Fermi 2 6400 North Dixie Hwy., Newport, MI 48166





10CFR50.55a

August 8, 2003 NRC-03-0061

U. S. Nuclear Regulatory Commission Attention: Document Control Desk Washington D C 20555-0001

Reference: Fermi 2 NRC Docket No. 50-341 NRC License No. NPF-43

Subject: Inservice Inspection Summary Report

Enclosed is the Summary Report of the 2003 Inservice Inspection (ISI) activities performed at Detroit Edison Company's Fermi 2 Nuclear Power Plant. This report represents a summary of the ISI activities for the Second Ten-Year Inspection Interval beginning February 17, 2000 through the Ninth Refueling Outage, which was completed on May 10, 2003.

This report is being submitted in accordance with ASME Section XI, 1989 Edition, paragraph IWA-6230, for IWB, IWC, IWD, and IWF inspections, and the 1992 Edition, including the 1992 Addenda, for IWE inspections.

Should you have any questions or require additional information, please contact Mr. Norman K. Peterson, Manager - Nuclear Licensing, at (734) 586-4258.

Sincerely,

Donald K. Cobb Director – Nuclear Production

Enclosure

cc: H. K. Chernoff
 M. A. Ring
 NRC Resident Office
 Regional Administrator, Region III
 M. Wilson - ANII
 R. Aben Chief Inspector, Michigan Dept. of Labor
 Bureau of Construction, Codes/Boiler Division

A047

## FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

### As required by the Provisions of the ASME Code Rules

1.	Owner	Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48226	-
•		(Name and Address of Owner)	

- 2. Plant <u>Fermi-2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport MI 48166</u> (Name and Address of Plant)
- 3. Plant Unit <u>2</u> 4. Owner Certificate of Authorization (if required) <u>N/A</u>
- 5. Commercial Service Date 01-23-88 6. National Board Number for Unit N/A
- 7. Components Inspected See Program Table in Section 7.0 and 8.0 of attached Summary Report

Component Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
RPV	Combustion Engineering	CE-67211	M345962M	21085
Class 1, 2, & 3 Components (1)	Wisner & Becker Townsend & Bottom	Various	M345962M	N/A
Associated Supports	Chicago Bridge & Iron	Various	M345962M	N/A
	Reactor Controls Inc.	Various	M345962M	N/A
	Walbridge Aldinger Co.	Various	M345962M	N/A
Containment Vessel	Chicago Bridge and Iron	C-4512	N/A	N/A

- 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 data 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.
  - (1) Certificate of Accreditation No. <u>OWN-159</u> for N-3 Data Report.

#### FORM NIS-1 (back)

- 8. Examination Dates 3/28/03 to 5/10/03
- 9. Inspection Interval from 02/17/00 to 02/17/10
- 10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. A listing of all required examinations and those completed to date for Interval 2, Period 2, Refuel Outage Nine (RF-09), is included in the ISI Summary Report of the 2003 Inservice Inspection, Section 7.
- 11. Abstract of Conditions Noted (included as Section 5 with IWE in Section 8 of Summary Report).
- 12. Abstract of Corrective Measures Recommended and Taken (included as Section 5 and 8 of Summary Report).

We hereby certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Date <u>*Ciuquet* 5</u> 2003 Signed <u>Detroit Edison Co.</u> By <u>Ma Bratha</u> Owner Lead ISI Engineer

Certificate of Authorization No. (if applicable) <u>N/A</u> Expiration Date <u>N/A</u>

#### **CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province Michigan of and employed by HSB CT of One State Street, Hartford, Conn 06102, have inspected the components described in this Owners Data Report during the period of <u>2/27/02</u> to <u>5/10/03</u> and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data Report. Furthermore, 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.

Date <u>August 6</u>, 2003 Signed <u>MonDullon</u> Commissions <u>MZ610</u> Inspector's Signature

State, Province

### ISI SUMMARY REPORT OF THE 2003 INSERVICE INSPECTION

at

Fermi 2 Nuclear Power Plant 6400 N. Dixie Highway Newport, MI 48166

Detroit Edison Company 2000 2nd Avenue Detroit, MI 48226

Commercial Service Date: January 23, 1988 NB# 21085 (RPV)

> Michigan Boiler Serial Number M345962M

#### To:

U. S. Regulatory Commission Attn: Document Control Desk Washington, DC 20555

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23-03

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Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48166 Fermi-2 Nuclear Power Plant, 6400 N. Dixie Highway, Newport, MI 48166 Commercial Service Date: 1-23-88 NB# 21085 (RPV)

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# **SECTION 1**

## INTRODUCTION

Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48166 Fermi-2 Nuclear Power Plant, 6400 N. Dixle Highway, Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

### **1.0 INTRODUCTION**

1.1 This report represents a summary of the Inservice Inspection (ISI) activities performed at Detroit Edison Company's Fermi 2 Nuclear Power Plant for the Second Ten-year Inspection Interval beginning February 17, 2000.

Fermi 2 - Program B (ASME Section XI, IWA-2420):

First Inspection Interval (1980-W'81 addenda) (01/23/88 - 02/16/00)\*

1. First Inspection Period	(01/23/88 - 06/10/91)
a. First Refueling Outage	(09/03/89 - 12/16/89)
b. Second Refueling Outage	(03/30/91 - 06/10/91)
2. Second Inspection Period	(06/11/91 - 01/03/95)
a. Third Refueling Outage	(09/12/92 - 11/07/92)
b. Fourth Refueling Outage	(04/12/94 - 01/03/95)*
3. Third Inspection Period	(01/03/95 - 12/31/98)*
a. Fifth Refueling Outage	(09/27/96 - 01/03/97)
b. Sixth Refueling Outage	(09/07/98 - 10/29/98)
Second Inspection Interval (1989 Edition)	(02/17/00 – 02/17/10)*
1. First Inspection Period	(02/17/00 03/27/03)

1. First Inspection Period	(02/17/00 - 03/27/03)
a. Seventh Refueling Outage	(04/01/00 – 05/23/00)
b. Eighth Refueling Outage	(10/22/01 – 11/30/01)
2. Second Inspection Period	(03/28/03 - Prior to RF-11, Fall 2006)
a. Ninth Refueling Outage	(03/28/03 - 05/10/03)

Fermi 2 was in an extended outage that began on 12/25/93 following a Turbine/Generator failure and ended with the closing of the output breaker on 01/18/95. Because of the extended shutdown, the first inspection interval for Fermi 2 was extended by one additional year to 2/16/2000 as provided for in IWA-2430. The second inspection interval may be shortened by one year to maintain the interval pattern as required in IWA-2430(d).

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- 1.2 Examinations were performed to satisfy the requirements (or portions thereof) of the following as applicable:
  - American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, Division 1, "Rules for Inservice Inspection of Nuclear Power Plant Components," Inspection Program B as listed in the following Table A and Section 6 of this report.
  - NUREG-0313, Revision 2, Technical Report on Material Selection and Processing Guidelines for BWR Coolant Pressure Boundary Piping.
  - BWRVIP-75, Technical Basis for Revision of NRC Generic Letter 88-01 Inspection Schedules.
  - Fermi 2 Technical Requirements Manual, 5.1 Snubbers.
  - Augmented inspection of selected components in accordance with the requirements as listed in the following Table A and Section 6 of this report.
  - BWROG NUREG-0619 Alternate Feedwater Nozzle Inspection Requirements, GE-NE-523-22-0292.

Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48166 Fermi-2 Nuclear Power Plant, 6400 N. Dixie Highway, Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

TABLE A

REQUIREMENT	DESCRIPTION	EXAM METHOD
	VESSELS	
Sect. XI, 1989 Edition Appendix VIII, 1995 Edition, 1996 Addenda for UT as applicable	Pressure Vessel (B-A, B-D, B-H, C-A, C-B)	Surface and/Automated Volumetric or Manual Volumetric
	Reactor Vessel Interior and welded attachments or core support structures (B-N-1, B-N-2)	Visual Examination
	Integral attachments for vessels (B-H, C-C)	Surface and/or Volumetric
	Pressure retaining bolting >2" diameter (B-G-1, C-D)	Surface and/or Volumetric
	Pressure retaining welds in CRD housing (B-O)	Surface and/or Volumetric
Sec. XI, 1992 Edition, 92 Addenda	Containment Inspection (IWE)	Visual
	PIPING	
Sect. XI, 1989 Edition Appendix VIII, 1995 Edition, 1996 Addenda for UT as applicable	Pressure retaining Piping Welds (B-F, B-J, C-F)	Surface and/or Manual Volumetric or Automated Volumetric
	Integral attachment for piping pumps and valves (B-K-1, C-C, Code Case N-509)	Surface and/or Volumetric
	OTHER	· · · · · · · · · · · · · · · · · · ·
1989 Edition	Pressure retaining partial penetration welds (B-E)	Visual Examination
	Pressure retaining bolting <2" diameter (B-G-2)	Visual Examination
	Pressure retaining bolting >2" diameter (B-G-1)	Visual Examination and /or Volumetric
	Pressure boundary component supports (F-A, Code Case N491-1)	Visual Examination
	Pump and Valve Internal Surfaces (B-L-2, B-M-2)	Visual Examination
	Detroit Edison Co., 2000 2nd Ave., Detroit, MI Fermi-2 Nuclear Power Plant, 6400 N. Dixie Highway, Ne Commercial Service Date: 1-23-88 NBNo. 2108:	ewport, MI 48166

	TABLE A (continued)	
REQUIREMENT	DESCRIPTION	EXAM METHOD
	PRESSURE TEST	
1989 Edition	Interval 2 Pressure Testing (B-P, C-H, and D-B, Code Case N-416-1, Code Case N-498-1)	Visual Examination
	AUGMENTED	с. Т
NUREG-0313, Rev. 2 and BWRVIP- 75	Pressure retaining piping welds (B-F, B-J)	Manual Volumetric and/or Automated Volumetric
	Pressure retaining piping welds (Nonclassed)	Manual Volumetric
BWROG NUREG-0619 Alternative Feedwater Nozzle Inspections	Feedwater Nozzle Inner Blend Radii (GE-NE-523-A71-594)	Manual or Automated Volumetric - from outside surface
Fermi 2 Technical Requirements Manual 5.1	Safety Related Snubbers	Visual Examination
	Sampling of Safety Related Snubbers	Functional Testing
IE Notice 93-079	Core Shroud	Visual Examination
Generic Ltr. 94-03	Core Shroud Welds	Visual Examination
IEB 80-13	Core Spray and Spargers	Visual Examination
Vendor Recommendations		
SIL No. 459	Byron Jackson Recirculation Pump Shaft Cracking	Visual Examination
SIL No. 409	Incore Dry Tube Cracks	Remote Visual Examination
RICSIL No. 073	Incore Dry Tube Cracks	Remote Visual Examination
SIL No. 420	Jet Pump Sensing Lines and Support Brackets	Remote Visual Examination
SIL No. 433	Shroud Head Bolts	Remote Visual Examination

Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48166 Fermi-2 Nuclear Power Plant, 6400 N. Dixie Highway, Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

#### TABLE A (continued)

REQUIREMENT	DESCRIPTION	EXAM METHOD					
	AUGMENTED (continued)						
SIL No. 462	Access Hole Cover Cracking	Remote Visual Examination					
SIL No. 465	Jet Pump Inlet Mixer	Remote Visual Examination					
SIL No. 474	Steam Dryer Channel Cracking	Remote Visual Examination					
SIL No. 551	Jet Pump Riser Bracket	Remote Visual Examination					
SIL No. 554	Top Guide Beams	Remote Visual Examination					
SIL No. 559	Top Guide Inspections	Remote Visual Examinations					
SIL No. 574	Jet Pump Adjusting Screw Tack Welds	Remote Visual Examination					
SIL No. 588, Rev. 1	Top Guide and Core Plate Cracking	Remote Visual Examination					
SIL No. 629	Inlet Mixer Wedge Damage in BWR Jet Pump Assemblies	Remote Visual Examination					

BWRVIP-01/76 BWR Core Shroud Inspection and Flaw Evaluation Guidelines

BWRVIP-03 Reactor Vessel and Internal Examination Guidelines

BWRVIP-07 Guidelines for Reinspection of BWR Core Shrouds

BWRVIP-18 Core Spray Inspection and Evaluation (I&E) Guidelines Reactor Vessel Internals Components

Core Shroud

Core Shrouds

Core Spray Internals Piping and Spargers

Remote Visual Examination, Ultrasonic and Eddy Current

Remote Methods as in BWRVIP-03

**Remote Visual and Ultrasonic** 

**Remote Visual Examination** 

Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48166 Fermi-2 Nuclear Power Plant, 6400 N. Dixie Highway, Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

### TABLE A (continued)

#### REQUIREMENT

### DESCRIPTION

### **AUGMENTED** (continued)

**Core Plate Components** 

**Top Guide Components** 

Core Differential Pressure and SLC Line Dissimilar Metal Nozzle Welds

Shroud Support Components

Jet Pump Components

Incore Guide/Dry Tubes

Vessel Internal Attachments

**Instrument Penetrations** 

### EXAM METHOD

**Remote Visual Examination** 

**Remote Visual Examination** 

**Direct Visual** 

**Remote Visual Examination** 

Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48166 Fermi-2 Nuclear Power Plant, 6400 N. Dixie Highway, Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

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BWRVIP-26 Top Guide I&E Guidelines

**BWRVIP-25** Core Plate

**I&E** Guidelines

BWRVIP-27 BWR Standby Liquid Control System / Core Plate Differential Pressure I & E Guidelines

BWRVIP-38 Shroud Support I&E Guidelines

BWRVIP-41 Jet Pump Assembly I&E Guidelines

BWRVIP-47 BWR Lower Plenum I&E Guidelines

BWVRIP-48 Vessel ID Attachment Weld I&E Guidelines

BWRVIP-49 Instrument Penetration I&E Guidelines

# **SECTION 2**

# SUMMARY OF ASME CLASS 1 & 2 AND AUGMENTED EXAMINATIONS

Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48166 Fermi-2 Nuclear Power Plant, 6400 N. Dixie Highway, Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

## 2.1 Interval 2, Period 2, RF-09 Examinations

وسيتوجع الجوي الجاد بالمحاد المحاد والمحاد والمحاد والمحاد والمحاد والمحاد والمحاد

RF-09 EXAM DATA BASE Class 1													
Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	L. 111	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
B-A Reactor Vessel	Shell & Head Welds		Vol.										
1-306J	Bottom Head Meridional	5360-5	UT	6	2667-59	4/6	4/8	4/16	UT-042 thru 045	UT-042 thru 045	RF-09- 01	Bio, 300,604'	Manual RPV
1-319D	Closure Head Meridional	5360-5	UT	6	2667-58	3/31	4/2	4/11	UT-016 thru 018	UT-016 thru 018	RF-09- 02	Refuel Fir.	Manual RPV
15-308B	Shell Longitudinal Weld	5360-5	UΤ	7	2667-62	4/4	4/10	4/15	VES.60.IN	186 Pages	RF-09- 05	DW,172,620'	Auto UT
2-307C	Shell Longitudinal Weld	5360-5	UT	7	2667-60	4/4	4/7	4/14	VES.60.IN	76 Pages	RF-09- 08	DW,218,610'	Auto UT
2-308B	Shell Longitudinal Weld	5360-5	υT	7	2667-60	4/5	4/9	4/14	VES.60.IN	27 Pages	RF-09- 09	DW,180,646'	Auto UT
4-319	Closure Head Circ Weld	5360-5	UT	6	2667-58	4/9	4/10	4/16	UT-048 thru 050, UT-063 thru 069	UT-048 thru 050, UT-063 thru 069	RF-09- 13	Refuel Fir.	Manual RPV
2-307A	Shell Longitudinal Weld	5360-5	UT	7	2667-60	4/8	4/12	4/14	VES.60.IN	137 Pages	RF-09- 106	DW,340,610'	Length Coverage 99%
<b>B-D Reactor Vessel</b>	Nozzie to Vessel Welds	:	Voi.		- -								-
13-314E	Recirc Inlet Nozzle	5361-5	UT	8	2667-60	4/6	4/11	4/14	NOZ.60.IN	34 Pages	RF-09- 03	DW,150,615'	Auto UT
13-314F	Recirc Inlet Nozzle	5361-5	UT	. 8	2667-60	- 4/7	4/10	4/14	NOZ.60.IN	50 Pages	RF-09- 04	DW,210,615' Auto UT	Auto UT
15-315	CRD Return Nozzle	5361-5	ŬΤ	6 & 20	2667-60	4/8	4/9	4/14	UT-051 thru 055	UT-051 thru 055	RF-09- 06	DW,145,638'	Manual RPV
4-316C	Feedwater Nozzle	5361-5	UT	8	2667-60	4/7	4/11	4/14	NOZ.60.IN	33 Pages	RF-09- 12	DW,150,642'	Auto UT
<b>B-D Reactor Vessel</b>	Nozzie Inner Bore Regio	n	Vol.		· . · ·								
13-314D IRS	Recirc Inlet Nozzle	5361-5	VT	15	1-mil wire	*4/16	*4/27	*5/13	N/A	N/A	N/A	Invess,120,	*Comp. Under Job 1109030328
13-314E IRS	Recirc Inlet Nozzle	5361-5	VT	15	1-mil wirə	*4/18	*4/27	*5/13	N/A	N/A	N/A	Invess,150	*Comp. Under Job 1109030328

Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48226 Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	LIII	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
13-314F IRS	Recirc Inlet Nozzle	5361-5	VT	15	<b>1-mil wire</b>	*4/18	*4/27	*5/13	N/A	N/A	N/A	Invess,210	*Comp. Under Job
13-314G IRS	Recirc Inlet Nozzle	5361-5	VΤ	15	1-mil wire	*4/16	*4/27	*5/13	N/A	N/A	N/A	Invess,240	1109030328 *Comp. Under Job 1109030328
13-314K IRS	Recirc Inlet Nozzle	5361-5	VT	15	1-mil wire	*4/16	*4/27	5/13*	N/A	N/A	N/A	Invess,330	*Comp. Under Job 1109030328
B-F Class 1-Piping	RIISI Welds		Vol.										109030328
N-9	CRD Return Cap (IGSCC)	5361-5	UT	13	CS-48, INC-49	4/8	4/14	4/16	UT-059 thru 062	UT-059 thru 062	RF-09- 47	DW,145,638'	RIISI Coverage
2-303G	RRI Noz to SE (IGSCC)	5356-5	UT	10	SS- 56/CSCL- 54	. 4/2	4/5	4/11	APC-001 thru 006	APD-001	RF-09- 07	DW,240,615'	RIISI Coverage
B-J Class 1-Piping	RIISI Welds		Vol.									4 - 4 	н 
FW-RD-2-A16	B31 12" SE-P (IGSCC,CRC)	5356-5	UT .	10	SS-17	4/3	4/5	4/14	APC-008 thru 011	APD-002	RF-09- 44	DW,240,615	RIISI Coverage
SW-RS-2-A2-W1	B31 28" Pipe-El (IGSCC)	5357-5	UT	4	SS-3	4/4	4/4	4/13	UT-036,UT-037	UT-036,UT- 037	RF-09- 69	DW,0,578'	RIISI Coverage
FW-E11-2299-2WF3	RHR 20" Tee-Pipe	2299-5	UT	3	CS-12	4/5	4/5	4/13	UT-040	UT-040	RF-09- 29	DW,175,597	
SW-E21-3053-3WN	Core Spray 12" El-Pipe	3053-5	UT	3	CS-15	4/8	4/10	4/15	UT-071	UT-071	RF-09- 57	DW,120,637	
SW-E21-3053-3WP	Core Spray 12" Pipe-El	3053-5	UT	3	CS-15	4/8	4/10	4/15	UT-070	UT-070	RF-09- 58	DW,120,636'	
FW-E51-2192-1W2	RCIC 6" El-Pipe	2192-5	UT	3	CS-22	4/8	4/10	4/16	UT-056 thru 058	UT-056 thru 058	RF-09- 40	DW,42,598'	
FW-E51-2192-2W3	RCIC 6" Pipe-E.	2192-5	UT	3	CS-22	4/11	4/12	4/15	UT-073 thru 075	UT-073 thru 075	RF-09- 60	DW,355,598'	
SW-N21-2336-1WD	RCIC 20* Sweep-Pipe	3536-5	UT	3	CS-12	4/2	4/3	4/16	UT-029,UT-030	UT-029,UT- 030	RF-09- 63	Stm,10,586'	
SW-N21-2336-1WU	RCIC 20" Pipe-Tee	3536-5	UT	3	CS-12	4/2	4/3	4/6	UT-031	UT-031	RF-09- 65	Stm,10,590'	
SW-N21-2336-1WL	FW (TASCS) 20" Tee-Pipe	3536-5	UΤ	3	CS-12	4/3	4/3	4/12	UT-025	UT-025	RF-09- 64	Stm,10,594'	RIISI Coverage
SW-N21-2336-3WC	RCIC 20" EI-Tee	3536-5	UT	3	CS-12	4/5	4/6	4/13	UT-038	UT-038	RF-09- 66	DW,330,608'	•
FW-N21-2336-3W4	RCIC 12" Tee-El	3536-5	UT	3	CS-15	4/5	4/6	4/14	UT-039	UT-039	RF-09- 43	DW,330,608'	

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Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48226 Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	L 111	ANI	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
B-G-1 Bolting	Greater Than 2"			· · ·									
326-02 (Closure Nuts)	1/3 of locations (1-22)	5362-5	мт	2	N/A	4/5	4/5	4/13	N/A	MT-013,VT- 029	RF-09- 10	Refuel Fir.	
Threads in Flange	1/3 of locations (1-22)	5362-5	UT	9	RPV & CSCL-52	3/31	4/2	4/4	UT-015	UT-015	RF-09- 70	<b>RPV</b> Cavity	complete prior to flood up
326-03 (Closure Washers)	1/3 of locations (1-22)	5362-5	VT-1	16	N/A	4/5	4/5	4/14	N/A	VT-028	RF-09- 11	Refuel Fir.	
Base Scope													
B-G-2 Bolting	2" and Less												
FBC-E41-2297-01		2297-5	VT-1	16	N/A	4/5	4/10	4/17	N/A	VT-032	RF-09- 25	DW,51,595'	Al bolting exams
	· · · ·		•										completed under
B31-F023A-VBB		5357-5	VT-1	16	N/A	4/3	4/4	4/17	N/A	VT-027	RF-09- 17	DW,342,574'	surveillance 1105030100
B31-F031A-VBB		5357-5	<b>VT-1</b>	16	N/A	4/3	4/4	4/17	N/A	VT-026	RF-09- 18	DW,290,578	• • •
E11-F067-VBB		2299-5	VT-1	16	N/A	4/5	4/10	4/17	N/A	VT-031	RF-09- 21	DW,163,595'	
E11-F009-VBB		2299-5	VT-1	16	N/A	4/5	4/10	4/17	N/A	VT-030	RF-09- 20	DW,163,600'	CARD 03- 16366
E21-F005A-VBB		3052-5	VT-1	16	N/A	3/29	3/29	4/17	N/A	VT-025	RF-09- 22	RB2,C13,633	
E21-F005B-VBB		3053-5	VT-1	16	N/A	3/29	3/29	4/17	N/A	VT-024	RF-09- 23	RB2,C11,632	
E51-F007-VBB		2192-5	VT-1	16	N/A	4/9	4/10	4/17	N/A	VT-048	RF-09- 24	DW,360,583'	
G33-F004-VBB		3096-5	VT-1	16	N/A	4/10	4/11	4/17	N/A	VT-049	RF-09- 46	RB2,C13,624	· · ·
B21-F032A-VBB		3537-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	<b>N/A</b> .	RF-09- 16	Stm,350,594'	Initial Scope Delete (RF09- 209), Examined as part of sample expansion

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48266 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

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Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	L (11	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
B21-F010B-VBB		3536-5	VT-1	16	N/A	4/14	4/16	4/17	N/A	N/A	RF-09- 14	DW,10,603'	Scope Delete RF09-209
B21-F011B-VBB		3536-5	VT-1	16	N/A	4/9	4/10	4/17	N/A	VT-047	RF-09- 15	DW,10,594	CARD 03- 16370
Initial Sample Expansion											15		10370
B-G-2 Bolting	2" and Less												
E11-F015B-VBB		2327-5	VT-1	16	N/A	4/9	4/10	4/17	N/A	VT-046	RF-09- 89		All bolting completed under
E21-F006A-VBB		3052-5	VT-1	16	N/A	4/9	4/10	4/17	N/A	VT-045	RF-09- 95		surveillance 1105030100
E21-F006B-VBB		3053-5	VT-1	16	N/A	4/9	4/10	4/17	N/A	VT-044	RF-09- 96		
E21-F007A-VBB		3052-5	VT-1	16	N/A	4/9	4/10	4/17	N/A	VT-043	RF-09- 97		
E21-F007B-VBB	* *	3053-5	VT-1	16	N/A	4/9	4/10	4/17	N/A	VT-042	RF-09- 98		
E41-F002-VBB		2297-5	VT-1	16	N/A	4/8	4/10	4/17	N/A	VT-039	85 RF-09- 79		
E41-F003-VBB		2297-5	VT-1	16	<b>N/A</b>	4/8	4/10	4/17	N/A	VT-038	RF-09- 78		
E41-F006-VBB		3537-5	VT-1	16	N/A	4/8	4/10	4/17	N/A	VT-037	RF-09- 77		
E51-F008-VBB		2192-5	VT-1	16	N/A	4/8	4/10	4/17	N/A	VT-035	RF-09- 75	• .	
E51-F013-VBB		3536-5	VT-1	16	N/A	4/8	4/10	4/17	N/A	VT-036	RF-09- 76		
G33-F001-VBB		3096-5	VT-1	16	N/A	4/9	4/10	4/17	N/A	VT-041	RF-09- 99		
G33-F101-VBB		3096-5	<b>VT-1</b>	16	N/A	4/9	4/10	4/17	N/A	VT-040	99 RF-09- 101		
G33-F121-VBB		3536-5	VT-1	16	N/A	= 4/8	4/10	4/17	N/A	VT-034	RF-09- 74		
G33-F220-VBB		3536-5	VT-1	16	N/A	4/8	4/10	4/17	N/A	VT-033	RF-09- 73		

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Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	L 111	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
Second Sample Expansion B-G-2 Boiting	2" and Less												
B21-F010A-VBB		3537-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-051	RF-09- 80		Completed under
B21-F010B-VBB		3536-5	VT-1	16	N/A	4/14	4/15	4/17	N/A	VT-069	RF-09- 81		surveillance Job 1105030100
B21-F011A-VBB		3537-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-052	RF-09- 82		
B21-F032A-VBB		3537-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-053	RF-09- 83		
B21-F032B-VBB		3536-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-054	RF-09- 84		
B21-F076A-VBB		3537-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-055	RF-09- 85		
B21-F076B-VBB		3536-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-056	RF-09- 86		
E11-F008-VBB		2299-5	VT-1	16	N/A	4/14	4/15	4/17	N/A	VT-068	RF-09- 87		CARD 03- 16372
E11-F015A-VBB		2298-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-057	RF-09- 88		
E11-F050A-VBB		2298-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-058	RF-09- 90		andra Angelander Angelander
E11-F050B-VBB		2327-5	VT-1	16	• <b>N/A</b>	4/11	4/12	4/17	N/A	VT-059	RF-09- 91		· · ·
E11-F060A-VBB		2298-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-060	RF-09- .92		
E11-F060B-VBB		2327-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-061	RF-09- 93		CARD 03- 16371
E11-F608-VBB		2299-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-062	RF-09- 94		
G33-F100-VBB		5351-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-063	RF-09- 100		
G33-F102-VBB		5351-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-064	RF-09- 102		
G33-F106-VBB		5351-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-065	RF-09- 103	T	
G33-F120-VBB		3536-5	VT-1	16	N/A	4/11	4/12	4/17	N/A	VT-066	RF-09- 104		

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Permi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48226 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	L m	ANfi	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
B-G-2 Botting	2" and Less												
CRD Flange Bolts	4219 (1) 3431 (2)	5363-5	VT-1	16	N/A	4/9	4/12	4/17	N/A	VT-050	RF-09- 105	Drywell, Undervessei	
CRD Bolting	New CRD Bolting 1-184	N/A	VT-1	16	N/A	3/27	3/28	4/16	N/A	VT-001 thru VT-023	RF-09- 72		
B-P	Pressure Retaining Boundary	M-4536	VT-2	43.000.005	N/A	4/30	4/30	4/30	N/A	0975030430	03-022	Various	System Leakage Test

Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48226 Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

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RE-09 EXAM DATA													
BASE Class 2	n an								And Respective States and Respective And Respective Res				
Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	LM	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remark
C-C Vessel	Intregal Attachment		Vol.										
W-E11-D2-HXS-13	RHR HX B	5370-5	MT	2	N/A	4/12	4/14	4/15	N/A	MT-018	RF-09- 53	RB2,B9,625'	Division 2 System
W-E11-D2-HXS-14	RHR HX B	5370-5	MT	2	N/A	4/12	4/14	4/15	N/A	MT-017	RF-09-		Cycloni
W-E11-D2-HXS-15	RHR HX B	5370-5	MT	2	N/A	4/12	4/14	4/16	N/A	MT-016	RF-09-		
W-E11-D2-HXS-16	RHR HX B	5370-5	MT	2	N/A	4/12	4/14	4/16	N/A	MT-019	55 RF-09- 56		
-F-1 Augmented	NRC Commitment		Vol.										
W-C41-2979-63S64	SLC weld 2" El -Pipe	297 <del>9</del> -5	PT	1	N/A	3/24	3/26	4/4	N/A	PT-001	RF-09- 26	RB3, 652,E11	
W-C41-2979-64\$65	SLC weld 2" Pipe-El	2979-5	PT	1	N/A	3/24	3/26	4/4	N/A	PT-002	RF-09- 27	RB3, 652,E11	
W-C41-5058-54S55	SLC weld 2"Pipe-Reducer	5374-5	PT	1	N/A	3/24	3/26	4/4	N/A	PT-003		RB3,F10,661	
<b>-F-</b> 2	<b>Circumferential Weld</b>	9 A	Vol.				÷		•		20	н 	
W-C11-2113-172-A	CRD SDV ' Pipe-Tee	5375-5	MT	2	N/A	3/29	4/1	4/6	N/A	MT-006	RF-09- 48	RB1,C10,597	
W-C11-2113-172-A		5375-5	υT	3	CS-20	3/29	4/1	4/6	UT-007,UT-008	UT-007,UT-	RF-09-		н -
W-E11-3035-7WB	RHR 6" El-Pipe	3035-5	MT	2	N/A	3/29	3/30	4/4	N/A	008 MT-005		Tor,180,578	· · · ·
W-E11-3151-3WF2	RHR 24" Tee-El	3151-5	MT	2	N/A	4/12	4/14	4/16	N/A	MT-020	49 RF-09-	HxRm,C10,60	Division 2
W-E11-3151-3WF2		3151-5	ய	3	CS-43	4/12	4/14	4/16	UT-080,UT-081	UT-080.UT-	30 RF-09-	5'	System
		3131-3								081	30		
W-E11-3154-4WC	RHR 24" EI-Tee	3154-5	MT	2	N/A	3/30	3/30	4/6	N/A	MT-007	RF-09- 50	Tor,C17,543'	
W-E11-3154-4WC		3154-5	UT	3	PDI-Alt- CS1	3/30	4/2	4/6	UT-009 thru 012	UT-009 thru 012	RF-09-		
W-E11-3154-13WO	RHR 24" Pipe-Pump	3154-5	MT	2	N/A	3/31	4/2	4/13	N/A	MT-011	RF-09-	RBSB,A15,54	
W-E11-3154-13WO		3154-5	UT	3	PDI-Ait-	4/1	4/2	4/13	UT-019,UT-021,	UT-019,UT-	31 RF-09-	1'	•
W-E11-3158-1W2	RHR 24" Pipe-El	3158-5	МТ	2	CS1 N/A	3/30	3/30	4/6	UT-022 N/A	021, UT-022 MT-008	31 RF-09-	HxRm,C17,59	
	TUNIET THEE										32	3'	
W-E11-3158-1W2		3158-5	υT	3	CS-43	3/31	3/31	4/6	UT-014	UT-014	RF-09- 32		

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

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Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	L #	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
FW-E11-3158-9WF2	RHR 20" Pipe-El	3158-5	MT	2	N/A	3/30	4/1	4/14	N/A	MT-009	RF-09- 33	• •	
FW-E11-3158-9WF2		3158-5	υT	3	CS-42	3/31	4/1	4/14	UT-013	UT-013	33 RF-09- 33	5'	
SW-E11-3177-9WE	RHR 20"EI-Pipe	3177-5	МТ	2	N/A	4/3	4/4	4/6	N/A	MT-012	RF-09-	Tor,B10,570'	
SW-E11-3177-9WE		3177-5	υT	3	CS-42	4/3	4/4	4/6	UT-035	UT-035	52 RF-09- 52		
FW-E21-3148-7W0	Core Spray 12" Red-Pump	3148-5	MT	2	N/A	3/31	4/2	4/14	N/A	MT-010	RF-09-		
FW-E21-3148-7W0		3148-5	UT	3	PDI-Alt-	4/1	4/2	4/14	UT-020	UT-020	34 RF-09-	1'	
FW-E41-3162-11WF1	HPCI 16" Pipe-Tee	3162-5	VT-1	17	CS1 N/A	3/25	3/28	4/4	N/A	N/A	34 RF-09-	Tor,G11,564'	
FW-E41-3162-11WF4	HPCI 16" Tee-Reducer	3162-5	VT-1	17	N/A	3/25	3/28	4/4	N/A	N/A	35 RF-09-	Tor,G11,564'	
FW-E41-3162-11WF5	HPCI 10" Reducer-	3162-5	VT-1	17	N/A	3/25	3/28	4/4	N/A	N/A		Tor,G11,564'	
FW-E41-3167-OW1	Reducer HPCI 10" Pump-Pipe	3167-5	MT	2	N/A	3/26	3/28	4/11	N/A	MT-001	37 RF-09-	HPCI Skid,	
FW-E41-3167-OW1		3167-5	υτ	3	CS-50	3/26	3/28	4/11	UT-002	UT-002	38 RF-09-	546'	
FW-E41-3169-2W0	HPCI 10" Pipe-Valve	3169-5	MT	2	N/A	3/26	3/29	4/14	N/A	MT-002	38 RF-09- 39	CRD,G11,569'	
FW-E41-3169-2W0		3169-5	UT	3	CS-36	3/27	3/29	4/14	UT-003,UT-004	UT-003,UT-	RF-09-		·
SW-E41-5373-GW3	HPCI 12"EI-Pipe	5373-5	MT	2	N/A	3/27	3/30	4/12	N/A	004 MT-003		HPCI Skid,	
SW-E41-5373-GW3		5373-5	υT	3	PDI-Alt-	3/27	3/30	4/12	UT-005,UT-006	UT-005,UT-	59 RF-09-	546'	
SW-N30-3258-7WK	Main Steam 26" Pipe-	3258-5	MT	2	CS1 N/A	4/6	4/10	4/13	N/A	006 MT-014	59 RF-09-	Stm,F12,589'	
SW-N30-3258-7WK	RedEl	3258-5	υτ	3	CS-5	4/6	4/10	4/13	UT-046,UT-072	UT-046,UT-	67 RF-09-		
SW-N30-3258-7WKLU		3258-5	MT	2	N/A	4/6	4/10	4/15	N/A	072 MT-015	67 RF-09-	Stm,F12,589'	
SW-N30-3258-7WKLU	Seam	3258-5	υT	3	CS-5	4/6	4/10	4/15	UT-047	UT-047	68 RF-09-		
C-F-2	Branch Connections		Vol.								68		
SW-E11-3160-1WD	RHR 18" Weldolet	3160-5	MT	2	N/A	3/29	3/30	4/4	N/A	MT-004,PT- 005	RF-09- 51	Tor,B15,578'	

Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48226 Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

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RF-09 EXAM DATA BASE Augmented												an a	
Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	L III	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
ANSI B31.1	GL 88-01 Category D		Vol.			UT							
FW-N20-3105-0W23	20" El-SE Htr 4N, Upper Nozz	3105-1	PT/UT	1 / 13	SSCL-88	4/16	4/18	N/A	UT-082 thru 084	UT-082 thru 084, PT-008	RF-09- 41	TB2,P12,62 4'	PT on ID. Also PDI- UT-10 DM
SW-N20-03-B011- BWSE	20" Nozz-SE 4N, Upper Nozz	3105-1	PT/UT	1 / 13	SSCL-88	4/16	4/18	N/A	UT-085 thru 087	UT-085 thru 088, PT-006	RF-09- 62	TB2,P12,62 4'	
FW-N20-3105-22WO	20° El-SE Htr 4N, Lower Nozz	3105-1	PT/UT	1 / 13	SSCL-88	4/15	4/18	N/A	UT-091 thru 093	UT-091 thru 094	RF-09- 42	TB2,P12,61 5'	
SW-N20-03-B011- AWSE	20" Nozz-SE 4N, Lower Nozz	3105-1	PT/UT	1 / 13	SSCL-88	4/15	4/18	N/A	UT-088 thru 090	UT-088 thru 091	RF-09- 61	TB2,P12,61 5'	

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48266 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

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Procedure	Reference Code	
39.NDE.001	1	
39.NDE.002	2	
PDI-UT-1	3	
PDI-UT-2	4	
PDI-UT-5	5	
GE-UT-300	6	
GE-UT-704	7	
GE-UT-705	8	
GE-UT-308	9	
GE-UT-209	10	
GE-UT-236	11	
GE-UT-504	12	
PDI-UT-10	13	
43.000.03/04	14	
43.000.017	15	
43.000.014	16	
43.000.019	17	
43.000.013	18	
GE-UT-309	19	
GE-UT-311	20	

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48226 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

## 2.2 Interval 2, Period 1, RF-08 Examinations

RF-08 EXAM DATA BASE Class 1													
Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	LIII	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
B-A Reactor Vessel	Shell Welds		Vol.										
1-308A		5360-5	UT	8	2667-62-1	15-Nov	17-Nov	19-Nov	PDI-254-C01 PDI-6-C25, C26	PDI-254-C01 UT23, UT24, UT25, UT26, 27	R8-96	DW,52,552	
1-308B		5360-5	υT	8	2667-62-1	15-Nov	17-Nov	19-Nov	PDI-254-C01 PDI-6-C27, C28	PDI-254-C01 UT28, UT29, UT30, UT31	R8-97	DW,142,552	
15-308C	· ·	5360-5	υτ	8	2667-62-1	14-Nov	17-Nov	19-Nov	PDI-254-C01	PDI-254-C01	R8-98	DW,262,244	
2-307A		5360-5	υr	8	2667-60-1	12-Nov	17-Jan	19-Nov	PDI-254-C02	PDI-254-C02	R8-99	DW,339,122	
B-A Reactor Vessel	Circ Head Welds		Vol.			•				n an			
4-319	2-319C to 2-319E 40%	5360-5	UT	6	2667-58-1	1-Nov	5-Nov	17-Nov	PDI-6-C11, C12	UT09, UT10	R8-47	Refuel Fir.	1 - A.
6-306	180 deg. to 360 deg.	5360-5	UT	6	2667-59-1	5-Nov	7-Nov	15-Nov	PDI-6-C13, C14	UT11, UT12	R8-57	Refuel Fir.	

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	LM	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
B-A Reactor Vessel 2-319A	Meridonal Head Welds Top Head	5360-5	Vol. UT	6	2667-58-1	21_Oct	6-Nov	17-Nov	PDI-6-C05, C06	UT05, UT06	R8-44	Refuel Fir.	
2-3194	гор пева	5300-5	01	Ö	200/*30*1	31-001	0-1104	LITINUV	FDI-0-005, 000	0105, 0106	10-44	Neluei Fil.	
2-319B	Top Head	5360-5	UT	6	2667-58-1	31-Oct	6-Nov	17-Nov	PDI-6-C07, C08	UT07	R8-45	Refuel Fir.	
2-319C	Top Head	5360-5	UT	6	2667-58-1	2-Nov	6-Nov	17-Nov	PDI-6-C09, C10	UT08	R8-46	Refuel Fir.	
1-319B	Top Head	5360-5	UT	6	2667-58-1	30-Oct	5-Nov	17-Nov	PDI-6-C01, C02	UT01, UT02	R8-42	Refuel Fir.	
1-319H	Top Head	5360-5	υτ	6	2667-58-1	30-Oct	5-Nov	17-Nov	PD1-6-C03, C04	UT03, UT04	R8-43	Refuel Fir.	
1-306A	Bottom Head	5360-5	UT	6	2667-59-1	6-Nov	7-Nov	17-Nov	PDI-6-C15, C16	UT13, UT14	R8-60	Bio, Odeg	
1-306D	Bottom Head	5360-5	UT	6	2667-59-1	6-Nov	7-Nov	18-Nov	PDI-6-C17, C18	UT15, UT16	R8-61	Bio, 120deg	
1-306E	Bottom Head	5360-5	UT	6	2667-59-1	6-Nov	7-Nov	18-Nov	PDI-6-C19, C20	UT17, UT18	R8-62	Bio, 144 deg	
1-306G	Bottom Head	5360-5	UT	6	2667-59-1	6-Nov	7-Nov	18-Nov	PDI-6-C21, C22	UT19, UT20	R8-63	Bio, 225deg	
1-306K	Bottom Head	5360-5	UT	6	2667-59-1	6-Nov	7-Nov	18-Nov	PDI-6-C23, C24	UT21, UT22	R8-64	Bio, 335deg	•
<b>B-A Reactor Vessel</b>	Shell to Flange Welds		Vol.				1.1			, at			
13-308	Partial from shell side	5360-5	υτ	7	2667-62-1	13-Nov	16- Nov	16-Nov	ISI-210-C46, C47, C48	UT25, UT26	R8-95	DW, 723"	120 degrees
13-308	Partial from flange	5360-5	UT	9	CSCI-52- FER	28-Oct	30- Oct	17-Nov	ISI-54-C01	UT01	R8-12	Vessei Cav.	180 degrees
<b>B-A Reactor Vessel</b>	Head to Flange		Vol. / Surf.										
3-319	1/3 of weld length	5360-5	ហ	7	2667-58-1	1-Nov	6-Nov	17-Nov	ISI-210-C01, C02, C03	UT01, UT02, UT03, UT04, UT05, UT11	R8-41	Refuel Fir.	
3-319	1/3 of weid length	5360-5	мт	2	N/A	30-Oct	6-Nov	17-Nov	N/A	MT-023	R8-41	Refuel Fir.	·

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	L M	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El Remarks
B-D Reactor Vessel	Nozzle to Vessel Welds		Vol.									
8-316A	Main Steam Nozzle	5361-5	UT	7	2667-62-1	8-Nov	9-Nov	19-Nov	<sup>7</sup> ISI-210-C31, C32, C33	UT19	R8-76	DW,71,655
8-316-B	Main Steam Nozzle	5361-5	UT	7	2667-62-1	8-Nov	9-Nov	19-Nov	/ ISI-210-C34, C35, C36	UT20	R8-77	DW,109,655
4-316A	Feedwater Nozzie	5361-5	ŬΤ	7	2667-62-1	8-Nov	9-Nov	19-Nov	ISI-210-C28, C29,	UT17, UT18	R8-75	DW,30,642
4-316B	Feedwater Nozzle	5361-5	UT	7	2667-62-1	7-Nov	8-Nov	18-Nov	C30 / ISI-210-C22, C23,	UT15	R8-65	DW,90,642
4-316D	Feedwater Nozzle	5361-5	UT	7	2667-62-1	8-Nov	10-	18-Nov	C24 ISI-210-C37, C38,	UT21, UT22	R8-78	DW,210,642
14-316B	Core Spray Nozzle	5361-5	υT	7	2667-62-1	7-Nov	Nov 8-Nov	18-Nov	C39 ISI-210-C25, C26,	UT16	R8-66	DW,240,641
13-314A	Recirc Inlet Nozzle	5361-5	υT	7	2667-60-1	5-Nov	7-Nov	17-Nov	C27 ISI-210-C10, C11,	UT09	R8-53	DW,30,615
13-314B	Recirc Inlet Nozzle	5361-5	UΤ	7	2667-60-1	5-Nov	7-Nov	17-Nov	C12 ISI-210-C19, C20,	UT14	R8-59	DW,60,615
13-314D	Recirc Inlet Nozzle	5361-5	UT	.7.	2667-60-1	6-Nov	7-Nov	17-Nov	C21 ISI-210-C16, C17,	UT13	R8-58	DW,120,615
13-314G	Recirc Inlet Nozzle	5361-5	UT	7	2667-60-1	4-Nov	7-Nov	17-Nov	C18 ISI-210-C04, C05,	UT06, UT07,	R8-51	DW,240,615
			•					•	C06	UT08		
13-314K	Recirc Inlet Nozzle	5361-5	UT	7	2667-60-1	5-Nov	7-Nov	17-Nov	ISI-210-C13, C14, C15	UT10	R8-54	DW, 330,615
5-314A	Recirc Suction Nozzle	5361-5	UT	7	2667-60-1	12-Nov	14- Nov	15-Nov	ISI-210-C43, C44, C45	UT24	R8-93	DW, 0,614
19-314B	JPI Nozzle	5361-5	UT	7	2667-60-1	9-Nov	10-	17-Nov	ISI-210-C40, C41,	UT23	R8-82	DW,280,612
B-D Reactor Vessel	Nozzle Inside Radius		Vol.				Nov		C42	с. С.	an a	Same as Nozzle to vessel
8-316A		5361-5	UT / VT	13 or 15	N/A	IVVI .	18- Nov	30-Nov	N/A	Completed under Surv.	01-034	above DW,71,655
8-316-B		5361-5	UT / VT	13 or 15	N/A	IVVI	18- Nov	30-Nov	N/A	43.000.017 Completed under Surv. 43.000.017	01-034	DW,109,655

Detroit Edison Co., 2000 2nd Ave., Detroit, ML 48226 Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

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Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	LIII	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
B-D Reactor Vessel	Nozzle Inside Radius		Vol. / VT										
4-316A		5361-5	UT	11	N/A	8-Nov	13- Nov	17-Nov ISI	-246-C01	ISI-246-C01	R8-86	DW,30,642	43.000.017
4-316B		5361-5	UT	11	N/A	8-Nov	13- Nov	17-Nov ISI	-246-C01	ISI-246-C01	R8-87	DW,90,642	
4-316D		5361-5	UT	11	N/A	7-Nov	13- Nov	17-Nov ISI	-246-C01	ISI-246-C01	R8-88	DW,210,64 2	
14-316B		5361-5	UT / VT	13 or 15	N/A	1-Nov	13- Nov	30-Nov	N/A	Completed under Surv. 43.000.017	01-034	DW,240,64 1	
15-315		5361-5	UT / VT	13 or 15	N/A	1-Nov	13- Nov	30-Nov	N/A	Completed under Surv. 43.000.017	01-034	DW,150,63 8	
13-314A		5361-5	UT / VT	13 or 15	N/A	1-Nov	18- Nov	30-Nov	N/A	Completed under Surv. 43.000.017	01-034	DW,30,615	
13-314B		5361-5	UT/VT	13 or 15	N/A	1-Nov	18- Nov	30-Nov	N/A	Completed under Surv. 43.000.017	01-034	DW,60,615	
13-314D		5361-5	υτ / ντ	13 or 15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	DW,120,61	Reshceduled
13-314G		5361-5	UT / VT	13 or 15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	DW,240,61	Reshceduled
13-314K		5361-5	UT / VT	13 or 15	N/A	N/A	N/A	N/A	N/A	N/A	<b>N/A</b>	DW, 330,615	Reshceduled
5-314A		5361-5	UT / VT	13 or 15	N/A	1-Nov	18- Nov	30-Nov	N/A	Completed under Surv. 43.000.017	01-034	DW, 0,614	
19-314B		5361-5	UT / VT	13 or 15	N/A	1-Nov	18- Nov	30-Nov	N/A	Completed under Surv. 43.000.017	01-034	DW,280,61 2	
<b>B-D Reactor Vessel</b>	Nozzle Inner Bore Region		Voi.							•			
4-316A IBR	FW Nzz Inner Bore Region	5361-5	UT	11	70287	8-Nov	13- Nov	17-Nov ISI	-246-C01	ISI-246-C01	R8-86	DW,30,642	
4-316B IBR	FW Nzz Inner Bore Region	5361-5	UT	11	70287	8-Nov	13- Nov	17-Nov ISI	-246-C01	ISI-246-C01	R8-87	DW,90,642	
4-316D IBR	FW Nzz Inner Bore Region	5361-5	UΤ	11	70287	7-Nov	13- Nov	17-Nov ISI	-246-C01	ISI-246-C01	R8-88	DW,210,64 2	

Permi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

	Description	ISO	Exams	Procedure	Cal Std	Comp	LM	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/Ei	Remarks
B-F & B-J Class 1	RIISI Welds												
Piping N5B	12" CS SE to Nzz (DM)	3052-5	UT	12	CS-44/IN- 45	6-Nov	16-Nov	19-Nov	PDI-2-C14 UNIXD-C03, C04	UT13, UT14 UNIXD-C03, C04	R8-79	DW,240,641	
SW-E21-3052-4W0X	10" CS Pipe to SE (DM)	3052-5	UT	12	CS-18/IN- 45	7-Nov	16-Nov	19-Nov	PDI-2-C13 UNIXD-C01, C02	UNIXD-C01, C02	R8-71	DW,240,641	
FW-RD-2-A9	28" Tee to Cross	5357-5	UT	4	SS-30	3-Nov	5-Nov		PDI-2-C06	UT07	R8-49	DW,270,613	
FW-E11-2298-6W0	24" Pipe to Tee	2298-5	UT	4	SS-8	2-Nov	2-Nov	17-Nov	PDI-2-C02	UT04	R8-39	DW,270,600	
SW-E11-2298-6WC	24" Pipe to Pipe (DM)	2298-5	UT	34	CS-7/SS- 8	2-Nov	2-Nov		PDI-1-C18 PDI-2-C04	UT03	R8-38	DW,270,600	1. 1.
FW-G33-3096-10WF3	4' Sweepolet to Tee	5351-5	UT	4	SS-23	2-Nov	8-Nov	17-Nov	PDI-2-C05	UT05, UT06	R8-40	DW,140,573	
7-316A	Main Steam Nzz to SE	5352-5	UT	3	CS-5	8-Nov	8-Nov	19-Nov	PDI-1-C34, C35	UT18	R8-74	DW,72,655	
SW-PS-2-A1-A	26" Pipe to Elbow	5352-5	υT	3	CS-5	8-Nov	8-Nov	17-Nov	PDI-1-C30, C31	UT16	R8-72	DW,72,655	•
SW-PS-2-A1-B	26" Elbow to Pipe	5352-5	υr	3	CS-5	8-Nov	8-Nov	17-Nov	PDI-1-C32, C33	UT17	R8-73	DW,72,653	
SW-PS-2-C3-J	8" Sweepolet to Pipe	5354-5	UT	3	CS-20	12-Nov	13-Nov	17-Nov	PDI-1-C40	UT23, UT24	R8-91	DW,314,609	* 4 *
SW-PS-2-C3-K	8" Pipe to Flange	5354-5	UT	3	CS-20	12-Nov	13-Nov	17-Nov	PDI-1-C41	UT25, UT26	R8-92	DW,314,609	
SW-RD-2-B8-W1	12" Pipe to Elbow	5358-5	UT	4	SS-17	1-Nov	2-Nov	16-Nov	PDI-2-C03	UT-02	R8-35	DW,90,613	2000 - 1990 -
SW-RD-2-B8-W2	12" Elbow to Pipe	5358-1	UT	4	SS-17	30-Oct	2-Nov	16-Nov	PDI-2-C01	UT-01, MT-011	R8-15	DW,90,615	
FW-E11-2327-0W1	24" Valve to Pipe	2327-5	UT	3	CS-9	3-Nov	4-Nov	17-Nov	PDI-1-C19	UT11	R8-48	RB1,B12,594	
FW-E41-2297-2W3	10" Pipe to Elbow	2297-5	UT	3	CS-22	2-Nov	3-Nov		ISI-350-C04 PDI-1-C17	UT09, UT10	R8-37	DW,0,586	
FW-E41-2297-0W4	10" Fluted head to pipe	2297-5	UT	3	CS-18	2-Nov	2-Nov	11-Nov	PDI-1-C15, C16	UT08	<b>R8-36</b>	Stm,F12,586	

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

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Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	L ##	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/Ei	Remarks
B-F & B-J Class 1	RiiSi Welds												
Piping 3-316A	FW 14" SE to Noz	3537-5	UT	3	CS-46	7-Nov	8-Nov	19-Nov	PDI-1-C28	UT14	R8-69	DW,30,642	
N4A	SE Ext. to SE	3537-5	υT	3	CS-46	7-Nov	8-Nov	19-Nov	PDI-1-C29	UT15	R8-70	DW,30,642	
FW-N21-2336-15W0	12" Pipe to SE	3537-5	UT	3	CS-15	7-Nov	8-Nov	17-Nov	PDI-1-C27	UT13	R8-68	DW,30,642	
SW-N21-2336-15WP	12* Pipe to Elbow	3537-5	UT	3	CS-15	7-Nov	8-Nov	18-Nov	PDI-1-C26	UT12	R8-67	DW,30,641	
B-G-1 Bolting	Greater Than 2"												
RPV Closure Nuts	1/3 of locations	5362-5	MT	2	N/A	10- Nov	12-Nov	17-Nov	N/A	MT-027, MT-028 VT-004	R8-83	Refuel Fir.	
RPV Closure Studs	1/3 of locations in place 48-51		UT	5	RPV Stud	28- Oct 4-Nov.	5-Nov		PDI-5-C01, C02 PDI-5-C03, C04	UT-01	R8-10 R8-50	RPV Cavity	
RPV Closure Studs	48-51 removed		MT	2	N/A	10- Nov	12-Nov	17-Nov	N/A	MT-026	R8-50	Refuel Fir.	
Threads in Flange	1/3 of locations		UT	10	CSCL-52	29- Oct	30-Oct	16-Nov	ISI-55-C01	UT-01, UT-02	R8-11	<b>RPV</b> Cavity	
RPV Closure Washers/Bushings	1/3 of locations		VT-1	16	N/A	10- Nov	12-Nov	17-Nov	N/A	VT-005	R8-84	Refuel Fir.	
Recirc Pump Studs	Pump A 1-16	5365-5	VT-1	16	N/A	10- Nov	17-Nov	27-Nov	N/A	01-035AP		DW,315,579	
Recirc Pump Studs	Pump A 1-16		UT	5	B31 Stud	10- Nov	12-Nov	19-Nov	PDI-5-C05, C06		R8-85	DW,315,579	· · ·
Recirc Pump nuts,	Pump A 1-16		VT-1	16	N/A	10-	17-Nov	27-Nov	N/A	01-035AP		DW,315,579	
bushings, and washers RPV Spare Flange	0 deg.	5361-5	VT-1	16	N/A	Nov 10-	17-Nov	27-Nov	N/A	01-035AN		Refuel Fir.	
RPV Spare Flange	180 deg.		VT-1	16	N/A	Nov 10-	17-Nov	27-Nov	N/A	01-035A0		Refuel Fir.	
B-G-2 Bolting	2" and Less					Nov							
FBC-E51-2192-01	FE Flange	2192-5	VT-1	16	N/A	1-Nov	17-Nov	27-Nov	N/A	01-035A		DW,360,594	* Completed visual
FBC-B21-5352-01L	SRV Flange	5352-5	VT-1	16	N/A	1-Nov	17-Nov	27-Nov	N/A	01-035B		DW,360,594	examination of
B21-F013L-VBB	SRV Bonnet	5352-5	VT-1	16	N/A	1-Nov	17-Nov	27-Nov	N/A	01-035C		DW,39,613	bolting per surveillance

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48126 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

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Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	L. 89	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
<b>B-G-2 Bolting</b> FBC-B21-5353-01K	2" and Less SRV Flange	5353-5	VT-1	16	N/A	1-Nov	17-Nov	27 Nov	N/A	01-035D		DW,39,613	43.000.014.
B21-F013K-VBB	SRV Bonnet	5353-5	VT-1	16	N/A	1-Nov	17-Nov	27-Nov	N/A	01-035E		DW,70,613	
FBC-B21-5353-01G	SRV Flange	5353-5	VT-1	16	N/A	1-Nov	17-Nov	27-Nov	N/A	01-035F		DW,70,613	
B21-F013G-VBB	SRV Bonnet	5353-5	VT-1	16	N/A	1-Nov	17-Nov	27-Nov	N/A	01-035G		DW,38,613	
B21-F028B-VBB	B Line Outboard MSIV	5353-5	VT-1	16	N/A	1-Nov	17-Nov	27-Nov	N/A	01-035H		DW,38,613	
FBC-B21-5354-01B	SRV Flange	5354-5	VT-1	16	N/A	1-Nov	17-Nov	27-Nov	N/A	01-0351		DW,298,613	
B21-F013B-VBB	SRV Bonnet	5354-5	VT-1	16	N/A	1-Nov	17-Nov	27-Nov	N/A	01-035J		DW,298,613	
B21-F028D-VBB	D Line Outboard MSIV	5353-5	VT-1	16	N/A	31-	17-Nov	27-Nov	N/A	01-035K		Stm,F12,599	)
E21-F006A-VBB	CS Inbd Check	3052-5	VT-1	16	N/A	Oct 9-Nov	17-Nov	27-Nov	N/A	01-035L		DW,210,627	
E41-F003-VBB	HPCI Otbd ISO Valve	2297-5	VT-1	16	N/A	31-	17-Nov	27-Nov	N/A	01-035M		Stm,F12,587	•
G33-F001-VBB	RWCU Inbd Iso	3096-5	VT-1	16	N/A	Oct 1-Nov	17-Nov	27-Nov	N/A	01-035N		DW,229,603	
G33-F120-VBB	RWCU to FW Ck	3536-5	VT-1	16	N/A	1-Nov	17-Nov	27-Nov	N/A	01-035O		Stm,F12,587	•
B21-F011A-VBB	FW A Manual Iso	3537-5	VT-1	16	N/A	1-Nov	17-Nov	27-Nov	N/A	01-035P		DW,350,603	ананананананананананананананананананан
B-H RPV Integral Attachment Welds	· · · · · · · · · · · · · · · · · · ·			· .		4.81-	<b>.</b>						· •
3-306/4-309 Skirt Weld	10 percent of length	5360-5	MT	2	N/A			19-Nov	N/A	MT-025	R8-52	Bio Annulus	
3-306/4-309 Skirt Weld	10 percent of length	5360-5	UT	7		4-Nov	6-Nov	19-Nov	ISI-210-C07, C08, C09	UT12	R8-52	Bio Annulus	
10-324A Stabilizer		5360-5	MT	2	<b>N/A</b>	13- Nov	14-Nov	16-Nov	N/A	MT-029	R8-94	DW,0,647	

Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48226. Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

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Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	Lm	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
B-H RPV Integral Attachment Welds B-O CRD Housing Welds CRDH-X02-Y27-W1	Peripheral Housing Weld		РТ	1	N/A	9-Nov	10-Nov	18-Nov	N⁄A	PT-004	R8-80	DWUV	
CRDH-X02-Y27-W2	Peripheral Housing Weld		PT	1	N/A	9-Nov	10-Nov	18-Nov	N/A	PT-005	R8-81	DWUV	

Permi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 4826 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

RF-08 EXAM DATA BASE Class 2													
Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	LM	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
C-A Vessel	Shell Welds		Vol.						ч. — с.				
SW-E11-D2-HX-11	Shell to Flange	5370-5	UT	14	CS-80	30- Oct	2-Nov	16-Nov	ISI-350-C03 ISI-215-C02	UT03, UT04, UT05	R8-34	RB1,B9,	
C-B Vessel	Nozzle to Shell Welds		Vol. /							0.00			
SW-E11-D2-HX-01	Inlet Nozzle to Head	5370-5	Surf. UT	14	CS-80	30- Oct	1-Nov	16-Nov	ISI-350-C01 ISI-215-C01	UT01, UT02	R8-13	RB1,89,	
SW-E11-D2-HX-01	Inlet Nozzle to Head	5370-5	MT	2		29-	1-Nov	16-Nov		MT-009	R8-13	RB1,B9,	
C-B Vessei	Inside Radius		Vol.			Oct							· · · ·
SW-E11-D2-HX-01 IRS	Inlet Nozzle to Head		υτ	13	CS-81	30-	1-Nov	15-Nov	ISI-211-C01	UT01	R8-30	RB1,B9,	
C-C Vessel	Integral Attachment		Surf.			Oct	9 1						
SW-E11-D2-HXS-05	Upper Shell Stiffener Weld		MT	2		31-	1-Nov	16-Nov		MT-013	R8-20	RB1,89,	
SW-E11-D2-HXS-06	Lower Shell Stiffener Weld	-	MT	2		Oct 31-	1-Nov	16-Nov	•	MT-012, MT-	R8-19	RB1,B9,	CARD 01-20653
SW-E11-D2-HXS-07	Support Ring		мт	2		Oct 31- Oct	1-Nov	16-Nov		012A MT-014	R8-21	RB1,B9,	Reportable Ind.

