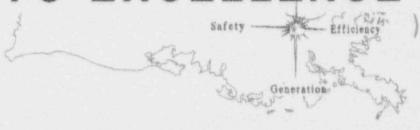


WATERFORD SES - UNITS





Inservice Inspection Summary Report

First Interval * Third Period * Fifth Refueling

September - October 1992

Entergy Operations, Inc.

PLANT

WATERFORD 3 STEAM ELECTRIC STATION
HIGHWAY 18
KILLUNA, LOUISIANA 70066

UTILITY

ENTERGY OPERATIONS, INC. 1340 ECHELON PARKWAY JACKSON, MISSISSIPPI 39213

AUTHORIZED INSPECTION AGENCY

ARKWRIGHT MUTUAL INSURANCE COMPANY 225 WYMAN STREET WALTHAM, MASSACHUSETTS 02154

COMMERCIAL SERVICE DATE: 09/24/85

Prepared By:	Chu E. Farsall	_/_	1/28/93	
Reviewed By:	Inservice Inspection Coordinator Inspection Programs Supervisor	_ / _	Date / ZB/G3	-
Reviewed By:	Luch S. Beliefer D. Authorized Nuclear Inspector	_/_	2-4-93	

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1.0 Introduction

In accordance with IWA-6000 of ASME Section XI, 1980 Edition thru Winter 81 Addenda, the following is the Inservice Inspection (ISI) Summary Report for the Fifth Refueling Outage of Waterford Steam Electric Station, Unit 3. Refuel 5 was the first outage of the third inspection period in the first ten year interval. Included in this report are summaries of examinations, abstracts of conditions found and corrective actions taken, repair/replacement activities and the "Owners Data Report for Inservice Inspection", Form NIS-1. The NIS-2 form, although not mandatory by the Winter 81 Addenda of Section XI, is being used to document repair/replacement activities.

This Summary Report covers Class 1, 2, and 3 components and their supports examined since the RCS Leakage Test at start-up from the Fourth Refueling (5/21/91) up to the RCS Leakage Test at start-up from the Fifth Refueling (11/6/92). The NIS-2 forms are included in Section 7.0 of this report and document Class 1 and 2 components and their supports which were repaired/replaced during this same time period.

The selection of items examined during Refuel 5 was based upon the requirements of the Waterford 3 Ten Year ISI Program. These items are listed by Code Item number in Sections 2.2, 3.2, 4.2 and 5.2 of this report. The items which received a limited exam during Refuel 5 have been identified by a note in the comments column. These items will be included in the applicable Relief Request (i.e., ISI-001, ISI-010) in the next revision of the Waterford 3 Ten Year ISI Program.

There were five methods of nondestructive examination (NDE) utilized during the implementation of the program: radiography (RT), ultrasonics (UT), penetrant (PT), magnetic particle (MT), and visual (VT). All procedures were developed by Entergy with the exception of the procedures used to examine Reactor Vessel bolting, which were developed by Westinghouse Electric Corporation. Examination procedures were reviewed by Entergy Operations, Inc. and Factory Mutual (ANII) prior to use. Overall implementation and supervisory control of contractors involved with Inservice Inspection was accomplished with Entergy personnel. The calibration standards used during Refuel 5 are the same standards (or exact replicas) which were utilized during Preservice examinations with exception of the calibration standard used for Reactor Vessel stud examinations. A new stud calibration standard was fabricated to facilitate examination from the bore hole. The UT equipment used were Sonic 136D, USK 7, USK 7D and EPOCH 2000 instruments. The transducers used were manufactured by Aerotech, Megasonics, Sigma and RTD.

All NDE data, vendor procedures, equipment/material certifications and personnel certifications associated with the examination portion of this report are stored in Waterford 3 Plant Records under R-Type C4.02 (NDE data, Westinghouse procedures/certifications and all UT certifications), I1.15 (personnel certifications) and J7.02 (MT/PT certifications). Steam Generator tube eddy current examinations are reported in accordance with Waterford 3 Technical Specifications and are not included in this report.

FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS As required by the Provisions of the ASME Code Rules

1.	Owner	Entergy	Operations, Inc.	1340	Echelon	Parkway, Jackson,	MS	39213
			(Name	and Ad	dress of Owi	ner)		errollelia F. danselia Informacioni

2.	Plant	Waterford	Steam	Electric	Station,	P.O.	Box	В,	Killona.	LA	70066	
					me and Addr						and the second second	-

3.	Plant Unit .	3 4.	Owner Certificate of Authorization (if required)	N/A	
77.3	. rear wall	**************************************	Owner Certificate of Authorization (if required)	N/A	

5. Commercial Service Date 09/24/85 6. National Board Number for Unit See Below

7. Components inspected

Combustion Engineering Combustion Engineering Combustion Engineering	74170 74270-1	N/A N/A	21694
		THE RESERVE OF THE PARTY OF THE	
Combustion Engineering	74070 0	the second secon	22156
	74270-2	N/A	22157
Combustion Engineering	74370	N/A	21682
Byron Jackson	711-N-0176	N/A	N/A
Byron Jackson	711-N-0174	N/A	N/A
Byron Jackson	711-N-0173	N/A	N/A
Byron Jackson	711-N-0175	N/A	N/A
Fisher Controls Co.	6721133	N/A	N/A
Fisher Controls Co.	6721134	N/A	N/A
Dresser	BS-01593	N/A	N/A
Dresser Compustion Engineering	85-08030	N/A	N/A
Dravo, Bergen-Paterson	*	N/A	N/A
Dravo, Bergen-Paterson	*	N/A	N/A
	Byron Jackson Byron Jackson Byron Jackson Byron Jackson Fisher Controls Co. Fisher Controls Co. Dresser Combustion Engineering, Dravo, Bergen-Paterson	Byron Jackson 711-N-0176 Byron Jackson 711-N-0174 Byron Jackson 711-N-0173 Byron Jackson 711-N-0175 Fisher Controls Co. 6721133 Fisher Controls Co. 6721134 Dresser BS-01593 Dresser BS-08030 Combustion Engineering, Dravo, Bergen-Paterson *	Byron Jackson 711-N-0176 N/A Byron Jackson 711-N-0174 N/A Byron Jackson 711-N-0173 N/A Byron Jackson 711-N-0175 N/A Fisher Controls Co. 6721133 N/A Fisher Controls Co. 6721134 N/A Dresser BS-01593 N/A Combustion Engineering, Dravo, Bergen-Paterson * N/A

^{*} Piping systems and component supports are too numerous to list. See Fifth Refueling Inservice Inspection Summary Report for complete list of components examined.

NOTE: Components which only received a VT-2 examination during a system pressure test are not listed above. See Section 6.0 of the Fifth Refueling Inservice Inspection Summary Report for pressure testing information.

FORM NIS-1 (back)

8. Examination Dates _	2/7/92 to 11/6/92 9. Inspection Interval from 9/24/85 to 9/24/95
10. Abstract of Examina	tions. Include a list of examinations and a statement concerning status of work required
	See Fifth Refueling Outage Inservice Inspection Summary Repor
11. Abstract of Condition	ns Noted
	See Fifth Refueling Outage Inservice Inspection Summary Repor
12. Abstract of Corrective	e Messures Recommended and Taken
	See Fifth Refueling Gutag: Inservice Inspection Summary Repor
	t the statements made in this report are correct and the examinations and corrective mea- he rules of the ASME Code, Section X7
Date Feb. 4	19 93 Signed Entergy Operations By CR. E Fregard
	Owner
	tion No. (if applicable) N/A Expiration Date N/A
the undersigned, hold inspectors and/or the Sta Norwood, MA hav 2/7/92 to has performed examinate with the requirements of By signing this certification.	CERTIFICATE OF INSERVICE INSPECTION ding a valid commission issued by the National Board of Boiler and Pressure Vessel ate or Province of Louisiana and employed by See Below * of we inspected the components described in this Owners' Data Report during the period 11/6/92 and state that to the best of my knowledge and belief, the Owner than and taken corrective measures described in this Owners' Data Report in accordance of the ASME Code, Section XI.
the undersigned, hold inspectors and/or the Sta Norwood, MA have 2/7/92 to has performed examinate with the requirements of By signing this certificoncerning the examins	CERTIFICATE OF INSERVICE INSPECTION ding a valid commission issued by the National Board of Boiler and Pressure Vessel ate or Province of Louisiana and employed by See Below * of we inspected the components described in this Owners' Data Report during the period 11/6/92 and state that to the best of my knowledge and belief, the Owner the ASME Code, Section XI. The ASME Code, Section XI. The ASME Code, Section XI. The Asme Code in this owners' Data Report in accordance of the ASME Code, Section XI.
the undersigned, hold inspectors and/or the Sta Norwood, MA hav 2/7/92 to has performed examinate with the requirements of By signing this certificoncerning the examinate seither the Inspector no or a loss of any kind arise that the set t	CERTIFICATE OF INSERVICE INSPECTION ding a valid commission issued by the National Board of Boiler and Pressure Vessel ate or Province of LOUISIANA and employed by See Below * of we inspected the components described in this Owners' Data Report during the period 11/6/92 and state that to the best of my knowledge and belief, the Owner ions and taken corrective measures described in this Owners' Data Report in accordance of the ASME Code, Section XI. The ficate neither the Inspector nor his employer makes any warranty, expressed or implied, ations and corrective measures described in this Owners' Data Report. Furthermore, we his employer shall be liable in any manner for any personal injury or property damage sing from or connected with this inspection. * Arkwright Mutual Insurance Co. 19 9 3
the undersigned, hold inspectors and/or the Sta Norwood, MA hav 2/7/92 to has performed examinate with the requirements of By signing this certificoncerning the examinate the concerning the examinate the loss of any kind arise that the section of a loss of any kind arise that the section is the section of	CERTIFICATE OF INSERVICE INSPECTION ding a valid commission issued by the National Board of Boiler and Pressure Vessel ate or Province of Louisiana and employed by See Below * of we inspected the components described in this Owners' Data Report during the period 11/6/92 and state that to the best of my knowledge and belief, the Owner from and taken corrective measures described in this Owners' Data Report in accordance of the ASME Code, Section XI. The cate neither the inspector nor his employer makes any warranty, expressed or implied, actions and corrective measures described in this Owners' Data Report. Furthermore, or his employer shall be liable in any manner for any personal injury or property damage sing from or connected with this inspection. * Arkwright Mutual Insurance Co.

2.0 Class 1 Examination Summary

2.1 Class 1 Examination Completion Status 3rd Period, 5th Refueling

CODE ITEM NO.	TOTAL EXAMS SELECTED FOR INTERVAL	EXAMS COMPLETED FIFTH REFUELING	TOTAL EXAMS COMPLETED TO DATE	% EXAMS COMPLETED TO DATE	COMMENTS
B1.11	3	0	0	0	DEFERRED
B1.12	9	0	0	0	DEFERRED
B1.21	1	0	0	0	DEFERRED
B1.22	10	0	4	40	
B1.30	1	0	1/2	50	
B1.40	1	0	2/3	66	
B2.11	2	1	2	100	
B2.12	4	2	4	100	
B2.31	10	4	10	100	
B2.32	18	6	18	100	
82.40	2	1	2	100	
B3.90	6	0	2	33	
B3.100		0	2	33	
B3.110		2	5	100	
B3.120		2	5	100	
B3.130		2 2	- 6	100	
83.140		2	6	100	
B4.11	16	16	16	100*	
B4.12	91	91	91	100*	
B4.13	10	10	10	100*	
B4.20	30	30	30	100*	
B5.40	5	0	3	60	
B5.130		0	10	66	
B5.140		2	8	89	
B6.10	54	18	54	100	
B6.30	54	18	54	100	
B6.40	54	0	27	50	
B6.50	54	18	54	100	
86.180		0	16	100	
B6.190		0	16	100	
B6.200		0	16	100	
B7.20	1	0	2/3	66	
87.30	4	2	4	100	
B7.40	4	2	4	100	
B7.50	2	1	2	100	
B7.60	4	2	4	100	
87.70	20	3	16	80	
B8.20	1	1/3	1	100	
B8.30	1	1/3	1	100	
B9.11	150	14	67	45	SEE NOTE 1
B9.12	76	8	26	34	SEE NOTE 1
B9.21	95	3	63	66	SEE NOTE 1

2.1 Cont'd Class 1 Examination Completion Status 3rd Period, 5th Refueling

ITEM	TOTAL EXAMS SELECTED FOR INTERVAL	EXAMS COMPLETED FIFTH REFUELING	TOTAL EXAMS COMPLETED TO DATE	% EXAMS COMPLETED TO DATE	COMMENTS
89.31	7	0	2	28	SEE NOTE 1
B9.32	13	0	2	15	SEE NOTE 1
B10.20	4	2	4	100	
B12.10	2	0	0	0	DEFERRED
B12.20	1	0	1	100	
B12.40	1	1	1	100	
B12.50	6	0	4	67	
B13.10	1	1	1	100**	
B13.30	6	0	0	0	DEFERRED
B13.31	16	0	0	0	DEFERRED
B13.32	1	0	0	0	DEFERRED
B14.10	8	0	0	0	DEFERRED
Cat. F-/	A 1	1/3	1	100	
Cat. F-0		3	93	68	
Flywhee		0	4	100**	Reg. Guide 1.14

^{* 100%} examined each refueling outage.

NOTE 1: During the fifth cycle of operation at Waterford 3, 126 Category B-J welds (i.e., Code Items B9.11, B9.12, B9.21, B9.31, B9.32) were added to the selection scope of the Waterford 3 Ten Year ISI Program. These welds were added following a review of stress calculations for all non-exempt Class 1 & 2 piping welds (approx. 1600). The review was performed due to past events (e.g., snubber reduction program, thermal stratification issues, component support modifications) which inevitably affected weld stress levels. The welds which were added to the program met the "high stress" criteria in ASME Section XI and therefore are required to be examined. See Revision 5 of the Waterford 3 Ten Year Inservice Inspection Program for details.

2.2 Class 1 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	М	ATERIAL	COMMENT	rs_
B-B	B2.11	05-008	1-2100	106"D	CS	CLAD		
	B2.12	05-006	1-2100	12"L	CS	CLAD	EXAMINED	12"
		05-007	1-2100	12"L	CS	CLAD	EXAMINED	12"

^{** 100%} examined at approximately 3 year intervals.

2.2 Con+'d Class 1 Items Examined 5th Refueling

CODE CATEGORY	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
B-B	B2.31	03-008	1-3100	172"D	CS CLAD	
		03-032	1-3100	23"D	CS CLAD	LIMITED EXAM
		03-033	1-3100	23"D	CS CLAD	
		03-034	1-3100	23"D	CS CLAD	
	B2.32	03-003	1-3100	100"L	CS CLAD	
		03-004	1-3100	100"L	CS CLAD	
		03-013	1-3100	9"L	CS CLAD	
		03-014	1-3100	9"L	CS CLAD	
		03-015	1-3100	9"L	CS CLAD	
		03-016	1-3100	9"L	CS CLAD	
	B2.40	03-009	1-3100	172"D	CS CLAD	
B-D	B3.110	05-010	1-2100	4"D	CS CLAD	
		05-013	1-2100	8"D	CS CLAD	
	83,120	05-015	1-2100	4"D	CS CLAD	LIMITED EXAM
		05-018	1-2100	8"D	CS CLAD	LIMITED EXAM
	B3.130	03-011	1-3100	30"D	CS CLAD	
		03-012	1-3100	30"D	CS CLAD	
	B3,140	03-020	1-3100	30"D	CS CLAD	
		03-021	1-3100	30"D	CS CLAD	
B-E	84.11	02-5-01	1-3100	3/4"D	INCONEL	SEE PARA. 6.2
		05-A-01	1-2100	3/4"D	SS	SEE PARA. 6.2
		05-A-02	1-2100	3/4"D	SS	SEE PARA. 6.2

2.2 Cont'd Class 1 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
B-E	B4.11	05-B-01 thru 05-B-04	1-2100	3/4"D	SS	SEE PARA. 6.2
		05-C-01	1-2100	1"D	SS	SEE PARA. 6.2
		03-N-01 thru 03-N-04	1-3100	3/4"D	SS	SEE PARA. 6.2
		04-N-01 thru 04-N-04	1-3200	3/4"D	SS	SEE PARA. 6.2
	84.12	02-V-01 thru 02-V-91	1-1300	4"D	INCONEL	SEE PARA. 6.2
	B4.13	02-U-92 thru 02-U-101	1-1300	5-1/2°D	INCCNEL	SEE PARA. 6.2
	84.20	05-H-01 thru 05-H-30	1-2100	1-1/2"D	SS	SEE PARA. 6.2
B-F	85.140	11-007	1-4200	2"D	CS CLAD & CAST SS	
		13-012	1-4201	2"D	CS CLAD & CAST SS	
B-G-1	86.10	01-N-01 thru 01-N-18	1-1400	6.75*D	CS	SEE NOTE 1
		01-N-37 thru 01-N-54	1-1400	6.75"D	CS	
	86.30	01-5-22	1-1400	6.75°D	cs	SEE NOTE 2
		01-5-23	1-1400	6.75"D	cs	SEE NOTE 2
		01-5-24	1-1400	6.75"D	cs	SEE NOTE 2

2.2 Cont'd Class 1 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
B-G-1	86.30	01-5-29	1-1400	6.75"D	CS	SEE NOTE 2
		01-5-35	1-1400	6.75"D	CS	SEE NOTE 2
		01-S-37 thru 01-S-54	1-1400	6.75"D	cs	
	B6.50	01-W-37 thru 01-W-54	1-1400	6.75"D	CS	
B-G-2	B7.30	03-022	1-3100	1"D	cs	
		03-023	1-3100	1 "D	cs	
	87.40	37-008	1-5100	2"D	CS	
		38-008	1-5200	2"D	cs	
	B7.50	RC-317A	1-4501	6"D	SS	
	87.60	37-009	1-5100	1.5"0	CS	
		38-009	1-5200	1.5"D	CS	
	87.70	RC-301A	1-4502	3*D	SS	
		RC-3018	1-4502	3"D	SS	
		RC-317A	1-4501	6"D	SS	
В-Н	B8.20	05-001	1-2100	100"D	CS	EXAMINED 1/3 ID/OD
	B8.30	03-001	1-3100	56"D	CS	EXAMINED 1/3 ID/OD
B-J	B9.11	07-016	1-4100	30"D	CS CLAD	10,00
		07-017	1-4100	30"D	CS CLAD	LIMITED EXAM
		07-018	1-4100	30"D	CS CLAD	
		09-001	1-4101	30°D	CS CLAD	
		09-002	1-4101	30"D	CS CLAD	LIMITED EXAM

2.2 Cont'd Class 1 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
B-J	B9.11	09-018	1-4101	30"D	CS CLAD	
		25-023	1-4502	4"D	SS	
		25-024	1-4502	4"D	SS	
		25-026	1-4502	4"D	ss	
		25-027	1-4502	4"D	SS	
		25-028	1-4502	4"D	SS	
		26-007	1-^501	6"D	SS	
		26-008	1-4501	6"D	SS	
		26-009	1-4501	6"D	SS	
	B9.12	07-014LB	1-4100	30"D	CS CLAD	EXAMINED 12"
		07-015LA	1-4100	30"D	CS CLAD	EXAMINED 12"
		07-019LA	1-4100	30"D	CS LLAD	
		07-020LB	1-4100	30"D	CS CLAD	
		09-003LB	1-4101	30"D	CS CLAD	EXAMINED 12"
		09-004LA	1-4101	30"D	CS CLAD	EXAMINED 12"
		09-019LB	1-4101	30"D	CS CLAD	
		09-020LA	1-4101	30"D	CS CLAD	
	B9.21	35-001	1-4206	2"D	SS	
		35-002	1-4206	2*D	SS	
		35-003	1-4206	2"0	SS	
B-K-1	810.20	39-003	1-5300	80"D	CAST SS	EXAMINED ID/
		40-003	1-5400	80"D	CAST SS	EXAMINED ID/
B-M-1	812.40	RC-317B	1-4501	6"D	SS	OD

2.2 Cont'd Class 1 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DPAWING	SIZE	MATERIAL	COMMENTS
B-N-1	B13.10	01-054	1-1200	N/A	N/A	LIMITED EXAM SEE PARA.
F-A	N/A	05-021	1-2100	103"0	cs	2.3.1 EXAMINED 1/3
F-C	N/A	RCRR-0101	1-4502	4"D	CS	
		RCRR-0105	1-4502	4"D	cs	ADDITIONAL EXAM; SEE
		RCRR-0106	1-4502	3"D	cs	PARA. 2.4.1 ADDITIONAL EXAM; SEE
		RCRR-0149	1-4504	3"D	cs	PARA. 2.4.1 ADDITIONAL EXAM; SEE
		RCRR-0150	1-4504	3"D	CS	PARA. 2.4.1 ADDITIONAL EXAM; SEE
		RCRR-0156	1-4504	3"D	CS	PARA. 2.4.1
		RCRR-0157	1-4504	3"D	cs	ADDITIONAL EXAM; SEE PARA. 2.4.1 SEE PARA. 2.3.3
		RCRR-0321	1-4504	3*D	cs	

- NOTE 1: Supplementary surface examinations were performed on Reactor Vessel Nuts 01-N-01 through 01-N-18 as stated in Ten Year ISI Program. Credit towards Table IWC-2412-1 of ASME Section XI was taken during Refuel 2.
- NOTE 2: These Reactor Vessel studs were examined during Refuel 3 and rejected by the examiner due to linear indications on the shank. An engineering evaluation determined the conditions to be acceptable as is but recommended reexamination of the support during Refuel 5. Credit towards Table IWB-2412-1 of ASME Section XI was taken during Refuel 3.
- 2.3 Abstract of Conditions Noted and Corrective Actions Taken
 - 2.3.1 Component I.D. No. 01-054 (Reactor Vessel and Closure Head Interior): Kemote visual examination (VT-3) using a video camera mounted to a miniature submarine revealed gouged core barrel alignment keys at 90 and 270 degrees of the vessel. Also, debris was noted in a localized area of the flange

2.3.1 (Cont'd)

surface and linear indications (apparent scratches) were noted on the Core Barrel interior at 270 degrees. An engineering evaluation determined that there was no significant damage which would affect the integrity of the Reactor Vessel.

- 2.3.2 Component Support No. RCRR-149: Visual examination (VT-3) revealed a missing portion of a cotter pin. The cotter pin was replaced and the support was reexamined and determined acceptable.
- 2.3.3 Component Support No. RCRR-321: Visual examination (VT-3) revealed a loose clamp which had rotated on pipe causing clamp to strut misalignment. The clamp was realigned and the support was reexamined and determined acceptable. See paragraph 2.4.1 for additional examinations required per IWF-2430(a).

2.4 Additional Examinations

As required by IWF-2430(a), additional examinations were performed when indications which exceeded the allowable standards of IWF-3000 were discovered. Details of the selection process and additional examinations performed are discussed below. No credit toward completion of required percentages of Table IWB-2412-1 is taken for additional exams.

