under way, some welds have yet to be completed or examined, but examination will be in accordance with codes. The remaining information will be forwarded to you when it becomes available.
- 3. This item is not applicable to Waterford 3.

If you have any questions on the above, please contact us.

Very truly yours,

J F MDM Chief Mechanical-Nuclear Engineer

Parthe las fr.

By: C F M Trapp

DJM:jjTh1 Att

cc: D L Aswell L V Maurin D B Lester F J Drummond C J Decareaux T F Gerrets w/att C Gibbs T K Armington Power Production Dept - Nuc (2) w/att Waterford 3 Site (2) w/att LP&L Site QA w/att P V Prasankumar Project Engineer