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	L. 111	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
C-C Vessel	Integral Attachment		Surf.										
SW-E11-D2-HXS-09	Stiffener Plate		MT	2		31- Oct	1-Nov	16-Nov		MT-015	R8-22	RB1,B9,	
SW-E11-D2-HXS-10	Stiffener Plate		MT	2		31- Oct	1-Nov	16-Nov		MT-016	R8-23	RB1,B9,	
SW-E11-D2-HXS-11	Stiffener Plate		MT	2		31- Oct	1-Nov	16-Nov		MT-017	R8-24	RB1,B9,	
SW-E11-D2-HXS-12	Stiffener Plate		MT	2		31- Oct	1-Nov	16-Nov		MT-018	R8-25	RB1,B9,	
SW-E11-D2-HXS-21	Stiffener Plate		MT	2		31- Oct	1-Nov	16-Nov		MT-019	R8-26	RB1,B9,	
SW-E11-D2-HXS-22	Stiffener Plate		MT	2		31- Oct	1-Nov	16-Nov		MT-020	R8-27	RB1,B9,	
SW-E11-D2-HXS-23	Stiffener Plate		MT	2		31- Oct	1-Nov	16-Nov		MT-021	R8-28	RB1,B9,	
SW-E11-D2-HXS-24	Stiffener Plate		MT	2		31- Oct	1-Nov	16-Nov		MT-022	R8-29	RB1,B9,	
C-F-1 Piping	<b>Circumferential Welds</b>		Surf.										
FW-C41-2979-72S73	2" Elbow to Pipe	2979- 5	PT	1 - <b>1</b> - 1		22- Oct	26-Oct	16-Nov		PT-001	R8-02	RB4,668	
FW-C41-2979-2S3	2* Elbow to Reducer	2979- 5	PT	1		31- Oct	1-Nov	11-Nov		PT-003	R8-33	RB2,C12,63	· · ·
FW-C41-2979-1S2	2" Reducer to Pipe	2979- 5	PT	1		31- Oct	1-Nov	11-Nov		PT-002	R8-32	RB2,C12,63 3	· · · ·
C-F-2 Piping	<b>Circumferential Welds</b>		Vol. / Surf. / VT								. *		
FW-E11-3146-5W0	18" Elbow to Valve	3146- 5	мт	2		25- Oct	29-Oct	16-Nov		MT-002	R8-03	Tor, B13, 579	
FW-E11-3146-5W0		3146- 5	UT	3	CS-40	25- Oct	29-Oct	16-Nov P	DI-1-C01, C02	UT01	R8-03		
SW-E11-3153-13WD	24" Pipe to Elbow	3153- 5	MT	2		24- Oct	29-Oct	16-Nov		MT-006	R8-07	SW Quad,543Y	
SW-E11-3153-13WD	.375" Std.	3153- 5	UT	3	PDI1-Alt	25- Oct	29-Oct		DI-1-C06, C07, 08	UT03	R8-07		
FW-E11-3159-0W1	12" Wol to Pipe	3159- 5	MT	2		26- Oct	31-Oct	16-Nov		MT-008	R8-09	Tor, B13,575	
FW-E11-3159-0W1	.406 Schd. 40	3159- 5	υT	3	PDI1-Alt	26- Oct	31-Oct		DI-1-C09, C10, 11, C12	UT04	R8-09		,

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	Lm	ANII Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
C-F-2 Piping	Circumferential Welds		Vol. / Surf. / VT									
SW-E21-3145-9WD	10" Elbow to Pipe	3145-5		17		31- Oct	31-Oct	16-Nov	VT-001	R8-16	Tor,320,577	
SW-E21-3147-5WJ	14" Pipe to Elbow	3147-5	MT	2			29-Oct	16-Nov	MT-003	R8-04	SE Quad.549Y	
SW-E21-3147-5WJ	.438 Schd. 40	3147-5	υτ	3	PDI1-Alt	24-	29-Oct	16-Nov PDI-1-C03, C0	4 UT02	R8-04	Quau,5461	
SW-E21-3147-19WB	12" Elbow to Pipe	3147-5	мт	2			29-Oct	16-Nov	MT-004	R8-05	RB2, C11,62	
SW-E21-3147-19WB		3147-5	UT	3	CS-15		29-Oct	16-Nov PDI-1-C05	UT05	R8-05	0	
SW-E21-3148-5WD	20" Pipe to WOL	3148-5	мт	2		Oct 26-	27-Oct	11-Nov	MT-005	R8-06	NE Over E41	
FW-E41-3162-11W0 &	24" Elbow to Pipe	3162-5	VT-1	17		Oct 29-	31-Oct	16-Nov	VT-003	R8-18	Quad,541 Tor,G11,560	
LD SW-E41-3162-11WC	24" Elbow to Reducer	3162-5	VT-1	17	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	Oct 29-	31-Oct	16-Nov	VT-002	R8-17	Tor,G11,560	
FW-N30-3259-4W0	24" Pipe to Valve	3259-5	мт	2		Oct 31-	1-Nov	16-Nov	MT-024	R8-31	TB,L12,632	· ·
FW-N30-3259-4W0		3259-5	UT	3	CS-9	Oct 31- Oct	1-Nov	16-Nov ISI-350-C02 PDI-C13, C14	UT06, UT07	R8-31		
FW-T48-04-2095-19W0	8" Pipe to Tee	2095-5	MT	2		.19- Oct	22-Oct	11-Nov	MT-001	R8-01	RB1,B13,59	
SW-E11-3151-8WD	24" Pipe to Weldolet	3151-5	MT	2		26-	27-Oct	16-Nov	MT-007	R8-08	- Tor,B12,575	
SW-N30-3258-13WB	26" Pipe to Sweepolet	3258-5	MT	2	: : :	Oct 29- Oct	30-Oct	16-Nov	MT-010	R8-14	Stm,F12,598	

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48226 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

in the second data

	MDATA BASE mented												
Sys/Comp ID	Description	ISO	Exams	Procedure	Cal Std	Comp	LIII	ANII	Cal Sheet	Data Sheet	Report	Loc/Az/El	Remarks
ANSI B31.1	GL 88-01 Category D												
FW-N21-3109-18W0		3109-1	UT	3/4	CS- 86/SSCL -87	5-Nov	7-Nov	17-Nov	PDI-1-C23, C24, C25 PDI-2-C10, C11, C12	UT11, UT12	R8-56	TB3,P5,645	
SW-N21-01-B002-AWSE		3109-1	UT	3/4	CS- 86/SSCL -87	5-Nov	7-Nov	17-Nov	PDI-1-C20, C21, C22 PDI-2-C07, C08, C09	UT08, UT09, UT10	R8-55	TB3,P5,645	
FW-N20-3105-0W13		3105-1	UT	3/4	CS- 11/SSCL -88	10- Nov	14-Nov	15-Nov	PDI-1-C36, C37, C38 PDI-2-C15, C16, C17	UT19, UT20 UT17	R8-89	TB2,P4,623	1.1
SW-N20-03-B010-BWSE		3105-1	UT	3/4	CS- 11/SSCL -88	10- Nov	14-Nov	15-Nov	PDI-1-C39, C42 PDI-2-C18, C19, C20	UT21, UT22, UT23 UT15	R8-90	TB2,P4,623	
Procedure	Reference	Code		Procee	dure .	an an tai An		Refe	rence Code	n an			
39.NDE.001		1		ISI-UT	-55				10				
39.NDE.002		2		GFRM	2-ISI-246	3			. 11				
PDI-UT-1		3		UNIXD					12				
PDI-UT-2		4		ISI-UT					13				
PDI-UT-5		5		ISI-UT					14	1			
PDI-UT-6		6		43.000				1. A.	15				
ISI-UT-210		7		43,000					· · · 16				
I/UX-PDI-254		8		43.000	.019				17		•		
GFRM2-ISI-54		9											

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

12.5

## 2.3 Interval 2, Period 1, RF-07 Examinations

White the first of the first of the second se	7 EXAM DATA BASE									
Cat/Item	Component ID	DESCRIPTION	ISO .	Procedure	EXAMS	CAL STD	COMP	CAL SHT	DATA SHT	Report
B-D	Reactor Vessel	Nozzie Inside Radius Section		6						
B3.100	4-31C IRS	(NUREG 0619) Inner Radius	5361-5	6	υτ	70287	17-Apr	AUT-IR-C01		R7-01
B3.100	4-316E IRS	(NUREG 0619) Inner Radius	5361-5	6	UT	70287	13-Apr	AUT-IR-C01		R7-02
B3.100	4-316F IRS	(NUREG 0619) Inner Radius	5361-5	6	UT	70287	17-Apr	AUT-IR-C01		R7-03
<b>NUREG 0619</b>	Reactor Vessel	Nozzie Inner Bore Region								
Augmented	4-316C IBR	FW Nozz Inner Bore Region	5361-5	6	υT	70287	16-Apr	AUT-IR-C01		R7-01
Augmented	4-316E IBR	FW Nozz Inner Bore Region	5361-5	6	UT	70287	13-Apr	AUT-IR-C01		R7-02
Augmented	4-316F IBR	FW Nozz Inner Bore Region	5361-5	6	UT	70287	16-Apr	AUT-IR-C01		R7-03
B-F	RPV / Piping	<b>RPV Noz to Safe End</b>								
B5.10	N5B	Dissimilar Metal Nozz-SE	3052-5	5	UT	FER-44,45	12-Apr	DETC-C05,C06		R7-04
	N5B	Core Spray	3052-5	1	PT	N/A	11-Apr		PT-05	R7-04
B5.10	2-303H	Dissimilar Metal Nozz-SE	5356-5	5	UT	FER-54,56	10-Apr	DETC-C01,C02		R7-05
	2-303H	Recirc Inlet	5356-5	1	PT	N/A	5-Apr		PT-03	R7-05
B5.10	4-303A	Dissimilar Metal Nozz-SE	5357-5	5 .	UT .	FER-55,57	12-Apr	DETC-C03,C04		R7-06
	4-303A	Recirc Suction	5357-5	1	• PT	N/A	7-Apr		PT-04	R7-06
B5.10	102-304A	Dissimilar Metal Nozz-SE	5361-5	4	UT	FER47, Alt.1	13-Apr	PDI-1-C15-17	UT-01	R7-07
						• •	13-Apr	PDI-2-C07-09		
	102-304A	Jet Pump Instrumentation	5361-5	1	PT	N/A 1	13-Apr		PT-06	R7-07
B5.20	5-315	Dissimilar Metal Nozz-SE	5361-5	4	υτ	FER28	14-Apr	PDI-2-C10-12	UT-01	R7-08
	5-315	Core DP and Liquid Control	R1-91	1	PT	N/A	14-Apr		PT-07	R7-08

Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

Integral Attach For Piping, Pu	Imps. Valves								Report
			• .					. 5 1	
SW-PS-2-A2-AA1	Pipe Lug Class 1	5352-5	2	MT	N/A	13-Apr		MT-17	R7-09
SW-PS-2-A2-AA2	Pipe Lug	5352-5	2	MT	N/A	13-Apr		MT-18	R7-10
SW-PS-2-A2-AA3	Pipe Lug	5352-5	2	MT	N/A	13-Apr		MT-19	R7-11
SW-PS-2-A2-AA4	Pipe Lug	5352-5	2	MT	N/A	13-Apr		MT-20	R7-12
Integral Attach For Piping, Pu	imps, Valves								
PSFW-E21-3147-301	Class 2 Stanchion to pipe	3147-5	2	MT	N/A	30-Mar		MT-02	R7-13
Pressure Retaining Welds in I	Piping								
FW-C41-2979-P	2" pipe to coupling	2979-5	1	PT	N/A	30-Mar		PT-01	R7-15
FW-C41-3361-02W1	3" valve to pipe	3361-5	1	PT	N/A	31-Mar		PT-02	R7-16
FW-E11-3146-6W10	20" tee to elbow	3146-5	2	MT	N/A	6-Apr		MT-11	R7-17
FW-E11-3146-6W10	20" tee to elbow	3146-5	3	UT	FER-41	8-Apr	PDI-1-C10	UT-01	R7-17
FW-E11-3146-6WH	24" tee to pipe	3146-5	2	МТ	N/A	3-Apr		MT-08	R7-18
FW-E11-3146-6WH	24" tee to pipe	3146-5	3	UT .	FER-43	4-Apr	PDI-1-C03	UT-01	R7-18
FW-E11-3158-10WF4	20" pipe to nozzle	3158-5	2	MT	N/A	14-Apr		MT-05,05R	R7-19
FW-E11-3158-10WF4	20" pipe to nozzle	3158-5	3	UT	FER-42	14-Apr	PDI-1-C18	t	R7-19
SW-N-30-3258-19WJ	26" pipe to reducer	3258-5	2	MT	N/A	7-Apr		MT-12	R7-20
SW-N-30-3258-19WJ	26" pipe to reducer	3258-5	3	UT	FER-5	8-Apr	PDI-1-C09	UT-01	R7-20
SW-N-30-3258-19WJLU	intersecting long seam weld	3258-5	2	MT	N/A	7-Apr		MT-13	R7-20
SW-N-30-3258-19WJLU	intersecting long seam weld	3258-5	3	UT	FER-5	8-Apr	PDI-1-C09	UT-02	R7-20
SW-E11-3035-5WE	6" tee to reducer	3035-5	2	MT	N/A	8-Apr		MT-14	R7-21
FW-E11-3157-0W6	16" pump to expander	3157-5	2	MT	N/A	31-Mar		MT-06	R7-22
FW-E11-3157-0W6	16" pump to expander	3157-5	3	UT	FER-40	31-Mar	PDI-1-C01	UT-01	R7-22
FW-E21-3144-0W1	12" pump to expander	3144-5	2	MT	N/A	30-Mar		MT-01	R7-23
	SW-PS-2-A2-AA3 SW-PS-2-A2-AA4 Integral Attach For Piping, Pu PSFW-E21-3147-301 Pressure Retaining Welds in FW-C41-2979-P FW-C41-3361-02W1 FW-E11-3146-6W10 FW-E11-3146-6W10 FW-E11-3146-6WH FW-E11-3146-6WH FW-E11-3158-10WF4 FW-E11-3158-10WF4 FW-E11-3158-10WF4 FW-E11-3158-10WF4 FW-E11-3158-19WJ SW-N-30-3258-19WJ SW-N-30-3258-19WJLU SW-N-30-3258-19WJLU SW-N-30-3258-19WJLU SW-N-30-3258-19WJLU SW-E11-3035-5WE FW-E11-3157-0W6 FW-E11-3157-0W6	SW-PS-2-A2-AA2Pipe LugSW-PS-2-A2-AA3Pipe LugSW-PS-2-A2-AA4Pipe LugIntegral Attach For Piping, Pumps, ValvesPSFW-E21-3147-301Class 2 Stanchion to pipePressure Retaining Welds in PipingFW-C41-2979-P2" pipe to couplingFW-C41-3361-02W13" valve to pipeFW-C41-3361-02W13" valve to pipeFW-E11-3146-6W1020" tee to elbowFW-E11-3146-6W1020" tee to elbowFW-E11-3146-6WH24" tee to pipeFW-E11-3146-6WH24" tee to pipeFW-E11-3158-10WF420" pipe to nozzleFW-E11-3158-10WF420" pipe to nozzleFW-N-30-3258-19WJ26" pipe to reducerFW-N-30-3258-19WJLUintersecting long seam weldFW-E11-3157-0W616" pump to expanderFW-E11-3157-0W616" pump to expander	SW-PS-2-A2-AA2         Pipe Lug         5352-5           SW-PS-2-A2-AA3         Pipe Lug         5352-5           SW-PS-2-A2-AA3         Pipe Lug         5352-5           SW-PS-2-A2-AA4         Pipe Lug         5352-5           SW-PS-2-A2-AA4         Pipe Lug         5352-5           SW-PS-2-A2-AA4         Pipe Lug         5352-5           Pressure Retaining Welds in Piping         2           FW-C41-2979-P         2" pipe to coupling         2979-5           FW-C41-3361-02W1         3" valve to pipe         3361-5           FW-E11-3146-6W10         20" tee to elbow         3146-5           FW-E11-3146-6WH         24" tee to pipe         3146-5           FW-E11-3146-6WH         24" tee to pipe         3146-5           FW-E11-3146-6WH         24" tee to pipe         3146-5           FW-E11-3158-10WF4         20" pipe to nozzle         3158-5           FW-E11-3158-10WF4         20" pipe to reducer         3258-5           FW-N-30-3258-19WJ         26" pipe to reducer         3258-5           FW-N-30-3258-19WJ         26" pipe to reducer         3258-5           FW-N-30-3258-19WJLU         intersecting long seam weld         3258-5           FW-N-30-3258-19WJLU         intersecting long seam weld         3	SW-PS-2-A2-AA2       Pipe Lug       5352-5       2         SW-PS-2-A2-AA3       Pipe Lug       5352-5       2         SW-PS-2-A2-AA4       Pipe Lug       5352-5       2         SW-PS-2-A2-AA4       Pipe Lug       5352-5       2         Integral Attach For Piping, Pumps, Valves       5352-5       2         PSFW-E21-3147-301       Class 2 Stanchion to pipe       3147-5       2         Pressure Retaining Welds in Piping       2979-5       1         FW-C41-2979-P       2" pipe to coupling       2979-5       1         FW-C41-3361-02W1       3" valve to pipe       3361-5       1         FW-C41-3361-02W1       3" valve to pipe       3146-5       2         FW-E11-3146-6W10       20" tee to elbow       3146-5       2         FW-E11-3146-6WH       24" tee to pipe       3146-5       2         FW-E11-3146-6WH       24" tee to pipe       3146-5       2         FW-E11-3158-10WF4       20" pipe to nozzle       3158-5       2         FW-E11-3158-10WF4       20" pipe to reducer       3258-5       2         FW-E11-3158-10WF4       20" pipe to reducer       3258-5       2         FW-E11-3158-10WJLU       intersecting long seam weld       3258-5       3	SW-PS-2-A2-AA2         Pipe Lug         5352-5         2         MT           SW-PS-2-A2-AA3         Pipe Lug         5352-5         2         MT           SW-PS-2-A2-AA4         Pipe Lug         5352-5         2         MT           SW-PS-2-A2-AA4         Pipe Lug         5352-5         2         MT           mtegral Attach For Piping, Pumps, Vaives	SW-PS-2-A2-AA2         Pipe Lug         5352-5         2         MT         N/A           SW-PS-2-A2-AA3         Pipe Lug         5352-5         2         MT         N/A           SW-PS-2-A2-AA3         Pipe Lug         5352-5         2         MT         N/A           SW-PS-2-A2-AA4         Pipe Lug         5147-5         PT         N/A           SW-C41-2979-P         2* pipe to coupling         2979-5         1         PT         N/A           SW-C41-3361-02W1         3* valve to pipe         3616-5         1	SW-PS-2-A2-AA2         Pipe Lug         5352-5         2         MT         N/A         13-Apr           SW-PS-2-A2-AA3         Pipe Lug         5352-5         2         MT         N/A         13-Apr           SW-PS-2-A2-AA4         Pipe Lug         5352-5         2         MT         N/A         13-Apr           Pressure Retaining Welds in Piping           74-41-3361-02W1         3' valve to pipe         3361-5         1         PT         N/A         30-Mar           FW-E11-3146-6W10         20' tee to elbow         3146-5         2         MT         N/A         6-Apr           FW-E11-3146-6WH         24' tee to pipe         3146-5         3         UT         FER-43         4-Apr           FW-E11-3158-10WF4         20'' pipe to nozzle <td>SW-PS-2-A2-AA2         Pipe Lug         5352-5         2         MT         N/A         13-Apr           SW-PS-2-A2-AA3         Pipe Lug         5352-5         2         MT         N/A         13-Apr           SW-PS-2-A2-AA4         Pipe Lug         5352-5         2         MT         N/A         30-Mar           Thressure Retaining Welds in Piping         Pumps         2979-5         1         PT         N/A         30-Mar           FW-C41-3361-02W1         3' valve to pipe         3361-5         1         PT         N/A         6-Apr           W-E11-3146-6W10         20' tee to elbow         3146-5         3         UT         FER-41         8-Apr         PDI-1-C10           FW-E11-3146-6WH         24' tee to pipe         3146-5         3         <td< td=""><td>SW-PS-2-A2-AA2         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-18           SW-PS-2-A2-AA3         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-19           SW-PS-2-A2-AA4         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-19           SW-PS-2-A2-AA4         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-02           Presure Retaining Welds in Plping         Purper Set Stanchion to pipe         3147-5         2         MT         N/A         30-Mar         PT-01           Presure Retaining Welds in Plping         2* pipe to coupling         2979-5         1         PT         N/A         30-Mar         PT-01           W-C41-3361-02W1         3* valve to pipe         3361-5         1         PT         N/A         31-Mar         PT-02           SW-E11-3146-6W10         20* tee to elbow         3146-5         2         MT         N/A         6-Apr         MT-16           W-E11-3146-6WH         24* tee to pipe         3146-5         2         MT         N/A         3-Apr         MT-08           W-E11-3146-6WH         24* tee to pipe</td></td<></td>	SW-PS-2-A2-AA2         Pipe Lug         5352-5         2         MT         N/A         13-Apr           SW-PS-2-A2-AA3         Pipe Lug         5352-5         2         MT         N/A         13-Apr           SW-PS-2-A2-AA4         Pipe Lug         5352-5         2         MT         N/A         30-Mar           Thressure Retaining Welds in Piping         Pumps         2979-5         1         PT         N/A         30-Mar           FW-C41-3361-02W1         3' valve to pipe         3361-5         1         PT         N/A         6-Apr           W-E11-3146-6W10         20' tee to elbow         3146-5         3         UT         FER-41         8-Apr         PDI-1-C10           FW-E11-3146-6WH         24' tee to pipe         3146-5         3 <td< td=""><td>SW-PS-2-A2-AA2         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-18           SW-PS-2-A2-AA3         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-19           SW-PS-2-A2-AA4         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-19           SW-PS-2-A2-AA4         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-02           Presure Retaining Welds in Plping         Purper Set Stanchion to pipe         3147-5         2         MT         N/A         30-Mar         PT-01           Presure Retaining Welds in Plping         2* pipe to coupling         2979-5         1         PT         N/A         30-Mar         PT-01           W-C41-3361-02W1         3* valve to pipe         3361-5         1         PT         N/A         31-Mar         PT-02           SW-E11-3146-6W10         20* tee to elbow         3146-5         2         MT         N/A         6-Apr         MT-16           W-E11-3146-6WH         24* tee to pipe         3146-5         2         MT         N/A         3-Apr         MT-08           W-E11-3146-6WH         24* tee to pipe</td></td<>	SW-PS-2-A2-AA2         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-18           SW-PS-2-A2-AA3         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-19           SW-PS-2-A2-AA4         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-19           SW-PS-2-A2-AA4         Pipe Lug         5352-5         2         MT         N/A         13-Apr         MT-02           Presure Retaining Welds in Plping         Purper Set Stanchion to pipe         3147-5         2         MT         N/A         30-Mar         PT-01           Presure Retaining Welds in Plping         2* pipe to coupling         2979-5         1         PT         N/A         30-Mar         PT-01           W-C41-3361-02W1         3* valve to pipe         3361-5         1         PT         N/A         31-Mar         PT-02           SW-E11-3146-6W10         20* tee to elbow         3146-5         2         MT         N/A         6-Apr         MT-16           W-E11-3146-6WH         24* tee to pipe         3146-5         2         MT         N/A         3-Apr         MT-08           W-E11-3146-6WH         24* tee to pipe

Detroit Edison Co., 2000 2nd Ave., Detroit, ML 48226 Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

GENERAL LEERS FERMANES

Cat/Item	Component ID	DESCRIPTION	ISO	Procedure	EXAMS	CAL STD	COMP	CAL SHT	DATA SHT	Report
C-F-2/C5.51	FW-E21-3147-16W17	12" elbow to pipe	3147-5	2	МТ	N/A	3-Apr		MT-09	R7-24
	FW-E21-3147-16W17	12" elbow to pipe	3147-5	3	UT	PDI -1 Alt.	6-Apr	PDI-1-C04-5	UT-01	R7-24
C-F-2/C5.51	SW-E21-3149-4WD	20 <sup>•</sup> pipe to tee	3149-5	2	MT	N/A	1-Apr		MT-07	R7-25
	SW-E21-3149-4WD	20" pipe to tee	3149-5	3	UT	PDI -1 Alt.	1-Apr	PDI-1-C02	UT-01	R7-25
C-F-2/C5.51	FW-E41-3163-7W0	16 <sup>e</sup> pipe to valve	3163-5	2	MT	N/A	8-Apr		MT-15	R7-26
	FW-E41-3163-7W0	16" pipe to valve	3163-5	3	UT	FER-85	10-Apr	PDI-1-C11	UT-01	R7-26
C-F-2/C5.51	FW-T48-04-2095-11W12	6" pipe to elbow	2095-5	2	MT	N/A	30-Mar		MT-03	R7-27
C-F-2/C5.51	FW-T48-04-2097-8W9	6" elbow to pipe	2097-5	2	МТ	N/A	30-Mar		MT-04	R7-28
C-F-2/C5.51	SW-T48-04-2097-21WB	8" elbow to pipe	2097-5	7	VT-1	N/A	5-Apr		VT-02	R7-29
C-F-2/C5.51	FW-T48-04-2097-20W21	8" pipe to tee	2097-5	2	MT	N/A	8-Apr		MT-16	R7-30
C-F-2/C5.51	SW-T48-04-2097-25WF	10" elbow to elbow	2097-5	7	VT-1	N/A	5-Apr		VT-01	R7-31
C-F-2/C5.81	SW-E11-3146-5WC	24" pipe to weldolet	3146-5	2	MT	N/A	3-Apr		MT-10	R7-32
Augmented	FW-N20-3107-0W17	20" safe end to pipe (dm)	3107-1	3,4	UT	FER-11, 88	10-Apr	PDI-1-C12-14	UT-01	R7-33
GL 88-01			•					PDI-2-C04-06	UT-01	
Augmented	SW-N20-03-B014-BWSE	20" nozzle to safe end (dm)	3107-1	3,4	UT	FER-11, 88	10-Apr	PDI-1-C12-14	UT-02	R7-34
GL 88-01				1. State 1.				PDI-2-C04-06	UT-02	
Augmented	FW-N20-3105-16W0	20" elbow to safe end (dm)	3105-1	3,4	UT	FER-11, 88	6-Apr	PDI-1-C06-08	UT-01	R7-35
GL 88-01						All and a second se		PDI-2-C01-03	UT-01	
Augmented	SW-N20-03-B014-AWSE	20" safe end to nozzle (dm)	3105-1	3,4	UT	FER-11, 88	6-Apr	PDI-1-C06-08	UT-02	R7-36
GL 88-01							-	PDI-2-C01-03	UT-02	
GE recommended exam	Steam Dryer	Support Ring Indications	5364-5	9	UT	CAL-DSR01	18-Apr	SDSR-CAL1/2	Dat-1/2	SDSR
		GE recommended exam								
	Procedure	Reference Code		Procedure		Reference	Code	and the second second		
	39.NDE.001	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		UNIXDETC		5				
	39.NDE.002	2		Fermi-800-1/2		6				
	PDI-UT-1	3		43.000.019		7				
	PDI-UT-2	4		43.000.004		8				

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## **SECTION 3**

## SUMMARY OF REACTOR INTERNAL EXAMINATIONS

## Code Category B-N-1 and B-N-2 Inspections Interval 2, Period 1, RF-09

Components	Technique	Requirement	<b>Results / Remarks</b>
Brackets			
Feedwater Spargers (3)	<b>VT-3 EVT-1</b>	BWRVIP-48	NRI
Core Spray Piping (4)	EVT-1	BWRVIP-48	RI (PB-015 Wear)
Feedwater			
Spargers (3)	VT-3	NUREG-0619	NRI
Nozzles (3)	VT-3	NUREG-0619	NRI
Core Spray		· · · ·	• •
Piping / Welds	EVT-1	BWRVIP-18	NRI (Note 1)
Spargers	EVT-1 / VT-1	BWRVIP-18	NRI (Note 1)
Jet Pump			
Riser Brace	EVT-1 / VT-1	ASME/BWRVIP-41	NRI
(JP No.3 & 4)			INIXI
Risers (JP No.3, 4 & 7)	EVT-1	BWRVIP-41	RI (Note 2)
Assemblies (JP No.3 & 4)	EVT-1	BWRVIP-41	NRI (Note 4)
Restrainer Bracket	EVT-1 / VT-1/3	SIL 574 / SIL 629	
Assemblies (JP No.1-20)	· · · ·		RI (Note 6)
Sensing Lines (JP No.3 & 4)	VT-3	SIL 420	NRI
Nozzle Inner Radius Surfaces	VT-1	Relief Request RR-A31 and RR-A31	NRI (Note 5)
			· · · · · · · · · · · · · · · · · · ·
Top Guide / Core Plate			·
6 locations Top Guide	<b>VT-1</b>	SIL 554 / BWRVIP-26	NRI
			<b>*</b>
Shroud	F3 777 4		
Shroud Support	EVT-1 EVT-1	BWRVIP-07 / 38	NRI (Note 3)
Gussets	EV 1-1	BWRVIP-07 / 38	NRI (Note 3)
Steam Dryer	· .		
Assembly 30%	VT-3	SIL 474	No change in indications noted
Steam Separator			
Assembly 30%	VT-3	N/A	NRI
Shroud Head Bolts 50%	VT-3	SIL 433	NRI

Notes:

- (1) Examined accessible areas of all selected piping welds and components to the extent possible per BWRVIP-18 requirements. Sampling inspections were also performed on sparger welds.
- (2) Reinspected indication adjacent to RS-1 weld (1.75") on Jet-Pumps 7 and 8 identified RF-06 (10/98) no change in length observed.
- (3) Examined H-8 and H-9 between Jet Pumps 3 and 4. Examined accessible areas of gussets 2 and 15.
- (4) All assembly welds visually inspected except for welds DF-3, AD-1 and AD-2, which are inaccessible for VT inspection. UT Technique not available.
- (5) Inspected accessible areas of the following nozzle inside radius areas within limits of design and geometry. Reactor Recirculation outlet (1), Reactor Recirculation intlet (5).
- (6) Second cracked tack weld discovered on restrainer screw for Jet-Pump No.15. Crimped screw and installed auxiliary spring wedge as a permanent repair.

## Code Category B-N-1 and B-N-2 Inspections Interval 2, Period 1, RF-08

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Components	Technique	Requirement	Results / Remarks
Brackets			
Steam Dryer Support (4)	EVT-1	BWRVIP-48	NRI
Feedwater Spargers (6)	EVT-1	<b>BWRVIP-48</b>	NRI
Guide Rod Bracket 0° & 180°	EVT-1 / VT-3	<b>BWRVIP-48</b>	NRI
Core Spray Piping (4)	EVT-1	BWRVIP-48	NRI
Feedwater			
Spargers (3)	VT-3	NUREG-0619	NRI
Nozzles (3)	VT-3	NUREG-0619	NRI
Core Spray			
Piping / Welds	EVT-1	BWRVIP-18	NRI (Note 1)
Spargers	EVT-1 / VT-1	BWRVIP-18	NRI (Note 1)
Jet Pump			
Risers (JP No.7 & 8)	EVT-1	BWRVIP-41	RI (Note 2)
Risers (JP No.1 & 2)	EVT-1	BWRVIP-41	NRI
Assemblies (JP No.1 & 2)	EVT-1	BWRVIP-41	NRI (Note 4)
Restrainer Bracket	EVT-1 / VT-1/3	SIL 574 / SIL 629	
Assemblies (JP No.1-20)			NRI
Sensing Lines	VT-3	SIL 420	NRI
Dry Tubes	· · · ·		· · · ·
4-SRM	VT-1	SIL 409 /	NRI
8-IRM	VT-1	RICSIL-073	NRI
Top Guide / Core Plate			
8 locations Top Guide	<b>VT-1</b>	SIL 554 / BWRVIP-26	NRI
Core Plate Bolts (4 locations)	<b>VT-1</b>	SIL 588 / BWRVIP-25	NRI (Note 6)
Shroud		- · · ·	:
Shroud Support	EVT-1	<b>BWRVIP-07 / 38</b>	NRI (Note 3)
Gussets	EVT-1	BWRVIP-07 / 38	NRI (Note 3)
Steam Dryer	· · · · · . ·	•	
Assembly 30%	VT-3	SIL 474	No change in indications
			noted
Steam Separator			· · · · · ·
Assembly 30%	<b>VT-3</b>	N/A	NRI
Shroud Head Bolts 50%	VT-3	SIL 433	NRI

Components	Technique	Requirement	nt Results / Remarks		
Nozzle Inside Radius Sections	VT-1 (1 mil wire)	RR-A31 and RR-A32	NRI (Note 5)		
RPV Seal Surface		N/A			
Head Flange	VT-1		NRI		
Vessel Flange	VT-1		NRI		
O-Rings	VT-1 (Direct)		NRI		
Vessel Cladding	VT-3		NRI		
Control Rod Guide Tubes (10)	EVT-1/VT-3	BWRVIP-47	NRI		
Surveillance Specimen Bracket / Lugs	EVT-1 / VT-3	BWRVIP-48	NRI		

Notes:

(1) Examined accessible areas of all welds and components to the extent possible. BWRVIP baseline inspections were completed RF-06 and RF-07. Sampling inspections were performed on the spargers.

(2) Reinspected indication adjacent to RS-1 weld (1.75") identified RF-06 (10/98) no change in length observed.

(3) Examined approximately 22% of H-8 and H-9 at  $0^{\circ}$  and  $180^{\circ}$  and between Jet Pumps 2 & 3. Examined accessible areas of gussets 1, 2, 3, 11, 12, & 22.

- (4) All assembly welds visually inspected except for welds DF-3, AD-1 and AD-2, which are inaccessible for VT inspection. UT Technique not available.
- (5) Inspected accessible areas of the folowing nozzle inside radius areas within limits of design and geometry. Main Steam (2), Core Spray (1), CRD Hydraulic Return (1) and Reactor Recirculation (3).
- (6) Inspected top of bolts at four azimuth locations only.

## Code Category B-N-1 and B-N-2 Inspections Interval 2, Period 1, RF-07

Components	Technique	Requirement	Results / Remarks
Brackets			
Steam Dryer Support (4)	EVT-1	<b>BWRVIP-48</b>	NRI
Feedwater Spargers (6)	EVT-1	BWRVIP-48	NRI
Guide Rod Bracket @ 180°	EVT-1 / VT-3	<b>BWRVIP-48</b>	NRI
Core Spray Piping (4)	EVT-1	BWRVIP-48	NRI
Feedwater			
Spargers	VT-3	NUREG-0619	NRI
Nozzles	EVT-1	NUREG-0619	NRI
Core Spray			
Piping / Welds	EVT-1	BWRVIP-18	NRI (Note 1)
Spargers	EVT-1	BWRVIP-18	NRI
Jet Pump			
Risers (JP No.7 & 8)	EVT-1	BWRVIP-41	RI (Note 2)
Risers (JP No.11-20)	EVT-1	BWRVIP-41	NRI
Assemblies (JP No.11-20)	EVT-1	BWRVIP-41	NRI (Note 4)
Set Screw Tack Welds	EVT-1	SIL 574	NRI
Sensing Lines	<b>VT-3</b>	SIL 420	NRI
Dry Tubes			
4-SRM	<b>VT-1</b>	SIL 409 /	NRI
8-IRM	<b>VT-1</b>	RICSIL-073	NRI
Top Guide / Core Plate		· · ·	
8 locations Top Guide	<b>VT-1</b>	SIL 554	NRI
Core Plate Bolts (4 locations)	<b>VT-1</b>	SIL 588 R1	NRI
Shroud			
H2 Indication	EVT-1	BWRVIP-07	No change in indication
Shroud Support	EVT-1	BWRVIP-07	NRI (Note 3)
Gussets	EVT-1	BWRVIP-07	NRI (Note 3)
Steam Dryer	•		
Assembly 30%	VT-3	SIL 474	No change
Previous Indications	VT-3/UT		Indications have shallow depth as expected
Steam Separator			
Assembly 30%	VT-3	N/A	NRI
Shroud Head Bolts 50%	VT-3	SIL 433	NRI

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Components	Technique	Requirement	Results / Remarks
Control Rod Blade	· · · · · · · · · · · · · · · · · · ·		
O2-39	EVT-1 CARD 98-17816		Re-look of previous indication – no significant
			changes.
RPV Seal Surface		N/A	
Head Flange	<b>VT-1</b>		NRI
Vessel Flange	<b>VT-1</b>		NRI
O-Rings	VT-1 (Direct)		NRI
Vessel Cladding	VT-3	·	NRI
Control Rod Guide Rods	EVT-1/VT-3	BWRVIP-47	NRI

Notes:

(1) Examined accessible areas of all welds except P-1, which was inaccessible.

- (2) Reinspected indication adjacent to RS-1 weld (1.75") identified RF-06 (10/98) no change in length observed.
- (3) Examined H-8 and H-9 at 0<sup>o</sup> and 180<sup>o</sup> only. Examined accessible areas of gussets between Jet Pumps No.11-20.
- (4) All assembly welds visually inspected expect for welds DF-3, AD-1 and AD-2, which are inaccessible for VT inspection. UT Technique not available.

## **SECTION 4**

## SUMMARY OF COMPONENT SUPPORT EXAMINATIONS

#### 4. SUMMARY OF COMPONENT SUPPORT EXAMINATIONS

VT-3 performed on various, system and component supports. Functional Testing for ASME Section XI, Article IWF-5000 snubbers was performed in accordance with EF-2 Technical Requirements Manual for functional testing of snubbers (Ref. Paragraph 5.1.)

4.1 ASME SECTION XI - IWF (Class 1 and 2) Credit for Component Supports for Interval 2, Period 2, Refuel-09.

CLASS	COMPONENT SUPPORTS	SNUBBERS (1)	TOTAL
1	5	30	35
2	21	56	77
3	15	57	72
Other		55	55

#### NOTE

(1) All Snubbers were visually inspected to the requirements of the Technical Requirements Manual 5.1 and ASME Section XI using Level I, Level II and III, VT-3 certified inspectors.

### 4.2 Technical Requirements Examinations

- 4.2.1 Refuel-09 Examinations
  - 1. VT-3 examinations were performed on all Safety Related and Non Safety Related snubbers selected for functional testing per Technical Requirements Manual 5.1. Total examined was 198.
  - 2. A total of 149 safety related snubbers were functionally tested per the Technical Requirements Manual. 66 snubbers were initially selected at random and functionally tested. Due to testing failures, 83 additional snubbers were functionally tested as required by the Technical Requirements Manual.
  - 3. Seal Life Changeout was performed on 24 snubbers.

### 4.2.2 Refuel-08 Examinations

- VT-3 examinations were performed on all Safety Related and Non Safety Related snubbers per Technical Requirements Manual 5.1. Total examined was 699.
- 2. A total of 66 safety related snubbers per the Technical Requirements Manual were initially selected at random and functionally tested. No snubbers failed functional testing.

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3. Seal Life Changeout was performed on 31 Snubbers.

#### 4.2.3 Refuel-07 Examinations

1. VT-3 examinations were performed on all Safety Related and Non Safety Related snubbers selected for functional testing per Technical Requirements Manual 5.1. Total examined was 223.

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- 2. A total of 66 safety related snubbers per the Technical Requirements Manual. Snubbers were initially selected at random and functionally tested. One additional snubber that failed functional testing during RF-06 was also functionally tested as required by the Technical Requirements Manual.
- 3. Seal Life Changeout was performed on 27 snubbers.
- 4. An additional 124 pre-service examinations were completed, resulting from the installation of additional supports due to a plant modification.

#### 4.2.4 Preservice Examinations

A preservice visual examination was performed for Technical Requirements Manual Snubbers and ASME Section XI supports which were modified, replaced, added, or repaired during refueling outages RF-07, RF-08, and RF-09 (includes seal life changeout).

## **SECTION 5**

## ABSTRACT OF CONDITIONS NOTED

## AND CORRECTIVE ACTIONS TAKEN

#### ABSTRACT OF CONDITIONS NOTED AND CORRECTIVE ACTIONS TAKEN

#### 5.1 Refuel-09

The results of the inservice inspections performed indicate that vessels, piping, and components included in the Fermi ISI-NDE Program are in good structural condition and can support safe and reliable operation during the next operating cycle.

### 5.1.1 RPV Internals

During RF-09 inspections were conducted on numerous reactor vessel components using the recommended inspection methods and techniques contained in various Boiling Water Reactor Vessel Internals Project (BWRVIP) inspection and examination guidelines as well as selected augmented inspections identified in Section 3. The intent is to perform the highest quality inspections on all RPV components including some BWRVIP guidelines that have not yet been formally approved by the NRC. This proactive approach will assure the continued structural integrity of RPV components. A detailed listing of inspections is provided in Section 3.

During vessel flange inspection after disassembly and prior to flood up it was noted that a nail had been compressed between the flanges near stud No. 54. The nail was removed leaving a depression outside of the sealing surface. A condition assessment resolution document (CARD 03-10364) was initiated, no repairs were required. Additionally, after O-ring removal and prior to cleaning, the grooves were inspected and heavy silver deposits were noted to have been transferred from the O-ring. The deposits were flaky in nature and were removed with scotch brite pads followed by light stoning (CARD 03-14819).

Inspections were completed on all accessible welds on two complete Jet Pump Risers and Assemblies (No.3& No.4) to comply with the BWRVIP-41 reinspection recommendations. Reinspection of a previously cracked restrainer set-screw on JP-15 revealed a second cracked tack weld (CARD 03-16929). All 20 Jet Pump restrainer assemblies were reinspected as recommended by SIL No. 629 including the wedge, restrainer screw contact, as well as the 80 restrainer screw tack welds. No additional cracked welds were found. The set-screw on JP-15 was staked to prevent backing out and an auxiliary spring wedge was installed per EDP 32499.

During RF-06 a crack approximately  $1 \frac{34}{2}$  long was identified on the thermal sleeve to elbow weld (RS-1) on the riser of Jet Pumps 7 and 8 at  $120^{\circ}$  AZ. This indication was evaluated and found acceptable for continued operation without repair. This indication was reinspected during RF-07, RF-08, and RF-09 and there continues to be no observable change in length or width. This indication is within the allowable flaw acceptance tolerance for this location and repair is not necessary. Re-inspection of this indication will again be performed during RF-10. This crack is similar to indications identified in at least 5 other BWR plants.

Indications and conditions identified during previous outages were reinspected during RF-09. One additional tie rod on the steam dryer was found to have a cracked tack weld (TR-E-6) similar to those noted previously. There is little or no concern that this nut, or any others, will back out during the current cycle with the remaining sound welds. No other changes were noted.

The RPV internals are in very good condition. There is no service related degradation that should impact plant performance during the next operating cycle. Internal inspections are

achieving their goal of detecting and monitoring degradation and effecting prudent repairs/replacement to maintain the plant in a safe and reliable manner.

5.1.2 RPV External Volumetric and ASME Piping Weld Examinations

During RF-09 Detroit Edison implemented a Risk Informed Inservice Inspection Program for ASME Class 1 piping welds. No piping weld defects were detected.

New utility performance demonstration initiative requirements (ASME Section XI, Appendix VIII, Supplement 10) were also implemented for two dissimilar metal weld inspections. No indications of service related degradation were detected.

RPV weld ultrasonic examinations using ASME Section XI, Appendix VIII/PDI procedures continue to be performed for the first time on scheduled weld locations. These more sensitive examinations are identifying a significantly larger number of manufacturing flaws than were reported during previous amplitude based examinations. These more sensitive inspections detected 4 indications/combinations that would have been unacceptable per IWB-3510. These pre-existing welding flaws were confirmed by review of the construction radiographs and the pre-service UT data. One large slag indication/combination was detected in lower intermediate shell course weld 15-308B and was accepted in accordance with IWB-3112 (b). However, due to its significant size, a fracture mechanics evaluation was performed as specified in CARD 03-16383 to verify the flaw will not present a structural or leakage problem during the remaining service-life of the RPV with a projected 20% power uprate, and including a 20 year life extension. INPO OE16421 was issued to notify other licensees.

During the performance of Category B-G-2 bolting inspections, loose nuts were detected on valve bolting at E11-F009-VBB and CARD 03-16366 was initiated. Investigation determined that the loose bolting was related to torquing practices for pressure seal bonnet bolting. An initial sample expansion was made and additional loose bolting was detected. The sample was extended to cover all pressure seal style bonnet bolting. Additional CARDs 03-16370, 03-16371, and 03-16372 were initiated for loose bolting during the expanded sample examinations of E11-F060B-VBB, B21-F011B-VBB, and E11-F008-VBB. Work requests (000Z031279, 000Z031430, 000Z031420, and 000Z0231490) were initiated to re-torque the pressure seal bonnet bolting with system pressure under the bonnets.

No service related degradation was noted during RF-09 NDE. The RPV and piping systems are in satisfactory condition to support future safe operation of the plant.

5.1.3 Component Supports

Several hangers were found with discrepancies between the installed condition and their configuration documents. It was determined that these conditions did not effect the components operability and were not reportable. No additional supports were inspected as a result of these observations.

Snubber functional testing found eight mechanical snubbers that did not meet acceptance criteria. Five of the failures were due to grease degradation. The other three failures were due to overload. All snubbers were replaced with rebuilt and tested snubbers. An evaluation of the effect of the failed snubbers on their associated piping found no adverse effects. All required sample expansions were completed to meet the requirements of the Technical Requirements Manual 5.1. Reference the following CARDs: 03-16111, 03-03-16112, 03-16921, 03-16933, 03-16934, 03-16935, 03-16927.

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#### 5.2 Refuel-08

The results of the inservice inspections performed indicate that vessels, piping, and components included in the Fermi ISI-NDE Program are in good structural condition and can support safe and reliable operation during the next operating cycle.

#### 5.2.1 **RPV Internals**

During RF-08 inspections were conducted on numerous reactor vessel components utilizing the recommended inspection methods and techniques contained in various Boiling Water Reactor Vessel Internals Project (BWRVIP) inspection and examination guidelines as well as selected augmented inspections identified in Section 3. Fermi's intent was to perform the highest quality visual inspections on all RPV components utilizing some BWRVIP guidelines that have not yet been formally approved by the NRC. This proactive approach will assure the continued structural integrity of RPV components. A detailed listing of inspections is provided in Section 3.

Inspections were completed on all accessible welds on two complete Jet Pump Risers and Assemblies (No.1& No.2) to comply with the BWRVIP-41 reinspection recommendations. These inspection points included welds previously inspected and no recordable indications were identified.

Baseline inspections had been previously completed for all Jet Pump assembly welds (No.1-20) during RF-06 and RF-07, with the exception of welds DF-3, AD-1 and AD-2. Inspection of these locations will be conducted during future outages when a technique is developed and qualified.

During RF-06 a crack approximately 1  $\frac{34}{2}$  long was identified on the thermal sleeve to elbow weld (RS-1) on the riser of Jet Pumps 7 and 8 at  $120^{\circ}$  AZ. This indication was evaluated and found acceptable for continued operation without repair. This indication was reinspected during RF-07 and again in RF-08, and there continues to be no observable change in length or width. This indication is within the allowable flaw acceptance tolerance for this location and repair is not necessary. Re-inspection of this indication will again be performed during RF-09. This crack is similar to indications identified in at least 5 other BWR plants.

Because of recent industry findings, all 20 Jet Pump restrainer assemblies were inspected as recommended by SIL No. 629 including the wedge, restrainer screw contact, as well as the 80 restrainer screw tack welds. The conditions on Jet Pump No.15 were again unchanged, and it still appears to have only one of 2 tack welds cracked. No additional cracked welds were found, therefore, no repairs were required this outage. In addition, there was no wedge damage identified and full contact (no gaps) was verified on all restrainer screws on all Jet Pumps.

Extensive visual inspections of Core Spray internal piping and spargers were performed per the BWRVIP-18 Guidelines for reinspection. No indications of cracking were identified. All accessible areas of the welds were inspected and no recordable indications were identified.

Inspections were performed on selected integral attachments per the guidelines of BWRVIP-48 and on approximately 22% of the Shroud Support Ring as well as several Gussets per the guidelines of BWRVIP-38. In addition, visual inspections were performed on several nozzle

inner radius sections per Relief Request RR-A31 and A32. No recordable indications were identified on any of these inspections.

Two new indications were identified on the steam dryer assembly welds in areas not previously inspected. The indications were identical to those previously reported. These indications were evaluated and no repairs were required during RF-08. Visual and ultrasonic inspections will continue to be performed during future outages.

Indications and conditions identified during previous outages were reinspected during RF-08. The reinspection included the following items with no further degradation identified.

- Steam Dryer tie rod nut to washer tack welds cracks and support ring.
- RPV internal surfaces "Bathtub Ring".
- SRM / IRM Dry Tubes.

No adverse changes in existing indications were noted. The RPV internals are in very good condition. There is no service related degradation that should impact plant performance during the next operating cycle. Internal inspections are achieving their goal of detecting and monitoring degradation and effecting prudent repairs/replacement to maintain the plant in a safe and reliable manner.

5.2.2 RPV External Volumetric and ASME Piping Weld Examinations

During RF-08 Detroit Edison implemented a Risk Informed Inservice Inspection Program for ASME Class 1 piping welds. No piping weld defects were detected.

New utility performance demonstration initiative requirements (ASME Section XI, Appendix VIII, Supplements 4 and 6) were also implemented for RPV weld inspection. These more sensitive inspections detected existing fabrication flaws that were confirmed by review of construction radiographs.

During the performance of Class 2 weld inspections, one service related defect was detected at a stiffener plate weld adjacent to a vessel support ring on the division 2 RHR heat exchanger. The defect appeared to have originated from a pre-existing construction flaw in the stiffener plate weld tie-in at the support ring weld and propagated into the base material in the heat affected zone of the stiffener plate. The inspection sample was expanded to include all of the stiffener plate welds at that location. No additional indications were detected. The defect was reported on CARD 01-20653 and the defect was ground out and repaired by welding. The repaired area was then re-inspected to verify defect removal.

No other service related conditions were noted during RF-08 inspections.

#### 5.2.3 Component Supports

Several hangers were found with discrepancies between the installed condition and their f configuration documents. It was determined that these conditions did not effect the components operability and were not reportable. No additional supports were inspected as a result of these observations.

Hanger P45-3353-G14, which was not in the sample scope, was found by plant personnel to be pulled from the wall. A new baseplate was mounted and the strut returned to design settings. An inspection scope expansion was initiated and all other supports on the P45-3353 line were

inspected. One minor discrepancy (loose jamb nut) was found and corrected. It was determined that this did not impact component operability.

#### 5.3 Refuel-07

Nondestructive examinations have verified that RPV and internals piping systems and supports are in good structural condition and can support safe and reliable operation during this operating cycle.

5.3.1 RPV Internals

During RF-07 inspections were conducted on numerous reactor vessel components utilizing the recommended inspection methods and techniques contained in various Boiling Water Reactor Vessel Internals Project (BWRVIP) inspection and examination guidelines as well as the augmented inspections identified in Section 3. While it is true that many of the guidelines are not yet approved by the NRC, the intent was to perform the highest quality visual inspections on RPV components. This proactive approach will assure the structural integrity of RPV components.

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Inspections were initially scheduled for 50% of the Jet Pump risers and assemblies (No.11-20) to comply with BWRVIP-41 inspection recommendations. These inspection points included welds not previously inspected. During RF-06 a crack approximately 1 ¾" long was identified on the thermal sleeve to elbow weld (RS-1) on the riser of Jet Pumps 7 and 8 at 120<sup>0</sup> AZ. This indication was evaluated and found acceptable for continued operation without repair. This indication was reinspected during RF-07 and there was no observable change in length or width. This indication is within the allowable flaw acceptance tolerance for this location and repair is not necessary. Re-inspection of this indication will again be performed during RF-08. This crack is similar to indications identified in at least 5 other BWR plants.

All accessible and welds and locations on Jet Pumps assemblies No.11-20 were inspected and no recordable indication were identified. A baseline inspection has been completed for all Jet Pump welds (No.1-20) with the exception of welds DF-3, AD-1 and AD-2. Inspection of these locations will be conducted during future outages when a technique is developed and qualified. Reinspections on 1 of the 20 original control rod blades (02-39) identified very little change from the cracking on the sheath area near the handle on blade identified in RF-06. These indications were evaluated and are not detrimental to the operation of the control blade. While not a code inspection, several blades were periodically inspected as recommended by General Electric, following the chemistry transient in 1993.

No new indications were identified on the steam dryer assembly welds in areas not previously inspected. Both ISI and General Electric previously evaluated the indications. No repairs were required during RF-07. In addition, selected linear indications on the steam dryer support ring were ultrasonically inspected to determine the depth. The indications are shallow, less than <sup>1</sup>/<sub>2</sub>" in depth, and pose no threat to the integrity of the steam dryer assembly. Visual and ultrasonic inspections will be performed during future outages.

Indications and conditions identified during previous outages were reinspected during RF-06. The reinspection included the following items with no further degradation identified.

- Core Shroud ID linear indication above the H2 weld.
- Steam Dryer tie rod nut to washer tack welds cracks and support ring.
- RPV internal surfaces "Bathtub Ring".

#### • SRM / IRM Dry Tubes.

The Jet Pump restrainer screws were again inspected (80 tack welds). The conditions were unchanged this outage on Jet Pump No.15, which had one of 2 tack welds cracked. No additional cracked welds were found. The condition identified previously did not require repair this outage.

Extensive inspection of Core Spray internal piping and spargers were performed per BWRVIP-18 Guidelines. No indications of cracking were identified. All accessible areas of welds were inspected with the exception of the P-1 weld, which is inaccessible for inspection.

No adverse changes in existing indications were noted. The RPV internals are in very good condition to date. There is no service related degradation that should impact plant performance during the next operating cycle. Internal inspections are achieving their goal of detecting and monitoring degradation and effecting prudent repairs/replacement to maintain the plant in a safe and reliable manner.

5.3.2 RPV External Volumetric and ASME Piping Weld Examinations

No service related defects were detected during RF-07 by nondestructive examinations performed.

5.3.3 Component Supports

Hanger E11-3184-G18 was found to have a loose jamb nut on the main strut and was tightened. It was determined that this did affect operability.

Hangers N30-3258-G02, G03, G08, G10, G11, G12, G14, G15, G16, N30-3259-G06, G07 and G08 were found with notches worn on the threaded rod at the top of the support. This condition was evaluated and it was determined that this did not impact component operability. Hangers N30-3258-G07 and G08 the notches were blended to remove sharp edges.

Hangers N30-3258-G04 and G15 were found to be slightly outside their cold setting. It was determined that this did not impact component operability. The hangers were reset to their cold position.

These conditions were not reportable.

#### 5.4 Refuel-06

### 5.4.1 RPV Internals

During RF-06 inspections were conducted on numerous reactor vessel components utilizing the recommended inspection methods and techniques contained in various Boiling Water Reactor Vessel Internals Project (BWRVIP) inspection and examination guidelines. While it is true that many of the guidelines are not yet approved by the NRC, the intent was to perform the highest quality visual inspections on RPV components. This proactive approach will assure the structural integrity of RPV components.

Inspections were initially scheduled for 50% of the Jet Pump risers and assemblies to comply with BWRVIP inspection recommendations. These inspection points included welds not previously inspected on the risers. A crack approximately 1 34" long was identified on the thermal sleeve to elbow weld (RS-1) on the riser of Jet Pumps 7 and 8 at 120<sup>o</sup> AZ. This

indication was evaluated and found acceptable for continued operation without repair. Reinspection of this indication will be performed during RF-07. This crack is similar to indications identified in at least 5 other BWR plants within the last year.

Inspections of 2 of the 20 original control rod blades identified cracking on the sheath area near the handle on blade 02-39. These indications were evaluated and are not detrimental to the operation of the control blade. However, Reactor Engineering is evaluating future inspection requirements for the additional old style blades. While not a code inspection, these blades are periodically inspected as recommended by General Electric, following the chemistry transient in 1993.

Several new indications were identified on the steam dryer assembly on welds or areas not previously inspected. These indications are similar to other previously reported indications on the dryer. Both ISI and General Electric evaluated the indications. No repairs were required during RF-06, but recommendations were made to re-inspect the non-safety related dryer assembly, both visually and ultrasonically in future outages.

Indications and conditions identified during previous outages were reinspected during RF-06. The reinspection included the following items with no further degradation identified.

- Core Shroud ID linear indication above the H2 weld.
- Steam Dryer tie rod nut to washer tack welds cracks and support ring.
- Shroud head bolt No.9 was replaced because it would not latch.
- RPV internal surfaces "Bathtub Ring".

The Jet Pump restrainer screws were again inspected (80 tack welds). The conditions were unchanged this outage on Jet Pump No.15, which had one of 2 tack welds cracked. No additional cracked welds were found. The condition identified previously did not require repair this outage.

Extensive inspection of Core Spray internal piping and spargers were performed per BWRVIP-18 to address recent industry occurrences of cracking. No indications of cracking were identified.

The Core Shroud was ultrasonically inspected as required by NRC commitment in accordance with the latest techniques and methods included in the BWRVIP inspection standards. Fermi 2 surpassed eight years of hot operating time, as a result inspection of the H3, H4, H5, and H7 welds were required. Inspections were performed using focused phased array ultrasonic techniques. This inspection identified no evidence of IGSCC in the welds and because of the extensive coverage obtained with the GE tooling, reinspection will not be required for 6 years.

No adverse changes in existing indications were noted. The RPV internals are in very good condition to date. There is no service related degradation that should impact plant performance during the next operating cycle. Internal inspections are achieving their goal of detecting and monitoring degradation and effecting prudent repairs/replacement to maintain the plant in a safe and reliable manner.

5.4.2 External Volumetric and ASME Piping Weld Examinations

No service related defects were detected during RF-06 by nondestructive examinations performed.

Examinations were encountered with physical limitations that prevented complete code coverage from being achieved. Relief requests have been prepared or are being revised to address all limitations encountered during the First Inspection Interval.

NDE examinations have verified that ASME piping systems are in good structural condition and can support safe and reliable operation during the next operating cycle.

#### 5.4.3 Component Supports

Eight component supports were discovered with minor service related discrepancies from the RF-06 inspection population of 138 component supports. Structural integrity evaluations were performed which concluded all component supports satisfied operability requirements. Therefore, no reportable conditions exist.

### 5.5 Refuel-05

#### 5.5.1 RPV Internals

During RF-05 two new concerns were identified and evaluated. Nine of the twelve SRM / IRM dry tubes were found not to be fully engaged in the top guide, but are sufficiently engaged to remain functional.

One of the two tack welds on a Jet Pump restrainer screw were found to be cracked. As a result, all 80 restrainer screw tack welds were inspected. No additional cracked welds were found. This condition did not require repair this outage.

Extensive inspection of Core Spray internal piping and spargers was performed to address recent industry occurrences of cracking. No indications of cracking were identified.

Indications identified during previous outages were reinspected during RF-05. The reinspection included the following items:

- Core Shroud ID linear indications above the H2 weld.
- Steam Dryer tie-rod nut to washer tack welds cracks.
- Steam dryer support ring.
- RPV internal surfaces at the "bathtub ring".

No adverse changes in existing indications were noted. The RPV internals are in very good condition to date. There is no service related degradation that should impact plant performance during the next operating cycle. Internals inspections are achieving their goal of detecting and monitoring degredation and effecting prudent repairs/replacements to maintain the plant in a safe and reliable manner.

	Repairs or Replacements Completed	Outage(s)
	Shroud Head Bolt replacement	RF-04, RF-05
÷.,	Jet-Pump Beam replacement	RF-04
	Steam Dryer End Panel repair	RF-03
	welding	

#### 5.5.2 Reactor Pressure Vessel External/Volumetric and ASME Piping Weld Examinations

No service related defects were detected during nondestructive examinations performed during RF-05. While it is still to early to draw any global conclusions about effectiveness of IGSCC mitigation treatments (IHSI, and MSIP) performed at Fermi, preliminary indications are good. No IGSCC has been detected to date in any piping welds. Additionally, no evidence of fatigue cracking has been detected in any RPV, piping system, or support welds.

#### 5.5.3 Component Supports

Several component supports were found with discrepancies between the existing field configuration versus as-built hanger sketch. Deviation Event Reports were issued to perform structural integrity calculations. These evaluations determined that the existing field configurations did not effect the component operability; no reportable configurations were found. No additional component supports were examined as a result of these observations.

5.6 Refuel-04

5.6.1 RPV Internals

During inspection of the RPV Internals/Internal Components a number of indications were reported to Detroit Edison for review/disposition. The reported conditions are listed as follows:

Core Shroud - Extensive Visual Examination of the Core Shroud outside surface welds was performed following hydrolazing of each weld. The circumferential welds on the outside surface of the Core Shroud were visually examined (VT-1) to the maximum extent possible from the H-1 weld through the H-7 weld with no indications being found. The H-8 and H-9 shroud support welds were also examined (VT-3) but from a greater distance and at a greater camera angle. No indications were found.

Core Shroud Inside Surface - The inside surface of the Core Shroud was inspected to the maximum extent on the H-2 through H-4 welds (VT-1). No indications were found on the H-3 and H-4 welds on the inside surface of the shroud. Two small indications <1-inch long were found at the 125° azimuth just above the H-2 weld but not in the H-2 weld. These indications were in a general vertical direction, jagged in nature, and tight with no visible separation. These indications appear to be different from indications found at other BWR's and most probably are a result of cold working during the fabrication process. These indications were evaluated against established flaw screening criteria and have no significant effect on the structural integrity of the shroud (reference deviation event report, DER 94-0221).

Corrosion Deposits/Biological Growth Deposits - Unusual surface conditions were identified during IVVI examinations on the unclad feedwater nozzles and also on the RPV cladding near the steam line nozzles 360° around the vessel. As a result, a sampling dive into the RPV was performed. A diver successfully completed the necessary corrosion product sampling, visual examinations, and exploratory examinations in the Reactor Vessel. Corrosion deposit samples were removed from both the "C" feedwater nozzle unclad area (150°) and the cladding at approximately the same azimuth. Based on the results of the sampling, there was no evidence of micro biologically induced corrosion (MIC) in the vessel, although the samples did test positive for the presence of bacteria. (DER 94-0204)

Additionally, the diver found (loose corrosion) on the feedwater nozzles. The deposits were easy to scrape off. There was no base metal attachment to the unclad surfaces. The corrosion

deposits on the vessel cladding (360°) were found to be more tightly adhered than the deposits on the feedwater nozzles. However, the vessel cladding corrosion deposits have been looked at and have been confirmed that there had been no base metal attack.

No pits or degradation of the cladding were identified. A special hydrolazing nozzle was utilized to remove the corrosion deposits on both the feedwater nozzles and the vessel cladding. The hydrolyzing was 100 percent effective in cleaning the feedwater nozzles and approximately 75 percent effective in removing the deposits on the vessel cladding.

Steam Dryer - Tie Rod Nut/Washer Tack Welds - Many of the 48 tie rod end washers/nuts protrude above the unit end plate surface. Fifteen of the protruding tie rods had cracked tack welds; however, all but 4 of these had at least 2 intact tack welds at each location. The remaining 4 tie rod nut/washers which had failed tack welds did not represent a structural or functional concern. There is little or no concern that these four nuts will back out during the current cycle with the remaining sound welds. Repairs made during RF-03 on the hood to end panel welds were re-inspected and found to be in good condition. (DER 94-0194)

Steam Dryer Support Ring - Two small indications were identified on the steam dryer support ring this outage; one indication was approximately 1/2" in length on the vertical face of the ring, the other indication was 4" - 6" in length on the horizontal face of the support ring. Based on experience with support ring cracking on similar dryers, these indications were caused by IGSCC. The primary source of stress is residual fabrication stress. Based on experience from similar dryers of the same design with more severe cracking, this crack does not present a concern for the structural adequacy of the support ring. (DER 94-0194)

Shroud Head Bolts - All Shroud Head Bolts were examined using Improved Ultrasonic Testing procedures. Crack-like indications were found in 16 of 48 bolts. The crack location was identical to those found at other BWRs (i.e., at the collar crevice). The 16 cracked bolts were replaced with those of a new and more IGSCC crack resistant design. A 17th bolt was replaced since it had a slight bow that precluded reinstallation. The remaining old design bolts which had no indications were reviewed and found to be acceptable for the next operation cycle. These bolts were reinstalled returning the configuration to the original design of 48 bolts. A design review was performed, in part, to determine the structural significance of operating with indications in 16 shroud head bolts. This review determined that only 20 bolts are required to fulfill design requirements. (DER 94-0210)

Jet Pump Hold Down Beams - As a precaution Detroit Edison replaced the (20) Jet Pump hold down beams. This was done as a conservative measure based on recent industry experience with beam cracking and possible deleterious effects from the chemistry transient. Following replacement Detroit Edison performed a baseline pre-service examination of the installed beams prior to plant start-up using the latest available technique for detecting cracking. Of the 20 Jet Pump assemblies, 12 beam bolt assemblies were changed in situ, 7 required that the inlet mixer assembly be removed, and 2 mixer assemblies were removed to permit camera access to the RPV bottom head area. Each mixer which was removed had a camera inserted for RPV bottom area examination. No discrepancies were observed. (DER 93-0643)

#### 5.7 Refuel-03

#### 5.7.1 RPV Internals

During inspection of the RPV Internals/Internal Components two cracks were reported to Detroit Edison for review/disposition. The reported conditions are listed as follows:

Crack Number 1 was located in hood to end plate weld HE-B-1. The crack was approximately 50" long, with a maximum gap of 1/2 inch. The crack ran through the throat of the weld and was caused by high cycle fatigue. This crack is not uncommon to the industry, having occurred at other plants.

Crack Number 2 is located in the end plate of dryer bank "A" just above the weld to the end plate of the drain trough. The crack is in the weld heat affected zone (HAZ) between Tie Rods TR-A-7 and TR-A-8. The crack is caused by Intergranular Stress Corrosion Cracking (IGSCC).

Crack Number 1 was repaired by grinding out the existing failed weld and preparing the base metal edges for the new weld, clamping the crack closed, rewelding the hood to end plate joint, and welding a new reinforcing plate over the replaced/existing weld. With the exception of the original failed weld repair, this repair process was repeated at three (3) similar locations where the potential future weld failure was high. This was performed as a preventive measure to preclude future joint failure, higher personnel exposure, and higher future repair costs.

An evaluation was performed on Crack Number 2, and it was determined that this crack did not require repair as there is low probability that this crack will propagate into weld or base metal outside the HAZ. The crack will tend to grow at a slow rate, as the stresses at this crack location during dryer operation are low. Crack Number 2 will continue to be monitored during future outages.

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These indications previously identified during inspections performed in RF-01 and RF-02 were again reinspected with no change in conditions noted. These areas in addition to the cracks identified and repairs performed during RF-03 will be monitored during further inspection of the RPV internals as required by ASME Section XI, Table IWB-2500-1 (B13.10).

#### 5.7.2 Component Supports

Several hangers were found with discrepancies between the installed condition and their configuration documents. Deviation Event Report (DER) 92-0573 was initiated for evaluation. It was determined that their nature was such that it did not effect the components operability and was not reportable. No additional supports were inspected as a result of these observations.

#### 5.8 Refuel-02

#### 5.8.1 RPV Internals

During inspection of the RPV Internals/Internal Components an additional indication to the ones previously identified during RF-01 was reported to Detroit Edison for review/disposition. The reported indications are listed as follows:

An apparent arc strike was noted on core spray internal piping at 310°. This was not recorded in the previous inspection.

This condition and those previously identified during RF-01 were evaluated using prudent engineering practices and were determined not to be non-conforming to the original design requirement or detrimental to continued service.

No corrective action was taken to repair these indications. These areas will be monitored during future inspections of the RPV internals as required by ASME Section XI, Table IWB-2500-1 (B13.10)

#### 5.8.2 Piping Welds

No service related defects were detected during the inspection of piping welds, 2 welds having rejectable indications were reported to Detroit Edison for review/disposition. The reported indications are listed as follows:

Weld SW-E11-3151-1WH had rejectable surface indications identified during the magnetic particle examination; deviation event report DER 91-0262 was initiated for evaluation.

Weld SW-RD-2-B3-W5LU-B had rejectable surface indications identified during the liquid penetrant examination; DER 91-0234 was initiated for evaluation.