2.4.1 Component Support No. RCRR-0321: Examination results required clamp to strut realignment, therefore IWF-2430 applies. As required, the adjacent supports (RCRR-0105 and RCRR-0149) were examined and determined acceptable.

Support No. RCRR-0321 is a rigid restraint which supports a Pressurizer Spray line from Loop 1B. Three component supports of similar type, design and function were examined during Refuel 5. Therefore, three additional supports were selected for examination in accordance with IWF-2430. The additional supports which were examined (including adjacent supports) are listed as follows:

SUPPORT NO.	CODE CAT.	DRAWING NO.	RESULTS
RCRR-0105 RCRR-0106 RCRR-0149 RCRR-0150 RCRR-0157	F-C F-C F-C F-C	1-4502 1-4502 1-4504 1-4504 1-4504	ACCEPTABLE ACCEPTABLE* ACCEPTABLE ACCEPTABLE

^{*} See Para. 2.3.2

- 2.5 Successive Examinations
 - 2.5.1 There were no successive e aminations performed per IWB/IWF-2420(b) on Class 1 items during Refuel 5.
 - 2.5.2 Successive examinations will be performed on RCRR-0321 which required corrective measures in accordance with the provisions of IWF-3000. This component support will be reexamined during the first inspection period of the second ten year interval as required by IWF-2420(b).

3.0 Class 2 Examination Summary

3.1 Class 2 Examination Completion Status 3rd Period, 5th Refueling

CODE ITEM NO.	TOTAL EXAMS SELECTED FOR INTERVAL	EXAMS COMPLETED FIFTH REFUELING	TOTAL EXAMS COMPLETED TO DATE	% EXAMS COMPLETED TO DATE	COMMENTS
C1.10 C1.20 C1.30 C2.21 C2.22	5 2 2 2 2	1 1 0 1 0	4 2 1 2 2	80 100 50 100 100	RELIEF REQ.
C2.31 C2.32	4 2	0 2	2 2	50 100	EXAMINED EACH PERIOD
C3.10 C3.20 C3.30 C5.11 C5.12 C5.21	4 25 6 70 5 48	5 0 21 2	21 3 68 5	100 84 66 97 100 83	
C5.22 C5.31 C6.20 Cat. F	10 1 2 -A 4	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6 2/3 1 2 108	60 66 50 50 69	

3.2 Class 2 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
C-A	C1.10	04-027	2-3200	264"D	cs	LIMITED EXAM
	C1.20	04-029	2-3200	105"0	CS	LIMITED EXAM
C-8	C2.21	04-030	2-3200	40"D	cs	LIMITED EXAM
	C2.32	54-081	2-1200	12"D	CS	SEE PARA.
		54-082	2-1200	12"D	cs	6.2 SEE PARA.
C-C	C3.10	04-061	2+3200	N/A	CS	6.2 LIMITED EXAM
		04-062	2-3200	N/A	CS	LIMITED EXAM
	C3.20	42-WS-1	2-4200	40"D	CS	

3.2 Cont'd Class 2 Items Examined 5th Refueling

CODE CATEGORY	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
C-C	C3.20	42-WS-1	2-4102	20"D	CS	
		45-WS-2	2-4102	20"D	CS	
		45-WS-3	2-4102	20"D	CS	
		45-WS-4	2-4102	20"D	CS	
C-F	C5.11	49-014	2-4104	14"D	SS	
		49-015	2-4104	14"D	22	
		49-023	2-4104	14"D	55	
		49-026	2-410-	14"D	SS	
		50-060	2-4204	20"D	SS	
		50-062	2-4204	20"D	SS	
		51-060	2-4105	14"D	SS	
		51-062	2-4105	14"D	SS	
		52-007	2-4206	6"D	SS	
		55-001	2-4109	10"0	SS	
		55-002	2-4109	10"D	SS	
		55-005	2-4112	10"D	SS	
		55-006	2-4112	10"D	SS	
		55-007	2-4112	10"D	SS	
		55-008	2-4112	10"0	SS	
		56-034	2-4211	8"D	is	
		56-066	2-4212	8"D	SS	
		57-002	2-4110	10"0	SS	
		57-005	2-4110	10"D	22	
		58-017	2-4210	10"D	SS	

3.2 Cont'd Class 2 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
C-F	C5.11	58-018	2-4210	10"D	SS	
	C5.12	50-061LA	2-4204	20"D	SS	EXAMINED 1"
		50-061LB	2-4204	20"D	SS	EXAMINED 1"
	C5.21	42-001	2-4200	34"D	cs	LIMITED EXAM
		42-002	2-4200	34"D	CS	
		42-024	2-4200	34"D	CS	LIMITED EXAM
		46-006	2-4202	20"D	cs	LIMITED EXAM
		46-008	2-4202	20"D	cs	LIMITED EXAM
		46-009	2-4202	20"D	CS	
		52-003	2-4206	14"D	SS	LIMITED EXAM
		52-004	2-4206	14"D	SS	LIMITED EXAM
		55-066	2-4113	6"D	SS	LIMITED EXAM
		55-078	2-4113	8"D	SS	LIMITED EXAM
F-C	N/A	MSRR-0002	2-4200	34"D	CS	
		MSRR-0007	2-4200	40"0	cs	SEE PARA. 3.3.1
		MSRR-0009	2-4200	40"D	CS	ADDITIONAL EXAM: SEE PARA. 3.4.1
		MSRR-0011	2-4100	34"D	CS	ADDITIONAL EXAM; SEE PARA. 3.4.1
		MSRR-0016	2-4100	40"D	CS	ADDITIONAL EXAM; SEE PARA. 3.4.1
		MSRR-0018	2-4100	40"D	CS	ADDITIONAL EXAM; SEE PARA. 3.4.1
		MSRR-0241	2-4101	40"D	CS	ADDITIONAL EXAM; SEE PARA. 3.4.1

3.2 Cont'd Class 2 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
F-C	N/A	MSRR-0242	2-4101	40"D	cs	ADDITIONAL EXAM; SEE
		MSRR-0243	2-4101	40"D	cs	PARA. 3.4.1 ADDITIONAL EXAM; SEE
		MSRR-0244	2-4101	40"D	cs	PARA. 3.4.1 ADDITIONAL EXAM; SEE
		MSRR-0247	2-4201	40"D	cs	PARA. 3.4.1 ADDITIONAL EXAM; SEE
		MSRR-0248	2-4201	40"D	cs	PARA. 3.4.1 NODITIONAL EXAM; SEE
		MSRR-0249	2-4201	40"D	CS	PARA. 3.4.1 ADDITIONAL EXAM; SEE
		MSRR-0250	2-4201	40"D	cs	PARA. 3.4.1 ADDITIONAL EXAM; SEE
		MSRR-0363	2-4101	8"D	cs	PARA. 3.4.1 ADDITIONAL EXAM; SEE
		MSRR-0365	2-4201	8*D	CS	PARA. 3.4.1 ADDITIONAL EXAM; SEE
		MSSH-0003	2-4200	40"D	CS	PARA. 3.4.1
		MSSH-0005	2-4200	40"D	CS	
		SIRR-0293	2-4113	8*D	CS	SUCCESSIVE EXAM; SEE
		SIRR-0403	2-4212	8"D	CS	PARA. 3.5.1 SUCCESSIVE EXAM; SEE
		SIRR-0932	2-4212	8"D	cs	PARA. 3.5.1 SUCCESSIVE EXAM; SEE PARA. 3.5.1

- 3.3 Abstract of Conditions Noted and Corrective Action Taken
 - 3.3.1 Component Support No. MSRR-0007: Visual examination (VT-3) revealed loose clamp bolts (2) on pipe clamp. The bolts were tightened and the support was reexamined and determined acceptable. See paragraph 3.4.1 for additional examinations required per IWF-2430(a).
 - 3.3.2 Component Support No. MSRR-0018: Visual examination (VT-3) revealed loose clamp bolts (2) on pipe clamp and a missing cotter pin. The bolts were tightened and a cotter pin was installed. The support was reexamined and determined acceptable. This support was examined as an additional exam in accordance with IWF-2430(a), see paragraph 3.4.1 for details.

3.4 Additional Examinations

As required by IWF-2430(a), additional examinations were performed when component supports which required corrective measures in accordance with the provisions of IWF-3000 were discovered. Details of the selection process and additional examinations performed are discussed below. No credit toward completion of required percentages of Table IWC-2412-1 is taken for additional exams.

3.4.1 Component Support No. MSRR-0007: Examination results required clamp bolts to be tightened, therefore IWF-2430 applies. One of the adjacent supports (MSSH-0005) was examined and accepted as part of the original outage scope. the other adjacent support (MSRR-0009) was examined in accordance with IWF-2430 and accepted.

Support No. MSRR-0007 is a rigid restraint which supports a 40" Main Steam line from Steam Generator 2. Two component supports of similar type, design and function were examined during Refuel 5. Therefore, two additional supports were selected for examination in accordance with IWF-2430. Of the two additional supports, one support (MSRR-0018) was rejected due to loose clamp bolts. This required the examination of all rigid restraints on similar trains or piping. In all, 14 additional examinations were performed (including adjacent supports). The following is a list of the additional supports:

SUPPORT NO.	CODE CAT.	DRAWING NO.	RESULTS
MSRR-0009 MSRR-0011 MSRR-0016 MSRR-0018	F-C F-C F-C	2-4200 2-4100 2-4100 2-4100	ACCEPTABLE ACCEPTABLE ACCEPTABLE UNACCEPTABLE*

3.4.1 (Cont'd)

SUPPORT NO.	CODE CAT.	DRAWING NO.	RESULTS
MSRR-0241 MSRR-0242 MSRR-0243 MSRR-0244 MSRR-0247 MSRR-0248 MSRR-0249 MSRR-0250	F-C F-C F-C F-C	2-4101 2-4101 2-4101 2-4101 2-4201 2-4201 2-4201	ACCEPTABLE ACCEPTABLE ACCEPTABLE ACCEPTABLE ACCEPTABLE ACCEPTABLE
MSRR-0363 MSRR-0365	F-C F-C	2-4201 2-4101 2-4201	ACCEPTABLE ACCEPTABLE ACCEPTABLE

^{*} See Para. 3.3.2

3.5 Successive Examinations

3.5.1 As required by IWF-2420(b), successive examinations were performed during Refuel 5 on items which failed to meet established acceptance criteria during the second inspection period. The Class 2 items which were examined per IWF-2420(b) are listed as follows:

COMPONENT	COMPONENT	DRAWING	PREVIOUS	RESULTS
1,D. NO	DESCRIPTION	NO.	EXAM	
SIRR-293 SIRR-403 SIRR-932	RIGID RESTRAINT RIGID RESTRAINT RIGID RESTRAINT	2-4212	REFUEL 3 REFUEL 3	ACCEPTABLE ACCEPTABLE ACCEPTABLE

These examinations did not result in additional corrective measures to be taken. Therefore, as allowed by IWF-2420(c), the inspection frequency for these supports will revert to the original ten year schedule.

3.5.2 Successive examinations will be performed on the component supports which required corrective measures in accordance with provisions of IWF-3000. The following Class 2 component supports will be reexamined during the first inspection period of the second ten year interval as required by IWF-2420(b):

MSRR-0007 MSRR-0018*

^{*} This support was examined as an additional examination (IWF-2430) during Refuel 5 and rejected.

4.0 Class 3 Examination Summary

4.1 Class 3 Examination Completion Status 3rd Period, 5th Refueling

CODE ITEM NO.	TOTAL EXAMS SELECTED FOR INTERVAL	EXAMS COMPLETED FIFTH REFUELING	TOTAL EXAMS COMPLETED TO DATE	% EXAMS COMPLETED TO DATE	COMMENTS
	F-A 10 F-C 591	0 114	6 498	60 84	

4.2 Class 3 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
F-C	N/A	CCRR-0014	N/A	16"D	cs	
		CCRR-0032	N/A	16"D	cs	
		CCRR-0033	N/A	16"D	CS	
		CCRR-0060	N/A	20"D	cs	
		CCRR-0061	N/A	20"D	cs	
		CCRR-0063	N/A	20"D	cs	
		CCRR-0065	N/A	20"0	CS	
		CCRR-0066	N/A	20"D	cs	
		CCRR-0182	N/A	16"D	cs	SEE PARA.
		CCRR-0183	N/A	16"D	CS	4.3.1
		CCRR-0184	N/A	16"D	cs	
		CCRR-0418	N/A	16"D	CS	
		CCRR-0419	N/A	16"D	CS	
		CCRR-0438	N/A	20"D	CS	
		CCRR-0439	N/A	20"D	cs	
		CCRR-0440	N/A	20"D	cs	

4.? Cont'd Class 3 Items Examined 5th Refueling

CODE CATEGORY	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
F-C	N/A	CCRR-0441	N/A	20"D	CS	
		CCRR-0442	N/A	20"D	cs	
		CCRR-0455	N/A	16"D	cs	SEE PARA.
		CCRR-0456	N/A	16"D	CS	4.3.2 ADDITIONAL EXAM; SEE
		CCRR-0457	N/A	16"D	cs	PARA. 4.4.1 ADDITIONAL EXAM; SEE
		CCRR-0458	N/A	16"D	cs	PARA. 4.4.1 ADDITIONAL EXAM; SEE
		CCRR-0459	N/A	16"D	cs	PARA. 4.4.1 ADDITIONAL EXAM; SEE
		CCRR-0460	N/A	16"D	cs	PARA. 4.4.1 ADDITIONAL EXAM; SEE
		CCRR-0461	N/A	16"D	cs	PARA. 4.4.1 ADDITIONAL EXAM; SEE
		CCRR-0462	N/A	16"D	cs	PARA. 4.4.1 ADDITIONAL EXAM; SEE
		CCRR-0463	N/A	16"D	CS	PARA. 4.4.1 ADDITIONAL EXAM; SEE
		CCRR-0464	N/A	16"D	CS	PARA. 4.4.1 ADDITIONAL EXAM; SEE
		CCRR-0466	N/A	6"D	cs	PARA. 4.4.1 SEE PARA. 4.3.3
		CCRR-0467	N/A	6"D	CS	LIMITED EXAM
		CCRR-0468	N/A	6"D	cs	LIMITED EXAM
		CCRR-0469	N/A	6"D	CS	LIMITED EXAM
		CCRR-0470	N/A	6"D	cs	LIMITED EXAM
		CCRR-0472	N/A	6"D	CS	

4.2 Cont'd Class 3 Items Examined 5th Refueling

CODE CATEGORY	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
F-C	N/A	CCRR-0475	N/A	6"D	cs	
		CCRR+0476	N/A	6"D	CS	
		CCRR-0477	N/A	6"D	CS	
		CCRR-0479	N/A	6"D	CS	
		CCRR-0480	N/A	6"D	CS	
		CCRR-0521	N/A	6"D	cs	
		CCRR-0522	N/A	ő"D	cs	
		CCRR-0523	N/A	6"D	cs	
		CCRR-0524	N/A	6"D	cs	
		CCRR-0525	N/A	6"D	CS	
		CCRR-0538	N/A	6"D	cs	
		CCRR-0539	N/A	6"D	CS	
		CCRR-0625	N/A	16"D	CS	ADDITIONAL EXAM; SEE PARA. 4.4.2 ADDITIONAL EXAM; SEE PARA. 4.4.2
		CCRR-0626	N/A	16"D	CS	
		CCRR-0627	N/A	16"D	CS	ADDITIONAL EXAM; SEE PARA. 4.4.
		CCRR-0628	N/A	16"D	CS	ADDITIONAL EXAM; SEE PARA, 4.4.
		CCRR-0677	N/A	16"D	CS	TANA. 4.4.2
		CCRR-0678	N/A	16"D	CS	
		CCRR-0679	N/A	16"D	CS	
		CCRR-0680	N/A	16"D	CS	
		CCRR-0701	N/A	16"D	CS	

4.2 Cont'd Class 3 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
F-C	N/A	CCRR-0702	N/A	16"D	cs	
		CCRR-0703	N/A	16"D	cs	
		CCRR-0704	N/A	16"D	cs	
		CCRR-0705	N/A	16"D	cs	
		CCRR-0706	N/A	16"D	cs	
		CCRR-0721	N/A	20"D	cs	
		CCRR-0727	N/A	20"D	cs	
		CCRR-0728	N/A	20"D	cs	
		CCRR-0729	N/A	20"D	cs	
		CCRR-0757	N/A	16"D	cs	
		CCKR-0758	N/A	16"D	cs	SEE PARA.
		CCRR-0759	N/A	16"D	cs	4.3.4
		CCRR-0760	N/A	16"0	cs	
		CCRR-0816	N/A	20"D	cs	
		CCRR-0817	N/A	20"D	CS	
		CCRR-0818	N/A	20"D	cs	
		CCRR-0819	N/A	20"D	CS	
		CCRR-0820	N/A	20"0	cs	
		CCRR-0821	N/A	16"D	CS	
		CCRR-0822	N/A	16"D	CS	
		CCRR-0823	N/A	16"D	CS	
		CCRR-0838	N/A	20"D	cs	SUCCESSIVE EXAM; SEE PARA, 4.5.1

4.2 Cont'd Class 3 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
F-C	N/A	CCRR-0949	N/A	20"D	CS	
		CCRR-1068	N/A	6"D	cs	LIMITED EXAM SEE PARA.
		CCRR-1089	N/A	6"D	CS	4.3.5
		CCRR-1090	N/A	6"D	cs	
		CCRR-1105	N/A	6"D	CS	SEE PARA.
		CCRR-1112	N/A	16"D	CS	4.3.6 ADDITIONAL EXAM; SEE
		CCRR-1119	N/A	10"D	CS	PARA 4.4.2 SEE PARA.
		CCRR-1120	N/A	10"D	CS	4.3.7
		CCRR-1201	N/A	16"D	CS	ADDITIONAL EXAM; SEE
		CCRR-3065	N/A	20"D	CS	PARA 4.4.2
		CCRR-3090	N/A	16"D	CS	
		CCRR-4559	N/A	16"D	CS	
		CCSH-0950	N/A	20"D	CS	SEE PARA.
		CCSH-1176	N/A	10"D	CS	4.3.8
		FWRR-0271	N/A	6"D	CS	
		FWRR-0272	N/A	6"D	CS	
		FWRR-0273	N/A	6"D	CS	
		FWRR-0274	N/A	6"D	CS	
		FWRR-0284	N/A	6"D	CS	
		FWRR-0285	N/A	6"D	cs	
		FWRR-0286	N/A	6"D	CS	
		FWRR-0287	N//	6"D	CS	

4.2 Cont'd Class 3 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
F-C	N/A	FWRR-0288	N/A	6"D	cs	
		FWRR-0289	N/A	6"D	cs	
		FWRR-0290	N/A	6"D	cs	
		FWRR-0291	N/A	6"D	cs	
		FWRR-0299	N/A	4"D	cs	
		FWRR-0300	N/A	4"D	cs	
		MSRR-0253	N/A	6"D	CS	SUCCESSIVE EXAM; SEE
		MSRR-0256	N/A	6"D	cs	PARA. 4.5.1 ADDITIONAL EXAM; SEE
		MSRR-0257	N/A	6"D	cs	PARA. 4.4.3
		MSRR-0258	N/A	6"D	CS	
		MSRR-0259	N/A	6"D	cs	
		MSRR-0260	N/A	6"D	CS	SEE PARA.
		MSRR-0261	N/A	6"D	cs	4.3.10
		MSRR-0262	N/A	6"D	cs	SEE PARA.
		MSRR-0263	N/A	6"D	cs	SEE PARA.
		MSRR-0264	N/A	6"D	CS	4.3.12
		MSRR-0265	N/A	6"D	cs	ADDITIONAL EXAM; SEE PARA. 4.4.3 ADDITIONAL EXAM; SEE PARA. 4.4.3 SUCCESSIVE EXAM; SEE PARA. 4.5.1 SEE PARA. 4.3.14
		MSRR-0266	N/A	6"D	cs	
		MSRR-0267	N/A	6"D	cs	
		MSRR-0268	N/A	6"D	CS	

4.2 Cont'j Class 3 Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
F-C	N/A	MSRR-0269	N/A	6"D	cs	SUCCESSIVE EXAM; SEE
	MSRR-0270	N/A	6"D	cs	PARA. 4.5.1	
		MSRR-0271	N/A	6"D	CS	
		MSRR-0272	N/A	6"D	cs	
		MSRR-0273	N/A	6"D	CS	SEE PARA. 4.3.15
		MSRR+0274	N/A	6"D	CS	4.3.13
		MSRR-0275	N/A	6"D	cs	
		MSRR-0276	N/A	6"D	CS	
		MSRR-0277	N/A	8"D	CS	ADDITIONAL EXAM; SEE PARA. 4.4.3 SUCCESSIVE EXAM; SEE PARA. 4.5.1 ADDITIONAL EXAM; SEE PARA. 4.5.1 ADDITIONAL EXAM; SEE PARA. 4.5.1 ADDITIONAL EXAM; SEE PARA. 4.4.3 ADDITIONAL EXAM; SEE PARA. 4.4.3 ADDITIONAL EXAM; SEE PARA. 4.4.3 SUCCESSIVE EXAM; SEE PARA. 4.4.3 SUCCESSIVE EXAM; SEE PARA. 4.4.3 SUCCESSIVE EXAM; SEE PARA. 4.5.1
		MSRR-0278	N/A	8"D	CS	
		MSRR-0279	N/A	8"D	CS	
		MSRR-0280	N/A	8"D	CS	
		MSRR-0281	N/A	8"D	CS	
		MSRR-0282	N/A	8"D	CS	
		MSRR-0283	N/A	8"0	CS	
		MSRR-0284	N/A	8"0	CS	
		MSRR-0285	N/A	8"D	CS	
		MSRR-0286	N/A	8"D	cs	SUCCESSINE EXAM; SEE

4.2 Cont'd Class 3 Items Examined 5th Refueling

CODE	CODE ITEM #	WELL, ITAM #	DRAWING	SIZE	MATERIAL	COMMENTS		
F-C	N/A	MSRR-0288	N/A	8"D	CS	ADDITIONAL EXAM; SEE		
		MSRR-0289	N/A	8"D	CS	PARA. 4.4.3 ADDITIONAL EXAM; SEE		
		mSRR-0290	N/A	8"D	CS	PARA. 4.4.3 ADDITIONAL EXAM; SEE		
		MSRR-0291	N/A	8*D	cs	PARA. 4.4.3 ADDITIONAL EXAM; SEE		
		MSRR-0293	N/A	8"D	cs	PARA. 4.4.3 ADDITIONAL EXAM; SEE		
		MSRR-0297	N/A	6"D	cs	PARA. 4.4.3 ADDITIONAL EXAM: SEE		
		MSRR-0300	N/A	16"D	cs	PARA. 4.4.3 ADDITIONAL EXAM; SEE		
		MSRR-0301	N/A	16"D	cs	PARA. 4.4.: ADDITIONAL EXAM; SEE		
		MSRR-0302	N/A	16"D	CS	PARA. 4.4.: ADDITIONAL EXAM; SEE		
		MSRR-0303	N/A	16"D	cs	PARA. 4.4.		
		MSRR-0304	N/A	16"D	cs			
		MSRR-0305	N/A	16"D	CS	ADDITIONAL EXAM; SEE		
					MSRR-0306	N/A	16"D	cs
		MSRR-3071	N/A	16"D	CS	PARA. 4.4.		
		MSRR-3077	N/A	4*D	CS	ADDITIONAL EXAM; SEE PARA. 4.4.		
		MSRR-3078	N/A	4*D	CS	ADDITIONAL EXAM; SEE PARA. 4.4.		

