INSERVICE INSPECTION REPORT

Date of Document Completion: January 17, 2003

REFUELING 15

INTERVAL 3
PERIOD 1
OUTAGE 1

J. M. FARLEY UNIT 2
NUCLEAR GENERATING PLANT
COLUMBIA, ALABAMA 36319

Commercial Service Date: July 30, 1981

Southern Nuclear Operating Company
40 Inverness Parkway
Birmingham, Alabama 35242

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A

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

1. Owner Southern Nuclear Operating Co. 40 Inverness Center Parkway, Birmingham, Al 35242 (as agent for Alabama Power Co)
(Name and Address of Owner)

2. Plant J. M Farley Nuclear Plant, Hwy 95 South, Columbia, Al. 36319
(Name and Address of Plant)

3. Plant Unit 2 4. Owner Certificate of Authorization (if required) N/A

5. Commercial Service 07/30/81 6. National Board Number for Unit See Listed N. B. for each component

7. Components Inspected

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Vessel	Combustion Engineering	CE 69105	N/A	21385
Reactor Vessel Closure Head	Combustion Engineering	CE 69105	N/A	21385
Reactor Vessel Internals	Westinghouse Pensacola	APR-RCRIUI	N/A	N/A
Pressurizer	Westinghouse Tampa	1561	N/A	W10793
Steam Generator A	Westinghouse Pensacola	ALAD-40307	N/A	73
Reactor Coolant Pumps A & C	Westinghouse EMD	APR-RCPPA-01 & 03	N/A	N/A
Reactor Coolant Piping	Southwest Fabricating	N/A	N/A	N/A
RHR Heat Exchanger A	Joseph Oat & Sons, Inc.	2046-1A	N/A	633
RHR Pump A	Ingersoll-Rand Co.	1170-18	N/A	N/A
Class 1 Piping	Daniel Construction	N/A	N/A	N/A
Class 2 Piping	Daniel Construction	N/A	N/A	N/A

Note. Supplemental sheets in the 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-1

8. Examination Dates 09/14/02 to 10/28/02

9. Inspection Period Identification: First Period 07/30/01 to 11/30/04

10. Inspection Interval Identification: Third Interval 07/30/01 to 07/30/11

11. Applicable Edition of Section XI 1989 Addenda None

12. Date/Revision of Inspection Plan: FNP-2-M-097; 05/15/02; Revision 3

13. Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan. See Tabs B, C and E

14. Abstract of Results of Examinations and Tests. See Tab B

15. Abstract of Corrective Measures. See Tab B

We certify that a) the statements made in this report are correct, b) the examinations and tests meet the Inspection Plan as required by the ASME Code, SectionXI, and c) corrective measures taken conform to the rules of the ASME Code, Section XI.

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

Date Jan. 17 2003 Signed Southern Nuclear Operating Co. By
(Owner)

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 Georgia and employed by Factory Mutual Insurance Company of Johnston, Rhode Island have inspected the components described in this Owner's Report during the period 9/14/02 to 12/31/02, and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in this Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations, tests, 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 GA 328 INA

Inspector's Signature

National Board, State, Province, and Endorsements

Date 1/17 2003

OWNER'S REPORT
FOR
INSERVICE INSPECTION

DATE: 01/17/03

OWNER NAME AND ADDRESS: Southern Nuclear Operating Co.
40 Inverness Parkway
Birmingham, Al 35242
(as agent for Alabama Power Co.)

NAME AND ADDRESS OF NUCLEAR GENERATING PLANT: Joseph M. Farley Nuclear Plant
Highway 95 South
Columbia, Alabama 36319

NAME ASSIGNED TO NUCLEAR POWER UNIT: Joseph M. Farley Nuclear Plant
Unit 2

OWNER CERTIFICATE OF AUTHORIZATION: N/A

COMMERCIAL SERVICE DATE: July 30, 1981

NATIONAL BOARD NUMBER: See listed NB's for each component

NAME OF COMPONENTS OR PARTS OF COMPONENTS INVOLVED: Representative samples of the following components and systems were examined using nondestructive examination techniques.

CLASS 1

COMPONENT OR SYSTEM	SYSTEM DESIGNATION	APR SKETCH
Reactor Vessel	B11	1-1100, 1-1100B, 1-1200
Reactor Vessel Closure Head	B11	1-1300, 1-1300A, 1-1300B, 1-1300C
Pressurizer	B31	1-2100A
Steam Generator	B21	1-3100
Reactor Coolant Pump	B41	1-5100, 1-5100B, 1-5300
Reactor Coolant System	B13	1-4100, 1-4501
RHR System	E11	1-4101
Safety Injection System	E21	1-4102, 1-4302
CVCS System	E21	1-4109

CLASS 2

COMPONENT OR SYSTEM	SYSTEM DESIGNATION	APR SKETCH
RHR Heat Exchanger	E11	2-3500
RHR Pump	E11	2-5130
Main Steam System	N11	2-4100, 2-4101

HYDROSTATIC TESTING: **SEE TABS B AND E**

NAME AND ADDRESS OF MANUFACTURER OR INSTALLER OF COMPONENTS:

REACTOR VESSEL AND REACTOR VESSEL CLOSURE HEAD Combustion Engineering, Inc. Chattanooga, Tennessee	REACTOR COOLANT PUMPS Westinghouse Electric Corporation Electro Mechanical Division Cheswick, Pennsylvania
REACTOR VESSEL INTERNALS Westinghouse Electric Corporation Pensacola, Florida	REACTOR COOLANT PIPING Southwest Fabricating and Welding Co., Inc. Houston, Texas
PRESSURIZER Westinghouse Electric Corporation Tampa Division Tampa, Florida	RHR HEAT EXCHANGER Joseph Oat and Sons, Inc. Camden, New Jersey
STEAM GENERATOR Westinghouse Electric Company Pensacola Plant No.5 Pensacola, Florida	RHR PUMP Ingersoll-Rand Co. Cameron Pump Division Phillipsburg, New Jersey
CLASS 1 & 2 PIPING Daniel Construction Co. Greenville, South Carolina	

INSERVICE INSPECTION DATES: **09/14/02 TO 10/28/02**

NAME OF AUTHORIZED NUCLEAR INSPECTOR: Charles G. Ward

NAME AND MAILING ADDRESS OF INSPECTOR'S EMPLOYER:

Factory Mutual Insurance Company
1301 Atwood Ave.
P. O. Box 7500
Johnston, RI. 02919

ABSTRACT: SEE TABS B AND C

B

J. M. FARLEY NUCLEAR PLANT UNIT NO 2
INTERVAL 3 PERIOD 1 OUTAGE 1
BALANCE OF PLANT/REACTOR VESSEL EXAMINATION SUMMARY

INTRODUCTION

The Inservice examination of Class 1 and 2 components and piping systems was conducted at Farley Nuclear Plant Unit 2 from September, 2002 to October, 2002. The examinations were performed in accordance with an approved Examination Program Plan located under Tab C of this report.

The program utilized ultrasonic, visual, and surface nondestructive testing methods in accordance with the requirements of ASME Section XI 1989 Edition and Technical Specifications 5.5.7, 5.5.8 and 5.5.16. The primary areas of examination included the Reactor Vessel, RCS piping, RHR/CVCS piping and supports and Main Steam piping and supports.

Selected examinations and related activities were witnessed by representatives of Southern Nuclear Operating Company and its Authorized Inspection Agency. All examinations were performed to the extent practical within geometric and physical limitations.

RESULTS

Examinations resulted in recordable indication areas being noted on the basis of procedure recording criteria, which generally are more conservative than specified in the ASME Section XI Acceptance Standards. Indications were evaluated and dispositioned by Indication Evaluation Reports (IER), shown in Tab F of this report. The results are summarized below.