Both welds were subsequently blend ground to remove the indications and reexamined by both surface and volumetric techniques with acceptable results. The initial indications on both welds were most likely left over from construction. No additional welds were inspected as a result of these minor indications.

#### 5.9 Refuel-01

5.9.1 RPV Internals

During inspection of the RPV Internals/Internal Components several conditions were reported to Detroit Edison for review/disposition. The reported indications are listed as follows:

Tack weld on feedwater sparger bracket at 180° for attachment nut/pin was not visible.

Unusual surface conditions (arc strikes and pitting) were noted on Loop A Core Spray Piping at approximately 140°. Additional light scratches were noted on both Loop A and Loop B Core Spray Internal Piping.

Small arc strikes were noted on the Core Spray Internal piping/sparger brackets at 15° and 150°.

A small arc strike was noted on the Upper Core Spray Sparger (shroud area) at 145°.

The above conditions were evaluated using prudent engineering practices and were determined not to be non-conforming to the original design requirement or detrimental to continued service.

No corrective action was taken to repair these indications. These areas will be monitored during future inspections of the RPV internals as require by ASME Section XI, Table IWB-2500-1 (B13.10)

#### 5.9.2 Component Supports

Hanger T48-2097-G21 was found to have insufficient clearances. Deviation Event Report (DER) 89-1315 was initiated for evaluation. It was determined that this was not reportable. The hanger was reworked to provide acceptable clearances as specified on the hanger sketch. Additional adjacent supports were visually inspected with no discrepancies identified.

## **SECTION 6**

## PROGRAM STATUS, ASME SECTION XI CREDIT - IWB, IWC & IWF

6. PROGRAM STATUS, ASME SECTION XI CREDIT - IWB, IWC, & IWF, Interval 2, Period 2, Refuel-09 (Excludes Pressure Testing)

### 6.1 CATEGORY B-A

6.1.1	CATEGORY: ITEM NO:	B-A B.1.11	Pressure Retaini Shell Welds-Cire	•	actor Vessel
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)
	RPV	4	4 (Note 1)	0	0%
	TOTALS:	4	4 (Note 1)	0	0%

### NOTE

(1) Relief Request RR-A25 was written to negate the need for examination of these welds beyond the overlap zone of the intersecting longitudinal seam.

6.1.2 CATEGORY: ITEM NO		B-A B.1.12	Pressure Retaini Shell Welds - Lo	•	actor Vessel
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)
	RPV	14	14	7	50%
	TOTALS:	14	14	7	50%

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## 6.1.3

6.1.4

CATEGORY: B-A ITEM NO: B.1.21 Pressure Retaining Welds in Reactor Vessel Head Welds - Circumferential

System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
RPV	2	2	1	50%	
Closure				-	Ī
Head	к н 				
RPV	2	1 (1)	.5	50%	1
Bottom		· 1.			
Head	· · · · · ·				;
TOTALS	4	3 (1)	1.5	50.0%	

### NOTE

(1) Some of these examinations are subject to limitations as identified in ISI/NDE Program Plan, Table A. Relief Request RR-A1 documents these limitations.

		· · · · · · · · · · · · · · · · · · ·	Pressure Retaining Welds in Reactor Vessel Head Welds - Meridional			
	System	Total Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	
	RPV	13	13	6	46.2%	
	Closure				,	
	Head	17	10/1)	¢	600	
	RPV Bottom	17	10(1)	6	60%	
	Head					
	TOTALS:	30	23 (1)	12	52.2%	

### NOTE

(1) Some of these examinations are subject to limitations or are inaccessible as identified in ISI/NDE Program Table A. Relief Request RR-A1 documents these limitations.

# 6.1.5 CATEGORY: B-A Pressure Retaining Welds in Reactor Vessel ITEM NO: B1.30 Shell-To-Flange

System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%) (1)
RPV	1	. 1	.5	50%
TOTALS:	1	1	.5	50%

### NOTES

(1) The examination of shell-to-flange welds may be performed during the first and third inspection periods in conjunction with the nozzle examinations of Exam. Cat. B-D (Program B). At least 50% of shell-to-flange welds shall be examined by the end of the first inspection period, and the remainder by the end of the third inspection period. (Ref. IWB-2500-1, Category B-A, Footnote (4)).

6.1.6	CATEGORY:	B-A	. '	Pressure Retaining Welds in Reactor Vessel
	ITEM NO:	B1.40		Head-To-Flange
		· .		

System	Total Comp.	Total Requiring	Examined To	Examined To Date
		Examination	Date	(%)
RPV	1	1	.33 (1)	33.3%
TOTALS:	· · · · 1	1	.33 (1)	33.3%

## **CATEGORY B-A Totals**

Item No.	Total Requiring Examination (3)	Examined To Date (2)	Minimum Required (1)	Maximum Allowed (2)
B1.11	4	0(0%)	N/A	N/A
B1.12	14	7 (50%)	N/A	N/A
<b>B1.21</b>	3	1.5 (50%)	N/A	N/A
B1.22	23	12 (52.2%)	N/A	N/A
<b>B1.30</b>	1	.5 (50%)	N/A	N/A
B1.40	1	.33 (33.3%)	N/A	N/A
TOTALS:	46	21.3 (46.3%)	N/A	67%

NOTES

- (1) Table IWB-2500-1 allows deferral to the end of the inspection interval. However, maximum credited/allowed shall not exceed percentages provided in Table IWB-2412-1.
- (2) Exam percentage requirements are based on category totals, not item totals. Item percentages are provided for information only.
- (3) Some of these examinations are subject to limitations or are inaccessible as identified in ISI/NDE Program Plan A Table. Relief Request RR-A1 documents these limitations.

### 6.2 CATEGORY B-D

6.2.1	CATEGORY: ITEM NO:	B-D B3.90	Full Penetration Welds of Nozzles in Vessels Nozzle-To-Vessel Welds		
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%) (1)
	RPV	30	30	17	56.6%
	TOTALS:	30	30	17	56.6%

### NOTE

(1) At least 25% but not more than 50% (credited) of the nozzles shall be examined by the end of the first inspection period and the remainder by the end of the inspection interval (Ref. Table IWB-2500-1, Category B-D, Footnote (2)).

6.2.2	CATEGORY: ITEM NO:	B-D B3.100	Full Penetration Nozzle Inside Ra		es in Vessels	
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%) (1)	:
	RPV	30	30	19	63.3%	-
	TOTALS:	30	30	19	63.3%	-

#### NOTE

(1) At least 25% but not more than 50% (credited) of the nozzles shall be examined by the end of the first inspection period and the remainder by the end of the inspection interval (Ref. Table IWB-2500-1, Category B-D, Footnote (2)).

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## **CATEGORY B-D TOTALS**

Item No.	Category B-D Totals Total Requiring Examination	Examined to Date	Minimum Required (1)	Maximum Allowed (1)
B3.90	30	17 (56.6%)	25%	N/A
B3.100	30	19 (63.3%)	25%	N/A
TOTALS:	60	36 (60%)	25%	N/A

### NOTE

(1) At least 25% but not more than 50% (credited) of the nozzles shall be examined by the end of the first inspection period and the remainder by the end of the inspection interval (Ref. Table IWB-2500-1, Category B-D, Footnote (2)).

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#### 6.3 **CATEGORY B-F**

6.3.1	CATEGORY: ITEM NO:	B-F B5.10	Pressure Retaining Dissimilar Metal Welds RPV Nozzle to Safe End Butt Welds ≥ 4" Dia.			
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
	RRS	12	4	1	25%	
	CS	2	2	1	50%	
	RPV	3	2	1	50%	
	TOTALS:	17	8	3	37.5%	

6.3.2	CATEGORY: ITEM NO:	B-F B5.20	Pressure Retaining RPV Nozzle to Sa	• ·	
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)
	SLC	1	1	1	100%
	TOTALS:	1	1	1	100%

6.3.3	CATEGORY: ITEM NO:	B-F B5.130	Pressure Retaining Dissimila0Piping Butt Welds ≥ 4" Dia.		r Metal Welds	
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
	RHR	3	2	1	50%	
	CS	2	2	1	50%	
	RWCU	2	0	0	0%	
	TOTALS:	7	4	2	50%	

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## **CATEGORY B-F TOTALS**

Item No.	Category B-F Totals Total Requiring Examination (1)	Examined to Date	Minimum Required	Maximum Allowed
B5.10	8	3 (37.5%)	(2)	(2)
B5.20	<b>1</b>	1 (100%)	(2)	(2)
B5.130	4	2 (50%)	(2)	(2)
TOTALS:	13	6 (46.1%)	16%	67%

## NOTES

(1) Risk Informed Inservice Inspection (RIISI) Program sample size.

(2) Exam percentage requirements are based on Category totals, not item totals. Item percentages are supplied for information only.

## 6.4 CATEGORY B-G-1

6.4.1	CATEGORY: ITEM NO:		B-G-1 B6.10	Pressure Retaining Bolting Greater than 2" in Dia. Closure Head Nuts			
		System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
		RPV	68	68	45	66.2%	
		TOTALS:	68	68	45	66.2%	
						•	
6.4.2	CATE	GORY: ITEM NO:	B-G-1 B6.20	Pressure Retaining Bolting Greater than 2" in Dia. Closure Studs in Place			
		System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
		RPV	68	64 (1)	19	29.7%	
		TOTALS:	68	64 (1)	19	29.7%	

## NOTES

(1) Inspections are performed in conjunction with item No. B6.30. Four (4) studs are removed at each Reactor Refuel.

6.4.3	CATEGORY: ITEM NO:	B-G-1 B6.30	Pressure Retaining Bolting Greater than 2" in Dia. Closure Head Studs when Removed			
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
	RPV	68	4 (1)	4	100%	
	TOTALS:	68	4 (1)	4	100%	
	NOTES					

(1) Inspections are performed in conjunction with item No. B6.20. Four (4) studs are removed at each Reactor Refuel.

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6.4.4	CATEGORY: ITEM NO:	B-G-1 B6.40	Pressure Retaining Bolting Greater than 2" in Dia. Reactor Vessel Threads in Flange		
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)
	RPV	68	68	45	66.2%
	TOTALS:	68	68	45	66.2%
6.4.5	CATEGORY:	B-G-1	Pressure Retaini	ng Bolting Grea	ter than 2" in Dia.

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ITEM NO:	B6.50	Reactor Vessel Closure Washers, Bushings (When Removed)					
System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)			
RPV	Washers 68	68	45	66.2%			
	Bushings 68	68 (1)	0	0%			
TOTALS:	136	136 (1)	45	33.1%			

NOTE

(1) Inspection of bushings is only required for connections that are disassembled.

6.4.6	CATEGORY: ITEM NO:			• . •	Greater than 2" in Dia.	
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
	RRS	32	32	16	50%	
	TOTALS:	32	32	16	50%	
6.4.7	CATEGORY:	B-G-1	Pressure Retaini	ng Bolting Grea	ter than 2" in Dia.	
	ITEM NO:	B6.200	Pumps, Nuts, Bushings and Washers (1)			
	System	Total Comp.	Total Requiring Examination	Examined To Date (1)	Examined To Date (%)	
	RRS	32	32	16	50%	
	TOTALS:	32	32	16	50%	

# NOTES

(1) Inspections are performed in conjunction with Stud UT inspection per item B6.180.

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## **CATEGORY B-G-1 TOTALS**

Item No.	Total Requiring Examination	Examined To Date	Minimum Required	Maximum Allowed
B6.10	68	45 (66.2%)	(1)	(1)
B6.20	64	19 (29.7%)	(1)	(1)
B6.30	4	4 (100%)	(1)	(1)
B6.40	68	45 (66.2%)	(1)	(1)
B6.50	136 (2)	45 (33.1%)	(1)	(1)
B6.180	32	16 (50%)	(1)	(1)
B6.200	32	16 (50%)	(1)	(1)
TOTALS:	404	190 (47%)	16%	67%

### NOTES

(1) Exam percentage requirement are based on Category totals, not item totals. Item percentages are shown for information only.

(2) Inspection of bushings is only required for connections that are disassembled.

## 6.5 CATEGORY B-G-2

6.5.1	CATEGORY: ITEM NO:	B-G-2 B7.10	Pressure Retaini Reactor Vessel-		nd smaller in Dia Nuts
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)
	RPV	3	3 (1)	0	0%
	TOTALS:	3	3 (1)	0	0%
		6			

## NOTES

(1) Represents Flanged/Bolted Connections-All bolts, studs and nuts were examined for each flanged connection examined.

6.5.2	CATEGORY: ITEM NO:	B-G-2 B7.50	Pressure Retaining Bolting 2" and smaller in Dia. Piping-Bolts, Studs and Nuts			
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
	HPCI, & RCIC	2	2 (1)	2	100%	
	TOTALS:	2	2 (1)	2	100%	

### NOTES

(1) Represents Flanged/Bolted Connections-All bolts, studs and nuts were examined for each flanged connection examined.

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## 6.5.3 CATEGORY: ITEM NO:

B-G-2

**B7.60** 

B-G-2 B7.70 Pressure Retaining Bolting 2" and smaller in Dia. Pump Bolts, Studs and Nuts, and Seal Bolting

System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	ł
RRC	2	2 (1)	0	0%	•
TOTALS:	2	2 (1)	0	0%	-

### NOTES

(1) Represents flanged/bolted connections-all bolts, studs and nuts are examined for each connection examined.

6.5.4	CATEGORY:
	ITEM NO:

Pressure Retaining Bolting 2" and smaller in Dia. Valves-Bolts, Studs and Nuts

System	Total Comp.	Total Requiring Examination (1)	Examined To Date (2)	Examined To Date (%)
MS	38	38	18	47.4%
RRS	4	4	2	50%
RHR	10	10	5	50%
CS	6	. 6	4	66.6%
HPCI	3	3	1	33.3%
RCIC	3	3	2	66.6%
RWCU	9	9	3	33.3%
FW	8	8	4	50%
TOTALS:	81	81	39	48.1%

## NOTES

(1) Represents flanged/bolted connections-all bolts, studs and nuts were examined for each flanged connection examined.

(2) All replacement bolting material utilized was visually inspected.

6.5.5	CATEGORY:	B-G-2		
	ITEM NO:	B7.80		

Pressure Retaining Bolting 2" and smaller in Dia. CRD Housings-Bolts, Studs and Nuts

System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)
CRD	185	185 (1)	47 sets*	25.4%
TOTALS:	185	185 (1)	47 sets*	25.4%

\*100% of disassembled flange bolting.

### NOTES

(1) Inspections are only required when CRD Housing Flanges are disassembled (Ref. Table IWB-2500-1, Category B-G-2)

Item No.	Total Requiring Examination	Examined To Date (2)	Minimum Required	Maximum Allowed
B7.10	3	0 (0%)	(1)	(1)
B7.50	2	2 (100%)	(1)	(1)
B7.60	2	0 (0%)	(1)	(1)
B7.70	81	39 (48.1%)	(1)	(1)
B7.80	185 (2)	47 (25.4%)	(1)	(1)
	273	88 (32.2%)	16%	67%

## **CATEGORY B-G-2 TOTALS**

#### NOTES

- Exam percentage requirements are based on category totals not item totals. Item (1) packages are supplied for information only.
- (2) Inspections are only required when CRD housing flanges are disassembled.

## 6.6 CATEGORY B-H

6.6.1

l	CATEGORY: ITEM NO:	B-H B8.10	Integral Attachme Reactor Vessel-In		Attachments
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)
	RPV Support Skirt	2	2	.2	10%
	Stabilizer Bracket Welds	8	<b>1</b>	1	100%
	Top Head Lifting Lugs	4	4	0	0%
	TOTALS:	14	7	1.2	17.1%

### 6.7 CATEGORY B-J

6.7.1	CATEGORY: ITEM NO:	B-J B9.11	Pressure Retaining Welds in Piping Circumferential Welds ≥ 4" Dia.		
	System	Total Comp.	Total Requiring Examination (1)	Examined To Date	Examined To Date (%)
	MS	113	11	5	45.5%
	RRS	109	15	5	33.3%
	RHR	71	5	3	60%
	CS	42	3	0	0%
	HPCI	14	2	2	100%
	RCIC	16	2	2	100%
	RWCU	70	7	1	14.3%
	FW	123	18	7	38.9%
	RPV	5	0	0	N/A
	TOTALS:	563	63	25	39.7%
		and the second			

(1) Risk Informed Inservice Inspection (RIISI) Program sample size.

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## **CATEGORY B-J TOTALS**

Item No.	Total Requiring Examination (1)	Examined To Date	Minimum Required (1)	Maximum Allowed (1)
B9.11	63	25 (39.7%)	16%	67%

## NOTES

(1) Fermi Risk Informed Inservice Inspection Program sample size.

## 6.8 CATEGORY B-K-1

6.8.1

CATEGORY:	B-K-1 Integral Attachments for Piping Pumps and Valves					
ITEM NO:	B10.10 / B10.20	Piping-I	ntegrally Welde	d Attachments		
System	Total Comp. (1)	Total Requiring Examination (2)	Examined To Date	Examined To Date (%) (3)		
All Class 1 Piping B10.10	13	2 locations (8 welds)	1 location (4 welds)	50%		
Pumps B10.20	3	. 1	0	0%		
TOTALS:	16	3	1	33%		

### NOTES

(1) Total component supports with integral attachments selected for examination per Code Case N-491-1

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- (2) Total examinations required for integral attachments per Code Case N-509.
- (3) One location examined each period.

6.9.1	CATEGORY: ITEM NO:	B-M-2 B12.50	Valve Bodies Valve Body, exc	ceeding 4" Nomi	nal Pipe Size
	System	Total Comp.	Total Requiring Examination	Examined To Date (1)	Examined To Date (%)
	MS	23	23	7	30.4%
	RRS	4	4	0	0%
	RHR	10	10	3	33.3%
	CS	6	6	2	33.3%
	HPCI	3	3	0	0%
	RCIC	1	··· <b>1</b>	0	0%
	RWCU	5	5	0	0%
	FW	8	8	6	75%
	TOTALS:	60	60	18	(1)

NOTE

(1) Per ASME Section XI IWB-2500-1 Table B-M-2 table note, the examinations are limited to one valve within each group of valves that are of the same constructional design and perform similar functions in the system. VT-3 inspections are performed on all Class 1 valves during disassembly for maintenance. Therefore, percentages are not applicable.

## 6.10 CATEGORY B-O

6.10.1					Welds In Control Rod Housings elds in CRD Housings		
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Req'd (%)	Maximum Allowed (%)
	RPV	40	8 (1)	2	25%	16%	67%
-	TOTALS	40	8 (1)	2	25%	16%	67 (3)

# NOTE

- (1) 10% of peripheral housings (2 welds per housing).
- (2) B14.10 is the only Item for this Category.
- (3) Examinations evenly spaced during each period of the inspection interval.

## 6.11 CATEGORY C-A

6.11.1 CATEGORY: ITEM NO:		C-A C1.10	Pressure Retaining Welds In Pressure Vessel Shell Circumferential Welds			
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
	RHR	. 1	. 1	1	100%	
	TOTALS:	1	1	1	100%	

## 6.11.2 CATEGORY: C-A ITEM NO: C1.20

Pressure Retaining Welds In Pressure Vessel Head Circumferential Welds

System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)
RHR	. 1	1	0	0%
TOTALS:	1	1	0	0%

### **CATEGORY C-A TOTALS**

Item No.	Total Requiring Examination	Examined To Date	Minimum Req'd (%)	Maximum Allowed (%) (1)
C1.10	1	1 (100%)	N/A	N/A
C1.20	1	0 (0%)	N/A	N/A
	2	1 (50%)	N/A (1)	N/A (1)

### NOTES

(1) Exams scheduled for the  $1^{st}$  and  $3^{rd}$  period.

## 6.12 CATEGORY C-B

6.12.1 CATEGORY:		С-В	Pressure Retaining Welds In Vessels			
	ITEM NO:	C2.21	Nozzle-To-Shell	(or Head) Weld	L .	
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
	RHR	4	2	1 .	50%	
	TOTALS:	4	2	1	50%	
6.12.2 CAT	EGORY:	С-В	Pressure Retaini	ng Nozzle Weld	s In Vessels	
	ITEM NO:	C2.22	Nozzle Inside Ra	adius Section		
	System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
	RHR	4 .	2	1	50%	
	TOTALS:	4	2	1	50%	

## **CATEGORY C-B TOTALS**

Item No.	Total Requiring Examination	Examined To Date	Minimum Req'd (%)	Maximum Allowed (%) (1)
C2.21	2	1(50%)	N/A	N/A
C2.22	2	1(50%)	N/A	N/A
	4	2(50%)	N/A (1)	N/A (1)

### NOTES

(1) Exams scheduled for the  $1^{st}$  and  $3^{rd}$  examination period.

### 6.13 CATEGORY C-C

6.13.1 CATEGORY: ITEM NO:		C-C C3.10	Integral Attachments for Vessels, Piping, Pumps and Valves Pressure Vessels			
	System	Total Comp. (1)	Total Requiring Examination (2)	Examined To Date	Examined To Date (%)	
	RHR	5	1 (19 welds)	11 welds	57.9%	
	TOTALS:	5	1 (19 welds)	11 welds	57.9%	

### NOTES

- (1) Total component supports with integral attachments welds selected for examination per Code Case N-491-1
- (2) Total examinations required for integral attachment welds per Code Case N-509.

6.13.2	CATEGORY: ITEM NO:	C-C C3.20	, Piping, Pumps and Valves ments			
	System	Total Comp. (1)	Total Requiring Examination (2)	Examined To Date	Examined To Date (%)	
	All Class 2	33	3	1	33.3%	
	Systems		5. 	· ·		
	TOTALS:	33	3	1	33.3%	

### NOTES

- (1) Total component supports with integral attachment welds selected for examination per Code Case N-491-1
- (2) Total examinations required for integral attachment welds per Code Case N-509.

Item No.	Total Comp. Requiring Exam	Examined To Date	Minimum Req'd (%)	Maximum Allowed (%)
C3.10	1	.58 (58%)	N/A	N/A
C3.20	3	1 (33.3% )	N/A	N/A
••••••••••••••••••••••••••••••••••••••	4	1.58 (39.5%)	16%	67%

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# CATEGORY C-C TOTALS

### 6.14 CATEGORY C-F

# 6.14.1 CATEGORY: C-F-1 Socket Welds (1) ITEM NO: N/A, NRC Augmented Commitment

System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
SLC	131	16	8	50%	-
TOTALS:	131	16	8	50%	-

#### NOTES

(1) The Class 2 portion of the Standby Liquid Control System is <4" NPS and is exempt per ASME Section XI. Fermi committed to examine 16 of 131 system welds during each inspection interval.

6.14.2 CATEGORY: C	-F-2 Pressu	Pressure Retaining Welds in Carbon or Low Alloy Steel			
ITEM NO: C		g g Welds <u>&gt; 3</u> /8" iı g > NPS	n Normal Wall	Thickness for	
System	Total Comp.	Total Requiring Examination	Examined To Date	Examined To Date (%)	
MS	74	6	4	66.6%	
CRD	34	3	1	33.3%	
RHR	464	34	18	52.9%	
CGC	113	6	2	33.3%	
HPCI	154	12	4	33.3%	
CS	196	15	7	46.7%	
Containment Pipi	ng (1) 279	23	10	43.5%	
TOTALS:	1314	99	46	46.5%	

### NOTES

(1) Containment piping includes augmented selections made in accordance with Relief Request RR-A26.

<b>CATEGORY C-F TOTALS</b>
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Item No.	Total Requiring Examination (1)	Examined To Date	Minimum Req'd (%) (2)	Maximum Allowed (%) (2)
C-F-1 (C5.11 Augmented)	16	8 (50%)	N/A	N/A
C-F-2 (C5.51 & C5.81)	99	46 (46.5%)	N/A	N/A
TOTALS:	115	54 (47%)	16%	67%

### NOTES

(1) Includes Augmented Class 2 selections.

(2) Exam percentage requirements are based on Category C-F totals, not item totals. Item percentages are supplied for information only.

6.15 CATEGORY F-A

6.15.1 CA ITH	TEGORY: EM NO:	F-A F1.10-F1.40		1 Type Supports		
	Section XI Class	System No.	System ID	Total Requiring Examination	Examined To Date	Examined To Date (%)
	Class 1	B11	RPV	9	2	22.2%
		B21	Steam Supply	8	4	50%
		B31	<b>Reactor Recirc</b>	6	3	50%
		E11	RHR	3	1	33.3%
		E21	CS	3	2	66.7%
		E41	HPCI	1.	0	0%
		E51	RCIC	1	1	100%
		G33	RWCU	5	1	20%
		N21	Feedwater	5	1	20%
		C	LASS 1 TOTALS	41	15	36.6%
,	Class 2	B21	SRV	6	3	50%
		C11	CRD	4	3	75%
		<b>E</b> 11	RHR	45	23	51.1%
		E21	CS	16	6	37.5%
		E41	HPCI	14	7	50%
		N30	MS	6	4	66.7%
		P11	Demin	1	1	100%
	·	T48	GCG	16	8	; <b>50%</b>
		C	LASS 2 TOTALS	108	55	50.9%
						1
	Class 3	E11	RHRSW	14	8	57.1%
		P42	RBCCW	1	1	100%
		P44	EECW	33	14	42.4%
		P45	EESW	18	7	38.9%
		R30	DGSW	10	6	60%
		C	LASS 3 TOTALS	76	36	47.4%
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	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Req'd (%)	Maximum Allowed (%)
F-A Class 1	41	15	36.6%	N/A	N/A
F-A Class 2	108	55	50.9%	N/A	N/A
F-A Class 3	76	36	47.4%	N/A	N/A
				N/A	N/A
TOTALS:	225	106	47.1%	16%	67%
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# TOTAL ALL CATEGORIES: F-A, F1.10-F1.40

# SECTION 7

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# UPDATED PROGRAM TABLES

### 7.1 PROGRAM TABLES

#### 7.1.1 Inservice Inspection Program (Plan) Tables (NDE)

The accompanying table lists the components or areas that are to be examined during the interval as updated for this refueling outage. Listed in an order following the items presented in the ASME Section XI, Subsections IWB, IWC, and IWD, the tables contain the following information:

**Code Class:** is the ASME class as defined in accordance with the **Code of Federal Regulations** 10CFR50.55a, Regulatory Guide 1.26, and NUREG 0800.

Interval: refers to the 120 month inspection interval as identified in Section 1.0 of this document.

**Page/Rev.:** indicates the consecutive and total page numbers for the NDE program. Rev. or Revision indicates the revision of the individual page or entire document.

**Code Category:** is the Examination Category as defined by ASME Section XI, Subarticles IWB-2500, IWC-2500 or IWD-2500.

Item Number: lists the Item No. as defined by ASME Section XI, Subarticles IWB-2500, IWC-2500, or IWD-2500. Note: all Item Numbers are addressed even though they may not be applicable to Fermi 2.

**Description and Unique Identification:** repeats the generic descriptions listed in tables IWB-2500-1, IWC-2500-1 or IWD-2500-1. The components to be examined are then listed by system and/or specific identification.

**Exam Method-Exam Method Selected:** identifies the code required method of examination i.e. Volumetric, Surface, or Visual. The specific examination selected is shown for the component i.e. UT, PT, MT, or VT (see list of abbreviations for expanded definitions).

**Relief Request:** if applicable, indicates the request for relief applicable in accordance with 10CFR50.55a (g) (5) (iii).

Augmented Exam Method: indicates the examination was required to meet a regulatory or licensing commitment and its outage code when completed or scheduled.

Sel. Basis: shows the abbreviation for the basis for selection of a component for examination.

**Period:** marks the 40 month period within the 120 month interval when the examination is scheduled (3 periods per interval).

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### NOTE

A tentative schedule of specific examinations has been completed for the second 10 year interval. All exams are scheduled for inspection in accordance with the rules of ASME Section - XI, IWA, IWB, IWC, IWD and IWF, and as augmented by specific commitments (i.e., NUREG 0313). Future revisions to this program (plan) shall be issued to reflect actual examinations to be performed during each refuel outage as well as all examinations completed during previous outages.

**Remarks:** are reserved for additional information to explain, amplify, or provide added details necessary to clarify the examination requirements.

7.1.1.1 Examination methods delineated in the following tables are intended to be representative of the ISI practice to be used or of preservice methods utilized. In either case, it should be recognized that either UT or RT is acceptable volumetric exams and either PT or MT is acceptable surface exams. Unique weld joint parameters may, of course, dictate more restrictive selection criteria; e.g., high background radiation will preclude RT, stainless materials will preclude MT, etc. It is intended that the process which selects exam methods for inspections under this plan treat UT and RT as interchangeable and PT and MT as interchangeable with consideration given to past practice in light of the reproducibility of results.

7.1.1.2 List of Abbreviations: The following abbreviations are used:

Plant Identification System (PIS) - Codes for Plant Systems

B21	- PIS Number for the Nuclear Boiler System
B31	- PIS Number for the Reactor Recirculation System
C11	- PIS Number for the Control Rod Drive System
C41	- PIS Number for the Standby Liquid Control System
E11	- PIS Number for the Residual Heat Removal System
E21	- PIS Number for the Core Spray System
E41	- PIS Number for the High Pressure Coolant Injection System
E51	- PIS Number for the Reactor Core Isolation Cooling System
G33	- PIS Number for the Reactor Water Cleanup System
G41	- PIS Number for the Fuel Pool Cooling System
N21	- PIS Number for the Feedwater System
N30	- PIS Number for the Main Steam System
T48	- PIS Number for the Combustible Gas Control System

## Acronyms Used to Identify Plant Systems

CGC	- Combustible Gas Control
CRD	- Control Rod Drive
CS	- Core Spray
FPC	- Fuel Pool Cooling
HPCI	- High Pressure Coolant Injection
RCIC	- Reactor Core Isolation Cooling
RHR	- Residual Heat Removal
RRC	- Reactor Recirculation
RWCU	- Reactor Water Cleanup
SDV	- Scram Discharge Volume
SLC	- Standby Liquid Control

Nondestructive Examination Method Abbreviations

MT	- Magnetic Particle Examination
PT	- Liquid Penetrant Examination
UT	- Ultrasonic Examination
VT	- Visual Examination
VT-1	- Visual Examination per IWA-2211
VT-2	- Visual Examination per IWA-2212
VT-3	- Visual Examination per IWA-2213
UT Mech.	- UT Mechanized
UT Mech./Mai	n UT Mechanized or Manual

### Weld Selection Basis Abbreviations

HCU	- High Cumulative Usage
HS	- High Stress
MS	- Moderate Stress
R	- Random selection of structural discontinuity weld
TE	- Terminal End
• <b>A</b> •	- Augmented
DM	- Dissimilar Metal Weld
RI	- Risk Informed Methodology

## **Degradation Mechanisms**

IGSCC	-Intergranular Stress Corrosion Cracking
CC	-Crevice Corrosion
TASCS	-Thermal Fatigue Cracking

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Plant Components and Weld Terminology Abbreviations

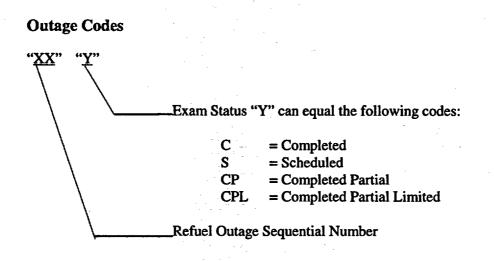
CRDH	- Control Rod Drive Housing
EXPJT	- Pipe Expansion
FBC	- Field Weld
HX	- Heat Exchanger
HXS	- Heat Exchanger Shell
IBR	- Inner Bore Region (Nozzle)
IIH	- Incore Instrumentation Housing
LD	- Longitudinal Downstream (Seam Weld)
LU	- Longitudinal Upstream (Seam Weld)
PAD	- Integral Attachment Weld Directly onto the Pressure
· .	Boundary of the Pipe
PSFW	- Piping Support Field Weld
PS	- Primary Steam (Nuclear Steam Supply System)
RD	- Recirculation Discharge
RS	- Recirculation Suction
SDV	- Scram Discharge Volume
SW	- Shop Weld
TRUNION	- Hanger Support Welded Directly onto the Pressure Boundary of the Pipe
VBB	- Valve Body and Bonnet Housing

### **Generic Miscellaneous Abbreviations**

BWR	- Boiling Water Reactor
CRC	- Corrosion Resistant Cladding
DWG	- Drawing
DM	- Dissimilar Metal Weld
EF2	- Enrico Fermi 2
in.	- Inches
N/A	- Not Applicable
NUREG	- Nuclear Regulatory Guide
PWR	- Pressurized Water Reactor
RR	- Relief Request
RPV	- Reactor Pressure Vessel

### **Component Support Abbreviations**

Α	- Anchor
С	- Constant Support
G	- Guide
R	- Rigid Support
SP	- Spring Hanger



Example:	07C	= Seventh Refueling Outage, Completed Exam
	08S	= Eighth Refueling Outage, Scheduled Exam
	08CP	= Eighth Refueling Outage, Completed Exam, Partial
	08CPL	= Eighth Refueling Outage, Completed Exam, Partial Limited

#### 7.1.2 Inservice Inspection Program (Plan) Tables (Component Supports)

7.1.2.1 The accompanying tables list the component supports to be examined during the first inspection interval. The tables are divided into ISI Class - 1,2, and 3 and start with Class - 1. The tables contain the following information:

**Code Class:** is the ASME class as defined in accordance with the **Code of Federal Regulations** (10CFR50.55a), Regulatory Guide 1.26, and NUREG 0800.

Interval: refers to the 120 month inspection interval as identified in Section 1.0 of this document.

**Page/Rev.:** indicates the consecutive and total page numbers for the NDE program. Rev. or Revision indicates the revision of the individual page or entire document.

**Code Category:** is the Examination Category as defined by ASME Section XI, Subarticle IWF.

Item Number: NOT USED – Because IWF category is the main selection determining factor for component supports, Item No. was not used to make hanger selections. The item Number depicts inspection points and therefore is more appropriately addressed in inspection procedures. The item Numbers for each category was used to identify the type of visual examination(s) each component support will receive and this information is provided in the tables.

**PIS No./System:** Identifies the Plant Identification System Number (PIS No.) and the System Title for each group of component supports to be examined.

**Isometric/Multiple Loop:** Identifies the specific isometric drawing applicable to a particular group of component supports and the Multiple Loop identification No. if applicable.

Unique Identification: Identifies the specific component support subject to examination.

**Exam Method – Exam Method Selected:** Identifies the code required method of examination (i.e. visual) and the specific examination selected for each component shown (i.e. VT-1, VT-3).

Type: Identifies the type of component support to be examined.

**Relief Request:** If applicable, indicates the request for relief applicable in accordance with 10CFR50.55a (g) (5) (iii).

**Period:** marks the 40 month period within the 120 month interval when the examination is scheduled (3 periods per interval).

**Remarks:** is reserved for additional information to explain, amplify, or provide added details necessary to clarify the examination requirements.

- 7.1.2.2 List of Abbreviations: For definitions of abbreviations used in the following tables, refer to Paragraph 10.1.2 of this document.
- 7.1.2.3 Inservice Inspection Program (Plan) Tables (NDE)
  - Table A Class 1, 2, and 3 Welds and Components
  - Table B Supports
  - Table C Snubbers

7.1.3 NOTES

#### NOTE 1

Examination categories B-F and B-J contain duplicate examination requirements for dissimilar metal pressure retaining welds in piping. Category B-J does not have a separate item number for dissimilar metal (DM) welds. Because of this all DM welds will be included in category B-F. This will aid in identification those welds that may have additional augmented, regulatory, or PDI requirements applied to them.

#### NOTE 2

By Detroit Edison Documents NRC-88-0243, NRC-89-0297, and NRC-90-0103, in response to Generic Letter 88-01 and NUREG-0313 Rev. 2, Detroit Edison had committed to the inservice inspection requirements for austenitic stainless steel welds in accordance with the guidelines of Generic Letter 88-01. All applicable welds have been classified according to NUREG-0313 Rev. 2 requirements with the required percentages of welds being included in this program. The applicable category (GL-88-01) is identified in the remarks column. All inspections will be performed utilizing procedures and personnel qualified to current Utility PDI Guidelines. In correspondence letter NRC-01-0038 Detroit Edison committed to use the NRC approved Generic Letter 88-01 alternative inspection schedule requirements of BWRVIP-75. Sample expansion will be as specified in the Fermi Risk Informed Inservice Inspection Program for Category A welds, and BWRVIP-75 for all other augmented weld selections. Methods and criteria for crack evaluation and repair shall be in conformance with IWB-3600 of Section XI of the 1989 Edition of ASME Boiler and Pressure Vessel Code. Detroit Edison requested that Non-Safety Related, Category D welds be removed from GL-88-01 scope per NRC-92-090. The NRC response (TAC No. M84117, 12-18-1992) modified the inspection interval such that inspection of the subject piping welds on a sampling basis of at least 10 percent of the weld population be performed during each refueling outage.

#### NOTE 3

Per the EF-2 UFSAR Subsection 4.5.1.2.7, Detroit Edison had agreed to ultrasonically inspect the RPV Jet Pump Hold Down Beams at each Reactor Refueling Outage until sufficient experience was gained to change the frequency of inspection. If a cracked beam were detected, it would be replaced prior to return to power operation. Due to the

failure of a jet pump hold down beams at another plant, SIL No. 330, Supplements 1 and 2, and RICSIL No. 065 were issued. As a result, during RF04 all jet pump hold down beams were replaced with beam assemblies that are less susceptible to IGSCC than the original assemblies. Subsequent UT and alternative inspections will be performed at future refueling outages based on industry experiences and the recommendations provided in IE Bulletin 80-07, NUREG/CR-3052, and the latest edition of BWRVIP-41. All beams were reinspected in RF09.

#### NOTE 4

ASME Section XI Category B-E requires inspection of the external surfaces of 25% nozzles among each group of penetrations of comparable size and function. Fermi practice is to perform a VT-2 examination inside the RPV bioshield annulus for RPV instrumentation nozzles, and of the bottom head penetrations through the skirt hatches, and under vessel during the system leakage test each refueling outage. If leakage is identified, further investigation will be made to identify the exact location.

#### NOTE 5

Component supports and the associated integrally welded attachments are selected for examination in accordance with Code Cases N-491-1 (Alternative Requirements for Selection and Examination of Component Supports) and N-509 (Alternative Rules for the Selection and Examination of Integrally Welded Attachments).

#### NOTE 6

Visual examination of snubbers covers only the snubber unit, except for those snubber supports selected in accordance with Code Case N-491-1. The balance of the support (Integral and nonintegral attachments including lugs, bolting, pins, clamps, and support steel) will be visually examined in accordance with subsection IWF requirements.

#### NOTE 7

Per SIL No. 420 an inspection will be performed on the jet pump sensing lines and support brackets when convenient. This inspection will determine if the weld between the support brackets and the vertical run of the sensing line is intact. Additionally, the inspection should concentrate on the jet pumps closest to the recirculation outlet nozzles. Inspection will be performed on the Jet Pumps scheduled for inspections during the refueling outage.

#### NOTE 8

Per NRC Information Notice No. 90-30 all dissimilar metal welds containing Inconel 600 series base materials, Alloy 82 and 182 weld butter, and/or filler metal shall be examined following the guidelines of SIL No. 455. It is essential and required that all examinations be performed by the use multiple refracted longitudinal waves (45° and 60° recommended) for crack detection and sizing in the Alloy 182 material and the low alloy material. All scanning of welds will be performed in both an axial and circumferential direction followed by a 45° shear wave if indications are identified using refracted longitudinal techniques. Examination of nozzle welds shall include the full thickness volume and be extended into the area of Alloy 182 Weld Material Buttering. The purpose of this additional/supplemental examination is to assure that Alloy 182 Butter Cracking in

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the nozzle bore has not occurred and extended into the low alloy nozzle material. Beginning with RFO9, ASME Section XI, Appendix 8, Supplement 10 requirements as implemented by the Utility Performance Demonstration Initiative are mandatory.

#### NOTE 9

Per SIL No. 433, Supplement 1, an Ultrasonic (UT) inspection of the entire shroud head bolt length was performed on the 48 shroud head bolts for evidence of cracking during RF04. All bolts have been replaced with a new design that is more resistant to cracking. Based on industry experience additional inspections will be performed at subsequent refuel outages.

#### NOTE 10

During RF-06 the Reactor Recirculation Pumps were modified to the 4th generation design configuration. This configuration was designed to mitigate known causes of shaft and cover cracking and provides for ultrasonic inspection of the shaft without requiring complete pump disassembly and removal. This change out also included change out of the rotating element to a welded impeller and added rotating baffle. In addition, the hydrostatic bearing was modified to a non-welded design. The need to completely disassemble is reduced by modification to the 4th generation configuration. The following augmented inspections will be performed if the pump is disassembled. Per SIL No. 415, a supplemental liquid penetrant or volumetric inspection of the suction splitters will be performed if visual inspections identify cracking of the suction splitters or attachment welds. Per RICSIL No. 038 and NRC Information Notice 89-20 inspections will be performed on the hydrostatic bearing and baffle plate. Inspection of the heater/cooler assembly should be performed if the pump is disassembled. Disassembly of the pump for inspections will be evaluated prior to each refuel outage based upon industry experience and hours of operation.

#### NOTE 11

Per SIL No. 474, a visual inspection will be performed on steam dryer drain channel welds during refueling outages. Portions of the steam dryer assembly, dryer banks, and welds will be visually inspected each refueling outage.

#### NOTE 12

Per IE Bulletin 80-13, and SIL No. 289, Revision 1, Supplement 2, a visual inspection is performed on the core spray internal piping each Refuel Outage. Inspection points include those identified in IE Bulletin 80-13 and SIL No. 289, Revision 1, Supplement 2, and BWRVIP-18. The inspection plan will follow the inspection recommendations and frequency provided in BWRVIP-18 as detailed in PEP16, Appendix III.

#### NOTE 13

Per SIL No. 462, inspection of the shroud support access hole cover was performed at the end of the first 10-year interval. Subsequent re-inspections will be based on industry experience and the inspection technique applied. Refer to PEP16, Appendix II.

#### **NOTE 14**

All Inservice Examinations of the Reactor Pressure Vessel Welds will be performed using both manual and mechanical examination techniques and will most likely be performed from the outside of the vessel. Limitations encountered that affect the examination volume as prescribed by ASME Section XI will be documented in an examination report.

All previous examinations were conducted in accordance with the requirements of Regulatory Guide 1.150, Revision 1, to the extent practical (Ref. NRC-87-0078). Beginning with RFO8, ASME Section XI, Appendix VIII, Supplement 4 and 6 requirements for vessel welds were implemented as specified in 10CFR50.55a.

Indications, regardless of amplitude, will be recorded on tape during the mechanized examination for analysis. Similarly, signal responses will be scrutinized during the manual examination process and indications will be recorded for further analysis and resolution.

#### NOTE 15

Visual inspections for leakage required by ASME Section XI Code Categories B-P, C-H, and D-B is performed using site procedures. Test Packages for all tests performed are developed utilizing the Inservice Inspection Classification Boundary Drawings listed on Table A-5-5.1 as the basis.

All components on the following systems are included in the Class 1 inspections: B21, B31, C41, E11, E21, E41, E51, G33, N21, and P34.

All components on the following systems are included in the Class 2 inspections: C11, C41, E11, E21, E41, G41, G51, N11, N30, P34, T4804, and T50.

All components on the following systems are included in the Class 3 inspections: E11, P42, P44, P45, and R30.

#### NOTE 16

Per RICSIL No. 059 and SIL No. 554, inspection of the top guide beams should be performed at grid locations where fuel and blade guides have been removed for other reasons. Inspection of selected grid locations will be performed during refueling outages. Additionally, ultrasonic inspection should be considered if cracking is found or as recommended by SIL No. 554.

#### NOTE 17

The extent of inspection and frequency for Jet Pump components and welds will follow the recommendations provided in BWRVIP-41. BWRVIP-41 replaced/modified the recommendations of SIL Nos. 551 and 574. Inspections will continue to be performed per the recommendations of SIL No. 574 on the adjusting screw tack welds in conjunction with the inspection of those Jet Pumps scheduled for inspection each refuel. Repairs if required will be performed in accordance with the recommendations of SIL No. 574 as appropriate. In addition, verification of contact will be performed on the restrainer screws and wedge assembly to the inlet mixer on Jet Pumps selected for inspection per

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the recommendations of RICSIL No. 078

#### **NOTE 18**

Per recommendation of SIL No. 571, augmented inspection of this stainless steel nozzle should be performed after 15 years of operation. The inspection boundary for this weld shall be extended to include all stainless steel material accessible for ultrasonic examination. If linear surface indications are found, ultrasonic examination should be used to determine crack depth. Inspection frequency has been modified per BWRVIP-27 to a 10 year re-inspection period.

#### **NOTE 19**

Visual inspection of the core shroud and shroud welds will be performed in accordance with the recommendations contained in BWRVIP "BWR Core Shroud Inspection and Flaw Evaluation Guideline" (BWRVIP-01) utilizing techniques detailed in BWRVIP "Reactor Pressure Vessel and Internals Examination Guidelines" (BWRVIP-03). SIL No. 572, Revision 1 inspection recommendations have been superceded. Fermi 2 has committed to perform future inspections per the guidance of the BWRVIP. Visual inspections will be performed as an enhanced EVT-1 inspection with the capability to resolve a 1/2-mil wire on the inspection surface. The BWRVIP has imposed additional guidelines for inspection based on years of operation, materials, and conductivity. Based on the above, during RF-06 a baseline inspection of the shroud welds (H-3, H-4, H-5, and H-7) was completed (approximately 90% volumetric coverage) utilizing an augmented ultrasonic phased array technique with no indication of service induced flaws. Future Core Shroud inspections will be performed in accordance with the BWRVIP Guidelines in BWRVIP-07 and BWRVIP-76. Core shroud support inspections will follow BWRVIP-038 and BWRVIP-104 guidelines utilizing approved techniques. Evaluation of anomalies shall be per the BWR Core Shroud Evaluation Reports (BWRVIP-01 and GENE-523-A53-0494). Additional references include SIL No. 572, Rev 1, RICSIL No. 054, Rev 1, RICSIL No. 068, RICSIL No. 077, Information Notices 93-079 and 94-042, and Generic Letter (GL) 94-03. GL 94-03 required advanced notification to the NRC of the proposed plan for Core Shroud inspection, evaluation and/or repair. Additional detail is provided in PEP16, Appendix I.

#### NOTE 20

Additional augmented examinations were performed during RF04 and changes were made to the inspection schedule for selected nozzle welds following the Turbine Generator Event and subsequent RPV chemistry transient for detection of IGSCC initiation.

#### NOTE 21

The new containment inspection requirements of ASME Section XI 1992 Edition, 1992 Addenda in effect for the Second Ten-year inspection interval changed the way containment system piping (between the isolation valves) are classified for ISI. IWE-1220(d) specifies that containment system piping is exempt from IWE requirements but shall be examined in accordance with the appropriate classification specified in the construction Design Specifications. This varies from the assumptions made during the first interval, when no IWE requirements were imposed. Relief Request RR-A26 documents Detroit Edison's proposed alternative examination requirements.

### NOTE 22

Inspections in addition to those listed for item no's B13.10, B13.20, B13.30 and B13.40 will be scheduled and performed as detailed in PEP16. Augmented inspection requirements for selected components and welds are detailed in PEP16 Appendicies, including the implementation of various BWRVIP inspection recommendations.

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## INSERVICE INSPECTION NDE PROGRAM

## TABLE A

### INSERVICE INSPECTION NDE PROGRAM TABLE A

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## FERMI 2 NUCLEAR POWER PLANT

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Category / Ite	em Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspe 1	ction 2	Period 3	Remarks
8-A									· · · · · · · · · · · · · · · · · · ·
<b>B1.11</b>	Circumferrential Shell	Weld							
1-313		UT	All B-A Welds	5360-5	<b>RR-A25</b>	N/A	N/A	N/A	Examined only at intersecting long seams
4-308A		UT	All B-A Welds	5360-5	<b>RR-A25</b>	N/A	N/A	N/A	Examined only at intersecting long seams
4-308B		UT	All B-A Welds	5360-5	<b>RR-A25</b>	N/A	N/A	N/A	Examined only at intersecting long seams
9-307		UT	All B-A Welds	5360-5	RR-A25	N/A	N/A	N/A	Examined only at intersecting long seams
B1.12	Longitudinal Shell Web	đ							
1-308A		UT	All B-A Welds	5360-5		08C			Note 14 Applies to all Category B-A Welds
1-308B		UT	All B-A Welds	5360-5		08C			
1-308C		UT	All B-A Welds	5360-5				125	
1-308D		UT	All B-A Welds	5360-5				12S	
15-308A	· · · · · · · · · · · · · · · · · · ·	UT .	All B-A Welds	5360-5		ч. -	10S		
15-308B		UT	All B-A Welds	5360-5			09C 10SP		CARD 03-16383, RF10 exam to size indication No. 124 only
15-308C	·	UT	All B-A Welds	5360-5		08C			
15-308D		UT	All B-A Welds	5360-5	•			11S	
2-307A		UT	All B-A Welds	5360-5		08C			
2-307B		UT	All B-A Welds	5360-5			10S		
2-307C		UT	All B-A Welds	5360-5			09C		
2-308A		UT	All B-A Welds	5360-5			10S		
2-308B		UT	All B-A Welds	5360-5			09C		
2-308C		UT	All B-A Welds	5360-5				11S	
B1.21	Circumferrential Head	Weld	1		,				
4-319		UT	All B-A Welds	5360-5		08CP	09C		08 - 2-319C to 2-319E 40% 9 - 2-319E to 2-319C 60%
5-306		UT	All B-A Welds	5360-5	RR-A1				Inaccessible Weld
5-319		UT	All B-A Welds	5360-5				11 <b>S</b>	
6-306		UT	All B-A Welds	5360-5		08C	10S		One sided exam 180-360 Deg, RF08, 0-180 De RF10
B1.22	Meridional Head Weld								
1-306A		UT	All B-A Welds	5360-5		08C			

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Category / Item Iden	tification	Exams Require	Selection Basis	Isometric	Relief Request	Insp 1	ection 2	Period 3	Remarks	
B-A										
B1.22 Meri	idional Head Weld									
1-306B		UT	All B-A Welds	5360-5			10S			
1-306C		UT	All B-A Welds	5360-5			10S		1. A A A A A A A A A A A A A A A A A A A	
1-306D		UT	All B-A Welds	5360-5		08C				
1-306E		UT	All B-A Welds	5360-5		08C				
1-306F		UT .	All B-A Welds	5360-5				12S		
1-306G		UT	All B-A Welds	5360-5		08C				
1-306H		UT	All B-A Welds	5360-5				11S		
1-306J		UT	All B-A Welds	5360-5			09C			
1-306K		UT	All B-A Welds	5360-5		08C				
1-319A	а. А. — — — — — — — — — — — — — — — — — — —	UT	All B-A Welds	5360-5	RR-A1			125		
1-319B		UT	All B-A Welds	5360-5		08C				
1-319C		UT	All B-A Welds	5360-5	RR-A1			12S		
1-319D		UT	All B-A Welds	5360-5			09C			
1-319E		UT	All B-A Welds	5360-5	RR-A1		10S			
1-319F		UT .	All B-A Welds	5360-5		•	1 <b>0</b> \$			
1-319G		UT	All B-A Welds	5360-5	RR-A1			12S		
1-319H		UT	All B-A Welds	5360-5		08C				
2-306A		UT	All B-A Welds	5360-5	RR-A1				Inaccessible Weld	
2-306B		UT	All B-A Welds	5360-5	RR-A1				Inaccessible Weld	
2-306C		UT	All B-A Welds	5360-5	RR-A1				Inaccessible Weld	•
2-306D		UT	All B-A Welds	5360-5	RR-A1				Inaccessible Weld	
2-306E		UT	All B-A Welds	5360-5	RR-A1				Inaccessible Weld	
2-306F		UT	All B-A Welds	5360-5	RR-A1				Inaccessible Weld	
2-306G		UT	All B-A Welds	5360-5	RR-A1				Inaccessible Weld	
2-319A		UT	All B-A Welds	5360-5		08C				
2-319B		UT	All B-A Welds	5360-5		08C				
····· 2-319C ····· >	their "	UT	All B-A Welds	5360-5		08C				
2-319D		UT	All B-A Welds	5360-5				115		

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Category / Item Identification		n Identification Exams Selection Basis Require I		Isometric	Relief Request	Inspection Period 1 2 3			Remarks
B-A									
<b>B1.22</b>	Meridional Head Weld	l							
2-319E		UT	All B-A Welds	5360-5				11 <b>S</b>	
<b>B1.30</b>	Shell to Flange Weld								
13-308 (fro	om flange)	UT	All B-A Welds	5360-5	RR-A1	08CP		12SP	0-180 Deg, RF-08; 180- 0 Deg, RF-12
13-308 (fro	om shell)	UT	All B-A Welds	5360-5	RR-A1	08CP	10SP	12SP	1/3 of weld each scheduled Inspection Period
<b>B1.40</b>	Head to Flange Weld								
3-319		UT/MT	All B-A Welds	5360-5		08CP	10SP	12SP	1/3 of weld each scheduled Inspection Period
B-D									
<b>B3.100</b>	RPV Nozzle Inside Rad	lius Section	L						
13-314A II	RS	VT	All BD-IRS	5361-5	RR-A32	08C			
13-314B II	RS	VT	All BD-IRS	5361-5	<b>RR-A32</b>	08C			
13-314C II	S	VT	All BD-IRS	5361-5	<b>RR-A32</b>		10S		
13-314D П	RS	VT	All BD-IRS	5361-5	RR-A32	1.	09C		
13-314E IF	S	VT	All BD-IRS	5361-5	<b>RR-A32</b>		09C		
13-314F IF	2 <b>S</b>	VT	All BD-IRS	5361-5	<b>RR-A32</b>		09C		
13-314G II	RS	VT	All BD-IRS	5361-5	RR-A32		09C		
13-314Н П	RS	VT	All BD-IRS	5361-5	RR-A32			12S	
13-314J IR	S	VT	All BD-IRS	5361-5	<b>RR-A32</b>			11S	
13-314К П	RS	VT	All BD-IRS	5361-5	RR-A32		09C		
14-316A II	RS	VT	All BD-IRS	5361-5	RR-A32			12S	
14-316B II	RS	VT	All BD-IRS	5361-5	RR-A32	08C			
15-315 IR	S	VT	All BD-IRS	5361-5	<b>RR-A31</b>	08C			
19-314A II	RS	VT	All BD Nozzles	5361-5	RR-A32		10S		
19-314B II	rs.	VT	All BD Nozzles	5361-5	RR-A32	08C			
2-318 IRS		UT	All BD Nozzles	5361-5	<b>RR-A31</b>		10S		
4-316A IB	R	UT	Α	5361-5		08CA			NUREG-0619/GE-NE-523-A71-594
4-316A IR	5	UT	All BD-IRS	5361-5		08CA			NUREG-0619/GE-NE-523-A71-594
4-316B IBI	R	UT	Α	5361-5	· · · ·	08CA			NUREG-0619/GE-NE-523-A71-594
4-316B IR	5	UT	All BD-IRS	5361-5		08CA			NUREG-0619/GE-NE-523-A71-594

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## FERMI 2 NUCLEAR POWER PLANT

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	Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspection 1		d 3 Remarks
	B-D							
	B3.100 RPV Nozzle Inside Rad	dius Section	l					
	4-316C IBR	UT	<b>A</b> .	5361-5		07CA		NUREG-0619/GE-NE-523-A71-594
	4-316C IRS	UT	All BD-IRS	5361-5		07CA		NUREG-0619/GE-NE-523-A71-594
	4-316D IBR	UT	Α	5361-5		08CA		NUREG-0619/GE-NE-523-A71-594
	4-316D IRS	UT	All BD-IRS	5361-5		08CA		NUREG-0619/GE-NE-523-A71-594
	4-316E IBR	UT	Α	5361-5		07CA		NUREG-0619/GE-NE-523-A71-594
	4-316E IRS	UT	All BD-IRS	5361-5		07CA		NUREG-0619/GE-NE-523-A71-594
	4-316F IBR	UT	A	5361-5		07CA		NUREG-0619/GE-NE-523-A71-594
	4-316F IRS	UT	All BD-IRS	5361-5		07CA		NUREG-0619/GE-NE-523-A71-594
	4-318A IRS	VT	All BD Nozzles	5361-5	<b>RR-A31</b>		115	
	4-318B IRS	VT	All BD Nozzles	5361-5	<b>RR-A31</b>	· .	115	
	5-314A IRS	VT	All BD-IRS	5361-5	<b>RR-A31</b>	08C		
	5-314B IRS	VT	All BD-IRS	5361-5	<b>RR-A31</b>		128	
	8-316A IRS	VT	All BD-IRS	5361-5	RR-A31	08C		
	8-316B IRS	VT	All BD-IRS	5361-5	RR-A31	08C		
	8-316C IRS	VT	All BD-IRS	5361-5	<b>RR-A31</b>		128	<b>3</b>
	8-316D IRS	VT	All BD-IRS	5361-5	RR-A31		125	
	B3.90 RPV Nozzle to Vessel V	Weld						
	13-314A	UT	All B-D Nozzles	5361-5	RR-A6	08C	1	
	13-314B	UT	All B-D Nozzles	5361-5	RR-A6	08C	· ·	
	13-314C	UT	All B-D Nozzles	5361-5	RR-A6	10	S	
	13-314D	UT	All B-D Nozzles	5361-5	RR-A6	08C		
	13-314E	UT	All B-D Nozzles	5361-5	RR-A6	. 09	C	
	13-314F	UT	All B-D Nozzles	5361-5	RR-A6	09	C	
	13-314G	UT	All B-D Nozzles	5361-5	RR-A6	08C		
	13-314H	UT	All B-D Nozzles	5361-5	RR-A6		125	
	13-314J	UT	All B-D Nozzles	5361-5	RR-A6		115	
• •	13-314K	UT ·	All B-D Nozzles	5361-5	RR-A6	08C	a .	and the second
	14-316A	UT	All B-D Nozzles	5361-5	RR-A6	10	S	

## INSERVICE INSPECTION NDE PROGRAM TABLE A

ISI - NDE Program Rev. 2 Change 3

## FERMI 2 NUCLEAR POWER PLANT

Category / Ite	em Identification	Exams Require	Selection Basis	Isometric	Relief Request	Insp 1	ection 2	Period 3	Remarks	
B-D										
<b>B3.90</b>	<b>RPV</b> Nozzle to Vessel	Weld								
14-316B		UT	All B-D Nozzles	5361-5	RR-A6	08C				
15-315		UT	All B-D Nozzles	5361-5	RR-A6		09C			
19-314A		UT	All B-D Nozzles	5361-5	RR-A6		10S			
19-314B		UT	All B-D Nozzles	5361-5	RR-A6	08C				
2-318		UT	All B-D Nozzles	5361-5	RR-A6		10S			
4-316A		UT	All B-D Nozzles	5361-5	RR-A6	08C				
4-316B		UT	All B-D Nozzles	5361-5	RR-A6	08C				
4-316C		UT	All B-D Nozzles	5361-5	RR-A6		09C			
4-316D		UT	All B-D Nozzles	5361-5	RR-A6	08C				1 9
4-316E		UT	All B-D Nozzles	5361-5	RR-A6		•	11 <b>S</b>		
4-316F		UT	All B-D Nozzles	5361-5	RR-A6			11S		
4-318A		UT	All B-D Nozzles	5361-5	RR-A6			11 <b>S</b>		
4-318B		UT	All B-D Nozzles	5361-5	RR-A6			11Š		
5-314A		UT	All B-D Nozzles	5361-5	RR-A6	08C		. •		
5-314B		UT	All B-D Nozzles	5361-5	RR-A6	, t		12S		
8-316A		UT	All B-D Nozzles	5361-5	RR-A6	08C			Note 14 Applies to all Category B-D	Welds
8-316B		UT	All B-D Nozzles	5361-5	RR-A6	08C		· .		
8-316C		UT	All B-D Nozzles	5361-5	RR-A6			12S		·
8-316D		UT	All B-D Nozzles	5361-5	RR-A6			125		•
B-E		·						an an An		
B4.11	Partial Penetration V	essel Nozzles				•				
17-315		VT-2	•	5361-5		07C, 08C	09C, 10S	11S, 12S		
7-315		VT-2		5361-5		07C, 08C	09C, 10S	11S, 12S	Each Refuel Outage - Note 4 applies Items	to all B-E
B4.12	Partial Penetration C	RD Nozzles								
1-310-X <u>-</u> `	Y	•¥T-2	zha fi i a giladhiro inationananath aire ha	••• <del>5</del> 363-5 ••••	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	07C, 08C	· 09C, 10S	11S, 12S	· 25% Nozzles External Surfaces - No	t <del>e 4</del> ***************

#### INSERVICE INSPECTION NDE PROGRAM TABLE A

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Category / Iter	m Identification	Exams Require	Selection Basis	Isometric	Relief Request	Insp 1	ection 2	Period 3	Remarks
B-E									
B4.12	<b>Partial Penetration</b>	CRD Nozzles							
CRDH-Y	x_	VT-2		5363-5		07C, 08C	09C, 10S	11S, 12S	
B4.13	<b>Partial Penetration</b>	Instrumentation	on Nozzies						
2-315A		VT-2		5361-5		07C, 08C	09C, 10S	11S, 12S	
2-315B	· .	VT-2		5361-5		07C, 08C	09C, 10S	11S, 12S	
2-315C		<b>VT-2</b>		5361-5		07C, 08C	09C, 10S	11S, 12S	
2-315D		VT-2		5361-5	1	07C, 08C	09C, 10S	11S, 12S	
2-315F		VT-2		5361-5		07C, 08C	09C, 10S	11S, 12S	
ШН-ХҮ_	_ (55)	VT-2	ч.	5363-5		07C, 08C	09C, 10S	11S, 12S	
B-F			м.						
B5.10	Dissimilar Metal RI	V Nozzle to S	afe End Weld 4" NPS	5 and Large	r				
101-304E		UT	A, RI (IGSCC)	5358-5	<b>RR-A30</b>		10S		Notes 2 & 8 Cat. B
102-304A		UT	A (IGSCC)	5361-5		07C		12S	Notes 2 & 8 Cat. B
2-303G		UT	A, RI (IGSCC)	5356-5	RR-A30	•	09C		Notes 2 & 8 Cat. B
2-303H		UT	A, RI (IGSCC)	5356-5	<b>RR-A30</b>	07C		12S	Notes 2 & 8 Cat. B
4-303A		UT	A, RI (IGSCC)	5357-5	RR-A30	07C		12S	Notes 2 & 8 Cat. B
N-9		UT	A, RI (IGSCC)	5361-5	<b>RR-A30</b>		09C		Notes 2 & 8 Cat. B
N5A		UT	A, (IGSCC, CC)	3053-5			10SA		Notes 2 & 8 Cat. B
N5B		UT	A, RI (IGSCC, CC)	3052-5	RR-A30	08C			Notes 2 & 8 Cat. B
<b>B5.130</b>	Dissimilar Metal Pij	ping Butt Weld	14" NPS and Larger						
SW-E11-22		UT	A, RI (IGSCC)	2298-5	<b>RR-A30</b>	08C			Note 1 & 2, Category B
SW-E11-23	27-6WC		A (IGSCC)	2327 <b>-</b> 5	· · ·		<b></b>	···· (11S··	Notes 1 & 2, Category Based and the second state was
SW-E21-30	52-4WOX	UT	A, RI (IGSCC)	3052-5	<b>RR-A30</b>	08C			Notes 1, 2 & 8 Category B (IGSCC)

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## INSERVICE INSPECTION NDE PROGRAM TABLE A