4.2 Cont'd Class 3 Items Examined 5th Refueling

CODE CATEGORY	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
F-C	N/A	MSRR-3u81	N/A	8"D	CS	ADDITIONAL EXAM; SEE
		MSRR-3082	N/A	8"D	cs	PARA. 4.4.3 ADDITIONAL EXAM; SEE
		MSRR-3083	N/A	4"D	CS	PARA. 4.4.3 ADDITIONAL EXAM; SEE
		MSRR-3085	N/A	1"D	CS	PARA. 4.4.3 ADDITIONAL EXAM; SEE
		MSRR-4059	N/A	6"D	cs	PARA. 4.4.3 SUCCESSIVE EXAM; SEE
		MSRR-4060	N/A	6"D	cs	PARA. 4.5.1
		MSRR-4061	N/A	6"D	cs	SEE PARA.
		MSRR-4062	N/A	6"D	cs	4.3.18
		MSRR-4063	N/A	6"D	cs	
		MSSH-0255	N/A	6"D	CS	

4.3 Abstract of Conditions Noted and Corrective Actions Taken

- 4.3.1 Component Support No. CCRR-0182: Visual examination (VT-3) revealed clamp to strut misalignment. The clamp was realigned and the support was reexamined and determined acceptable. See paragraph 4.4.1 for additional examinations required per IWF-2430(a).
- 4.3.2 Component Support No. CCRR-0455: Visual examination (VT-3) revealed unacceptable gap measurements. Further examination by engineering determined the gaps to be within tolerances.
- 4.3.3 Component Support No. CCRR-0466: Visual examination (VT-3) revealed missing fillet welds. Further examination by engineering determined the support to be acceptable as is.

- 4.3.4 Component Support No. CCRR-0758: Visual examination (VT-3) revealed damaged end paddles on the strut. The strut was replaced and the support was reexamined and determined acceptable. See paragraph 4.4.1 for additional examinations required per IWF-2430(a).
- 4.3.5 Component Support No. CCRR-1068: Visual examination (VT-3) revealed fillet welds in wrong location. Further examination by engineering determined the support to be acceptable as is.
- 4.3.6 Component Support No. CCRR-1105: Visual examination (VT-3) revealed unacceptable gap measurements. Further examination by engineering determined the gaps to be within tolerance.
- 4.3.7 Component Support No. CCRR-1119: Visual examination (VT-3) revealed missing retaining rings on clevis pins. Retaining rings were installed and the support was reexamined and determined acceptable. See paragraph 4.4.2 for additional examinations required per IWF-2430(a).
- 4.3.8 Component Support No. CCSH-0950: Visual examination (VT-3) revealed the data plates to be painted over (unable to verify spring setting). The paint was removed from the data plates and the spring can settings (double spring) were verified and determined acceptable.
- 4.3.9 Component Support No. MSRR-0253: Visual examination (VT-3) revealed clamp to strut misalignment and a missing cotter pin. The clamp was realigned and a cotter pin was installed. The support was reexamined and determined acceptable. This support was examined as a successive exam in accordance with IWF-2420(b). See Para. 4.5.1 for details. Also, see paragraph 4.4.3 for additional examinations required per IWF-2430(a).
- 4.3.10 Component Support No. MSRR-0263: Visual examination (VT-3) revealed a missing bolt on anchor plate and a weld to embed plate which is not shown on design drawing. Further examination by engineering determined the support to be per design.
- 4.3.11 Component Support No. MSRR-0262: Visual examination (VT-3) revealed heavy rust on rear brackets and paddles. Engineering evaluation determined the condition to be acceptable. However, the support will be cleaned and repainted during Refuel 6.
- 4.3.12 Component Support No. MSRR-0263: Visual examination (VT-3) revealed heavy rust on support. Engineering evaluation determined the condition to be acceptable. However, the support will be cleaned and repainted during Refuel 6.

- 4.3.13 Component Support No. MSRR-0267: Visual examination (VT-3) revealed heavy rust on support. Engineering evaluation determined the condition to be acceptable. However, the support will be cleaned and repainted during Refuel 6.
- 4.3.14 Component Support No. MSRR-0268: Visual examination (VT-3) revealed a loose locknut. The locknut was tightened and the support was reexamined and determined acceptable. See paragraph 4.4.3 for additional examinations required per IWF-2430(a).
- 4.3.15 Component Support No. MSRR-0273: Visual examination (VT-3) revealed clamp to strut misalignment which caused the strut paddle to be bent. Also, the structural steel appeared to be distorted. Engineering evaluation determined the structural steel to be acceptable. However, the strut was replaced and the support was reexamined and determined acceptable. See paragraph 4.4.3 for additional examinations required per IWF-2430(a).
- 4.3.16 Component Support No. MSRR-0291: Visual examination (VT-3) revealed an improperly installed cotter pin. The cotter pin was replaced and the support was reexamined and determined acceptable.
- 4.3.17 Component Support No. MSRR-0297: Visual examination (VT-3) revealed a cotter pin that had corroded off. New cotter pins and retaining rings were installed and the support was reexamined and determined acceptable.
- 4.3.18 Component Support No. MSRR-4061: Visual examination (VT-3) revealed clamp to strut misalignment. Engineering evaluation determined the condition to be within design tolerances.

4.4 Additional Examinations

As required by IWF-2430(a), additional examinations were performed when component supports which required corrective measures in accordance with the provisions of IWF-3000 were discovered. Details of the selection process and additional examinations performed are discussed below. No credit toward completion is taken for additional exams.

4.4.1 Component Support No. CCRR-0182 and CCRR-0758: These supports are rigid restraints which support the Auxiliary Component Cooling Water (ACCW) Pump B discharge line to Component Cooling Water (CCW) Heat Exchanger B. Examination results of these supports required corrective measures to be taken, therefore IWF-2430 applies. All adjacent supports were examined and accepted as part of the original scope. It was determined that 25 component supports of similar type.

4.4.1 (Cont'd)

design and function were examined during Refuel 5. Therefore 25 additional component supports were required to be examined per IWF-2430. However, only 9 other similar supports exist, therefore all remaining supports of similar type, design and function were examined with no additional descrepancies noted. The following is a list of the additional supports:

SUPPORT NO.	CODE CAT.	DRAWING NO.	RESULTS
CCRR-0456 CCRR-0457 CCRR-0458 CCRR-0459 CCRR-0460 CCRR-0461 CCRR-0462 CCRR-0463 CCRR-0464	F-C F-C F-C F-C F-C F-C	4305-5700 4305-5700 4305-5701 4305-5701 4305-5701 4305-5701 4305-5701 4305-5701	ACCEPTABLE ACCEPTABLE ACCEPTABLE ACCEPTABLE ACCEPTABLE ACCEPTABLE ACCEPTABLE ACCEPTABLE ACCEPTABLE

4.4.2 Component Support No. CCRR-1119: Examination results required retaining rings to be installed on the clevis pins, therefore, IWF-2430 applies. One of the adjacent supports (CCRR-1201) was examined and accepted in accordance with IWF-2430. The other adjacent support (CCRR-1121) is located inside of a penetration which is protected by a fireseal and therefore could not be examined.

Support No. CCRR-1119 is a rigid restraint which supports a Component Cooling Water (CCW) line to the Circulating Water Discharge Header. It was determined that 5 supports of similar type, design and function were examined during Refuel 5. Therefore, 5 additional supports were selected for examination in accordance with IWF-2430. The following is a list of the additional supports:

SUPPORT NO.	CODE CAT.	DRAWING NO.	RESULTS
CCRR-0625	F-C	4305-6259	ACCEPTABLE
CCRR-0626	F-C	4305-6259	ACCEPTABLE
CCRR-0627	F-C	4305-6259	ACCEPTABLE
CCRR-0628	F-C	4305-6259	ACCEPTABLE ACCEPTABLE
CCRR-1112	F-C	4305-6259	

4.4.3 Component Support No. MSRR-0253, MSRR-0268 and MSRR-0273: These supports are rigid restraints which support a Main Steam supply line to Emergency Feedwater (EFW) Pump A/B.

4.4.3 (Cont'd)

Examination results required corrective measures to be taken on MSRR-0268, MSRR-0253 and MSRR-0273. Therefore, the provisions of IWF-2430 apply to each of these supports. All adjacent supports were examined as part of the original outage scope. The adjacent supports were MSRR-0269, MSRR-4059, MSRR-4060, MSRR-4061 and MSSH-0255. Examination of MSRR-4061 revealed strut to clamp misalignment, however, an engineering evaluation determined the condition to be within design tolerances (see Para. 4.3.18). All other adjacent supports were also determined acceptable.

A total of 32 supports similar in type, design and function were examined during Refuel 5. Therefore, 32 additional examinations were required to be performed per IWF-2430. However, only 25 other similar supports exist, therefore all remaining supports of similar type, design and function were examined. The following is a list of the additional supports:

SUPPORT NO.	CODE CAT.	DRAWING NO.	RESULTS
MSRR-0256	F-C	4305-6915	ACCEPTABLE
MSRR-0265	F-C	4305-6915	ACCEPTABLE
MSRR-0266	F-C	4305-6915	ACCEPTABLE
MSRR-0278	F-C	4305-6916	ACCEPTABLE
MSRR-0280	F-C	4305-6912	ACCEPTABLE
MSRR-0282	F-C	4305-6912	ACCEPTABLE
MSRR-0283	F-C	4305-6912	ACCEPTABLE
MSRR-0284	F=C	4305-6912	ACCEPTABLE
MSRR-0288	F-C	4305-6912	ACCEPTABLE
MSRR-0289	F+C	4305-6912	ACCEPTABLE
MSRR-0290	F+C	4305-6912	ACCEPTABLE
MSRR-0291	F-C	4305-6912	ACCEPTABLE*
MSRR-0293	F-0	4305-6912	ACCEPTABLE
MSRR-0297	F-C	4305-6914	ACCEPTABLE**
MSRR-0300	F-C	4305-6913	ACCEPTABLE
MSRR-0301	F-C	4305-6913	ACCEPTABLE
MSRR-0302	F+C	4.05-6913	ACCEPTABLE
MSRR-0305	F+C	4305-6913	ACCEPTABLE
MSRR-0306	F-C	4305-6913	ACCEPTABLE
MSRR-3077	F-C	4305-6912	ACCEPTABLE
MSRR-3078	F-C	4305-6912	ACCEPTABLE
MSRR-3081	F+C	4305-6912	ACCEPTABLE
MSRR-3082	F+C	4305-6912	ACCEPTABLE
MSRR-3083	F-C	4305-6912	ACCEPTABLE
MSRR-3085	F-C	ESSE-MS-103	ACCEPTABLE

^{*} See Para. 4.3.16

^{**} See Para. 4.3.17

4.5 Successive Examinations

4.5.1 As required by IWF-2420(b), successive examinations were performed during Refuel 5 on items which failed to meet established acceptance criteria during the second inspection period. The Class 3 items which were examined per IWF-2420(b) are listed as follows:

COMPONENT I.D. NO		MPONENT CRIPTION	DRAWING NO	PREVIOU	JS	RESULTS
CCRR-0838 MSRR-0253 MSRR-0267 MSRR-0269	Rigid Rigid	Restraint Restraint Restraint	4305-6375 4305-6915 4305-6915 4305-6915	Refuel Refuel Refuel	3333	Acceptable Unacceptable Acceptable* Acceptable
MSRR-0279 MSRR-0281 MSRR-0285 MSRR-0286 MSRR-4059	Rigid Rigid Rigid Rigid	Restraint Restraint Restraint Restraint	4305-6916 4305-6912 4305-6912 4305-6916	Refuel Refuel	33333	Acceptable Acceptable Acceptable Acceptable Acceptable

^{*} See Para, 4,3,13

Examination results from MSRR-0253 required clamp to strut realignment (See Para. 4.3.9), therefore this support will be reexamined in the first inspection period of the second ten year interval as required by IWF-2420. The remaining successive examinations did not result in additional corrective measures to be taken. Therefore, as allowed by IWF-2420(c) the inspection frequency for these supports will revert to the original ten year schedule.

4.5.2 Successive examinations will be performed on the Class 3 component supports which required corrective measures in accordance with the provisions of IWF-3000. The following Class 3 component supports will be reexamined during the first inspection period of the second ten year interval as required by IWF-2420(b):

CCRR-0182 CCRR-0758 CCRR-1119 MSRR-0253* MSRR-0268 MSR3-0273

^{*} This support was examined as a successive examination (IWF-2420) during Refuel 5 and rejected.

5.0 Supplemental/Augmented Examination Summ ry

5.1 Supplemental/Augmented Examination Completion Status 3rd Period, 5th Refueling

CODE ITEM NO.	SELF	EXAMS ECTED INTERVAL		COMPLETED REFUELING	TOTAL EXAMS COMPLETED TO DATE	% EXAMS COMP: TED TO DATE	COMMENTS
C5.11	Sup.	87		8	87	100	
C5.11	Aug.	4		2	4	100	
C5.21	Aug.	110	2	2	95	86	
C5.22	Aug.	20		4	17	85	
Cat. 5		4		0	2	50	

5 2 Supplemental/Augmented Items Examined 5th Refueling

CODE CATEGORY	CODE 1TEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
SUPPLEMEN	TAL PROGR	RAM				
C-F	C5.11	61-046	2-4104	20"D	SS	
		61-047	2-4104	20"D	SS	
		61-051	2-4108	14"D	SS	
		61-053	2-4108	14"D	SS	
		61-071	2-4108	14"D	SS	
		62-041	2-4207	10"D	SS	
		62-047	2-4207	10"D	SS	
		62-048	2-4207	10"D	SS	
AUGMENTED	PROGRAM					
C-F	C5.11	52-001	2-4206	14"D	SS	LIMITED EXAM
		52-002	2-4206	14"D	SS	LIMITED EXAM
	C5.21	42-003	2-4200	34"D	CS	
		42-005	2-4200	34"D	CS	

5.2 Cont'd Supplemental/Augmented Items Examined 5th Refueling

CODE CATEGORY	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
C+F	C5.21	42-006	2-4200	40"D	CS	
		42-008	2-4200	40"D	cs	
		42-010	2-4200	40"D	cs	
		42-016	2-4200	40"D	cs	
		45-613	2-4102	20"0	cs	
		45-014	2-4102	20"D	cs	
		45-016	2-4102	20"0	cs	
		45-017	2-4102	20"D	cs	
		46-004	2-4202	20"D	cs	
		46-010	2-4202	20"0	cs	
		55-068	2-4113	8"D	SS	LIMTED EXAM
		55-070	2-4113	8"D	SS	LIMITED EXAM
		55-071	2-4113	8"0	SS	
		55-072	2-4113	8"0	SS	
		55-073	2-4113	8"D	SS	
		55-074	2-4113	8"D	SS	
		55-075	2-4113	8"D	SS	LIMITED EXAM
		55-077	2-4113	8"D	SS	
		56-049	2-4211	8"D	SS	
		56-050	2-4211	8"D	SS	LIMITED EXAM
	C5.22	42-004LA	2-4200	34"D	CS	
		42-004LB	2-4200	34"D	cs	

5.2 Cont'd Supplemental/Augmented Items Examined 5th Refueling

CODE	CODE ITEM #	WELD/ ITEM #	DRAWING	SIZE	MATERIAL	COMMENTS
C-F	C5.22	42-009LA	2-4200	40"D	CS	
		42-009LB	2-4200	40"D	CS	

- 5.3 Abstract of Conditions Noted and Corrective Actions Taken
 - 5.3.1 ISI examinations did not identify any conditions on Supplemental/Augmented items which exceeded the allowable standards in IWB-3000.
- 5.4 Additional Examinations
 - 5.4.1 Additional examinations were not required on Supplemental/ Augmented items.
- 5.5 Successive Examinations
 - 5.5.1 There were no successive examinations performed per IWC-2420(b) on Supplemental/Augmented items during Refuel 5.
 - 5.5.2 There were no Supplemental/Augmented items which met the criteria of IWC-2420(b) during Refuel 5. Therefore, no successive examinations will be required in future refueling outages.

6.0 Pressure Testing Summary

As required by ASME Section XI and Sections 2.2, 3.2 a.d 4.3 of the Waterford 3 Ten Year Inservice Inspection Program, VT-2 examinations were conducted during the performance of system pressure tests. No throughwall pressure boundary leakage was identified. Other leakage (packing, gaskets, etc.) and boric acid residue was documented on Condition Identifications (CIs) for evaluation and/or corrective action.

6.1 Hydrostatic Testing

The following components/subsystems were hydrostatically tested during Refuel 5:

- Auxiliary Component Cooling Water System Train A from CCW Heat Exchanger A Dutlet Isolation Valve to Wet Cooling Tower A
- Auxiliary Component Cooling Water System Train B from CCW Heat Exchanger B Outlet Isolation Valve to Wet Cooling Tower B
- 0 Chilled Water Train A & A/B
- Chilled Water Train B 0
- 0 Component Cooling Water Train B
- 0 Nitrogen Accumulator #1 (Pneumatic)
- Nitrogen Accumulator #2 (Pneumatic) 6
- Nitrogen Accumulator #3 (Pneumatic) 6
- Nitrogen Accumulator #4 (Pneumatic) 0
- Nitrogen Accumulator #5 (Pneumatic) 0
- Nitrogen Accumulator #6 (Pneumatic) Ö
- 0
- Nitrogen Accumulator #7 (Pneumatic) Nitrogen Accumulator #8 (Pneumatic) 0
- Instrument Air/Nitrogen Accumulator #1 Valve Operating Header 0
- Instrument Air/Nitrogen Accumulator #2 Valve Operating Header 0
- Ø. Instrument Air/Nitrogen Accumulator #3 Valve Operating Header
- Instrument Air/Nitrogen Accumulator #4 Valve Operating Header 0
- Instrument Air/Nitrogen Accumulator #5 Valve Operating Header 0
- Instrument Air/Nitrogen Accumulator #6 Valve Operating Header 0
- Instrument Air/Nitrogen Accumulator #7 Valve Operating Header Ø.
- Instrument Air/Nitrogen Accumulator #8 Valve Operating Header

6.2 Normal Operating Pressure Testing

The Class 1 System Leakage Test which is required at start-up following each refueling outage was completed. The VT-2 exam boundary included the Class 1 Reactor Coolant System with all valves in normal position required for reactor start-up.

5.2 Cont'd Normal Operating Pressure Testing

DEFECURE TEST NO

All forty-month examinations (Class 2 and 3) which were required to be performed during the second inspection period were completed prior to the end of the period (5/25/92). No forty-month examinations (Class 2 and 3) have been performed during the third inspection period. The following is a list of the Class 2 and 3 normal operating pressure tests that were conducted subsequent to start-up from Refuel 4 (5/21/91) and prior to the end of the second inspection period (5/25/92):

DESCRIPTION

PRESSURE TEST NO.	DESCRIPTION
1.1(a)	Steam Generator System (RAB only)
1.1(c)	Charging (RAB only)
1.1(d)	Sampling (RAB only)
1.2	Charging Train "A" (RAB only)
1.3	Charging Train "A/B" (RAB only)
1.4	Charging Train "B" (RAB only)
1.5	CCW "A" (RAB only)
1.6	CCW "B" (RAB enly)
1.7	ACCW Train "A"
1.8	ACCW Train "B"
1.9	N ₂ Accumulator I
1.10	N ₂ Accumulator II
1.11	N ₂ Accumulator III
1.12	N ₂ Accumulator IV
1.13	Na Accumulator V & IX
1.14	N ₂ Accumulator VI
1.15	N₂ Accumulator VII
1.16	N ₂ Accumulator VIII
1.17	Fuel Pool Cooling Train "A"

6.2 Cont'd Normal Operating Pressure Testing

PRESSURE TEST NO.	DESCRIPTION
1.19	HVAC/Chilled Water System
1.20	Chilled Water Train "A"
1.21	Chilled Water Train "B"
1.22	Diesel Oil Storage Tank "A"
1.23	Diesel Oil Storage Tank "B"
1.24	Refueling Water Storage Pool (RWSP)
1.25	EFW Between Flow Control and Isol. Valves
2.2	HPSI "B" SI Recirc.
2.4	CS Train "A"
2.5	CS Train "B"
2.6	EFW Train "A"
2.7	EFW Train "B"
2.8	EFW Train "A/B"
2.9	BAM Tank "A"
2.10	BAM Tank "B"
2.11	Diesel Oil Transfer Pump "A"
7.12	EDG Train "A"
2.13	Diesel Oil Transfer Pump "B"
2.14	EDG Train "B"
2.15	CCW Make-up
2.17	Chilled Water Train "A/B"
3.1(a)	LPSI Train "A" RAB
3.1(b)	LPSI Train "A" RCB
3.2(a)	LPSI Train "B" RAB
3.2(b)	LPSI Train "B" RCB

7.0 NIS-2 Forms

The following NIS-2 forms document the ASME Class 1 and 2 repair and replacement activities performed between 05/21/91 and 11/6/92:

acement S/G #1
2
1
acement S/G #2
acement S/G #2
acement S/G #2
acement PZR
acement CHSR-564
RC-317A
RC-317B
tor Vessel
cor Vessel
acement SI-512B
acement Heaters
ve Packing Partial SI=302
ve Packing Partial SI-331B
ve Packing Partial SI-331A
ve Packing Partial SI-332B

7.0 NIS-2 Forms (Cont'd)

NIS-2 No.	WA No.	CI No.	Description
92-109	01078224	275825	Partial Replacement S1-143A
92~201	01055676	267147	Partial Replacement CVC-188 A/B
92-202	01063783	270824	Partial Replacement CVC-192 A/B
92-203	01074068	274065	Partial Replacement CVC-192B, 2CH1 1/2-154B, 2CH2-153B
92-204	01088787	2784 3	Partial Replacement CVC Pump 1AB
	01092209	279747	Partial Replacement CVC Pump 1B
92-205	99000414	274618	Snubber Replacement MSSR-3073
92-206	01071882	273335	Partial Replacement RC-317A
92-207	01082058	276787	Partial Replacement CVC-192A
92-208	01063145	270731	Repair Line 2CH4-418
92-209	011000704	282264	Replacement S1-343
92-210	01085243	277467	Repair CVC-109
92-211	01089618	277077	Partial Replacement CC-710
92-212	01086862	278188	Partial Replacement MS-1158
92-213	01100672	282262	Repair/Partial Replacement SI-344
92-214	01092960	279405	Repair/Partial Replacement SI-225B
	01083703	277384	Repair SI-227A
92-215	01086461	275657	Replacement SI-108A
	01086436	275656	Replacement SI-108B
92-216	01095681	015673	Partial Replacement SI-604A
92-217	01091726	019041	Partial Replacement CS-110B
92-218	01058579	266539	Partial Replacement FP-601A
	01097928	281041	Partial Replacement FP-601B