SUMMARY OF INDICATIONS

CLASS 1

(A) VOLUMETRIC EXAMINATIONS

- There were no Class 1 Volumetric indications.

(B) SURFACE EXAMINATIONS

- There were no Class 1 Surface indications.

(C) VISUAL EXAMINATIONS

- There were thirty-two (32) bolted connections which had varying degrees of boron accumulation, which was removed and re-inspections performed satisfactorily.

  There was one (1) Reactor Vessel Stud Washer which had a dent on its outer edge. A supplemental surface examination was performed and found acceptable.

CLASS 2

(A) VOLUMETRIC EXAMINATIONS

- There were no Class 2 Volumetric indications.

(B) SURFACE EXAMINATIONS

- There were no Class 2 Surface indications.

(C) VISUAL EXAMINATIONS

- There were forty-four (44) bolted connections which had varying degrees of boron accumulation, which was removed and re-inspections performed satisfactorily.

  There was one (1) spring can with indications of damage to the load indicator. This condition had been previously reported (RF12) and evaluated as acceptable.

AUGMENTED EXAMINATIONS

- Augmented surface examinations were performed on the C Reactor Coolant Pump Flywheel. No indications were identified.

ADDITIONAL EXAMINATIONS

Results from additional examinations which were performed during this outage are as follows:

- **Class 1 System Leakage Test**

  In accordance with ASME Section XI 1989 Edition IWB-5221, leak testing of the Class 1 Reactor Coolant System Pressure Boundary was performed prior to startup following the fifteenth refueling outage. The VT-2 examinations were completed by plant personnel on 10/14/02. A copy of the completed test procedure FNP-2-SOP-1.4 is retained by the Farley Nuclear Plant Document Control. A copy of the VT-2 data sheets are located behind Tab 1.7.

  Subsequent to the Class 1 leakage test, control rod problems developed when rod B-8 was not able to be completely inserted into the core during testing. The plant was returned to cold shutdown, the reactor head disassembled and the control rod assembly and associated drive shaft were replaced. The inability to insert the control rod was attributed to a foreign object, which damaged the control rod assembly. An extensive search by plant personnel was not able to locate the foreign object believed responsible. The control rod replacement delayed the end of the outage until 10/28/02. VT-2 examinations associated with equipment disassembled after the initial completion of procedure FNP-2-SOP-1.4 and the end of the outage were performed.

  In addition, to meet the 1989 Section XI IWA-5242(a) requirement for removal of insulation from bolted connections in "systems borated for the purpose of controlling reactivity" the alternative exam requirements of Relief Request RR 27 were used. This Relief Request allowed the insulation to be removed and the bolted connection to be examined for evidence of leakage at static conditions. If evidence of leakage was apparent the bolting was either removed and examined per IWA-5250(2) or the provisions of Relief Request RR 23 were followed. This allowed an evaluation to be performed instead of removal and examination of the bolting.

- **Class 1 and 2 Hydrotesting**

  No Class 1 or 2 hydrostatic testing was performed during the fifteenth refueling outage.

- **Class 2 Functional/Inservice Testing**

  Functional/Inservice tests Class 2 systems were performed in accordance with the requirements of ASME Code Section XI, Articles IWA-5000 and IWC-5000. Systems examined included Main Steam and Feedwater, CTMT Spray, Boric Acid Transfer System, CVCS, Service Water and Component Cooling Water. A copy of the completed test report(s) is maintained in FNP Document Control.

STATUS OF EXAMINATIONS REQUIRED FOR CURRENT INTERVAL

This refueling was the 1st outage, 1st period of the current interval and the examinations completed to date represent approximately 40% of the total Class 1 and 2 scope for the current period. Approximately 15% of the examinations required for the current interval have been completed.

U2R15 ISI Report

U2R15 was the first in-service inspection of the new replacement Model 54F steam generators which were replaced during U2R14. The inspection scope for all three SG's was:

- 100% full length bobbin (with exception of low row U-bends)
- 20% hot leg top of tubesheet plus point
- 100% low row U-bend plus point
- Plus point of bobbin signals which were not observed during the Pre-Service Inspection (PSI) or which had changed since the PSI.

No indications of degradation were observed and the inspections were completed ahead of schedule.

Work was performed in accordance with NEI 97-06 Rev 1 and EPRI SG NDE Guidelines, Rev 5.

C

EXAMINATION PROGRAM PLAN

UNIT 2 RF 15

INTERVAL 3 PERIOD 1 OUTAGE 1

2002

UNIT 2

FIGURE 2

FARLEY NUCLEAR PLANT
INSERVICE INSPECTION PROGRAM CHANGE

Unit No. 2 Change No. 001 Page 1 of 1

10 Year Interval 3 40 Month Period 1 Outage 1

BOP ISI Description of Change:

Component Number: **Reason for Change:**

Delete examination:	Method	
APR1-1300-S01	SURFACE	Surface examination deleted per RR-49
APR1-1300-S14	SURFACE	Surface examination deleted per RR-49
APR1-1300-S15	SURFACE	Surface examination deleted per RR-49
APR1-1300-S24	SURFACE	Surface examination deleted per RR-49
APR1-1300-S25	SURFACE	Surface examination deleted per RR-49
APR1-1300-S27	SURFACE	Surface examination deleted per RR-49
APR1-1300-S28	SURFACE	Surface examination deleted per RR-49
APR1-1300-S29	SURFACE	Surface examination deleted per RR-49
APR1-1300-S30	SURFACE	Surface examination deleted per RR-49
APR1-1300-S31	SURFACE	Surface examination deleted per RR-49
APR1-1300-S32	SURFACE	Surface examination deleted per RR-49
APR1-1300-S51	SURFACE	Surface examination deleted per RR-49
APR1-1300-S52	SURFACE	Surface examination deleted per RR-49
APR1-1300-S53	SURFACE	Surface examination deleted per RR-49
APR1-1300-S54	SURFACE	Surface examination deleted per RR-49
APR1-1300-S55	SURFACE	Surface examination deleted per RR-49
APR1-1300-S56	SURFACE	Surface examination deleted per RR-49
APR1-1300-S57	SURFACE	Surface examination deleted per RR-49
APR1-1300-S58	SURFACE	Surface examination deleted per RR-49

Component number:	Change Procedure	Reason for Change
APR2-3500-A	FNP-0-NDE-100.31	Component is a vessel less than 2". Code requirement is Appendix III, Section XI. The proper NDE procedure is FNP-0-NDE-100.31.

APPROVED BY: John W Beck 9-12-02
Vendor Coordinator Date

APPROVED BY: Gary A. Stokes 9-12-02
SNC Coordinator Date

UNIT 2

FIGURE 2

FARLEY NUCLEAR PLANT
INSERVICE INSPECTION PROGRAM CHANGE

Unit No. 2 Change No. 002 Page 1 of 1

10 Year Interval 3 40 Month Period 1 Outage 1

BOP ISI Description of Change:

Component Number: **Reason for Change:**

Delete examination:	Method	
EG2-045-2AFW-R50	VT-3	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ (TRENCH)
EG2-046-2AFW-R76	VT-3	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ INSULATION SAMPLE
EG2-046-2AFW-R76 (ATT)	VT-1	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ INSULATION SAMPLE
EG2-046-2AFW-R83	VT-3	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ (TRENCH)
EG2-211-2SW-R88 (ATT)	VT-1	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ SCAFFOLD / INSUL.
EG2-211-SW-2A13 (ATT)	VT-1	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ SCAFFOLD / INSUL.
EG2-218-2SW-R568 (ATT)	VT-1	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ SCAFFOLD / INSUL.
EG2-221-SW-2A09 (ATT)	VT-1	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ SCAFFOLD / INSUL.
EG2-255-2CCW-R245	VT-3	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ SCAFFOLD
EG2-481-AFW-2A6	VT-3	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ SCAFFOLD / INSUL.
EG2-481-AFW-2A6 (ATT)	VT-1	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ SCAFFOLD / INSUL.
EG2-496-2SW-R268 (ATT)	VT-1	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ SCAFFOLD / INSUL.
EG2-548-AS-2A4 (ATT)	VT-1	DEFER TO NEXT OUTAGE / CRAFT SUPPORT/ SCAFFOLD I INSUL.
24 - B-M-2 VALVE INTERNALS	VT-3	VALVES NOT DISASSEMBLED
3 – B-L-2 PUMP INTERNALS	VT-3	PUMPS NOT DISASSEMBLIED

Component number:		Reason for Change
UPFLOW MODIFICATION	VT-3	REACTOR VESSEL INTERNAL MODIFICATION PSI PERFORMED

APPROVED BY: N/A Vendor Coordinator Date N/A

APPROVED BY: SNC Coordinator Date 10-8-02

(89) Code Cat. (89) Item No.	Component No. Figure No.	Component Desc.	Cal Block No.	Method Sur	Method Vol	Method Vis	NDE Procedures	Remarks
B-A B1.30	APR1-1100-1 Figure 001	UPPER SHELL TO FLANGE	ALA-RV-2, ALA-RV-5		VOL		FNP-ISI-54	RG 1.150 RR-17
B-G-1 B6.40	APR1-1100-L04 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6 40	APR1-1100-L05 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L06 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6 40	APR1-1100-L07 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L08 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L09 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6 40	APR1-1100-L28 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6 40	APR1-1100-L29 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L30 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L31 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L32 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L33 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L34 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	

J. M. FARLEY NUCLEAR PLANT
OUTAGE PLAN
Interval 3 Period 1 Outage 1

(89) Code Cat. (89) Item No.	Component No. Figure No.	Component Desc.	Cal Block No.	Method Sur	Vol	Vis	NDE Procedures	Remarks
B-G-1 B6 40	APR1-1100-L35 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L36 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6 40	APR1-1100-L37 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L44 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L45 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L46 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L47 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6 40	APR1-1100-L48 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L49 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6 40	APR1-1100-L50 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6 40	APR1-1100-L51 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L52 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L53 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L54 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-G-1 B6.40	APR1-1100-L55 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	

(89) Code Cat. (89) Item No.	Component No. Figure No.	Component Desc.	Cal Block No.	Method Sur	Vol	Vis	NDE Procedures	Remarks
B-G-1 B6.40	APR1-1100-L56 Figure 016	RPV STUD HOLE THREADS/LIGAMENTS	ALA-RV-6		VOL		FNP-ISI-55	
B-N-1 B13.10	APR1-1200-VS INT Figure Accessib	VESSEL INTERIOR			VT-3		FNP-ISI-88	
B-O B14.10	APR1-1300-58 Figure 022	CRD HOUSING WELDS			SUR		FNP-0-NDE-100.5	10% of peripheral CRD housings
B-G-1 B6.10	APR1-1300-N01 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13
B-G-1 B6.10	APR1-1300-N14 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100 21	RR-13
B-G-1 B6.10	APR1-1300-N15 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13
B-G-1 B6.10	APR1-1300-N24 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13
B-G-1 B6.10	APR1-1300-N25 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100 21	RR-13
B-G-1 B6.10	APR1-1300-N27 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13
B-G-1 B6.10	APR1-1300-N28 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13
B-G-1 B6.10	APR1-1300-N29 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13
B-G-1 B6.10	APR1-1300-N30 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100 21	RR-13
B-G-1 B6.10	APR1-1300-N31 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100 21	RR-13
B-G-1 B6.10	APR1-1300-N32 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13
B-G-1 B6.10	APR1-1300-N51 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100 21	RR-13

J. M. FARLEY NUCLEAR PLANT
OUTAGE PLAN
Interval 3 Period 1 Outage 1

(89) Code Cat. (89) Item No.	Component No. Figure No.	Component Desc.	Cal Block No.	Method Sur	Vol	Vis	NDE Procedures	Remarks	
B-G-1 B6.10	APR1-1300-N52 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13	
B-G-1 B6.10	APR1-1300-N53 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13	
B-G-1 B6.10	APR1-1300-N54 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100 21	RR-13	
B-G-1 B6.10	APR1-1300-N55 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13	
B-G-1 B6.10	APR1-1300-N56 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100 21	RR-13	
B-G-1 B6.10	APR1-1300-N57 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13	
B-G-1 B6.10	APR1-1300-N58 Figure	REACTOR VESSEL NUTS			VT-1		FNP-0-NDE-100.21	RR-13	
B-G-2 B7.80	APR1-1300-PEN 51 Figure	CRD HOUSING BOLTING			VT-1		FNP-0-NDE-100 21		
B-G-1 B6.30	APR1-1300-S01 Figure 016	REACTOR VESSEL STUDS	ALA-36		VOL		FNP-0-NDE-100.39		
~~B-G-1~~ B6.30	~~APR1-1300-S01~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~		~~SUR~~		~~FNP-0-NDE-100.11~~	Deleted	PC-01
B-G-1 B6.30	APR1-1300-S14 Figure 016	REACTOR VESSEL STUDS	ALA-36		VOL		FNP-0-NDE-100 39		
~~B-G-1~~ B6 30	~~APR1-1300-S14~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~		~~SUR~~		~~FNP-0-NDE-100.11~~	Deleted	PC-01
B-G-1 B6.30	APR1-1300-S15 Figure 016	REACTOR VESSEL STUDS	ALA-36		VOL		FNP-0-NDE-100.39		
~~B-G-1~~ B6.30	~~APR1-1300-S15~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~		~~SUR~~		~~FNP-0-NDE-100.11~~	Deleted	PC-01
~~B-G-1~~ B6.30	~~APR1-1300-S24~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~		~~SUR~~		~~FNP-0-NDE-100.11~~	Deleted	PC-01

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B-G-1 B6.30	APR1-1300-S24 Figure 016	REACTOR VESSEL STUDS	ALA-36	VOL	FNP-0-NDE-100.39		
~~B-G-1~~ B6 30	APR1-1300-S25 Figure 016	REACTOR VESSEL STUDS	ALA-36	SUR	FNP-0-NDE-100.11	Deleted	PC-01
B-G-1 B6 30	APR1-1300-S25 Figure 016	REACTOR VESSEL STUDS	ALA-36	VOL	FNP-0-NDE-100.39		
~~B-G-1~~ B6.30	APR1-1300-S27 Figure 016	REACTOR VESSEL STUDS	ALA-36	SUR	FNP-0-NDE-100.11	Deleted	PC-01
B-G-1 B6.30	APR1-1300-S27 Figure 016	REACTOR VESSEL STUDS	ALA-36	VOL	FNP-0-NDE-100.39		
~~B-G-1~~ B6 30	APR1-1300-S28 Figure 016	REACTOR VESSEL STUDS	ALA-36	SUR	FNP-0-NDE-100.11	Deleted	PC-01
B-G-1 B6 30	APR1-1300-S28 Figure 016	REACTOR VESSEL STUDS	ALA-36	VOL	FNP-0-NDE-100.39		
~~B-G-1~~ B6.30	APR1-1300-S29 Figure 016	REACTOR VESSEL STUDS	ALA-36	SUR	FNP-0-NDE-100.11	Deleted	PC-01
B-G-1 B6.30	APR1-1300-S29 Figure 016	REACTOR VESSEL STUDS	ALA-36	VOL	FNP-0-NDE-100.39		
~~B-G-1~~ B6.30	APR1-1300-S30 Figure 016	REACTOR VESSEL STUDS	ALA-36	SUR	FNP-0-NDE-100.11	Deleted	PC-01
B-G-1 B6 30	APR1-1300-S30 Figure 016	REACTOR VESSEL STUDS	ALA-36	VOL	FNP-0-NDE-100 39		
~~B-G-1~~ B6.30	APR1-1300-S31 Figure 016	REACTOR VESSEL STUDS	ALA-36	SUR	FNP-0-NDE-100.11	Deleted	PC-01
B-G-1 B6 30	APR1-1300-S31 Figure 016	REACTOR VESSEL STUDS	ALA-36	VOL	FNP-0-NDE-100 39		
B-G-1 B6 30	APR1-1300-S32 Figure 016	REACTOR VESSEL STUDS	ALA-36	VOL	FNP-0-NDE-100.39		
~~B-G-1~~ B6.30	APR1-1300-S32 Figure 016	REACTOR VESSEL STUDS	ALA-36	SUR	FNP-0-NDE-100.11	Deleted	PC-01