ISI - NDE Program Rev. 2 Change 3

# FERMI 2 NUCLEAR POWER PLANT

Category / Item Iden	tification	Exams Require	Selection Basis	Isometric	Relief Request	Inspe 1	ection P	eriod 3	Remarks
B-F									· · · · · · · · · · · · · · · · · · ·
B5.130 Dissi	similar Metal Piping	; Butt Weld	i 4" NPS and Large	r					
SW-E21-3053-4W	'OX	UT	A (IGSCC)	3053-5			10S		Notes 1, 2 & 8 Category B (IGSCC)
B5.20 Dissi	similar Metal RPV N	lozzle to Sa	afe End Weld Less 7	Than 4" NPS					
5-315		PT	Α	R1-91		07C			Note 18
5-315		UT	Α			07C			Note 18
3-G-1									
B6.10 RPV	V Closure Head Nuts	s Greater 7	fhan 2"						
326-02, 1 through (	68	MT	>2 dia."	5362-5		08CP	09CP	11SP	1/3 Each Period
	np Studs Greater Th	ian 2"							
RRC Pump A, Stud		UT	>2 dia."	5365-5		08C	· .		
RRC Pump B, Stud	ds 1 through 16	UT	>2 dia."	5365-5			• •	115	
B6.190 Pum	np Flange Surface, V	When Disas	sembled				1997 - 194 1997 - 1997 - 1997 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1		en en en en en en de la forma de la companya de la Este de la companya d
RRC Pump A, Flan	nge	VT-1	>2 dia."	5365-5					Perform if disassembled
RRC Pump B, Flan	nge	VT-1	>2 dia."	5365-5					Perform if disassembled
B6.20 RPV	V Closure Studs Grea	ater Than	2", In-place	· · ·		· .			
326-01, 1 through (	68	UT	>2 dia."	5362-5	•	08CP	10SP	11SP	1/3 Each Period
B6.200 Pum	np Nuts, Bushings, ar	nd Washer	<b>[</b> 5]	1 1					
RRC Pump A Nuts Washers Set 1 - 16	•	VT-1	>2 dia."	5365-5		08C			
RRC Pump B Nuts Washers Set 1 - 16	s, Bushings &	VT-1	>2 dia."	5365-5				1 <b>1S</b>	
	, V Closure Studs Grea	ater Than	2". When Removed	1	•				
326-01, 1 through (		MT	>2 dia."	- 5362-5		08C			48-51 Removed w/refueling chute
-	V, Threads in Flange		-						
1 through 68		UT	>2 dia."	5362-5		08CP	09CP	11SP	1/3 Each Period
•	V Closure Washers a								
326-03, Washers 1		VT-1	>2 dia."	5362-5		08CP	09CP	11SP	1/3 Each Period
-	h:68				E 8764 9766 978 - 4. 7. 4. 7. 8. 9. 9 				Only required when studs are removed (48-51

#### INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Category / It	em Identification	Exams Require	Selection Basis	Isometric	Relief Request	Insp 1	ection 2	Period 3	Remarks	
B-G-2										
<b>B7.10</b>	RPV Bolts, Studs, a	nd Nuts 2" and	Less							
Instrumen	tation Nozzle	VT-1	< 2 dia."	5361-5				11 <b>S</b>		
Spare Flar	nge (0Deg)	<b>VT-1</b>	< 2 dia."	5361-5				11 <b>S</b>		
Spare Flar	nge (180Deg)	<b>VT-1</b>	< 2 dia."	5361-5				11 <b>S</b>		
B7.50	Piping Bolts, Studs,	and Nuts 2" ar	nd Less							
FBC-E41-	2297-01	<b>VT-1</b>	< 2 dia."	2297-5			09C			
FBC-E51-	2192-01	<b>VT-1</b>	< 2 dia."	2192-5		08C				
B7.60	Pump Bolts, Studs,	and Nuts 2" an	d Less							
RRC Pum	p A Seal Bolting	<b>VT-1</b>	< 2 dia."	5365-5			10S			
RRC Pum	p B Seal Bolting	<b>VT-1</b>	< 2 dia."	5365-5				12S		
B7.70	Valve Bolts, Studs,	and Nuts 2" and	d Less						-1	
B21-F010	A-VBB	<b>VT-1</b>	< 2 dia."	3537-5		а 4	н н	12S	an a	
B21-F010	B-VBB	<b>VT-1</b>	< 2 dia."	3536-5	· · · · ·		09C			
B21-F011	A-VBB	<b>VT-1</b>	< 2 dia."	3537-5		08C	· .			
B21-F011	B-VBB	<b>VT-1</b>	< 2 dia."	3536-5			09C			
B21-F013	A-VBB	<b>VT-1</b>	< 2 dia."	5355-5		07C				
B21-F013	B-VBB	<b>VT-1</b>	< 2 dia."	5354-5		08C				
B21-F013	C-VBB	<b>VT-1</b>	< 2 dia."	5353-5			10S			
B21-F013	D-VBB	<b>VT-1</b>	< 2 dia."	5353-5		07C				
B21-F013	E-VBB	<b>VT-1</b>	< 2 dia."	5354-5			10S			
B21-F013	F-VBB	<b>VT-1</b>	< 2 dia."	5353-5			1 <b>0S</b>			
B21-F013	G-VBB	<b>VT-1</b>	< 2 dia."	5353-5		08C				
B21-F013	H-VBB	<b>VT-1</b>	< 2 dia."	5354-5				12S		
B21-F013	J-VBB	<b>VT-1</b>	< 2 dia."	5354-5		07C				
B21-F013	K-VBB	<b>VT-1</b>	< 2 dia."	5353-5		08C				
B21-F013	L-VBB	<b>VT-1</b>	< 2 dia."	5352-5		08C				
B21-F013	M-VBB	<b>VT-1</b>	< 2 dia."	5352-5		07C				
B21-F013	N-VBB	VT-1 ***	< 2 dia."	5352-5	aleantic e com pa		10-9 10 - 4 6 4 <sup>-</sup> 4 4	" 11 <b>5</b> ~~	والمراجع والمراجع المراجع	a nya nya katala miningi a nya katala sa katala sa Ta
B21-F013	P-VBB	<b>VT-1</b>	< 2 dia."	5355-5				12S		

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## INSERVICE INSPECTION NDE PROGRAM TABLE A

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspe 1	ection 2	Period 3	Remarks
B-G-2								
B7.70 Valve Bolts, Studs, and	d Nuts 2" ar	rd Less						
B21-F013R-VBB	<b>VT-1</b>	< 2 dia."	5354-5				12S	
B21-F022A-VBB	<b>VT-1</b>	< 2 dia."	5352-5				11 <b>S</b>	
B21-F022B-VBB	<b>VT-1</b>	< 2 dia."	5353-5				12S	
B21-F022C-VBB	VT-1	< 2 dia."	5354-5			10S		
B21-F022D-VBB	<b>VT-1</b>	< 2 dia."	5355-5				125	
B21-F028A-VBB	VT-1	< 2 dia."	5352-5			10S		
B21-F028B-VBB	<b>VT-1</b>	< 2 dia."	5353-5		08C			
B21-F028C-VBB	<b>VT-1</b>	< 2 dia."	5354-5				11 <b>S</b>	
B21-F028D-VBB	<b>VT-1</b>	< 2 dia."	5355-5		08C			
B21-F032A-VBB	<b>VT-1</b>	< 2 dia."	3537-5			09C		
B21-F032B-VBB	<b>VT-1</b>	< 2 dia."	3536-5				11 <b>S</b>	
B21-F076A-VBB	VT-1	< 2 dia."	3537-5				115	
B21-F076B-VBB	VT-1	< 2 dia."	3536-5				11S	
B31-F023A-VBB	VT-1	< 2 dia."	5357-5			09C		
B31-F023B-VBB	<b>VT-1</b>	< 2 dia."	5359-5				11S	
B31-F031A-VBB	<b>VT-1</b>	< 2 dia."	5357-5			09C		
B31-F031B-VBB	<b>VT-1</b>	< 2 dia."	5359-5				11S	
E11-F008-VBB	<b>VT-1</b>	< 2 dia."	2299-5	·			125	
E11-F009-VBB	<b>VT-1</b>	< 2 dia."	2299-5			09C	÷.,	
E11-F015A-VBB	VT-1	< 2 dia."	2298-5		07C			· · · ·
E11-F015B-VBB	<b>VT-1</b>	< 2 dia."	2327-5				11 <b>S</b>	
E11-F050A-VBB	VT-1	< 2 dia."	2298-5		07C			
E11-F050B-VBB	<b>VT-1</b>	< 2 dia."	2327-5		07C			
E11-F060A-VBB	<b>VT-1</b>	< 2 dia."	2298-5				12S	
E11-F060B-VBB	<b>VT-1</b>	< 2 dia."	2327-5			10S		
E11-F067-VBB	VT-1	< 2 dia."	2299-5			09C		
E11-F608-VBB	••VT-1	<pre>&lt; 2 dia."</pre>	2299-5	القورة للمحر ويعولا ال	en l'en toether	iento nos	11S	алан түртөлүүн улуу алуу жулжжана алуу арамаан айтаасын алуулаган түртөр жана арамараан арал арал арал арамара Алуу арамаан арал арал арал арал арал арал арал а
E21-F005A-VBB	<b>VT-1</b>	< 2 dia."	3052-5			09C		

#### INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

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Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Insp 1	ection 2	Period 3	Remarks
B-G-2								
B7.70 Valve Bolts, Studs	, and Nuts 2" an	d Less						
E21-F005B-VBB	VT-1	< 2 dia."	3053-5			09C		
E21-F006A-VBB	VT-1	< 2 dia."	3052-5		08C			
E21-F006B-VBB	<b>VT-1</b>	< 2 dia."	3053-5		07C			
E21-F007A-VBB	<b>VT-1</b>	< 2 dia."	3052-5				12S	
E21-F007B-VBB	<b>VT-1</b>	< 2 dia."	3053-5				12S	
E41-F002-VBB	VT-1	< 2 dia."	2297-5				11S	
E41-F003-VBB	<b>VT-1</b>	< 2 dia."	2297-5		08C			
E41-F006-VBB	<b>VT-1</b>	< 2 dia."	3537-5			10S		
E51-F007-VBB	<b>VT-1</b>	< 2 dia."	2192-5			<b>09C</b>		
E51-F008-VBB	VT-1	< 2 dia."	2192-5		07C			
E51-F013-VBB	<b>VT-1</b>	< 2 dia."	3536-5			e a la	11 <b>S</b>	
FBC-B21-5352-01L	<b>VT-1</b>	< 2 dia."	5352-5	÷	08C			
FBC-B21-5352-01M	<b>VT-1</b>	< 2 dia."	5352-5		07C			
FBC-B21-5352-01N	<b>VT-1</b>	< 2 dia."	5352-5				115	
FBC-B21-5353-01C	VT-1	< 2 dia."	5353-5			10S		
FBC-B21-5353-01D	VT-1	< 2 dia."	5353-5		07C			
FBC-B21-5353-01F	<b>VT-1</b>	< 2 dia."	5353-5			10S		· .
FBC-B21-5353-01G	<b>VT-1</b>	< 2 dia."	5353-5		08C			
FBC-B21-5353-01K	<b>VT-1</b>	< 2 dia."	5353-5		08C			
FBC-B21-5354-01B	VT-1	< 2 dia."	5354-5		08C			
FBC-B21-5354-01E	<b>VT-1</b>	< 2 dia."	5354-5			10S		
FBC-B21-5354-01H	<b>VT-1</b>	< 2 dia."	5354-5				12S	
FBC-B21-5354-01J	<b>VT-1</b>	< 2 dia."	5354-5		07C			
FBC-B21-5354-01R	VT-1	< 2 dia."	5354-5			•	12S	
FBC-B21-5355-01A	VT-1	< 2 dia."	5355-5		07C			
FBC-B21-5355-01P	<b>VT-1</b>	< 2 dia."	5355-5				128	
G33-F001-VBB	<b>VT-1</b>	< 2 dia."	3096-5	and so the second	<b>08C</b>		14.211.2	د میں جانے ہیں۔ اور اور میں مرکز اور
G33-F004-VBB	<b>VT-1</b>	< 2 dia."	3096-5			09C		

## INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

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Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspe 1	ction I 2	Period 3	Remarks
B-G-2								
B7.70 Valve Bolts, Studs, an	nd Nuts 2" ar	nd Less						
G33-F100-VBB	<b>VT-1</b>	< 2 dia."	5351-5			10S		
G33-F101-VBB	<b>VT-1</b>	< 2 dia."	3096-5				12S	
G33-F102-VBB	<b>VT-1</b>	< 2 dia."	5351-5				12S	
G33-F106-VBB	VT-1	< 2 dia."	5351-5				11S	
G33-F120-VBB	VT-1	< 2 dia."	3536-5		08C			· · · ·
G33-F121-VBB	<b>VT-1</b>	< 2 dia."	3536-5		07C			
G33-F220-VBB	<b>VT-1</b>	< 2 dia."	3536-5			10 <b>S</b>		
B7.80 CRD Bolts, Studs, and	d Nuts 2" an	id Less						
185 sets of Bolts, Studs and Nuts	Visual VT-1	< 2 dia."			08CP	09CP		When Disassembled (24 sets, 08), (23 sets, 09)
<b>B-H</b>								
B8.10 RPV Integral Attachr	ment Weld						н. - н	and a second second Second second
10-324A	МТ	B-H Weld	5360-5		08C			Code Case N-509
3-306/4-309	UT	B-H Weld	5360-5		08CP		ал А.	10% of Weld length
3-306/4-309	MT	B-H Weld	5360-5		08CP			10% of Weld length
8-319A	МТ	B-H Weld	5360-5				12S	Supplemental exam for weld 1-391A, RR-A1
8-319B	MT	B-H Weld	5360-5				12S	Supplemental exam for weld 1-391C, RR-A1
8-319C	MT	B-H Weld	5360-5			10S	· · · ·	Supplemental exam for weld 1-391E, RR-A1
8-319D	MT	B-H Weld	5360-5				12S	Supplemental exam for weld 1-391G, RR-A1
B-J	·		10 - C		н 			
B9.11 Circumferential Pipin	na Weld 4" N	JDQ or Larger						
3-316A	UT	RI (TASCS, CC)	3537-5	RR-A30	08C			
3-316D	UT	RI (TASCS, CC)	3536-5	RR-A30	000		12S	
3-316E	UT	RI (TASCS, CC)	3536-5	RR-A30			12S	
7-316A	UT	RI	5352-5	RR-A30	08C		110	
FW-E11-2298-6W0	UT	A, (IGSCC)	2298-5	111-1100	08C			Note 2, Category B
FW-E11-2299-2WF3	UT	RI	2299-5	RR-A30		09C	<ul> <li>A state of</li> </ul>	THUE 2, Caugoly 12 and a second secon

## INSERVICE INSPECTION NDE PROGRAM TABLE A

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspec 1	tion Po 2	eriod 3	Remarks
B-J		· · · · · · · · · · · · · · · · · · ·						
B9.11 Circumferential Pi	ping Weld 4" N	PS or Larger						
FW-E11-2327-0W1	UT	RI	2327-5	<b>RR-A30</b>	08C			
FW-E11-2327-0W6	UT	RI	2327-5	<b>RR-A30</b>			115	, i construction of the second s
FW-E11-2327-6W0	PT	A (IGSCC)	2327-5				11S	Note 2 Category B
FW-E21-3052-4WF1	UT	RI	3052-5	<b>RR-A30</b>			12S	
FW-E41-2297-0W4	MT	RI	2297-5	<b>RR-A30</b>	08C			
FW-E41-2297-2W3	UT	RI	2297-5	<b>RR-A30</b>	08C			
FW-E51-2192-1W2	UT	RI	2192-5	RR-A30		09C		
FW-E51-2192-2W3	UT	RI	2192-5	<b>RR-A30</b>		09C		
FW-G33-3096-10WF3	UT	A, RI (IGSCC)	5351-5	<b>RR-A30</b>	08C	1	-	
FW-G33-3096-6WF5	UT	RI	3096-5	<b>RR-A30</b>			11S	
FW-G33-3096-8W11	UT	RI	5351-5	<b>RR-A30</b>		10S	· .	
FW-G33-3096-8W9	UT	RI	5351-5	<b>RR-A30</b>		10S		
FW-G33-3096-9WF1	UT	RI	5351-5	<b>RR-A30</b>		10S		
FW-N21-2336-13W14	UT	RI	3537-5	<b>RR-A30</b>		10S		
FW-N21-2336-14WF1	UT	RI	3537-5	<b>RR-A30</b>		10 <b>S</b>		
FW-N21-2336-15W0	UT	RI (TASCS)	3537-5	<b>RR-A30</b>	08C			
FW-N21-2336-16W19	UT	RI	3537-5	<b>RR-A30</b>			11 <b>S</b>	
FW-N21-2336-3W4	UT	RI	3536-5	RR-A30		09C		RCIC Selection
FW-PS-2-A6	UT	RI	5352-5	RR-A30			12S	
FW-PS-2-C3	UT	RI	5354-5	<b>RR-A30</b>		10S		
FW-RD-2-A1-W1	UT	RI, A (IGSCC)	5357-5	<b>RR-A30</b>			12S	Note No. 2, Cat. B
FW-RD-2-A11	UT	RI, A (IGSCC)	5356-5	<b>RR-A30</b>			11S	Note 2, Category B (CRC)
FW-RD-2-A16	UT	RI, A (IGSCC)	5356-5	<b>RR-A30</b>		09C		Note 2, Category B (CRC)
FW-RD-2-A17	UT	A (IGSCC)	5356-5				12S	Note 2, Category B(CRC)
FW-RD-2-A9	UT	A (IGSCC)	5357-5		08CA			Note 2, Category B
FW-RD-2-B1-W1	UT	RI, A(IGSCC)	5359-5	<b>RR-A30</b>			11S	Note 2, Category B UFSAR 5.2.3.2
FW-RD-2-B19	UT	A, (IGSCC)	5358-5		5 g	10SA	· · · · •	Note 2, Category B (CRC)
FW-RS-2-A1	UT	A (IGSCC)	5357-5				12SA	Note No. 2, Cat. B

## INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2

Change 3

Category	/ Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspo 1	ection 2	Period 3	Remarks			
B-J	· • • • • • • • • • • • • • • • • • • •											
<b>B9.1</b> 1	1 Circumferential Piping	g Weld 4" N	<b>PS or Larger</b>									
N4A		UT	RI (TASCS, CC)	3537-5	<b>RR-A30</b>	08C						
N4D		UT	RI (TASCS,CC)	3536-5	<b>RR-A30</b>			12S				
N4E		UT	RI (TASCS, CC)	3536-5	<b>RR-A30</b>			11S				
SW-F	E21-3053-3WN	UT	RI	3053-5	<b>RR-A30</b>		09C					
SW-F	E21-3053-3WP	UT	RI	3053-5	<b>RR-A30</b>		09C					
SW-C	G33-3096-5WD	UT	RI	3096-5	<b>RR-A30</b>			11 <b>S</b>				
SW-C	G33-3096-5WH	UT	RI	3096-5	<b>RR-A30</b>			11S				
SW-N	N21-2335-1WD	UT	RI	3536-5	<b>RR-A30</b>		09C		<b>RCIC Selection</b>			
SW-N	N21-2336-13WC	UT	RI	3537-5	<b>RR-A30</b>		10S					
SW-N	N21-2336-13WE	UT	RI	3537-5	<b>RR-A30</b>		10S					
SW-N	N21-2336-15WP	UT	RI (TASCS)	3537-5	RR-A30	08C						
SW-N	N21-2336-1WL	UT	RI (TASCS)	3536-5	RR-A30		09C					•
SW-N	N21-2336-1WU	UT	RI	3536-5	<b>RR-A30</b>		09C		<b>RCIC Selection</b>			
SW-N	N21-2336-3WC	UT	RI	3536-5	<b>RR-A30</b>		09C		RCIC Selection			
SW-F	PS-2-A1-A	UT	RI	5352-5	RR-A30	<b>08C</b>						
SW-F	PS-2-A1-B	UT	RI	5352-5	<b>RR-A30</b>	08C						
SW-F	PS-2-A4-B	UT	RI	5352-5	<b>RR-A30</b>			12S				
SW-F	PS-2-C3-A	UT	RI	5354-5	RR-A30		10S					
SW-F	PS-2-C3-C	UT	RI	5354-5	RR-A30		10S					
SW-F	PS-2-C3-D	UT	RI	5354-5	RR-A30		10S					
SW-F	PS-2-C3-J	UT	RI	5354-5	RR-A30	08C						
SW-F	PS-2-C3-K	UT	RI	5354-5	RR-A30	08C						
SW-F	RD-2-A3-W7	UT	RI, A (IGSCC)	5356-5	RR-A30			11S	Note 2, Category B			
SW-F	RD-2-A4-W2	UT	RI	5356-5	RR-A30			11 <b>S</b>	Note 2, Category A			
SW-F	RD-2-B4-W2	UT	RI, A	5358-5	RR-A30			12S	Note 2, Category A			
SW-F	RD-2-B8-W1	UT	RI, A	5358-5	RR-A30	08C			Note 2, Category A			
SW-R	RD-2-B8-W2 1910 A 9700 4154 5	UT UT	<b>RI, A</b> '		<b>RR-A30</b>	108C+1	રક્ષ તોરાંગ્સન હ	. <b>.</b>	Note 2, Category A	n ing in these grad	الماهية الحاصية	62 - zant Ka
SW-R	RS-2-A2-W1	UT	A (IGSCC)	5357-5			09C		Note No. 2, Cat. B			

#### INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Insp 1	ection 2	Period 3	Remarks
B-J								
B9.11 Circumferential Pig	ping Weld 4" N	<b>PS or Larger</b>						
SW-RS-2-B1-W1	UT	RI, A (IGSCC)	5359-5	<b>RR-A30</b>			11 <b>S</b>	Note 2, Category B
SW-RS-2A1-W1	UT	RI, A (IGSCC)	5357-5	RR-A30			12S	Note No. 2, Cat. B
B-K-1								
B10.10 Piping Integral Atta	achment Weld							
SW-N21-2336-20WB	МТ	> 5/8 T"	3537-5			1 <b>0</b> S		ISI Eval. 99-055; Code Case N-509
SW-N21-2336-20WC	MT	> 5/8 T"	3537-5			1 <b>0S</b>		ISI Eval. 99-055; Code Case N-509
SW-N21-2336-20WD	MT	> 5/8 T"	3537-5	· .		10S		ISI Eval. 99-055; Code Case N-509
SW-N21-2336-20WE	MT	> 5/8 T"	3537-5			1 <b>0S</b>		ISI Eval. 99-055; Code Case N-509
SW-PS-2-A2-AA1	MT	> 5/8 T"	5352-5		07C		•	ISI Eval. 99-055; Code Case N-509
SW-PS-2-A2-AA2	MT	> 5/8 T"	5352-5		07C			ISI Eval. 99-055; Code Case N-509
SW-PS-2-A2-AA3	MT	> 5/8 T"	5352-5		07C			ISI Eval. 99-055; Code Case N-509
SW-PS-2-A2-AA4	MT	> 5/8 T"	5352-5		07C		1.1	ISI Eval. 99-055; Code Case N-509
B10.20 Pump Integral Atta	chment Weld	· · · ·				e 11		
SW-B31-5365-Pump A-WA	PT .	> 5/8 T"	5365-5	• • •	17		125	ISI Eval. 99-055; Code Case N-509
B-L-2								
B12.20 Pump Casing								
RRC Pump A	<b>VT-3</b>	Visual VT-3	5365-5					Only if Disassembled, Note 10
RRC Pump B	<b>VT-3</b>	Visual VT-3	5365-5					Only if Disassembled, Note 10
B-M-2	· · · ·				•			
B12.50 Valve Body	•	а. — С. А. — С. — С. — С. — С. — С. — С.						
B21F010A	<b>VT-3</b>	>4 NPS"	3537-5		08C	09C		Only if Disassembled
B21F010B	<b>VT-3</b>	>4 NPS"	3536-5		07C	09C		Only if Disassembled
B21F011A	VT-3	>4 NPS"	3537-5					Only if Disassembled
B21F011B	VT-3	>4 NPS"	3536-5					Only if Disassembled
B21F013A	VT-3	>4 NPS"	5355-5	н 1				Only if Disassembled
B21F013B	VT-3	'>4 NPS"	5354-5	ta stratina strati	N. S. S. Row	an the the ender of	verit – 1849	Only if Disassembled
B21F013C	VT-3	>4 NPS"	5353-5		08C			Only if Disassembled
								-

## INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspe 1	ection 2	Period 3	Remarks	
B-M-2									
B12.50 Valve Body									
B21F013D	VT-3	>4 NPS"	5353-5					Only if Disassembled	
B21F013E	VT-3	>4 NPS"	5354-5					Only if Disassembled	
B21F013F	<b>VT-3</b>	>4 NPS"	5353-5		08C			Only if Disassembled	
B21F013G	<b>VT-3</b>	>4 NPS"	5353-5					Only if Disassembled	
B21F013H	<b>VT-3</b>	>4 NPS"	5354-5					Only if Disassembled	
B21F013J	<b>VT-3</b>	>4 NPS"	5354-5					Only if Disassembled	
B21F013K	VT-3	>4 NPS"	5353-5		08C			Only if Disassembled	
B21F013L	<b>VT-3</b>	>4 NPS"	5352-5					Only if Disassembled	
B21F013M	<b>VT-3</b>	>4 NPS"	5352-5					Only if Disassembled	
B21F013N	<b>VT-3</b>	>4 NPS"	5352-5		08C		en e	Only if Disassembled	
B21F013P	VT-3	>4 NPS"	5355-5	5 C				Only if Disassembled	
B21F013R	<b>VT-3</b>	>4 NPS"	5354-5					Only if Disassembled	
B21F022A	<b>VT-3</b>	>4 NPS"	5352-5		ан 19			Only if Disassembled	
B21F022B	<b>VT-3</b>	>4 NPS"	5353-5					Only if Disassembled	
B21F022C	<b>VT-3</b>	>4 NPS"	5354-5		i.			Only if Disassembled	
B21F022D	<b>VT-3</b>	>4 NPS"	5355-5		07C			Only if Disassembled	
B21F028A	<b>VT-3</b>	>4 NPS"	5352-5					Only if Disassembled	
B21F028B	VT-3	>4 NPS"	5353-5		07C			Only if Disassembled	
B21F028C	<b>VT-3</b>	>4 NPS"	5354-5		07C			Only if Disassembled	
B21F028D	<b>VT-3</b>	>4 NPS"	5355-5					Only if Disassembled	
B21F032A	<b>VT-3</b>	>4 NPS"	3537-5		07C			Only if Disassembled	
B21F032B	<b>VT-3</b>	>4 NPS"	3536-5	,	07C			Only if Disassembled	· · · · · · · · · · · · · · · · · · ·
B21F076A	<b>VT-3</b>	>4 NPS"	3537-5		07C			Only if Disassembled	
B21F076B	<b>VT-3</b>	>4 NPS"	3536-5		07C	09C		Only if Disassembled	
B31F023A	<b>VT-3</b>	>4 NPS"	5357-5					Only if Disassembled	
B31F023B	<b>VT-3</b>	>4 NPS"	5359-5					Only if Disassembled	ана (т. 1997). 1997 — Прила Парада, 1997 — Прила (т. 1997). 1997 — Прила Парада, 1997 — Прила (т. 1997).
B31F031A	VT-3	>4 NPS" · · · · · · · · · · ·	~··5357-5*·	e escales a cara	ي رواي در د			Only if Disassembled	n di kana sa kana sa kata sa k
B31F031B	<b>VT-3</b>	>4 NPS"	5359-5					Only if Disassembled	

#### **INSERVICE INSPECTION NDE PROGRAM** TABLE A

## FERMI 2 NUCLEAR POWER PLANT

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Catego	o <b>ry / Ite</b> r	n Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspe 1	ection Pe 2	riod 3	Remarks	
B-M-	-2										
<b>B</b> 1	12.50	Valve Body									
El	11F008		<b>VT-3</b>	>4 NPS"	2299-5					Only if Disassembled	
El	11F009		VT-3	>4 NPS"	2299-5					Only if Disassembled	
El	11F015A		<b>VT-3</b>	>4 NPS"	2298-5		07C			Only if Disassembled	
El	1F015B		<b>VT-3</b>	>4 NPS"	2327-5					Only if Disassembled	
E	1F050A		VT-3	>4 NPS"	2298-5		07C	09C		Only if Disassembled	
El	1F050B		<b>VT-3</b>	>4 NPS"	2327-5		07C	09C		Only if Disassembled	
El	1F060A		VT-3	>4 NPS"	2298-5					Only if Disassembled	
El	1F060B		<b>VT-3</b>	>4 NPS"	2327-5					Only if Disassembled	
El	1F067		<b>VT-3</b>	>4 NPS"	2299-5					Only if Disassembled	· · · · ·
E1	1F608		VT-3	>4 NPS"	2299-5	÷				Only if Disassembled	
E2	21F005A		VT-3	>4 NPS"	3052-5					Only if Disassembled	
E2	21F005B		<b>VT-3</b>	>4 NPS"	3053-5					Only if Disassembled	
E2	21F006A	., · · ·	<b>VT-3</b>	>4 NPS"	3052-5		08C			Only if Disassembled	
E2	21F006B	en e	<b>VT-3</b>	>4 NPS"	3053-5		07C	09C		Only if Disassembled	
E2	21F007A		VT-3	>4 NPS"	3052-5					Only if Disassembled	
E2	21F007B		VT-3	>4 NPS"	3053-5		. •			Only if Disassembled	
E4	1F002		VT-3	>4 NPS"	2297-5					Only if Disassembled	. •
<b>E</b> 4	1F003		VT-3	>4 NPS"	2297-5					Only if Disassembled	
<b>E</b> 4	1F006		VT-3	>4 NPS"	5352-5			•		Only if Disassembled	
· E5	1F013		<b>VT-3</b>	>4 NPS"	3536-5					Only if Disassembled	
G3	3 <b>F</b> 001		<b>VT-3</b>	>4 NPS"	3096-5					Only if Disassembled	н. По селот
G3	33F004		VT-3	>4 NPS"	3096-5					Only if Disassembled	•
G3	3F100		VT-3	>4 NPS"	5351-5					Only if Disassembled	
G3	3F102		VT-3	>4 NPS"	5351-5					Only if Disassembled	
G3	3F106		VT-3	>4 NPS"	5351-5					Only if Disassembled	

# **B-N-1**

B13.10

and provide and the first statement and the statement and the second statement and the statement of the statement of the Reactor Vessel Interior - Vessel Internals are examined using remote visual techniques. Exams listed are code required exams. More detailed techniques are utilized as per BWRVIP I&E Guidelines (Note 22).

## INSERVICE INSPECTION NDE PROGRAM TABLE A

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Category / Iter	m Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspe 1	ction 2	Period 3	Remarks
B-N-1									
B13.10	Reactor Vessel Inter techniques are utilize				ote visual te	chniques	s. Exa	ms liste	d are code required exams. More detailed
Access Hole	e Cover	<b>VT-</b> 1	Vessel Interior, A				09C		Note No. 13
CDP and SI	C Line	VT-3	Vessel Interior						Only if Accessible
Control Rod	Drive Housings	VT-3	Vessel Interior						Only if Accessible
Core Shroud	<b>1</b>	VT-1	Vessel Interior, A			07CP/ 08CP			Note No. 19
Core Shrouc	1	VT-3	Vessel Interior			07CP/ 08CP			Note No. 19
Core Shroud	1 Welds	UT	Vessel Interior, A					12S	Note No. 19
Core Spray Piping	Sparger and Interior	VT-3 / VT-1	Vessel Interior, A		•	07C/0 8CP	09CP		Note No. 12
Feedwater S	parger	VT-3	Vessel Interior			07CP/ 08CP	09CP		NUREG 0619 at least once every 4 Cycles
Flux Monito	or Housings	VT-3	Vessel Interior	· · ·					Only if Accessible
Guide Rod I	Holders / Brackets	VT-3	Vessel Interior			07CP/ 08CP		12SP	
Instrumentat	tion Lines	VT-3	Vessel Interior, A		· .	07CP/ 08CP	09CP		Note No. 7
Jet Pump Co	omponents	VT-3 / UT	Vessel Interior, A			07CP/ 08CP	09CP		Note No. 17
Jet Pump Ho	old Down Beams	VT-3	Vessel Interior	•	· · ·	07CP/ 08CP	09CP	· .	
Jet Pump Ho	old Down Beams	UT	Vessel Interior, A				09C		Note No. 3
Recirculation	n Inlet Nozzle	<b>VT-3</b>	Vessel Interior			08CP	09CP	10SP	
Sample Hold	ders	VT-3	Vessel Interior			08CP	10SP	12SP	
Shroud Head	đ	VT-3	Vessel Interior			07CP/ 08CP	09CP	•.	
Shroud Head	d Bolts	UT	Α						Note No. 9
Shroud Head	d Bolts	VT-3	Vessel Interior	history and the the	· · · · · ·	07CP/ 08CP	09CP	. `.	ر میں ایک

#### INSERVICE INSPECTION NDE PROGRAM TABLE A

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#### FERMI 2 NUCLEAR POWER PLANT

Selection Basis Relief **Inspection Period** Exams **Category / Item Identification** Isometric Remarks Require Request 3 2 1 **B-N-1** B13.10 Reactor Vessel Interior - Vessel Internals are examined using remote visual techniques. Exams listed are code required exams. More detailed techniques are utilized as per BWRVIP I&E Guidelines (Note 22). Steam Dryer Assembly / Hold **VT-3** Vessel Interior 07CP/ 09CP Note No. 11 Downs **08CP VT-3** 07CP/ 09CP Steam Separator Assy. Vessel Interior **08CP Top Guide** VT-3 Vessel Interior 07CP/ 09CP Note No. 16 **08CP B-N-2** B13.20 RPV Interior Welded Attachments Within Beltline Region - Vessel Internals are examined using remote visual techniques. Exams listed are code required exams. More detailed techniques are utilized as per BWRVIP I&E Guidelines (Note 22). Jet Pump Riser Brace Arms **VT-1** 07CP/ 09CP Vessel Interior, A **08CP** Surveillance Specimen Bracket **VT-1** Attachment Weld 07CP/ 10SP 08CP B13.30 RPV Interior Welded Attachments Beyond Beltline Region - Vessel Internals are examined using remote visual techniques. Exams listed are code required exams. More detailed techniques are utilized as per BWRVIP I&E Guidelines (Note 22). **Core Spray Piping Brackets** Interior Attachment 07CP/ 09C VT-3 **08CP Beyond Beltline** Feedwater Sparger Brackets **VT-3** Interior Attachment 07CP/ **08CP Beyond Beltline** Shroud Support Welds VT-3/ Interior Attachment 09CP 11S Note No. 19 UT **Beyond Beltline** Steam Dryer Support Lugs **VT-3 Interior Attachment** 07CP/ **Beyond Beltline 08CP** B13.40 Welded Core Support Structure - Vessel Internals are examined using remote visual techniques. Exams listed are code required exams. More detailed techniques are utilized as per BWRVIP I&E Guidelines (Note 22). Core Support Assy. & Bolts VT-3/ A 07CP/ **BWRVIP-25** UT **08CP** Lower Core Shroud VT-3 Core Support, A 07CP 09CP Note No. 19 **Peripheral Fuel Support .VT-3** 07CP/ 09CP Α **08CP** 

## INSERVICE INSPECTION NDE PROGRAM TABLE A

FERMI 2 NUCLEAR POWER PLANT

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Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request		ection 1	Period 3	Remarks
8-0								· · · · · · · · · · · · · · · · · · ·
B14.10 Welds in CRD Housir	ng							
CRDH-X02-Y27-W1	PT	10% Peripheral Housing Welds	5363-5		08C			
CRDH-X02-Y27-W2	PT	10% Peripheral Housing Welds	5363-5		08C			
CRDH-X02-Y31-W1	PT	10% Peripheral Housing Welds	5363-5			1 <b>0S</b>		
CRDH-X02-Y31-W2	PT	10% Peripheral Housing Welds	5363-5			10S		
CRDH-X02-Y35-W1	PT	10% Peripheral Housing Welds	5363-5	н 1977 - А 1977 - А		:	11S	
CRDH-X02-Y35-W2	PT	10% Peripheral Housing Welds	5363-5	an Article - Article Marticle - Article - Arti			11 <b>S</b>	
CRDH-X02-Y39-W1	PT	10% Peripheral Housing Welds	5363-5				12S	
CRDH-X02-Y39-W2	PT	10% Peripheral Housing Welds	5363-5				128	
B-P		•						
B15.X Class 1 Pressure Reta	aining Bound	ary						
B21, B31, C41, E11, E21, E41, E51, G33, N21, P34	VT-2	Class1 Pressure Retaining Boundary	<b>F</b> actoria de la compañía de la		07C, 08C	09C, 10S	115	X Includes items - B15.10, B15.50, B15.60 and B15.70. Each Refueling Outage; Note 15
B21, B31, C41, E11, E21, E41, E51, G33, N21, P34	VT-2	Class1 Pressure Retaining Boundary	,			. *** 2 1	12 <b>S</b>	X Includes items - B15.11, B15.51, B15.61 and B15.71. Each Interval, Code Case N-498-1
C-A			et a					· · · · · · · · · · · · · · · · · · ·
C1.10 Shell Circumferential	l Weld		i.					
SW-E11-D2-HX-11	UT	Gross Structural Discontinuity	5370-5		08C			
C1.20 Head Circumferential	al Weld							
SW-E11-D2-HX-05	UT	Gross Structural	5370-5				11S	

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# FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2

Change 3

Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspe 1	ction Per 2	riod 3	Remarks		
C-B										
C2.21 Nozzle to Shell (or H	lead) Weld									
SW-E11-D2-HX-01	MT	Shell - T >.5"	5370-5		08C					
SW-E11-D2-HX-01	UT	Shell - T >.5"	5370-5		08C					
SW-E11-D2-HX-10	UT -	Shell - T >.5"	5370-5				11S			
SW-E11-D2-HX-10	MT	Shell - T >.5"	5370-5			·	11S		н н н н	
C2.22 Nozzle Inside Radiu	s Section								· · ·	
SW-E11-D2-HX-01 IRS	UT	Selected Nozzle			08C					
SW-E11-D2-HX-10 IRS	UT	Selected Nozzle		· · ·			11S		н П	
C-C										
C3.10 Intregally Welded A	ttachment (Ve	essel)		· .		· · · ·				
SW-E11-D2-HXS-05	MT	10%	5370-5		08C			Code Case N-509		·
SW-E11-D2-HXS-06	MT	10%	5370-5		08C	14 a.		Code Case N-509		
SW-E11-D2-HXS-07	MT	10%	5370-5		08C	·		Code Case N-509		
SW-E11-D2-HXS-09	MT	10%	5370-5		08C			Code Case N-509	· · ·	
SW-E11-D2-HXS-10	MT	10%	5370-5		08C			Code Case N-509		
SW-E11-D2-HXS-11	MT	10%	5370-5		08C			Code Case N-509		
SW-E11-D2-HXS-12	MT	10%	5370-5		08C			Code Case N-509		
SW-E11-D2-HXS-13	MT	10%	5370-5			09C		Code Case N-509		
SW-E11-D2-HXS-14	MT	10%	5370-5			09C		Code Case N-509	•	
SW-E11-D2-HXS-15	MT	10%	5370-5			09C		Code Case N-509		
SW-E11-D2-HXS-16	MT	10%	5370-5			09C		Code Case N-509		•
SW-E11-D2-HXS-17	MT	10%	5370-5				11S	Code Case N-509		
SW-E11-D2-HXS-18	MT	10%	5370-5				115	Code Case N-509		
SW-E11-D2-HXS-19	MT	10%	5370-5				11S	Code Case N-509		
SW-E11-D2-HXS-20	MT	10%	5370-5	•			11S	Code Case N-509		
SW-E11-D2-HXS-21	MT	10%	5370-5				11S	Code Case N-509		
SW-E11-D2-HXS-22	MT	10%	5370-5				11S	Code Case N-509		
SW-E11-D2-HXS-23	MT	10%	5370-5	••••••••••••••••••••••••••••••••••••••	· · ··	•••••	11S	Code Case N-509	netion e sor a	1 0 10 <sup>1</sup>
SW-E11-D2-HXS-24	MT	10%	5370-5			:	11S	Code Case N-509		

## INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Ca	ategory / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspo 1	ection 2	Period 3	Remarks			-
C	-C											-
	C3.20 Intregally Welded A	ttachment (Pi	ping)									
	C11-50-2113-G262A	MT	10%	5375-5				11S	Code Case N-509			
	C11-50-2113-G262B	MT	10%	5375-5				11S	Code Case N-509			
	C11-50-2113-G262C	MT	10%	5375-5				11S	Code Case N-509			
	C11-50-2113-G262D	MT	10%	5375-5				11 <b>S</b>	Code Case N-509			
	C11-50-2113-G262E	MT	10%	5375-5				11 <b>S</b>	Code Case N-509			
	C11-50-2113-G262F	MT	10%	5375-5				11 <b>S</b>	Code Case N-509			
	C11-50-2113-G262G	MT	10%	5375-5				11 <b>S</b>	Code Case N-509			
	C11-50-2113-G262H	MT	10%	5375-5	1			11 <b>S</b>	Code Case N-509			
	PSFW-E21-3147-301	MT	10%	3147-5		07C			Code Case N-509			
. 1	PSFW-E41-3167-IWE	MT	10%	3167-5			10S		Code Case N-509			
	PSFW-E41-3167-IWF	MT	10%	3167-5	•		10S		Code Case N-509			
19 10	PSFW-E41-3167-IWG	MT	10%	3167-5	· · ·		10S		Code Case N-509			•
	PSFW-E41-3167-IWH	MT	10%	3167-5			10S		Code Case N-509		• • • •	
	SW-E11-3151-4WE	MT	10%	3151-5	1. A. M.			125	Code Case N-509	·		
	SW-E11-3151-4WF	MT	10%	3151-5				12S	Code Case N-509			. •
	SW-E11-3151-4WG	MT	10%	3151-5				12S	Code Case N-509			
	SW-E11-3151-4WH	MT	10%	3151-5				128	Code Case N-509		· · · ·	
	SW-E11-3151-4WJ	MT	10%	3151-5				12S	Code Case N-509		·	
	SW-E11-3151-4WK	MT	10%	3151-5	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	н. 14		12S	Code Case N-509			
Ċ	-F-1			н 								
	Augmente NRC Commitment		на. На селото на селото н По селото на селото н								•	
	FW-C41-2979-11S12	PT	Α	2979-5			10S		EF2-53.873			
	FW-C41-2979-17818	PT	Α	2979-5				12S	EF2-53.873			
	FW-C41-2979-1S2	PT	Α	2979-5		08C			EF2-53.873			
	FW-C41-2979-2S3	PT	A .	2979-5		08C			EF2-53.873			
	FW-C41-2979-50S51	PT	Α	2979-5				11S	EF2-53.873			
	FW-C41-2979-63864	PT	A State	2979-5			09C		EF2-53.873		a da a t	
	FW-C41-2979-64S65	PT	A	2979-5			09C		EF2-53.873			

#### INSERVICE INSPECTION NDE PROGRAM TABLE A

ISI - NDE Program Rev. 2 Change 3

# FERMI 2 NUCLEAR POWER PLANT

	Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Insp 1	ection 2	Period 3	Remarks	
-	C-F-1			<u>.</u>						
	Augmente NRC Commitment									
	FW-C41-2979-72S73	РТ	Α	2979-5		08C		•	EF2-53.873	
	FW-C41-2979-81S82	РТ	Α	2979-5				12S	EF2-53.873	
	FW-C41-2979-L	PT	Α	2979-5			10S		EF2-53.873	
	FW-C41-2979-P	PT	Α	2979-5		07C			EF2-53.873	
	FW-C41-3361-02W1	PT	Α	3361-5		07C			EF2-53.873	
	FW-C41-3361-1WF22	РТ	Α	3361-5				12S	EF2-53.873	
	FW-C41-3361-1WF25	PT	$\mathbf{A}^{\mathbf{A}}$	3361-5				11 <b>S</b>	EF2-53.873	
	FW-C41-5058-54S55	PT	<b>A</b>	5374-5			09C		EF2-53.873	
	FW-C41-5058-65S66	PT	<b>A</b>	5374-5		1.		11 <b>S</b>	EF2-53.873	
	C-F-2	en an an an Arraige An an Arraige an Arraige								
	C5.51 Circumferential Weld				· · · · · ·					
	FW-C11-2113-249-B	MT	R	5372-5				12S		
	FW-C11-2113-249-B	UT	R	5372-5	· .	л 1		12S		
	FW-E11-3146-5WO	UT	MS	3146-5		08C				
	FW-E11-3146-5WO	MT	MS	3146-5		08C				
	FW-E11-3146-6W10	MT	MS	3146-5		07C				
	FW-E11-3146-6W10	UT	MS	3146-5		07C				
	FW-E11-3146-OW1	MT	TE	3146-5				115		
	FW-E11-3146-OW1	UT	TE	3146-5				11S		
	FW-E11-3151-10W0	MT	TE	3151-5				11S		
	FW-E11-3151-10W0	UT	TE	3151-5				11S		
	FW-E11-3151-3WF2	UT	MS	3151-5			09C			
	FW-E11-3151-3WF2	MT	MS	3151-5			09C			
	FW-E11-3151-7W11	MT	MS	3151-5			10S			
	FW-E11-3151-7W11	UT	MS	3151-5			10S			
	FW-E11-3154-13WO	UT	TE	3154-5			09C	·		
	FW-E11-3154-13WO	МТ	TE	3154-5			09C		- K	
	FW-E11-3154-4WO	UT	TE	3154-5				12S		

## INSERVICE INSPECTION NDE PROGRAM TABLE A

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2

Change 3

Category	/ Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Insp 1	ection 2	Period 3	Remarks		· · ·
C-F-2	-	1						<u> </u>			
C5.51	<b>Circumferential Weld</b>										
FW-E	11-3154-4WO	MT	TE	3154-5				12S			
FW-E	11-3157-OW6	MT	TE	3157-5		07C					
FW-E	1-3157-OW6	UT	TE	3157-5		07C					
FW-E	1-3158-10WF4	UT	TE	3158-5		07C					
FW-E	1-3158-10WF4	MT	TE	3158-5		07C					
FW-E	1-3158-1W2	UT	R	3158-5			09C				· · ·
FW-E	1-3158-1W2	MT	R	3158-5	а. -		09C				
FW-E	11-3158-9WF2	MT	R	3158-5			09C				
FW-E	1-3158-9WF2	UT	R	3158-5			09C				·
FW-E	1-3159-OW1	UT	HS	3159-5		08C				* a	
FW-E	1-3159-OW1	MT	HS	3159-5		08C	e e e	· · ·			н 11 А.
FW-E	11-3160-OW2	<b>VT-1</b>	R	3160-5	<b>RR-A26</b>			11S	Note 21		
FW-E	1-3161-4WF5	<b>VT-1</b>	R	3161-5	<b>RR-A26</b>		· .	12S	Note 21	and the state	
FW-E	1-3164-4W5	UT	R	3164-5				12S			
FW-E	1-3164-4W5	MT	R	3164-5				12S			
FW-EI	1-4611-1W2	VT-1	R	4611-5	<b>RR-A26</b>			12S	Note 21	-	
FW-E1	1-4611-1WF2	<b>VT-1</b>	R	4611-5	<b>RR-A26</b>			12S	Note 21		
FW-E1	1-4612-3WF4	<b>VT-1</b>	R	4612-5	<b>RR-A26</b>			12S	Note 21		
FW-E1	1-4612-4W5	VT-1	R	4612-5	<b>RR-A26</b>		10S	·	Note 21		
FW-E1	1-4612-4WF1	VT-1	R	4612-5	RR-A26			12S	Note 21		
FW-EI	1-4612-7W8	<b>VT-1</b>	R	4612-5	<b>RR-A26</b>		1 <b>0</b> \$	•	Note 21		
FW-E1	1-4612-8WF3	<b>VT-1</b>	R	4612-5	<b>RR-A26</b>		10S		Note 21		
FW-E1	1-4612-9WO	VT-1	R	4612-5	<b>RR-A26</b>			11S	Note 21		н. 
FW-E2	21-3144-0W4	MT	ТЕ	3144-5	· •		10S				
FW-E2	21-3144-0W4	UT	TE	3144-5			10S				
FW-E2	21-3144-OW1	MT	TE	3144-5		07C					
FW-E2	21-3145-11WO	MT	R	3145-5	en an		10S				
FW-E2	21-3147-16W17	UT	R	3147-5		07C			:		
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#### INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Category / 1	tem Identification	Exams Require	Selection B	lasis	Isometric	Relief Request	Inspe 1	ection 2	Period 3	Remarks		
C-F-2												
C5.51	<b>Circumferential</b> Weld											
FW-E21-	3147-16W17	MT	R		3147-5		07C					
FW-E21-	3148-0W8	MT	TE		3148-5				12S			
FW-E21-	3148-0W8	UT	TE		3148-5				12S			
FW-E21-	3148-7W0	MT	TE		3148-5			09C				· · · · · · · · · · · · · · · · · · ·
FW-E21-	3148-7W0	UT	TE		3148-5			09C				
FW-E41-	3162-11WF1	<b>VT-1</b>	R		3162-5	<b>RR-A26</b>		09C		Note 21		
FW-E41-	3162-11WF4	VT-1	R		3162-5	<b>RR-A26</b>		09C		Note 21		
FW-E41-	3162-11WF5	<b>VT-1</b>	R		3162-5	<b>RR-A26</b>		09C		Note 21		ч. - С.
FW-E41-	3162-11WO	<b>VT-1</b>	R		3162-5	<b>RR-A26</b>	08C			Note 21		· · · · ·
FW-E41-	3162-1W2	UT	R	a da anta a da anta a da a da a da a da	3162-5	ан 1919 - Алар	n an trainn Chailtean	10S				
FW-E41-	3162-1W2	MT	R		3162-5			10S	ela e e			
FW-E41-	3162-9WF0	UT	TE		3162-5		· · · ·		12S			
FW-E41-	3162-9WF0	MT	TE		3162-5				12S			
FW-E41-	3163-7W0	MT	TE		3163-5		07C			- 1.		
FW-E41-	3163-7W0	UT	TE		3163-5		07C	1.1				· · ·
FW-E41-	3163-8W0	UT	TE		3163-5				11 <b>S</b>		•	en de la companya de La companya de la comp
FW-E41-	3163-8W0	MT	TE		3163-5				115		н. 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 -	ante Antonio de la composición de la composi
FW-E41-	3167-1W2	MT	R	•	3167-5				12S	÷.,		
FW-E41-	3167-1W2	UT	R		3167-5				12S			
FW-E41-	3167-9WO	MT	TE		3167-5	· .			115			
FW-E41-	3167-9WO	UT	TE		3167-5	· · · ·			11S		·	
FW-E41-	3167-OW1	MT	TE		3167-5			09C				
FW-E41-	3167-OW1	UT	TE		3167-5			09C	4			
FW-E41-	3169-2W0	UT	R		3169-5			09C				
FW-E41-	3169-2W0	MT	R		3167-5			<b>09C</b>				
FW-E41-	31 <b>72-0</b> W1	UT	TE		3172-5			10S				
FW-E41-	3172-0W1	MT · · ·	TE	·~ ,	** 3172-5		••• • •••	· -10S	14.10 1	•	27e Brik, si katala	€ \$\$7. ₽. ≯≈8. ≯≈
FW-E41-	3172-0W8	UT	R		3172-5				12S			
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## INSERVICE INSPECTION NDE PROGRAM TABLE A

## FERMI 2 NUCLEAR POWER PLANT

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# INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Category	/ Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspe 1	ection 2	Period 3	
C-F-2									
C5.51	1 Circumferential We	eld							
SW-F	E11-3158-8WG	MT	R	3158-5				11S	
SW-F	E11-3161-1WH	MT	R	3161-5				12S	
SW-F	E11-3161-4WB	<b>VT-1</b>	R	3161-5	<b>RR-A26</b>		<b>10S</b> <sup>·</sup>		Note 21
SW-F	E11-3161-4WK	<b>VT-1</b>	R	3161-5	<b>RR-A26</b>			12S	Note 21
SW-F	E11-3177-6WD	MT	R	3177-5				11 <b>S</b>	
SW-F	E11-3177-6WD	UT	R	3177-5				11S	
SW-F	E11-3177-9WE	MT	R	3177-5			09C		
SW-F	E11-3177-9WE	UT	R	3177-5			09C		
SW-F	E21-3145-9WD	<b>VT-1</b>	R	3145-5	<b>RR-A26</b>	08C			Note 21
SW-F	E21-3147-15WF	UT	R	3147-5				11S	
SW-F	E21-3147-15WF	MT	R	3147-5				115	
SW-F	E21-3147-15WG	MT	R	3147-5	· .	· · · · ·	10S		
SW-F	E21-3147-15WG	UT	R	3147-5			10S	· · ·	
SW-F	E21-3147-19WB	UT	R	3147-5		08C			
SW-F	E21-3147-19WB	MT	R	3147-5		08C			
SW-F	E21-3147-5WJ	UT	R	3147-5		08C			
SW-F	E21-3147-5WJ	MT	R	3147-5	· · · ·	08C			
SW-F	21-3148-5WD	MT	R	3148-5		08C			
SW-F	21-3149-4WD	MT	R	3149-5		07C			
SW-F	21-3149-4WD	UT	R	3149-5		07C			
SW-F	21-3149-6WC	UT	R	3149-5				125	
SW-F	21-3149-6WC	MT	R	3149-5	· .			12S	
SW-F	E21-3149-6WL	UT	R	3149-5				11S	
SW-F	321-3149-6WL	MT	R	3149-5				11S	
SW-F	241-3162-11WC	<b>VT-1</b>	R	3162-5	<b>RR-A26</b>	08C			Note 21
SW-F	241-3162-1WU	МТ	R	3162-5			10S		
SW-F	41-3162-1WU	UT	<b>R</b>	3162-5	e e e e	And an and the	- 10S		ુરા દેવના પ્રાપ્ત અને અને છે. <b>તે છે છે</b>
	341-5373-GW3	MT	R	5373-5			09C		

## INSERVICE INSPECTION NDE PROGRAM TABLE A

ISI - NDE Program Rev. 2 Change 3

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FERMI 2 NUCLEAR POWER PLANT

Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Insp 1	ection 2	Period 3	Remarks
C-F-2								
C5.51 Circumferential Weld								
SW-E41-5373-GW3	MT	R	5373-5			09C		
SW-G41-3669-3WB	MT	Ŕ	3669-5			10S		
SW-N30-3258-13WJ	UT	MS	3258-5				12S	
SW-N30-3258-13WJ	MT	MS	3258-5				12S	
SW-N30-3258-19WJ	MT	MS	3258-5		07C			
SW-N30-3258-19WJ	UT	MS	3258-5		07C			
SW-N30-3258-1WJ	MT	MS	3258-5			10S		
SW-N30-3258-1WJ	UT ·	MS	3258-5		1. 	10S	н 	
SW-N30-3258-7WK	MT	MS	3258-5	1		09C		
SW-N30-3258-7WK	UT	MS	3258-5			09C		
SW-T48-04-2095-5WD	MT	R	2095-5				115	
SW-T48-04-2095-WSW3	MT	R	2095-5	· · ·		1.1	115	
SW-T48-04-2097-18WC	MT	R	2097-5		the the s	10S	:	
SW-T48-04-2097-20WD	MT	MS	3258-5	RR-A26		· .	115	Note 21
SW-T48-04-2097-21WB	VT-1	R	2097-5	<b>RR-A26</b>	07C			Note 21
SW-T48-04-2097-25WF	<b>VT-1</b>	R	2097-5	<b>RR-A26</b>	07C			Note 21
C5.52 Longituinal Weld								
SW-E41-3162-11WOLD	<b>VT-1</b>	R	3162-5	<b>RR-A26</b>	08C			Note 21
SW-N30-3258-13WJLU	MT		3258-5				1 <b>2S</b>	
SW-N30-3258-13WJLU	UT		3258-5				12S	
SW-N30-3258-19WJLU	UT		3258-5		07C			
SW-N30-3258-19WJLU	MT		3258-5		07C		:	
SW-N30-3258-1WJLU	MT		3258-5			105		
SW-N30-3258-7WKLU	UT		3258-5			09C		
SW-N30-3258-7WKLU	MT		3258-5			09C		
C5.81 Branch Connection We	ld		4					
FW-E11-3146-15FW01	MT	<b>MS</b>	····3146-5 ·	• • •	u k eser	• 11 *22	··· 12S	فالحروا فالانها الانتهار المتعاول والمهومون والمهومون والمعارية
FW-E11-3157-4WF01	MT	R	3157-5				125	

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## INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Category / Item	Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspe 1	ection 2	Period 3	Remarks
C-F-2				<u></u>					
C5.81	Branch Connection We	eld							
SW-E11-3146	5-5WC	MT	MS	3146-5		07C			
SW-E11-3146	5-5WM	MT	HS	3146-5			10S		
SW-E11-3146	5-7WC	MT	HS	3146-5				12S	
SW-E11-3151	1-8WD	MT	HS	3151-5		08C			
SW-E11-3160	J-1WD	MT	HS	3160-5			09C		
SW-E21-3144	4-5WE	MT	R	3144-5				11S	
SW-N30-3258	8-13WB	MT	R	3258-5		08C			
С-Н				1 - -					
<b>C.7X</b>	Class 2 Pressure Retain	ning Bound	ary						
B21 Main Ste	am	VT-2	Class 2 Boundary	5808-1 5808-2		08C	10S		X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period
E11 Residual	Heat Removal System	VT-2	Class 2 Boundary	5813-1 5813-2 5813-3		08C	105		X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period
E21 Core Spra	ay System	VT-2	Class 2 Boundary	5814		08C	10S	· · · · ·	X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period
E41 High Pres Injection	ssure Coolant	VT-2	Class 2 Boundary	5815		08C	10S		X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period
G41 Fuel Pool System	l Cooling & Cleanup	VT-2	Class 2 Boundary	5819		08C	105	•	X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period
G51 Torus Wa System	ater Management	VT-2	Class 2 Boundary	5820		08C	10S		X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period
N30 Main & F	Reheat Steam System	<b>VT-2</b>	Class 2 Boundary	5822		08C	10S		X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period
P34 Post Acci	ident Sampling	<b>VT-2</b>	Class 2 Boundary	5824		08C	10S		X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period
T48-04 Contai Control System	inment Atmosphere, m	VT-2	Class 2 Boundary	5830-1 5830-2		08C	10 <b>S</b>		X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period
T50 Primary C Monitoring Sy		`VT-2```'	Class 2 Boundary	5831	a sana ang s	08C	105	~ 1 16 63 8 -	X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period

## INSERVICE INSPECTION NDE PROGRAM TABLE A

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3 Page 30

Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Insp 1	ection 2	Period 3	Remarks
С-Н								
C7.X Class 2 Pressure Retai	ning Bound	ary						
B21 Main Steam	VT-2	Class 2 Boundary	5808-1 5808-2				125	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1
C11 Control Rod Drive System	VT-2	Class 2 Boundary	5810-1		08C	10S		X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period
C11 Control Rod Drive System	VT-2	Class 2 Boundary	5810-1				128	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1
C41 Standby liquid Control System	VT-2	Class 2 Boundary	5811		08C	1 <b>0</b> S		X includes items C7.10, C7.30, C7.50 and C7.70. Perform each Period
C41 Standby liquid Control System	VT-2	Class 2 Boundary	5811			- <sup>1</sup>	125	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1
E11 Residual Heat Removal System	VT-2	Class 2 Boundary	5813-1 5813-2 5813-3				12S	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1
E21 Core Spray System	VT-2	Class 2 Boundary	5814	• • •			12S	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1
E41 High Pressure Coolant Injection	<b>VT-2</b>	Class 2 Boundary	5815	RR-A19			12S	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1
G41 Fuel Pool Cooling & Cleanup System	VT-2	Class 2 Boundary	5819				12S	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1
G51 Torus Water Management System	VT-2	Class 2 Boundary	5820				12\$	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1
N30 Main & Reheat Steam System	VT-2	Class 2 Boundary	5822		a.		12S	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1
P34 Post Accident Sampling	VT-2	Class 2 Boundary	5824	· · ·		:	125	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1
T48-04 Containment Atmosphere, Control System	VT-2	Class 2 Boundary	5830-1 5830-2				12\$	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1
T50 Primary Containment Monitoring System	VT-2	Class 2 Boundary	5831		a.		12S	X includes items C7.20, C7.40, C7.60 and C7.80. Perform each Interval; Code Case N498-1

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D2.10 Pressure Retaining Components

## INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Insp 1	ection 2	Period 3	Remarks	
D-B									
D2.10 Pressure Retaining Co	mponents								
E11 Residual Heat RemovalSystem Functional Boundary	Visual, VT-2	System Function	Class 3 Systems		08C	1 <b>0S</b>	12\$	Note 15 Perform Each Per	iod; Code Case 498-1
P42 Reactor Building Closed Cooling Water	Visual, VT-2	System Function	Class 3 Systems		08C	10S	12S	Note 15 Perform Each Per	iod; Code Case 498-1
P44 Emergency Equipment Cooling Water	Visual, VT-2	System Function	Class 3 Systems		08C	10S	125	Note 15 Perform Each Per	iod; Code Case 498-1
P45 Emergency Equipment Service Water	Visual, VT-2	System Function	Class 3 Systems		08C	105	12S	Note 15 Perform Each Per	iod; Code Case 498-1
R30 Emergency Diesel Generator & Service Water	Visual, VT-2	System Function	Class 3 Systems		08C	10S	125	Note 15 Perform Each Per	iod; Code Case 498-1
D2.20 Intregal Attachment (S	Supports an	d Restraints)							
P45-3360-G11	VT-3	Integral Attachment Weld	3360-2				11S		
D2.40 Intregal Attachment			14			a da			
E11-3184-G08	VT-3	Integral Attachment Weld	3184-2			09C			
P44-3048-G10	VT-3	Integral Attachment Weld	3048-2	· · · · ·	07C				
N/A		tan Ang ang ang ang ang ang ang ang ang ang a							
N/A ANSI B31.1 Augmente	d								· · · ·
FW-N20-3105-22WO	UT	NUREG 0313	3105-1			09C		Note 2, Category D	
FW-N20-3105-0W13	UT	NUREG 0313	3105-1		08C			Note 2, Category D	
FW-N20-3105-0W15	UT	NUREG 0313	3105-1		. <sup>1</sup> .		12S	Note 2, Category D	
FW-N20-3105-0W23	UT	NUREG 0313	3105-1			09C		Note 2, Category D	
FW-N20-3105-14WO	UT	NUREG 0313	3105-1				12S	Note 2, Category D	
FW-N20-3105-16W0	UT	NUREG 0313	3105-1		07C			Note 2, Category D	
FW-N20-3105-24W0	UT	NUREG 0313	3105-1			10S		Note 2, Category D	
FW-N20-3105-OW21	UT	NUREG 0313	3105-1	ورجا فالجر في	1 march		11S	Note 2, Category D	ىمىرىمىيەن - ئە <del>كەم مەركە</del> مەركەر مەركە
FW-N20-3107-0W1	UT	NUREG 0313	3107-1			10S		Note 2, Category D	

## INSERVICE INSPECTION NDE PROGRAM TABLE A

# FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3 Page 32

Category / Item Identification	Exams Require	Selection Basis	Isometric	Relief Request	Inspe 1	ction P 2	eriod 3	Remarks
N/A								
N/A ANSI B31.1 Augm	ented							
FW-N20-3107-0W17	UT	NUREG 0313	3107-1		07C			Note 2, Category D
FW-N21-3109-18W0	UT	NUREG 0313	3109-1		08C			Note 2, Category D
FW-N21-3109-29WO	UT	NUREG 0313	3109-1				11S	Note 2, Category D
SW-N20-03-B009-BWSE	UT	NUREG 0313	3105-1				11S	Note 2, Category D
SW-N20-03-B010-BWSE	UT	NUREG 0313	3105-1		08C			Note 2, Category D
SW-N20-03-B011-AWSE	UT	NUREG 0313	3105-1			09C		Note 2, Category D
SW-N20-03-B011-BWSE	UT	NUREG 0313	3105-1			09C		Note 2, Category D
SW-N20-03-B012-AWSE	UT	NUREG 0313	3105-1				12S	Note 2, Category D
SW-N20-03-B012-BWSE	UT	NUREG 0313	3105-1	:			12S	Note 2, Category D
SW-N20-03-B013-AWSE	UT	NUREG 0313	3105-1			10S		Note 2, Category D
SW-N20-03-B013-BWSE	UT	NUREG 0313	3107-1			105		Note 2, Category D
SW-N20-03-B014-AWSE	UT	NUREG 0313	3105-1		07C			Note 2, Category D
SW-N20-03-B014-BWSE	UT	NUREG 0313	3107-1	an a	07C			Note 2, Category D
SW-N21-01-B001-AWSE	UT	NUREG 0313	3109-1				11S	Note 2, Category D
SW-N21-01-B002-AWSE	UT	NUREG 0313	3109-1		08C		-	Note 2, Category D