7.0 NIS-2 Forms (Cont'd)

NIS-2 No.	WA No.	CI No.	Description
92-219	99003376	281818	DC-3376, Valve Packing Enhancement, Partial Replacement SI-307A
		281819	DC-3376, Valve Packing Enhancement, Partial Replacement S1-307B
		281820	DC-3376, Valve Packing Enhancement, Partial Replacement SI-308B

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

	Name						
1340 Echelon	Parkway, Jacks Address	on, MS 39213	-	Sheet 1 of	3		
Plant Wate	rford Name			Unit 3			
Hwy, 18, P.	O. Box B. Kills Address	ona. LA 70066		See Remarks on Repair Organiza			
	Name D. Box B. Killo Address			Type Code Symbo Authorization N Expiration Date	0.	Not Applic	
Identificati	lon of System S	C /Steam Cenev	ator)				
W81 Adde		ts Repaired or	Replac	ced and Replaces	nent Co	omponents	
Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional Board No.	Other Identification	Year Bu/lt	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
		The second secon	tional Board			Replaced, or	Code Stamped (Yes
Component	Manufacturer Combustion	Serial No.	tional Board No.	Identification Steam	Bu'.lt	Replaced, or Replacement	Code Stamped (Yes or No)
SG No. 1	Manufacturer Combustion Engineering Combustion	Serial No. 74270-1	tional Board No. 22156	Steam Generator Steam	Bu'.1t	Replaced, or Replacement Repair	Code Stamped (Yes or No)
SG No. 1	Manufacturer Combustion Engineering Combustion Engineering Combustion	74270-1 74270-1	tional Board No. 22156	Steam Generator Steam Generator Steam Generator	Bu'.1t 1975	Replaced, or Replacement Repair Partial Replacement Partial	Code Stamped (Yes or No) No

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

	FORK NIS-2 (Back)
Remarks WA's 01089740, 0	01090472, 01090473, 01089915, 01099258, 01101374
	CERTIFICATE OF COMPLIANCE
We certify that	t the statements made in the report are correct and this
repair and replacement repair or replacement	conforms to the rules of the ASME Code, Section XI.
Type Code Symbol Stamp	None
Signed Hany At.	Maintenance Engineer Date /- 5 93
	CERTIFICATE OF INSERVICE INSPECTION
Boiler and Pressure Vess and employed by <u>Awkwrig</u> inspected the components May 1991 to <u>Nove</u> and belief, the Owner ha	ing a valid commission issued by the National Board of el Inspectors and the State or Providence of Louisiana ht Mutual Insurance Co.* of Norwood, MA have described in this Owner's Report during the period mber 1992 , and state that to the best of my knowledge is performed examinations and taken corrective measures is Report in accordance with the requirements of the ASME

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's keport. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Hugh S. Benford Commissions 5951 N & I S
Inspector's Signature National Board and Endorsements

Date 1-/2.93

^{*} Factory Mutua! System

Containment entries during operation showed apparent leakage from steam generator No. 1. Additional investigation showed leakage from steam generator No. 1 manway covers. Maintenance history reviews showed installation of incorrect pressure cliss gaskets during refueling outage four. During replacement of gaskets on WA 01089740 pine cold leg manway studs, five cold leg manway nuts and two hot leg manway study were found to have damaged threads. Due to damaged threads these study and nuts were replaced. Replacement manway study and nuts were VT-1 examined. Puting gasket replacement corrosion was identified on primary manway leak and cold leg cover due to gasket leakage. These were evaluated and repaired the No. 20080473 and 01090472 respectively. Repair areas were examined using a magge tic particle (MT) method with sationative actory results. Following manway cover and head corrosion repair and reassembly using replacement manway study and nuts, pressure testing at normal operating pressure was found satisfactory using VT-2 leakage inspection criteria.

Investigation of installation of incorrect pressure class gaskets on steam generator No. 1 revealed installation of incorrect pressure class gaskets on steam generator No. 2 also. During replacement of gaskets on steam generator No. 2 on WA 01089915 five manway studs and four manway nuts were found to have damaged threads. Due to damaged threads these studs and nuts were replaced. Replacement manway studs and nuts were VT-1 examined. Following reassembly using replacement manway studs and nuts pressure testing at normal operating pressure was found satisfactory using VT-2 leakage inspection criteria.

During refuel 5 steam generator No. 2 manway covers were removed for tube eddy current inspection. One manway stud was found stuck and seven other studs were found to have minor thread damage. Therefore, eight manway studs and one manway nut were replaced on WA 01099258. Replacement manway studs and nuts were VT-1 examined. Following reassembly with replaced manway studs and nuts pressure testing at normal operating pressure was found satisfactory using VT-2 leakage inspection criteria.

Removal of a stuck stud on steam generator No. 2 required replacement of a previously installed helicoil insert. Helicoil replacement was accomplished on WA 01101374. ASME Section XI Code Case N-496 was used for helicoil installation. Following helicoil replacement pressure testing at normal operating system pressure was found satisfactory using VT-2 leakage inspection criteria on WA 01099258.

Steam Generator manway stud, nut and helicoil certifications are filed in records as follows:

Manway Studs: PO W44145 MRIR M05987 FAN 4944-1599 PO W44448 MRIR M07304

Helicoil Insert: PO W48395 MRIR MO4048 Manway Nuts: PO A75614 MRIR 0075-80 FAN 0601-1905 PO W22172 MRIR M01941 FAN 3525-1254 PO W45032 MRIR M04933 FAN 5076-1285

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Cide Section XI

	Owner Ent	ergy Operations Name	LIC	-	Date	Decemb	er 16, 1992	
	1340 Echelor	n Parkway, Jack Address	son. MS 3921	2	Sheet 1 of	3		
2.	Plant Wate	erford Name			Unit 3			
	Hwy. 18, P	O. Box B. Kill Address	Lona, LA 7006	6	WA 01100673 Repair Organiz	ation	P.O. No., Jo	b No
3.		Name D. Box B. Kill: Address			Type Code Symbouthorization Expiration Date	No.	Not Appli	cable cable
		ion of System E			9 <u>71</u> Edition, <u>S</u>	71 Add	enda. NA Code	e Case
•	W81 Adde	ole Edition of enda	Section XI Ut	ilized	for Repairs or I	Replace	enants 1980	through
	Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- cional Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
	RC MPZRO001	Combustion Engineering	74370	21682	Pressurizer	1975	Partial Replacement	No
							TOTAL STREET, AND AS RESIDENT COMMENT	Marine Constitution

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) Information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

	CERTIFICATE OF COMPLIANCE
We certify that	t the statements made in the report are correct and this
replacement repair or replacement	conforms to the rules of the ASME Code, Section XI.
ype Code Symbol Stamp	None
igned Lawy	Maintenance Engineer Date /- 4-93
	CERTIFICATE OF INSERVICE INSPECTION
nd employed by <u>Awkwrigh</u> nspected the components ay 1991 to <u>Nover</u> nd belief, the Owner has	ing a valid commission issued by the National Board of el Inspectors and the State or Providence of <u>louisiana</u> ht Mutual Insurance Co.* of <u>Norwood</u> . MA have described in this Owner's Report during the period mber 1992, and state that to the best of my knowledge s performed examinations and taken corrective measures a Report in accordance with the requirements of the ASME
arranty, expressed or in escribed in this Owner's mployer shall be liable	
Inspector's Sig	principal de la company de la

Removal of pressurizer manway cover was required during refueling outage 5 to provide a reactor coolant system vent path. Inspection of manway studs showed minor thread pitting and galling on eight manway studs and two manway nuts. Therefore, these were replaced with spares from stores.

Prior to installation replacement studs and nuts were visually examined using VT-1 criteria. Examination results were satisfactory.

Following reassembly of manway pressure testing at normal operating pressure conditions was conducted using VT-2 leakage acceptance criteria. Pressure testing results were acceptable.

Material certification for replacement items is filed as follows:

Studs: PO 147786 MRIR 8048-84 FAN 1248-0191

Nuts: PO A75614 MRIR 0104-80 FAN 0601-1952

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

4.	OwnerEnt	ergy Operations Name	, Inc.		Date	Decemb	er 16, 1992	
	1340 Echelo	n Parkway, Jack Address	cson. MS 3921	3	Sheet 1 of	_3_		
2.	Plant Wat	erford Name			Unit 3			
	Hwy. 18, P	Address	lona, LA 7006	6	WA 01092221 Repair Organiz	ation	P.O. No., Jo	b No
3.		Name O. Box B. Killo Address			Type Code Symb Authorization Expiration Dat	No.	Not Appli	cable cable
4.	Identificat	ion of System ©	VC (Chemical	Volume '	Control)			
5.	(a) Applica (b) Applica W81 Add	ble Construction ble Edition of	on Code <u>Sec 11</u> Section X1 Ut	I NB 1	9 <u>74</u> Edition, <u>S</u> for Repairs or	76 Add Replac	enda, <u>NA</u> Codements 1980	e Case through
6.			ate Pensived o	r Danla	and and Danlaga	6		
6.		ion of Componer Name of Manufacturer	Manufacturer Serial No.	Na- tional	Other	Year	Repaired, Replaced, or	(Yes
6.	Identificat	ion of Componer	Manufacturer	Na- tional Board	Other	Year	Repaired, Replaced, or	Code Stamped (Yes
6.	Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)
6.	Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)
7	Name of Component CHSR-564	Name of Manufacturer	Manufacturer Serial No. 3651	Na- tional Board No. NA	Other Identification Snubber	Year Built	Repaired, Replaced, or Replacement Partial Replacement	Code Stamped (Yes or No)

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 though 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

	FORM NIS-2 (Back)
Remark	s None

	CERTIFICATE OF COMPLIANCE
	Ve contifu that the statement of the
	We certify that the statements made in the report are correct and this
repair	replacement conforms to the rules of the ASME Code, Section XI.
Type Co	de Symbol Stamp None
Certifi	cate of Authorizati Not Applicable Expiration Date Not Applicable
Signed	Haintenance Engineer Date 1-4-93
1	
	CERTIFICATE OF INSERVICE INSPECTION
and empinspect May 199 and bel describe	undersigned, holding a valid commission issued by the Nationa' Board of and Pressure Vessel Inspectors and the State or Providence of Louisiana loyed by Awkwright Mutual Insurance Co.* of Norwood, MA have ed the components described in this Owner's Report during the period to November 1992 and state that to the best of my knowledge ief, the Owner has performed examinations and taken corrective measures ed in this Owner's Peport in accordance with the requirements of the ASME ection XI.
describe employe	ing this certificate neither the inspector nor his employer makes any y, expressed or implied, concerning the examinations and corrective measures ed in this Owner's Report. Futhermore, neither the Inspector nor his r shall be liable in any manner for any personal injury or property damage as of any kind arising from or connected with this inspection.
Hu	1 Senford Commissions 5951 N B I S Inspector's Signature National Board and Endorsements
Date _	1-6-93

^{*} Factory Mutual System

During replacement of valve operator parts for letdown to regenerative heat exchanger from reactor coolant loop (CVCMVAA:101) testing of operator snubber CHSR-564 was performed. Testing and valve operator parts replacement required snubber removal. Snubber mounting pins were lost. Therefore, snubber mounting pins were replaced. Installation of snubber with new mounting pins was satisfactorily visually verified per PE-005-011.

Material certification for replacement snubber mounting pins is filed as follows:

TR 5355 MRIR 7940-87 FAN 3031-1057 PO WP3-6640 MRIR 82-02788 FAN 0866-1762

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

	Owner <u>Ente</u>	rgy Operations Name	. Inc.		Date	ecembe	er 21, 1992	
	1340 Echelon	Parkway, Jack Address	son. MS 3921	l	Sheet 1 of	_3		
	Plant <u>Vate</u>	rford Name			Unit 3			
	Hwy. 18, P.	O. Box B. Kill Address	ona, LA 7006	_	WA's 01094356 a Repair Organiza			o No
3.		ed by <u>Entergy</u> Name . Box B. Killo			Type Code Symbo Authorization ! Expiration Date	No.	Not Applie	able able
		Address on of System B						
	(a) Applicab	le Constructio	on Code Sec II	I NB 1	974 Edition, Si	26 Add	enda, <u>NA</u> Code	e Case
	(b) Applicab W81 Adde	nda			ced and Replacer			
	(b) Applicab W81 Adde	nda		Replac	ced and Replacer	nent Co	Repaired, Replaced, or	ASME Code Stamped
	(b) Applicab W81 Adde Identificati Name of	nda on of Componer Name of	nts Repaired on	Replace Na- tional Board	ced and Replacer	nent Co	Repaired, Replaced, or	ASME Code Stamped
RC	(b) Applicab W81 Adde Identificati Name of Component	nda on of Componen Name of Manufacturer	Manufacturer Serial No.	Na- tional Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
RC	(b) Applicab W81 Adde Identificati Name of Component MVAAA317 A	nda on of Componer Name of Manufacturer Dresser	Manufacturer Serial No. BS-08031	Na- tional Board No.	Other Identification Valve 1RC-R2573A	Year Built	Repaired, Replaced, or Replacement Keplaced	ASME Code Stamped (Yes or No)
RC	Name of Component MVAAA317 A	nda on of Componen Name of Manufacturer Dresser Dresser	Manufacturer Serial No. BS-08031	Na- tional Board No. NA	Other Identification Valve 1RC-R2573A Valve 1RC-R2573A	Year Built 1979	Repaired, Replaced, or Replacement Keplaced	ASME Code Stamped (Yes or No) No

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

	FORM NIS-2 (DACK)
Rema	rks None
- proceed and the	
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
repa	replacement conforms to the rules of the ASME Code, Section XI.
Type	Code Symbol Stamp None
Certi Signe	ficate of Authorization No. Not Applicable Expiration Date Not Applicable Hany HBC Maintenance Engineer Date 1-5-43
	CERTIFICATE OF INSERVICE INSPECTION
Boile and e inspe May 1 and b descr	e undersigned, holding a valid commission issued by the National Board of rand Pressure Vessel Inspectors and the State or Providence of Louisiana mployed by Awkwright Mutual Insurance Co.* of Norwood, MA have coted the components described in this Owner's Report during the period to November 1992 , and state that to the best of my knowledge elief, the Owner has performed examinations and taken corrective measures ibed in this Owner's Report in accordance with the requirements of the ASME Section XI.
warra descr emplo or a	gning this certificate neither the inspector nor his employer makes any nty, expressed or implied, concerning the examinations and corrective measures ibed in this Owner's Report. Futhermore, neither the Inspector for his yer shall be liable in any manner for any personal injury or property damage loss of any kind arising from or connected with this inspection. Commissions 5951 N B I S Inspector's Signature National Board and Endorsements
Date	1-6-93

^{*} Factory Mutual System

During refueling outage five both pressurizer safety valves were removed and replaced with spare valves. Replacement valves were reworked and tested with satisfactory results prior to installation. Removed valves will be tested and reworked as necessary.

Following installation and return to service replacement valves were pressure tested at normal operating pressure. Examination for leakage during pressure testing using VT-2 leakage criteria was satisfactory.

Copies of Code Data Reports for replaced and replacement valves are contained in NIS-2 91-022 and 91-023.

Certification for rework and testing of replacement valves is contained in PO W42268 MRIR M06507.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

	Owner Ent	ergy Operations Name	Inc.		Date	Decemb	er 21, 1992	
	1340 Echelor	n Parkway, Jack Address	son, MS 3921	3	Sheet 1 of	3		
	Plant <u>Wat</u>	erford Name			Unit 3			
	Hwy 18 P	O. Box B. Kill Address	ona, LA 7006	6	WA's 01101543 (Repair Organiza			b No
		Name D. Box B. Killo Address			Type Code Symbo Authorization I Expiration Date	No.	Not Appli	
	Identificat	ion of System E	C (Reactor Co.	olant)				
	W81 Adde	enda	nts Repaired on Manufacturer	Replac	for Repairs or I	nent Co	Repaired, Replaced, or	ASME Code Stamped
	RC MRCTOOO1	Combustion Engineering	74170	21694	Reactor Vessel	1976	Repair	No
_							;	
								The state of the s

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)	
Remarks None	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the report are	correct and this
repair conforms to the rules of the ASME Code	Section XI
repair or replacement	Section At.
Type Code Symbol Stamp None	
Certificate of Authorization No. Not Applicable Expiration	Date Not Applicable
Signed Harry Ht3 Can) Maintenance Enginee	Date 1-5-93
	ACCUSED OF A SECURIOR STREET, SAID OF SECURIOR STREET, SAID STREE
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the Nat	ional Board of
Boiler and Pressure Vessel Inspectors and the State or Providence	
and employed by Awkwright Mutual Insurance Co. * of Norwood.	MA have
inspected the components described in this Owner's Report during May 1991 to November 1992 , and state that to the be-	
and belief, the Owner has performed examinations and taken corre	
described in this Owner's Report in accordance with the requirem	
Code, Section XI.	
By signing this certificate neither the inspector nor his employ	er makes any
warranty, expressed or implied, concerning the examinations and	
described in this Owner's Report. Futhermore, neither the Inspe- employer shall be liable in any manner for any personal injury o	
or a loss of any kind arising from or connected with this inspec	
26 1 1 1 1 1	51 N B T C
The Sector's Signature Commissions 59 National B	oard and Endorsements
The state of the s	
Date 1-6-93	
Date	

* Factory Mutual System

During reactor vessel disassembly for refueling outage five an indication was found on vessel flange and head sealing areas. Investigation showed a small piece of metal had apparently been left in this area and crushed during reactor vessel assembly during refuel four. Investigation showed minor damage to 0-ring grooves in head and 0-ring sealing areas on vessel flange.

Damage areas were documented, evaluated and repaired on WA 01101576 for head and 01101543 for frange. Repaired areas were examined visually and using liquid penetrant (PT). Following return to service a leak test of reactor coolant system at normal operating pressure using procedure OP-903-024 provided satisfactory results.

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

	OwnerEnte	rgy Operations Name	Inc.		Date	Januar	y 14. 1993	
	1340 Echelor	Parkway, Jack Address	son. MS 3921	3	Sheet 1 of	_3_		
2.	Plant <u>Wate</u>	rford Name			Unit 3			
	Hwy. 18, P.	O, Box B, Kill Address	ona, LA 7006	6	WA 01082087 Repair Organiza	ation	P.O. No., Joh	b No
		Name Ded by Entergy Name Name Address			Type Code Symbo Authorization N Expiration Date	No.	Not Applie	cable cable
4.	Identificati	on of System §	I (Safety Ini	ection)				
	W81 Adde							
			Manufacturer Serial No.	Na- tional	Other	Year	Repaired, Replaced, or	ASME Code Stamped (Yes
	Identificati	on of Componer	Manufacturer	Na- tional Board	Other	Year	Repaired, Replaced, or	Code Stamped (Yes
	Identificati Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional Board No.	Other Identification Valve	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)
	Name of Component MVAAA512 B	Name of Manufacturer	Manufacturer Serial No. E-6373-1-4	Na- tional Board No. NA	Other Identification Valve 1SI-V2509	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
repa	replacement conforms to the rules of the ASME Code, Section XI.
уре	Code Symbol Stamp None
igne	ficate of Authorization No. Not Applicable Expiration Date Not Applicable Harry Maintenance Engineer Date 1-14-93
	CERTIFICATE OF INSERVICE INSPECTION
nd e nspe ay 1 nd b escr	e undersigned, holding a valid commission issued by the National Board of r and Pressure Vessel Inspectors and the State or Providence of Louisiana mployed by Awkwright Mutual Insurance Co.* of Norwood, MA have cted the components described in this Owner's Report during the period 991 to November 1992, and state that to the best of my knowledge elief, the Owner has performed examinations and taken corrective measures ibed in this Owner's Report in accordance with the requirements of the ASME Section XI.
arra escr mplo	gning this certificate neither the inspector nor his employer makes any nty, expressed or implied, concerning the examinations and corrective measures ibed in this Owner's Report. Futhermore, neither the Inspector nor his yer shall be liable in any manner for any personal injury or property damage loss of any kind arising from or connected with this inspection.
474	Inspector's Signature Commissions 5951 N B I S
	Inspector's Signature National Board and Endorsements
	1-15-93

High pressure safety injection header to reactor coolant loop 2 hotleg injection check valve (SI MVAAA512 B) was found to have a hinge pin cover leak. Hinge pin cover gasket on this valve was recently replaced. Investigation showed hinge pin cover bolting to not provide sufficient strength to allow full compression of gasket. Therefore, hinge pin cover studs and nuts were change to a material providing additional strength necessary to adequately compress gasket.

Pressure testing was performed at normal operating pressure conditions following hinge pin stud and nut replacement. Inspection for leakage to VT-2 criteria during pressure testing was satisfactory.