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~~B-G-1~~ B6.30	~~APR1-1300-S51~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~	~~SUR~~			~~FNP-0-NDE-100.11~~	Deleted	PC-01
B-G-1 B6.30	APR1-1300-S51 Figure 016	REACTOR VESSEL STUDS	ALA-36		VOL		FNP-0-NDE-100.39		
~~B-G-1~~ B6.30	~~APR1-1300-S52~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~	~~SUR~~			~~FNP-0-NDE-100.11~~	Deleted	PC-01
B-G-1 B6 30	APR1-1300-S52 Figure 016	REACTOR VESSEL STUDS	ALA-36		VOL		FNP-0-NDE-100.39		
~~B-G-1~~ B6 30	~~APR1-1300-S53~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~	~~SUR~~			~~FNP-0-NDE-100.11~~	Deleted	PC-01
B-G-1 B6.30	APR1-1300-S53 Figure 016	REACTOR VESSEL STUDS	ALA-36		VOL		FNP-0-NDE-100.39		
~~B-G-1~~ B6.30	~~APR1-1300-S54~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~	~~SUR~~			~~FNP-0-NDE-100.11~~	Deleted	PC-01
B-G-1 B6.30	APR1-1300-S54 Figure 016	REACTOR VESSEL STUDS	ALA-36		VOL		FNP-0-NDE-100.39		
B-G-1 B6.30	APR1-1300-S55 Figure 016	REACTOR VESSEL STUDS	ALA-36		VOL		FNP-0-NDE-100.39		
~~B-G-1~~ B6.30	~~APR1-1300-S55~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~	~~SUR~~			~~FNP-0-NDE-100-11~~	Deleted	PC-01
~~B-G-1~~ B6 30	~~APR1-1300-S56~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~	~~SUR~~			~~FNP-0-NDE-100-11~~	Deleted	PC-01
B-G-1 B6.30	APR1-1300-S56 Figure 016	REACTOR VESSEL STUDS	ALA-36		VOL		FNP-0-NDE-100.39		
~~B-G-1~~ B6.30	~~APR1-1300-S57~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~	~~SUR~~			~~FNP-0-NDE-100.11~~	Deleted	PC-01
B-G-1 B6.30	APR1-1300-S57 Figure 016	REACTOR VESSEL STUDS	ALA-36		VOL		FNP-0-NDE-100.39		
~~B-G-1~~ B6 30	~~APR1-1300-S58~~ Figure 016	~~REACTOR VESSEL STUDS~~	~~ALA-36~~	~~SUR~~			~~FNP-0-NDE-100.11~~	Deleted	PC-01

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B-G-1 B6.30	APR1-1300-S58 Figure 016	REACTOR VESSEL STUDS	ALA-36		VOL		FNP-0-NDE-100.39	
B-G-1 B6.50	APR1-1300-W01 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100 21	
B-G-1 B6 50	APR1-1300-W14 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6.50	APR1-1300-W15 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6.50	APR1-1300-W24 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6.50	APR1-1300-W25 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6.50	APR1-1300-W27 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6.50	APR1-1300-W28 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6.50	APR1-1300-W29 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6.50	APR1-1300-W30 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100 21	
B-G-1 B6 50	APR1-1300-W31 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6.50	APR1-1300-W32 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6 50	APR1-1300-W51 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6.50	APR1-1300-W52 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100 21	
B-G-1 B6.50	APR1-1300-W53 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100 21	

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B-G-1 B6 50	APR1-1300-W54 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100 21	
B-G-1 B6 50	APR1-1300-W55 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6.50	APR1-1300-W56 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-G-1 B6 50	APR1-1300-W57 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100 21	
B-G-1 B6 50	APR1-1300-W58 Figure	REACTOR VESSEL WASHERS			VT-1		FNP-0-NDE-100.21	
B-D B3.110	APR1-2100-10 Figure 008	PRZ UPPER HD. TO NOZZLE WELD	APR-7		SUR		FNP-0-NDE-100.11	(SUPPLEMENTAL SURFACE EXAM) RR-6
B-D B3.110	APR1-2100-10 Figure 008	PRZ UPPER HD. TO NOZZLE WELD	APR-7		VOL		FNP-0-NDE-100.34	(SUPPLEMENTAL SURFACE EXAM) RR-6
B-D B3.120	APR1-2100-10IR Figure 008	PRZ NOZ-INSIDE RADIUS	ALA-38		VOL		FNP-0-NDE-100.38	
B-D B3.110	APR1-2100-9 Figure 008	PRZ UPPER HD. TO NOZZLE WELD	APR-7		SUR		FNP-0-NDE-100.11	(SUPPLEMENTAL SURFACE EXAM) RR-6
B-D B3.110	APR1-2100-9 Figure 008	PRZ UPPER HD. TO NOZZLE WELD	APR-7		VOL		FNP-0-NDE-100.34	(SUPPLEMENTAL SURFACE EXAM) RR-6
B-D B3.120	APR1-2100-9IR Figure 008	PRZ NOZ-INSIDE RADIUS	ALA-38		VOL		FNP-0-NDE-100 38	
B-G-2 B7.30	APR1-3100-N01 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N02 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N03 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N04 Figure	STEAM GEN NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.

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B-G-2 B7.30	APR1-3100-N05 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N06 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N07 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N08 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N09 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N10 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N11 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N12 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N13 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N14 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N15 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N16 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N17 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7 30	APR1-3100-N18 Figure	STEAM GEN NUTS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7 30	APR1-3100-N19 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.

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B-G-2 B7.30	APR1-3100-N20 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N21 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N22 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N23 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N24 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N25 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N26 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N27 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N28 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N29 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N30 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N31 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-N32 Figure	STEAM GEN. NUTS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S01 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S02 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.

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B-G-2 B7.30	APR1-3100-S03 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S04 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S05 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S06 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S07 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S08 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S09 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S10 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S11 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S12 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7 30	APR1-3100-S13 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S14 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S15 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7 30	APR1-3100-S16 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7 30	APR1-3100-S17 Figure	STEAM GEN STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA

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B-G-2 B7.30	APR1-3100-S18 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S19 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S20 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S21 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S22 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S23 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S24 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S25 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S26 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S27 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100.21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S28 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S29 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7.30	APR1-3100-S30 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.
B-G-2 B7 30	APR1-3100-S31 Figure	STEAM GEN. STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA
B-G-2 B7 30	APR1-3100-S32 Figure	STEAM GEN STUDS			VT-1		FNP-0-NDE-100 21	PSI DONE AT ENSA.