## INSERVICE INSPECTION NDE PROGRAM

# TABLE B

## INSERVICE INSPECTION NDE PROGRAM TABLE B

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3 Page 2

Code Class	Identification Number	Exams Method	Component Support Type	Relief Request	Inspe 1	ction I 2	Period 3	Remarks	
1	B11-5360-Skirt	VT-3	Α		08C			RPV Skirt & Bolting	
1	B11-5360-STAB-A	<b>VT-3</b>	G			10 <b>S</b>		<b>RPV</b> Stabilizer Supports	
1	B11-5360-STAB-B	VT-3	G		08C			<b>RPV</b> Stabilizer Supports	
1	B11-5360-STAB-C	VT-3	G			10S		<b>RPV Stabilizer Supports</b>	
1	B11-5360-STAB-D	<b>VT-3</b>	G			1 <b>0S</b>		<b>RPV</b> Stabilizer Supports	
1	B11-5360-STAB-E	VT-3	G				11\$	<b>RPV</b> Stabilizer Supports	
1	B11-5360-STAB-F	<b>VT-3</b>	G				12S	<b>RPV</b> Stabilizer Supports	
1	B11-5360-STAB-G	<b>VT-3</b>	G				11 <b>S</b>	<b>RPV</b> Stabilizer Supports	
1	B11-5360-STAB-H	<b>VT-3</b>	G			10S		<b>RPV Stabilizer Supports</b>	
1	B21-2192-G02	<b>VT-3</b>	SP				12S		
1	B21-2192-G13	VT-3	G				12S		
1	B21-2297-G14	<b>VT-3</b>	G		n terre de transformente de la construcción de la construcción de la construcción de la construcción de la cons No construcción de la construcción d	10S			N
1	B21-5352-HA1	<b>VT-3</b>	SP		07C				· · · ·
1	B21-5353-HB2	VT-3	SP	•	08C				
1	B21-5354-AC1	<b>VT-3</b>	Α			10S			
1	B21-5354-HC3	<b>VT-3</b>	SP		08C				
1	B21-5355-GD1	VT-3	G		07C				
1	B31-5356-HA4	<b>VT-3</b>	SP				12S		
1	B31-5357-HA1	VT-3	SP	14. 14.		10S			
1	B31-5357-HA7	<b>VT-3</b>	C	•	08C				
1	B31-5358-HB3	<b>VT-3</b>	SP		07C			. •	· · ·
1	B31-5359-HB6	<b>VT-3</b>	С			10S			
1	B31-5359-HB7	<b>VT-3</b>	C			09C			
1	E11-2298-G01	<b>VT-3</b>	SP				11S		
1	E11-2299-G03	<b>VT-3</b>	SP				11S		
1	E11-2327-G03	VT-3	R			09C			
1	E21-3052-G02	VT-3	SP			09C			
1 🗤	E21-3053-G01	VT-3	SP			09C			* • • • • • • • • • •
1	E21-3053-G03	VT-3	R				12S		
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#### INSERVICE INSPECTION NDE PROGRAM TABLE B

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

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Code Class	Identification Number	Exams Method	Component Support Type	Relief Request	Insp 1	ection 2	Period 3	Remarks
1	E41-2297-G05	VT-3	SP				125	· · · · · · · · · · · · · · · · · · ·
1	E51-2192-G11	VT-3	SP		07C			
1	G33-3096-G01	VT-3	SP			10S		
1	G33-3096-G04	VT-3	SP		07C			
1	G33-3096-G10	VT-3	SP				11S	
1	G33-3096-G32	<b>VT-3</b>	G				11S	
Í	N21-3536-G02	VT-3	SP			09C		
1	N21-3536-G03	VT-3	SP				12S	
1	N21-3536-G07	VT-3	SP				11S	
1	N21-3537-G04	VT-3	SP	:		10 <b>S</b>		
1	N21-3537-G06	VT-3	SP		· · · ·	10S	н. <sup>1</sup>	
2	B21-2586-G02	VT-3	R				125	Augmented exam - See ISI 99-056
2	B21-2587-G06	VT-3	SP				11S	Augmented exam - See ISI 99-056
2	B21-2590-G12	VT-3	SP	· · · · · ·		10S	1997 - 1997 -	Augmented exam - See ISI 99-056
2	B21-2592-G04	VT-3	R		07C			Augmented exam - See ISI 99-056
2	B21-2594-G06	VT-3	SP			09C		Augmented exam - See ISI 99-056
2	B21-4095-G06	<b>VT-3</b>	R		07C			Augmented exam - See ISI 99-056
2	C11-2113-G262	<b>VT-3</b>	G				11 <b>S</b>	· · · · · · · · · · · · · · · · · · ·
2	C11-2113-G266	<b>VT-3</b>	R			09C		
2	C11-2113-G274	VT-3	G	· · ·		09C		
2	C11-2113-G294	<b>VT-3</b>	G		07C			
2	E11-3035-G02	VT-3	R			10S		
2	E11-3035-G05	VT-3	SP	÷		09C		
2	E11-3035-G19	VT-3	G			10S		
2	E11-3035-G24	VT-3	R				12S	
2	E11-3146-G30	VT-3	G				12S	
2	E11-3146-G32	VT-3	SP			09C		•
2	E11-3146-G36	WT-3	R.	r	×	10S -	ensis e e e	i and a second second
2	E11-3151-G05	VT-3	SP				11S	

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## INSERVICE INSPECTION NDE PROGRAM TABLE B

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3 Page 4

Code Class	s Identification Numb	er Exam			Insp 1	ection 2	Period 3	Remarks	
2	E11-3151-G25A	VT-3	R		07C				<u> </u>
2	E11-3151-G29	VT-3	R			09C			
2	E11-3153-G10	<b>VT-3</b>	G		08C				
2	E11-3153-G12	VT-3	SP			09C			
2	E11-3153-G16	VT-3	R				12S		
2	E11-3154-G05	VT-3	SP			10S			
2	E11-3154-G09	VT-3	R		08C				
2	E11-3154-G22	VT-3	R				11S		
2	E11-3154-G28	VT-3	R			09C			
2	E11-3157-G04	VT-3	SP		07C				
2	E11-3157-G24	VT-3	R			09C	анан сайта. Тайта ал		·
2	E11-3157-G29	VT-3	R			105	· · · ·		
2	E11-3158-G33	VT-3	R	94 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 - 1970 -		09C			
2	E11-3158-G46	VT-3	R			09C			
2	E11-3158-G50	VT-3	SP				125		
2	E11-3159-G06	VT-3	R		07C		1 .		
2	E11-3159-G09	VT-3	R				11S		
2	E11-3160-G01	VT-3	SP		08C				
2	E11-3160-G19	VT-3	G		н. 1		12S		
2	E11-3161-G11	VT-3	R				12S	н. - С С С С С С С С	
2	E11-3161-G15	VT-3	R		08C				
2	E11-3164-G11	VT-3	G		07C				
2	E11-3164-G17A	VT-3	R				12S		
2	E11-3164-G21	VT-3	SP		08C				
2	E11-3177-G18	VT-3	R		,	10S			
2	E11-3177-G19	VT-3	R		<b>08C</b>				
2	E11-3177-G30	VT-3	G			10S			
2	E11-4611-G04	••••• <b>VT-3</b> •	SP ·	ng kan disa garan sa sa	14	••••	· · · 125 · ·	n - 1 - 1 - 2284, 4147 - 4494 € 1	n 20 km2
2	E11-4611-G09	VT-3	R		,		12S		

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## INSERVICE INSPECTION NDE PROGRAM TABLE B

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3 Page 5

Code Class	Identification Number	Exams Method	Component Support Type	Relief Request	Insp 1	ection Period 2 3	Remarks
2	E11-4611-G15	VT-3	R		08C		
2	E11-4612-G10	VT-3	R			11S	
2	E11-4612-G12	VT-3	G		08C		
2	E11-5370-G01	VT-3	G			11S	Div 2 RHR HTX Supports
2	E11-5370-G02	VT-3	G		08C		Div 2 RHR HTX Supports
2	E11-5370-G03	VT-3	G			09C	Div 2 RHR HTX Supports
2	E11-5370-G04	VT-3	G			11S	Div 2 RHR HTX Supports
2	E11-5370-G05	VT-3	Α		08C		Div 2 RHR HTX Supports
2	E21-3144-G03	VT-3	SP		07C		
2	E21-3144-G06	VT-3	Α	· · · · · · · · · · · ·	:	115	
2	E21-3144-G11	VT-3	R	and a second		10S	
2	E21-3144-G16	VT-3	R	<ul> <li>Marka</li> <li>and a second second</li></ul>	08C		
2	E21-3144-G20	VT-3	R		1. N.	115	
2	E21-3145-G05	VT-3	SP		n Al-	12S	
2	E21-3147-G13	VT-3	R			125	
2	E21-3147-G20	VT-3	G		ан 1	09C	
2	E21-3147-G35	VT-3	R		07C		and a second
2	E21-3147-G39	VT-3	SP			10S	· · · · · · · · · · · · · · · · · · ·
2	E21-3148-G29	VT-3	R			09C	
2	E21-3148-G37	VT-3	SP			10S	
2	E21-3148-G48	VT-3	R			12S	
2	E21-3149-G05	VT-3	SP			115	
2	E21-3149-G06	VT-3	R			11 <b>S</b>	
2	E21-3150-G02	VT-3	R		07C		
2	E41-3162-G01	VT-3	SP			09C	
2	E41-3162-G03	VT-3	R			09C	
2	E41-3162-G13	VT-3	G			12S	
2	E41-3163-G01	• VT-3	SP ·····		08C		م میں دی کر میں
2	E41-3163-G12	VT-3	R	•		125	
-		7 <b>4</b> 4 <sup>7</sup>	~~				· · · · · · · · · · · · · · · · · · ·

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#### INSERVICE INSPECTION NDE PROGRAM TABLE B

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Code Clas	ss Identification Number	Exams Method	Component Support Type	Relief Request	Inspe 1	ection 2	Period 3	Remarks
2	E41-3167-G01	VT-3	R	<u>,</u>	07C		<u></u>	
2	E41-3167-G13	VT-3	SP		•	10S		•
2	E41-3167-G15	VT-3	R				12S	
2	E41-3169-G100	<b>VT-3</b>	G		08C			
2	E41-3169-G13	VT-3	SP			09G		
2	E41-3169-G17	VT-3	R			10S		
2	E41-3172-G01	<b>VT-3</b>	SP		07C			
2	E41-3172-G14	VT-3	R				11 <b>S</b>	
2	E41-3172-G18	VT-3	G				11S	
2	N30-3258-G02	VT-3	С		07C			
2	N30-3258-G07	VT-3	С		07C			
2	N30-3258-G17(A-D)	VT-3	R			10S		
2	N30-3259-G02	VT-3	С	an a	07C			
2	N30-3259-G25	<b>VT-3</b>	R			09C	н 1	
2	N30-3259-G73	<b>VT-3</b>	SP				12S	
2	P11-3566-G10	<b>VT-3</b>	SP		07C			
2	T48-2095-G01	VT-3	SP		08C	, i		
2	T48-2095-G07B	VT-3	R				11 <b>S</b>	
2	T48-2095-G10A	<b>VT-3</b>	R			10S		
2	T48-2095-G19	VT-3	G	·			11 <b>S</b>	
2	T48-2095-G22	VT-3	R			09C		· · · ·
2	T48-2095-G24A	VT-3	R			10S		- <sup>1</sup> .
2	T48-2095-G25	<b>VT-3</b>	R		07C			1
2	T48-2095-G26A	<b>VT-3</b>	R				12S	. 1
2	T48-2097-G07	VT-3	R			10S		
2	T48-2097-G13B	<b>VT-3</b>	R		07C			
2	T48-2097-G17	VT-3	R				11S	
2	T48-2097-G19	••••••••••••••••••••••••••••••••••••••	900 <b>G</b> (1997) - 19	en e	·	a e	···· 1 <b>†S</b> ~	م میں ایک ایک کی میں میں میں میں میں میں میں میں میں می
2	T48-2097-G21	VT-3	R		07C			

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## INSERVICE INSPECTION NDE PROGRAM TABLE B

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

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Code Class	Identification Numb	ber	Exams Method	Component Support Type	Relief Request	Insp 1	ection 3	Period 3	Remarks
2	T48-2097-G22A		VT-3	R			09C	• •	· · · · · · · · · · · · · · · · · · ·
2	T48-2097-G25A		VT-3	R		08C			
2	T48-2097-G34		VT-3	G			09C		
3	E11-2179-G20		VT-3	R		07C			
3	E11-2180-G14		VT-3	G				12S	
3	E11-2183-G07		VT-3	G			10S		
3	E11-2183-G15		VT-3	R		08C			
3	E11-2184-G12		VT-3	R			10S		
3	E11-2184-G22		VT-3	G		08C			
3	E11-3184-G04		VT-3	G				12S	
3	E11-3184-G08		VT-3	R			09C		
3	E11-3184-G10		VT-3	R				11S	
3	E11-3184-G18		<b>VT-3</b>	R		07C			
3	E11-3185-G40	· .	VT-3	R			09C		
3	E11-3185-G53		VT-3	SP			09C		
3	E11-3185-G58	н. 19	VT-3	SP				12S	
3	E11-3185-G60		VT-3	G			09C		
3	G33-3096-G09		VT-3	R			10S		
3	P42-3340-G06		VT-3	SP			.09C		
3	P44-3047-G28		VT-3	G				115	
3	P44-3048-G10		VT-3	SP		07C			
3	P44-3084-G10		VT-3	R		07C			
3	P44-3084-G15		VT-3	R			10S		
3	P44-3189-G38		VT-3	SP		08C			
3	P44-3189-G42		VT-3	R			10S		
3	P44-3189-G47		VT-3	R		07C	·		
3	P44-3336-G01		VT-3	Α			09C		
- <b>3</b> *	P44-3336-G15	y and an an	VT-3	R and a	a garana sa sa s	÷	ana ing	~~ <b>11S</b> ~*	م ارتباط می دوند می دوند. می واقع و واقع و و و و و و و و و و و و و و و و و و و
3	P44-3337-G13		VT-3	R				12S	

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#### INSERVICE INSPECTION NDE PROGRAM TABLE B

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Code Class	Identification Number	Exams Method	Component Support Type	Relief Request	Insp 1	ection 2	Period 3	Remarks
3	P44-3337-G16	VT-3	R			10S		
3	P44-3345-G02	VT-3	G		08C			
3	P44-3345-G08	VT-3	R			09C		
3	P44-3346-G02	VT-3	G				11 <b>S</b>	
3	P44-3346-G12	VT-3	R				12S	
3	P44-3347-G10	VT-3	R		07C			
3	P44-3347-G14	VT-3	R				12S	
3	P44-3348-G12	VT-3	Α		07C			
3	P44-3351-G28	VT-3	R		08C			
3	P44-3351-G41	VT-3	SP				12S	
3	P44-3368-G31	VT-3	R		· .		11 <b>S</b>	
3	P44-3368-G38	VT-3	R	n de la constance. An anna an			12S	
3	P44-3558-G14	VT-3	R				12S	
3	P44-3559-G12	VT-3	R			10S	•	
3	P44-4624-G01	VT-3	G	· · · ·			115	
3	P44-4624-G12	VT-3	R	. '			125	
3	P44-4625-G03	VT-3	G			н. 	11S	
3	P44-4625-G13	VT-3	R			09S		
3	P44-4628-G02	VT-3	R	·	-	10S		
3	P44-4629-G05	VT-3	G	•		09S		
3	P44-4629-G08	VT-3	R		08C			
3	P44-EECW Head Tank Sprts (Div. 2)	VT-3			08C			
3	P44-EECW Htr Sprts (Div. 1)	VT-3	. *				12S	
3	P45-2178-G09	VT-3	R			<b>09S</b>		
3	P45-2204-G11	VT-3	R				11S	
3	P45-3352-G02	VT-3	G				12S	
3	P45-3352-G06	VT-3	R		07C			
~ 3 ~		• VT-3 •	R	and a start of the start		10 <b>S</b> ***	المراجع المراجع	n da mui en en en en este sant ana da en este en este service este en este en este este este este es
3	P45-3359-G03	VT-3	G		08C			
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## INSERVICE INSPECTION NDE PROGRAM TABLE B

## FERMI 2 NUCLEAR POWER PLANT

ISI - NDE Program Rev. 2 Change 3

Page 9

Code Class	<b>Identification</b> Number	Exams Method	Component Support Type	Relief Request	Inspe 1	ction 1 2	Period 3	Remarks			
3	P45-3359-G11	VT-3	SP				11S	- · · · · · · · · · · · · · · · · · · ·			<u> </u>
3	P45-3360-G04	VT-3	R			10S	•				
3	P45-3360-G07	VT-3	G			09S					
· 3	P45-4626-G03	VT-3	G				12S				
3	P45-4626-G08	VT-3	Α				11S				
3	P45-4627-G06	VT-3	Α				12S				
3	P45-4627-G12	VT-3	R				11S				
3	P45-4630-G04	VT-3	R			09S					
3	P45-4631-G04	VT-3	R			09S					
3	P45-4632-G08	VT-3	R		,	10S					
3	P45-4632-G10	VT-3	G				11S		1997 - 1997 1997 - 1997 - 1997 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1		
3	R30-2176-G17	VT-3	G		07C		•			•	
3	R30-2176-G28	VT-3	Α		1. A. A.	10S			I.		N.
3	R30-2176-G31	VT-3	G	· .	08C						
3	R30-2177-G04	VT-3	R			<b>09S</b>		·			
3	R30-2177-G27	VT-3	R				11S				
3	R30-2177-G31	VT-3	G		08C						
3	R30-2181-G04	VT-3	R				11 <b>S</b>	• •			
3	R30-2181-G15	<b>VT-3</b>	R			10S		· · · ·		· .	
3 .	R30-2182-G02	VT-3	G			09S					
3	R30-2182-G14	VT-3	R		07C						
									•		

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### **SECTION 8**

### SUMMARY OF CONTAINMENT INSPECTIONS (IWE)

#### 8. INTRODUCTION

Section 8 is a Summary of the IWE inspection activities completed at Fermi 2 during the ninth refueling outage. The RF-09 scope included the  $2^{nd}$  period 100% inspection of the accessible surfaces of the primary containment and a representative sample of VT-1 and VT-3 inspections of primary containment components. This is the second refuel, in the  $2^{nd}$  period, consisting of three refuels, with RF-09 containing the majority of the inspections.

#### 8.1 ABSTRACT OF CONDITIONS NOTED AND CORRECTIVE ACTIONS TAKEN

Locations where degraded coating was identified during RF-07 and RF-08 were re-inspected prior to their repair. Areas identified showed no further degradation in their condition. These areas had a thin layer of surface rust, which was a result of condensation from overhead lines dripping down onto the primary containment shell.

During RF-09, 11 locations below the 583' elevation had their protective coating replaced. During the protective coating prep work, no material loss of the primary containment shell was noted. In addition to these 11 areas, a pit at the I-Beam weld, at elevation 583' azimuth 77 deg, was cleaned and re-painted. Finally, seven arc strikes, which had been previously blend ground, were re-coated.

During RF-09, areas that were repaired during RF-07 were re-inspected with particular attention being given to the moisture seal located at the concrete floor to drywell shell interface and the painted surface in this area. These inspections identified no new or unexpected degradation.

The inspections of the remaineder of the primary containment resulted in the issuance of 7 corrective action resolution documents (CARDs). CARD 03-14450 "Water Accumulation in Torus Downcomer to Vent Header Tee Connections," was generated to address the water accumulation in the ring header. None of the other CARDs were an operability concern and were issued for trending and cleanliness issues.

#### 8.2 PROGRAM STATUS, ASME SECTION XI CREDIT – IWE

8.2.1 CATEGORY: ITEM NO:		E-A Conta E1.11 Acces			
Description	Total Comp	TotalExaminedRequiringToExaminationDate	Examined To Date (%)	Minimum Required (%)	Maximum Allowed (%)
Accessible Liner Surfaces	1	1	100%	100%	100%
TOTALS	1	1 1 1	100%	100%	100%

#### NOTE:

(1) Per 10CFR50.55a, 100% of the accessible surfaces of the containment were required to be inspected (General Visual) during the first period (RF-07) and once every period after. During RF-09, a 100% inspection was completed of the accessible areas of the primary containment this completes the inspection requirement for the 2<sup>nd</sup> period.

8.2.2	CATEGORY:	E-A	Containment Surfaces
	ITEM NO:	E1.12	Accessible Surface Areas

Description	Total Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Required (%) (1)	Maximum Allowed (%)
Accessible Liner Surfaces	1	1	0 (Note 1)	0%	N/A	<b>N/A</b>
TOTALS	1	1	0 (Note 1)	0%	N/A	N/A

#### NOTE

(1) Inspections (VT-3) are required to be performed during the 3<sup>rd</sup> Period, Refuel Outages 11 and 12.

8.2.3 CATEGORY: E-A Containment Surfaces

ITEM NO: E1.20 Vent System - Accessible Surface Areas

Description	Total Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Required (%) (1)	Maximum Allowed (%)
Accessible	1	1	0 (Note 1)	0%	N/A	N/A
Liner Surfaces					•	ł
TOTALS	. 1	1	0 (Note 1)	0%	N/A	N/A

NOTE

(1) Inspections (VT-3) are required to be performed during 3<sup>rd</sup> Period, Refuel Outages 11 and 12.

 8.2.4
 CATEGORY:
 E-C
 Containment Surfaces Requiring Augmented Examination

 ITEM NO:
 E4.11
 Visible Surface

 Description
 Total
 Total
 Examined

Description	Comp	Requiring Examination (1)	To Date (1)	To Date (%)	Required (%)	Allowed (%)
Visual Surfaces	0	0	0	0%	0%	0%
TOTAL	0	0	0	0%	0%	0%
NOTE	-					l S

(1) No Visual augmented examinations have been identified.

8.2.5 CATEGORY: E-C Containment Surfaces Requiring Augmented Examination ITEM NO: E1.12 Surface Area Grid, Min Wall Thickness Locations

Description	Total Comp	Total Requiring Examination (1)	Examined To Date	Examined To Date (%)	Minimum Required (%)	Maximum Allowed (%)
Surface Area Grid	0	0	0	N/A	N/A	N/A
TOTAL	0	0.	0	N/A	N/A	N/A

NOTE

(1) No Visual augmented examinations have been identified.

8.2.6 CAT	EGORY:	E-D	Seals, Gaskets	s, and Moisture	Barriers	
ITEM	NO:	E5.10	Seals (1)			•
Description	Total Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Required (%)	Maximum Allowed (%)
Seals	61	61	(Note 1)	N/A	N/A	N/A
TOTAL	61	61	(Note 1)	N/A	N/A	N/A
NOTE		e Le restricte				

(1) Code requires a visual examination, VT-3, of all seals, gaskets, and other devices once each interval. Request for Relief CISI-001 has been approved to verify the leak tightness of seals and gaskets in accordance with 10CFR50, Appendix J.

8.2.7	CATE	GORY: NO:	E-D E5.20	Seals, Gaskets		, and Moisture Barriers			
Desci	ription	Total Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Required (%)	Maximum Allowed (%)		
Ga	sket	31	31	(Note 1)	N/A	N/A	N/A		
TO	TAL	31	31	(Note 1)	N/A	N/A	N/A		

#### NOTE

(1) Code requires a visual examination, VT-3, of all seals, gaskets, and other devices once each interval. Request for Relief CISI-001 has been approved to verify the leak tightness of seals and gaskets in accordance with 10CFR50 Appendix J.

8.2.8	CATE	GORY:	E-D	Seals, Gaskets, and Moisture Barriers				
ITEM NO:		E5.30	Moisture Barrier			*		
Descri	iption	Total Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Required (%)	Maximum Allowed (%)	
Mois Bar		1	1	1	67%	35%	67%	
TOT	<b>FAL</b>	1	1	1	67%	35%	67%	
NOTE			• •				į	

During RF-07, 100% of the moisture barrier was inspected and replaced. There was no damage to the liner at this location. During RF-08 and RF-09, it was inspected again with no degradation identified. 67% credited for RF-08 and RF-09.

8.2.9 CATEGORY: ITEM NO:		E-G E8.10				
Description	Total Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Required (%)	Maximum Allowed (%)
Bolting Connections	89	89	48	53.9%	34%	67%
TOTAL	89	89	48	53.9%	34%	67%
8.2.10 CATE ITEM I	GORY:	E-G E8.20	Pressure Retaining Bolting Bolting Connections – (Note 1)			:
	NU.	E0.20	Doming		î.	
Description	Total Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Required (%)	Maximum Allowed (%)
Bolting Connections Torque	89	89	(Note 1)	N/A	N/A	N/A
TOTAL	89	89	(Note 1)	N/A	N/A	N/A
NOTE						

(1) Code requires a bolt torque or tension test for bolted connections not disassembled. Request for Relief CISI-007 has been approved to verify the leak tightness of bolted connections in accordance with 10CFR50, Appendix J.

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8.2.11 CATEGORY: ITEM NO:		E-P	Pressu	¢		
		E9.10	Pressur			
Description	Total Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Required (%)	Maximum Allowed (%)
Pressure Retaining Boundary	1	1	(Note 1)	N/A	N/A	<b>N/A</b>
TOTAL	1	1	(Note 1)	N/A	N/A	N/A
NOTE						

(1) Will be tested in accordance with 10CFR50, Appendix J Program.

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8.2.12 CATEGORY: ITEM NO:		E-P E9.20	ponents n Bellows			
Descripti	Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Required (%)	Maximum Allowed (%)
Containm Penetrati Bellow	on	29	(Note 1)	N/A	N/A	<b>N/A</b>
TOTAL	L 29	29	(Note 1)	N/A	N/A	ŀN∕A
NOTE						: •
(1) Wi	ill be tested in a	ccordance with 100	CFR50, Append	lix J Program.		
	ATEGORY: EM NO:	E-P E9.30	Pressu Airlock	re Retaining Co	omponents	
Descripti	ion Total Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Required (%)	Maximum Allowed (%)
Airlocl	k 1	1	(Note 1)	N/A	N/A	N/A
	1	1	(Note 1)	N/A	N/A	N/A
NOTE		· · ·			:	- -
(1) W	ill be tested in a	ccordance with 10	CFR50, Append	fix J Program.		а (
8.2.14 C	ATEGORY:	E-P	Pressu	re Retaining C	omponents	
IT	EM NO:	E9.40	Seals a	nd Gaskets	-	• •
Descript	ion Total Comp	Total Requiring Examination	Examined To Date	Examined To Date (%)	Minimum Required (%)	Maximum Allowed (%)
Seals And Gasket		92	(Note 1)	N/A	N/A	N/A
	92	92	(Note 1)	N/A	N/A	N/A
NOTE						i
(1) W	ill be tested in a	ccordance with 10	CFR50, Appen	dix J Program.		
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Detroit Edison Co., 2000 2nd Ave., Detroit, MI 48226 Fermi 2 Nuclear Power Plant, 6400 N. Dixie Hwy., Newport, MI 48166 Commercial Service Date: 1-23-88 NBNo. 21085 (RPV)

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#### **SECTION 9**

#### SECTION XI REPAIR/REPLACEMENT NIS-2 FORMS INDEX

#### 9. NIS-2 DATA REPORT INDEX

LOG No.	WORK PKG. No.	COMPONENT No.	ASME CLASS	DESCRIPTION
02-001	B273060100	B2104F013R	1	SRV Refurbishment
02-002	R300040100	R3000F142A	3	Replace carbon steel disc with carbon steel disc.
02-006A	000Z020786	E1100F050A	1	Replace Disc
02-006B	000Z020787	E1100F050B	1	Replace Disc
02-007	VARIOUS	B2104F013A-R	1	RF-09 SRV Replacement
02-008	A498030100 A519030100	VARIOUS	N/A	RF-09 mechanical snubber rebuild
02-009	A497030100 A514030100	VARIOUS	N/A	RF-09 hydraulic snubber rebuild
02-010	000Z021705	R3000F142A	3	Replace carbon steel disc with stainless steel
02-012	R303020100	R3000F142D	3	Replace carbon steel disc with stainless steel
02-014	000Z011314 / 000Z022265	P45F400	3	Replace Valve
02-015	VARIOUS	VARIOUS	1	CRDM Rebuilds
02-016	000Z021044	N30-2186-G18	N/A	Rework hanger
02-017	N/A	E1100F025B	. *	Refurbish relief valve
02-019	000Z023784	E51-3174-G07	N/A	Modify Pipe Support
03-001	VARIOUS	VARIOUS	1	RF-09 CRDM replacement installation and replacement bolting
03-002	000Z002161	G4100F231	3	Install new throttle valve for Fuel-Pool Cooling System
03-003	000Z023688	E11-3185-G051	N/A	Replace leaking snubber

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LOG No.	WORK PKG. No.	COMPONENT No.	ASME CLASS	DESCRIPTION
03-011	Y664030100	T2300F400D	2	Replace Bolting
03-012	P521630100	G3300F120	1	Replace Bolting
03-013	000Z031288	E1151C001C	3	Replace Bolting
03-014	000Z031277	E1151C001A	3	Replace Bolting
03-016	000Z031322, 000Z031323	R3001C007, R3001C008	3	Bolting replacement and pump column repair
03-017	000Z031324	P4500C002B	3	Bolting replacement and pump column repair
03-018	000Z031320, 000Z031321, 000Z031466	E1151C001B, E1151C001D	3	Bolting replacement and pump column repair
03-019	000Z031253	T4804F603A	2	Bolting replacement
03-020	000Z023952	E1100F031	2	Replace valve disc
03-021	000Z031294, 000Z031597	P4500C002A	3	Repair pump column and replace bolting
03-022	000Z031290, 000Z031293	R3001C005, R3001C006	3	Repair pump column and replace bolting
03-023	000Z031478, 000Z031597	E1151C001A, E1151C001C	3	Repair pump column and replace
03-024	000Z031598	B2104F013J	1	Repair inlet flange/gasket surface
03-025	000Z030591	P44F402A	3	Replace cage, stem and plug

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	LOG No.	WORK PKG. No	COMPONENT No.	ASME CLASS	DESCRIPTION	
_	03-028	000Z031881	G3300F120	1	Bolting replacement	Ì
	03-029	000Z031863	E1100F050A	1.1	Bolting replacement for Bonnet	

# 02-001

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

1. Owner Detroit Edison C				Date	_		
	ame			OL			· · · ·
6400 North Dixie Hight Addres		48166	-	Sheet 1	01	2	
2. Plant Fermi 2 Nuclear F	T			Unit 2			
	ame		🗕 i sina. Na siya sa si		r: Targe	t Rock Corp, P.O. NS-3	25856
6400 North Dixie High	vay, Newport MI	48166				Technologies, P.O. NS	
Addres				Ponek	Omania	ation P.O. No., Job No., etc.	
	s It Edison Compa	nν		Type Code Symbol		N/A	
				Stamp	_		
	ume			Authorization No.	· <u></u>	<u>N/A</u>	
6400 North Dixie Highw		48166	-	Expiration Date		<u>N/A</u>	
Address Identification of System		ar Boiler Main C	tham Cofe	hr Relief Value Pile	t Accor	nblies, and Main Bodies.	
<ul> <li>(a) Applicable Construction</li> <li>(b) Applicable Edition of S</li> <li>Identification of Components Be</li> </ul>	Class Section XI Utilized	1 19 for Repairs or Rep	lacements	Edition S'1970 1992, 92 Adden		Addenda, <u>NA</u>	Code Cas
	Class Section XI Utilized	1 19 for Repairs or Rep	lacements	1992, 92 Adden		Addenda, <u>NA</u>	Code Cas
(b) Applicable Edition of S	Class Section XI Utilized	1 19 for Repairs or Rep	lacements	1992, 92 Adden		Addenda, <u>NA</u>	1
(b) Applicable Edition of S	Class Section XI Utilized I paired or Replaced Name of	1 19 for Repairs or Rep d and Replacement Manufacturer	nt Compones National Board	1992, 92 Adden	Year	Repaired, Replaced,	ASM
(b) Applicable Edition of S Identification of Components Re	Class Section XI Utilized I paired or Replaced	1 19 for Repairs or Rep d and Replacemen	nt Components	1992, 92 Adden			Code Case ASM Code Stamp
(b) Applicable Edition of S Identification of Components Re	Class Section XI Utilized I paired or Replaced Name of	1 19 for Repairs or Rep d and Replacement Manufacturer	nt Compones National Board	1992, 92 Adden	Year	Repaired, Replaced,	ASM
(b) Applicable Edition of S Identification of Components Re	Class Section XI Utilized I paired or Replaced Name of	1 19 for Repairs or Rep d and Replacement Manufacturer	nt Compones National Board	1992, 92 Adden	Year	Repaired, Replaced,	ASM Code Stamp (Yes
(b) Applicable Edition of S Identification of Components Re Name of Component SRV Pilot Assemblies	Class Section XI Utilized I paired or Replaced Name of Manufacturer	1 19 for Repairs or Rep d and Replacement Manufacturer Serial No Various, See	acements nt Component National Board No.	1992, 92 Adden	ida Year Built	Repaired, Replaced, or Replacement	ASM Cod Stamp (Yes or No Yes
(b) Applicable Edition of S Identification of Components Re Name of Component	Class Section XI Utilized I paired or Replaced Name of Manufacturer Target Rock	1 19 for Repairs or Rep d and Replacement Manufacturer Serial No Various, See attached list Various, See	lacements nt Component National Board No. N/A	1992, 92 Adden nts Other Identification B2104F013A-R	Year Built N/A	Repaired, Replaced, or Replacement Replacement	ASM Cod Stamp (Yes or No Yes
(b) Applicable Edition of S Identification of Components Re Name of Component SRV Pilot Assemblies	Class Section XI Utilized I paired or Replaced Name of Manufacturer Target Rock	1 19 for Repairs or Rep d and Replacement Manufacturer Serial No Various, See attached list Various, See	lacements nt Component National Board No. N/A	1992, 92 Adden nts Other Identification B2104F013A-R	Year Built N/A	Repaired, Replaced, or Replacement Replacement	ASM Code Stamp (Yes or No

7. Description of Work

Rebuild & Test 15 SRV Pilot Assemblies, and 4 SRV Main Bodies as required.

8. Tests Conducted:

Hydrostatic Pneumatic Dother I Pressure

Nominal Operating Pressure [ ] psi Test Temp.\_\_\_\_

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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.

(10/94) Form NIS-2 (Back) Applicable Manufacturer's Data Reports to be attached where required. Remarks 9. All 15 SRV Pilot Assemblies, and 4 main Bodies were rebuilt and tested as necessary under Target Rock P.O. NS-325856, and NWS P.O. NS-325815. All Parts used are recorded in Work Request B273060100, as well as the Target Rock final document package from refurbishment activities. See attachment (1) list of SRV Main Body Serial Numbers that Pressure Retaining Parts were used on. No welding repairs were performed. **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. repair or replacement Type Code Symbol Stamp Original Code Data Report to be supplemented by Section XI Program 02-001 and TR field Service report 02Z-010 Expiration Date Certificate of Authorization No. N/A 21 AN IST CAR 2003 Signed Date Owner or Owner's Designee. Title 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 Province of Michigan \_\_\_and employed by H.S.B.I.&I. Co. have inspected the components described One State Street, Hartford, CT 06102 in this Owner's Report during the period March 21, 2002 to 07-28-2003, and s to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described \_\_\_, and state that 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. Furthermore, 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. Inspector's Signature Commissions XLZ610 National Board, State, Province, and Endorsements Date July 28 2003 (10/94)

Attachment (1) NIS-2 Repair Replacement Program 02-001

Sites ZOFZ

## Pressure Retaining Parts Installed in SRV Main Bodies

Main Valve Body S/N#	Pilot Base to body Nut 1-1/8-12 unf. Stock#252- 0544	P.O. # , Lot#, or HT#
336	4ea.	P.O.# 362415, HT#D230
338	4ca.	P.O.# 362415, HT#D230
318	4 <del>c</del> a.	P.O.# 362415, HT#D230
319	4ea.	P.O.# 362415, HT#D230

02-002

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

1.	Owner Detroit Edison Co	mpany		Da	te		May 23, 2002	
	Nar							
	6400 North Dixie Highwa	ay, Newport MI 4	8166	Sh	eet <u>1</u>	of _2		
	Address							
2.	Plant Fermi 2 Nuclear Po			Un	it <u>2</u>			<del> </del>
	Nar 6400 North Dixie Highwa		48166			o Mainte		
	Address					- <b>-</b>	n P.O. No., Job No., etc.	
<b>3</b> . ·	Work Performed by Detroit	Edison Compan	y	Ту	be Code Symbol S	Stamp	N/A	
. •	Nan				thorization No.		N/A	
	6400 North Dixie Highwa	ay, Newport, MI	48166	Ex	piration Date		N/A	· .
•.	Address Identification of System T		Generator Servic					
			<b>MI</b>					
5. 6.	(a) Applicable Construction (b) Applicable Edition of Solution of Components Rep	ection XI Utilized for	319 or Repairs or Repla		1992 -92 Adden		Addenda, <u>N/A</u> (	Code Case
	(b) Applicable Edition of S	n Code <u>Class</u> ection XI Utilized for	319 or Repairs or Repla	cements	1992 -92 Adden		Addenda, <u>N/A</u> ( Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
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7. Description of Work

Install Replacement Carbon Steel/Stainless Steel Faced Disc in Check Valve.

8. Tests Conducted:

Hydrostatic Pneumatic Other Pressure

Nominal Operating Pressure X

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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.

(12/82)

This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N. Y. 10017

Remarks	Replacement Disc procurred per P.O. #357513, Serial No. CM8886B.	-
Stainlass A	Alloy Disc will be installed at a later time. (CARD 02-14702)	
Statiliess A		
- <u></u>		
	CERTIFICATE OF COMPLIANCE	
	We certify that the statements made in the report are correct and this conforms to the statement conforms to the statementconforms to	the rules of the
ASME Cod	de, Section XI. repair or replacement	
· .		
Type Code	e Symbol Stamp: Original Code Data Report N5-5(T&B) to be supplemented by Owners Section XI Program 02-	002
	of Authorization Market Mith	•
	of Authorization No N/AExpiration Date	
		2002
•	Owner or Owner's Designee, Title	
	CERTIFICATE OF INSERVICE INSPECTION	
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or Province	CERTIFICATE OF INSERVICE INSPECTION rsigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and t e of	of
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For complete work package, see Work Request R300040100

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This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017

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(12/80)

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en	is below to be complete	d for all vessels	where applicable.					t
5.	Safety Valve Outlets:	Number	Sız	ŧ	Location	· ·		
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	Inspection Manholes:	No	\$-2e					
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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

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	Address						
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6400 North Divia	Name Highway, Newport Mi	48166					
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·	Address			Repair O	ganization P	.O. No., Job No., etc.	
Work Performed by	Detroit Edison Com	npany		Code Symbol		N/A	· · · <sup>1</sup> · ·
	Nome		Stamp	p rization No.		N/A	
6400 North Divis	Name Highway, Newport, M	1 49166		ation Date		 N/A	
	Address						
Identification	and the second	ual Heat Removal (LF	CI) Division	1		n an	
of System							• •
							1
(a) Applicable Cons		<b>ME III,</b>					
	Clas	ss 1 19	71 Edition	<u>-71</u>	Addenda 💬	<u>N/A</u>	Code Cas
					Carlos Maria	2 * * * <del>* 2</del> *	
	on/Addenda of Section	XI Utilized for Repairs o		chreibh& CQ_CQ			•
(b) Applicable Edition Replacements	on/Addenda of Section	XI Utilized for Repairs o		92-92 Addenda			
Replacements			<u>_19</u>	192-92 Addenda			
Replacements	on/Addenda of Section 2 ents Repaired or Replac		<u>_19</u>	92-92 Addenda			
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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.

psi

Test Temp.

(10/94)

Other []

Pressure

Form NIS-2 (Back)

9.	Remarks:	Replacement Parts included a new Disc that was previously modified per Section XI Program 01-006B
	•	that was procured per PO # 357655, SA 105, HT Code 4460, SN 2. (Applicable Data Report Atached)
		In addition, the following quantities of bolting material was also replaced.

(8)	1-1/4"-8 TPI Studs PO# 880392, SA 193, Grade B7, Trace E171
(4)	5/8"-11 TPI Studs PO# 955769, SA 193, Grade B7, Trace C232
(8)	5/8"- 8 TPI Nuts PO# 965260, SA 194, Grade 2H, Trace F554
(8)	1-1/4"-8 TPI Nuts PO# 739669, SA 194, Grade 7, Trace RH98
	A P M. Marson for the second state in a Marshad

Applicable Manufacturer's Data Reports to be attached

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this <u>Replacement</u> conforms to the rules of theASME Code, Section XI.

Type Code Symbol Stamp Original Code data report N5-094 to be supplemented by Owners Section XI Program 02-006A and Section XI Program 03-029

Certificate of Authorization No. Expiration Date N/A NE Z 203 R.M. Hambleton Lead ISI Engineer Date Signed Owner or Owner's Designee, Title

#### 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 Province of <u>Michigan</u> and employed by <u>HSB CT</u> of <u>One State Street</u>, <u>Hartford</u>, <u>CT 06102</u> have inspected the components described in this Owner's Report during the period  $\frac{2^{-1}2-3^{-2}}{2^{-2}}$  to  $\frac{2^{-2}2}{2^{-2}}$ , 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. Furthermore, 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.

Date June 24 2 Commissions NIZ 610 National Board, State, Province, and Endorsements 2003

(10/94)

For complete work package, see Work Request 000Z020786 and 000Z031863

(a) Manufactured by       Flowserve Corporation, 701 First Street, Williamsport, PA 17701         (b) Manufactured by       P.O. Box 1659, Detroit, MI 48231         (c) Manufactured by       P.O. Box 1659, Detroit, MI 48231         (d) Manufacture description of Periods Made and Street Street Provide Manufacture Corporation Centrate Mader's Street No.       N/A         (e) Conserved According to Dreving No.       D11726 R/A       Derving Propered by, Flowserve Corp.         (e) Conserved According to Dreving No.       D11726 R/A       Derving Propered by, Flowserve Corp.         (f) Description of Periods Stating The Edition       1980.       Addenda data Summer' 62 Case No.       N/A         (e) Applicable ASHE Code Section III, Edition       1980.       Addenda data Summer' 62 Case No.       N/A       Class.       1         (e) Applicable ASHE Code Section III, Edition       1980.       Addenda data Summer' 62 Case No.       N/A       Class.       1         (e) Applicable ASHE Code Section III.       Edit description of the NT Centration No.       NIT 13       Class.       1         (e) Applicable ASHE Code Section III.       Edit description of the ASHE Code Section III.       No.				T FOR NUCLEAR PART AND API E. Code Rules, Section III. Div. 1	NIG Z EII00F0 02006A & 03- GIGT 20-2
(1) Museisement de Detroit Edison, P.O. Box 1659, Detroit, MI 48231 Uters an Adver of Contacts Marker of Con	. (s) Man	afactured by Flowserve	Corporation, 701 Fi	rst Street, Williamspo	rt, PA 17701
Meetinestime-Certificate Holder's Serial No. of Part       2       Nor'l Bd. No.       N/A         (a) Constructed According to Dreving No.       D11726 R/A       Dreving Prepared by. FlowServe Corp.         (b) Description of Part haspeced       Swing Check Disc w/Stellitte Tess Res. Seat, Ht. #H4460 SA10:         (c) Applicable ASHE Code Section III, Edition       1980., Addends dar Summer '82 Case No.       N/A         (c) Applicable ASHE Code Section III, Edition       1980., Addends dar Summer '82 Case No.       N/A         (c) Applicable ASHE Code Section III, Edition       1980., Addends dar Summer '82 Case No.       N/A         (c) Applicable ASHE Code Section III, Edition       1980., Addends dar Summer '82 Case No.       N/A         (c) Applicable ASHE Code Section III.       Control Computes at Section III.       Case No.       N/A         (c) Applicable ASHE Code Section III.       Control Computes at Section III.       Control Computes III.       Case No.         NDTE:       No Hydrotesting Performed       Enrico Fermi 2 Site       Site of the molecular Holder to serie.       Amount III.         Vereiff dast de statements made in difference at Section III.       Section III.       Section III.       Section III.         Vereiff dast de statements Made in add Stress Report.       Provise North Control III.       Section III.       Section III.         Vereiff dast de statements Made in add Stress R	(b) Man	efectured to Detroit Ed	ison, P.O. Box 1659	, Detroit, MI 48231	
(*) Description of Pure Laspecred Swing Check Disc w/Stellite Tess Res. Seat, Ht. #H4460 SA10: (*) Applicable ASHE Code: Section III, Edition 1980, Addends dee Summer'82 case No. N/A class 1 Remarks: Spare Part(s) for 24"-9003 Swing Check Valve (without Resilient Seat) Destroyer S.O. and Item No: P932G-1 NOTE: No Hydrotesting Performed Enrico Fermi 2 Site Te éredit bas the resenances ande la chis report are correct and this versiel part or apparenance as defined in the Cade con- as to the nice of construction and Stress Report and this versiel part or apparenance as defined in the Cade con- as to the nice of construction and Stress Report are to the report of the NPT Certificate Holder for spuritesance is reported by the formation and Stress Report of the apputtesance is necessaries and Stress Report of the APT Certificate Holder for spuritesance is a necessaries and Stress Report and Stress Report of the apputtesance is necessaries and Stress Report of Authorization No. NI713 CERTIFICATION OF DESCN FOR APPURTENANCE (when explicable) Design apecifications certified by	kientific	ano-Certificate Holder's Seria		(a) A first of the second s second second s second second se	N/A
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Design specifications certified by Prof. Eng. State Reg. No Stress analysis report certified by Prof. Eng. State Reg. No CERTIFICATE OF SHOP INSPECTION I, the undersigned, bolding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Statisticate of Pennsylvania and employed by <u>Commercial Union Insurance Company</u> and/or the State or Statisticate of a pressure vessel described in this. Boston. Mass have imported the part of a pressure vessel described in this. Pertial Data Report on <u>D-110-01</u> Have imported the part of a pressure vessel described in this. By signing this certificate, aeither the Inspector sor his employer makes any vananty, expressed or implied, concern- ing the part described in this Partial Data Report. Furthermore, neither the Inspector are not is employer thall be liable in any manner for any personal lajury of property damage or a loss of any kind arising from or confidence print this inspection					
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Lettificate of Shop Inspection I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the Stare erformixexof <u>Pennsylvania</u> and employed by <u>Commercial Union Insurance Company</u> <u>Boston. Mass</u> . Partial Data Report on <u>Pennsylvania</u> have inspected the part of a pressure vessel described in this. Partial Data Report on <u>Pennsylvania</u> is constructed this part in accordance with the ASME Code Section III. By signing this certificate Holder has constructed this part in accordance with the ASME Code Section III. By signing this certificate, acither the Inspector sor his employer makes any warranty, expressed or implied, concern- ing the part described in this Partial Data Report. Furthermore, neither the Inspector and his employer thall be liable in any manner for any personal injury of property damage or a loss of any kind arising from or comfared print this inspection. Date <u>P-30-01</u> <u>256</u> <u>Pennsylvania 2392</u>	Design sp	pecifications certified by			
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the Scare or Artivixer <u>Pennsylvania</u> and employed by <u>Commercial Union Insurance Company</u> <u>BOSTON. Mass</u> . <u>Aure inspected</u> the part of a pressure vessel described in this vertial Data Report on <u>PHOOD</u> have inspected the part of a pressure vessel described in this be signing this certificate, mether the Isspector nor his employer makes any variancy, expressed or implied, concern- ing the part described in this Partial Data Report. Furthermore, mether the Inspector nor his employer with this inspection. Date <u>P-30-0</u> to <u>256</u> Not the Jame Market of the part of a pressure vessel described in the secondarian of the part described in this secondariance with the asset of any kind arising from or confarer with this inspection.	iress an	alysis report certified by		Prol. Eng. Scare	Reg. No
Add/or the State or Strawikows <u>Pennsylvania</u> and employed by <u>Commercial Union Insurance Company</u> <u>Boston. Mass</u> . And the part of a pressure vessel described in this partial Data Report on <u>P-Mo-O</u> <u>1000</u> are <u>1000</u> By signing this certificate, acither the laspector sor his employer makes any warranty, expressed or implied, concern- ng the part described in this Partial Data Report. Furthermore, Beither the Inspector sor his employer rich this inspection. Data <u>1000</u> By signing this described in this Partial Data Report. Furthermore, Beither the Inspector sor his employer rich this inspection. Data <u>1000</u> <u>256</u> Pennsylvania 2392			CERTIFICATE OF SHOP	INSPECTION	
thall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or conference rich this inspection. Date 7-30-0/ 17 CU/ 256 Pennsylvania 2392		and the second	commission issued by the Na	tional Board of Boiler and Pressur of her Commercial Union I	e Vessel Inspectors
	and/or the Bo Partial De and belief By sig	e State er Chik Wike Kot Pen Ston, Mass. ata Report on <u>P-110-01</u> (, the NPT Certificate Holder has gning this certificate, meicher	the Laspector sor his employ	19 end state that to the ance with the ASME Code Section III, er makes any warranty, expressed	el described in this. best of my knowledge or implied, concern-
	and/or.th Bordal De and belief By sig ing the thall be	e State er AXXXXXXXX of Pen oston. Mass. ata Report on <u>P-//O/</u> , the NPT Certificate Holder has gaing this certificate, acither part described in this P liable in any manner for an	to constructed this part in accord or the laspector sor his employ Partial Data Report. Further	19 and state that to the ance with the ASME Code Section III. er makes any warrancy, expressed ermore. Beither the Inspector ismage or a loss of any kind arisu	el described in this best of my knowledge or implied, concern- nor his employer

# 02-006B

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

1.	Owner Detroit Edison Company	Date	June 2, 2003	
÷.,	Name			
	6400 North Dixie Highway, Newport MI 48166	Sheet	1 of 2	
÷	Address			
2	Plant Fermi 2 Nuclear Power Plant	Unit	2	
	Name 6400 North Dixie Highway, Newport MI 48166			
· · .			Deco Maintenance	
	Address		Organization P.O. No., Job No., etc.	
3.	Work Performed by Detroit Edison Company	Type Code Symbol Stamp	N/A	
	Name	Authorization No.	N/A	-
	6400 North Dixie Highway, Newport, MI 48166	Expiration Date	N/A	
4.	Address Identification N5-0312 Residual Heat Removal (LPCI)	Division 2		
	of System			
.5.	(a) Applicable Construction Code ASME III,			
۰.		Edition <u>71</u>	Addenda <u>N/A</u>	Code Case
: :	(b) Applicable Edition/Addenda of Section XI Utilized for Repairs or Replacements			

6. Identification of Components Repaired or Replaced and Replacement Components

	Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Cods Stamped (Yes or No)
•	E1100F050B	Anchor Darling	IN-077	NA	V8-2164	1974	Replacement	Y
-1								
· ·								

7. of Work

Install replacement Disc and replace bolting material as determined by the Maintenance Supervisor following valve disassembly

**Tests Conducted:** 8.

Hydrostatic []

Pneumatic [] Other [] Pressure

Nominal Operating Pressure [X] psi .... Test Temp.\_\_

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.

(10/94)

Form NIS-2 (Back)

9. Remarks: Replacement Parts included a new Disc that was previously modified per Section XI Program 01-006A that was procured per PO # 279604, SA 105, HT Code C1788, SN 1.(Applicable Data Reports Atached) in addition, the following quantities of bolting material was also replaced.

4	1-1/4"-8 TPI Studs PO# 965330, SA 193, Grade B7, Trace F556
4	1-1/4"-8 TPI Studs PO# 880390, SA 193, Grade B7, Trace E171
8	1-1/4"-8 TPI Nuts PO# 880299, SA 194, Grade 7, Trace 68395

Applicable Manufacturer's Data Reports to be attached

#### 

the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State or province of <u>Michigan</u> and employed by <u>HSB CT</u> of <u>One State Street</u> , <u>Hartford</u> , <u>CT 06102</u> have inspected the components described in this Owner's Report during the period <u>H2-910</u> <u>6-23-93</u> , and state that to the best of my nowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in coordance with the requirements of the ASME Code, Section XI. The 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. Furthermore, neither the Inspector nor his employer shall be liable in any sanner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection. Mational Board, State, Province, and Endorsements	CERTIFICATE	OF INSERVICE INSPECTION
Ad corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any anner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	rovince of <u>Michigan</u> and employed by <u>HSB C</u> omponents described in this Owner's Report during the peri nowledge and belief, the Owner has performed examination	T of One State Street, Hartford, CT 06102 have inspected the iod $\frac{7}{12}$ and state that to the best of my is and taken corrective measures described in this Owner's Report in
	nd corrective measures described in this Owner's Report. F	urthermore, neither the Inspector nor his employer shall be liable in any of any kind arising from or connected with this inspection.
	Inspector's Signature	

For complete work package, see Work Request 000Z020787

	As reparted by the Previ	Richard Contractor		S	1100F05
(a) 2000000 tr	nchor/Darling Val	Tve Co., 701 Fi	rst St. : William	sport. PA 177	01
bi Mesofanucad fac	Detroit Edison, I	P.O. Box 1659,		231	
isatire Geo Certican I	biller's Bernal No. of Part	<b>1</b>		N/A	••••••••••••••••••••••••••••••••••••••
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# 02–007 03–024

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

1.	Owner Detroit Edison Company	Date	5/08/03
С. ÷	traine de la companya de <b>Name</b> e la companya de la		
1	6400 North Dixie Highway, Newport MI 48166	Sheet 1	of <u>2</u>
	Address		
2.	Plant Fermi 2 Nuclear Power Plant	Unit 2	
	Name 6400 North Dixie Highway, Newport MI 48166	DEC	o Maintenance
	Address	Repair	Organization P.O. No., Job No., etc.
3.	Work Performed by Detroit Edison Company	Type Code Symbol Stamp	NA
• .	Name	Authorization No.	N/A
	6400 North Dixie Highway, Newport, MI 48166	Expiration Date	N/A
. • .	Address		
4.	Identification of System B21Nuclear Boiler, Main Steam Sal	iety Relief Valve Pilot	Assemblies, and Base Assemblies
5.	(a) Applicable Construction Code ASME III Class 1 19 71	Edition W71	Addenda. NA Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992, 92 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
SRV Pilot Assemblies	Target Rock	Various (See attached list)	N/A	B2104F013A-R Various	N/A	Replacement	Yes
SRV Main Body Assemblies	Target Rock	Various (See attached list)	N/A	B2104F013A-R Various	N/A	Replacement	Yes

Description of Work During RF09, Replaced all 15 SRV Pilot Assemblies. Replaced Main Bodies on B2104F013G, H, L & P.

8. Tests Conducted:

Hydrostatic Pneumatic Other I Pressure

Nominal Operating Pressure 🗵 psi Test Temp.\_\_\_\_

°F)

VT-2 Per 43.000.005 and 24.137.21, Operability Test per 24.137.11

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.

(10/94)

7.

9. Remarks

#### Applicable Manufacturer's Data Reports to be attached

All 15 SRV Pilots, and 4 Main Bodies were replaced using station Work Requests B350030100 thru B364010100. Bolting material was changed out on SRV B2103F013H (1) 1-3/8" x 6UNC-2Ax10", SA-193 grade B7, PO# 686576, (2) 13/8" nuts, SA-194, Grade 7, PO# 806420. See attached listing for SRV exchange matrix SRV Pilots were refurbished per Section XI Program 02-001, and Work Request B273060100. The B2104F013J position SRV Reactor side, and Valve side Inlet Flanges were weld repaired due to minor steam cutting using WR#000Z031598 per Section XI Program 03-024.

•	statements made in the report are correct		
the ASME Code, Section XI.		repair or repl	acement
•		· ·	
Type Code Symbol Stamp <u>Original Co</u> g	de Data Reports to be supplemented by Second	ection XI Program 02-007	.03-024 and TR Field Service
	de Data Reports to be supplemented by Se	ection XI Program 02-007	, 03-024 and TR Field Service
Report Number 02Z-010		ection XI Program 02-007	. 03-024 and TH Field Service
Type Code Symbol Stamp <u>Original Cou</u> Report Number 02Z-010 Certificate of Authorization No SignedR. M. Hambleton, ISI Engineer			

#### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressure Vessel Inspectors and the State or Province of \_\_\_\_\_\_ Michigan \_\_\_\_\_\_ and employed by \_HSB CT \_\_\_\_\_\_ of

<u>One State Street, Hartford, CT 06102</u> In this Owner's Report during the period 10 - 0.3 - 0.2 to 0.5 - 1.3 - 0.3, 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 cartificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, 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.

Inspector's Signature

Commissions NB9486 ABINNS 12610

National Board, State, Province, and Endorsements

Date May 13 2003

(10/94)

NIS-2 For 02-007 / 03-024 Sheet 2 of 2

# 2003 Refueling Outage SRV Replacement Matrix RF09

Division	PIS Number	Steam Line	Isometric Draing	Code Data Report	Set Point psig-	Work Request	Valve/ Body S/N	Pilot S/N
				N-5				
I (LLS)	B2104F013A	D	M-4095	265	1135	B350030100	389	342
	B2104F013B	C	M-2591	301	1135	B351030100	331	1197
	B2104F013C	В	M-2594	- 291	1135	B352030100	391	1184
	B2104F013D	B	M-2593	278	1145	B353030100	328	327
	B2104F013E	С	M2592	309	1155	B354030100	339	336
	B2104F013F	B	M-2596	290	1145	B355030100	327	339
(LLS)	B2104F013G	В	M-2587	321	1135	B357030100	338	1200
<del></del>	B2104F013H	С	M2588	266	1155	B356030100	336	1199
	B2104F013J	С	M2589	308	1155	B358030100	332	328
	B2104F013K	B	M2595	311	1135	B359030100	330	332
	B2104F013L	A	M-4094	313	1145	B360030100	319.	319
	B2104F013M	A	M-2586	268	1145	B361030100	342	1198
	B2104F013N	A	M-4093	310	1145	B362030100	341	330
	B2104F013P	D	M-4096	322	1155	B363030100	318	318
	B2104F013R	С	M-2590	288	1155	B364030100	371	1180
		· .					· · ·	
	All 15 SRV P	ilots we	re replaced,	and the 4	Shaded B	lodies were re	eplaced as	well
	· · ·	· ·		1. A.				· · · · · · · · · · · · · · · · · · ·

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

02-008

	ompany		Da	ate		May 14, 2003	
Na 6400 North Dixie Highv	ame wav. Newport MI	48166	St	neet 1	of	6	e e se Se se seg
Addres						~	· · · ·
Plant Fermi 2 Nuclear P	ower Plant		Ur	nit 2			
	але			n i i i i i i i i i i i i i i i i i i i			• • • •
6400 North Dixie Highv	vay, Newport MI	48166		DE	Co Main	tenance	
Address	The second second second				-	tion P.O. No., Job No., etc.	
Work Performed by Detro		ny	··· • • •	pe Code Symbol	Stamp	N/A	
	ame			thorization No.		N/A	
6400 North Dixie Highw		48166	E	piration Date	· · ·	<u>N/A</u>	
Address Identification of System	The second s	mh Cummante (h.f.	haniani P-	ibb anal			· · · · · ·
inclining and in Oksigini	ranous compone	ent Supports (Med	AIGUILOU JII	100013)			
(b) Applicable Edition of \$ dentification of Components Re					•		
A second s			a dhan ce	1. S. S. S. S. S. S.		and the second	
Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	Code Stampe
Name of Component			Board				Code Stampe (Yes
PLANT MECHANICAL	Manufacturer Pacific		Board				Code Stampe (Yes
	Manufacturer	Serial No	Board No.	Identification	Built	or Replacement	Code Stampe (Yes or No)
PLANT MECHANICAL	Manufacturer Pacific	Serial No	Board No.	Identification	Built	or Replacement	Code Stampe (Yes or No)
PLANT MECHANICAL	Manufacturer Pacific	Serial No	Board No.	Identification	Built	or Replacement	Code Stampe (Yes or No)
PLANT MECHANICAL	Manufacturer Pacific	Serial No	Board No.	Identification	Built	or Replacement	Code Stampe (Yes or No)
PLANT MECHANICAL	Manufacturer Pacific	Serial No	Board No.	Identification	Built	or Replacement	Code Stampe (Yes or No)
PLANT MECHANICAL SNUBBERS	Manufacturer Pacific Scientific	Serial No Various	Board No. NA	Identification	Built	or Replacement	Code Stampe (Yes or No)
PLANT MECHANICAL SNUBBERS	Manufacturer Pacific Scientific	Serial No	Board No. NA	Identification	Built	or Replacement	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.

(12/82)

This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N. Y. 10017

#### Form NIS-2 (Back)

Remarks Attached are listings of Mechanical Snubbers that were refurbished and changed out during testing activities during RF09. Applicable Manufacturer's Data Reports to be attached

Note the listing of the Mechanical Snubbers that were refurbished prior to and during RF09 including a listing of parts installed.

Documentation satisfies requirements of Code Case N-508-1 as allowed by Relief Request RR-C4.

			TE OF COMPL		t t t t t	
ASME Code, Secti	• •	statements made in the	report are correc	and this <u>Replacement</u> repair or replacem	-	of the
Type Code Symbo	I Stamp_Original Coc	de Data Reports to be si	upplemented by o	wners Section XI Proc	gram No. 02-008.	
Certificate of Author	vrization No	N/A		Expiration Date N/A	· · · · · · · · · · · · · · · · · · ·	
Signed and	r Owner's Designee, Title	LEAD IS	I Ely	_DateJUL	Y 25 .20	03
	Towner's Designee, The				•	
	· .	CERTIFICATE OF	F INSERVICE I	ISPECTION		
I, the undersigned, or Province of	holding a valid commi Michigan	ission issued by the Nat		iler and Pressure Ves	sel Inspectors and the S	State
One State Stre	et, Hartford, CT 061	102			the components descri	
in this Owner's Rep	ont during the period	Sept. 04, 2 he Owner has performe	d examinations a		and state asures described	inat .
in this Owner's Rep By signing this	ort in accordance with certificate neither the	h the requirements of the Inspector nor his emplo	e ASME Code, S over makes any w	ection XI. arranty, expressed or i		
in this Owner's Rep By signing this examinations and c	ort in accordance with certificate neither the corrective measures de	h the requirements of th	e ASME Code, S over makes any w s Report. Further	ection XI. arranty, expressed or i nore, neither the Inspa	ctor nor his employer	
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(12/82)

9.