Material certification for replacement study and nuts is filed as follows:

Studs:

Rod, threaded 3/8" 16 tp1 SA564 Gr. 630 Ht. 1100 PO W444437 MRIR M07308 FAN 5145-0933

Nut:

Nut, hex stainless steel 3/8" 16 tpi SA194 Gr. 6 PO W41455 MRIR M00513 FAN 4704-1313

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

I. Owner	Enter	gy Operation Name	s. Inc.		Date	Febr.	гу 2, 1993	
1340 Ect	helon	Parkway, Jac Address	kson. MS 3921	3	Sheet 1 of	6		
2. Plant	Water	ford Name			Unit 3			
Hwy. 18	8. P.O		lona, LA 7006	6	WA 01099476 Repair Organiz	ation	P.O. No., Jo	b No
		Name	Operations, I		Type Code Symb Authorization Expiration Dat	No.	Not Appli	cable cable
4. Identifi	cation	n of System E	C (Reactor Co	olant)				
 (a) Appl (b) Appl 	icable	Construction of	on Code <u>Sec II</u> Section XI Ut	I NB 1	9 <u>71</u> Edition, <u>S</u> for Repairs or 1	Zl Add Replac	enda, <u>NA</u> Code	e Case
MOT	Addend	la .			ced and Replace			
MOT	cation	la .	Manufacturer	Replac		ment C	Repaired, Replaced,	ASME Code Stamped (Yes
5. Identifi Name of	cation	n of Componer	ts Repaired o	Na- tional Board	ced and Replacer	ment C	Repaired, Replaced,	ASME Code Stamped (Yes
Name of Componen	t M	Name of Combustion	Manufacturer Serial No.	Na- tional Board No.	Other	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Name of Componen	t M 3 C E 1 C	Name of Componer of Combustion of Combustion Combustion Combustion	Manufacturer Serial No.	Na- tional Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement Replaced	ASME Code Stamped (Yes or No)
Name of Componen RC EHTR71A	t M 3 C E 1 C E 2 C	Name of Componer Combustion Engineering Combustion Engineering Combustion	Manufacturer Serial No.	Na- tional Board No. NA	Other Identification Heater	Year Built 1983	Repaired, Replaced, or Replacement Replaced	ASME Code Stamped (Yes or No) No
Name of Componen RC EHTR71A RC EHTR72A RC EHTR72A	t M 3 CE 1 CE	Name of Component of Component of Component on Combustion of Component of Combustion of Component	Manufacturer Serial No.	Na- tional Board No. NA NA NA	Other Identification Reater Heater Heater	Year Built 1983	Repaired, Replaced, or Replacement Replacement Replacement	ASME Code Stamped (Yes or No) No

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

	FORM NIS-2 (Back)
Remarks	See Code Data Reports (Attachment 2)
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
	r replacement conforms to the rules of the ASME Code, Section XI.
Type Code	Symbol Stamp None
Certificat	hay Alau Annicable Expiration Date Not Applicable Expiration Date Not Applicable Expiration Date 2-2-93
	CERTIFICATE OF INSERVICE INSPECTION
onler and ind employ inspected lay 1991 ind belief	dersigned, holding a valid commission issued by the National Board of Pressure Vessel Inspectors and the State or Providence of Louisiana ed by Awkwright Mutual Insurance Co.* of Norwood, MA have the components described in this Owner's Report during the period to November 1992, and state that to the best of my knowledge the Owner has performed examinations and taken corrective measures in this Owner's Report in accordance with the requirements of the ASME ion XI.
escribed mployer s r a loss	this certificate neither the inspector nor his employer makes any expressed or implied, concerning the examinations and corrective measures in this Owner's Report. Futhermore, neither the Inspector nor his hall be liable in any manner for any personal injury or property damage of any kind arising from or connected with this inspection.
Hugh	1. Benjard Commissions 5951 N B I S Inspector's Signature National Board and Endorsement
	2.3-93
ate o	

^{*} Factory Mutual System

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

1.	Owner:	Entergy Operations, Inc 1340 Echelon Parkway, Jackson, MS 39213	Date February 2, 1993 Sheet 3 of 6
2.	Plant:	Waterford 3 Hwy. 18, P.O. Box B, Killona, LA 70066	WA 01099476
3.	Work Pe	rformed By: Entergy Operations, Inc. Hwy. 18, P.O. Box B, Killona, LA 70066	Type Code Stamp: None Authorization No.: N/A Expiration Date: N/A
1.	Tdentif	Jacobson of Courses and Courses	

4. Identification of System: RC (Reactor Coolant)

6.

5. (a) Construction Code: ASME Section III NB 1971 Edition S71 Addenda (b) Repair/Replacement Code: ASME Section XI 1980 Edition W81 Addenda

N	ame of		on of Componen Name of	Manuf. Serial	Other Ident-	Year	Repaired, Replaced,	ASMI
Com	ponent		Manufacturer	Number	fication	Built	Replacement	Stamp
RC 1	EHTR72A	2	Combustion Engineering	6	Pressurizer Heater	1983	Replaced	No
RC I	EHTR72A	2	Combustion Engineering	1962	Pressurizer Heater	1991	Replacement	No
RC I	EHTR72A	3	Combustion Engineering	25F	Pressurizer Heater	1987	Replaced	No
RC I	EHTR72A	3	Combustion Engineering	1949	Pressurizer Heater	1991	Replacement	No
RC E	EHTR75B	4	Combustion Engineering	17	Pressurizer Heater	1983	Replaced	No
RC E	EHTR75B	4	Combustion Engineering	1952	Pressurizer Heater	1991	Replacement	. No

During last plant operating cycle five (5) pressurizer heaters were found with grounded elements. These heaters were removed and replaced with spare heater assemblies from stores. Socket welds holding heaters in pressurizer were examined using dye penetrant method (PT) and found acceptable. Socket welds were exempt from pressure testing in accordance with IWA-4400 (b) (5).

Copies of code data reports for replacement heaters are presented in Attachment 2. Material certifications for heaters are filed as follows:

PO W19752 MRIR M04276 FAN 4361-1744

Attachment 2 Code Data Reports Page 1 of 2

					1
	FORM NAS N	OR NPT CEATIFICATE	HOLDERS' DATA	ALPORT POR E	HA NIGAL
		NUCLEAR PARTS	AND APPURYZNA I the ASSIS Code, I	Social M. Divisio	
		Non Yo Example	Cheus Dav's Pressburg	LEUMP	Rd, Rdw Lee Lob. Rds
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2 Mars	Paragos ter 1000 Pro	oustion Engineer.	, Windsor, CT	06095-0500	Tear
	Enter	ospect Hill Road	66		THE RESERVE AND ADDRESS OF THE PARTY OF THE
		tem : 54-47917+9	75,000	and Plug	1991
4 7100	Rev. QJ	COM 1 24-8731370	etarity meading	-ditto	None
3. 454	E Code Section W washing	1971 5 (200	er 1971		Total (no. or .
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	e star in accordance with Car	nai. 8000. 10tv. 1 ohiel	N/A Revos	M/X	Done were Summer
	138 OF Newling	ton was directed	to follow th	e 1986 Eq. t	201, 86
1. Rema	Int separate for or	elding and NDE p	rocedures.		
• TE	NAME AND POST OFFICE ADDRESS OF THE PARTY OF	A December of the last of the	485	.394 Max.	
720	m 2 .18C		180	.885	100.623/9
* 8. Nogen.	SOCIARE IN ASSESSMENT	sur, area commercia aus accessusing princi abundo cyndurasida (nur.)	man specific come at the en	Makes y 1 merennement y 4.460	is contained and an age of the processors
2 Aspen	eliferential characters constitution	the same of the sa		-	
		National	For as A	Senur tementes	Reserve
	Fort or Approximation Serves Interrupty	Boord No.	Samo	E Murriper	Books Number
	MPG. S/N	in Aumenical Order			se Numerical Diserr
	*** 1944	None	126		PARTY AND DESCRIPTION OF THE PARTY OF THE PA
111	1945	None	1331 adjaneses		
	1945	None	(33)		
	THE RESERVE THE PARTY OF THE PA	None	1331 adjaneses		
121 131 141 154	1945 1945 1947 1948	None	(39)		
	1945 1949 1949	NORE	(37) (39) (39) (31) (37)		
121 131 141 154 160	1745 	NORE	(3) (3) (3) (3) (3) (3)		
121 133 141 154 160 171 191 191	1745 	None	(37) (39) (39) (31) (37)		
121 138 144 156 167 177 160 197	1945 1846 1948 1949 1950 1951	NOR	(27) (18) (18) (19) (13) (13) (13) (13)		
121 133 141 154 160 171 191 191	1945 1846 1948 1949 1950 1951	NOR	(27) (128) (130) (131) (132) (134) (134) (134) (134) (134)		
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Attachment 2 Code Data Reports Page 2 of 2

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FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

		Name					y 2, 1993		
134	O Echelon	Parkway, Jack Address	son, MS 39213		Sheet 1 of	3			
Pla	r.t <u>Wate</u>	rford Name		Unit 3 WA 99003376 281814.281821.281822.281823 Repair Organization P.O. No., Job No.					
Hw	y. 18, P.	O. Box B. Kill Address							
Work Performed by Entergy Operations, Inc. Name Hwy. 18, P.O. Box B. Killona, LA 70066 Address					Type Code Symbol Stamp None Authorization No. Not Applicable Expiration Date Not Applicable				
. Ide	entificati	on of System §	I (Safety Inje	ction)					
(a)	Applicab	le Edition of	n Code <u>Sec III</u> Section XI Uti	NB 19	71 Edition, W7 for Repairs or F	2 Adde	enda, <u>NA</u> Code ements <u>1980</u> t	Case	
	W81 Adde		ts Repaired or	Replac	and Replaces	ment Co	omponents		
. Ide			Manufacturer Serial No.	Na-		Year	Repaired, Replaced, or	(Yes	
. Ide	entificati	on of Componer	Manufacturer	Na- tional Board	Other	Year	Repaired, Replaced, or	Code Stamped (Yes	
Na Con	entificati ame of aponent	on of Componer Name of Manufacturer Velan	Manufacturer Serial No.	Na- tional Board No.	Other Identification Valve	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)	
Na Con	entificati ame of apponent fVAAA302	Name of Manufacturer Velan Engineering	Manufacturer Serial No. 470-2 73-EB-23605-	Na- tional Board No.	Other Identification Valve 1SI-V2505	Year Built 1980	Repaired, Replaced, or Replacement Partial Replacement	Code Stamped (Yes or No)	
Na Con	entificati mme of mponent fVAAA302 VAAA331 A	Name of Manufacturer Velan Engineering Lunkenheimer	Manufacturer Serial No. 470-2 73-EB-23605- 34 73-EB-23605-	Na- tional Board No. NA	Other Identification Valve 1SI-V2505 Valve 1SI-V1505TK1A	Year Built 1980	Repaired, Replaced, or Replacement Partial Replacement Partial Replacement Partial	Code Stamped (Yes or No) No	

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is $8\ 1/2$ in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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Account and the second	
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
	placement conforms to the rules of the ASME Code, Section XI.
Type Code	Symbol Stamp None
Certifica Signed	Tany At Bland Maintenance Engineer Date 2-2-93
	CERTIFICATE OF INSERVICE INSPECTION
and employ inspected tay 1991 and belief	f, the Owner has performed examinations and taken corrective measures in this Owner's Report in accordance with the requirements of the ASME
described imployer s or a loss	this certificate neither the inspector nor his employer makes any expressed or implied, concerning the examinations and corrective measures in this Owner's Report. Futhermore, neither the Inspector nor his shall be liable in any manner for any personal injury or property damage of any kind arising from or connected with this inspection.
	Commissions 5951 N B I S

^{*} Factory Mutual System

As part of a plant valve packing enhancement program packing gland leak off lines are cut and capped. During packing enhancement lantern rings are removed and packing ring stack height reduced. Excess valve packing gland space is taken up using split carbon bushings. Leak off lines cut and capped are typically 1/8" to 3/4" NPS. Due to implementation of packing enhancement socket weld cap installed on leak off line from valve stuffing box becomes a pressure retaining component. Welds for installing socket weld cap are examined using dye penetrant method (FT). Based on IWA-4400 (b) (5) welds are exempt from pressure testing. However, pressure testing at normal operating pressure was performed. Inspection for leakage during pressure testing using VT-2 acceptance criteria was acceptable.

Material certification for 1/8", 1/2" and 3/4" SA182 F304 30001b socket welded pipe caps is provided as follows:

PO L97429 MRIR 7468-86 FAN 2394-0355

TR 5911 MRIR 0629-88 FAN 3273-2251 PO WP3-8410 MRIR 82-03078 FAN 1771-2601

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

	rgy Operations Name		Date February 1, 1993						
1340 Echelon	Parkway, Jack Address		Sheet <u>1</u> of <u>3</u>						
. Plant <u>Wate</u>	rford Name			Unit 3					
Hwy, 18, P.	O. Box B. Kill Address		WA 01078224 Repair Organization P.O. No., Job No						
. Work Perform	ed by <u>Entergy</u> Name . Box B. Killo Address			Type Code Symbo Authorization N Expiration Date	0	Not Applic	able		
. Identificati	on of System <u>S</u>	I (Safety Inje	ction)	-					
(a) Applicab (b) Applicab W81 Adde	le Edition of nda	Section XI Uti	llized i	<u>71</u> Edition, <u>W7</u> for Repairs or F	2 Adde Replace	enda, <u>NA</u> Code ements <u>1980 t</u>	Case hrough		
. Identificati	on of Componen	ts Repaired or	Replac	ed and Replaces	ment Co	omponents			
Name of Component	on of Componen Name of Manufacturer	Manufacturer Serial No.	Na- tional		Year	Repaired, Replaced, or	ASME Code Stampe (Yes or No)		
Name of	Name of	Manufacturer	Na- tional Board	Other	Year	Repaired, Replaced, or	Code Stampe (Yes		
Name of Component	Name of Manufacturer Anchor	Manufacturer Serial No.	Na- tional Board No.	Other Identification Valve	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)		
Name of Component	Name of Manufacturer Anchor	Manufacturer Serial No.	Na- tional Board No.	Other Identification Valve	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)		
Name of Component SI MVAAA143 A	Name of Manufacturer Anchor	Manufacturer Serial No. 1N252	Na- tional Board No.	Other Identification Valve 1S:-V1519RL2A	Year Built	Repaired, Replaced, or Replacement	Code Stampe (Yes or No)		

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

				FU	IKM N	18-2	(Bac)	()				
Kemarks	None.						THE PARTY NAMED IN					
-												
											THE RESERVE	-

CERTIFICATE OF COMPLIANCE

	the statements made in the report are correct and this
replacement replacement	conforms to the rules of the ASME Code, Section XI.
Type Code Symbol Stamp	None
Signed Hary AKBL	ion No. Not Applicable Expiration Date Not Applicable Maintenance Engineer Date 2-1-93

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood, MA have inspected the components described in this Owner's Report during the period May 1991 to November 1992, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Thigh S Benford Commissions 5951 N B I S
Inspector's Signature National Board and Endorsements

Date 2-3-93

^{*} Factory Mutual System

During routine inspection of low pressure safety injection header to reactor coolant loop 2A containment penetration #38 check valve (SI MVAAA143 A) hinge pin cover studs were found with thread damage and were over stressed. Corrective action involved replacement of hinge pin cover studs. Following replacement and return to service pressure testing at normal operating pressure was conducted. Inspection for leakage during pressure testing using VT-2 criteria was satisfactory.

Material certification for replacement items is filed as follows:

PO W48260 MRIR M02481

1.	Owner Ent	ergy Operations	Inc.	No. light word	Date	Novemb	er 11. 1992	
	1340 Echelo	n Parkway, Jack Address	son, MS 3921	3	Sheet 1 of	3		
2.	Plant <u>Wat</u>	erford Name			Unit 3			TO PROTECTION VINCENSIANO
	Hwy. 18, P	.O. Box B. Kill Address	ona, LA 7006	6	WA 01055676 Repair Organiz	ation	P.O. No., Jo	b No
3.		Name O. Box B. Killo Address			Type Code Symb Authorization Date	No.	Not Appli	cable cable
5.	(a) Applica (b) Applica W81 Add	ble Edition of	on Code <u>Sec II</u> Section XI Ut	I NC 1	Control) 971 Edition, W for Repairs or I	Replac	ements 1980	e Case through
	Name of Component	Name of Manufacturer	Manufacturer	Na- tional	Other Identification	Year	Repaired, Replaced, or	ASME Code Stamped (Yes or No)
	CVC-188A/B	Anchor Darling	2N1132	N/A	Valve 2CH-V127A/B	1978	Partial Replacement	No
							.*	
7		on of Work Se						
	. Tests Con	ducted: Hydro	estatic [] Pressur	Pneuma	tic [] Norma	Test '	Γe	шр.

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is $8\ 1/2$ in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

	FORM NIS-2 (Back)
	Remarks None
	CERTIFICATE OF COMPLIANCE
	그리 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그
	We certify that the statements made in the report are correct and this
	replacement conforms to the rules of the ASME Code, Section XI.
Ty	yre Code Symbol Stamp None
Ce	ertificate of Authorization No. Not Applicable Expiration Date Not Applicable
3.	igned x Tany TCS Comp Maintenance Engineer Date 11-11-42
	CERTIFICATE OF INSERVICE INSPECTION
ar de	the undersigned, holding a valid commission issued by the National Board of piler and Pressure Vessel Inspectors and the State or Providence of Louisians and employed by Awkwright Mutual Insurance Co.* of Norwood MA have aspected the components described in this Owner's Report during the period evember 1989 to May 1991 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures escribed in this Owner's Report in accordance with the requirements of the ASME ode, Section XI.
de en or	signing this certificate neither the inspector nor his employer makes any arranty, expressed or implied, concerning the examinations and corrective measures escribed in this Owner's Report Futhermore, neither the Inspector nor his apployer shall be liable in any manner for any personal injury or property damage a loss of any kind arising from or connected with this inspection. July 1. Bluffel Commissions 5951 N B I S Inspector's Signature National Board and Endorsements
Da	ste 1/-1/- 9 2

^{*} Factory Mutual System

During Refuel 4 charging pump AB suction header isolation valve was reworked. This rework was performed due to identified seat and body to bonnet leakage under normal operating conditions.

During rework a satisfactory disc and seat blue check could not be obtained due to wear of seating surfaces. Therefore, a replacement disc and seat rings were obtained from material and stores and installed.

Certification of replacement gate and seat rings are found in the following records:

Item	Purchase Order No.	MRIR	EAN	Serial No.
Disc	L 32486	6407-84	2701-1594	
Seat Ring	L 32486	6301-84	2701-1872	N/A

1. OwnerEnte	ergy Operations Name	. Inc.		Date	Novemb	er 12, 1992	
1340 Echelon	n Parkway, Jack Address	son, MS 3921	3	Sheet 1 of	3		
2. Plant Wate	erford Name		_	Unit 3			
Hwy. 18, P	O. Box B. Kill Address	ona, LA 70066	5	WA 01063783 Repair Organiza	ation	P.O. No., Jol	o Ne
	Name D. Box B. Killo Address			Type Code Symbo Authorization I Expiration Date	No.	Not Applic	cable
4. Identificat	ion of System (VC (Chemical)	Volume (Control)			
(b) Applicat	ole Edition of enda	Section XI Ut:	ilized	9 <u>74</u> Edition, <u>S</u> for Repairs or I	Replace	ements <u>1980</u>	
Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
CVC-192A/B	Crosby	N60643- 00-0002	NA	Valve 2CH-R1527A/B	1978	Partial Replacement	No
7. Description	on of WorkSe	e Attachment	l (1 Pa	ge)			
8. Tests Cond	ducted: Hydro Other	static [] [] Pressur	Pneuma re	tic [] Norma 2485 psi tches, or drawin	Test '	Temp.	F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back) Remarks None CERTIFICATE OF COMPLIANCE We certify that the statements made in the report are correct and this __ conforms to the rules of the ASME Code, Section XI. replacement repair or replacement Type Code Symbol Stamp None Certificate of Authorization No. Not Applicable Expiration Date Not Applicable . Maintenance Engineer Date 11-12-92 CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood, MA have inspected the components described in this Owner's Report during the period November 1989 to May 1991 , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Thunk S. Ben for Commissions 5951 N B I S
Inspector's Signature National Board and Endorsements

^{*} Factory Mutual System

Charging pump AB discharge header relief valve was identified as having a upper gasket leak during normal operating conditions. The valve was disassembled for rework. During rework the disc insert was found cut beyond rework and the bellows was found to be leaking.

A replacement disc insert, disc insert pin and bellows were obtained from material and stores. The valve was reassembled using replacement parts. Following reassembly the valve was successfully bench tested and installed in the system.

Upon return to service a pressure test at normal operating pressure was performed. Examination by VT-2 was satisfactory.

Certification for replacement disc insert is filed in the following record:

Purchase Order: W11796

Serial Number: N91102-49-0072

MRIR: 9780-87 FAN: 2672-2057

	Rame Name			Date No		r 12, 1992	
1340 Echelon	Parkway, Jacks Address	son, MS 39213		Sheet 1 of	3		
. Plant <u>Water</u>	ford Name			Unit 3			
Hwy, 18, P.O	Address	ona, LA 70066	STREET,	WA 01074068 Repair Organiza	tion P	.O. No., Job	No
. Work Performe	Name Box B. Killon Address			Type Code Symbo Authorization N Expiration Date	0	Not Applic	
. Identificati	on of System C	VC (Chemical V	olume C	(ontrol)			
				74 Edition, <u>S7</u> for Repairs or R			
W81 Adde		ts Repaired or	Na-	eed and Replacem	ent Co	Repaired,	ASME Code
W81 Adde		ts Repaired or Manufacturer Serial No.	Na- tional		Year	Repaired, Replaced, or	Code Stampe (Yes
W81 Adde	on of Componen	Manufacturer	Na- tional Board	Other	Year	Repaired, Replaced, or	Code Stampe (Yes
W81 Adde	on of Componen Name of Manufacturer Tompkins	Manufacturer Serial No.	Na- tional Board No.	Other Identification Pipe	Year Built	Repaired, Replaced, or Replacement	Code Stampe (Yes or No)
W81 Adde . Identificati . Tame of Comp. Tent 2CH1-1/2-1548	on of Componen Name of Manufacturer Tompkins Bechwith Tompkins	Manufacturer Serial No. N/A	Na- tional Board No.	Other Identification Pipe 2CH1-1/2-154B	Year Built 1982	Repaired, Replaced, or Replacement Partial Replacement	Code Stamped (Yes or No) No
W81 Adde . Identificati . Tame of Comp. Lent 2CH1-1/2-154B	Name of Manufacturer Tompkins Bechwith Tompkins Bechwith	Manufacturer Serial No. N/A N/A	Na- tional Board No. N/A	Other Identification Pipe 2CH1-1/2-154B Pipe 2CH2-153B-1 Valve	Year Built 1982	Repaired, Replaced, or Replacement Partial Replacement Partial Replacement	Code Stamped (Yes or No) No
W81 Adde . Identificati . Tame of Comp. Tent 2CH1-1/2-154B 2CH2-153B CVC-192B	Name of Manufacturer Tompkins Bechwith Tompkins Bechwith	Manufacturer Serial No. N/A N/A N60641- 00-0003	Na- tional Board No. N/A N/A	Other Identification Pipe 2CH1-1/2-154B Pipe 2CH2-153B-1 Valve 2CH-R1528B	Year Built 1982	Repaired, Replaced, or Replacement Partial Replacement Partial Replacement	Code Stampe (Yes or No) No

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

. Remarks None
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this
replacement conforms to the rules of the ASME Code, Section XI.
Type Code Symbol Stamp None
Signed Hary And Remark Engineer Date 11-12-9-3
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood, MA have inspected the components described in this Owner's Report during the period May 1991 to November 1992, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Thurst S. Benford Commissions 5951 N B I S Inspector's Signature National Board and Endorsements
Date

^{*} Factory Mutual System

During operation of positive displacement Charging Pump 1B in the Chemical Tolume Control (CVC) system, the discharge relief valve, CVC-192B, is subject to constant pressure pulses from the pump. The valve is located close to the pump discharge causing the disc insert to develop leaks over time. In addition, during recent reworks it was observed that flanges installed to allow valve removal did not line up properly. This flange misalignment created valve body stress during installation that contributed to disc leakage.

Therefore, lines and flanges into and out of valve CVC-192B were reworked to eliminate misalignment. During this work CVC-192B was also reworked and required replacement of the disc insert.

The valve relief pressure was set and successfully bench tested. All welds were inspected by the liquid penetrant method (PT) satisfactorily. After assembly lines into and out of CVC-192B were satisfactorily hydrostatically tested.