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B-F B5.70	APR1-4100-25RDM Figure 012	SAFE-END TO NOZZLE	ALA-53		SUR		FNP-0-NDE-100.5	ADDED PER STEAM GENERATOR REPLACEMENT DURING 2R14. PSI DONE AT ENSA. RR-46
B-F B5.70	APR1-4100-25RDM Figure 012	SAFE-END TO NOZZLE	ALA-53		VOL		FNP-0-NDE-100.31	ADDED PER STEAM GENERATOR REPLACEMENT DURING 2R14. PSI DONE AT ENSA. RR-46
B-F B5.70	APR1-4100-26RDM Figure 012	NOZZLE TO SAFE-END	ALA-53		SUR		FNP-0-NDE-100.5	ADDED PER STEAM GENERATOR REPLACEMENT DURING 2R14. PSI DONE AT ENSA. RR-46
B-F B5.70	APR1-4100-26RDM Figure 012	NOZZLE TO SAFE-END	ALA-53		VOL		FNP-0-NDE-100.31	ADDED PER STEAM GENERATOR REPLACEMENT DURING 2R14. PSI DONE AT ENSA. RR-46
B-G-2 B7.70	APR1-4101-QV001B (B) Figure	VALVE BOLTING			VT-1		FNP-0-NDE-100 21	Group 1. RR-23
~~B-M-2~~ B12.50	~~APR1-4101-QV001B~~ Figure Internal	~~COPES VLV BODY 12" GATE VLV RHR~~			~~VT-3~~		~~FNP-0-NDE-100.23~~	~~Group 1. Inspect one per group if~~ disassembled. Deleted
B-G-2 B7.70	APR1-4101-QV016B (B) Figure	VALVE BOLTING			VT-1		FNP-0-NDE-100.21	Group 1. RR-23
~~B-M-2~~ B12.50	~~APR1-4101-QV016B~~ Figure Internal	~~COPES VLV BODY 12" GATE VLV RHR~~			~~VT-3~~		~~FNP-0-NDE-100 23~~	~~Group 1. Inspect one per group if~~ disassembled.
B-G-2 B7.70	APR1-4102-QV032A (B) Figure	VALVE BOLTING			VT-1		FNP-0-NDE-100.21	Group 5. RR-23
~~B-M-2~~ B12.50	~~APR1-4102-QV032A~~ Figure Internal	~~COPES 12" CHK VLV ACCUM DISCH~~			~~VT-3~~		~~FNP-0-NDE-100 23~~	~~Group 5. Inspect one per group if~~ disassembled.
~~B-M-2~~ B12.50	~~APR1-4102-QV037A~~ Figure Internal	~~COPES 12" CHK VLV ACCUM DISCH~~			~~VT-3~~		~~FNP-0-NDE-100.23~~	~~Group 5. Inspect one per group if~~ disassembled.
~~B-M-2~~ B12 50	~~APR1-4103-QV021G~~ Figure Internal	~~VELAN VALVE BODY 6" CHK VLV RHR~~			~~VT-3~~		~~FNP-0-NDE-100.23~~	~~Group 2. Inspect one per group if~~ disassembled.
~~B-M-2~~ B12 50	~~APR1-4103-QV051G~~ Figure Internal	VELAN VALVE BODY 6" CHK VLV RHR			VT-3		FNP-0-NDE-100 23	Group 2 Inspect one per group if disassembled

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(89) Code Cat. (89) Item No.	Component No. Figure No.	Component Desc.	Cal Block No.	Method Sur	Method Vol	Method Vis	NDE Procedures	Remarks
~~B-M-2~~ B12.50	~~APR1-4104-QV076A~~ Figure Internal	~~VELAN VALVE BODY 6" CHK VLV SI~~			~~VT-3~~		~~FNP-0-NDE-100.23~~	~~Group 3. Inspect one per group if~~ disassembled.
~~B-M-2~~ B12.50	~~APR1-4104-QV077A~~ Figure Internal	VELAN VALVE BODY 6" CHK VLV SI			~~VT-3~~		~~FNP-0-NDE-100 23~~	~~Group 3. Inspect one per group if~~ disassembled.
B-G-2 B7.50	APR1-4109-FLG-1 Figure	FLANGE BOLTING			VT-1		FNP-0-NDE-100 21	RR-23
~~B-M-2~~ B12.50	~~APR1-4201-QV032B~~ Figure Internal	~~COPES 12" CHK VLV ACCUM DISCH~~			~~VT-3~~		~~FNP-0-NDE-100 23~~	~~Group 5. Inspect one per group if~~ disassembled.
~~B-M-2~~ B12.50	~~APR1-4201-QV037B~~ Figure Internal	COPES 12" CHK VLV ACCUM DISCH			~~VT-3~~		~~FNP-0-NDE-100.23~~	~~Group 5. Inspect one per group if~~ disassembled.
B-M-2 B12.50	APR1-4202-QV021B Figure Internal	VELAN VALVE BODY 6" CHK VLV RHR			VT-3		FNP-0-NDE-100.23	~~Group 2. Inspect one per group if~~ disassembled.
B-M-2 B12.50	APR1-4203-QV051B Figure Internal	VELAN VALVE BODY 6" CHK VLV RHR			VT-3		FNP-0-NDE-100.23	Group 2. Inspect one per group if disassembled.
~~B-M-2~~ B12.50	~~APR1-4204-QV076B~~ Figure Internal	~~VELAN VALVE BODY 6" CHK VLV SI~~			VT-3		FNP-0-NDE-100 23	Group 3. Inspect one per group if disassembled.
~~B-M-2~~ B12.50	~~APR1-4204-QV077B~~ Figure Internal	~~VELAN VALVE BODY 6" CHK VLV SI~~			~~VT-3~~		~~FNP-0-NDE-100 23~~	~~Group 3. Inspect one per group if~~ disassembled.
B-M-2 B12.50	APR1-4301-QV001A Figure Internal	COPES VLV BODY 12" GATE VLV RHR			VT-3		FNP-0-NDE-100.23	Group 1. Inspect one per group if disassembled.
B-M-2 B12.50	APR1-4301-QV016A Figure Internal	COPES VLV BODY 12" GATE VLV RHR			VT-3		FNP-0-NDE-100 23	~~Group 1. Inspect one per group if~~ disassembled.
B-G-2 B7.70	APR1-4302-QV032C (B) Figure	VALVE BOLTING			VT-1		FNP-0-NDE-100 21	Group 5. RR-23
~~B-M-2~~ B12.50	~~APR1-4302-QV032C~~ Figure Internal	~~COPES 12" CHK VLV ACCUM DISCH~~			~~VT-3~~		~~FNP-0-NDE-100 23~~	~~Group 5. Inspect one per group if~~ disassembled.
B-G-2 B7 70	APR1-4302-QV037C (B) Figure	VALVE BOLTING			VT-1		FNP-0-NDE-100 21	Group 5. RR-23
~~B-M-2~~ B12 50	~~APR1-4302-QV037C~~ Figure Internal	~~COPES 12" CHK VLV ACCUM DISCH~~			VT-3		FNP-0-NDE-100 23	Group 5 Inspect one per group if disassembled