For complete work package, see Work Request A498030100

A498030100 A519030100

Hanger Number	Old Serial	New Serial
B21-2174-G25A	13116	13152
B21-2174-G25B	13151	8496
B21-2589-G02	8990	12809
B21-2590-G04	9855	
B21-2593-G07	9856	4708
B21-2595-G07	9016	10340
B21-7195-G01A	12742	19925
B21-7195-G01B	22414	22419
B21-E213-SSA1	4705	9861
B21-E213-SSA1	9877	7018
B21-E213-SSA3	8982	10348
B21-E213-SSC5	11283	8731
B21-E213-SSD1	8716	4713
B31-5064-G24	13163	13204
B31-5065-G39B	12690	22337
B31-5065-G40	11466	12709
B31-5065-G41	22344	12694
B31-5239-G02B	22367	19932
B31-5239-G16	13144	8478
B31-E215-SSB8	4710	9850
C41-2340-G08	6828	13155
C41-2340-G12	13126	13138
C41-2340-G16A	13193	8469
E11-3146-G33	4706	9848
E11-3152-G33	12444	15286
E11-3154-G17	8997	9006
E11-3179-G05	8482	13134
E11-3184-G45	20982	12435
E11-3185-G32A	6187	10345
E11-3519-G14	20974	12447
E11-4004-G01S	12692	22347
E11-4004-G02A	12697	22412
	13132	
E21-2199-G04 E21-3147-G26	8357	<u>6828</u> 8959
E41-5256-G02	22372	22349
E41-5256-G20SA	12696	19923
E41-5256-G20SB	12677	22458
E41-5256-G20SC	13183	13108
E41-5256-G21	8480	13165
E41-5256-G22S	13133	8474
E51-3174-G09A	8714	9857
G33-3244-G39	12436	15290
G51-4059-G20	23169	18658
N21-3131-G33	8328	9017
N21-3131-G38	9005	9011
N21-3536-G29B	12821	8342
N21-3536-G37	10332	10354
N21-3536-G38A	12798	8985
N21-3536-G38B	12800	8999
N21-3537-G26B	9897	7021
N21-3537-G31	10352	10351
<u></u>		

NIS-2 # 02-009 2.0F6

### Mechanical Snubbers Replaced with Rebuilt Spares

	Hanger Number	Old Serial	New Serial
•	N21-3537-G34	11272	8708
	N21-3537-G38A	12810	9019
	N21-3537-G38B	8984	8961
	N30-2186-G03	22401	19934
	N30-2186-G04	19940	22357
	N30-2186-G05	22342	22341
	N30-2186-G07	13142	13169
	N30-2186-G09	13112	8501
Ť	N30-2186-G10	19919	22436
	N30-2186-G11	12739	19917
-	N30-2186-G15	8491	8470
•	the second damage of the secon	13129	
	N30-2186-G16	22395	13180 27916
•	N30-2186-G17		
: -	N30-2186-G18	13128	8497
	N30-3259-G29	8710	9847
	N30-3259-G49	1589	1588
•	N30-3259-G55	8723	12792
	N30-3259-G57	8747	11281
	N30-3259-G76	9889	8748
	N30-3259-G81	7019	9843
97 J	N30-3526-G46	13170	8495
	N30-3526-G48	12993	12750
	N30-3526-G54	16235	13195
	N30-3526-G55	13141	13157
	N30-3526-G57	8493	8486
	N30-3526-G58	13175	13184
•	P11-3156-G05	12684	12715
1	P11-3566-G11	13143	8510
	P34-7405-G02	12741	22372
	P34-7405-G07	13195	13109
1	P42-4357-G22B	12691	22406
	P50-2163-G13	22365	12677
	P50-2163-G14	12672	12712
I	P50-3579-G25	22426	19907
	T23-I2837-36-G32	22422	22499
. [	T23-I2837-36-G33	22380	22400
	T23-I2837-36-G45	22434	12746
I	T23-I2837-36-G56	22374	12722
Ī	T23-I2837-36-G58	22357	22429
	T23-I2837-36-G75	11974	12707
Ì	T23-I2837-36-G96B	12689	19933
	T23-I2837-40-G02A	12712	12738
- L	T23-I2837-40-G02B	12763	22455
- 1 <b>H</b>	T23-I2837-40-G08	18641	21954
- 14	T23-I2837-40-G09A	8481	13187
- F	T23-I2837-40-G09B	12757	19898
- F	T23-I2837-41-G05A	13157	8465
- H-	T23-I2837-41-G05B	13196	13116
- H	T23-I2837-41-G10A	13130	8466
- 4-	T23-I2837-41-G17	8487	13181
- 1 <b>- 6</b> -	T23-12837-42-G03	12771	12733
L	1 20-12001 -72-000		12100

NIS-2 #02-000 3 & 6

Mechanical Snubbers Replaced with Rebuilt Spares

	이야지 않으니?	en type te g
Hanger Number	Old Serial	New Serial
T23-I2837-42-G12B	8486	16224
T23-I2837-42-G14B	22335	12730
T23-I2837-42-G22	22347	19921
T23-12837-42-G24	8492	13156
T23-12837-42-G28	13181	13173
T23-I2837-42-G41	22428	12741
T23-I2837-42-G50	13173	13135
T23-I2837-42-G54	12749	22370
T23-I2837-43-G45	8484	8509
T23-I2837-43-G49	12740	12760
T23-I2837-45-G02B	13202	13163
T23-I2837-45-G11A	8508	13131
T23-12837-45-G12A	13185	13166
T23-I2837-46-G100	13158	13154
T23-I2837-46-G102	22355	12685
T23-I2837-46-G17A	12714	22417
T23-I2837-46-G22	12988	12977
T23-I2837-46-G54	13204	13190
T23-I2837-46-G70	13178	13147
T23-I2837-46-G94D	19918	12764
T23-I2837-48-G12	13111	8468
T23-I2837-51-G141	22411	12743
T23-I2837-51-G142	13108	8506
T23-I2837-51-G144	22439	12725
T23-I2837-51-G19	19911	22459
T23-I2837-51-G28	12715	12768
T23-I2837-51-G29	22386	12724
T23-I2837-51-G33	22403	12751
T23-I2837-51-G61	13201	13153
T23-I2837-51-G62	22375	22340
T48-4061-G08	19577	21950
T48-4062-G05B	22413	19928
T48-5314-G02	22435	22424
T48-5314-G03	13187	8498
T48-5314-G06	12711	12701
T49-5325-G58	13167	8507
T50-7431-G02	12727	22360
T71-l2837-62-G35	12747	22353
T71-I2837-62-G57	22445	12692
T71-l2837-63-G32	13159	13133
T71-I2837-64-G50	22451	22391
T71-l2837-64-G51	13134	8493

NIS-Z # 02-009 4 05-6

NIS-2 #02-008 5056

## Mechanical Snubbers Rebuilt with New Parts

Serial	Snubber Location	Size	Description	Work Package
1				
22412	E11-4004-G02A	1/4	Ring, Retaining Washer	
8509	T23-I2837-43-G45	1/2	Torque Carriers & Shaft Assembly Ring, Retaining Rod & Bearing Assembly	A49803010
22419	B21-7195-G01B	1/4	Assy, Rod & Bearing Ring, Retaining Washer	A49803010
12701	T48-5314-G06	1/4	Ring, Retaining Washer	A49803010
12750	N30-3526-G48	1/4	Ring, Retaining	A49803010
9011	N-21-3131-G38	10	Ring, Retaining Washer	A49803010
9017	N21-3131-G33	10	Ring, Retaining Washer Assy, Bearing	A49803010
9012	SPARE	10	Ring, Retaining	A49803010
13154	T23-I2837-46-G100	1/2	Ring, Retaining Washer	A49803010
1588	N30-3259-G49	100	Pin, Cotter Washer Washer, Locking	A498030100
9857	E51-3174-G09A	35	Ball, 0.622 in. Ball, 0.624 in. Pin, Cotter Washer, Locking	A498030100
12792	N30-3259-G55	35	Ball, 0.622 in. Ball, 0.624 in. Pin, Cotter Washer, Locking	A498030100
13147	T23-I2837-46-G70	1/2	Ring, Retaining	A498030100
8507	T49-5325-G58	1/2	Ring, Retaining Washer	A498030100
8495	N30-3526-G46	1/2	Ring, Retaining Washer	A498030100
22424	T48-5314-G02	1/4	Ring, Retaining Washer	A498030100
22340	T23-I2837-51-G62	1/4	Ring, Retaining Washer	A498030100
12707	T23-I2837-36-G75	1/4	Ring, Retaining	A498030100
22436	N30-2186-G10	1/4	Ring, Retaining Anti-Rotation Key Washer	A498030100
12733	T23-I2837-42-G03	1/4	Ring, Retaining	A498030100

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## Mechanical Snubbers Rebuilt with New Parts

Serial	Snubber Location	Size	Description	Work Package
8 - 2 <sup>- 1</sup>				
19934	N30-2186-G03	1/4	Torque Carriers & Shaft Assembly Ring, Retaining Washer	A498030100
12809	B21-2589-G02	10	Ring, Retaining Retainer, Nut Bearing Assy	A498030100
20972	SPARE	3	Thrust Bearing Kit	A519030100
12450	SPARE	3	Thrust Bearing Kit Bearing Screw Assembly	A519030100
4710	SPARE (Unsat Functional Test)	35	Ball, 0.622 in. Ball, 0.624 in. Pin, Cotter	A519030100
13190	T23-I2837-46-G54	1/2	Retaining Ring	A519030100
19921	T23-I2837-42-G22	1/4	Washer	A519030100
23166	SPARE	1	Washer	A519030100
8469	C41-2340-G16A	1/2	Retaining Ring	A519030100
8470	N30-2186-G15	1/2	Retaining Ring	A519030100
8985	N21-3536-G38A	10	Load Pin Stock Code 482-5682 PO 245779	0963030328
8342	N21-3536-G29B	10	Load Pin From N21-3536-G38A	0963030328
12750	N30-3526-G48	<b>%</b>	Load Pin Stock Code 482-5679 PO 245776	0963030328
13147	T23-12837-46-G70	1/2	Load Pin Stock Code 482-5679 PO 245776	0963030328
113195	N30-3526-G54	<b>½</b>	Load Pin Stock Code 482-5679 PO 245776	0963030328

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

02-009

Name of ComponentName of ManufacturerManufacturerBoard No.Other IdentificationYear BuiltRepaired, Replaced, Stampe (Yes)		ompany		Da	ate		May 14, 2003	
Address       Unit       2         Plant       Fermi 2 Nuclear Power Plant       Unit       2         Address       Repair Organization P.O. No., Job No., etc.       Repair Organization P.O. No., Job No., etc.         Address       Repair Organization P.O. No., Job No., etc.       Repair Organization P.O. No., Job No., etc.         Work Performed by       Detroit Edison Company       Type Code Symbol Stamp       N/A							7	
Plant       Fermi 2 Nuclear Power Plant       Unit       2         Name       DECo Maintenance         6400 North Dibie Highway, Newport MI 48166       DECo Maintenance         Address       Repart Organization P.O. No., Job No., etc.         Work Performed by       Detroit Edison Company       Type Code Symbol Stamp       N/A         Address       Repart Organization P.O. No., Job No., etc.         6400 North Didde Highway, Newport, MI 48166       Expiration No.       N/A         Address       Kentification No.       N/A         6400 North Didde Highway, Newport, MI 48166       Expiration Date       N/A         Address       Address       Name         Identification of System       Various Component Supports (Hydraulic Snubbers)       N/A         (a)       Applicable Edition of Section XI Utilized for Repairs or Replacements       1992-W192          (b)       Applicable Edition of Section XI Utilized for Repairs or Replacements       1992-W192          dentification of Components Repaired or Replaced and Replacement Components       Built       Orher Placement       Stampe (Yes or No)         Name of Component       Nam of Component Replaced and Replacement Supports       No.       Various       REPLACEMENTS       N         PLANT HYDRAULIC       Power       Various <td></td> <td></td> <td>48166</td> <td>SI</td> <td>neet <u>1</u></td> <td> of</td> <td><u> </u></td> <td></td>			48166	SI	neet <u>1</u>	of	<u> </u>	
Name       DECo Maintenance         Address       Repair Organization P.O. No., dob No., etc.         Work Performed by       Detroit Eclison Company       Type Code Symbol Stamp       N/A         8400 North Dide Highway, Newport, MI 48166       Expiration P.O. No., dob No., etc.       N/A         8400 North Dide Highway, Newport, MI 48166       Expiration Date       N/A         8400 North Dide Highway, Newport, MI 48166       Expiration Date       N/A         8400 North Dide Highway, Newport, MI 48166       Expiration Date       N/A         8400 North Dide Highway, Newport, MI 48166       Expiration Date       N/A         8400 North Dide Highway, Newport, MI 48166       Expiration Date       N/A         8400 North Dide Highway, Newport, MI 48166       Expiration Date       N/A         8401 Name of System       Various Component Supports (Hydraulic Snubbers)       1/2         (a) Applicable Construction Code       ANSI B31.7       19       69       Article       121         (b) Applicable Components Repaired or Replaced and Replacement Components       1992-W'92       0/16       Year       Repaired, Replaced, Stamp (Yeas or No.)       Stamp (Yeas or No.)         PLANT HYDRAULIC       Power       Various       NA       NONE       Various       REPLACEMENTS       N         SNUBBERS				· 1979 · 1979 · 1979 · 1979 · 1979 · 1979 · 1979 · 1979 · 1979 · 1979 · 1979 · 1979 · 1979 · 1979 · 1979 · 1979				
6400 North Dixie Highway, Newport MI 48166       DECo Maintenance         Address       Repatr Organization P.O. No., Job No., etc.         Work Performed by       Detroit Eclison Company       Type Code Symbol Stamp       N/A		· · · · · ·		Ur	ui <u>2</u>			
Address       Repair Organization P.O. No., Job No., etc.         Work Performed by       Detroit Edison Company Name       Type Code Symbol Stamp       N/A         6400 North Dick Highway, Newport, MI 48166       Expiration No.       N/A         6400 North Dick Highway, Newport, MI 48166       Expiration No.       N/A         Address       Address       N/A         Identification of System       Various Component Supports (Hydraulic Snubbers)       N/A         (a)       Applicable Construction Code       ANSI B31.7       19       69       Articles       1-720 & 1-721         (a)       Applicable Edition of Section XI Utilized for Repairs or Replacements       1992-W792       dentification       God or Replaced, and Replacement Components         Name of Component       Name of Manufacturer       Secial No       Other       Year       Repaired, Replaced, or Replaced, or No)         PLANT HYDRAULIC       Power       Various       NA       NONE       Various       REPLACEMENTS       N         SNUBBERS       Piping       Identification and for future Installation       Identification       Identification       Identification         Description of Work       Refurbish Hydraulic Snubbers during testing activities and for future Installation       Identification       Identification         Tests Conducted: </td <td></td> <td></td> <td>48166</td> <td></td> <td></td> <td></td> <td></td> <td></td>			48166					
Work Performed by       Detroit Edison Company       Type Code Symbol Stamp       N/A         Name       Authorization No.       N/A         6400 North Dide Highway, Newport, MI 48166       Expiration Date       N/A         Address       Various Component Supports (Hydraulic Snubbers)       N/A         Identification of System       Various Component Supports (Hydraulic Snubbers)       N/A         (a)       Applicable Construction Code       ANSI B31.7       19       69       Articles       1-720 & 1-721         (b)       Applicable Construction Code       ANSI B31.7       19       69       Articles       1-720 & 1-721         (c)       Applicable Construction Code       ANSI B31.7       19       69       Articles       1-720 & 1-721         (b)       Applicable Edition of Section XI Utilized for Replace ments       1992-W192       dentification of Components Repaired or Replaced and Replacement Components       Other       Year       Repaired, Replaced, or Replacement       Stampe (Yeas or No)         Name of Component       Name of Manufacturer       Serial No       NA       NONE       Yarious       REPLACEMENTS       N         PLANT HYDRAULIC       Power       Various       NA       NONE       Various       REPLACEMENTS       N         Description of Work<								
Name       Authorization No.       N/A         6400 North Dide Highway, Newport, MI 48166       Expiration Date       N/A         Address       Address       MA         Identification of System       Various Component Supports (Hydraulic Snubbers)       N/A         (a) Applicable Construction Code       ANSI B31.7       19       69       Articles       1-720 & 1-721         (a) Applicable Construction Code       ANSI B31.7       19       67       Article       121       ()         (b) Applicable Edition of Section XI Utilized for Repairs or Replacements       1992/W92       1292       ()       Applicable Edition of Section XI Utilized for Replaced and Replacement Components         Name of Component       Name of Manufacturer       National Board       Other Identification       Year       Repaired, Replaced, or Replacement       Stampe (Yes or No)         PLANT HYDRAULIC       Power       Various       NA       NONE       Various       REPLACEMENTS       N         SNUBBERS       Piping       Various       NA       NONE       Various       REPLACEMENTS       N         Description of Work       Refurbish Hydraulic Snubbers during testing activities and for future Installation       Installation       Installation         Tests Conducted:       Hydrostatic       Pneumatic				Tv		-		
6400 North Dide Highway, Newport, MI 48166       Expiration Date       N/A         Address       Address       N/A         Identification of System       Various Component Supports (Hydraulic Snubbers)       N/A         (a) Applicable Construction Code       ANSI B31.7       19       69       Articles       1-720 & 1-721         (a) Applicable Construction Code       ANSI B31.1       19       67       Article       121						oump		
Address         Various Component Supports (Hydraulic Snubbers)         ANSI B31.7       19       69       Articles       1-720 & 1-721         (a)       Applicable Construction Code       ANSI B31.1       19       67       Article       121         (b)       Applicable Edition of Section XI Utilized for Repairs or Replacements       1992-W'92		····-	48166					
Various Component Supports (Hydraulic Snubbers)         (a) Applicable Construction Code       ANSI B31.7       19       69       Articles       1-720 & 1-721         (b) Applicable Edition of Section XI Utilized for Repairs or Replacements       1992-W'92       1992-W'92         dentification of Components Repaired or Replaced and Replacement Components       1992-W'92       Assumption         Mame of Component       Name of Manufacturer       National Board       Other       Year       Repaired, Replaced, or Replaced, or Replacement       Simpe (Year)         PLANT HYDRAULIC       Power       Various       NA       NONE       Various       REPLACEMENTS       N         PLANT HYDRAULIC       Power       Various       NA       NONE       Various       REPLACEMENTS       N         Description of Work       Refurbish Hydraulic Snubbers during testing activities and for future installation       Installation       Installation         Tests Conducted:       Hydrostatic       Pneumatic       Nominal Operating Pressure       Installation								
(a)       Applicable Construction Code       ANSI E31.7       19       69       Articles       1-720 & 1-721         (a)       Applicable Edition of Section XI Utilized for Repairs or Replacements       1992-W792         dentification of Components Repaired or Replaced and Replacement Components         Name of Component       Name of         Manufacturer       Serial No         Name of Component       Name of         Manufacturer       Serial No         PLANT HYDRAULIC       Power         Piping       Various         NA       NONE         Various       REPLACEMENTS         N       NONE         Various       NA         NONE       Various         REPLACEMENTS       N         Description of Work       Refurbish Hydraulic Snubbers during testing activities and for future installation         Tests Conducted:       Hydrosztic       Pneumatic       Nominal Operating Pressure		and the second	ent Supports (Hvo	Iraulic Snub	bers)			
Name of Component       Name of Manufacturer       Manufacturer       Board       Other       Year       Repaired, Replaced, or Replaced, or Replacement       Code Stampe (Yes or No)         PLANT HYDRAULIC       Power       Various       NA       NONE       Various       REPLACEMENTS       N         SNUBBERS       Piping       Various       NA       NONE       Various       REPLACEMENTS       N         Description of Work       Refurbish Hydraulic Snubbers during testing activities and for future installation       Installation       Installation	(b) Applicable Edition of S	ection XI Utilized	for Repairs or Repl	acements	1992- <b>W</b> '92			
PLANT HYDRAULIC SNUBBERS       Power Piping       Various       NA       NONE       Various       REPLACEMENTS       N         SNUBBERS       Piping       Image: Source of the second sec	Norma of Commonst			Board				ASME Code
Description of Work       Refurbish Hydraulic Snubbers during testing activities and for future installation         Tests Conducted:       Hydrostatic	Name of Component	Manufacturer	Senai No	No.		Buin	or Replacement	
Description of Work       Refurbish Hydraulic Snubbers during testing activities and for future installation         Tests Conducted:       Hydrostatic	PLANT HYDRAULIC	Power						(Yes or No)
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure	PLANT HYDRAULIC	Power				Various		(Yes or No)
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure	PLANT HYDRAULIC	Power		н. 1.н.т. Ж		Various		(Yes or No)
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure	PLANT HYDRAULIC	Power		н. 1.н.т. Ж		Various		(Yes or No)
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure	PLANT HYDRAULIC	Power		н. 1.н.т. Ж		Various		(Yes or No)
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure	PLANT HYDRAULIC	Power		н. 1.н.т. Ж		Various		(Yes or No)
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure	PLANT HYDRAULIC	Power		н. 1.н.т. Ж		Various		(Yes or No)
Tests Conducted: Hydrostatic Pneumatic Nominal Operating Pressure	PLANT HYDRAULIC	Power		н. 1.н.т. Ж		Various		(Yes or No)
	PLANT HYDRAULIC SNUBBERS	Power Piping	Various		NONE	Various	REPLACEMENTS	(Yes or No)
	PLANT HYDRAULIC SNUBBERS	Power Piping	Various		NONE	Various	REPLACEMENTS	(Yes or No)
	PLANT HYDRAULIC SNUBBERS	Power Piping	Various	NA esting activi	NONE ties and for futu	Various	REPLACEMENTS	(Yes or No)
	PLANT HYDRAULIC SNUBBERS Description of Work <u>Refur</u> Tests Conducted: Hydro	Power Piping bish Hydraulic S	Various	NA esting activi	NONE ties and for futu ating Pressure	Various	REPLACEMENTS	(Yes or No) N

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.

(12/82)

This Form (E00030) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N. Y. 10017

#### Form NIS-2 (Back)

9. Remarks Attached are listings of Hydraulic Snubbers that were refurbished and changed out during testing activities during RF09. Applicable Manufacturer's Data Reports to be attached

Note the listing of the Hydraulic Snubbers that were refurbished prior to and during RF09 including a listing of parts installed.

Documentation satisfies requirements of Code Case N-508-1 as allowed by Relief Request RR-C4.

ASME Code, Secti	We certify that the s	tatements made in	the report are corr				rules of the
ASME CODE, Secu				repau	or replacemen	L	
Type Code Symbo	I Stamp_Original Cod	e Data Reports to t	e supplemented b	v owners Sect	ion XI Progra	m No. 02-009.	
Certificate of Autho	rization No	N/A		_Expiration D	ate <u>N/A</u>		
Signed KM	halles	- LOAD I	ST ENG	Date	JUY	25	.20 03
Owner o	r Owner's Designee, Title	<b>}</b>					
				· · · · · · · · · · · · · · · · · · ·			
		CERTIFICATE	OF INSERVICE	INSPECTIC	N		
I the undersigned	holding a valid commi	esion leaved by the	National Board of	Roller and Pre		Inconctore and	t the State
or Province of	Michigan	and employed			33416 ¥6336	hispectors and	of
	et, Hartford, CT 061			have	inspected th	e components	o
in this Owner's Rep	ort during the period_	09.00	-02_	to 07-		•	state that
to the best of my kn	owledge and belief, th	e Owner has perfo	med examination:	and taken co	rective meas	ures described	
	ort in accordance with						
	certificate neither the I						
	orrective measures de						
snall be liable in any	y manner for any perso	onal injury or prope	ny damage or a lo	ss of any kind	ansing from c	r connected wi	in inis
	•						
No.	sech	·L	Commission	, MI	610		
1-jun	Inspector's Signatur	r <del>e</del>			State, Provin	e, and Endors	ements
1-fun							
- Andre	29	20 03					

For complete work package, see Work Request

<u>A497030100</u> <u>A514030100</u> Hydraulic Snubbers Replaced with Rebuilt Spares

Hanger Number	Old Serial	New Serial
N21-3109-G77B	820250	
E11-3152-G24	820187	810222
E11-3158-G29	820251	820220
E11-3158-G30	810228	810220
E11-3158-G34	810027	810016
E11-3161-G10	810150	820227
E11-3177-G25	820072	
E21-3145-G23	820165	810164
E21-3147-G27	810008	
E41-3162-G17	820054	820202
E41-3162-G23	820106	820112
E51-3174-G33	810064	810167
E51-3174-G39	810019	820079
E51-3174-G40	810166	830019
E51-3175-G12	820093	820076
E51-3176-G17	810152	810138
G33-3244-G36A	820129	820083
G33-3244-G36B	810178	820078
G51-4059-G15	820151	810031
T46-3093-G18B	830035	830040
E11-3177-G09	830037	820054

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Hydraulic Snubbers Rebuilt and Re-installed

NIS-2 FOC #02-009 30F7

Hanger Number	Serial Number
N21-3109-G72B	810159
N21-3109-G63A	830033
N21-3109-G63B	820196
N21-3103-G20A	820014
N21-3109-G72A	810092
E11-3184-G15A	810211
E11-3160-G13	820135
E11-3146-G16	830028
E51-3175-G13	820183
E21-3144-G32	820171
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Serial	Snubber Number	Size	Description	Work Package
810090	N21-3109-G77B	4x5	Kit, Seal Ring, Piston O-Rings	A497030100
830004	T46-3093-G18B	4x5	Kit, Seal Ring, Piston O-Rings Bar, Flat 1/4" x 2" Angle, 1 x 1 x 1/4 Connector, Male	A497030100
			Bearing, Rod Nut Ferrule, Back Ferrule, Front Tubing, 1/4*	
820202	E41-3162-G17	4x5	Kit, Seal Ring, Piston O-Rings	A497030100
820220	E11-3158-G29	4x5	Kit, Seal O-Rings Ring, Piston	A497030100
810222	E11-3152-G24	2-1/2 × 5	Hex Bolt, 1/4"x20x1 Hex Nut, 1/4"x20 Pipe Nipple Angle Iron 1"x1"x1/4" Flat Bar 3/8"x1" Kit, Seal Ring, Piston O-Rings	A497030100
810049	E21-3147-G27	2x5	Kit, Seal Ring, Piston O-Rings Tube, Cylinder 2"	A497030100
810138	E51-3176-G17	2x5	Bearing, Rod Ring, Piston Kit, Seal O-Rings Angle Iron 1"x1"x1/4"	A497030100
810151	SPARE	2x5	Kit, Seal Ring, Piston O-Ring Elbow 1/4" Angle Iron 1"x1"x1/4"	A497030100
820112	E41-3162-G23	2x5	O-Rings Ring, Piston Kit, Seal	A497030100



Serial	Snubber Number	Size	Description	Work Package
820227	E11-3161-G10	2X5	Kit, Seal Ring, Piston O-Rings	A497030100
810167	E51-3174-G33	1-1/2 X 5	O-Rings Ring, Piston Kit, Seal	A497030100
810164	E21-3145-G23	1-1/2 X 5	Kit, Seal Ring, Piston O-Rings	A497030100
810031	G51-4059-G15	1-1/2" x 5	Kit, Seal O-Rings Ring, Piston	A497030100
820066	SPARE	1-1/2" x 5	O-Rings Ring, Piston Kit, Seal	A497030100
820079	E51-3174-G39	1-1/2 x 5	Kit, Seal Ring, Piston O-Rings	A497030100
830019	E51-3174-G40	1-1/2" X 5	Kit, Seal Ring, Piston O-Rings	A497030100
810016	E11-3158-G34	2-1/2 X 5	Kit, Seal Ring, Piston O-Rings	A497030100
810220	E11-3158-G30	2-1/2 X 5	Hex Bolt 1/4"x1 Hex Nut 1/4" Angle Iron 1x1x1/4 Flat Bar 1/4x2 SS Tubing 1/4" SS Nut (Tubing) 1/4" SS Front Ferrule 1/4" SS Back Furrule 1/4" Pipe Nipple Kit, Seal Ring, Piston O-Rings	A497030100
820078	G33-3244-G36B	1-1/2 x 5	O-Rings Ríng, Piston Kit, Seal Valve Block (SN#820164)	A497030100
820083	G33-3244-G36A	1-1/2" x 5	Kit, Seal Ring, Piston O-Rings	A497030100
810168	E11-3177-G25	1-1/2 x 5	Kit, Seal Ring, Piston O-Rings	A497030100

Serial	Snubber Number	Size	Description	Work Package
820082	SPARE	2x5	O-Rings Ring, Piston Kit, Seal	A497030100
810159 820196	N21-3109-G72B N21-3109-G63B	4x5 4x5	Kit, Seal Ring, Piston O-Rings Sight Glass Assembly	A514030100 A514030100
020190	N21-3109-G03B	4X0	Kit, Seal Rings, Piston O-rings	A514030100
820014	N21-3103-G20A	4x5	Kit, Seal Rings, Piston O-rings	A514030100
810092	N21-3109-G72A	4x5	Kit, Seal Rings, Piston O-rings	A514030100
830037	SPARE	4x5	Kit, Seal Rings, Piston O-rings	A514030100
820076	E51-3175-G12	1-1/2 x 5	Kit, Seal Rings, Piston O-rings	A514030100
810211	E11-3184-G15A	2x5	Hex Bolt, 1/4"x20x1 Hex Nut, 1/4"x20 Pipe Nipple Angle Iron 1"x1"x1/4" Flat Bar 3/8"x1" Kit, Seal Ring, Piston O-Rings	A514030100
820135	E11-3160-G13	2x5	Kit, Seal Ring, Piston O-Rings	A514030100
830028	E11-3146-G16	5x5	Kit, Seal Ring, Piston O-Rings Angle Iron ¼"x1/4"x9"	A514030100
820183	E51-3175-G13	2x5	Kit, Seal Ring, Piston O-Rings	A514030100
820171	E21-3144-G32	1-1/2"x5	Kit, Seal Ring, Piston O-Rings	A514030100
830033	N21-3109-G63A	4x5	Kit, Seal Ring, Piston O-Rings	A514030100

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Serial	Snubber Number	Size	Description	anda Antonio Statu	Work Package
an an Na				• 1	
820054	E11-3177-G09	4x5	Hex Bolt, 1/4"x20x1 Hex Nut, 1/4"x20 Angle Iron 1"x1"x1/4" Flat Bar 3/8"x1" Kit, Seal Ring, Piston O-Rings		A514030100

# 02-010

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

	Owner Detroit Edi			Date			2-15-2003	
 	6400 North Dixie Hi	Name ghway, Newport M	1 48166	Shee	<b>t</b>	1 ol	2	
2.	Plant Fermi 2 Nuclea	ddress ar Power Plant		Unit			2	
		Name						
	6400 North Dixie Hi		1 48166				intenance	· · · ·
3.	A Work Performed by	ddress		Tima	Repair Or Code Symbol	ganization P	.O. No., Job No., etc.	
J.	•	Detroit Edison Con	npany	Stam			N/A	
 		Name		Autho	prization No.		N/A	
•				Expin	ation Date			
	6400 North Dixie High		<u>ll 48166</u>	n an			N/A	
4.	A Identification of System	ddress	esel Generator Servic	a Watar D	ivision 1 (EDC			
	<ul> <li>(a) Applicable Construct</li> <li>(b) Applicable Edition</li> <li>Replacements</li> </ul>	Clas	ME III, ss 3 19 XI Utilized for Repairs o		<u>W'71</u> 192-W'92 Idenda	Addenda,	<u>NA</u>	Code Case
5.	(b) Applicable Edition	Clas	ss 3 19 XI Utilized for Repairs o	r 19 <u>A</u> a	192-W' ' 92	Addenda,	Repaired,	<b> </b>
	(b) Applicable Edition Replacements Identification of Componen	<u>Cla:</u> (Addenda of Section) Is Repaired or Replace	ss 3 19 XI Utilized for Repairs o ced and Replacement C	r 1s <u>A</u> a components	192-W* + 92 Idenda			ASME Code Stamped
	(b) Applicable Edition Replacements Identification of Componen	Cla: Addenda of Section Is Repaired or Repla Name of	ss 3 19 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial	Components	192-W <sup>*</sup> 4 92 Idenda Other	Year	Repaired, Replaced,	ASME Code Stamped (Yes
	(b) Applicable Edition Replacements Identification of Componen	Cla: Addenda of Section Is Repaired or Repla Name of	ss 3 19 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial	Components	192-W <sup>*</sup> 4 92 Idenda Other	Year	Repaired, Replaced,	ASME Code Stamper
	(b) Applicable Edition Replacements Identification of Componen Name of Component	Clar Addenda of Section Is Repaired or Replac Name of Manufacturer Wm.	ss 3 19 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	components National Board No.	92-W <sup>+</sup> 92 Idenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)
	(b) Applicable Edition Replacements Identification of Componen Name of Component	Clar Addenda of Section Is Repaired or Replac Name of Manufacturer Wm.	ss 3 19 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	components National Board No.	92-W <sup>+</sup> 92 Idenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)
	(b) Applicable Edition Replacements Identification of Componen Name of Component	Clar Addenda of Section Is Repaired or Replac Name of Manufacturer Wm.	ss 3 19 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	components National Board No.	92-W <sup>+</sup> 92 Idenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)
	(b) Applicable Edition Replacements Identification of Componen Name of Component R3000F142A	<u>Cla</u> Addenda of Section Is Repaired or Replac Name of Manufacturer Wm. Powell	ss 3 19 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	Components National Board No. N/A	92-W <sup>+</sup> 92 Idenda Other Identification V15-2096	Year Built 1976	Repaired, Replaced, or Replacement Replacement	ASME Code Stamper (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. Replacement Disc procurred per Purchase Order Number 350277, SA 217- Gr. CA15, Serial No. CM8990B.

			· · ·			
				•		
	Applicable Man	ufacturer's Data Repo	rts to be attached			
	• •			·		
		•				•
	 	ERTIFICATE OF CO				
			•			
We certify that the stat	tements made in the report are	correct and this repla	cement_conforms	to the rules of th	neASME Code, Section )	1.
			· ·			
Type Code Symbol Sta	amp <u>Original Code Data repo</u>		· ·			
	amp <u>Original Code Data repo</u>		· ·			
Type Code Symbol Sta Work request #00020	amp <u>Original Code Data repo</u> 21705.	nt N5-5 (T & B) to be s	upplemented by O	wners Section >	KI Program Plan 02-010	
Type Code Symbol Sta Work request #00020	amp <u>Original Code Data repo</u> 21705.		· ·	wners Section >		
Type Code Symbol Sta Work request #00020 	amp <u>Original Code Data repo</u> 21705.	nt N5-5 (T & B) to be s	upplemented by O	wners Section >	KI Program Plan 02-010	

	CERTIFICATE OF INSERVICE INSPECTION
Provinc compor knowled	Indersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or a of <u>Michigan</u> and employed by <u>HSB CT</u> of <u>One State Street</u> , <u>Hartford</u> , <u>CT 06102</u> have inspected the ments described in this Owner's Report during the period $2 = .23202$ to <u>fee by 3 2003</u> , and state that to the best of my dge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in ance with the requirements of the ASME Code, Section XI.
and con	ing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations rective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
7	Inspector's Signature     Commissions     Integers       National Board, State, Province, and Endorsements
Date	July 9 2003

(10/94)

9.

Remarks

-	I. (a) Manufactured by	The Wm.	Powe11	Сотра			n Avenue, ( Certificate Holder		ati, OH 45225
	(b) Manufactured for_	Detroit	Edisc	n <u>, 640</u>	0 Dixie	Highway,	• • • • •	11 4816	6
2	. Identification-Certifica	te Holder's Sa	· · .			_Nat'l Bd. No.	and the second	CRN	
	a) Constructed Accord	ding to Drawi	ng No. P/	<u>N 26-0</u>	85524-15	002-00 <sub>Drav</sub>	wing Prepared by	The Wm	
•	(b) Description of Part				the second s				<u> </u>
7	(c) Applicable ASME C Remarks:	ode: Section	III, Editio	n <u>1971</u>	; Adde	nda date <u>villili</u>	EI /1 : Case N	0. <u>N/A</u>	Class
Ĩ			(Bri	ef descripti	ion of service	for which com	ponent was design	ed.)	
· -					<u> </u>				CED \
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	۵٬۰۰ <u>۰ - ۲۰۰۰ - ۲۰۰۰ - ۲۰۰۰</u> ۲۰۰۰ - ۲۰۰۰-	<u></u>			•				
Ite	m 4-8 inclusive to be com	pleted for sin	ole wall ve	sels, jacker	ts of jacketed	vessels, or shell	is of heat exchange	iers.	
			• •						
4.	Shell: Material	& Spec. No.I	T.S	. of range	specified)	lom, Thkin.	Corr. Allow in	. Diamf	L
	, Seams: Long	i i i i i i i i i i i i i i i i i i i	1. 1.			<b>•</b> •	Eff	•	
			_ = H.T. <sup>1</sup>				ETT		
6.	Heads: (a) Material		T.s					T.S	
	Location (top, bottom, ends)			Radius		Apex Ang			
	(a)								
	(b)		<u> </u>						
	If removable, bolts used	Material	Spec. No.	T.S., Size	Number)	Other faste		Describe or	attach sketch)
7.	Jacket Closure:								
		(De	scribe as o	gee and we	ld, bar, etc. I	f bar, give dime	nsions, if bolted,	describe or	sketch)
8.	(a) Design Pressure <sup>2</sup>		psi at			F (b) Min. Pr	essure-Test Temp.	· · · ·	<u> </u>
	ns 9 and 10 to be complete	ad for tube re						· .	
									•
9.	Tube Sheets: Stationary:			Dian	n ISubject to	in. Thk	in. A	ttachment .	
•••	Floatine:	Material	d & Spec.	No.) Diarr	ISUDJECT TO	pres.) in The	in. A	tachment	(Weided, boited)
10.	Tubes: Material			_in. Thk.		_ in. or gage N		Type	
- •								(S	traight or Ul
Item	ns 11-14 inclusive to be co	mpleted for i	nner chami	bers of iaci	ceted vessels	or channels of t	peat exchangers	· · ·	
						· · · · · · · · · · · · · · · · · · ·			
	Shell: Material	Spec. No.1	.T.S		I	lom, Thk in,	Corr. Allowi	n. Diam	ftin. Length_ftin
11.				그는 가는 것을				· · · · ·	
· · ·			н., <u></u> чті			₹.T > <b>∓</b>	Effic	ciency	, ×
· · ·	Seams: Long					_(b).Material_		T.S.	
12.	Girth Heads: (a) Material			<u> </u>	<u>et. et. 1997</u>	_\D/.Wisteria:			
12.	Girth Heads: (a) Material		T.S Crown	Knuckle	Elliptical	Conical	Hemispherical		Side to Pressure
12. 13.	Girth Heads: (a) Material Location	Thickness	T.S Crown Radius	Knuckle Radius			• • •		Side to Pressure (convex or conceve)
12. 13.	Girth Heads: (a) Material	Thickness	T.S Crown Radius	Knuckle Radius	Elliptical	Conical	Hemispherical		
12. 13.	Girth Heads: (a) Material Location (a) Top, bottom, ends	Thickness	T.S Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Diam.	
12.	Girth Heads: (a) Material Location (a) Top, bottom, ends (b) Channel	Thickness	T.S Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical	Diam.	(convex or concave)

	• •		F	ORM N-2 (B	ack)			
en	ns below to be complet	ed for all vessel	s where applicable.	·				
	Safety Valve Outlets: Nozzles:	Number	Size	·	Location	- <u>.</u>		
	Purpose (inlet, outlet, drain)	Number	Diam. or Size	Туре	Materiaj	Thickness	Reinforcement Material	How Attac
		·				·		
•	Inspection Manholes:	No	Size		Location			
	<b>Openings:</b> Handholes	s: No	Size		Location			1-1
	Threaded:	No	Size		Location			• <u>•</u>
<b>š</b> .	Supports: Skirt	Lugs	(Number)		_Other	Attache	d b	8 ho.,1
	Date <u>Ma</u> : Certificate of Authór		, <u>75_2002_</u> signo 12/13/03	; .	. Powell Co Certificate Holder)		<u>ered</u> N1579	pre
	Design information on		ATION OF DESIGN	I FOR APP	URTENANCE (	vhen applica	ble)	
	Stress analysis report o	n file at				<u> </u>		
	-					ng. State	Reg. No	
	Stress analysis report o	artified by				-	Reg. No	·
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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 02-012

1.	Owner Detroit E	dison Company		Date		<u></u>	July 25, 2003	
	6400 North Dixie	Name Highway, Newport M	1 48166	Shee	et	<u>1</u> 0	f 3	
2.	Plant Fermi 2 Nuc	Address lear Power Plant		Unit	la la companya da la Companya da la companya da la company		2	
· · ·	6400 North Dixie	Name Highway, Newport M	1 48166			Deco Ma	intenance	
		Address			Repair O		O. No., Job No., etc.	·
3.	Work Performed by	Detroit Edison Con	npany	Type Stam	Code Symbol		N/A	
. 1		Name			prization No.	· · • · ·	N/A	
	6400 North Dixie	Highway, Newport, N	1 48166	Expir	ation Date	· .	N/A	
		Address				a sera a		
4.	Identification	N5-020 (T&B)	Diesel Generator Se	ervice water	System	<u> </u>	<u></u>	· · ·
	of System					• • •		
5.	(a) Applicable Cons	struction Code ASM	ME III, ss 3 19	71 Edition	71	Addenda	N⁄A	Code Case
6.	(b) Applicable Edition Replacements Identification of Component		XI Utilized for Repairs of ced and Replacement (	<u>_1</u> !	992-92 Addenda			
	Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
	R3000F142D	Wm. Powell	66171-7	N/A	V15-2078	1976	Replacement	Y
						n ar e Mili Mili An a		
						a sa Sana a		
7.	Description of Work	Install replacement	Stainless Steel Alloy	Disc in chec	<u>k valve to minimi</u>	ze wear o	f disc post	
8.	Tests Conducted:	Hydrostatic [ ]	Pneumatic [] N	ominal Operat	ting Pressure [X]			

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.

(10/94)

9. Remarks: Replacement Plug/Stem assembly procured per PO#357727-1, Serial No. CM 9037B. Disc was repaired by manufacturer prior to installation due to defective threads. (Reports Attached ).

Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPLIANCE
We ca	tify that the statements made in the report are correct and this <u>Replacement</u> conforms to the rules of the ASME Code, Section XI
Туре (	Code Symbol Stamp Original Code data report N5-020 (T&B) supplemented by Owners Section XI Program 02-012
Certific	ate of Authorization NoNAExpiration DateNA
	R.M. Hambleton Lead ISI Engineer ALTA Date July 25 20 03

	sion issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or
Province of <u>Michigan</u> and employonents described in this Owner's Rep	by HSB CT_of One State Street, Hartford, CT 06102_have inspected the port during the period_Actly 7, 03 to Acceptor 03, and state that to the best of my
nowledge and belief, the Owner has perfo	ormed examinations and taken corrective measures described in this Owner's Report in
ccordance with the requirements of the AS	SME Code, Section XI.
y signing this certificate neither the Inspec	ctor nor his employer makes any warranty, expressed or implied, concerning the examinations
المتلفية فيعاليه والمتعارية ومستعموهم والمستعم والمرا	Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any
	damage or a loss of any kind arising from or connected with this inspection.
	damage or a loss of any kind arising from or connected with this inspection.
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	damage or a loss of any kind arising from or connected with this inspection.
	damage or a loss of any kind arising from or connected with this inspection.

For complete work package, see Work Request R303020100

	NUCLEAR PA As Required by the Pro	HOLDERS' DATA REPORT I RTS AND APPURTENANCE ovisions of the ASME Cod ceed One Day's Production	S* e, Section III	Pg. 1 of _2
Anufactured and certifie	ed by The Wm. Powell	Company, 3233 Colerat	In Avenue, Cin	cinnati, OH 452
Manufactured for	troit Edison, P.O. Be	ox 1659, Detroit, MI	48231	
	EF 2 Site, 6400 Dix	(name and address of purchaser) ie Highway, Newport,		i je ki s se te j
		(name and address)	<u>MI 40100</u>	
$\frac{26-085524-15}{(\text{drawing no.})}$	5002-00 ASME SA217 CA	A15 111.6	N/A (CRN)	2002 (year built)
		Winter 1971 (addenda dəte)		N/A
and the second				(Code Case no.)
ibricated in accordance	with Const. Spec. (Div. 2 only)	(no.) Revision	D	ste
emarks:	Tag V15-2071	an an the second se Second second		
			: · · · · · · · · · · · · · · · · · · ·	
	Min. design thickness (in ate Holders' Data Reports are attac	.) Dia. ID (ft & in.) _	Length ov	erall (ft & in.)
Part or Appurtenan Serial Number	National Board No. In Numerical Orde	er Part or Appur Serial Nun		National Board No. In Numerical Order
Serial Number (1) <u>CM 9037B</u> (2)	sce Board No. In Numerics! Orde <u>N/A</u>	er Serial Nun (26) (27)	nber	Board No.
Serial Number (1) <u>CM 9037B</u> (2) (3)	Board No. in Numerics! Orde N/A	er Serial Nun (26) (27) (28)	nber	Board No.
Serial Number (1) <u>CM 9037B</u> (2) (3) (4)	Soard No. in Numerical Orde <u>N/A</u>	er Serial Nun (26) (27) (28)	nber	Board No.
Serial Number (1) <u>CM 9037B</u> (2) (3) (4) (5) (6)	Soard No. in Numerical Orde N/A	er Serial Nun (26) (27) (28) (28) (29) (30) (31)	nber	Board No.
Serial Number           (1)         CM 9037B           (2)	Soard No. in Numerical Orde N/A	er Serial Nun (26) (27) (28) (29) (30) (31) (32)	nber	Board No.
Serial Number           (1)         CM 9037B           (2)	Soard No. in Numerical Orde N/A	er Serial Nur (26) (27) (28) (29) (30) (31) (32) (33)	nber	Board No.
Serial Number           (1) <u>CM 9037B</u> (2)	Soard No. in Numerical Orde N/A	er Serial Nur (26) (27) (28) (29) (30) (31) (32) (33) (34) (34)	nber	Board No.
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Serial Number           (1)         CM 9037B           (2)	Soard No. In Numerical Orde N/A	er Serisi Nur (26) (27) (28) (29) (30) (31) (32) (33) (34) (32) (33) (34) (35) (36) (36) (37) (38) (38) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (47)	nber	Board No. in Numerical Order

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\* Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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(7/98)

This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

# FORM N-2 (Back - Pg 2 of \_2\_)

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· Certifi	cate Holder's Serial Nos.	through
CERTIFICA	non of design	· · · · · · · · · · · · · · · · · · ·
Design specifications certified by	P.E. State P.E. State	
CERTIFICATE	OF COMPLIANCE	
We certify that the statements made in this report are correct and that conforms to the rules of construction of the ASME_Code, Section III, D		
NPT Certificate of Authorization No. <u>N1579</u> Date <u>10/10/02</u> Name <u>The Wm: Powell Co.,</u> (NPT Certificate Holder)		13/03 Cauthorized representative)
CERTIFICAT	E OF INSPECTION	
I, the undersigned, holding a valid commission issued by the National of <u>Oh10</u> and employed by <u>H.S.B.C.T.</u> of <u>Hartford</u> , <u>CT</u> have inspected these items descrit best of my knowledge and belief, the Certificate Holder has fabricated III, Division 1. Each part listed has been authorized for stamping on the By signing this certificate, neither the inspector nor his employer makes in this Data Report. Furthermore, neither the inspector nor his employer or loss of any kind arising from or connected with this inspection. Date <u>IO</u> Signed <u>Hattan</u> Signed <u>Hattan</u>	bed in this Data Report on these parts or appurtenances in accord a date shown above. a any warranty, expressed or implied, co	, and state that to the lance with the ASME Code, Section oncerning the equipment described

Work performed by _	The Wm. Powell C	Company	<u></u>	Powell Ord	
		(nar	ne)		P.O. no., job no., etc.)
	3233 Colerain Av	venue Cin (address)	cinnati, OH 4	5225	er en de transmission. Transmission
	<b>21530</b>			2/12/02	
"NR" Certificate no	NI579	E	xpiration date <u>1</u>	2/13/03	- 
Owner Det	roit Ealson	(name)	en e		<u> </u>
200	0 Second Avenue	Detroit.	MI 48226		
		(address)			
Name and identificati	on of nuclear power plant	Enrico Ferm	12		
Address of nuclear po	ower plant6400 Dix	ie Highway	Newport, MI	48166	•
Identification of syste	m		•	and a second second	
a: Identification of co	omponent repaired, modifie	d or replaced <u>1 – D</u>	isc for 8" Fig	ure 3061 Che	ck Valve
b: Name of manufact	urer <u>The Wm. Pow</u>				2002
c: Identifying nos.	(mfr.'s serial no.) (		/A risdictional no.)	N/A (other)	(year built)
Tests conducted: hv	es <u>The Wm. Powel</u> drostatic D pneumatic <u>Welded up and ma</u>	design pressure	to correct dim	ensional prol	olems
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ertify that the statem	ents made in this report are		and the second	anship on this1	epair
	section of the ASME Co	de.		(repair,	modification or replaceme
ed erried (	The Gerald		lity Manager		<u>2/14/03</u> ¥¥
(authorized	representative of repair organizatio	n)	, (title)		(date)
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Ohio	a valid Commission issue by H.S.B.		of Boller and Pressur	e Vessel Inspectors	and the state or pro f Hartford, C
U	modification or replaceme		ort on 2/1		2005 and state that
•	and belief, this repair, m			4 A Reprint Provide A Repri	
• •	ME Code. By signing this c	10 C			
	ir, modification or replacen	ment described in this re	eport. Futhermore, nei	ther the Inspector i	nor his employer sha
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able in any manner fo	ned(Authorize	ed Inspector)	_Commissions	(state or province, N	ational Board)

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P.O. 357727

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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

Owner Detroit	Edison Company Name		Date			october 3, 2002	
6400 North Dixie	Highway, Newport N	M 48166	She	et	10	x 2	
	Address						
Plant Fermi 2 Nuc	lear Power Plant		Unit		an a th	2	
	Name						
6400 North Dixie	Highway, Newport M	(1 48166					
					the second s	lintenance	
Work Performed by	Address Detroit Edison Cor		Time	Code Symbol	nganizabon r	P.O. No., Job No., etc. N/A	•
WOIN CENDINED DY	Dennir Emson Ani	Ilpairy	Stam			NVA	1.
	Name	•		orization No.		N/A	
6400 North Dixle	Highway, Newport, N	<i>N</i> I 48166	Expir	alion Date		N/A	
•	Address	•	•		•		·: · . · .
Identification of System	<u>T&amp;BN5-4 er</u>	nd 21 - Emergency Ec	uipment Sei	vice Water Syst	tem Divisio	<u>n 1</u>	
(a) Applicable Cons		ME III, se 3 19	71 Edition	Winter 1971	Addenda	N/Å	Code Cas
	<u>Cla</u> on/Addenda of Section	ss 3 19 XI Utilized for Repairs o	omponents National Board		Addenda, Year Bulk	Repaired, Replaced,	ASME
(b) Applicable Edition Replacements centification of Component Name of	Cla on/Addenda of Section snts Repaired or Repla Name of	ss 3 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial	r 1: components National	1971 992-02 Addenda Other	Year	Repaired,	ASME Code Stampa (Yes
(b) Applicable Edition Replacements centification of Component Name of	Cla on/Addenda of Section snts Repaired or Repla Name of	ss 3 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial	r, 1: componentis National Board	1971 992-02 Addenda Other	Year	Repaired, Replaced,	ASME Code Stampu (Yes
(b) Applicable Edition Fleplacements dentification of Component Name of Component	Cla on/Addenda of Section ents Repaired or Repla Name of Manufacturer	ss 3 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial	r, 1: components National Board No.	1971 992-82 Addenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASMI Code Stampo (Yes or No Y
(b) Applicable Editin Replacements dentification of Component Name of Component P45F400	Cla on/Addenda of Section ents Repaired or Repla Name of Manufacturer Target Rock	ss 3 19 XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	r 1: components National Board No.	1971 992-92 Addenda Other Identification V30-:1033	Year Bullt 2000	Repaired, Replaced, or Replacement Replaced	ASME Code Stampo (Yes or No Y
(b) Applicable Editin Replacements dentification of Component Name of Component P45F400	Cla on/Addenda of Section ents Repaired or Repla Name of Manufacturer Target Rock	ss 3 19 XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No 1	r 1: components National Board No.	1971 992-92 Addenda Other Identification V30-:1033	Year Bullt 2000	Repaired, Replaced, or Replacement Replaced	ASME Code Stampe (Yes or No) Y

Other [] Pressure \_\_\_\_\_ psi

si Test Temp.

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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.

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Form NI	S-2 (Back)
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# 9. Remarks: <u>Replacement Valve procurred per P.O. #371566</u>, Serial No. 4.

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Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE** We certify that the statements made in the report are correct and this <u>Replacement</u> conforms to the rules of theASME Code, Section XI. Type Code Symbol Stamp Original Code Data report Ter 4 to be supplemented by Owners Section XI Program #02-014 Certificate of Authorization No. **N/A** Expiration Date N/A 19 2002 R.M. Hambleton Lead ISI Engineer OTOBER Signed\_\_\_\_ Date Owner or Owner's Designee, Title

ļ	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 Province of <u>Michigan</u> and employed by <u>HSB_CT</u> of <u>One State Street</u> , <u>Hartford</u> , <u>CT 06102</u> have inspected the components described in this Owner's Report during the period <u><math>\mathcal{B} - \mathcal{B} - \mathcal{O} - \mathcal{I} - \mathcal{O} \mathcal{Z}</math></u> , 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. Furthermore, 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.           Mathematical Activity of property damage or a loss of any kind arising from or connected with this inspection.         Inspector's Signature         Commissions       NB9448 to       NEASCES       NECord         National Board, State, Province, and Endorsements
	Date <u>Oct-7</u> 18 2002
	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. Furthermore, 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. Matter Commissions MB948 contraster Matters Inspector's Signature Matter Board, State, Province, and Endorsements

For complete work package, see Work Request 000Z011314

FORM NE	V-1 CERT	<b>IFICATE HO</b>	LDERS' DAT	TA REPORT FO	DR NUCLEA	r pumps of	VALVES'	<ul> <li>A State of the second se</li></ul>
	As Regul	ired by the F	rovisions of	the ASME Co	da, Section	III, Division 1		
			a an	화 있으며 이렇게 한다.	and the second			Pg. 1 of 2 🕆

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ASME Code, Section III, Division 1: <u>1989</u> None <u>3</u> None (edition) (addenda date) (class) (Code Case no.) Pump or valve <u>Valve</u> Nominal inlet size <u>2</u> Outlet size <u>3</u> (in.) (in.)		Manufactured for Detroit Edisor	r 6400 North Dixie Hw	v.: Newport, MI			SED
Model No., Series No., or Type       992510-001       Drawing       992510-001       RevE       CRN       N/A         ASME Code, Section III, Division 1:       1989       None       3       None         ASME Code, Section III, Division 1:       1989       None       3       None         Pump or valve       Valve       Nominal Inlet size       2       Outlet size       3         Material:       Body       SA105       Disc       SA564 630       Bolting       N/A         (a)       (b)       (c)       (d)       (e)       Outlet size       3       Serial       No.       No.       No.       No.       No.       No.       No.       No.       No.				•		fe	5
Model No., Series No., or Type       992510-001       Drawing       992510-001       Nev.       E       Crive       10/A         ASME Code, Section III, Division 1:       1989       None       3       None       (class)       (Code Case no.)         Pump or valve       Valve       Nominal inlet size       2       Outlet size       3       (code Case no.)         Material:       Body       SA105       Cap       SA105       Disc       SA564 630       Bolting       N/A         (a)       (b)       (c)       (d)       (e)       (in.)         Cert.       Nat"I       Body       Cap       Disc       Serial       No.       No.       No.       No.       No.       No.       No.       Serial       Serial       Serial       Serial       Serial       Serial       Serial       Serial       No.		Location of installation <u>Enrico Fe</u>	(name and address)	<u>e Fiwy.; Newdol</u>			- (V 2:
Image: Construction of the state of the	-	Model No., Series No., or Type 992	<u>2510-001</u> Drawir	g 99Z510-00	1 Rev	E_ CRN <u>N/A</u>	2
Material:       Body       SA105       Cap       SA105       Disc       SA564 630       Bolting       N/A         (a)       (b)       (c)       (d)       (e)         Cert.       Natil       Body       Cap       Disc       Serial         Holder's.       Board       Serial       Serial       Serial         Serial No.       No.       No.       No.       No.         3       N/A       :114       5       4         4       113       4       5       N/A	•	ASME Code, Section III, Division 1:					<b>5</b> -
(a) Cert. Holder's.(b) Nat"l(c) Body(d) Cap Serial No.(e) Disc. Serial No.3N/ASerial No.Serial No.Serial 	:. :.	Pump or valve <u>Valve</u>	Nominal inlet size	2 (in.)	Outlet siz	e <u>3</u> (in.)	
Cert.     Natil     Body     Cap     Disc       Holder's.     Board     Serial     Serial     Serial       Serial No.     No.     No.     No.       3     N/A     114     5       4     113     4     5       N/A     N/A     N/A     N/A		Material: Body <u>SA105</u>	Cap <u>SA105</u>	Disc <u>SA</u>	564 630	Bolting <u>N/A</u>	
3     N/A     :114     5     4       4     113     4     .5       N/A     ·     ·     ·     N/A	•	Holder's Board	Body Serial		Cap Serial	Disc Serial	
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\* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through . 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300 REPRINT 6/93

	•	Certificate Holder's	Serial No. <u>3&amp; 4</u>	
8 Design conditions <u>175</u> (pressure	psi <u>125</u> (temperatur	•F or valve pressure cla	ss <u>N/A</u>	
9. Cold working pressure2	95psi at 100 °F	·		
10. Hydrostatic test450	psl. Disc differential	est pressureN/A		F
11. Remarks:		•		
	•		•	
· · · · · · · · · · · · · · · · · · ·	· CERTIFICATION OF	DESIGN	····	٦
Design Specification certified by	Lawrence D. Burr	P.E. State	Reg. No. <u>33999</u>	- [
Design Report certified by	Not Applicable	P.E. State	Reg. No	
construction of the ASME Code, Sec N Certificate of Authorization No Date <u>7 25 2000</u> Name (N C	<u>N-1947</u>	Signed	•	-
	· · ·	•	······································	_ <b>_</b>
•	CERTIFICATE OF INS	PECTION		7
I, the undersigned, holding a valid com and the State of Province of <u>N</u> of <u>Boston, MA</u> have ins and state that to the best of my knowle accordance with the ASME Code, Set By signing this certificate, neither th concerning the component described i be liable in any manner for any person with this inspection.	ew York pected the pump, or valve, adge and belief, the Certific ction III, Division 1. e inspector nor his emple in this Data Report. Furthe	d employed by <u>OneBeac</u> described in this Data Repo ate Holder has constructed over makes any warranty, or more, neither the inspector ge or a loss of any kind aris	con Americal Ins. Co. Int on <u>7/25/2007</u> this pump, of valve, in expressed or implied, nor his employer shall	

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# 02-015

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

Owner Detroit Edison Company			Date 2-11-2003												
Name 6400 North Dixie Highway, Newport MI 48166			Sheet 1 of 31												
Address			Unit												
. Plant <u>Fermi 2 Nuc</u>	Plant Fermi 2 Nuclear Power Plant				<u> </u>	2									
6400 North Dixie	Highway, Newport M	48166	<u></u>	Ponsir Or		intenance									
Address 3. Work Performed by <u>Detroit Edison Company</u> Name 6400 North Dixie Highway, Newport, MI 48166			Repair Organization P.O. No., Job No., etc. Type Code Symbol												
			Stamp Authorization No. Expiration Date		N/A N/A N/A										
									Address			en Berenne – <del>T</del> Stransfer			
								t. Identification of System	/NE 1100 NE	1) Control Dod Drive	Puntom				· · · · · · · · · · · · · · · · · · ·
								(b) Applicable Edit Replacements		ss 1 19 XI Utillzed for Repairs o		<u>1971</u> 992- W* * 92 ddenda	Addenda,	<u>N/A</u> (	Code Case
Replacements	on/Addenda of Section	XI Utilized for Repairs o	r 11 <u>A</u>	992-W''92	Aodenda, Year Built	 Repaired, Replaced, or Replacement	ASME Code Stampe								
Replacements Identification of Compor Name of Component	on/Addenda of Section ents Repaired or Repla Name of Manufacturer	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	r 11 A Components National Board No.	992-W**92 ddenda Other identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)								
Replacements Identification of Compor Name of	on/Addenda of Section ents Repaired or Repla Name of	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial	r 11 A Components National Board	992- W° ' 92 ddenda Other	Year	Repaired, Replaced,	ASME Code Stampe (Yes								
Replacements Identification of Compor Name of Component Control Rod Drive	on/Addenda of Section ents Repaired or Repla Name of Manufacturer General	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	r 11 A Components National Board No.	992-W**92 ddenda Other identification	Year Built Variou	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)								
Replacements Identification of Compor Name of Component Control Rod Drive	on/Addenda of Section ents Repaired or Repla Name of Manufacturer General	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	r 11 A Components National Board No.	992-W**92 ddenda Other identification	Year Built Variou	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)								
Replacements Identification of Compor Name of Component Control Rod Drive	on/Addenda of Section ents Repaired or Repla Name of Manufacturer General	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	r 11 A Components National Board No.	992-W**92 ddenda Other identification	Year Built Variou	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)								
Replacements Mame of Component	on/Addenda of Section ents Repaired or Repla Name of Manufacturer General Electric	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	r 11 Ar Components National Board No. N/A	992-W' '92 ddenda Other Identification Ct102D@	Year Built Variou	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.

(10/94)

### Form NIS-2 (Back)

### 9. Remarks Refurbished Control Rod Drive Mechanisms for Installation in RF-09. Replacement parts were procured per various Purchase Orders as detailed on attached sheets. Copies of available Code Data Reports are attached.

Applicable Manufacturer's Data Reports to be attached

We certify	that the statements made in the report are correct and this <u>replacement</u> conforms to the rules of theASME Code, Section XI.
	e Symbol Stamp <u>Original Code Data Reports for each Control Rod Drive will be supplemented by Owners Section XI Program</u> 15 and various work requests as listed on attached Sheet 2. For tracking purposes CRDM information will be maintained in No
Certificate	of Authorization NoNAExpiration DateN/A

### **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 Province of Michigan \_and employed by HSB CT \_of One State Street, Hartford, CT 06102 \_have inspected the components described in this Owner's Report during the period 8-8-02to 02-18-03, 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. Furthermore, 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.

Date Feb. 18 182003

(10/94)

NIS-2 For Section XI Program 02-015

Sheet 2 of 37

Serial No.	Rebuild WR	(1) Cylinder Tube/ Flange (480-8571)	Piston Tube (482-5312)	Other ASME Parts
4558	0002991677	#5545, PO# 266443	#1641, PO#314467 (2)	None
4524	000Z991706	• • • • • • • • • • • • • • • • • • •	#0363, PO# 287926	None
4580	000Z991691	#6507, PO# 266443	#1722, PO# 314467 (2)	None
3180	000Z991687		#3023, PO# 314467 (2)	None
3931	0002003983	#6180, PO# 266443	#1855, PO# 314467 (2)	None
4362	000Z991694	#5423, PO# 266443	#1410, PO# 314467 (2)	None
4508	000Z003990	#5752, PO# 266443	#0307, PO# 287926	None
4408	000Z003997	•		Ring Flange Cap Screws #480-9052 (
4512	000Z991683	-	#0333, PO # 287926	None
4006	000Z991696		#2877, PO# 314467 (2)	None
4307	000Z003999	#6387, PO# 266443	#1380, PO# 314467 (2)	None
5950	000Z012225		-	None
3954	000Z991700	#5770, PO# 266443	#3062, PO# 314467 (2)	None
4092	000Z955551	#6086, PO# 266443	#0637, PO# 295214	None
4511	000Z003987	#6125, PO# 266443	#2074, PO# 314467 (2)	None
4569	000Z991679	•	#0378, PO# 287926	None
4526	000Z991681	•	-	None
-3152	0002991704	•		None
4406	000Z991689	•	•	None
3528	000Z003995	#5451, PO# 266443	•	None
6475	000Z991702		•	None
6412	000Z991675	•	•	None
4590	000Z991698		#1374, PO# 314467 (2)	None
3339	000Z991685		#1709, PO# 314467 (2)	None

Replacement Cylinder Tube/Flange assemblies were utilized from Shoreham Nuclear Station Control Rod Drive Mechanisms that were procured per P.O. 266443. Product Quality Certifications were supplied, however, manufacturers data reports were not supplied with these items. The CRDM's obtained were disassembled and inspected and the usable parts were put into the Fermi stock system.

Piston Tube Stock No. 480-8699

1)

2)

3) Replaced Ring Flange Cap Screws with those from Shoreham drive Serial Number 6261,PO# 266443. Also reference CARD 02-14887

02-015 Sheet 3 of 37

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Serveral Electric Co., Castle Rayne Pd.; Milmington, N.C. In Conferred by .... The Beauty Course of Street St 1.12 OR NY CON 

. . . . . . er Part nd According to Drawing Ke. 79202262010 d by D. L. Peterson

Platen Tube Assembly ta Applicate and Code Sector State 1971 . Auto State S'73 ..... . - È T144 Stanlard part for use with reactor.

Everystatically tested at 1825 per. . . . . . .

NOTE: This Piston Tube Assembly was Reprostatically.

\* Ristor of Storts - 2 Tested in Control Red Drive SAN: \$291

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1 Sta 9/27 1 E4 5 .... GE-1220-110 June 16, 1907 NP: N-1151 elmin Liplers

CERTIFICATION OF DESIGN FOR APPURTEAANCE ( -+ en applicable)

Drap Mersein a Sie - GENERAL ELECTRIC CO. - SNI JOFE, OLLIF!