Certification for replacement pipe, fittings and valve disc are filed in the following records:

Flanges 2" 1501b Sch. 80 RFSW SA182F304

TR 5774 Item 4 MRIR 9509-87 FAN 3273-1377 PO WP3-349 MRIR 78-02111 FAN 0660-1660 Ht. Code HJ765

TR 5681 Item 29 MRIR 9014-87 FAN 2557-1424 PO WP3-349 MRIR 78-02111 FAN 0660-1660 Ht. Code HJ765

TR 5677 Item 26 MRIR 8853-87 FAN 3031-1296 PO WP3-3887 MRIR 80-03370 FAN 0580-0649 Ht. Code A2134

Flanges 1.5" 2500 Sch.160 RFSW SA182F304 TR 5682 Item 7 MRIR 8860-87 FAN 2557-1480 PO WP3-7635 MRIR 82-00926 FAN 0884-0008 Ht. Code A2193

Pipe 2" Sch. 80 SA376 Type 304 TR 6037 Item 1 MRIR 0082-87 FAN 3156-1558 PO WP3-3886 MRIR 80-2127 FAN 0580-0459 Ht. Code 464717

Pipe 1.5" Sch. 160 SA376 Type 304 PO W43204 Item 1 MRIR M08347 FAN 4778-1969

Disc Insert PO W11796 MRIR 9780-87 FAN 2572-2057 S/N N91102-49-0074

1. Owne	rEnter	Ey Operations.	Inc.		Date No	vembe	20, 1992	
1340	Echelon		Sheet <u>1</u> of <u>3</u>					
2. Plan	tWate;	ford Name			Unit 3			
Hwy	. 18. P (Address	ona, LA 70066		WA 01088787 WA Repair Organiza			No
		Name Box B. Killo			Type Code Symbo Authorization N Expiration Dete	0	Not Aprilio	
4. Ider	ntificati	on of System C	VC (Chemical V	olume C	Control)			
(b)	Applicab W81 Adds	le Edition of nda	Section XI Uti	lized f	74 Edition, S7 for Repairs or R	eplace	ements 1980 t	
6. Idei	reiricati	on of Componen	ts kepaired or	r Keplac	ed and Replaces	ent Co	mponents	
	me of ponent	Name of Manufacturer	Manufacturer Serial No.	Na- tional Board No.	Oth r Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
CVCMP	MP0001AB	Gaulin	611848-1	N/A	Sump	1974	Partial Replacement	No
CVCMP	MP0001B	Gaulin	611851-3	N/A	Pump	1974	Partial Replacement	No
7. D	escripti	on of WorkS	se Attachment	1 (1 Pa	ge)			
6 8. 1	ests Con				tic [] Norm			
(1) s inclu	ize is 8 ded on e	1/2 in. X 11	in., (2) infor (3) each shee	mation	tches, or drawi in items 1 thro umbered and the	ugh 6	on this repo	ort is

FORM NIS-2 (Back)

	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
re	replacement conforms to the rules of the ASME Code, Section XI.
ſyp	e Code Symbol Stamp None
	ned House Authorization No. Not Applicable Expiration Date Not Applicable Indicate of Authorization No. Not Applicable Expiration Date Not Applicable Indicate Date 11-20-92
	CERTIFICATE OF INSERVICE INSPECTION
Bo: and in: Mar and de:	the undersigned, holding a valid commission issued by the National Board of ler and Pressure Vessel Inspectors and the State or Providence of Louisiana demployed by Awkwright Mutual Insurance Co.* of Norwood, MA have expected the components described in this Owner's Report during the period to November 1992 — , and state that to the best of my knowledge delief, the Owner has performed examinations and token corrective measures scribed in this Owner's Report in accordance with the requirements of the ASME de, Section XI.
Ву	signing this certificate neither the inspector nor his employer makes any tranty, expressed or implied, concerning the examinations and corrective measures scribed in this Owner's Report. Futhermore, neither the Inspector nor his ployer shall be liable in any manner for any personal injury or property damage
wa de em or	Augh S. Saufore Commissions 5951 N B I S Inspector's Signature National Board and Endorsemen

^{*} Factory Mutual System

During investigation of a discharge block head gasket leak on charging pump 1AB on WA 01088787 a crack was identified on one cylinder bore. Corrective action required block replacement. Crack development is attributed to inadequate radius of suction valve bore and material strength.

Block replacement was conducted using a new block design in accordance with design change DC 3254. Block replacement required replacement of a 3/4" flushing line flange and rework of flushing line piping socket welds to maintain installation configuration.

Flushing line socket welds were examined using a dye penetrant exam (PT) and found acceptable. Flushing line socket welds are exempt from hydrostatic testing per IWA-4400 (b) (5).

Complete installed replacement was pressure tested by examining for leakage using VT-2 criteria at operating pressure and found acceptable.

During packing replacement of charging pump 1B cracks were found in two cvlinder block bores. Corrective action required block replacement. Block replacement was accomplished on WA 01092209. Block cracks are due to inadequate radius of suction valve bore and material strength.

Block replacement was conducted using a new block design in accordance with design change DC 3254. Block replacement required replacement of a 3/4" flushing line flange and rework of flushing line piping socket welds to maintain installation configuration.

Flushing line socket welds were examined using a dye penetrant exam (PT) and found acceptable. Flushing line socket welds are exempt from hydrostatic testing per IWA-4400 (b) (5).

Complete installed replacement was pressure tested by examining for leakage at operating pressure using VT-2 criteria and found acceptable.

Certifications for replacement components are on file in records as follows:

Flanges 3/4" 1500 1b RFSW SA182F304 HEAT A2387
TR 5736 Item 14 MRIR 9022-87 FAN 3031-1409 PO WP3-6354 MRIR 81-03091
FAN 1766-2622

Pipe 3/4" Sch. 160 Sa376 Type 304 HEAT 464590 TR 3085 Item 1 MRIR 2868-85 FAN 2589-1836 PO WP3-3886 MRIR 80-02061 FAN 0580-0478

TR 6037 Item 4 MRIR 0082-87 FAN 3156-1558 PO WP3-3686 MRIR 80-02061 FAN 0580-0478
Block PO W33420 MRIR M04443 FAN 4341-1293

	OwnerEnt	ergy Operations Name	. Inc.		Date November 20, 1992				
	1340 Echelo	n Parkway, Jack Address	son. MS 3921	L	Sheet 1 of	_3			
	Plant	erford Name		_	Unit 3				
	Hwy. 18, p	Address	ona, LA 7006	b	WA 99000414 C Repair Organiza			o No	
		Name O. Box B. Killo Address			Type Code Symbo Authorization 1 Expiration Date	No.	Not Appli		
	Identificat	ion of System M	IS (Main Steam						
0	(b) Applica W81 Add	ble Edition of enda	Section XI Ut	ilized	9 <u>74</u> Edition, <u>S</u> for Repairs or I	Replac	ements 1980	e Case through	
5 .	Identificat	ion of Componer	its kepaired o	r Replac	ced and Replacer	ment C	omponents		
	Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional	Other	Year	Repaired, Replaced, or	(Yes	
	Name of	Name of	Manufacturer	Na- tional Board	Other	Year	Repaired, Replaced, or	Code Stamped (Yes	
	Name of Component	Name of Manufacturer Pacific	Manufacturer Serial No.	Na- tional Board No.	Other Identification Snubber/Pipe	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)	
	Name of Component MSSR-3073	Name of Manufacturer Pacific Scientific	Manufacturer Serial No. 37138	Na- tional Board No.	Other Identification Snubber/Pipe 2MS2-276 Snubber/Pipe	Year Built	Repaired, Replaced, or Replacement Replaced	Code Stamped (Yes or No) No	
	Name of Component MSSR-3073	Name of Manufacturer Pacific Scientific	Manufacturer Serial No. 37138	Na- tional Board No.	Other Identification Snubber/Pipe 2MS2-276 Snubber/Pipe	Year Built	Repaired, Replaced, or Replacement Replaced	Code Stamped (Yes or No) No	
	Name of Component MSSR-3073	Name of Manufacturer Pacific Scientific	Manufacturer Serial No. 37138	Na- tional Board No. NA	Other Identification Snubber/Pipe 2MS2-276 Snubber/Pipe 2MS2-276	Year Built	Repaired, Replaced, or Replacement Replaced	Code Stamped (Yes or No) No	

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

CERTIFICATE OF COMPLIANCE We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp None Certificate of Authorization No. Not Applicable Expiration Date Not Applicable Signed Authorization No. Not Applicable Expiration Date Not Applicable Signed Maintenance Engineer Date 11-20-92 CERTIFICATE OF INSERVICE INSPECTION I. the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood MA have inspected the components described in this Owner's Report during the period November 1989 to May 1991 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By sixning this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measured described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage.		
We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI. Type Code Symbol Stamp None Certificate of Authorization No. Not Applicable Expiration Date Not Applicable Signed Maintenance Engineer Date 11-20-98 CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood Ma have inspected the components described in this Owner's Report during the period November 1989 to May 1991 , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warrancy, expressed or implied, concerning the examinations and corrective measure described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage.		
Type Code Symbol Stamp None. Certificate of Authorization No. Not Applicable Expiration Date Not Application Signed Authorization No. Not Applicable Expiration Date Not Application No. Maintenance Engineer Date 11-20-92 CERTIFICATE OF INSERVICE INSPECTION I. the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood, MA have inspected the components described in this Owner's Report during the period November 1989 to May 1991 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measured described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage.		CERTIFICATE OF COMPLIANCE
Type Code Symbol Stamp None. Certificate of Authorization No. Not Applicable Expiration Date Not Application Signed Certificate of Authorization No. Not Applicable Expiration Date Not Application Signed Certificate Of Inservice Inspection I, che undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood, MA have inspected the components described in this Owner's Report during the period November 1989 to May 1991 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measure described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage.	We certify	that the statements made in the report are correct and this
CERTIFICATE OF INSERVICE INSPECTION I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisians and employed by Awkwright Mutual Insurance Co.* of Norwood, MA have inspected the components described in this Owner's Report during the period November 1989 to May 1991 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measured described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage.	replacement repair or replacement	conforms to the rules of the ASME Code, Section XI.
CERTIFICATE OF INSERVICE INSPECTION I, che undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood, MA have inspected the components described in this Owner's Report during the period November 1989 to May 1991 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measure described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage.	Type Code Symbol Stamp	p None
I, che undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood, MA have inspected the components described in this Owner's Report during the period November 1989 to May 1991, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measure described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage.		
Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood MA have inspected the components described in this Owner's Report during the period November 1989 to May 1991 , and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASML Code, Section XI. By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measure described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage.		CERTIFICATE OF INSERVICE INSPECTION
warranty, expressed or implied, concerning the examinations and corrective measure described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage.	Boiler and Pressure Ve and employed by Awkwrinspected the componer November 1989 to Mand belief, the Owner described in this Owner	essel Inspectors and the State or Providence of Louisiana right Mutual Insurance Co.* of Norwood, MA have nts described in this Owner's Report during the period ay 1991 . and state that to the best of my knowledge has performed examinations and taken corrective measures
	warranty, expressed or described in this Owne employer shall be liab or a loss of any kind	r implied, concerning the examinations and corrective measures er's Report. Futhermore, neither the Inspector nor his ole in any manner for any personal injury or property damage arising from or connected with this inspection.
Thurse S. Benford Commissions 5951 N B I S Inspector's Signature National Board and Endorseme	Inspector's	Commissions 5951 N B I S Signature National Board and Endorsements

* Factory Mutual System

Snubber MSSR-3073 failed functional testing due to high final running drag forces and initial breakaway test with extension attached. Corrective action required snubber replacement. Functional testing of replacement snubber was satisfactory.

Certification of replacement snubber is contained in files as follows:

PO L105527 MRIR 7789-87 FAN 2705-0479

1.	OwnerEnt	ergy Operations Name	L. Inc.	- Andrew	Date	Novemb	er 20, 1992	
	1340 Echelo	n Parkway. Jack Address	sen. MS 3921	3	Sheet 1 of			
2.	Plant <u>Wat</u>	erford Name		PERSONAL PROPERTY AND PROPERTY	Unit 3		1000	
	Evy. 18, P	.O. Box B. Kill Address	ona, 1A 7006	6	WA 01071882 Repair Organiz	ation	P.O. No., Jol	b No
3.		ned by <u>Entergy</u> Name O. Box B, <u>Kills</u> Address			Type Code Symbo Authorization I Expiration Date	No.	Not Applie	cable cable
4.	Identificat	ion of System E	C (Reactor Co	olant)				Market Service Market Service
D	(b) Applica W81 Add	ble Edition of enda	Section XI Ut	ilized	9 <u>71</u> Edition, <u>W</u> for Repairs or I	Replac	ements 1980	e Case through
	Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional	Other Identification	Year	Repaired, Replaced, or	ASME Code Stamped (Yes or No)
	RC-317A	Dresser	BS-08031	NA	Valve 1RC-R2573A	1979	Partial Replacement	No
-								
L								
7		on of Work <u>Se</u>						
V		Otner	[] Pressur	:e	psi tches, or drawing	Test '	Temp.	F

NOTE: Supplement_1 sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

	FORM NIS-2 (Back)
1	Remarks None
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
ï	replacement conforms to the rules of the ASME Code, Section XI.
Ту	pe Code Symbol Stamp None
	gned Law Watherisation No. Not Applicable Expiration Date Not Applicable
	CERTIFICATE OF INSERVICE INSPECTION
Bo an in No an de	the undersigned, holding a valid commission issued by the National Board of ciler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood, MA have espected the components described in this Owner's Report during the period exember 1989 to May 1991 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures scribed in this Owner's Report in accordance with the requirements of the ASME de, Section XI.
wa de em or	signing this certificate neither the inspector nor his employer makes any tranty, expressed or implied, concerning the examinations and corrective measures scribed in this Owner's Report. Futhermore, neither the Inspector nor his uployer shall be liable in any manner for any personal injury or property damage a loss of any kind arising from or connected with this inspection. Commissions Inspector's Signature Commissions Section 1. Section 2. Section 3. S
	te _//-23-92

* Factory Mutual System

During normal plant operation leakage past a pressurizer safety valve was identified. During a planned maintenance outage replacement of both pressurizer safety valves was performed to eliminate identified leakage. This replacement was accomplished on WA 01056125 for "A" pressurizer safety valve RC MVAAA317 A. During replacement valve serial no. BS-08031 was removed and replaced with valve serial no. BW-09724.

Following removal valve serial no. BS-08031 was reworked at a vendor shop on purchase order W035078. This rework was documented on WA 01071882. During rework disc replacement was required due to steam cut seating surfaces from leakage. This NIS-2 is to document disc replacement on valve serial no. BS-08031.

Following rework of valve serial no. BS-08031 replacement of pressurizer safety valves was again performed during refueling outage four. At this time valve serial no. BW-09724 was removed and replaced with valve serial no. BS-08031 for RC MVAAA317 A. This replacement was accomplished on WA 01054796. Replacement of valves during maintenance and refueling outages was documented on NIS-2 91-022.

Following rework and disc replacement valve serial no. BS-08031 was bench set and tested for leakage. Pressure testing was not performed on WA 01071882. Pressure testing was performed on WA 01054796 following replacement in system by performing a system leakage test using YT-2 leakage criteria. Documentation of acceptable system leakage criteria is documented in WA 01054796 and NIS-2 91-022.

Certification of replacement components is filed in records as follows:

Disc PO W16802 MRIR M03216 FAN 3653-1324

	ergy Operations Name	. Inc.	-	Date	ecembe	r 3, 1992	
1340 Echelo	on Parkway, Jack Address	son. MS 39213	_	Sheet 1 of	_3		
Plant Wat	terford Name			Unit 3			
Hwy. 18. J	P.O. Box B. Kill Address	ona, LA 70066		WA 01082058 Repair Organiza	ition	P.O. No., Job	o No
	Name O. Box B. Killo Address			Type Code Symbo Authorization M Expiration Date	lo	Not Applie	
Identifica	tion of System ©	VC (Chemical	and Vol	ume Control)			
	able Construction able Edition of denda						
Identificat	tion of Componen	ts Rapaired or	r Replac	ed and Replacer	ment Co	omponents	
Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional		Year	Repaired, Replaced, or	ASME Code Stamped (Yes
Name of	Name of	Manufacturer	Na- tional Board	Other	Year	Repaired, Replaced, or	Code Stamped (Yes
Name of Component	Name of Manufacturer	Manufacturer Serial No. N60643-	Na- tional Board No.	Other Identification Valve	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)
Name of Component	Name of Manufacturer	Manufacturer Serial No. N60643-	Na- tional Board No.	Other Identification Valve	Year Built	Repaired, Replaced, or Replacement	Code Stamped (Yes or No)

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

	CERTIFICATE OF COMPLIANCE
We cer	tify that the statements made in the report are correct and this
replaceme repair or repla	nt conforms to the rules of the ASME Code, Section XI.
Type Code Symbol	Stamp None
Signed Stary	Maintenance Engineer Date 13-3-92
	CERTIFICATE OF INSERVICE INSPECTION
	CERTIFICATE OF INSERVICE INSPECTION
Boiler and Press and employed by Inspected the co May 1991 and belief, the described in thi	ded, holding a valid commission issued by the National Board of sure Vessel Inspectors and the State or Providence of Louisiana Awkwright Mutual Insurance Co.* of Norwood, MA have supponents described in this Owner's Report during the period to November 1992 , and state that to the best of my knowledge Owner has performed examinations and taken corrective measures so Owner's Report in accordance with the requirements of the ASME
Boiler and Press and employed by inspected the coday 1991 and belief, the described in this code, Section XI by signing this varranty, expressions cribed in this employer shall bor a loss of any of the control of the	ded, holding a valid commission issued by the National Board of ture Vessel Inspectors and the State or Providence of Louisiana Awkwright Mutual Insurance Co.* of Norwood, MA have imponents described in this Owner's Report during the period to November 1992 , and state that to the best of my knowledge Owner has performed examinations and taken corrective measures so Owner's Report in accordance with the requirements of the ASME certificate neither the inspector nor his employer makes any sed or implied, concerning the examinations and corrective measures so Owner's Report. Futhermore, neither the Inspector nor his eliable in any manner for any personal injury or property damage kind arising from or connected with this inspection.

Charging pump A discharge header relief valve was identified as having a top cap leak during normal operating conditions. Corrective action required rework. During rework valve disc insert seating surfaces were found cut beyond rework and bellows was found leaking.

A replacement disc insert, disc insert pin and bellows were obtained from material and stores. Valve reassembly was performed using replacement parts obtained. Following reassembly a successful bench setting and test was obtained.

Upon return to service a pressure test at normal operating pressure was performed. Examination by VT-2 was satisfactory.

Certification for replacement disc insert is filed in the following record:

Purchase Order: W11796

Serial Number: N91101-49-0073

MRIR: 9780-87 FAN: 2672-2057

1.	OwnerEnt	ergy Operations Name	. Inc.		Date	Decemb	er 3. 1992	
	1340 Echelo	n Parkway, Jack Address	son. MS 3921	3	Sheet 1 of	_3_		
2.	Plant Wat	erford Name		i-maturity	Unit 3			
	Hwy. 18. P	O. Pox B. Kill Address	ona, LA 7006	6	WA 01063145 Repair Organiza	ation	P.O. No., Jo	b No
3.		med by <u>Entergy</u> Name O. Box B. Killo Address			Type Code Symbo Authorization I Expiration Date	No.	Not Appli	
4.	Identificat	ion of System (VC (Chemical	Volume	Control)			
Þ	(b) Applica W81 Add	ble Edition of enda	Section XI Ut	ilized	9 <u>74</u> Edition, <u>S</u> for Repairs or I	Replac	ements 1980	e Case through
6.	Identificat	ion of Componer	ts Repaired o	r Replac	ced and Replacer	ment C	omponents	
	Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
	2CH4-41B	Dravo	7942	NA	Pipe 2CH4-41A/B-2	1977	Repaired	No
-								
1								
7	. Descripti	on of WorkSe	e Attachment	1 (1 Pa	ge)			
8	. Tests Con	ducted: Hydro	estatic [] Pressu	Pneuma re	tic Norma	Test '	Temp.	F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

-	
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
repai	repair conforms to the rules of the ASME Code, Section XI.
Type C	Code Symbol Stamp None
	Hary Hollow J. Maintenance Engineer Date 12-3-92
	CERTIFICATE OF INSERVICE INSPECTION
Boiler and em inspec May 19 and be descri	undersigned, holding a valid commission issued by the National Board of and Pressure Vessel Inspectors and the State or Providence of Louisiana ployed by Awkwright Mutual Insurance Co.* of Norwood, MA have ted the components described in this Owner's Report during the period to November 1992 , and state that to the best of my knowledge lief, the Owner has performed examinations and taken corrective measures bed in this Owner's Report in accordance with the requirements of the ASME Section XI.
warrar descri employ or a l	ming this certificate neither the inspector nor his employer makes any maty, expressed or implied, concerning the examinations and corrective measures bed in this Owner's Report. Futhermore, neither the Inspector nor his er shall be liable in any manner for any personal injury or property damage coss of any kind arising from or connected with this inspection.
	Inspector's Signature Commissions 5951 N B I S National Board and Endorsement

^{*} Factory Mutual System

Charging pump "B" suction piping flange has exhibited consistent leakage. Investigation revealed misalignment of suction flanges. Correction of flange misalignment required grinding of downstream weld on 4" X 2" eccentric reducer located upstream of suction flange. This weld was partially ground to remove crown and then rewelded. Heat applied during welding changed flange alignment sufficiently to provide adequate alignment.

Radiographic examination (RT) was used to examined repaired weld. Following return to service repaired weld was pressure tested at normal operating pressure conditions. Examination for leakage during pressure testing was conducted using VT-2 criteria and found satisfactory.

1. OwnerEnt	ergy Operations Name	. Inc.		Date	Decemb	er 15, 1992	
1340 Echelo	n Parkway, Jack Address	son. MS 3921	1	Sheet 1 of			
. Plant <u>Wat</u>	erford Name			Unit 3			
Hwy. 18, P	.O. Box B. Kill Address	ona, LA 7006	6	WA 01100704 Repair Organiza	ation	P.O. No., Jo	b No
	ned by <u>Entergy</u> Name O. Box B. Killo Address			Type Code Symbol Authorization Expiration Date	No.	Not Appli	cable cable
(a) Applica (b) Applica W81 Add	ble Edition of enda	on Code <u>Sec II</u> Section XI Ut	I NC 19	9 <u>74</u> Edition, <u>S</u> for Repairs or I	Replac	emenus 1980	e Case through
Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional	Other Identification	Year	Repaired, Replaced,	ASME Code Stamped (Yes or No)
SI MVAAA343	WKM Valve Div. ACF Inc.	567698	1920	2SI-F1561A/B 2SI2-80A/B-1	1980 1982	Replaced	Yes
SI MVAAA343	Masoneilan	N00224-2-1	NA	2SI-F1561A/B 2SI2 80A/B-1	1982 1982	Replacement	Yes
CONTRACTOR CONTRACTOR WAS N							
8. Tests Con	Other	n form of list	Pneuma re	tic Norma 2145 psi tches, or drawin	Test '	Temp. 68 y be used, p	F

included on each sheet, and (3) each sheet is numbered and the number of sheets is

recorded at the top of this form.