(89) Code Cat. (89) Item No.	Component No. Figure No.	Component Desc.	Cal Block No.	Method Sur	Method Vol	Method Vis	NDE Procedures	Remarks	
~~B-M-2~~ B12.50	~~APR1-4303-QV021A~~ Figure Internal	~~VELAN VALVE BODY 6" CHK VLV RHR~~			~~VT-3~~		~~FNP-0-NDE-100.23~~	~~Group 2. Inspect one per group if~~ disassembled.	PC-02
~~B-M-2~~ B12.50	~~APR1-4304-QV051A~~ Figure Internal	~~VELAN VALVE BODY 6" CHK VLV RHR~~			~~VT-3~~		~~FNP-0-NDE-100.23~~	~~Group 2. Inspect one per group if~~ disassembled.	
~~B-M-2~~ B12.50	~~APR1-4305-V077C~~ Figure Internal	~~VELAN VALVE BODY 6" CHK VLV SI~~			~~VT-3~~		~~FNP-0-NDE-100.23~~	~~Group 3. Inspect one per group if~~ disassembled.	
B-F B5.40	APR1-4501-1DM Figure 012	PRZ NOZZLE TO SAFE-END	ALA-5		SUR		FNP-0-NDE-100.5		
B-F B5.40	APR1-4501-1DM Figure 012	PRZ NOZZLE TO SAFE-END	ALA-5		VOL		FNP-0-NDE-100.31		
~~B-M-2~~ B12.50	~~APR1-4501-QV031A~~ Figure Internal	~~CROSBY VLV BODY 6" RLF VLV PZR~~			~~VT-3~~		~~FNP-0-NDE-100.23~~	~~Group 4. Inspect one per group if~~ disassembled.	PC-02
~~B-M-2~~ B12.50	~~APR1-4502-QV031B~~ Figure Internal	~~CROSBY VLV BODY 6" RLF VLV PZR~~			~~VT-3~~		~~FNP-0-NDE-100.23~~	~~Group 4. Inspect one per group if~~ disassembled.	
~~B-M-2~~ B12.50	~~APR1-4503-QV031C~~ Figure Internal	~~CROSBY VLV BODY 6" RLF VLV PZR~~			~~VT-3~~		~~FNP-0-NDE-100.23~~	~~Group 4. Inspect one per group if~~ disassembled.	
~~B-L-2~~ B12.20	~~APR1-5100-1C~~ Figure Internal	~~R.C. PUMP CASINGS~~			~~VT-3~~		~~FNP-0-NDE-100.23~~	INSPECT ONE PUMP CASING ~~IF A~~ PUMP IS DISASSEMBLED.	
F-A F1.40	APR1-5100-CS-1 Figure 037	REACTOR COOLANT PUMP 2A Q2B41P001A	-		VT-3		FNP-0-NDE-100.23		
F-A F1.40	APR1-5100-CS-2 Figure 037	REACTOR COOLANT PUMP 2A Q2B41P001A	-		VT-3		FNP-0-NDE-100.23		
F-A F1.40	APR1-5100-CS-3 Figure 037	REACTOR COOLANT PUMP 2A Q2B41P001A	-		VT-3		FNP-0-NDE-100.23		
~~B-L-2~~ B12.20	~~APR1-5200-1C~~ Figure Internal	R C. PUMP CASINGS			VT-3		FNP-0-NDE-100.23	INSPECT ONE PUMP CASING ~~IF A~~ PUMP IS DISASSEMBLED.	PC-02
B-L-2 B12 20	APR1-5300-1C Figure Internal	R C PUMP CASINGS			VT-3		FNP-0-NDE-100 23	INSPECT ONE PUMP CASING IF A PUMP IS DISASSEMBLED	

(89) Code Cat. (89) Item No.	Component No. Figure No.	Component Desc.	Cal Block No.	Method Sur	Vol	Vis	NDE Procedures	Remarks
R-G/AUG B1.14	APR1-5300-FW1 Figure	R C. PUMP FLYWHEEL		SUR-AUG			FNP-0-NDE-100.5	Perform surface exam on any flywheel that is disassembled. Any flywheel not previously disassembled & surface examined, will be given a volumetric exam on inner half-radius during third period.
C-B C2.31	APR2-3500-4 Figure 027	RESID HX REINF PLATE/VSL WELD		SUR			FNP-0-NDE-100.5	
C-A C1.10	APR2-3500-A Figure 023	RESIDUAL HX SHELL TO FLANGE	ALA-32	VOL			~~FNP-0-NDE-100.44~~ FNP-0-NDE-100.31	
F-A F1.20	APR2-4100-2MS-R613 Figure 037	SPRING CAN W/ATT	-	VT-3			FNP-0-NDE-100.23	
F-A F1.20	APR2-4101-2MS-R511 Figure 037	2 DIRECTIONAL RESTRAINT W/STANC (3)	-	VT-3			FNP-0-NDE-100 23	
F-A F1.40	APR2-5130-CS-1 Figure 037	RHR PUMP (A) Q2E11P001A-A	-	VT-3			FNP-0-NDE-100 23	
F-A F1.40	APR2-5130-CS-2 Figure 037	RHR PUMP (A) Q2E11P001A-A	-	VT-3			FNP-0-NDE-100.23	
F-A F1.40	APR2-5130-CS-3 Figure 037	RHR PUMP (A) Q2E11P001A-A	-	VT-3			FNP-0-NDE-100.23	
F-A F1.40	D200039-1-CS TANK Figure 037	ANCHOR BOLT RING W/ATT	-	VT-3			FNP-0-NDE-100.23	
D-A D1.10	D200039-1-CS TANK (ATT) Figure	ANCHOR BOLT RING W/ATT		VT-1			FNP-0-NDE-100.21	
F-A F1.40	D200039-1-RM P 2A Figure 037	RMW PUMP Q2P12P001A-A	-	VT-3			FNP-0-NDE-100.23	
F-A F1 40	D200089-1-SW 501A Figure 037	SW STRAINER Q2P16F501A	-	VT-3			FNP-0-NDE-100 23	
D-A D1 10	D200089-1-SW 501A (ATT) Figure	SW STRAINER Q2P16F501A		VT-1			FNP-0-NDE-100.21	

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(89) Code Cat. (89) Item No.	Component No. Figure No.	Component Desc.	Cal Block No.	Method Sur	Method Vol	Method Vis	NDE Procedures	Remarks
~~F-A~~ F1.30	~~EG2-045-2AFW-R50~~ Figure 038	~~TWO DIRECTIONAL RESTRAINT~~	~~-~~		~~VT-3~~		~~FNP-0-NDE-100.23~~	
F-A F1.30	EG2-046-2AFW-R62 Figure 038	ONE DIRECTIONAL RESTRAINT	-		VT-3		FNP-0-NDE-100.23	
~~F-A~~ F1.30	~~EG2-046-2AFW-R76~~ Figure 038	~~TWO DIRECTIONAL RESTRAINT W/ATT~~	~~-~~		~~VT-3~~		~~FNP-0-NDE-100.23~~	
D-A D1.20	EG2-046-2AFW-R76 (ATT) Figure	TWO DIRECTIONAL RESTRAINT W/ATT			VT-1		FNP-0-NDE-100 21	
~~F-A~~ F1.30	~~EG2-046-2AFW-R83~~ Figure 038	~~TWO DIRECTIONAL RESTRAINT~~	~~-~~		~~VT-3~~		~~FNP-0-NDE-100.23~~	
F-A F1.30	EG2-077-2SW-R22 Figure 038	TWO DIRECTIONAL RESTRAINT W/ATT	-		VT-3		FNP-0-NDE-100.23	
D-A D1.20	EG2-077-2SW-R22 (ATT) Figure	TWO DIRECTIONAL RESTRAINT W/ATT			VT-1		FNP-0-NDE-100.21	
F-A F1.30	EG2-200-2SW-R726 Figure 038	SWAY STRUT	-		VT-3		FNP-0-NDE-100.23	
F-A F1.30	EG2-202-2SW-R716 Figure 038	TWO DIRECTIONAL RESTRAINT W/ ATT	-		VT-3		FNP-0-NDE-100.23	
F-A F1.30	EG2-203-2SW-R736 Figure 038	TWO DIRECTIONAL RESTRAINT	-		VT-3		FNP-0-NDE-100.23	
F-A F1.30	EG2-203-2SW-R823 Figure 038	ONE DIRECTIONAL RESTRAINT	-		VT-3		FNP-0-NDE-100 23	
F-A F1.30	EG2-203-2SW-R831 Figure 038	SWAY STRUT	-		VT-3		FNP-0-NDE-100.23	
F-A F1.30	EG2-210-2SW-R48 Figure 038	SWAY STRUT	-		VT-3		FNP-0-NDE-100.23	
F-A F1.30	EG2-211-2SW-R88 Figure 038	ONE DIRECTIONAL RESTRAINT W/ATT	-		VT-3		FNP-0-NDE-100 23	
~~D-A~~ D1 20	~~EG2-211-2SW-R88 (ATT)~~ Figure	~~ONE DIRECTIONAL RESTRAINT W/ATT~~			~~VT-1~~		~~FNP-0-NDE-100.21~~	