GERAL ELECTRIC CO., SAN JOEF, CALIF. Vernor M. Perce Part, Eng. Suite Calif. . R. 14485

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## CERTIFICATE OF SHOP INSPECTION

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. 02-015 02-015 Sheet 5 of 37 and the second s FORMEN-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPURTEMANCES. As required by the Provision of the ASKE Gode Eules, Section III, Div I 1. Numifectured & Certified by : Ganaral Electric Company Nuclear Energy ( OFNE) 3901 Cectle Harne Road, Wilmington 1-10 ( Hane and Address of EFT Certificate Bold Newsort Mission 48188 (b)- Henufactured for : Formi-2 ( Home and Address of H Certificate Holder for Yes 31 Identification - Certificate Holder's S/K of Part : \_\_\_\_\_\_\_ Net Bd. No. A (a) Constructed Accordi ; to Drawing No: 79802280012 Rev 35 Dug. Prepared by D. L. Prepared by (c) Applicable ASHE Code: Section III , Edition 1974 . Addende Date W75 . Case do 1301-2 Class 1 3. REMARKS: Standard part for use with Reactor. Hickostatically tested at 1825 psi. min. ( Brief description of service for which component was designed ) Mercertify that the statements in this report are correct and this vessel part or appurtmenter as defined in the code conforms to the rules of construction of the ASME Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An MPT Certification Holder, for appurtment is responsible for furnishing a separate Design actification and Stress Report if the appurtmente is not included in the component Design Specification and Stress Report ]. Lite: 01/15/65 Signed ( MET Certificate Holder De Louissant-i Certificate of Authorization Expires: 6/16/86 Cartification of Authorization No. : N2RE15E Certification of Design for Appurtenance GE Company, San Jose, California Besign information on file at Stress analysis report on file at \_\_\_\_\_GE Company. San Jose, California Design specification certified by B.N. Srcher Prof. Eng. State Call. Reg. No. 18345 BC2285253 Rev. 2 DCZ246254 Rev 1 Stress analysis report certified by Edward Yoshio Frof. Eng. State Call. Rog. No. 10110545 · 1820 Certification of Shop Inspection I, the undersigned, holding a valid commission by the Kational Board of Boiler and Pressure dispector and/o State or Province of <u>Morth Carolina</u> and employed by <u>Department of Labor</u> of <u>State of Morth Carolina</u> inspected the part of a pressure vessel described in this Partial Data Report on <u>State of Morth Carolina</u> and state that to the best of my knowledge and belief, the MPT Certificate Holder has constructed this par accordance with the ASME Code Section III. Ry signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or hapin concerning the part described in the Partial Data Report. Furthermore, neither the Inspector for his employer shall be lisble in any manner for any personal infury or property damages or a loss of any kind arising from connected with this inspection. NC 1231, Ohio, WC 365 PA PEreen 16.1996 lunce Kational Board, State; Province and No. Date Inspector's Signature \*Supplemental sheets in form of lists, sketches or drawing by be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Date Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS". ý di de 

02-015 02 - 015Sheet 6 of 37 POER W-2 ( brok ) tous 4-8 Incl. to be completed for single wall vessels, jackets vessels, or shells of hest exchanges Kominal Corrosion Thickness \_\_\_\_\_ in. Allowance \_\_\_\_\_ in. Bis. \_\_\_\_ ft. \_\_\_\_in Langth 4. Shell: Katerial T.S. (tand & Epen Ho.) (Min. ef Parge Specified) \_\_\_\_ R.T. \_\_\_ N. SANETIACIE \_\_\_\_ K.T. Leng to of Coor . H.T. R.T. 🖉 Girth 🔄 1 T.S. \_\_\_\_ (b) Naterial \_ each: (a) Raterial Location ( Top Cr. wn Knuck le Elliptical Concial Bottom, Ends ) Thickness R Jus Radius Ratio. Apex Ang Henispherical eter 2 ( conv : or Apex Angle Radius Dù ALL THE REAL Taxing the second Other fastening If removable, bolts used (Dù (Interior, Spec. No., T.S. Ste Number) 7. Jacket Closure: \_ Charpy Import States States . . . . . et ter oft 1250 \_\_\_\_ psi at \_\_\_\_ 575 8 Deston pressure Itens ? and 10 to be completed for tube sections In. Attach \_\_\_\_ Dia. \_ Thickness 9. Tube Sheets: Stationary. Katerial (IChd & Bpec. Hz.) Dia. Whited to presents ) in. Attach 100 Thickness Keterial Floating. hate a page. Babler \_\_\_\_ in Thickness \_ \_\_\_\_\_ 0.D. \_\_\_ 10. Tubes: Material \_\_\_\_ • • Item 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers. Corresion ta Length ft for ina 1 in. Allowance \_\_\_\_ in. Biz. \_\_\_ ft. Sell: Stell: Katerial T.S. Thickness \_\_\_\_ (Kind & Spec. No. ) (Lin. of Penge Specified) Neteria d Efficiency R.T. \_\_\_\_ H.T. 12. Seens: Long \_\_\_\_ As of Cou н.т. \_ R.T. Eirth \_ TS (b) Naterial \_ 13. Nezds: (a) Katerial \_\_ \_\_\_\_\_ T.S. \_\_\_\_ Flat of the to Pr Knuckle Elliptical Conciel Heatspherice ] to Free Crown Apex Angle Radius Location Thickness Radius Radius At io (a) Top. bottoz, ands (b) Channel A STALLED A Other fastening Drop He johi Charpy Lapart (1-1) F at temp of If remurable, bolts used (a) (6) (c) 14. Dasign pressure \_ psi at \_ Itees below to be completed for all vessels where applicable. Location Size 15. Safety Valve Outlets: Number 1411-1412 1411-14111 14111 16. Nozzies: Purpose (Intel. TYPE Quest, DECH) Number Dia. or Size H.C. TOTAL MAC S. TEAK SEALAR 1935 4 1 1 1 1 1 A ALC: CLASS 12 Inspection Manholes, No. Openings: Handhole., No. Threaded, No. Location Size ANTA ALASSA Location Size Location Size Attached **Other** Lugs.... Legs (Number) skirt \_\_\_\_\_ 18. Supports: ALC: N ..... (Yes or No ) (.kumber) 1 . If Pondensid Heat-Tracted 2 - List other internal or adamal pressure with coincident temperature when applicable

A Star Star Page 1 02-915-7 FORMING AND CERTIFICATE HOLDERS' DATA REPORT FOR MUCLEAR DART AND STONTING Sheet 7 of 37 02-015 Nagufactured & Certified by . General Electric Company Nuclear Energy (GENE) 1. 3901 Cestle Hevne Roed, Wilminston, North Cercline 2540 ( See and Address of EFT Certificete Feiner 1(c) Nanufactured for : Form! - 2 Newport Michigan 48165 ( Kans and Address of # Certificate Bolder for standard not last Nat 1.Bd. No H/A Admitification - Certificate Holder's S/N of Part : 0353 (4) Constructed According to Drawing No: 79802280012 Rev 35 Bag. Prepared by D. Prepared by (b) Description of Part Inspected: Piston Tube Assembly (t) Applicable ASNE Code: Section III . Edition <u>1974</u>, Addenda Date <u>1975</u>, Case No. 351-2 Cline 1 3. REMARKS: Standard part for use with Reactor. Hydrostatically tested at 1825 psl. film. ( Brief description of service for which component was design 3 ž 60 26 1.2 1. Cap HERET ADA 2/8 8#4 x 1 1/16 00 h 2. Indicator Tube Services 1 deste SA312-TP3: " 1/4" ach 40 - secutions pipe 0.113 well thickness 1.065 mer. die. Resoter Verse Z 3. Pkg 159A1176P001 Think Is S112-1304 1/4" thet x 0.812" 00 4. Flenge \$1906102001 (7195474) SATE2-FSC4 3.37" #htt x \$ 5/8" 00 5. Heed 12953539P005 SA 182 - FYM 7/8" thick x 2.875" dia. Code deld PEOYPICE 6. Ring Flange 11485122P002 SA182 - F304 1" #kkx 5.0" 00 x 1.75" 10 7. Cap Screw 117C45164002 SA123 - 85 6 41. 1/2" dia. on 4 1/8" bolt circle 8. Plug 175A7951P001 SA162 - F304 0.35" Eick x 1.307" dis. Code Nold P507P102 Ralled before wild 9. Nut 114254602001 XA - 19 54479-1.30 Wet x 2.62 de -3 1

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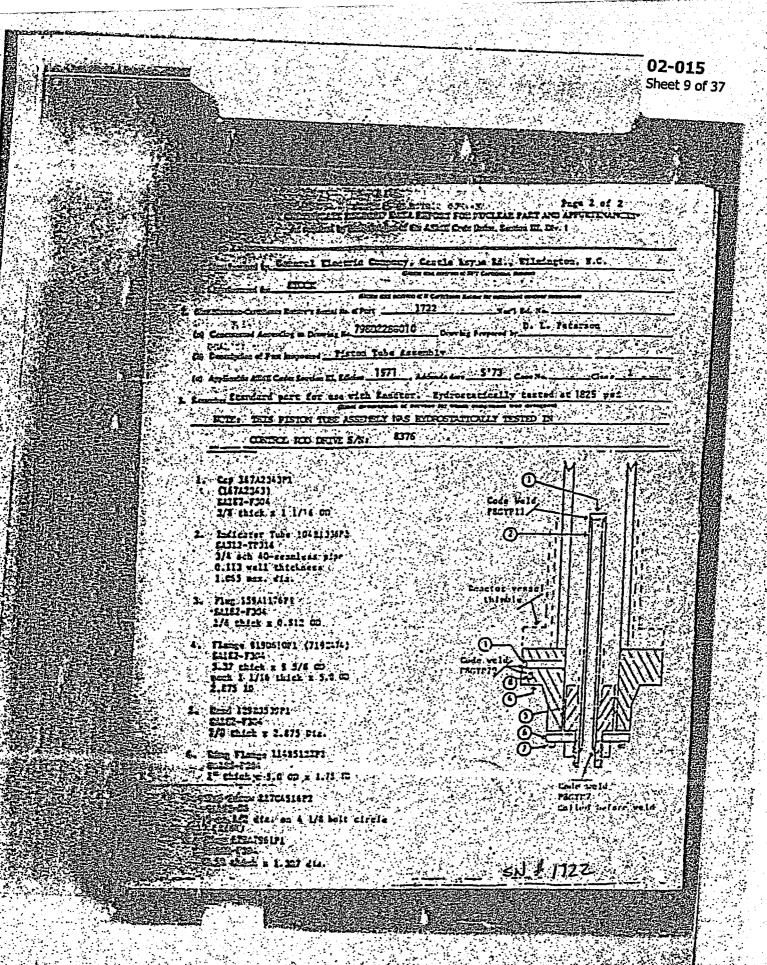
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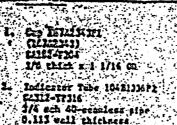
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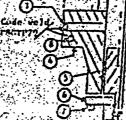
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November 15, 1991 JPT-5-1151 Certificace of Autoritation Espires 

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CERTIFICATE OF SHOP INSPECTION

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-10/16 / is 81 and man that is the best of any transvisates and bell d, the NPT Certificate Holder has concreted mis part is accordance with the ASNE Code Section III. Sy wining this certificate, active the lapport of the employer parts any surrary, expressed at implied, concern-ing the part described in this Farrial Data Report. Furthermore, as the Tibe Instructor and with the Asne induced at the section of the employer section of the lapport of a sufficiency of any surrary for any surrary for any section of the section of the section of the sufficience of the lapport of a sufficience of the section of the surface of the section of the sufficience of the section of the sufficience of the section of the sufficience of the section of the surface of the section of the sufficience of the section of the surface of the section of the sufficience of the section of the surface of the section of the sufficience of the section of

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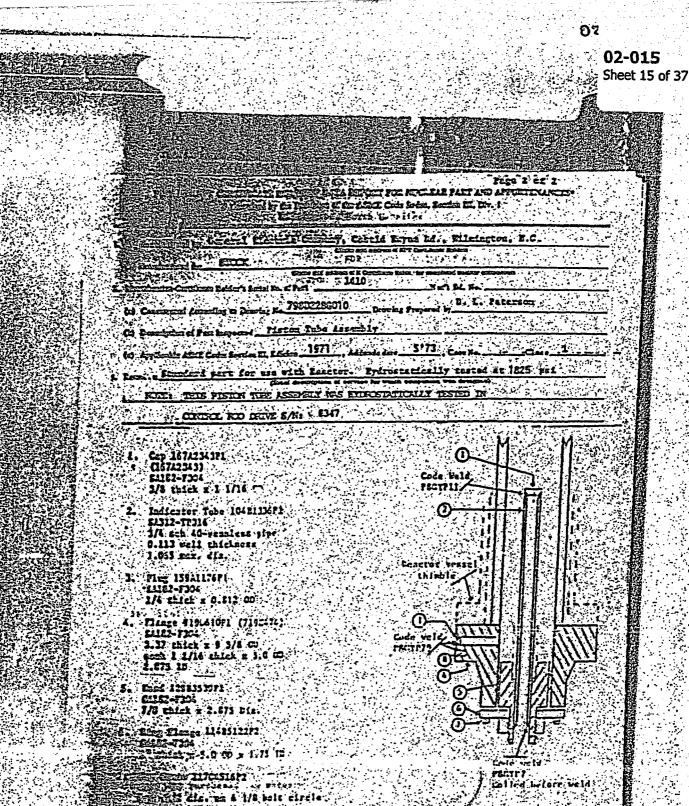
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02-015 02015 Sheet 16 of 37 ORM H-2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR HUCLEAR PART AND AFFURTEMANCES As required by the Provision of the ASKE Code Rules, Section III, Div Kenufectured & Certified by : Ganaral Electric Company Nuclear Energy 1.65-15 3901 Cestle Herne Road. Wilmington North Com <u>ن</u> ( Nets and Address of MTT Certificate Molder 3) (b) Kenufactured for : Formi-2 Newport Michkaen 48168 ( Enne and Address of # Certificate Holder for completed purloar Scientification - Certificat Holder's S/N of Part : 0307 / Net Bd. No. - N/A (a) Constructed According to Drawing No: 7980228G012 Rev 35 Dwg. Freparad by Dillemanor (b) Description of Part Inspected: \_\_\_\_\_\_ Piston Tube Assembly (c) Applicable ASHE Code: Section III , Edition 1974 , Addende Date 175 , Case No. 2001-2 Class 3. REWRKS: Stendard part for use with Reactor, Hydrostatically tested at 1955 pel. min [ Brief description of service for which component was designed ] We certify that the statements in this report are correct and this vessel part or appurtenance as defined in the code conforms to the rules of construction of the ASNE Crie Section III. ( The applicable Designed Specification end Strus Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for appurtuee is responsible for furnishing a separate Design Specification and Stress Report if the epuritering a is not time in and it the component Design Specification and Stress Report ). Date: 01/16/98 Signed GE-NE ŝγ ( MPT Certificate Holder ) DATE: Cartificate of Authorization Expires: 6/16/96 Certification of Authorization No. STN 311512 E State Certification of Design for Appurtenence Design information on file at \_\_\_\_\_ GE Company, San Jose, Celliomia Stress analysis report on file at \_\_\_\_\_GE Company. San Jose . Celifornia DC2266:53 Kev. 2 0C2286254 Rev 1 Stress analysis report certified by \_Edward Yoshio\_ Prof. Eng. State \_Call. Reg. No. \_AATTACKS Certification of Shop Inspection and state that to the best of my knowledge and belief, the MPT Certificate Holder has constructed this parties eccordance with the ASKE Code Section III. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer s cil be liable in any wanner for any personal injury or property damages or a loss of any kind for is ing tracio o 1 led connected with this inspection. Quere NC 1231. Ohio. WC 3595 PA non Date Inspector's Signature Estimal Board, State, Province and Es. \*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS". 

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N2-015 02-015 Sheet 18 of 3 FORM NEAPTCENTIFICATE HOLDERS' DATA REPORT FOR NICLEAR PART AND APPLITUES AND APPLITUE Kanufectured & Certified by : General Electric Company Nuclear Energy / GENET 3901 Ceste Herne Roed, Wilmington AmeriC ( Inte and Address of EPT Certificate Solder (b) Resultectured for : Formi-2 Newport Michigen 48166 I Name and Address of # Certificate Bolder for completed proclassion 2. Identification - Certificate Holder's S/K of Part : \_\_\_\_\_\_\_ No 18d No T 17/ (a) Constructed According to Drawing No: 79802286012 Rev 35 Dag. Prepared by D.L. Powerson (b) Description of Part inspected: Piston Tube Assembly (c) Applicable ASME Code: Section III , Edition 1974 , Addenda Date 1975 Case 10 7387-2 Claus 3. "REWRYS: Standard part for use with Reactor. Hydrostatically tested at 1825 psl. min." ( Brief description of service for which component was designed 167A2545400/ 1. Cap 44620274Poct 2 SA122-F316 3/5 Elick x 1 1/18 00 115 2. Indicator Tube 4500 \$4312 - TP. 16 1/4" sch 40 - soemiess pipe 0.115" well thickness 1.065" mer. die. Reacter Vecës I 3. Plug 159A1176P001 Thintle 54112-F304 1/4" thick x 0.812 00 4. Fisnge \$190610P001 (719E474) SA182-F304 13" Dick x 8 5/8'00 5. Head 122335392005 SA162-F304 7/8" thick x 2.875" dia. Code Held P5017102 6. Ring Flange 11425122P002 SA182 - F304 f tick x 5.0" OD x 1.75" ID 7. Cap Screw 117C4516P002 SA 183 - 86 6 44. 1/2" dia. on 4 1/8" bolt circle E. Plug 175A7951F001 SA182 - F304 0.38" Silck x 1.307" dia. Code No Id PSOTP102 Ä Rolled before weld 9. Not 11485450P001 X.6. 19 SA479 1.30° Exist x 2.62° dia. #307

02-015 02-015 Sheet 19 of 37 CORDIN-2 RPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND APPLIATEMANT As required by the Provision of the ASHE Code Enles, Section III; Div. I 1. Kanufactured & Certified by : General Electric Company Michael Erented / CENTERS 3301 Ceste Haune Road, Wilminston, World Caroline 2000 ( Reat and Address of ET Certificate Holder ) 475355 (b) Kenufectured for : Formd-2 Newport Michigan 48166 ( Hame and Address of # Cartificate Bolder for completed proclear to 2. Identification - Certificate Holder's S/N of Part : 0333 Nat Bd. No. NA (a) Constructed According to Drawing Ko: 79802283012 Rev 25 Deg. Prepared by D. L. Prepared (b) Description of Part Inspected: Piston Tube Assembly (c) Applicable ASHE Code: Section III . Edition 1974, Addenda Bate 1975, Case No. Class 3. REMARKS: Standard part for use with Reactor, Hydrostatically tested at 1825 pail min. ( Brief description of service for which component was designed ) 20 2 3 1 We Cartify that the statements in this report are correct and this vessel part or appurtenance as (defined in the code conforms to the rules of construction of the ASNE Code Section III. ( The applicable Designed Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certification Holder for experiments is responsible for furnishing a separate Design SL scification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report ). Late: 01/16/05 Signed . By ( SC.QL Lepre ( KTI Certificate Bolder Certificate of Authorization Expires: <u>6/16/96</u> Certification of Authorization No. : PTN=1151 ALC: A Certification of Design for Appurtenence Design information on file at \_\_\_\_ GE Company, San Jose, California Stress analysis report on file at \_\_\_\_\_ GE Company ; San Jose , California K2246253 Rev. 2 Design specification certified by B.N. Sridher Prof. Eng. State Cold. Reg. No. 12225 2266254 Rev 1 Stress analysis report certified by Edward Yoshio Prof. Eng. State Cell, Reg. No. Mar 19845 Certification of Shop Inspection I, the undersigned, holding a valid commission by the Kational Board of Boiler and Pressure Inspectors and/or a State or Province of <u>North Carolina</u> and employed by <u>Decorrigent of Labor</u> of <u>State of North Carolina</u> have inspected the part of a pressure vessel described in this Partial Data Report on <u>West of the part of a pressure vessel</u> described in this Partial Data Report on <u>West of the part of a pressure vessel</u> described in this Partial Data Report on <u>West of the part of a pressure vessel</u> described in this Partial Data Report on <u>West of the part of a pressure vessel</u> described in the NPT Certificate Holder has constructed this part in accordance with the ASNE Code Section III. ctors and/or the 11 . TY96 ... By signing this certificate. neither the Inspector nor his employer makes any warranty. expressed on two lie concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damages or a loss of any kind arising from t connected with this inspection. //6 un NC 1231, Ohio, WC 3585 PA me Date 0 Inspector's Signature Kational Board, State, Province And No. 2 \*Supplemental sheets in form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS". 

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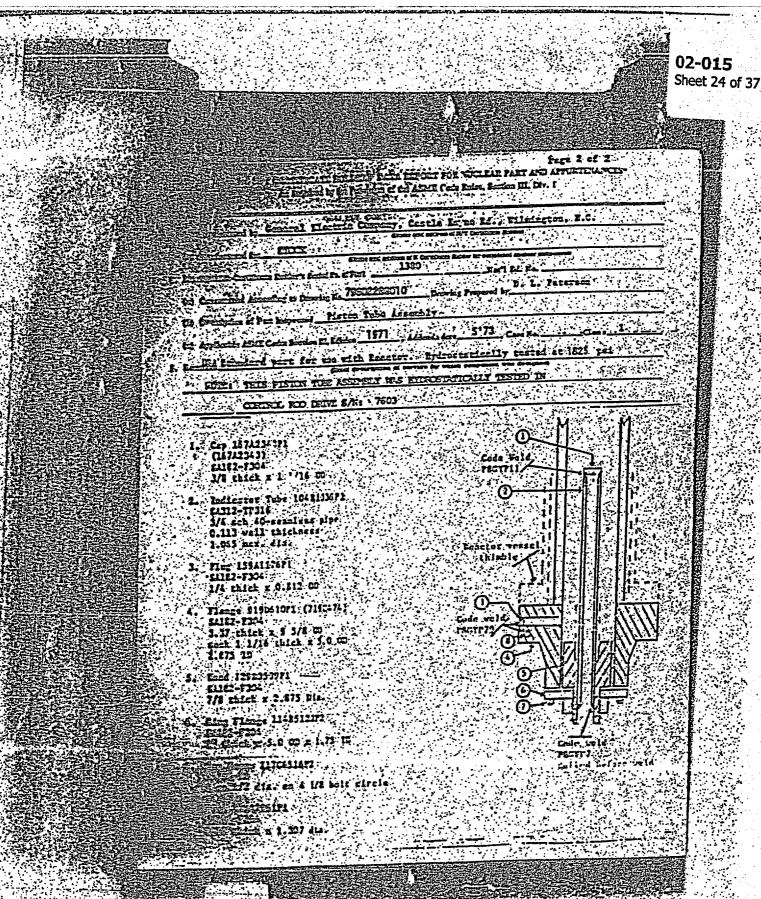
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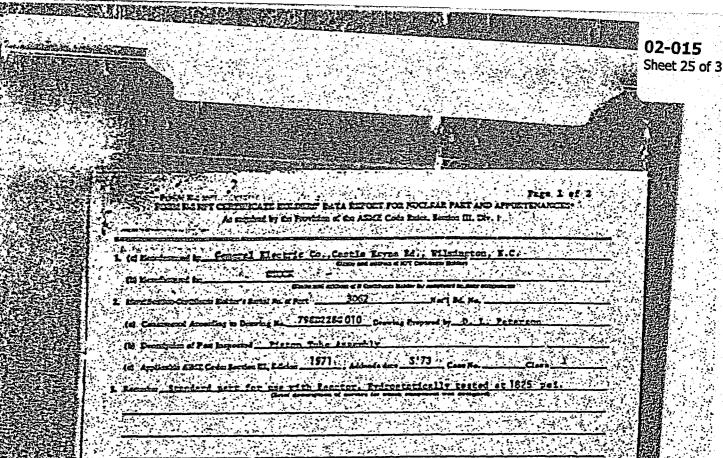
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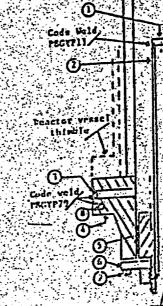
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02-015 Sheet 27 of 37 02015 270=3 Pare 1 of 2 STAM N.I NPT CERTIFICATE HORDERS' DATA EFFORT FOR NULLAR PART AND APPORTENANCES. As required by the Province of the ASME Cude Rules, Section III, Day, J L (a) Numberund by General Electric Co., Castle Rayne Rd., Vilmington, N.C. a of STT Cart Links Bald -(N Kunfurnet for General E setric Co., San Jose, California (NEBG) Rame and address of a Cortal cale dial for the su 0637 -2. Montheation-Contrate Holder's Serial No. of Part 79802286 010 Drawing Prepared by D. (a) Constructed According to Deswing No. Peterson the Description of Per Inspected \_\_\_\_\_\_\_ Platon Tube Assembly. None (c) Applicable ASIE Coler Section El, Edition \_ 1977 . Micele Car. L. Remain Spendard part for use with Reactor, Hydrostatically sested at 1820 psi. • Number of sheets - 2 Te centify diat de successes made la this seport are correct and this vessel part or appuries and the success and the appuries of the appuries of the de Code con-forms in the miss of construction of the ASUE Code Section III. (The speciality Desize Specification and Strue Report of the responsibility of the NPT Certificate Holder for sars. An NPT Certificate to the province the termonal the specification and Strue Report of the specification and 80 Signed GE. XEPD-120-QA sedenni 9/17 INT CORRECT HAGAN NPT-K-2151 June 16, 1981 Condicate of Authoritation Expires Condicate of Michorization CERTIFICATION OF DESIGN FOR APPURTENANCE (-kes applicable) Besign information on file at General Electric Co., NEPD-WD-QA, Castle Kayne Rd., Wilsington Seets maless report on file as General Electric Co., NEPD-M: D-QA, Castle Kayne Rd., Wilmington Vernon W. Pence Prat. Ene. Since Calif. Rec. No. 14-68 Geeigh specifications candled by Reg. No. \_\_\_\_ Prot. Eng. Sisie Callf. Verson W. Pence Succes sally sis report constiled by, CERTIFICATE OF SHOP INSPECTION I, the undersigned, building a patist commitsion leaved by the Nacional Basid of Boiler and Pressure Vessel taspectors uller the State or Province of North Careline and employed by -Department of Labor State of North Carolina have inspecied the part of a pressure result described in this 9/17 in 60 and state that the state of the state Percel Des Report or. And beief the APT Continents Mulder net constructed this part in arcurdan, with the ASME Lode Section II. By aiguing this continent, another the Inspector as his employee makes my samany, espressed or implied, concern tag the part Coscribed in this Partial Data Repuit Fusinermure, neither the Inspectur sur his employee shall be hable in any manner for any present injury or property damage or a last of tay and driving from or consected tag the liable in any manner for any present injury or property damage or a last of tay and driving from or consected 9717 80 NC 779, PALYCELEO, OHIO om hapterar's bighter Bargenal Basid, Scale, Frensact and Rat 113.431 4- -+ Gene 2.4. 1848 206 41- 1 - 1 12-012-02-021-01-

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02-015 FORM N-2 NFT CERTIFICATE HOLDERS DATA REPORT FOR NUCLEAR PART AND AFFURTENANCES Page 1 of 2 Sheet 29 of 37 As required by the Provision of the ASME Code & tes. Section III, Div. L.

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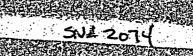
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#### 02-015 Sheet 30 of 3

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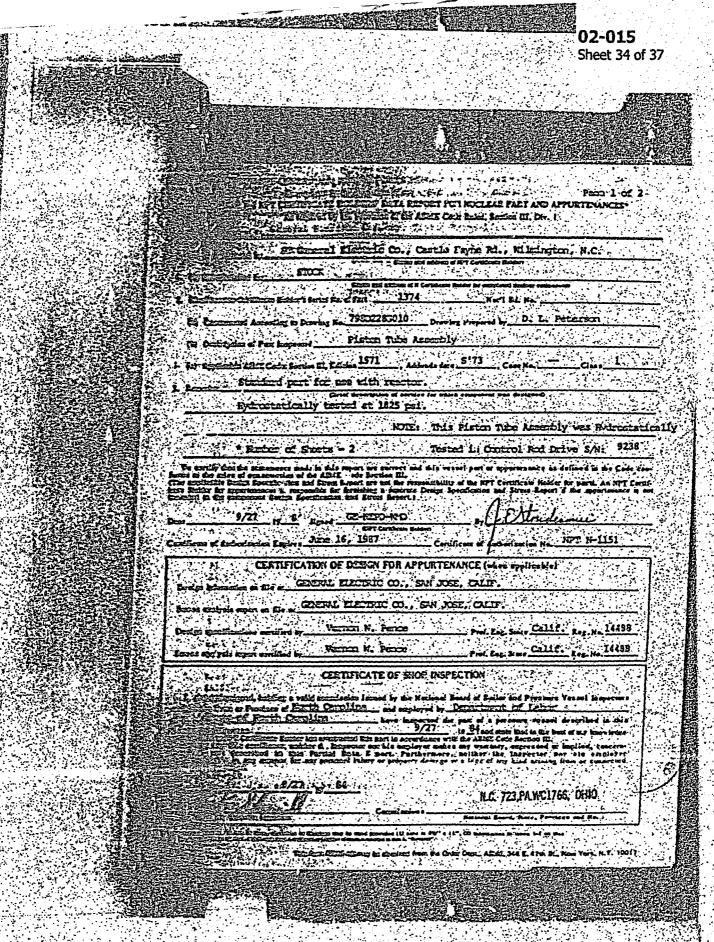
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02-015 Sheet 31 of 37 THE WAR OFM N-2NP7 CERTIFICATE HOLDERS' DATA REPORT FOR MUCLEAR PART AND APPURTERANCES As required by the Provision of the ASHE Code Eules, Section III, Div I I. Kanufactured & Certified by : General Elactric Company Mus 100 3901 Cestle Hevne Roed. Wilmington North Camping 10401 ( Name and Address of ETT Cartificere motorer) Newport Michigan 48105 (b) Nanufactured for : Formi-2 ( Home and Address of # Certificate Bolder for to -----Identification - Certificate Holder's S/N of Part : 0378 -Net Bd. No. N/A (a) Constructed According to Drawing Ko: 79802280012 Rev 35 Dag. Prepared by D. - Peterson (b) Description of Part Inspected: Piston Tube Assembly (c) Applicable ASHE Code: Section III , Edition 1974 , Addende Date 1975 , Case the 1121-2 Class 3. REMARKS: Stendard part for use with Reactor. Hydrostatically lested at 1825 pail min ( Brief description of service for which emponent was divid THEFT . . We cortify that the statements in this report are correct and this vessel part or apportanence as de conforms to the rules of construction of the ASNE Code Section III. ( The applicable Designed Specifi Report are not the responsibility of the NPT Cer' "icate Holder for parts. An NPT Certification Hold cification nactivity is responsible for furnishing a separate Design Specification and Stress Report if the apput the component Design Specification and Stress Report ). Signed \_ GE-NE Er Date: 01/16/95 ( MPT Certificate Holder Certificate of Authorization Expires: 6/16/96 Certification of Authorization Bo. NET N=1151 18-25 Certification of Design for Appurtenance GE Company, San Jose, California Design information on file at Stress enalysis report on file at \_\_\_\_GE Company; San Jose. California 62245253 Rev. 2 Design specification certified by B.N. Sridhar Frof. Eng. State Cell. Reg. Bo. 518245 102216255 Ees 1 Stress analysis report certified by Edward Yoshio Prof. Eng. State Call. Reg. 40. 10018046 Certification of Shop Inspection I. The undersigned, holding a valid commission by the National Board of Boiler and Pressure Inspectors and/or State or Province of <u>North Carclina</u> and employed by <u>Decomment of Lews</u> of <u>State of North Carclina</u> has inspected the part of a pressure vessel described in this Partial Data Report on and state that to the best of my knowledge and belief. the MPT Certificate Holder has constructed this accordance with the ASHE Code Section III. By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or small concerning the part described in the Partial Data Report. Furthermore, neither the Inspector nor nil complex shall be liable in any manner for any personal injury or property damages or a loss of any kind erising from aloyer connected with this inspection. P Eum NC 1231, Ohio. WC 3595 PA Hermon Inspector's Signature Pate \*Supplemental sheets in-form of lists, sketches or drawing may be used provided (1) size is 8-1/2" x 11", (2) information in 1-2 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in Item 3. "REMARKS". SN# 378 Second State of the second second second

02-013 02-015 Sheet 32 of 37 FORK H-2 ( Duck ) Item +3 Incl. to be completed for single wall vessels, jackets vessels, or shells of heat exchangers Konina 1 **1** Corros ion Thickness \_\_\_\_ In. Allowance \_\_\_\_ in. Dia. \_\_\_\_ft. \_\_\_\_in Length \_\_\_\_ft 4. Shell: Material T.S. · ( Hind & Spor, Ha. ) ( Min. of Range Specified ) states and the loc y . R.T. Scares: Long \_\_\_ N.T. Girth\_ H.T. . R.T. <u>.....</u> 1497 (b) Nitarial 6. Back (a) Hataria) • · . . . T.S. Location ( Top Crimin Knuckle Elliptical Concial Bottom, Ends ) Thickness F Jius Radius Ratio Apex Ang Next spherics 1 (141 5168 14 77685) Radius Diameters (1507 an Spin. Apex Angle 1.1 Ser Standy The second second second Other fastening li recovable, bolts used (Material, Spec. No., T.S. Ste Number) Toron Jab (and t 7. Jacket Closure: (Desorbe as ages and weld, bur, etc. If bur give desensions, If be STATE: at temp of Destin pressure 1250 \_\_\_\_ psf at \_\_\_\_ 575 Items field 10 to be completed for tube sections 9. Hobe Shects: Stationary. Material Dia. Seject to prosecue ) Thickness Alternation Floating. Naterial \_\_\_\_\_\_ Bia. ALC OF IT Tubes: Naterial \_ in Thickness 0.D. Itens 11 - 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat and appendix in. Bia. \_\_\_\_ft. in Length /1 Romine 1 Corresion Shell: Katerial \_\_\_\_\_ T.S. \_\_\_\_ Thickne: (Kind & Rpec. No.) (Min. of Parge Specified) Thickness \_ in. Allowance 12. Snews: Long \_\_\_\_ \_\_\_\_ R.T. \_ **H.T.** -Girth . H.T. R.T. . The to of Courses Moets: (a) Material \_\_\_\_ T.S. (b) Naterial \_\_\_\_\_ Lat to Side to Prese Diamter. S. From: Origin Crown Knuckle Elliptical Concial Henispherica 1 Vii Thickness Radius Radius Apex Angle Radius Location Retio Vision (e) Top, bot ton, ends T TOTAL TRADE Tiffremovable, bolts used (a) Other festening (6) (c) Brop Ve Ight Charpy Impact and Automatication of the It. Deston pressure F at temp of psi at \_\_\_\_ Items below to be completed for all vessels where applicable. 15. Safety Valve Outlets: Number Size Location E15. Actzles: Furpow (Init, Outlet, Davin 1 Dis. or Size Material Number Type A DE CARACE COST CONTRACT Wat I the second 17. Inspection Kanholes, No. Openings: Handholes, No. Size Location Location A STATE OF A Size Threaded. No. Location \*ASSA Size 18- Supports: Skirt.\_\_\_\_\_\_(Yee or No) Legs \_ Other \_\_\_\_\_(Decode ) \_ Lugs \_ 100 (Number) (humber) betreff Hack-Treated. 2 - List other informal or external pressure with poincident temperature when applicable 18. S

STATISTICS STATES 02013 FORM N 2 NPT CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PART AND PROVIDENT Sheet 33 of 37 As required by the Provision of the ASKE code Fulse Section TIC Fig. 1 Sheet 33 of 37 02 - 015Ŧ 3 \$ 1. Naturestured & Certified by : General Electric Company Nuclear Energy (GENE) 3901 Castle Havne Road, Wilmington, North Carolina 28401 ( Kame and Address of Er? Cartificate Enlder ) -(b) Kanufactured for : Form - 2 Newport, Michkan 48165 ( Hane and Address of I Certificate Holder for completed mullear component ) Identification - Certificate Holder's S/N of Part : 0378 Nati Bd. No. N/A (a) Constructed According to Drawing No: 7980228G012 Rev 35 Dag. Frepared by D. Frepared by (b) Description of Part Inspe :ed: Piston Tube Assembly (c) Applicable ASNE Code: Section III. Edition 1974. Addenda Bate W75. Case No. 1857-2 REMAKS: Standard part for use with Reactor. Hydrostatically tested at 1825 pai, min ( Brief description of service for which component was designed ) L.S. S.° \$**~**\$~}• 1. Cop Hand Control A 9-71/5/46 1/5 Edit x 1 1/16 00 2 Industry Tube HETE COORDOCL STUffer 2/5 800 40 - 80. 1000 000 10.113 was fricknoss 1.055 mer. cie. Reactor Veces7 3. Flug 153A1175P001 Thintle a second SL162-F304 1/4" thick x 0.812" 00 4. Flange \$190610P001 (7195474) \$A1F2-F304 3.37 tick x 9 5/8 00 5. Head 12983539P005 SA182 - F304 7/8" trick x 2.875" dia. Cade Ms PSOYP102 6. Ring Fiange 11485122F002 SA 182 - F304 1"## x 5.0" OD x 1.75" 1D 7. Cap Screw 117C4516P002 SA193 - 85 6 es. 1/2" dia on 4 1/8" bolt circle 8. Plug 175A7951P001 S . . . SA182 - F304 0.3." thick x 1.307" die Code Held PSONP1CE 6 Rellad before 20 I d 8. No. 11485 150P001 XH-19 54679 1.30 thex x 2.62 da



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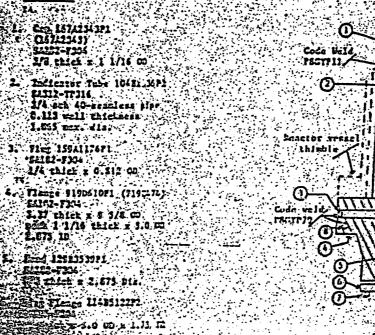
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SJ#1709

## 02 - 016

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

i.	Owner Detroit Edison Company	Date	May 3,, 2(	)03	
•	Name 6400 North Dixie Highway, Newport MI 48166	Sheet	1 of 1		
2.	Address Plant Fermi 2 Nuclear Power Plant	Unit	2		
	Name 6400 North Dixie Highway, Newport MI 48166		Deco Maintenance		
3.	Address Work Performed by Detroit Edison Company	Repair ( Type Code Symbol Stamp	Organization P.O. No., Job N/A		
et i i Let Let te	Name 6400 North Dixie Highway, Newport, MI 48166	Authorization No. Expiration Date	N/A N/A		
4.	Address Identification <u>Main Steam Line Drain Pipe Support N30</u> of System	2186-G18			
5.	(a) Applicable Construction Code AISC 6 <sup>®</sup> and 7 <sup>®</sup> Edition	N/A Edition	Addenda. I	VA Code Ca	ISA
•	(b) Applicable Edition/Addenda of Section XI Utilized for Repairs or	1992-92 Addenda	a a se a		

Replacements

Identification of Components Repaired or Replaced and Replacement Components 6.

Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
N30-2186-G18	Wismer & Becker	N/A	NA	N/A	1984	Replaced	N

Description 7. of Work

Replace existing pipe support clamp for support N30-2186-G18 with a pipe attachment designed per ERE-31931 to prevent/restrict clamp rotation on pipe.

**Tests Conducted:** 8.

Hydrostatic [] Other [X] Pressure

Pneumatic []

Nominal Operating Pressure [] Test Temp.

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.

psi

(10/94)

#### Form NIS-2 (Back)

9. Remarks: New baseline inspection performed. Material utilized %" plate A36, Ht# U1192/39A, PO # 385500-01, (2)-2" U-Bolts- Ht # 7910A, PO # 380087.

#### Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this <u>Replacement</u> conforms to the rules of the ASME Code, Section XI.
• • • •	Type Code Symbol Stamp Original Construction records for N30-2186-G18 to be supplemented by Owners Section XI Program #02-016
	Certificate of Authorization No. <u>NA</u> Expiration Date <u>N/A</u>
	Signed R.M. Hambleton Lead ISI Engineer RML by Lal 5-3-2003 May 3, 2003

#### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boller and Pressure Vessel Inspectors and the State or Michigan and employed by HSB\_CT\_of One State Street, Hartford, CT 06102 have inspected the Province of components described in this Owner's Report during the period 9-18-02 to 5-20-03, 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. Furthermore, 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.

Commissions National Board, State, Province, and

Endorsements

ManDell Inspector's Signature

(10/94)

For complete work package, see Work Request 000Z021044

# 02-017

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

Owner Detroit Ed	Name			•			2 L
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				Deep to O		aintenance	<u> </u>
	Address *Detroit Edison Co	ompany	Type Starr	Code Symbol	rganization F	<sup>2</sup> .O. No., Job No., etc. N/A	
	Name		and the second	orization No.		N/A	
6400 North Dixie Hi	ghway, Newport, M	<u>//i 48166</u>	Expir	ation Date		N/A	
A Identification of System	Address <u>N5-0246 &amp; 03</u>	807 Residual Heat Ren	noval Syste	m Division 2			•
(a) Applicable Constr	Cla	ME III, ss 2 19 7		<u>572</u>	Addenda	NA	Code Cas
	Cla		<b>r</b>	<u>5'72</u> 992-92 Addenda	Addenda	NA	Code Cas
(b) Applicable Edition	<u>_Cla</u> /Addenda of Section	iss 2 19 7 XI Utilized for Repairs of	<u></u>		Addenda	NA	Code Case
(b) Applicable Edition Replacements	<u>_Cla</u> /Addenda of Section	iss 2 19 7 XI Utilized for Repairs of	<u></u>		Addenda Year Built	N/A Repaired, Replaced, or Replacement	ASMI Code Stamp (Yes or No
(b) Applicable Edition Replacements dentification of Componen Name of	<u>Cla</u> /Addenda of Section ts Repaired or Repla Name of	ISS 2 19 7 XI Utilized for Repairs of aced and Replacement C Manufacturer Serial	r <u>11</u> components National Board	992-92 Addenda Other	Year	Repaired, Replaced,	ASM Code Stamp (Yes
(b) Applicable Edition Replacements dentification of Componen Name of Component	<u>Cla</u> /Addenda of Section ts Repaired or Repla Name of Manufacturer	ISS 2 19 2 XI Utilized for Repairs of aced and Replacement C Manufacturer Serial No	r <u>11</u> components National Board No.	002-92 Addenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASM Code Stamp (Yes or No
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7. of Work

Install replacement disc in relief valve due to identified pitting of disc seating surface.

8. Tests Conducted:

d: Hydrostatic [] Pneumatic [] Nominal Operating Pressure [X] Other [X] Pressure \_\_\_\_\_ psi Test Temp.\_\_\_\_\_

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.

(10/94)

#### Form NIS-2 (Back)

9. Remarks:

Replacement Disc assembly procurred per239415-01, Serial No. N90574-42-0017 (Report Attached ). Valve returned to stock as a tested spare for future replacement. \*Valve refurbishment completed per PO# 371508 @ NWS.

Applicable Manufacturer's Data Reports to be attached

#### **CERTIFICATE OF COMPLIANCE**

We certify that the statements made in the report are correct and this <u>Replacement</u> conforms to the rules of theASME Code, Section XI.

Type Code Symbol Stamp Original Code data report N5-0246 and -0307 to be supplemented by Owners Section XI Program 02-017

N/A

Certificate of Authorization No.

Signed R.M. Hambleton Lead ISI Engineer (U) Owner or Owner's Designee, Title

#### 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 Province of <u>Michigan</u> and employed by <u>HSB CT</u> of <u>One State Street</u>, <u>Hartford</u>, <u>CT 06102</u> have inspected the components described in this Owner's Report during the period <u>OP 19-020</u>, <u>OP-28-03</u>, 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. Furthermore, 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.

Marshune Inspector's Signature

Commissions MITGIO

Expiration Date

Date

National Board, State, Province, and Endorsements

Date July 28

(10/94)

For complete work package, reference PO #371508

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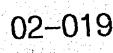
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#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

		January 7, 2003
Name States and States		
6400 North Dixie Highway, Newport MI 48166	Sheet	1 of 1
Address		
ant Fermi 2 Nuclear Power Plant	Unit	2
Name 6400 Nonth Dixie Highway, Newport MI 48166		
		Deco Maintenance
Address	Repair (	Organization P.O. No., Job No., etc.
ork Performed by Detroit Edison Company	Type Code Symbol Stamp	N/A
Name	Authorization No.	N/A
6400 North Dixie Highway, Newport, MI 48166	Expiration Date	N/A
Address		
entification <u>BCIC Turbine Exhaust line Pipe Suppor</u> System	E51-3174-G07	<u>a de la composition de</u>
	6400 North Dixie Highway, Newport MI 48166         Address         ant       Fermi 2 Nuclear Power Plant         Name         6400 North Dixie Highway, Newport MI 48166         Address         ork Performed by         Detroit Edison Company         Name         6400 North Dixie Highway, Newport, MI 48166         Address         ork Performed by         Name         6400 North Dixie Highway, Newport, MI 48166         Address         antification	6400 North Dixie Highway, Newport Mi 48166       Sheet         Address       Unit         Name       6400 North Dixie Highway, Newport Mi 48166         6400 North Dixie Highway, Newport Mi 48166       Repair 0         Address       Repair 0         ork Performed by       Detroit Edison Company         Name       Authorization No.         6400 North Dixie Highway, Newport, Mi 48166       Expiration Date         Address       Authorization No.         6400 North Dixie Highway, Newport, Mi 48166       Expiration Date         Address       BCIC Turbine Exhaust line Pipe Support E51-3174-G07

(b) Applicable Edition/Addenda of Section XI Utilized for Repairs or 1992-92 Addenda Replacements

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Manufacturer	Manufacturer Settal No	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
Wismer & Becker	N/A	N/A	N⁄A	1984	Replaced	Y
	Manufacturer Wismer &	Manufacturer No Wismer & N/A	Manufacturer No Board No. Wismer & N/A N/A	Manufacturer     No     Board     Identification       No.     No.     Wismer & N/A     N/A     N/A	Manufacturer     No     Board No.     Identification     Built       Wismer &     N/A     N/A     N/A     1984	Manufacturer     No     Board     identification     Built     Replaced, or Replacement       Wismer &     N/A     N/A     N/A     1984     Replaced

7. of Work

(10/94)

Modify existing pipe support structural steel to allow installation of a new motor on valve E5150F001 per **TSR/EDP-32288** 

8. Tests Conducted:

Hydrostatic [] Pneumatic [] Other [X] Pressure Nominal Operating Pressure []

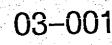
Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 in. X 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

#### Form NIS-2 (Back)

Remarks: New baseline inspection performed. New 4x4 tube steel, Ht # 966772, procurred per PO# 318436, and %" plate, Ht# 170447D, 9. procurred per PO # 335189. Applicable Manufacturer's Data Reports to be attached CERTIFICATE OF COMPLIANCE We certify that the statements made in the report are correct and this <u>Replacement</u> conforms to the rules of theASME Code, Section XI, Type Code Symbol Stamp Original Construction recore for E51-3174-G07 to be supplemented by Owners Section XI Program #02-019 Certificate of Authorization No. **Expiration Date** N/A R.M. Hambleton Lead ISI Engineer Signed Date Owner or Owner's Designee, Title 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 Michigan and employed by HSB CT of One State Street, Hartford, CT 06102 have inspected the Province of components described in this Owner's Report during the period 12-5-02 to 01-07-03, 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. Furthermore, 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. Commissions NB9480 NTAS STS Inspector's Signature National Board, State, Province, and Endorsements 20 03

(10/94)

For complete work package, see Work Request 000Z023784



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

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6400 Nr	rth Divie Hi	Name ighway, Newport Mi	48166	Shee		10	f 2	
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	ing same in	Name			s significant second	kana katan S		
6400 No	orth Dixie Hi	ghway, Newport MI	48166				intenance	
	A	ddress			Repair On		P.O. No., Job No., etc.	
Work Perform	4 T T T T T	Detroit Edison Com	pany	Type Stam	Code Symbol		N/A	
	_	Name		Autho	rization No.	N/A		
6400 No	rth Dixie Hi	ghway, Newport, M	148166	Expira	ation Date		N/A	•
Identification of System		ddress ( <u>N5-J120-N5-1</u>	) Control Rod Drive !	System				
(b) Applic Repla	icements If Componen	<u>Clas</u> /Addenda of Section )	AE III, s 1 19 KI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	Components National Board	<u>71</u> 92-92 Addenda Other Identification	Addenda Year Built	Repaired, Replaced,	Code Case
					and the second			Code
				No.			or Replacement	Stamped (Yes
CRD Housing	Bolting	RCI	N5-J120-N5-1	No. N/A	See Matrix	1975	or Heplacement	Stamped
CRD Housing Control Rod Mechanisr	Drive	RCI General Electric	N5-J120-N5-1 See Matrix		See Matrix See Matrix	1975 1975		Stamped (Yes or No)
Control Rod	Drive	General		N/A			Replacement	Stamped (Yes or No) N
Control Rod	Drive	General		N/A			Replacement	Stamped (Yes or No) N

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)

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		<u> </u>	CERTIF	ICATE OF CO	OMPLIANCE			•	
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We cer	ntify that the states	ments made in the	report are correc	t and this Repla	acement_conforms	to the rules of	the ASME (	Code, Sectio	n XI.
Туре С	code Symbol Stan	np Original Code	data report N5-J1	20-N5-1 to be s	upplemented by O	wners Section	XI Program	03-001	
Cartific	ate of Authorizati	ón No.	N//A		Expiration Da	ta	N/A	· •	
Cermic				1				·	
Signed_		eton Lead ISI E	ngineer KM	1920	Date	MAY	23	_20 03	 
	Owner or Own	er's Designee, Title						1. S. S. S.	
		• •	CERTIFICATE	E OF INSERVI	CE INSPECTION	t i a ser e t		•	· . ·
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						44 J.			<sup>1</sup>
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Provinc	e ofMi	chigan and emplo	oyed by <u>HSB_C</u>	T_of One Sta	te Street, Hartfor	d. CT 06102	_have inspe	cted the	
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#### NIS-2 03-001 Sheet 2 of 2

Nis-2 Attsachment for Section XI Program No. 03-001 - RF09 CRDM Exchange

- Replacement bolting (Cap Screws) were replaced on each drive mechanism installed (8 per drive). Replacement Cap Screws were procurred per PO # 363782,HT Code 14761, PO # 362633, HT Code 84587/F280, and PO # 36378, HT Code 8995873. ASME III - Class 1, SA193 Grade B7, 1"-8UNC-2A x 5-1/2"
- New Serial are based on the locations requested prior to the outage and were verified during installation.

CRDM	Serial No.	New Serial	Exchange WR	NewCap Screws
		No.	Be it it	PO# - Ht # - (Qty
14-55	6397	6086	000Z020645	362633-
				84587/F280
06-27	3410	4512	000Z021058	362633-
				84587/F280
10-27	4189	4006	000Z021060	362633- 84587/F280
14-51	4584	6475	000Z021062	362633-
14-51		0175	0002.021002	84587/F280
30-39	4488	6387	000Z021048	362633-
				84587/F280
14-11	4459	6507	000Z021064	363784 -
i i se				8995873(6)
				363782 - 14761(1
				362633-
5. I				84587/F280(1)
26-11	4523	4408	000Z021066	363782 - 14761
22-15	3608	6180	000Z021068	363782 - 14761
06-31	6541	5545	000Z021070	362633-
				84587/F280
30-31	3326	3152	000Z021050	362633-
				84587/F280
58-19	3623	5752	000Z021072	363782 - 14761
54-27	4286	4406	000Z021074	363782 - 14761
30-59	5655	3339	000Z021089	362633-
				84587/F280
42-55	4436	6172	000Z021052	362633-
	-			84587/F280
34-47	4315	6125	000Z021091	362633-
·				84587/F280
38-47	4391	5950	000Z021093	362633-
·				84587/F280
42-35	3521	3180	000Z021095	363782 - 14761
58-23	4330	6412	000Z021097	363782 - 14761
38-07	4312	4590	000Z021054	363782 - 14761(6)
				362633-
				84587/F280(2)
50-19	3999	5451	000Z021099	363782 - 14761
54-43	4309	5423	000Z021101	363782 - 14761
58-35	4340	4524	000Z021103	363782 - 14761
34-15	7019	5770	000Z021056	363782 - 14761

# 03-002

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

Owner Detroit	Edison Company		Uale	Date April 15, 2003			· · · · · · · · · · · · · · · · · · ·
	Name						
6400 North Dixie	Highway, Newport N	11 48166	Shee	at	10	<u>f 3</u>	
	Address						·
Plant Fermi 2 Nu	clear Power Plant		Unit			2	······
6400 North Divie	Name Highway, Newport M	11 48166				و محمد المراجع اليوني. المراجع المحمد المراجع المحمد	
	inginuy, newportin				Deco Ma	lintenance	
· · · · · · · · · · · · · · · · · · ·	Address			Repair O		O. No., Job No., etc.	
Work Performed by Detroit Edison Company				Type Code Symbol N/A Stamp			
	Name		Authorization No.		N/A		
6400 North Dixie	Highway, Newport, N	Al 48166	Expir	ation Date		N/A	-
	Address					·	
dentification	Fuel Pool Coc	oling and Clean-up to	RHR Return	Line			· · ·
of System					•	e la defensa de la composición de la c	
<ul><li>(a) Applicable Cor</li><li>(b) Applicable Edit Replacements</li></ul>	Cla		92 7 <u>1</u> Edition r 19	the second se	(Valve) Addenda	<u></u>	Code Cas
(b) Applicable Edit Replacements	Cla ion/Addenda of Section	<u>ss 3</u> 19	71 Edition r 19	<u>71</u>	• •	<u>N/A</u>	Code Cas
(b) Applicable Edit Replacements	Cla ion/Addenda of Section	ss 3 19 XI Utilized for Repairs o	71 Edition r 19	<u>71</u>	• •	N/A Repaired, Replaced, or Replacement	ASM Code Stamp (Yes
(b) Applicable Edit Replacements Jentification of Compor Name of Component	Cla ion/Addenda of Section nents Repaired or Repla Name of Manufacturer	ss 3 19 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	71 Edition r 19 Components National Board No.	71 992-92 Addienda Other Identification	Addenda Year Built	Repaired, Replaced, or Replacement	ASM Code Stamp (Yes or No
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**Tests Conducted:** 8.

Hydrostatic [ x ] Pneumatic []

248/ 570

Pressure

Other [ ]

Nominal Operating Pressure [] Test Temp.\_ psi

83.1

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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.

(10/94)

#### Form NIS-2 (Back)

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14.2		• •				
We certify the	at the statements made	in the report are correct	t and this <u>Replac</u>	ement_conforms to t	he rules of the ASME Co	xde, Section XI.
Type Code S	ymbol Stamp Orioinal	Code data report to be	supplemented by	Owners Section XI P	rogram 03-002	
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Certificate of	Authorization No	N/A		Expiration Date	NA	
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For complete work package, see Work Request 000Z002161

PAGE ZOF3

#### FORM NPV-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES\* 100 JANA As Required by the Provisions of the ASME Code, Section III, Division 1

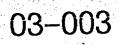
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Model No., Series No.,	er Type Globe	Drawing94-162	231 Bev. B	CRN	N/A EDIS
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ASME Code, Section II	I, Division 1:1		92 3		
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Pump or valveVal	Lve Nomina	l inlet size6 "	Outlet size	<u>6*</u>	
		n die Antonie en Gescherkerse (in.) is der		(in.)	
Material: Body SA2]	LG-WCB Bonnet	SA696-C Dis	<u>k A582-416T</u>	Bolting Studs:	
				Nuts:	SA194-2H
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\* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8½ × 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88) This form (E00037) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300. REPRINT 6/83

FORM NPV-1 (Back - Pg. 2 of \_2\_ D1331 Certificate Holder's Serial No. 707 300 8. Design conditions or valve pressure class (pressure) ltemperatural 740 nsi at 100°F 9. Cold working pressure 1125 815 psi. Disk differential test pressure 10. Hydrostatic test Material: Bonnet Retainer SA516-70 (Ht. ID: VLM) 11. Remarks: 1.02 27.8 7 - E **CERTIFICATION OF DESIGN** =IA Reg. no. 33999 Lawrence D. Burr MI Design Specification certified by P.E. State N/A Design Report certified by . P.E. State Reg. no. **CERTIFICATE OF COMPLIANCE** ñ We certify that the statements made in this report are correct and that this pump or valve conforms to the rules for construction of the ASME Code, Section III, Division 1. N Certificate of Authorization No.. 15/01 Name Flowserve Corporati Date Signed (N Certificate Holder) lauthorized rec . . . *...* **CERTIFICATE OF INSPECTION** I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State MORNANNe of \_\_\_\_\_ Pennsylvania and employed by Commercial Union Ins. Co. Boston. of Mage \_ have inspected the pump, or valve, described in this Data Report on 10-12-00 00 2-13-01 and state that to the best of my knowledge and belief, the Certificate Holder has constructed this pump, or valve, in accordance with the ASME Code, Section III, Division 1. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component described in this Data Report. Furthermore, 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. Date Commissions Pennsvlvania 2392 Charles Yaung [Nat'L Bd. (incl. endorsements) and state or prov. and no.] (1) For manually operated valves only.

2. Fabricated for <u>Detroit Edison</u> , P.O. Box 1659, Detroit, (name and added 3. Location of installation <u>Enrico Fermi Unit 2, 6400 Dixie Hig</u> (name and added 4. Type <u>D133T-1-1A</u> N/A 94-1623	of NPT Certificate Holder) MI 48231 trass) ghway, Newport, MI 48166 ress of Furchaser) 31, R/B N/A 2001 ing no.1 (Nat'L Ed. no.1 (year build) 3 N/A (class) (Code Case no.) Ambient •F (if perf ers nspectors have been furnished for the following items >1 Valve) oth Valve ports	
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	(authorized representative)	
CERTIFICATE OF SHOP INSPEC		
I, the undersigned, holding a valid commission issued by the National Board of Boiler of	and Pressure Vessel Inspectors and the State or Pr Insurance Co.	
of Boston, Mass.	have inspected the nining subassembly described	
Data Report on 11-17-color-2-13-9 and state that to the best of my knowledge and	d belief, the Certificate Holder has fabricated this	
subassemply in accordance with the ASME Code, Section III, Division 1.		
By signing this certificate neither the inspector nor his employer makes any warranty,	expressed or implied, concerning the piping subass	
described in this Data Report. Furthermore, neither the inspector nor his employer shall	l be liable in any manner for any personal injury or pr	
damage or a loss of any kind arising from or connected with this inspection.		
Date 2-13-01 Signed Mercher 4ingung 256 c	ommissions Pennsylvania 2392	
Date 2-13-07_Signed <u>Vittell</u> <u>450 mg 256</u> Co Charles Youth Storied Inspector)	Ommissions	
Supplemental information in form of lists stretches of drawing may be used and its die to		
* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is ( is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the to	$\sigma_{\mathcal{D}} \neq 11$ , (2) information in items 1 through 4 on this Data on of this form.	
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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

Owner Detroit Edi						2-15-2003	· · · · · ·
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6400 North Dixie Hi	ghway. Newport M	48166			Deco Ma	intenance	
	ddress			Repair Or		P.O. No., Job No., etc.	
Work Performed by			Туре	Code Symbol			
	Detroit Edison Con	npany	Starr	ip		N/A	No tubite
· · · · · · · · · · · · · · · · · · ·	Name		Auth	orization No.			
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			Expir	ation Date			
6400 North Dixie Hi		11 48166			<u> </u>	N/A	
A	ddress						
of System		ort E11-3185-G51 - D	Ninician 4 DL	IDC14/			
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Replacements	<u>AIS</u> Addenda of Section	C 19 XI Utilized for Repairs o	<u>A</u>	992-₩**92 ddenda	Addenda,	NA	Code Case
(b) Applicable Edition Replacements Identification of Componen	AlS (Addenda of Section Is Repaired or Replace	C 19 XI Utilized for Repairs o ced and Replacement C	7 <u>th</u> Edition or 11 <u>A</u> Components	992-W**92 ddenda			1
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(b) Applicable Edition Replacements Identification of Component Name of Component E11-3185-G51 Description	AIS (Addenda of Section ts Repaired or Replac Name of Manufacturer Wismer &	C 19 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	7th Edition or 11 Components National Board No.	992-W <sup>+</sup> 92 ddenda Other identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)
(b) Applicable Edition Replacements Identification of Component Name of Component E11-3185-G51 Description	AIS Addenda of Section Is Repaired or Replac Name of Manufacturer Wismer & Becker	C 19 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	7th Edition or 11 Components National Board No. N/A	992-W <sup>+</sup> 92 ddenda Other Identification E1185G051	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)
(b) Applicable Edition Replacements Identification of Component Name of Component E11-3185-G51 Description of Work	AlS Addenda of Section Is Repaired or Replace Name of Manufacturer Wismer & Becker	C 19 XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No 810087 9draulic Snubber with	7th       Edition         or       11         A       A         Components       A         National       Board         No.       N/A         N/A       A         a tested sp.       A	992-W <sup>+</sup> 92 ddenda Other Identification E1185G051	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.