	FORM NIS-Z (Back)
Rema	rks _ See Attachment 2 (4 Pages) for Code Data Reports.
-	
Professional	
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
repa	replacement conforms to the rules of the ASME Code, Section XI.
Туре	Code Symbol Stamp None
Certi	ficate of Authorization No. Not Applicable Expiration Date Not Applicable This Alexander Date 1-8-93
	CERTIFICATE OF INSERVICE INSPECTION
and e inspe May 1 and b descr	e undersigned, holding a valid commission issued by the National Board of r and Pressure Vessel Inspectors and the State or Providence of Louisiana mployed by Awkwright Mutual Insurance Co.* of Norwood, MA have cted the components described in this Owner's Report during the period to November 1992, and state that to the best of my knowledge elief, the Owner has performed examinations and taken corrective measures ibed in this Owner's Report in accordance with the requirements of the ASME Section XI.
warra descr emplo or a	gning this certificate neither the inspector nor his employer makes any nty, expressed or implied, concerning the examinations and corrective measures ibed in this Owner's Report. Futhermore, neither the Inspector nor his yer shall be liable in any manner for any personal injury or property damage loss of any kind arising from or connected with this inspection. Commissions 5951 N B I S Inspector's Signature Commissions National Board and Endorsement.
	Inspector's Signature National Board and Endorsements 1-8-93

^{*} Factory Mutual System

Safety Injection Tank Drain to Refueling Water Storage Pool Valve (SI MVAAA343) was not able to meet Local Leak Rate Testing (LLRT) criteria. Several attempts to rework valve internals failed to achieve adequate LLRT results. During rework attempts valve leak off line was cut and a cap weld on since cutting of leak off line was necessary for valve disassembly. After several failed attempts to rework valve a decision was made to replace this gate valve with a globe valve. Valve replacement was performed in accordance with SPEER 9201094. All welds for replacement and cutting and installing cap on leak off line were inspected by visual (VT-1), liquid penetrant (PT) and radiographically (RT) as appropriate. As inspection results were satisfactory. Following replacement installation piping and valve were hydrostatically tested. Hydrostatic test inspection to VT-2 leakage criteria was satisfactory. Following replacement acceptable LLRT results were obtained.

Material certification for replacement items is filed in records as follows:

Control Valve 2" SS SA351 Gr. 316 CF8M SN N0022: -2-1 PO W19029 MRIR M00101 FAN 3687-0098

Pipe 2" Sch. 160 SS SA376 Gr. 304 Heat No. 465218 TR 6024-87 MRIR 0083-87 FAN 3156-1506 PO WP3-4338 MRIR 80-02356 FAN 0582-0052

Pipe Cap 1/2" 3000 1b SS SA182 SW

TR 5104-86 MRIR 6974-86 FAN 2384-1130 Heat Code BEH

PO WP3-9116 MRIR 82-03477 FAN 1771-3016 Heat Code BEH

PO L97429 MRIR 7468-86 FAN 2394-0355 Heat Code FHX

Attachment 2 Cod: Data Reports (Page 1 of 4)

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^{*} Supplemental phoets in facts of tide abordhes or drawings may be used provided (1) size is \$ 12 x 11. Quinformation in some 1. 2 and 5 on this Date Report to included on each phoet and (3) each phoet is numbered and number of sheets to recorded at top of this form.

Attachment 2 Code Data Reports (Page 2 of 4)

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Attachment 2 Code Data Reports (Page 3 of 4)

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(1) or manually operated valves only

^{*} Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-10" x 21", (2) information in an items 1, 2 and 5 on this Date Report is included on each sheet, and (3) each sheet is numbered and number of all seconded at top of this form

Stude SA-193, B7 W-K-M Valve Heat PMU-555 Nuts SA-194, 7 Texas Bolt Heat PMU-555 Nuts SA-194, 7 Texas Bolt Heat PM22711 One Segment SA-564, 630 Coulter Steel Heat P76877 Pipe Plug SA-679, 316 Coulter Steel Heat PA16790 CERTUPICATE OF COMPLIANCE Certify that the statements made in this report are sorrect and that this pump or valve conforms to the rull student of the ASM Cole for Nuclear Power Plant Components Section III. Div 1. Edition 1971 Building Code Cess No NA Date January 6, 1981 Opic Code Cess No NA Date January 6, 1981 INCENTIFICATION OF DESIGN CERTUPICATION OF DESIGN C	11.515 11.5	Manager Street Ave.	The second second second	THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER, THE OWNE
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structed this pump, or valve, in accordance with the ASME Code, Section III By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning

the equipment described in this Data Report Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal manner or property damage or a loss of any kind arising from or connected with this inspection

Date S English missen 1981.

... Commissions

NB 4893 THE PROV AND NO 1

1. Owner Entergy Operations, Inc. Date December 17, 1992

	Name						
1340 Echelon	Parkway, Jacks Address	son. MS 39213	-	Sheet 1 of	3		MARKAGO MARKA
. Plant <u>Waterford</u> Name			- 1	Unit 3			
Hwy. 18, P.O. Box B. Killons, LA 70066 Address				WA 01085243 Repair Organization P.O. No., Job No			
Name Hwy. 18. P.O. Box B. Killona, LA 70066 Address				Type Code Symbol Stamp None Authorization No. Not Applicable Expiration Date Not Applicable			
4. Identificati	on of System C	VC (Chemical)	olume C	Control)			
(b) Applicab	ole Edition of	Section XI Uti	llized 1	27 Edition, <u>87</u> for Repairs or F	Replace	ements <u>1980</u> (
o. Idencificati	T Componer	its Repaired Of	Kebrac	ed and Replace	T C	Imponencs	
Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional Board No.	Other Identification	Year Euil+	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
CVC MVAAA109	Masoneilan	N00223-2-1	NA	Valve 2CH-F1518A/B	1982	Repair	No
7. Descripti		ostatic [Pneuma	ge) tic [] Norm 2250 psi			
	mental sheets	in form of lis	ts, ske	tches, or drawi	ngs ma	y be used, p	rovided

included on each sheet, and (3) each sheet is numbered and the number of sheets is

recorded at the top of this form.

FORM NIS-Z (Back)
Remarks None
CERTIFICATE OF COMPLIANCE
We certify that the statements made in the report are correct and this
repair conforms to the rules of the ASME Code, Section XI.
Type Code Symbol Stamp None
Signed Hamy At 3 Co. Not Applicable Expiration Date Not Applicable Signed Hamy At 3 Co. 9 . Maintenance Engineer Date 1-4-93
CERTIFICATE OF INSERVICE INSPECTION
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Mutual Insurance Co.* of Norwood, MA have inspected the components described in this Owner's Report during the period May 1991 to November 1992, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Acusch A. Renter Commissions 5951 N E I S Inspector's Signature National Board and Endorsements
Date

^{*} Factory Mutual System

Letdown heat exchanger inlet header containment isolation valve (CVCMVAAA109) was identified as having seat leakage. Rework activities identified steam cutting on plug seating surfaces. To correct steam cutting, metal was removed on plug seating surfaces. Following metal removal plug seating surfaces were examined using liquid penetrant (PT). Examination results were satisfactory. Following reassembly valve seat leakage was verified acceptable by local leak rate testing (LLRT) criteria.

	OwnerEnt	ergy Operations Name	s. Inc.		Date	Decemb	er 17, 1992	
	1340 Echelo	n Parkway, Jack Address	kson, MS 3921	3	Sheet 1 of	_3_		
2.	Plant Wate	erford Name			Unit 3			
	Hwy, 18, P	O. Box B. Kill Address	lona, LA 7006	6	WA 01089618 Repair Organiz	ation	P.O. No., Jo	b No
3.		ned by <u>Entergy</u> Name O. Box B. Kills Address			Type Code Symbouthorization Expiration Date	No.	Not Appli	cable cable
4.	Identificat	ion of System (C (Component	Cooling	1)			
1	W81 Add	enda	Section XI Ut	r Repla	074 Edition, S for Repairs or I	Replac	omponents	through
	Name of	Name of	Manufacturer	tional Board	Other	Year	Repaired, Replaced, or	ASME Code Stamped (Yes
	Name of Component	Name of Manufacturer			Other Identification	A TOTAL PROPERTY.	Replaced, or	Code Stamped (Yes
				Board		A TOTAL PROPERTY.	Replaced, or	Code Stamped (Yes or No)
	Component	Manufacturer	Serial No.	Board No.	Identification Valve	Built	Replaced, or Replacement	Code Stamped (Yes or No)
	Component	Manufacturer	Serial No.	Board No.	Identification Valve	Built	Replaced, or Replacement	Code Stamped (Yes or No)
	Component CC MVAAA710	Manufacturer Jamesbury	Serial No. NC39630-03C	Board No. NA	Valve 2CC-F243A/B	Built	Replaced, or Replacement Partial Replacement	Code Stamped (Yes or No)
7	Component CC MVAAA710 Description	Manufacturer Jamesbury on of Work Se	Serial No. NC39630-03C	Board No. NA	Valve 2CC-F243A/B	Built 1977	Replaced, or Replacement Partial Replacement	Code Stamped (Yes or No) No

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)	
Remarks None	
CERTIFICATE OF COMPLIANCE	
We certify that the statements made in the report are corre	ct and this
replacement conforms to the rules of the ASME Code, Sec	tion XI,
Type Code Symbol Stamp None	
Signed Hany At B Com J. Maintenance Engineer Da	
CERTIFICATE OF INSERVICE INSPECTION	
I, the undersigned, holding a valid commission issued by the National Boiler and Pressure Vessel Inspectors and the State or Providence of and employed by Awkwright Mutual Insurance Co.* of Norwood, MA inspected the component described in this Owner's Report during the May 1991 to November 1992, and state that to the best of and belief, the Owner has performed examinations and taken corrective described in this Owner's Report in accordance with the requirements Code, Section XI.	Louisiana have period my knowledge
By signing this certificate neither the inspector nor his employer male warranty, expressed or implied, concerning the examinations and corrected in this Owner's Report. Futhermore, neither the Inspector temployer shall be liable in any menner for any personal injury or propor a loss of any kind arising from or connected with this inspection. August 1 Barton Commissions 5951 N Inspector's Signature National Board	ctive measures nor his perty damage
Date 1-6-93	

^{*} Factory Mutual System

Non-Nuclear safety component cooling water return header inside containment isolation valve (CC MVAAA710) was identified as having failed local leak rate testing (LLRT) criteria. During rework valve wafer sealing surface was found to have cutting. A replacement valve wafer was installed. After reassembly LLRT was acceptable.

Following return to service pressure testing of valve at normal operating pressure to VT-2 leakage criteria was satisfactory.

Material Certification for replacement wafer is filed as follows:

PO W48991 MRIR M05362 Serial No. NKC-2 PO L16418 MRIR 5697-84 FAN 3007-1212 Serial No. NKC-2

Owner Ente	Name	Inc.		DateDe	ecembe	r 17, 1992	
1340 Echelor	Parkway, Jacks Address	on, MS 39213	- 11	Sheet 1 of	_3		
. PlantWate	erford Name		-	Unit 3			***
Hwy. 18, F	O. Box B. Killo Address	ona, LA 70066		WA 01086862 Repair Organiza	tion P	.O. No., Job	No
	Name O. Box B. Killor Address			Type Code Symbo Authorization N Expiration Date	0.	Not Applic	able able
. Identificat	ion of System M	S (Main Steam)					
(b) Applica	ble Edition of	DEPARTMENT WE ARE	to the say and an area of	the statement of the	The second second	water the terms Alexander	the state of the s
W81 Add			Replac	ed and Replacem	ent Co	Repaired, Replaced,	ASME Code Stampe (Yes
W81 Add . Identificat Name of	ion of Componen	ts Repaired or	Na- tional Board	ed and Replacen	ent Co	Repaired, Replaced,	ASME Code Stampe (Yes
W81 Add . Identificat Name of Component	ion of Componen	ts Repaired or Manufacturer Serial No.	Na- tional Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

-	
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
repai	replacement conforms to the rules of the ASME Cor Cection XI.
Type C	ode Symbol Stamp None
Certif Signed	icate of Authorization No. Not Applicable Expiration Date Not Applicable And Maintenance Enginee: Date 1-4-93
	CERTIFICATE OF INSERVICE INSPECTION
Boiler and em inspec May 19 and be descri	undersigned, holding a valid commission issued by the National Board of and Pressure Vessel Inspectors and the State or Providence of Louisiana ployed by Awkwright Mutual Insurance Co.* of Norwood, MA have ted the components described in this Owner's Report during the period to November 1992 , and state that to the best of my knowledge lief, the Owner has performed examinations and taken corrective measures bed in this Owner's Report in accordance with the requirements of the ASME Section XI.
warran describ employer a l	ning this certificate neither the inspector nor his employer makes any ty, expressed or implied, concerning the examinations and corrective measures bed in this Owner's Report. Futhermore, neither the Inspector nor his er shall be liable in any manner for any personal injury or property damage oss of any kind arising from or connected with this inspection. Commissions 5951 N B I S Inspector's Signature Commissions
	Inspector's Signature National Board and Endorsement
Date	1-6-93

^{*} Factory Mutual System

Main steam No. 2 atmospheric dump valve (MS MVAAAll6 B) was identified as having seat leakage. Rework showed plug and seat sealing surfaces to be steam cut. Therefore, plug and seat were replaced.

Following return to service pressure testing at normal operating pressure to VT-2 leakage criteria was satisfactory.

Material certification for replacement items is filed as follows:

Plug: PO W38662 MRIR M02689 FAN 4962-0489

Seat: PO W32164 MRIR M02245 FAN 4277-1721

1.	Owner Ente	ergy Operations Name	. Inc.		Date	Decemb	e- 19, 1992	
	1340 Echelor	Parkway, Jack Address	son, MS 3921	_	Sheet 1 of	_3		
2.	Plant Wate	erford Name		-	Unit 3			
	Hwy. 18. P.	O. Box B. Kill Address	ona, LA 70066		WA 01100672 Repair Organiz	ation	P.O. No., Joi	b No
3.		Name D. Box B. Killo Address			Type Code Symbourhorization Expiration Date	No.	Not Appli	cable cable
5.	(a) Applicat (b) Applicat W81 Adde	ole Edition of	on Code <u>Se. II</u> Section X1 Ut:	NC 1	9 <u>74</u> Edition, <u>N</u> for Repairs or I	Replac	ements 1980	e Case through
	Name of Component	Name of Manufacturer	Manufacturer Serial No.	Na- tional	Other Identification	Year	Repaired, Replaced, or	ASME Code Stamped (Yes or No)
0.5	I MVAAA344	Yarway	8126	NA	Valve 2SI-V1570	1977	Repair	No
55	I MVAAA344	Yarway	8126	NA	Valve 2SI-V1570	1977	Partial Replacement	No
							.,	
7.	Description	n of Work Se	e Attachment	(1 Pa)	ge)			

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be we, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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FORM	NI	300	2 (5ac	K)

	FORM NIS-2 (Back)
R	emarks None
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	CERTIFICATE OF COMPLIANCE
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
	repair and replacement conforms to the rules of the ASME Code, Section XI. epair or replacement
Ту	pe Code Symbol Stamp None
	gned Hany Jack Can J. Maintenance Engineer Date 1-4-43
-	CERTIFICATE OF INSERVICE INSPECTION
Bo an in Ma an de	the undersigned, holding a valid commission issued by the National Board of iler and Pressure Vessel Inspectors and the State or Providence of Louisiana demployed by Awkwright Mutual Insurance Co.* of Norwood, MA have spected the components described in this Owner's Report during the period y 1991 to November 1992, and state that to the best of my knowledge delief, the Owner has performed examinations and taken corrective measures scribed in this Owner's Report in accordance with the requirements of the ASME de, Section XI.
wa de em	signing this certificate neither the inspector nor his employer makes any rranty, expressed or implied, concerning the examinations and corrective measures scribed in this Owner's Report. Futhermore, neither the Inspector nor his ployer shall be liable in any manner for any personal injury or property damage a loss of any kind arising from or connected with this inspection.
	June 1. Sentard Commissions 5951 N 8 I S Inspector's Signature National Board and Endorsements
Da	te <u>1-6-93</u>

^{*} Factory Mutual System

Safety Injection Tanks Drain to Refueling Water Storage Pool Header Isolation Valve (SI MVAAA344) was identified as having seat leakage. Rework required grinding to remove stem bushing retaining tack weld on bonnet. During rework disc was found to have cuts in seating area due to leakage. Cuts in disc seating area could not be repaired. A replacement disc/stem assembly was obtained and installed. A blue check of replacement disc/stem assembly to valve seat did not provide adequate seat contact. Lapping of seat did not provide adequate seat contact. Therefore, valve seat was machined. Following machining, lapping of disc to seat provided adequate seat contact. Following machining and lapping, valve seat was inspected visually with no surface indications noted. Stem bushing retaining tack weld was made on bonnet. Tack weld was examined by liquid penetrant (PT).

Following return to service valve was pressure tested at normal operating pressure. Examination during pressure test for leakage using VT-2 criteria was satisfactory.

Material certification for replacement disc/stem assembly is filed as follows:

PO L24202 MRIR 5995-84 FAN 1513-0006

Owner <u>Ente</u>	rgy Operations Name	. Inc.		Date	ecembe	r 19, 1992	
1340 Echelon	Parkway, Jack Address	son, MS 39213	_	Sheet 1 of	3		
Plant <u>Wate</u>	rford Name			Unit 3			
Hwy, 18, P.	O. Box B. Kill Address	ons, IA 70066	5	WA's 01092960. Repair Organiza		ALL SECTION AND ADDRESS OF THE PARTY OF THE	No No
	Name Box B. Killo Address			Type Code Symbo Authorization N Expiration Date	lo.	Not Applic	
Identificati	on of System S	I (Safety Inje	ection)				
Applicab W81 Adde	le Edition of	Section XI Uti	llized :	968 Edition, M7 for Repairs or F	leplace	ements 1980 t	case
Name of Component	Name of Manufacturer	Manufacturer	Na- tional	Other Identification	Year	Repaired, Replaced, or	ASME Code Stamped (Yes or No)
II MVAAA225 B	Target Rock Corporation	71L-002-1	NA	Valve 2SI-V1545B1	1979	Repair	No
		717 000 1	NA	Valve	1979	Partial	
SI MVAAA225 B	Target Rock Corporation	71L-002-1		2SI-V1545B1		Replacement	No
****	The state of the s	71L-002-1	NA		1979	Replacement	No No
SI MVAAA225 B SI MVAAA227 A	Corporation Target Rock			2SI-V1545B1 Valve	1979		
BI MVAAA227 A	Corporation Target Rock	71L-002-6	NA NA	2SI-V1545B1 Valve 2SI-V1542A3	1979		

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is $8\ 1/2$ in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

NAME AND ADDRESS OF THE OWNER, WHEN	
-	
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
repair repair	and replacement conforms to the rules of the ASME Code, Section XI.
Type Cod	s Symbol Stamp None
Certific Signed	Hany ABCam Annicable Expiration Date Not Applica Maintenance Engineer Date 1-12-93
	CERTIFICATE OF INSERVICE INSPECTION
Boiler and emploinspected May 1991 and belied described	ndersigned, holding a valid commission issued by the National Board of and Pressure Vessel Inspectors and the State or Providence of Louisiana byed by Awkwright Mutual Insurance Co.* of Norwood, MA have the components described in this Owner's Report during the period to November 1992 , and state that to the best of my knowledge of, the Owner has performed examinations and taken corrective measures in this Owner's Report in accordance with the requirements of the ASME out on XI.
warranty described employer	ng this certificate neither the inspector nor his employer makes any expressed or implied, concerning the examinations and corrective measures in this Owner's Report. Futhermore, neither the Inspector nor his shall be liable in any manner for any personal injury or property damage of any kind arising from or connected with this inspection.
2/	Inspector's Signature Commissions 5951 N B 1 S National Board and Endorsemen
Thus	material boats and binorsoner

A review of refuel four MOVATS data showed high pressure safety injection pump header B to reactor coolant loop 1A flow control valve (SI MVAAA225 B) to have experienced a valve stem over thrusting due to valve operator. Recommended action was to replace valve stem/disc assembly.

Rework of valve to replace stem/disc assembly requires removal of a seal weld. For proper assembly match marks are needed on body and bonnet. Match marks were inadvertently made deeper than desired. Match marks were measured and remaining body and bonnet body thickness compared against minimum thickness from valve data reports and ASME Section III requirements. A determination was made that valve body and bonnet remaining thickness meet all requirements. Match marks were blended and examined using liquid penetrant (PT). No indications were found.

Valve reassembly was performed using a new stem/disc assembly. Valve bonnet to body seal weld was performed and inspected using liquid penetrant (PT). No indications were found.

Following return to service valve was pressure tested at normal operating pressure. Examination of pressure test using VT-2 criteria was satisfactory.

Material certification for replacement stem/disc is filed as follows:

PO W13745 MRIR 2337-87 FAN 4647-1968

High pressure safety injection pump header A to reactor coolant loop 2A flow control valve (SI MVAAA227 A) was identified as contributing to safety injection tank leakage. Rework required removal and replacement of a body to bonnet seal weld. During rework valve seat sealing area was found to be scored. Scoring could not be removed by lapping. Machining of valve seat also failed to remove scoring. Valve seat was examined following machining. No indications were found other than identified scoring. Valve was reassembled following lapping of disc to seat. Rework of valve to replace seat or valve will occur on WA 01089946. Body to bonnet seal weld was examined using liquid penetrant (PT). No indications were found.