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(89) Code Cat. (89) Item No.	Component No. Figure No.	Component Desc.	Cal Block No.	Method Sur	Method Vol	Method Vis	NDE Procedures	Remarks
F-A F1.30	EG2-211-SW-2A13 Figure 038	ANCHOR W/ ATT	-		VT-3		FNP-0-NDE-100 23	
D-A D1.20	EG2-211-SW-2A13 (ATT) Figure	ANCHOR W/ ATT			VT-1		FNP-0-NDE-100 21	RC-02
F-A F1.30	EG2-218-2SW-R568 Figure 038	ONE DIRECTIONAL RESTRAINT W/ATT	-		VT-3		FNP-0-NDE-100.23	
D-A D1.20	EG2-218-2SW-R568 (ATT) Figure	ONE DIRECTIONAL RESTRAINT W/ATT			VT-1		FNP-0-NDE-100 21	RC-02
F-A F1.30	EG2-220-2SW-BR12 Figure 038	SNUBBER (H)(2) W/ATT	-		VT-3		FNP-0-NDE-100 23	RR-12
D-A D1.20	EG2-220-2SW-BR12 (ATT) Figure	SNUBBER (H)(2) W/ATT			VT-1		FNP-0-NDE-100.21	RR-12
F-A F1.30	EG2-221-2SW-R505 Figure 038	TWO DIRECTIONAL RESTRAINT	-		VT-3		FNP-0-NDE-100.23	
D-A D1.20	EG2-221-SW-2A09 (ATT) Figure	ANCHOR W/ATT			VT-1		FNP-0-NDE-100.21	RC-02
F-A F1.30	EG2-248-2CCW-R213 Figure 038	3 DIRECTIONAL RESTRAINT W/ATT	-		VT-3		FNP-0-NDE-100 23	
D-A D1.20	EG2-248-2CCW-R213 (ATT) Figure	3 DIRECTIONAL RESTRAINT W/ATT			VT-1		FNP-0-NDE-100.21	
F-A F1.30	EG2-251-2CCW-R83 Figure 038	TWO DIRECTIONAL RESTRAINT	-		VT-3		FNP-0-NDE-100.23	
F-A F1.30	EG2-255-2CCW-R245 Figure 038	SNUBBER (2) W/STANCHION (2)			VT-3		FNP-0-NDE-100.23	RR-12 RC-02
F-A F1.30	EG2-255-CCW-2A28 Figure 038	ANCHOR W/ATT	-		VT-3		FNP-0-NDE-100.23	
D-A D1.20	EG2-255-CCW-2A28 (ATT) Figure	ANCHOR W/ATT			VT-1		FNP-0-NDE-100 21	
F-A F1 30	EG2-260-2CCW-R445 Figure 038	ONE DIRECTIONAL RESTRAINT W/ATT	-		VT-3		FNP-0-NDE-100 23	

J. M. FARLEY NUCLEAR PLANT
OUTAGE PLAN
Interval 3 Period 1 Outage 1

(89) Code Cat. (89) Item No.	Component No. Figure No.	Component Desc.	Cal Block No.	Method Sur	Vol	Vis	NDE Procedures	Remarks
D-A D1.20	EG2-260-2CCW-R445 (ATT) Figure	ONE DIRECTIONAL RESTRAINT W/ATT			VT-1		FNP-0-NDE-100.21	
F-A F1.30	EG2-317-2PA-R34 Figure 038	ONE DIRECTIONAL RESTRAINT	-		VT-3		FNP-0-NDE-100.23	
F-A F1.30	EG2-448-2CCW-R165 Figure 038	TWO DIRECTIONAL RESTRAINT	-		VT-3		FNP-0-NDE-100.23	
F-A F1.30	EG2-449-2CCW-R147 Figure 038	SPRING CAN	-		VT-3		FNP-0-NDE-100.23	
F-A F1.30	EG2-480-2AFW-R149 Figure 038	SWAY STRUT	-		VT-3		FNP-0-NDE-100.23	
~~F-A F1.30~~	~~EG2-481-AFW-2A6 Figure 038~~	~~ANCHOR W/ATT~~			~~VT-3~~		~~FNP-0-NDE-100 23~~	PC-02
~~D-A D1.20~~	~~EG2-481-AFW-2A6 (ATT) Figure~~	~~ANCHOR W/ATT~~	-		~~VT-1~~		~~FNP-0-NDE-100 21~~	
F-A F1.30	EG2-482-2AFW-R143X Figure 038	SPRING CAN (2) W/STANCHION	-		VT-3		FNP-0-NDE-100 23	
F-A F1.30	EG2-482-2AFW-R66 Figure 038	TWO DIRECTIONAL RESTRAINT	-		VT-3		FNP-0-NDE-100 23	
F-A F1.30	EG2-494-2SW-R288 Figure 038	TWO DIRECTIONAL RESTRAINT	-		VT-3		FNP-0-NDE-100 23	
F-A F1.30	EG2-496-2SW-R264 Figure 038	TWO DIRECTIONAL RESTRAINT	-		VT-3		FNP-0-NDE-100 23	
F-A F1.30	EG2-496-2SW-R268 Figure 038	3 DIRECTIONAL RESTRAINT W/ATT	-		VT-3		FNP-0-NDE-100 23	
~~D-A D1 20~~	~~EG2-496-2SW-R268 (ATT) Figure~~	~~3 DIRECTIONAL RESTRAINT W/ATT~~			~~VT-1~~		~~FNP-0-NDE-100.21~~	PC-02
F-A F1 30	EG2-548-AS-2A4 Figure 038	ANCHOR W/ATT	-		VT-3		FNP-0-NDE-100 23	
D-A D1 20	EG2-548-AS-2A4 (ATT) Figure	ANCHOR W/ATT	-		VT-1		FNP-0-NDE-100 21	PC-02

J. M. FARLEY NUCLEAR PLANT
OUTAGE PLAN
Interval 3 Period 1 Outage 1

(89) Code Cat. (89) Item No.	Component No. Figure No.	Component Desc.	Cal Block No.	Method Sur	Vol	Vis	NDE Procedures	Remarks
F-A F1.30	EG2-620-2RM-R133 Figure 038	TWO DIRECTIONAL RESTRAINT	-		VT-3		FNP-0-NDE-100.23	