(10/94)

9. Remarks Replaced snubber with a tested spare that was refurbished per WR# 000Z984276. Applicable Manufacturer's Data Reports to be attached CERTIFICATE OF COMPLIANCE We certify that the statements made in the report are correct and this replacement conforms to the rules of theASME Code, Section XI. Type Code Symbol Stamp Original Construction Records for E11-3185-G51 will be supplemented by Owners Section XI Program Plan 03-003 and Work request 000z023688, Expiration Date Certificate of Authorization No. N/A FERBUARY 15 20 0 -R.M. Hambleton Lead ISI Engineer Signed\_ Owner or Owner's Designee, Title 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 \_and employed by HSB CT\_of One State Street, Hartford, CT 06102\_have inspected the Province of Michigan components described in this Owner's Report during the period An 30,02 to Le Le 8,2003, 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. Furthermore, 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. Commissions MZG10 V Inspector's Signature National Board, State, Province, and Endorsements 20 (10/94)

03–011

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

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Plant       Fermi 2 Nuclear Power Plant       Unit       2         Name       Name       0<		- 1 - A - 24
Name       Deco Mainte         6400 North Dixie Highway, Newport MI 48166       Deco Mainte         Address       Repair Organization P.O. N         Work Performed by       Detroit Edison Company       Stamp       NV         Name       Authorization No.       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         Identification       N5-0522 Primary Containmant Pneumatic Supply System       N         of System       N5-0608 Nitrogen Inerting System       1971       Addreda,         (a) Applicable Construction Code       ASME III,       Winter       1992-92 Addenda         (b) Applicable Edition/Addenda of Section XI Utilized for Repairs or       1992-92 Addenda       1992-9		
6400 North Dixie Highway, Newport MI 48166       Deco Maintee         Address       Repair Organization P.O. N         Work Performed by       Detroit Edison Company       Stamp       NV         Name       Authorization No.       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         Address       N5-0522 Primary Containmant Pneumatic Supply System       N         of System       N5-0608 Nitrogen Inerting System       Winter         (a) Applicable Construction Code       ASME III,       Winter         Class 2       19       71       Edition         (b) Applicable Edition/Addenda of Section XI Utilized for Repairs or       1992-92 Addenda         Identification of Components Repaired or Replaced and Replacement Components       1992-92 Addenda         Name of       Name of       Manufacturer Serial       National       Other         Name of       Name of       Manufacturer Serial       National       Other       Built       o		
Address       Deco Mainte         Work Performed by       Detroit Edison Company       Stamp       N         Mame       Authorization No.       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         Address       Address       N         Identification       N5-0522 Primary Containmant Pneumatic Supply System       N         of System       N5-0508 Nitrogen Inerting System       N         (a)       Applicable Construction Code       ASME III, Class 2       19       71       Edition       1971       Addrenda,         (b)       Applicable Edition/Addenda of Section XI Utilized for Repairs or Replacements       1992-92 Addenda       1992-92 Addenda       1992-92 Addenda         Identification of Components Repaired or Replaced and Replacement Components       Name of       Manufacturer Serial       National       Other       Year         Name of       Name of       Manufacturer Serial       National       Identification       Built       o		na na Li Nutri Li
Address       Repair Organization P.O. N         Work Performed by	hance	
Work Performed by       Type Code Symbol Stamp       Nump         Detroit Edison Company       Stamp       N/         Name       Authorization No.       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         Address       Mathorization Date       N         Identification       N5-0522 Primary Containmant Pneumatic Supply System       N         of System       N5-0608 Nitrogen Inerting System       Winter         (a)       Applicable Construction Code       ASME III, Class 2       19       71       Edition       1971       Addenda,         (b)       Applicable Edition/Addenda of Section XI Utilized for Repairs or Replacements       1992-92 Addenda       1992-92 Addenda         Identification of Components Repaired or Replaced and Replacement Components       1992-92 Addenda       Value       Value         Name of       Name of       Manufacturer       No       National Board       Other       Year         No       No       Rentification       Suit       o		
Name       Authorization No.         6400 North Dixie Highway, Newport, MI 48166       Expiration Date         Address       Address         Identification       N5-0522 Primary Containmant Pneumatic Supply System         of System       N5-0608 Nitrogen Inerting System         (a)       Applicable Construction Code       ASME III, Class 2       19       71       Edition       1971       Addrenda,         (b)       Applicable Edition/Addenda of Section XI Utilized for Repairs or Replacements       1992-92 Addenda       1992-92 Addenda         Identification of Components Repaired or Replaced and Replacement Components       1992-92 Addenda       1992-92 Addenda         Name of Component       Name of Manufacturer       Manufacturer Serial No       National Board No.       Other Identification       Year Built		
6400 North Dixie Highway, Newport, MI 48166       Expiration Date       N         Address       Address       N         Identification       N5-0522 Primary Containmant Pneumatic Supply System       N         of System       N5-0608 Nitrogen Inerting System       N         (a)       Applicable Construction Code       ASME III, Class 2       19       71       Edition       1971       Addreda,         (b)       Applicable Edition/Addenda of Section XI Utilized for Repairs or Replacements       1992-92 Addenda       1992-92 Addenda         Identification of Components Repaired or Replaced and Replacement Components       1992-92 Addenda       1992-92 Addenda         Name of       Name of       Manufacturer Serial       National       Other       Year         Name of       Namufacturer       No       No       Identification       Identification       Identification	<u>A</u>	
6400 North Dixie Highway, Newport, MI 48166       Expiration Date         Address       Address         Identification       N5-0522 Primary Containmant Pneumatic Supply System         of System       N5-0608 Nitrogen Inerting System         (a)       Applicable Construction Code       ASME III, Class 2       Winter         (a)       Applicable Construction Code       ASME III, Class 2       Year         (b)       Applicable Edition/Addenda of Section XI Utilized for Repairs or Replacements       1992-92 Addenda         Identification of Components Repaired or Replaced and Replacement Components       1992-92 Addenda         Name of       Name of       Manufacturer         Name of       Name of       Manufacturer         No       No       Other         No       Board       No	n de la serie de la serie Na serie de la s	re da la la Transferencia
Address       N5-0522 Primary Containmant Pneumatic Supply System         of System       N5-0608 Nitrogen Inerting System         (a)       Applicable Construction Code       ASME III,         Class 2       19       71       Edition         (b)       Applicable Edition/Addenda of Section XI Utilized for Repairs or       1992-92 Addenda         Identification of Components       Replacements       1992-92 Addenda         Identification of Components Repaired or Replaced and Replacement Components       Other       Year         Name of       Name of       Manufacturer       National       Other       Year         No       National       National       Other       Built       other	<u>A</u>	
Address         Identification       N5-0522 Primary Containmant Pneumatic Supply System         of System       N5-0608 Nitrogen Inerting System         (a)       Applicable Construction Code       ASME III, Class 2       Winter         (a)       Applicable Construction Code       ASME III, Class 2       Winter         (b)       Applicable Edition/Addenda of Section XI Utilized for Repairs or Replacements       1992-92 Addenda         Identification of Components Repaired or Replaced and Replacement Components       1992-92 Addenda         Name of Component       Name of Manufacturer       Manufacturer Serial No       National Board No.       Other Identification       Year Built	/A	
of System       N5-0608 Nitrogen Inerting System         (a)       Applicable Construction Code       ASME III. Class 2       19       71       Edition       1971       Addenda,         (b)       Applicable Edition/Addenda of Section XI Utilized for Repairs or Replacements       1992-92 Addenda       1992-92 Addenda         Identification of Components Repaired or Replaced and Replacement Components       1992-92 Addenda       Year         Name of Component       Name of Manufacturer       Manufacturer Serial No       National Board No.       Other Identification       Year Built		
(a)       Applicable Construction Code       ASME III.       Winter         Class 2       19       71       Edition       1971       Addenda,         (b)       Applicable Edition/Addenda of Section XI Utilized for Repairs or       192-92 Addenda       1992-92 Addenda         Kdentification of Components       Replaced and Replaced and Replacement Components       1992-92 Addenda       Year         Name of       Name of       Manufacturer Serial       National       Other       Year         No.       Vear       Board       No.       Board       Built       0		
Class 2     19     71     Edition     1971     Addenda,       (b)     Applicable Edition/Addenda of Section XI Utilized for Repairs or Replacements     1992-92 Addenda       Identification of Components Repaired or Replaced and Replacement Components     1992-92 Addenda       Name of Component     Name of Manufacturer     Manufacturer Serial No     National Board No.     Other Identification     Year Built		•
Class 2     19     71     Edition     1971     Addenda,       (b)     Applicable Edition/Addenda of Section XI Utilized for Repairs or Replacements     1992-92 Addenda       Identification of Components Repaired or Replaced and Replacement Components     1992-92 Addenda       Name of Component     Name of Manufacturer     Manufacturer Serial No     National Board No.     Other Identification     Year Built		
(b) Applicable Edition/Addenda of Section XI Utilized for Repairs or Replacements       1992-92 Addenda         Identification of Components Repaired or Replaced and Replacement Components       1992-92 Addenda         Name of Component       Name of Manufacturer Serial National Board No.       Other Built Other Utilization         Output       Name of No.       Other Identification       Year Identification	N/A	Code Cas
Replacements       1992-92 Addenda         Identification of Components Repaired or Replaced and Replacement Components       Identification of Components         Name of Component       Name of Manufacturer Serial National Board No.       Other Identification         Value       Value       Value       Value         Image: Name of Component       Name of Manufacturer Serial No.       National Board No.       Other Identification         Image: No.       Image: No.       Image: No.       Image: No.       Image: No.		
Component Manufacturer No Board Identification Built No.		
Component Manufacturer No Board Identification Built No.	Repaired,	ASM
	Replaced,	Cod
T2300F400D         GPE Controls         7208-0327/4         N/A         V21-2004         1974         I	r Replacement	Stamp
T2300F400D         GPE Controls         7208-0327/4         N/A         V21-2004         1974         I		(Ye
	Replacement	Y
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Description of Work Install Replacement Flance Bolt		
of Work Install Replacement Flange Bolt		• • •

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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		<u>m i i i i i i i i i i i i i i i i i i i</u>		•		
· · · ·	Applicable Mar	nufacturer's Data Reports to	be attached	· · · · · · · ·		<u> </u>
		:		· · ·	•	. • .
· · · · ·	C	ERTIFICATE OF COMP	LIANCE		· · · · · ·	· · · · · · · · · · · · · · · · · · ·
We certify that	at the statements made in the report are	correct and this Replacerr	nent_conforms to the n	ules of the ASME Co	de, Section XI	I.
Type Code S	ymbol Stamp Original Code Data repor	rt N5-522 and N5-608 to be	supplemented by Own	ners Section XI Prog	ram # 03-011	•
Certificate of A	Authorization No	NA 1	Expiration Date	N/A		ــــــــــــــــــــــــــــــــــ
		Butte	Date M	4 21	203	
	M. Hambleton Lead ISI Engineer mer or Owner's Designee, Title	1-				

#### 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 Province of Michigan and employed by HSB CT of One State Street, Hartford, CT 06102 have inspected the components described in this Owner's Report during the period 12-8-03 to 6-3-03, 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. Furthermore, 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.

Marshing Inspector's Signature

Commissions NB 9486 ABINILS

National Board, State, Province, and Endorsements

Date < 2003

(10/94)

Remarks

For complete work package, see Work Request Y664030100

# 03–012 03–028

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

Owner Detroit E	Name			• · · · · · · · · · · · · · · · · · · ·		May 21, 2003	
6400 North Dixie I	Highway, Newport N	<i>l</i> I 48166	She	at the second	10	of 1	
	Address			· · · · · · · · · · · · · · · · · · ·			
Plant Fermi 2 Nucl	ear Power Plant	i se an	Unit	· · · · · · · · · · · · · · · · · · ·		2	
6400 North Divie I	Name Highway, Newport M	II /8166				an a	
	nginvay, newport iv				Deco M	aintenance	
	Address			Repair O		P.O. No., Job No., etc.	
Work Performed by	_			Code Symbol			
	Detroit Edison Con Name	npany	Stam	· · · •		N/A	
	rvaine	میشوند و می از این این ا میتر این میده این این این این مورو میتر این این این این این	AUUX	prization No.		N⁄A	
6400 North Dixie H	lighway, Newport, N	AI 48166	Expir	ation Date	a na s		
11				2000 - 1990 - 1997 1997 - 1997 - 1996 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997		N/A	
the second s	Address						
Identification of System	N5-0214 Feed	iwater Loop B, RWC	J Return to V	essel			
(a) Applicable Const	nution Codo ASI	ME III.		Winter			
		ss <b>1</b> 19	71 Edition		Addenda,	N/A	Code Case
						· · · · · · · · · · · · · · · · · · ·	e entre La transformación
	N/Addenda of Section	XI Utilized for Repairs of					
(b) Applicable Edition Replacements	n/Addenda of Section			92-92 Addenda			
		XI Utilized for Repairs c	_19	192-92 Addenda			
Replacements		XI Utilized for Repairs c	_19	192-92 Addenda			
Replacements Identification of Component	nts Repaired or Repla	XI Utilized for Repairs of ced and Replacement (	_19 Components			Benzirad	ASME
Replacements		XI Utilized for Repairs c	_19	192-92 Addenda Other Identification	Year Built	Repaired, Replaced,	ASME
Replacements Identification of Compone Name of	nts Repaired or Repla	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial	15 Components National	Other			Stampe
Replacements Identification of Compone Name of	nts Repaired or Repla	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial	 Components National Board	Other		Replaced,	Code Stampe (Yes
Replacements Identification of Compone Name of	nts Repaired or Repla	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial	 Components National Board	Other		Replaced,	Code Stampe
Replacements Identification of Componen Name of Component	nts Repaired or Replace Name of Manufacturer	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial No	20mponents National Board No.	Other Identification	Built	Replaced, or Replacement	Code Stampe (Yes or No)
Replacements Identification of Componen Name of Component	nts Repaired or Replace Name of Manufacturer	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial No	20mponents National Board No.	Other Identification	Built	Replaced, or Replacement	Code Stampe (Yes or No)
Replacements Identification of Componen Name of Component	nts Repaired or Replace Name of Manufacturer	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial No	20mponents National Board No.	Other Identification	Built	Replaced, or Replacement	Code Stampe (Yes or No)
Replacements Identification of Componen Name of Component	nts Repaired or Replace Name of Manufacturer	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial No	20mponents National Board No.	Other Identification	Built	Replaced, or Replacement	Code Stampe (Yes or No)
Replacements Identification of Componen Name of Component	nts Repaired or Replace Name of Manufacturer	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial No	20mponents National Board No.	Other Identification	Built	Replaced, or Replacement	Code Stampe (Yes or No)
Replacements Identification of Componen Name of Component G3300F120	nts Repaired or Replace Name of Manufacturer	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial No	20mponents National Board No.	Other Identification	Built	Replaced, or Replacement	Code Stampe (Yes or No)
Replacements Identification of Componen Name of Component G3300F120 Description	nts Repaired or Replan Name of Manufacturer Anchor Darling	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial No E 3062-2-1	20mponents National Board No. N/A	Other Identification V8-4615	Built 1983	Replaced, or Replacement Replacement	Code Stampe (Yes or No)
Replacements Identification of Componen Name of Component G3300F120 Description	nts Repaired or Replan Name of Manufacturer Anchor Darling	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial No	20mponents National Board No. N/A	Other Identification V8-4615	Built 1983	Replaced, or Replacement Replacement	Code Stampe (Yes or No)
Replacements Identification of Componen Name of Component G3300F120 Description of Work	nts Repaired or Replan Name of Manufacturer Anchor Darling	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial No E 3062-2-1	20mponents National Board No. N/A	Other Identification V8-4615	Built 1983 net retaine	Replaced, or Replacement Replacement	Code Stampe (Yes or No)
Replacements Identification of Componen Name of Component G3300F120 Description of Work Tests Conducted:	nts Repaired or Replan Name of Manufacturer Anchor Darling	XI Utilized for Repairs of ced and Replacement ( Manufacturer Serial No E 3062-2-1 ent Bolting material ar Pneumatic []	20mponents National Board No. N/A N/A nd installed n	Other Identification V8-4615	Built 1983 net retaine	Replaced, or Replacement Replacement	Code Stampe (Yes or No)

recorded at the top of this form.

(10/94)

9. Remarks

- Replacement Bolting material procured per the following Purchase orders:
- (4) ½" –13 UNC x 2-1/4", SA 193 Gr. B7, PO# 886964
- (4) <sup>1</sup>/<sub>2</sub>" -13 UNC Nuts, SA-194 Gr. 2H. PO# 890771,
- (1) Bonnet Cover/Retainer Plate, A516 Gr. 70, PO# 357114

#### Applicable Manufacturer's Data Reports to be attached

	C	ERTIFICATE OF	COMPLIANCE		
We certi	fy that the statements made in the report an	e correct and this R	eplacement_conforms to the	rules of theASME	Code, Section XI.
Туре Со	de Symbol Stamp <u>Original Code Data repo</u>	nt N5-0214 to be sur	pplemented by Owners Section	on XI Program #03	-012 and 03028
Certificat	te of Authorization No	N/A	Expiration Date		
Signed	R.M. Hambleton Lead ISI Engineer Owner or Owner's Designee, Title	Rub &	Date N	NA4 21	.2003

#### **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 Michigan and employed by HSB CT of One State Street, Hartford, CT 06102 have inspected the Province of components described in this Owner's Report during the period 5/1/03 to 5/30/05 \_, 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. Furthermore, 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. Inspector's Signature Commissions NO9486 ARTNINS National Board, State, Province, and Endorsements May 30 200 Date (10/94) For complete work package, see Work Requests P521030100 and 000Z031881

03-013 03-014 03-023

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

-	1.1	 ÷	1.	÷.	. * /	Sec. 34	1.1	 1.1.1.	·· .	 e gen i	11
					1.11		•				

1	Owner Detroit Edi	son Company		Date			May 14, 2003	
	6400 North Dixie H	Name ighway, Newport M	1 48166	Shee	et	<u>1</u> 0	f 1	- 
2.		Address ar Power Plant		Unit			2	
	6400 North Dixie Hi	Name ghway, Newport M	I 48166			Deco M	aintenance	
3.		lddress Detroit Edison Corr	npany		Code Symbol		P.O. No., Job No., etc. N/A	
·		Name		Stam	p prization No.		N/A	
. • •	6400 North Dixie Hi	e formanie i de la service	1 48166		ation Date	····-	 N/A	
	ببر منصحي المحصد المنشد الأعلمي التلت	ddress						
E I	of System (a) Applicable Constru			92	92 (	Valve)		Code Case
Э.	(b) Applicable Edition Replacements		ss 3 19 XI Utilized for Repairs o	1 A 4	<u>71</u>	Addenda	<u> </u>	JUUE Gase
		Addenda of Section	XI Utilized for Repairs o	r1		Year Built	N/A Repaired, Replaced, or Replacement	ASME Code Stamped (Yes
	Replacements Identification of Componen Name of Component	Addenda of Section ts Repaired or Replace Name of Manufacturer	XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	Components National Board No.	992-92 Addenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
	Replacements Identification of Componen Name of	Addenda of Section	XI Utilized for Repairs o ced and Replacement C Manufacturer Serial	components National Board	992-92 Addenda Other	Year	Repaired, Replaced,	ASME Code Stamped (Yes
	Replacements Identification of Componen Name of Component	Addenda of Section ts Repaired or Replace Name of Manufacturer	XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	Components National Board No.	992-92 Addenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
	Replacements Identification of Componen Name of Component E1151C001A	Addenda of Section ts Repaired or Replac Name of Manufacturer Goulds Pumps	XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No N301213-1	National Board No.	992-92 Addenda Other Identification N/A	Year Built 1975	Repaired, Replaced, or Replacement Replacement	ASME Code Stamped (Yes or No) Y
	Replacements Identification of Componen Name of Component E1151C001A	Addenda of Section ts Repaired or Replac Name of Manufacturer Goulds Pumps	XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No N301213-1	National Board No.	992-92 Addenda Other Identification N/A	Year Built 1975	Repaired, Replaced, or Replacement Replacement	ASME Code Stamped (Yes or No) Y
3. I	Replacements Identification of Componen Name of Component E1151C001A E1151C001C Description	Addenda of Section ts Repaired or Replac Name of Manufacturer Goulds Pumps	XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No N301213-1 N301213-3	National Board No.	992-92 Addenda Other Identification N/A	Year Built 1975	Repaired, Replaced, or Replacement Replacement	ASME Code Stamped (Yes or No) Y

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.

psi

Test Temp

Other []

Pressure

9.	Remarks:	Quantities identified for the Replacement Fasteners procured on the following Purchase Orders were replaced in both E1151C001A and E1151C001C.
60		(P.O. 388545 / HT. Code F921) / 120 Nuts 7/8" – 9 (P.O. 859106 / HT. Code MTX for E1151C001C) and 120 Nuts (P.O. 388545 H or E1151C001A)
16	¾"−10X2·	- ¼" (P.O. 388546 / HT. Code F925)
32	3/4" – 10 X	1 - 7/8" (P.O. 388546 / HT Code F925)
12		5" (P.O. 388546 / HT. Code F922) and 12 Nuts 7/8 – 9 (P.O. 388546 / HT. Code F939) These additional Fasteners ed on E1151C001C and not on E1151C001A.
		Applicable Manufacturer's Data Reports to be attached
		CERTIFICATE OF COMPLIANCE
	We certify that	at the statements made in the report are correct and this <u>Replacement</u> conforms to the rules of the ASME Code, Section XI.
		ymbol Stamp Original Code data report T&B N5-3 to be supplemented by Owners Section XI Program 03-023 and Bolting Programs 03-013 (E1151C001C) and 03-014 E1151C001A.
	Certificate of	Authorization NoNAExpiration DateNA
		Put ANA ANALING
	Signed <u>R.</u>	Authorization NoNAExpiration DateNA <u>M. Hambleton Lead ISI Engineer</u> RML DateDateNA wher or Owner's Designee, Title

#### **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 Province of <u>Michigan</u> and employed by <u>HSB\_CT</u> of <u>One State Street</u>, <u>Hartford</u>, <u>CT\_06102</u> have inspected the components described in this Owner's Report during the period  $\frac{\sqrt{-8}-0.3}{\sqrt{-8}-0.3}$  to  $\frac{\sqrt{-9}-0.3}{\sqrt{-9}-0.3}$ , 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. Furthermore, 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.

Inspector's Signature Commissions N39486 ABINNS National Board, State, Province, and Endorsements

ay 20 Date

(10/94)

For complete work package, see Work Request 000Z031277, 000Z031288, 000Z031597, and 000Z031478.

## 03–016

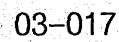
#### FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI

Owner Detroit E	dison Company Name		Date			May 14, 2003	
6400 North Dixie	Highway, Newport M	<b>II 48166</b>	Shee	t .	10	<b>5f 1</b>	
	Address						
Plant Fermi 2 Nucl	ear Power Plant	a film a film A a start a start a start a A a start a start a start a start a	Unit	• •		2	A
6400 North Dixie I	Name Highway, Newport M	I 48166			Dese	aintenance	
an a	Address			Renair Or		P.O. No., Job No., etc.	
Work Performed by	Detroit Edison Con	npany	Type Stam	Code Symbol		N/A	
	Name			prization No.		N/A	
6400 North Dixie I	lighway, Newport, N	11 48166	Expire	ation Date		NA	·
(a) Applicable Cons			92		(Valve) Addenda	A1/A	Code Case
Replacements Identification of Compone Name of	on/Addenda of Section ents Repaired or Repla Name of	XI Utilized for Repairs o ced and Replacement C Manufacturer Serial	19 components National	992-92 Addenda Other	Year	Repaired,	ASME
Replacements	on/Addenda of Section ents Repaired or Repla	XI Utilized for Repairs o ced and Replacement C	t Components	992-92 Addenda			ASME Code Stampe (Yes
Replacements Identification of Compone Name of	on/Addenda of Section ents Repaired or Repla Name of	XI Utilized for Repairs o ced and Replacement C Manufacturer Serial	components National Board	992-92 Addenda Other	Year	Repaired, Replaced,	ASME Code Stampe
Replacements Identification of Compone Name of Component	on/Addenda of Section ents Repaired or Repla Name of Manufacturer	XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	Components National Board No.	92-92 Addenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)
Replacements Identification of Compone Name of Component R3001C007	on/Addenda of Section ents Repaired or Repla Name of Manufacturer Goulds Pumps	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	Components National Board No. N/A	92-92 Addenda Other Identification	Year Built 1977	Repaired, Replaced, or Replacement Replacement	ASME Code Stampe (Yes or No) Y
Replacements Identification of Compone Name of Component R3001C007	on/Addenda of Section ents Repaired or Repla Name of Manufacturer Goulds Pumps	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	Components National Board No. N/A	92-92 Addenda Other Identification	Year Built 1977	Repaired, Replaced, or Replacement Replacement	ASME Code Stampe (Yes or No) Y
Replacements Identification of Compone Name of Component R3001C007	on/Addenda of Section ents Repaired or Repla Name of Manufacturer Goulds Pumps	XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No TCN N0007-3 TCN N0007-4	Components National Board No. N/A	92-92 Addenda Other Identification	Year Built 1977	Repaired, Replaced, or Replacement Replacement	ASME Code Stampe (Yes or No) Y

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.

)	<u>¾" – 10 X 2 – ½" (P.O. 384301 / HT. (</u>	Code F984)	· .		
		•.			
	5/8" - 11 X 2" (P.O. 384301 / HT. Coc	de F985)		· .	
	5/8" – 11 X 1-3/4" (P.O. 384301 HT C	Code F986)		· · · · · · · · · · · · · · · · · · ·	
		· · · · · · ·		• •	
		Applicable Manufacturer's [	Data Reports to be attached		
	· · · · · · · · · · · · · · · · · · ·	CERTIFICAT	E OF COMPLIANCE	•	
1	We certify that the statements made in	the renort are correct and	this Renlacement conforms t	o the rules of the ASME Co	de Section XI
		• .			· · ·
1	Type Code Symbol Stamp Original Co	ode data report T&B N5-20	to be supplemented by Owner	rs Section XI Program 03-01	16
(	Certificate of Authorization No	N/A	Expiration Date	N/A	
e	Signed R.M. Hambleton Lead IS	SIEDINGON PALL	1 00.1	MAY 14	20.03
	Owner or Owner's Designee, T		DateDate		a_ <u></u>
		Title	INSERVICE INSPECTION		a <u></u>
L P O k	Owner or Owner's Designee, T	CERTIFICATE OF mission issued by the Natio mployed by <u>HSB CT</u> of Report during the period enformed examinations and	INSERVICE INSPECTION onal Board of Boiler and Press One State Street, Hartford \$-13-03 to \$5-20-0	ure Vessel Inspectors and th . <u>CT 06102</u> have inspect 	he State or ed the est of my
L, P ki a B	Owner or Owner's Designee, T the undersigned, holding a valid comr rovince of <u>Michigan</u> and er omponents described in this Owner's i nowledge and belief, the Owner has pr	CERTIFICATE OF mission issued by the Nation mployed by <u>HSB CT_of</u> Report during the period erformed examinations and e ASME Code, Section XI. spector nor his employer m his Owner's Report. Further	INSERVICE INSPECTION onal Board of Boiler and Press <u>One State Street, Hartford</u> <u>43-03</u> to <u>05-20-0</u> I taken corrective measures de akes any warranty, expressed armore, neither the Inspector n	ure Vessel Inspectors and th <u>CT 06102</u> have inspect <u>2</u> , and state that to the be escribed in this Owner's Rep or implied, concerning the e or his employer shall be liab	he State or ed the est of my port in
L P C ki a Ba	Owner or Owner's Designee, T the undersigned, holding a valid comr rovince of <u>Michigan</u> and er omponents described in this Owner's i nowledge and belief, the Owner has pr coordance with the requirements of the y signing this certificate neither the Ins and corrective measures described in th	CERTIFICATE OF mission issued by the Natio mployed by <u>HSB CT</u> of Report during the period enformed examinations and e ASME Code, Section XI. spector nor his employer m his Owner's Report. Further inty damage or a loss of any	INSERVICE INSPECTION onal Board of Boiler and Press One State Street, Hartford 43-03 to 05-20-0 I taken corrective measures de akes any warranty, expressed akes any warranty, expressed akes any warranty, expressed wind arising from or connecte Commissions 1948	ure Vessel Inspectors and th <u>CT 06102</u> have inspect <u>23</u> , and state that to the be escribed in this Owner's Rep or implied, concerning the e or his employer shall be liab d with this inspection.	he State or ed the est of my port in examinations ble in any
L P C ki a Ba	Owner or Owner's Designee, T the undersigned, holding a valid comr rovince of <u>Michigan</u> and er omponents described in this Owner's i nowledge and belief, the Owner has pr coordance with the requirements of the y signing this certificate neither the Ins and corrective measures described in th	CERTIFICATE OF mission issued by the Natio mployed by <u>HSB CT</u> of Report during the period erformed examinations and e ASME Code, Section XI. spector nor his employer m his Owner's Report. Further inty damage or a loss of any	INSERVICE INSPECTION onal Board of Boiler and Press One State Street, Hartford 43-03 to 05-20-0 I taken corrective measures de akes any warranty, expressed akes any warranty, expressed akes any warranty, expressed wind arising from or connecte Commissions 1948	ure Vessel Inspectors and th <u>CT 06102</u> have inspect <u>13</u> , and state that to the be escribed in this Owner's Rep or implied, concerning the e or his employer shall be liab d with this inspection.	he State or ed the est of my port in examinations ble in any
L, P ki a B	Owner or Owner's Designee, T the undersigned, holding a valid comr rovince of <u>Michigan</u> and er omponents described in this Owner's i nowledge and belief, the Owner has pi ccordance with the requirements of the signing this certificate neither the Ins and corrective measures described in the anner for any personal injury or proper MAMAMA	CERTIFICATE OF mission issued by the Natio mployed by <u>HSB CT</u> of Report during the period erformed examinations and e ASME Code, Section XI. spector nor his employer m his Owner's Report. Further inty damage or a loss of any	INSERVICE INSPECTION onal Board of Boller and Press One State Street, Hartford 43-03 to 05-20-0 I taken corrective measures de akes any warranty, expressed armore, neither the Inspector n y kind arising from or connecte Commissions 1996 National E	ure Vessel Inspectors and th <u>CT 06102</u> have inspect <u>23</u> , and state that to the be escribed in this Owner's Rep or implied, concerning the e or his employer shall be liab d with this inspection.	he State or ed the est of my port in examinations ble in any
I, P ki a B	Owner or Owner's Designee, T the undersigned, holding a valid comr rovince of <u>Michigan</u> and er omponents described in this Owner's i nowledge and belief, the Owner has pi ccordance with the requirements of the signing this certificate neither the Ins and corrective measures described in the anner for any personal injury or proper MAMAMA	CERTIFICATE OF mission issued by the Natio mployed by <u>HSB CT</u> of Report during the period erformed examinations and e ASME Code, Section XI. spector nor his employer m his Owner's Report. Further inty damage or a loss of any	INSERVICE INSPECTION onal Board of Boller and Press One State Street, Hartford 43-03 to 05-20-0 I taken corrective measures de akes any warranty, expressed armore, neither the Inspector n y kind arising from or connecte Commissions 1996 National E	ure Vessel Inspectors and th <u>CT 06102</u> have inspect <u>23</u> , and state that to the be escribed in this Owner's Rep or implied, concerning the e or his employer shall be liab d with this inspection.	he State or ed the est of my port in examinations ble in any

For complete work package, see Work Request 000Z031322 and 000Z031323.



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

Owner Detroit Ed	ison Company		Date			May 14, 2003	
6400 North Dixie H	Name Johway, Newport M	148166	Shee	an a	10	f 1	
	Address			•	10	•	
المراجع والمحاج والمحاج والمحاج المحاج ا	ar Power Plant		Unit			2	
	Name						•
6400 North Dixie H	ighway, Newport M	1 48166					
						intenance .O. No., Job No., etc.	<u></u>
	Address Detroit Edison Corr	nonv	Tune	Code Symbol	ganization r	N/A	•
HOIR I CHONINGU DY	Deuoir Eulson Con	ihanà	Stam			IWA	
	Name			rization No.	· · · · · · · · ·	N/A	
6400 North Dixie Hi	ghway, Newport, M	li 48166	Expira	ation Date		N/A	
Identification	vidress	Emergency Equipmen					
(a) Applicable Constr	<u>Clas</u>	<u>ss 3 19 1</u>	92 71 Edition		Valve) Addenda	<u>N/A</u>	Code Case
(b) Applicable Edition Replacements Identification of Componen Name of Component		XI Utilized for Repairs o ced and Replacement C Manufacturer Serial No	19 components National Board	92-92 Addenda Other Identification	Year Built	Repaired, Replaced,	Code
Replacements Identification of Componen Name of	ts Repaired or Replac	ced and Replacement C Manufacturer Serial	19 components National	Other			Code Stampe
Replacements Identification of Componen Name of Component	ts Repaired or Replac Name of Manufacturer	ced and Replacement C Manufacturer Serial No	19 Components National Board No.	Other Identification	Built	Replaced, or Replacement	Code Stampe (Yes
Replacements Identification of Componen Name of	ts Repaired or Replac	ced and Replacement C Manufacturer Serial	19 components National Board	Other		Replaced, or Replacement Repair/	Code Stampe (Yes
Replacements Identification of Componen Name of Component	ts Repaired or Replac Name of Manufacturer	ced and Replacement C Manufacturer Serial No	19 Components National Board No.	Other Identification	Built	Replaced, or Replacement	Code Stampe (Yes
Replacements Identification of Componen Name of Component	ts Repaired or Replac Name of Manufacturer	ced and Replacement C Manufacturer Serial No	19 Components National Board No.	Other Identification	Built	Replaced, or Replacement Repair/	Code Stampe (Yes
Replacements Identification of Componen Name of Component	ts Repaired or Replac Name of Manufacturer	ced and Replacement C Manufacturer Serial No	19 Components National Board No.	Other Identification	Built	Replaced, or Replacement Repair/	Code Stampe (Yes
Replacements Identification of Componen Name of Component	ts Repaired or Replac Name of Manufacturer	ced and Replacement C Manufacturer Serial No	19 Components National Board No.	Other Identification	Built	Replaced, or Replacement Repair/	Code Stampe (Yes
Replacements Identification of Componen Name of Component	ts Repaired or Replac Name of Manufacturer	ced and Replacement C Manufacturer Serial No	19 Components National Board No.	Other Identification	Built	Replaced, or Replacement Repair/	Code Stampe (Yes
Replacements Identification of Component Name of Component P4500C002B	ts Repaired or Replace Name of Manufacturer Goulds Pumps	ced and Replacement C Manufacturer Serial No TCN N0006-2	19 Components National Board No.	Other Identification	Built 1977	Replaced, or Replacement Replacement	ASME Code Stampe (Yes or No) Y
Replacements Identification of Component Name of Component P4500C002B	ts Repaired or Replace Name of Manufacturer Goulds Pumps	ced and Replacement C Manufacturer Serial No	19 Components National Board No.	Other Identification	Built 1977	Replaced, or Replacement Replacement	Code Stampe (Yes
Replacements Identification of Component Name of Component P4500C002B	ts Repaired or Replace Name of Manufacturer Goulds Pumps	ced and Replacement C Manufacturer Serial No TCN N0006-2	19 Components National Board No.	Other Identification	Built 1977	Replaced, or Replacement Replacement	Code Stampe (Yes
Replacements Identification of Component Name of Component P4500C002B	ts Repaired or Replace Name of Manufacturer Goulds Pumps	ced and Replacement C Manufacturer Serial No TCN N0006-2	19 Components National Board No.	Other Identification	Built 1977	Replaced, or Replacement Replacement	Code Stampe (Yes
Replacements Identification of Component Name of Component P4500C002B Description of Work	nstalled Replaceme	ced and Replacement C Manufacturer Serial No TCN N0006-2 ent Bolting and Weld	19 Components National Board No. N/A Repair per th	Other Identification	Built 1977 oved WP(	Replaced, or Replacement Replacement	Code Stampe (Yes

Note: Supplemental sheets in form of fists, 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.

(10/94)

3	34" - 10 X 2 - 32" (P.O. 384301 / HT. Code F984)
	3/4" - 10 X 2 - 1/4" (P.O. 384301 / HT. Code F988)
6	3/4" - 10 X 2" (P.O. 384301 HT Code F989 (Qty. 14) & F990 (Qty. 2).
•	Applicable Manufacturer's Data Reports to be attached
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this <u>Repair/Replacement</u> conforms to the rules of the ASME Code, Section XI.
	Type Code Symbol Stamp Original Code data report T&B N5-21to be supplemented by Owners Section XI Program 03-017.
	Certificate of Authorization No
	Signed R.M. Hambleton Lead ISI Engineer AM Talkta Date MAY 14, 2003
	CALLA ALL - MARL WI - 27
	Signed R.M. Hambleton Lead ISI Engineer AM Talkta Date MAY 14, 2003
	Signed R.M. Hambleton Lead ISI Engineer AM Talkta Date MAY 14, 2003
	Signed R.M. Hambleton Lead ISI Engineer AM Calletta Date MAY 14, 2003
	Signed R.M. Hambleton Lead ISI Engineer AM Calletta Date MAY 14, 2003
	Signed R.M. Hambleton Lead ISI Engineer AM Calletta Data MAY 14, 20 03
	Signed R.M. Hambleton Lead ISI Engineer AMU Auto Date MAY 14.2003 Owner or Owner's Designee, Title CERTIFICATE OF INSERVICE INSPECTION
	Signed R.M. Hambleton Lead ISI Engineer AMU Auto Date MAY 14.2003 Cwnar or Owner's Designee, Title 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
	Signed R.M. Hambleton Lead ISI Engineer AMU Auto Date MAY 14.2003 Owner or Owner's Designee, Title 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 Province of Michigan and employed by HSB CT of One State Street, Hartford, CT 06102 have inspected the
	Signed R.M. Hambleton Lead ISI Engineer AMU Auto Date MAY 14.2003 Owner or Owner's Designee, Title 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 Province of Michigan and employed by HSB CT of One State Street, Hartford, CT 06102 have inspected the components described in this Owner's Report during the period 113-03 to 5-21-03, and state that to the best of my
	Signed R.M. Hambleton Lead ISI Engineer AM Julit Date MAY 14.2003 Cwnar or Owner's Designee, Title 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 Province of Michigan and employed by HSB CT of One State Street, Hartford, CT 06102 have inspected the

and corrective measures described in this Owner's Report. Furthermore, 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.

Inspector's Signature

Commissions NB9486 ABINNS NO

National Board, State, Province, and Endorsements

Date 20 0

(10/94)

For complete work package, see Work Request 000Z031324.

## 03–018

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

. Owner Detro	it Edison Company		Date			May 14, 2003	
6400 North Di	Name xie Highway, Newport N Address	11 48166	She	et	<u> </u>	<del>গ 1</del>	
Plant Fermi 2 N	Address		Unit			2	
6400 North Dr	Name xie Highway, Newport M	1 48166					
					Deco M	aintenance	
	Address				ganization	P.O. No., Job No., etc.	
Work Performed by	Detroit Edison Cor	npany	Type	e Code Symbol		NA	
	Name			orization No.		N/A	
6400 North Db	kie Highway, Newport, N	<u>Al 48166</u>	Expir	ration Date	در د مر <del>محمد مر</del>	<u>N/A</u>	11
Identification of System	Address <u> </u>	(RHR Service Water	(RHRSW) F	Pumps E1151C00	1B and E	<u>1151C001D).</u>	
	-		<u> </u>				<u></u>
	<u>Cia</u>	<u>ss 3 19 </u>	and the second se		Valve) Addenda	<u>N/A</u>	Code Case
(b) Applicable E Replacemen	dition/Addenda of Section	XI Utilized for Repairs o		992-92 Addenda			
Tiopidocinaii	C	영국 전 동물건	<b></b>	JOE-DE AUGENIOU			
Identification of Comp	onents Repaired or Repla	ced and Replacement C	omponents				
			·	a la companya	· · · · ·	· · · · · · · · · · · · · · · · · · ·	in ind
Name of Component	Name of Manufacturer	Manufacturer Serial No-	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes
E1151C001B	Goulds Pumps	N301213-2	N/A	N/A	1975	Replacement	or No) Y
E1151C001D	Goulds Pumps	N301213-4	N/A	N/A	1975	Replacement	Y
Description of Work	Installed Replaceme 000Z031466,	ent Bolting and perfor	med approv	ed Weld Repairs	on E115	I COO1B per WPCS	<b>!</b>
	·		•	en e			· <u>·····</u> ······························
Tests Conducted:	Hydrostatic [] Other [] Pressure			ting Pressure [X]	0r		
Tests Conducted:	Hydrostatic [] Other [] Pressure			ting Pressure [X] st Temp	ºF		
	Other [] Pressure	e ps	l Te	st Temp	°F		
Note: Suppler		e ps	l Tex s may be use	st Temp d provided (1) size	<sup>0</sup> F is 8 1/2 in		

9.	Remarks: Quantities identified for the Replacement Fasteners procured on the following Purchase Orders were replaced E1151C001B and E1151C001D.	in both
60	7/8" - 9 X 7" (P.O. 388546 / HT. Code F944) and 120 Nuts (P.O. 968438 HT. Code QJS)	
16	%" - 10 X 2 - ¼" (P.O. 384300 / HT. Code F982)	
32	3/4" - 10 X 1 - 7/8" (P.O. 384300 / HT Code F983)	
	CARD 03-17716 was written to document that a Sample Plan was used by QA for performing heat Number verific Column to Column bolts on both Pumps. This condition was found acceptable per the site Corrective Action Program	
	Applicable Manufacturer's Data Reports to be attached	
		•
	CERTIFICATE OF COMPLIANCE	
	We certify that the statements made in the report are correct and this <u>Repair/Replacement</u> conforms to the rules of the ASME Section XI.	Code,
	Type Code Symbol Stamp Original Code data report to be supplemented by Owners Section XI Program 03-018.	
	Certificate of Authorization NoNAExpiration DateNA	<u>)3</u>
•		
	CERTIFICATE OF INSERVICE INSPECTION	
•	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the S Province of <u>Michigan</u> and employed by <u>HSB_CT</u> of <u>One State Street</u> , <u>Hartford</u> , <u>CT</u> <u>06102</u> have inspected to components described in this Owner's Report during the period <u><math>\frac{1}{2}-\frac{1}{2}-\frac{1}{2}</math></u> to <u><math>5-\frac{1}{2}-\frac{1}{2}</math></u> , and state that to the best of knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report accordance with the requirements of the ASME Code, Section XI.	he fimy
	By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the exar and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.	
	Marpula Commissions N/39486 ASTANS 16	1410
	Inspector's Signature National Board, State, Province, and Endorsements	

For complete work package, see Work Request 000Z031320, 000Z031321, and 000Z031466.

2003

(10/94)

Date May 21

03-019

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

1.	OwnerDetroit Edit	son Company		Date			May 3, 2003	
· · ·		Name						
	6400 North Dixie Hi	ghway, Newport M	<u>II 48166</u>	Shee	t	10	<u>f 1</u>	1. <u>1</u> . 1.
	een all an an Arganesia 🖡	ddress			و هو المراجع ا والمراجع المراجع			
2.	Plant Fermi 2 Nuclea	ar Power Plant		Unit			2	<u> </u>
	6400 North Dixie Hi	Name ghway, Newport N	<b>II 48166</b>			Dava Ma		
		ddress			Bengis		intenance 2.0. No., Job No., etc.	
3.		ddress Detroit Edison Cor	npany	Type Stam	Code Symbol	ganzason r	N/A	
		Name		1 N N N N	rization No.		N/A	
	6400 North Dixie High	hway. Newport. N	<b>(  48166</b>	Expir	ation Date		N/A	<u></u>
		ddress			-			
4.	Identification of System	Hydrogen Re	combiner / Combustib	le Gas Syste	em (N5-602)			
5.	(a) Applicable Constru		<b>ME III,</b> ss <b>3</b> 19	71 Edition	71	Addenda	N/A	Code Case
	(b) Applicable Edition/ Replacements		XI Utilized for Repairs o	<b>r</b> a da p	92-92 Addenda			
3.	Identification of Component	s Repaired or Repla	ced and Replacement C	omponents				
	Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped
								(Yes or No)
	T4804F603A	Wismer &	NC73110-010	N/A	V4-2144	1983	Replacement	<b>Y</b> ≜

**Tests Conducted:** 8.

Description

of Work

Hydrostatic []

Becker

Pneumatic [] Other [] Pressure

Nominal Operating Pressure [X] psi Test Temp.\_\_\_

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.

Replaced bolt that was damaged during removal of spool piece for valve trfurbishment.

(10/94)

7.

		• • •	•			
		•				
	:					
·		Applicable Manuf	acturer's Data Repor	ts to be attached	· · ·	······································
		•••				
	· · · · · · · · · · · · · · · · · · ·	CEI	RTIFICATE OF CO	MPLIANCE		· · ·
	ymbol Stamp <u>Original</u>					
Certificate of A	ymbol Stamp <u>Original</u> Authorization No <u>M. Hambleton Lead</u> mer or Owner's Designed	N I ISI Engineer		<u>Owners Section XI</u> Expiration Date_    Date	Program 03-019 N/A MAP1 3	_2003_
Certificate of A	Authorization No	N I ISI Engineer			N/A	.2003
Certificate of A	Authorization No	N I ISI Engineer a, Titta		Expiration Date_	N/A	_20 <u>03</u>

Commissions 1139486 PBINNS National Board, State, Province, and

Endorsements

Marsure Inspector's Signature Date 1 2003

(10/94)

For complete work package, see Work Request 000Z031253

## 03-020

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

Owner	Detroit Edis	on Company	Date	May 21	, 2003
	and the second second	Name			
640	0 North Dixie Hig	hway, Newport MI 48166	Sheet	1 of 2	
	Ad	dress			
Plant	Fermi 2 Nuclear	Power Plant	Unit	2	
6400	· · · · ·	Name hway, Newport MI 48166			
	· · · · · · · · · · · · · · · · · · ·		n All Anna an Airtíne an Anna Anna Anna Anna Anna Anna Anna A	Deco Maintena	
	Ad	dress		pair Organization P.O. No.,	Job No., etc.
Work Pe	nformed by D	etroit Edison Company	Type Code Symbo Stamp	A/A	
2		Name	Authorization No.	N/A	
6400	North Dixie High	way, Newport, MI 48166	Expiration Date	N/A	
Identifica	Ad	ress N5-307 Residual Heat Removal S	System (Division 2)		
of Systen	n				* :
(a) A	Applicable Construct	tion Code ASME III, 19 Class 2	71 Edition 71	Addenda	N/A Code Case
	Applicable Edition/A Replacements	ddenda of Section XI Utilized for Repain	s or 1992-92 Adder	nda	

Identification of Components Repaired or Replaced and Replacement Components 6.

Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (Yes or No)
E1100F031B	Wm. Powell	63872-2	N/A	V8-2104	1975	Replacement	Y .
				18 an 4	1. 1. 1. 2		
_	· · · · · · · · · · · · · · · · · · ·						

Description

7. of Work

(10/94)

Installed Replacement Disc in check valve. Existing disc had evidence of pitting on seating surface and valve has had a history of seat leakage.

**Tests Conducted:** 8.

Hydrostatic []

Pneumatic [] Other [] Pressure

Nominal Operating Pressure [X] psi Test Temp.

۴

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.

		. *		•					
						· · · ·		•	
			· ·	 ,	· · · · ·				·
			· · ·	· · ·	• •				:
	· · ·	Арр	licable Manufactu	rer's Data Rep	orts to be attach	ed			
				•					
	· · · ·		CERTIF	CATE OF C	OMPLIANCE				<u>.</u>
		· .					•		
We cert	tify that the statem	ients made in the	e report are correc	t and this Rep	lacement_confor	ms to the rules	of the ASME	Code, Section	XI.
Туре С	ode Symbol Stam	p Original Code	data report (N5-3	07) to be supp	lemented by Ow	ners Section XI	Program 03-	020.	
					·		-		
Cerunca	ate of Authorizatio	NO		. \	Expiration		N/A		<u> </u>
Signed_		ton_Lead ISI E r's Designee, Title		Oll	Data	MAY	2	_20 <u>03</u>	
		· · ·				1011	· · ·		
	· . ·		CERTIFICATE	OF INSERV	ICE INSPECT	IUN			
Province compone knowled	e of <u>Mic</u> ents described in t ge and belief, the	higan_and empl this Owner's Rep Owner has perfo	ision issued by the loyed by <u>HSB C</u> port during the per primed examination SME Code, Section	T_of <u>One Si</u> iod_ <u>4-/4-0</u> is and taken o	ate Street, Har	tford, CT 0610	02 have inspirate that to the	e best of my	· · ·
and corre	ective measures d	lescribed in this (	ctor nor his emplo Owner's Report. I damage or a loss	urthermore, r	either the Inspec	tor nor his emp	ioyer shall be		ns .
	ala.	A. 1	0	•	sions NB9	2/81-	AZN	alc al	TP. 1
	Insp	ector's Signature	,	<u> </u>	-	onal Board, Sta			<u>. a</u> r
Date <	June	4	20:03		· ·	:			. *

For complete work package, see Work Request 000Z023952.

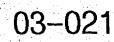
	E. Ree	-1.8% · · · · ·		SHE DOOR IN	ac beccarded an	
	The Wm.	Powell Co.	, 3233 Co.	lerain Ave.	, Cincinnati	, Ohio 45225
			ikame and	address of NPT C	ertificate Holdert	NIS-Z
tbi Manufach	ired for DET. FOIL	(Name an	d addres of N Ca	tificate Holder to	WOOTL, HI 4	amoonenil Z
2 dominication	Certificate Holder's	Serial No. Part _C	M 7475B	_Nat'i Bd No _	<u>N/A</u>	CAN NO N/A
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112/801 6 e . **第**2

This form (E00040) may be obtained from the Order Dept., ASME, 345 E. 47th St., New York, N.Y. 10017



DISC CM4 7.4 7 5 8 Inone below to be competited for all retuels where explicitly a Location Size: Salety Vave Outlen: Num ť -141 Renforcement Thebasy Metanet 1.Sell Anta Material Type Purpose (solat Diam. et S 18 ...Nu ì • S.X. ÷. 1 THE REPORT OF THE REPORT Licention تزر Size. Manholes いた思想の最高 Ña ۰. Location Size Hancholes No · . . . . Location Ŧ T Size Ńа فيتجز بنط The Anached Othe (Where & how) tiegs. (Describe) Supports, Ski INumber 18 (Number) (Yui or nel We call it that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the sufer of continuction of the ASME Code. Section all The applicable Design Specification and Design Report att not the responsibility of the NPT Condicate Holder for parts. An NPT Rifeste Holder for appurtenances is responsible for turnishing a separate Design Specification and Design Report if the app nance is not included in the component Design Specification and Design Report.) - Signed The The Powell Co B (NPT Cartificate Holder) 1579 蘝 792-\*\* - Certificate of Authorization No. ż . 7 ficate of Authorization Expire CRYD :20 - 2 . . 10.00 CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable) 55 · • 3 4. information file at Design Ċ, مير ا is reportion file a . . <u>م</u> 3 4 Prof. Eng. State 2 fications certified by. Detroit.1 Reg. No Prof. Eng. State. Stress Matris report certified by. 74 CERTIFICATE OF SHOP INSPECTION the under smetholding a valid commission issued by the National Board of Bolter and Pressure Vessel Inspectors and the State of Province and employed by H.S.B.T.4. T.Co. have inspected the part of a pressure vessel described in this Horinot of 1.4 whartford. C .x :: \* Partial Data Report on and belief the NPT Certificate Holder has constructed this part in accordance with the ASME Code, Section III By signing this cartificate, neither the Inspector nor his employ. makes any warranty, expressed or implied, concerning the part de Embed in this Partia Data Report, Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal Figure or property damage or a loss of any kind arising from or connected with this inspection. 19 92 .... ... COMMISSY 0H10 in Commissions National Board, State, Province and No. Ξ. Inspector's Signatu . 0.201



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

OwnerDetroit Ec	lison Company		Date			May 14, 2003	
6400 North Divie 1	Name Highway, Newport N	11 48166	Shee		1.0	ntana ara-ara-ara- ≰t	
	Address	11 40100	Unico	•			
Plant Fermi 2 Nucle	ear Power Plant		Unit			2	
	Name				la su t		
6400 North Dixie H	lighway, Newport M	li 48166					
1 <u></u>						aintenance	
	Address		Time i		ganization f	P.O. No., Job No., etc.	
Work Performed by	Detroit Edison Con	npany	Stamp	Code Symbol		N/A	
	Name		144 C	rization No.		N/A	
	lighway, Newport, N	<u>Al 48166</u>	Expira	ation Date		N/A	<u>.</u>
	Address						
Identification	<u>T&amp;B N5-4</u>	(Emergency Equipm	ent Service	Water (EESW) F	Pump P45	<u>500C002A)</u>	
of System	. :						
(a) Applicable Const	ruction Code ASI	ME III,	92	92	(Valve)		
1-1 - hbucanie adibi			71 Edition		Addenda	N/A (	Code Case
(b) Applicable Edition	n/Addenda of Section	XI Utilized for Repairs o	<b>r.</b>				
Replacements		نې د د د ور ده وسوې و د او د د وسوې و د د و د د و د د و د و د د و و د د و و د د و و د د و و د د و و د د و و د د و و د د و و د د و و د د و و د د و و د د و و د د و و د د		92-92 Addenda	_		
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dentification of Compone	nts Repaired or Repla	ced and Replacement C	omponents				
dentification of Compone	nts Repaired or Repla	ced and Replacement C	omponents				
				Other	Vear	Bensired	ASME
Name of	Name of	ced and Replacement C Manufacturer Serial No	omponents National Board	Other Identification	Year Built	Repaired, Replaced,	
		Manufacturer Serial	National		1	Repaired, Replaced, or Replacement	Code
Name of	Name of	Manufacturer Serial	National Board		1	Replaced,	Code Stampe (Yes
Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Identification	Built	Replaced, or Replacement	Code Stampe (Yes or No)
Name of	Name of	Manufacturer Serial	National Board		1	Replaced, or Replacement Repair/	Code Stampe (Yes
Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Identification	Built	Replaced, or Replacement	Code Stampe (Yes or No)
Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Identification	Built	Replaced, or Replacement Repair/	Code Stampe (Yes or No
Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Identification	Built	Replaced, or Replacement Repair/	Code Stampe (Yes or No
Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Identification	Built	Replaced, or Replacement Repair/	Code Stampe (Yes or No
Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Identification	Built	Replaced, or Replacement Repair/	Code Stampe (Yes or No)
Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Identification	Built	Replaced, or Replacement Repair/	Code Stampo (Yes or No
Name of Component P4500C002A	Name of Manufacturer	Manufacturer Serial No	National Board No.	Identification	Built	Replaced, or Replacement Repair/	Code Stampo (Yes or No
Name of Component P4500C002A Description	Name of Manufacturer Goulds Pumps	Manufacturer Serial No	National Board No. N/A	Identification	Built 1977	Replaced, or Replacement Replacement	Code Stampo (Yes or No Y
Name of Component P4500C002A Description	Name of Manufacturer Goulds Pumps	Manufacturer Serial No TCN N0006-1	National Board No. N/A	Identification	Built 1977	Replaced, or Replacement Replacement	Code Stampo (Yes or No Y
Name of Component P4500C002A Description	Name of Manufacturer Goulds Pumps	Manufacturer Serial No TCN N0006-1	National Board No. N/A	Identification	Built 1977	Replaced, or Replacement Replacement	Code Stampe (Yes or No) Y
Name of Component P4500C002A Description of Work	Name of Manufacturer Goulds Pumps	Manufacturer Serial No TCN N0006-1 ent Bolting and perform	National Board No. N/A med Weid Re	Identification N/A epairs per the fo	Built 1977 Ilowing ap	Replaced, or Replacement Replacement	Code Stampe (Yes or No) Y
Name of Component P4500C002A Description of Work	Name of Manufacturer Goulds Pumps Installed Replaceme	Manufacturer Serial No TCN N0006-1 ent Bolting and perform	National Board No. N/A <u>med Weid Re</u>	Identification N/A epairs per the fo	Built 1977 Ilowing ar	Replaced, or Replacement Replacement	Code Stampo (Yes or No Y
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Name of Component P4500C002A Description of Work	Name of Manufacturer Goulds Pumps Installed Replaceme	Manufacturer Serial No TCN N0006-1 ent Bolting and perform	National Board No. N/A <u>med Weid Re</u>	Identification N/A epairs per the fo	Built 1977 Ilowing ar	Replaced, or Replacement Replacement	Code Stampe (Yes or No) Y

recorded at the top of this form.

(10/94)

	%" - 10 X 2 - ½" (P.O. 384301 / HT. Code F987)
	3/4" - 10 X 2 - 1/4" (P.O. 384301 / HT. Code F988)
	3/4" - 10 X 2" (P.O. 384301 HT Code F990)
	Applicable Manufacturer's Data Reports to be attached
÷	
	CERTIFICATE OF COMPLIANCE
	We certify that the statements made in the report are correct and this <u>Repair/Replacement</u> conforms to the rules of the ASME Code,
	Section XI.
	Type Code Symbol Stamp Original Code data report (T&B N5-4) to be supplemented by Owners Section XI Program 03-021,
	Certificate of Authorization NoN/AExpiration DateN/A
	Signed R.M. Hambleton Lead ISI Engineer RMH Ups Date MAPI 14 2003
	Signed R.M. Hambleton Lead ISI Engineer (AVC ). UP Date _
	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
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>Michigan</u> and employed by <u>HSB_CT_of One State Street, Hartford, CT 06102</u> have inspected the
-	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>Michigan</u> and employed by <u>HSB_CT</u> of <u>One State Street</u> , <u>Hartford</u> , <u>CT</u> 06102 have inspected the components described in this Owner's Report during the period $\frac{1}{2}$ , $\frac{2}{2}$ , $\frac{2}{2}$ , $\frac{2}{2}$ , and state that to the best of my
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>Michigan</u> and employed by <u>HSB_CT_of One State Street, Hartford, CT 06102</u> have inspected the
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>Michigan</u> and employed by <u>HSB_CT</u> of <u>One State Street</u> , <u>Hartford</u> , <u>CT 06102</u> have inspected the components described in this Owner's Report during the period <u>1-19-9-</u> to <u>5-21-03</u> , 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.
	I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of <u>Michigan</u> and employed by <u>HSB_CT</u> of <u>One State Street</u> , <u>Hartford</u> , <u>CT 06102</u> have inspected the components described in this Owner's Report during the period <u>1-12-23</u> to <u>5-221-03</u> , 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

Mansector's Signature Date May 21 Commissions NB9486 ABININS A National Board, State, Province, and Endorsements 20 0.7

(10/94)

For complete work package, see Work Request 000Z031294, 000Z031597, and 000Z031284.

03-022

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

		Edison Company Name		Date	and a second		May 14 2003			
	6400 North Dixie	Highway, Newport M	1 48166	Shee	*	10	<b>f f</b>			
	Plant Fermi 2 Nuc	Address lear Power Plant		Unit			2			
•	Fidin Ferrini 2 1900	Name		VIII			<u> </u>			
	6400 North Dixie	Highway, Newport M	1 48166	ی اور		an a				
		Address		Deco Maintenance Repair Organization P.O. No., Job No., etc.						
-	Work Performed by	Detroit Edison Con	npany	Type Starr	Code Symbol	nga naauta i r	N/A			
		Name			Authorization No.		N/A	an a ta sh		
	6400 North Dixie	Highway, Newport, M	lí 48166	Expir	ation Date	ta susse	N/A			
	Identification	Address	gency Diesel Genera							
•	of System									
	(a) Applicable Cons			<b>B</b> 2	92	(Valve)				
	(b) Applicable Editi		ss 3 19 XI Utilized for Repairs o	71 Edition		Addenda	<u> </u>	Code Case		
	Identification of Compon Name of Component	Name of Manufacturer	Manufacturer Serial No	National Board No.	Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe		
			<ul> <li>A state of the second se</li></ul>					(Yes		
-	R3001C005	Gouids Pumps	TCN N0007-1	N/A	NA	1977	Repair/			
-	R3001C005 R3001C006	Gouids Pumps Gouids Pumps	TCN N0007-1 TCN N0007-2	N/A N/A	N/A N/A	1977 1977	Repair/ Replacement Repair/ Replacement	or No		
						n an Arian Taona an Ariana	Replacement Repair/	or No) Y		
						n an Arian Taona an Ariana	Replacement Repair/	or No) Y		
-	R3001C006					n an Arian Taona an Ariana	Replacement Repair/	or No) Y		
		Goulds Pumps		N/A med Weld F	NA	1977	Replacement Repair/	or No) Y		

recorded at the top of this form. (10/94)

9. Remarks: Quantities identified for the Replacement Fasteners procured on the following Purchase Orders were replaced in both R3001C005 and R3001C006.

Form NIS-2 (Back)

40 3/4" - 10 X 2 - 1/2" (P.O. 384301 / HT. Code F984)

8 5/8" - 11 X 2" (P.O. 384301 / HT. Code F985)

16 5/8" - 11 X 1-3/4" (P.O. 384301 HT Code F986)

Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF	COMPLIANCE	
We certify that the statements made in the re	port are correct and this_R	epair/Replacement_conforms to	the rules of the ASME Code,
Section XI.			
Type Code Symbol Stamp Original Code dat	a report T&B N5-5 to be su	polemented by Owners Section 2	KI Program 03-022.
Certificate of Authorization No	N/A	Expiration Date	NA
	Put	1 A A/	
Signed R.M. Hambleton Lead ISI Eng Owner or Owner's Designee, Title	ineer FMQ VA	Date MAC	14_20D
			•

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 Province of <u>Michigan</u> and employed by <u>HSB CT</u> of <u>One State Street</u>, <u>Hartford</u>, <u>CT 06102</u> have inspected the components described in this Owner's Report during the period <u>M19-03</u> to <u>05-20-03</u>, 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. Furthermore, 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.

Commissions NB9486 ABINIS Date May 20 National Board, State, Province, and Endorsements 20 03

(10/94)

For complete work package, see Work Request 000Z031290, 000Z031293, and 000Z031597.

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

03 - 025

Owner Detroit E	dison Company		Date			May 21, 2003	
6400 North Divie	Name Highway, Newport M	1 48166	Shee		1 0	19	
_0400 110/01 DIAR	Address	140100			10		
Plant Fermi 2 Nuc	lear Power Plant		Unit			2	
	Name						
6400 North Dixie	Highway, Newport M	I 48166					
						intenance	
Work Performed by	Address		Time	Hepair Or Code Symbol	ganization P	.O. No., Job No., etc. N/A	
work renormed by	Detroit Edison Con	ipany	Stam			IVA	
	Name		· · · · · · · · · · · · · · · · · · ·	vization No.		N/A	
6400 North Dixie	Highway, Newport, M	1 48166	Expira	ation Date	ta an ann	N/A	
	Address					1	
Identification of System	N5-013 EECW	System Division 1					
or cysic.in				······			· <u>·</u> ····
Replacements	Classion/Addenda of Section	XI Utilized for Repairs of	r 19	<u>-71</u> /	Addenda	<u>NA</u>	Code Case
(b) Applicable Editi	Classion/Addenda of Section	XI Utilized for Repairs of	r 19	· · · · · · · · · · · · · · · · · · ·	Year Built	N/A Repaired, Replaced, or Replacement	ASME Code Stamped
(b) Applicable Editi Replacements Identification of Compor Name of	Classion/Addenda of Section ents Repaired or Replace Name of	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial	r <u>19</u> Components National Board	92-92 Addenda Other	Year	Repaired, Replaced,	ASME
(b) Applicable Editi Replacements Identification of Compor Name of	Classion/Addenda of Section ents Repaired or Replace Name of	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial	r <u>19</u> Components National Board	92-92 Addenda Other	Year	Repaired, Replaced,	ASME Code Stamped (Yes
(b) Applicable Edit Replacements Identification of Compor Name of Component	Classion/Addenda of Section	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	r <u>19</u> Components National Board No.	92-92 Addenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)
(b) Applicable Edit Replacements Identification of Compor Name of Component	Classion/Addenda of Section	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	r <u>19</u> Components National Board No.	92-92 Addenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)
(b) Applicable Edit Replacements Identification of Compor Name of Component	Classion/Addenda of Section	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	r <u>19</u> Components National Board No.	92-92 Addenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)
(b) Applicable Edit Replacements Identification of Compor Name of Component	Classion/Addenda of Section	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	r <u>19</u> Components National Board No.	92-92 Addenda Other Identification	Year Built	Repaired, Replaced, or Replacement	ASME Code Stampe (Yes or No)
(b) Applicable Edit Replacements Identification of Compor Name of Component	Classion/Addenda of Section	XI Utilized for Repairs of ced and Replacement C Manufacturer Serial No	r 19 Components National Board No. N/A	92-92 Addenda Other Identification V8-2364	Year Built 1974	Repaired, Replaced, or Replacement Replacement	ASME Code Stampe (Yes or No)

Tests Conducted: 8.

Hydrostatic [] Other [] Pressure Nominal Operating Pressure [X] psi Test Temp.

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) informa-tion 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.

(10/94)

9. Remarks:

Replacement Plug/Stem assembly procured per PO#239515, Serial No. DC5919-2 (Report Attached) in addition, other trim replaced included the Cage, Seat Ring, and Seat Ring Adapter.

Applicable Manufacturer's Data Reports to be attached

	CERTIFICATE OF	COMPLIANCE	
that the statements made in the rep	ort are correct and this_R	eplacement_conforms i	to the rules of theASME Code, Section XI
e Symbol Stamp Original Code data	report N5-013 to be supp	lemented by Owners Se	ection XI Program 03-025
of Authorization No	N/A	Expiration Date	N/A
	neer RUHL	Date	MAY 21 203
	e Symbol Stamp <u>Original Code data</u>	that the statements made in the report are correct and this <u>Re</u> s Symbol Stamp <u>Original Code data report N5-013 to be supp</u> of Authorization No	R.M. Hambleton Lead ISI Engineer RMK Date

#### **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 Province of <u>Michigan</u> and employed by <u>HSB\_CT</u> of <u>One State Street</u>, <u>Hartford</u>, <u>CT 06102</u> have inspected the components described in this Owner's Report during the period  $\frac{97-22-03}{2}$  to <u>6-03-03</u>, 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. Furthermore, 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.

1 and

Inspector's Signature

Commissions NB9486 ABINNS

National Board, State, Province, and Endorsements

Date <u>Lune</u> 2003

(10/94)

For complete work package, see Work Request 000Z030591

	FARM	N-2 CERTIFICATE	N DERS: DAT			EL ALCHAR
		NUCLEAR PART	IS AND APP	UNTERIANCES!		
		As Required by the Prov	risions of the ed One Day's		tion III	1-2/14
		FISHER CONTROLS	•	States and the second states and the	NINTOUT CAS	Pro-
			Andrea Self			
2. Manufact	red for <u>Detroi</u>	t Edison Co., Bor	16595 Detr		3	
3. Location e	f installation Ferm	i II Power Plant,	Newport, M	1 48166		<b>i</b> : : : :
2 10	A#6110Rev B	SI-170-21650T		A STATE STATE		
4. Type	titrewing no.)	SA-479-316SST	ferinde strengen		N	
5. ASME Coo	le, Section III:	1971 Win	Iter 1971		10.00	
6. Fabricated	In accordance with C	onst. Spec. (Div. 2 only)	15 4 S 1400	Revision		
7. Ramarks -	<u>N/A</u>			ALC: ST		
-						
		Min. design thickness (in.) _			Longth bretal	
9. When appli		ers' Data Reports are attach	ed for each item	It this report.		
4.						
- 6 N - E -	or Appurtenance erial Number	-National		Part or Appurtenence Seria' Number	AND A STREET OF CLARKE SHOULD STREET	
	ethii Nurnoer	Board No.		Sorra Wumber	AT THE AVER A PROPERTY AND A PROPERTY AND	
	5919-1	Heat Number 13949-1				
	5919-2	13949-2*		State of the local state of the state of the		
(3)						
		<b>S</b> .		· · · · · · · · · · · · · · · · · · ·		
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FORM N=2 (back) Mit Sonal Au CERTIFICATION OF DESIGN ..... etifications contilied by Sylvester H. Noetzel PESTIN ALL PESTIN esign report (certified by \_ N/A CERTIFICATE OF SHOP COMPLIANCE that the statements made in this report are correct and that this (these) these morms to the rules of construction of the ASME Code, Section III. 1930 T Certificate of Authorization No. \_\_ ..... Exore 23-13-91 Name FISHER CONTROLS INT'L INC. CERTIFICATE OF SHOP INSPECTION . the undersigned, holding a valid commission issued by the National B and of Boiler and Pressure Vessel Inspectors and the State of Provender HARTEORD S. B. T. & T. CO. and amployed by HARTFORD S.B.I & I CO. IOYA. at of my knowledge and belief, the Certificate Holder has fabricated these parts of aportenances in accordance with the ASME Code Se Each part listed has been authorized for stamping on the date shown above." signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerving the environment descrete this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal at any or prepares damage a signing this certificate, neither the inspector nor his employer makes any warranty, expressed or impletion concer a of any kind arising from or connected with this inspection. <u>ن</u>ې ( - 12-13-91 Signed \_ 10 Authorized In . 1