	Owner Ent	ergy Operation Name	s. Inc.		Date	Decemb	er 19, 1992	
	1340 Echelo	n Parkway, Jac Address	kson, MS 3921	3	Sheet 1 of	9		
2.	Plant Wat	erford Name		-	Unit 3			
	Hwy. 18, P	.O. Box B. Kil Address	lona, LA 7006	6	WA's 01086461 Repair Organiz			b No
3.		Name O. Box B. Kill Address			Type Code Symbo Authorization 1 Expiration Date	No.	Not Appli	cable cable
4.	Identificat	ion of System ;	SI (Safety Inje	ection)				
)	W81 Add	enda	Section XI Ut:	llized	9 <u>74</u> Edition, <u>S</u> for Repairs or I	Replace	ements 1980	e Case through
	Name of	Name of	Manufacturer	Na- tional	Other	Year	Repaired, Replaced, or	ASME Code Stamped (Yes
	Component	Manufacturer	SELLAL NO.	no.	Identification	pulle	Replacement	
SI	MVAAA108 A		D3643	NA NA	Valve 2SI-V331A	1977	Replacement	
L	MVAAA108 A		D3643	-	Valve			or No)
SI	MVAAA108 A	TRW Mission	D3643	NA	Valve 2SI-V331A Valve	1977	Replaced	or No) No
SI	MVAAA108 A MVAAA108 A MVAAA108 B	TRW Mission	D3643 91-1704-01(N) -02 D3642	NA NA	Valve 2SI-V331A Valve 2SI-V331A	1977 1992	Replaced Replacement	No No
SI	MVAAA108 A MVAAA108 B MVAAA108 B	TRW Mission C&S Valve Co. TRW Mission	D3643 91-1704-01(N) -02 D3642 91-1704-01(N) -01	NA NA NA	Valve 2SI-V331A Valve 2SI-V331A Valve 2SI-V331B Valve 2SI-V331B	1977 1992 1977	Replaced Replacement Replaced	No No

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in, X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

The state of the s	
	CERTIFICATE OF COMPLIANCE
	CERTIFICATE OF CONFETANCE
We certify	that the statements made in the report are correct and this
replacement repair or replacemen	conforms to the rules of the ASME Code, Section XI.
Type Code Symbol Stam	p None
Signed Ham A	ization No. Not Applicable Expiration Date Not Applicate Blue 3 Maintenance Engineer Date 1-5-93
	CERTIFICATE OF INSERVICE INSPECTION
Boiler and Pressure Version and employed by Awkw inspected the component to November 1991 t	olding a valid commission issued by the National Board of essel Inspectors and the State or Providence of Louisiana right Mutual Insurance Co.* of Norwood, MA have not described in this Owner's Report during the period ovember 1992, and state that to the best of my knowledge has performed examinations and taken corrective measures er's Report in accordance with the requirements of the ASME
warranty, expressed or described in this Own	ficate neither the inspector nor his employer makes any r implied, concerning the examinations and corrective measures er's Report. Futhermore, neither the Inspector nor his ble in any manner for any personal injury or property damage arising from or connected with this inspection.
employer shall be lial or a loss of any kind July 1. Buy Inspector's	사람이 나타 [10] 2016 일 집에는 네트 바람이지 아니는 이 집에 살은 사람이 사용했다니 않아 다짐 중에 많은 12 시간이 되었다면 했다.

^{*} Factory Mutual System

Low pressure safety injection pumps A and B suction header check valves (SI MVAAA108 A and B) were identified as having hinge pin plug leakage. Leakage is attributed to wear. Required corrective action was to replace valves. During replacement of A valve 2 flange nuts were lost. Replacement nuts were obtained and installed.

Following return to service valves were pressure tested at normal operating pressure. Examination for leakage during pressure test using VT-2 criteria was satisfactory.

Material certifications is filed as follows:

Valves:

PO W42801 MRIR M00849 FAN 5076-0144

Nuts:

PO W20933 MRIR M04903 FAN 3064-1312

Attachment 2 Code Data Reports ("age 1 of 6)

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^{*} Supplemental sheets in form of lists, shirthes or drawings may be used provided (1) size is \$-1.2" s 11", (2) information in items 1, 2 and 5 on this data report is unfolded on nich sheet, and (3) each sheet is numbered and number of sheets. is recorded at top of this form.

This form (6 (XXX) /) may be in a corp from the Orner Dept., ASME, 346 E, 47 St., Nov York, N.Y. 1901? 1/761

Attachment 2 Code Data Reports (Page 2 of 6)

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Attachment 2 Code Data Reports (Page 3 of 6)

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6. Pump or valve Val	VE Nomenal	ment sure	Outter ours	
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7. Material: Body SA	351 Gr. OFBM Bonnes	NA Diek	SN 351 Or. OFFM a	ware SELLIN
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Sersel No.	No.	No.	CONTRACTOR OF THE PROPERTY OF	Outproduction !
91-1704-01(N)-01	N/A	HEAT: 465491	NA	PEAT: 90
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This form (ECCC37) may be statemed from this Grider Dept., ASME, 22 Leve Grive, Box 2369, Forebott, NJ 07007-8366.

(12/84)



Attachment 2 Code Data Reports (Page 4 of 6)

				Careto	ato Holder's Si	areat No. 91-17
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9. Design	n conditions	(presoure)	PSI	ores	re preseure cli	800 amanual
8. Col6 4	working pressure	720	per et 100°F			
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- means	\$18174 TETS commended					
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	e Pin Retains		SA 479 T 316	HEAT OTE:	DE-2	ALVERT - SEPTEMBER
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(1) For manually operated valves only.

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		COLUMN TO SERVICE DE S	AND DESCRIPTION OF THE PERSON	Mark & Mark Control of the Control o	The second secon
	1 Manufactured and ce	miles by C&S Valve (Company, Tricentric Di	Vision: 40 Chestrut	Ave.; Westmont, 11 (
			Inc.; Waterford #3 Nuc	al Purchaser	illone, Louisiana 70
	3 Location of installatio	n Haterford #3 Nuc	lear; Highway 18; Taf		
	4 Model No., Series No.	or Type Dual Plate		O1(N) Any ORIG.	CRA_N/A
	5 ASME Code. Section	III. Division 1: 1971	Winter leadends to	CONTRACTOR OF THE PERSON NAMED IN COLUMN 2 IS NOT THE PERSON NAMED	N/A (Caste Court only)
	6 Pump or vehre Val		20"	Outlet size	To account and the same
	7. Material: Body 55	351 Gr. CFBM Sonner		SA 351 Gr. OF84 a	See Back of Pac
	(8)	(b)	10)	(d)	fül
	Cart.	Maci	Body	Bornes	Guela
	Helder's	Board	Seriel	Senal	Benef
	Senal No	No.	No.	No	No.
	91-1704-01(N)-02	N/A	HEAT: 465491	N/A	JEAT: 465491
	PRODUCT OF STREET		S/N: 78276-2		S/N: 78275-3
	Separate and the separate sepa		-		S/N: 29225-A.
	CONTRACTOR OF COMMUNICATION				
	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER,	THE RESIDENCE AND ADDRESS OF THE PERSONS NAMED IN	THE RESERVE AND ADDRESS OF THE PARTY OF THE	CONTRACTOR OF STREET	
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This form (EQ0037) may be getained from the Order Dept., ASME, 22 Law Orive, See 2300, Farthern NJ 07007-2300.

* Supplemental information in form of lists, Fletches, or grawings may be used provided (1) size is 8% is 11, (2) interchistum in items 1 through 6 an into 2sts Report is included on sech sheet is humbered and the number of sheets is recorded at the tap of this form

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Attachment 2 Code Data Reports (Page 6 of 6)

		Cartificate Holder's Serve No	91-1704-01(
	100		300
Design conditions 720	1 (18 resperature)	"F or valve pressure class	
Crus working pressure 720	DS- 81 100*F		
Mydiostatic 1381 1080 pm	Disk differential test pre	796	
Mydigatetic (38)			
Stop Pin Retainer - MATERIAL:	SA 479 T 316	HEAT CODE: XXE	
Stop Pin Retainer - MATERIAL: Hinge Pin Retainer - MATERIAL:	SA 479 T 316	HEAT CODE: ONE-2	
	CERTIFICATION OF	DESIGN	
On sulfa			11597
Design Specification contribut by	nteray Operations	P.E. State Req.	PQ
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			rules for constructs
of the ASNE Code Section III. Division 1.	N-2723	figures 6/2	0.45
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(1) For manually operated verses only.

Protesta				NOT AND DESCRIPTION	TAXONA MADA WALLANDON	THE PERSONNEL PROPERTY.		TET HATTING AND ADDRESS.
1. 0	wnerEnte	ergy Operations Name	Inc.	-	Date	Decemb	er 19. 1992	
1	340 Echelor	Parkway, Jack Address	son, MS 3921	3	Sheet 1 of	_3_		
2. P	lant Wate	erford Name			Unit 3			
	Hwy. 18. P.	O. Box B. Kill Address	ona. LA 7006	6	WA 01095681 Repair Organiz	ation	P.O. No., Joi	b No
		Name D. Box B. Killo Address			Type Code Symbouthorization Expiration Date	No	Not Appli	cable cable
4. I	dentificati	on of System S	I (Safety Inje	ection)				
6. I	b) Applicat W81 Adde dentificati	ole Edition of enda on of Componer Name of	ts Repaired of	Replace Na- tional	974 Edition, Sofor Repairs or Sofor Repairs or Sofor Repairs or Sofor Replaces	ment C	ements 1980 omponents Repaired, Replaced, or	ASME Code Stamped (Yes
-	omponent	Manufacturer		No.	Identification	-	The same of the sa	
SI	MVAAA604 A	TRW Mission	D1445	NA	Valve 2SI-V105A	1977	Partial Replacement	No
7.	Description	on of Work <u>Se</u>	e Attachment	1 (1 Pa	ge)			
8.	Tests Cond	ducted: Hydro Other	static [] Pressur	Pneuma	tic [] Norm	al Ope	rating Pressu	ure F
NOT	E: Supplem	mental sheets i	n form of list	ts, ske	tches, or drawing	ngs ma	y be used, pr	rovided

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet — numbered and the number of sheets is recorded at the top of this form.

Remarks None	
	CERTIFICATE OF COMPLIANCE
We certify	that the statements made in the report are correct and this
	conforms to the rules of the ASME Code, Section XI.
Type Code Symbol Sta	mp None
Cortificate of Autho	rization No. Not Applicable Expiration Date Not Applic
Type Code Symbol Sta	rization No. Not Applicable Expiration Date Not Applic
I, the undersigned, Boiler and Pressure and employed by Awk inspected the compon May 1991 to and belief, the Owne described in this Ow	rization No. Not Applicable Expiration Date Not Applic
I, the undersigned, Boiler and Pressure and employed by Awk inspected the compon May 1991 to and belief, the Owne described in this Ow Code, Section XI. By signing this cert warranty, expressed described in this Ow employer shall be li	CERTIFICATE OF INSERVICE INSPECTION holding a valid commission issued by the National Board of Vessel Inspectors and the State or Providence of Louisiana wright Mutual Insurance Co.* of Norwood, MA have ents described in this Owner's Report during the period November 1992 , and state that to the best of my knowledge r has performed examinations and taken corrective measures

^{*} Factory Mutual System

Safety injection recirculating sump outlet header A check valve (SI MVAAA604 A) was removed for routine examination. During removal and examination flange installation study and nuts were found to have thread damage from galling. Therefore, wring installation new study and nuts were installed as needed.

Following return to service a system functional pressure test at normal operating pressure was performed. Examination for leakage using VT-2 criteria was satisfactory.

Material certification for replacement study and nuts is filed as follows:

Studs: Rod All Thread 1-1/4" 7UNC SA 193 Gr. B8 Heat No. 79243 Heat Code D7 PO W19649 MRIR M06113 FAN 3066-0404

Nuts: 1-1/4" 7UNC SA 194 Gr. 8 PO L48663 MRIR 7685-84 FAN 1258-1876

	ner <u>Ente</u>	rgy Operations Name	Inc.		Date	Decembe	er 19, 1992	
134	40 Echelon	Parkway, Jack Address	son, MS 3921	1	Sheet 1 of	_3		
1. Pl	ant <u>Kate</u>	rford Name			Unit 3			
_Hs	wy. 18. P.	O. Box B. Kill Address	ona, LA 70066	_	WA 01091726 Repair Organiza	ation 1	P.O. No., Jol	o No
		ed by <u>Entergy</u> Name . Box B. Killo Address			Type Code Symbo Authorization N Expiration Date	No	Not Applie	cable cable
. Ide	entificati	on of System C	S (Containment	Spray)			-
(b)) Applicab W81 Adde	le Edition of nda	Section XI Uti	ilized i	P71 Edition, W for Repairs or F ced and Replacer	Replace	ements <u>1980</u>	e Case through
	ame of mponent	Name of Manufacturer	Manufacturer Serial No.	Na- tional Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
IN THE PERSON NAMED IN	VAAA110 B	Velan	754-2	NA	Valve 2CS-V1502B	1975	Partial Replacement	No
CS M		Designation of the control of the co	A STALL SECTION AND A STALL SECTION AS A STALL SECT		THE REAL PROPERTY AND ADDRESS OF THE PERSON			STATE OF
CS M								
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NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

-	
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
	eplacement conforms to the rules of the ASME Code, Section XI.
Type Code	e Symbol Stamp None
Signed _	Hamy Jack Com J. Not Applicable Expiration Date Not Applicable Hamy Jack Com J. Maintenance Engineer Date 1-5-93
	CERTIFICATE OF INSERVICE INSPECTION
Boiler a and empl inspecte May 1991 and beli describe	ndersigned, holding a valid commission issued by the National Board of nd Pressure Vessel Inspectors and the State or Providence of Louisiana oyed by Awkwright Mutual Insurance Co.* of Norwood. MA have d the components described in this Owner's Report during the period to November 1992 , and state that to the best of my knowledge ef, the Owner has performed examinations and taken corrective measures ad in this Owner's Report in accordance with the requirements of the ASME ection XI.
warranty describe employer	ing this certificate neither the inspector nor his employer makes any concerning the examinations and corrective measures and in this Owner's Report. Futhermore, neither the Inspector nor his shall be liable in any manner for any personal injury or property damage as of any kind arising from or connected with this inspection.
or a los	A Senton Commissions 5951 N B I S Inspector's Signature National Board and Endorsement

^{*} Factory Mutual System

During routine inspection of containment spray pump B minimum recirculation stop check valve (CS MVAAA110 B) an adequate seat contact could not be obtained. Valve disc replacement was required to achieve and adequate seat contact to prevent valve leakage.

Following return to service pressure testing at normal operating pressure was performed. Examination during pressure testing for leakage using VT-2 criteria was satisfactory.

Material certification for replacement disc is filed as follows:

PO 148866 Item 108 MRIR 0996-85 FAN 2587-0402

. Owner <u>Ent</u>	ergy Operations Name	, Inc.		Date	Januar	су 8, 1993	
1340 Echelo	n Parkway, Jack Address	son, MS 3921	3	Sheet 1 of	3		
. PlantWat	erford Name			Unit 3			
Hwy. 18, P	.O. Box B. Kill Address	ona, LA 70060	<u>6</u>	WA's 010585,9 a Repair Organiza		The second secon	No No
	med by <u>Entergy</u> Name O. Box B. Killo Address			Type Code Symbo Authorization N Expiration Date	No.	Not Applic	
. Identificat	ion of System E	P (Fire Prote	ction)				
				171 PALLET C'	TO Add	anda MA Cade	Cana
(b) Applica W81 Add	ble Construction ble Edition of enda	Section XI Ut	ilized :	for Repairs or I	Replace	ements 1980	
(b) Applica W81 Add	ble Edition of enda	Section XI Ut	Replace Na-	for Repairs or I	ment Co	mponents Repaired, Replaced, or	ASME Code Stamped (Yes
(b) Applica W81 Add Identificat Name of Component	ble Edition of enda ion of Componen Name of	ts Repaired o	Replace Na- tional	for Repairs or E	ment Co	mponents Repaired, Replaced, or	ASME Code Stamped (Yes
(b) Applica W81 Add . Identificat Name of Component FP MVAAA601 A	ble Edition of enda ion of Componen Name of Manufacturer WKM Valve Div	ts Repaired or Manufacturer Serial No.	Replace Na- tional Board No.	for Repairs or Posed and Replacer Other Identification Valve	ment Co	mponents Repaired, Replaced, or Replacement Partial	ASME Code Stamped (Yes
(b) Applica W81 Add . Identificat Name of Component FP MVAAA601 A	Name of Manufacturer WKM Valve Div ACF Ind., Inc	Manufacturer Serial No.	Replace Na- tional Board No.	Other Identification Valve 2FP-F127	Year Built	Repaired, Replaced, or Replacement Partial Replacement Partial	ASME Code Stamped (Yes or No)
(b) Applica W81 Add . Identificat Name of Component FP MVAAA601 A	Name of Manufacturer WKM Valve Div ACF Ind., Inc	Manufacturer Serial No.	Replace Na- tional Board No.	Other Identification Valve 2FP-F127	Year Built	Repaired, Replaced, or Replacement Partial Replacement Partial	ASME Code Stamped (Yes or No)
(b) Applica W81 Add Identificat Name of Component FP MVAAA601 A	Name of Manufacturer WKM Valve Div ACF Ind., Inc	Manufacturer Serial No. 70-116604	Replace Na-tional Board No. 1667	Other Identification Valve 2FP-F127 Valve 2FP-F129	Year Built	mponents Repaired, Replaced, or Replacement Partial Replacement Partial Replacement	ASME Code Stamped (Yes or No)

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

THE RESERVE OF THE PARTY OF THE	

	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
	placement conforms to the rules of the ASME Code, Section XI.
Type Code	Symbol Stamp None
Certifica Signed	And Att Can No. Not Applicable Expiration Date Not Application Date 1-13-9.3
	CERTIFICATE OF INSERVICE INSPECTION
Boiler an and emploinspected May 1991 and belied described	dersigned, holding a valid commission issued by the National Board of de Pressure Vessel Inspectors and the State or Providence of Louisiana by Markwright Mutual Insurance Co.* of Norwood, MA have the components described in this Owner's Report during the period to November 1992, and state that to the best of my knowledge of, the Owner has performed examinations and taken corrective measures in this Owner's Report in accordance with the requirements of the ASME tion XI.
warranty, described employer	expressed or implied, concerning the examinations and corrective measures in this Owner's Report. Futhermore, neither the Inspector nor his shall be liable in any manner for any personal injury or property damage of any kind arising from or connected with this inspection.
-59/	A Rental Commissions 5951 N P I S Inspector's Signature National Board and Endorsemen
Hugh	

Fire protection headers A and B outside containment isolation valves (FP MVAAA601 A and B) failed local leak rate testing (LLRT). Corrective action required valve rework. During rework valve stem and seat showed normal wear that prevented adequate sealing to LLRT criteria. During rework worn valve stems and seats were replaced along with contoured plugs and post plug with back-up plate.

Following rework LLRT results were satisfactory. In addition pressure testing at normal operating pressure was conducted. Inspection for leakage at normal operating pressure using VT-2 criteria was satisfactory.

Material certification for replacement parts is filed as follows:

Stem

PO W36622 MRIR M03522 FAN 4367-0786

Seat:

PO W19032 MRIR M02270 FAN 3535-0091 PO W34686 MRIR M06206 FAN 4370-2164

Post Plug and Back-up Plate PO A36745 MRIR 1265-88 FAN 3010-0830 and 3466-0436

Contour Plug PO A36745 MRIR 5867-84 FAN 3010-0830

1.	Owner Ent	ergy Operation: Name	s. Inc.		Date	Februa	ry 2, 1993	
	1340 Echelo	n Parkway, Jack Address	kson, MS 3921	3	Sheet 1 of	_3_		
2.	Plant Wat	erford Name		-	Unit 3			
	Hwy. 18, P	O. Box B. Kill Address	Lona, LA 7006	6	WA 99003376 CI Repair Organiza	's 281 ation	818. 281819 P.O. No., Joi	<u>& 28182</u> 0 b No
		Name D. Box B. Killo Address			Type Code Symbo Authorization 1 Expiration Date	No.	Not Appli	cable cable
	Identificat	ion of System §	I (Safety Inj	ection)				
	(a) Applicat	ole Constructio	- Manthallian collection				CONTRACTOR - PARTY - DOUGLASS	
	W81 Add	ole Edition of	ts Repaired o	r Repla	for Repairs or F	ment C	omponents Repaired, Replaced,	ASME Code Stamped
	W81 Add	ole Edition of	Section XI Ut	r Repla	for Repairs or F	ment C	omponents Repaired, Replaced, or	ASME Code Stamped (Yes
	W81 Adde	ole Edition of enda Lon of Componer Name of	Section XI Ut	r Replace Na- tional Board	for Repairs or F	Ment Control Year Built	omponents Repaired, Replaced, or	ASME Code Stamped (Yes or No)
SI	W81 Adde Identificat: Name of Component	Name of Manufacturer	Manufacturer Serial No.	Replace Na- tional Board No.	Other Identification Valve	Ment Control Year Built	omponents Repaired, Replaced, or Replacement Partial	ASME Code Stamped (Yes or No)
SI SI	Name of Component MVAAA307 A	Name of Manufacturer Fisher Controls, Inc	Manufacturer Serial No.	Na- tional Board No.	Other Identification Valve 2SI-F1564TK1A	Year Built	omponents Repaired, Replaced, or Replacement Partial Replacement Partial	ASME Code Stamped (Yes or No)
SI SI	Name of Component MVAAA307 A MVAAA307 B	Name of Manufacturer Fisher Controls, Inc Fisher Controls, Inc	Manufacturer Serial No. 5040516	Na- tional Board No.	Other Identification Valve 2SI-F1564TK1A Valve 2SI-F1565TK1B	Year Built 1976	ments 1980 mponents Repaired, Replaced, or Replacement Partial Replacement Partial Replacement Partial	ASME Code Stamped (Yes or No) No
SI SI	Name of Component MVAAA307 A MVAAA307 B MVAAA308 B	Name of Manufacturer Fisher Controls, Inc Fisher Controls, Inc	Manufacturer Serial No. 5040516 504517	Repla Na- tional Board No. NA	Other Identification Valve 2SI-F1564TK1A Valve 2SI-F1567TK2B	Year Built 1976	ments 1980 mponents Repaired, Replaced, or Replacement Partial Replacement Partial Replacement Partial	ASME Code Stamped (Yes or No) No

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

	FORM NIS-2 (Back)
	Remarks None
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this
	replacement conforms to the rules of the ASME Code, Section XI.
	Type Code Symbol Stamp None
	Signed Havy And Maintenance Engineer Date 2-0-93
	CERTIFICATE OF INSERVICE INSPECTION
The second second second second	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of Louisiana and employed by Awkwright Murual Insurance Co.* of Norwood, MA have inspected the components described in this Owner's Report during the period May 1991 to November 1992, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.
	By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measure described in this Owner's Report. Futhermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
	Journal Signature Commissions 5951 N B I S Inspector's Signature National Board and Endorsement

Date 2-3-93

^{*} Factory Mutual S tem

As part of a plant valve packing enhancement program packing gland leak off lines are cut and capped. During packing enhancement lantern rings are removed and packing ring stack height reduced. Excess valve packing gland space is taken up using split carbon bushings. Leak off lines cut and capped are typically 1/8" to 3/4" NPS. Due to implementation of packing enhancement socket weld cap installed on leak off line from valve stuffing box becomes a pressure retaining component. Welds for installing socket weld cap are examined using dye penetrant met.od (PT). Based on IWA-4400 (b) (5) welds are exempt from pressure testing. However, pressure testing at normal operating pressure was performed. Inspection for leakage during pressure testing using VT-2 acceptance criteria was acceptable.

Material certification for 1/2" SA182 F304 30001b socket welded pipe caps is provided as follows:

PO L97429 MRIR 7468-86 FAN 2394-0355