D

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1.1

EXAMINATION SUMMARY
FOR UNIT 2
INTERVAL 3 PERIOD 1 OUTAGE 1

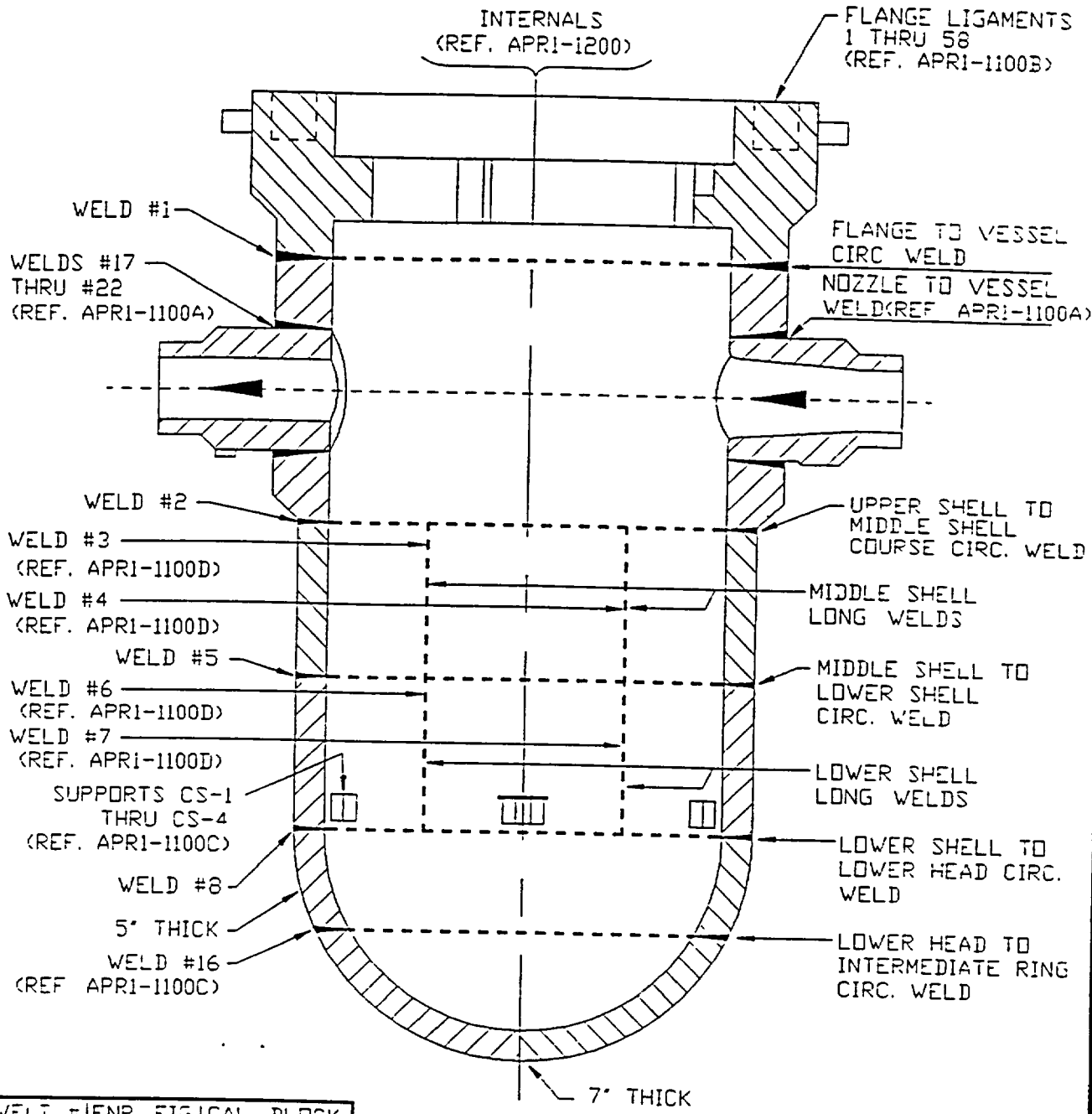
DRAWING APR1-1100
REACTOR VESSEL

ITEM NO	VOLUMERIC			SURFACE			VISUAL			REMARKS
	NI	NRI	RI	NI	NRI	RI	NI	NRI	RI	
1	X									

REACTOR VESSEL

Q2B11H001

APR1-1100



WELD #	FNP. FIG	CAL. BLOCK
1	001	ALA-RV-2 ALA-RV-5
2	001	ALA-RV-5
5	001	ALA-RV-5
8	001	ALA-RV-1

VENDOR MANUAL U-214660

REV	DATE	BY	CHK'D	DESCRIPTION	DEW			
1	7-21-97	HSK	TLS	REVISED PER REA 96-1295 REV.0				
0	11-22-91	SDH	JAR	ISSUED PER PCN S-91-2-7763.	CAB/R	HGM	PKC/AH	DML
					APPR 1	APPR 2	APPR 3	APPR 4

(CAD) APR11100 HSK-1
DCAD

Southern Company Services, Inc for

ALABAMA POWER COMPANY
JOSEPH M. FARLEY NUCLEAR PLANT
UNIT 2

REACTOR VESSEL

SCS DRAWING NUMBER	SHEET	REV
A-356454	1	1

WESTINGHOUSE NUCLEAR SERVICES DIVISION
INSPECTION SERVICES

WELD ULTRASONIC EXAMINATION
INSERVICE

PLANT: J. M. Farley	UNIT: 2	SKETCH: APR1-1100
SYSTEM / COMP.: REACTOR VESSEL		PROCEDURE: FNP-ISI-54, REV. 0
EXAMINER: [signature]		DATE: 09/19/02

EQUIPMENT	TRANSDUCER			SCAN DIRECTION											CALIBRATION CHECK
INST. S / N: Staveley 136-897K	S/N	G03136		G03136					G03136						INITIAL TIME: 03:17 / 09-19-02
REP. RATE: 1K	SIZE	1.0		1.0					1.0						
	FREQ.	2.25 MHz		2.25 MHz					2.25 MHz						
REJECT: OFF	ANGLE	0°		0°					0°						
DAMPING: 500 OHMS	CALIBRATION REFLECTOR LOCATION	SIGNAL AMPLITUDE	SWEEP POSITION	METAL PATH					DISTANCE FROM SCRIBE / REF. LINE TO						FINAL TIME: 06:20 / 09-19-02
				-20%	-50%	PEAK	+50%	+20%	-20%	-50%	PEAK	+50%	+20%		
FILTER: 1	D	80%	4 5	32"	32"	32"	32"	32"	-2.5"	-1.5"	0	1.5"	2.5"		
	C	80%	5.2	38"	38"	38"	38"	38"	-3"	-2"	0	2"	3"		
LIN. CHECK: SAT	B	70%	6.2	44"	44"	44"	44"	44"	-3.5"	-2.3"	0	2.3"	3 5"		
S. U. CABLE: 125' / RG174															
COUPLANT: DEMIN WATER															CAL. BLOCK: ALA-RV-2
															THICKNESS: 14"
	CAL. GAIN	72.8 dB													SURFACE THERMOMETER S/N: 48881
															TEMPERATURE: 88° F

WELD NUMBER	TEMP.	BEAM ANGLE	SCAN	EXAMINATION LIMITATIONS	EXAM SURFACE	RESULTS NI	RESULTS NRI	RESULTS RI	REMARKS
1	102° F	0°	YES	NONE	SMOOTH	X			REFERENCE ULTRASONIC INDICATION DATA SHEET FOR GEOMETRY
				[signature] LVII 9-24-02					
				ANII REVIEW: [signature] 9/24/02					

WESTINGHOUSE NUCLEAR SERVICES DIVISION

ULTRASONIC INDICATION DATA

PLANT: J M. FARLEY | UNIT: 2 | SKETCH: APR1-1100

SYST. / COMP.: REACTOR VESSEL | PROCEDURE: FNP-ISI-54, REV. 0

EXAMINER: [signature] | DATE: 9-19-02

LINEARITY AND CAL. CHECK: SAT | CAL. BLOCK THICKNESS: 14"

WELD NUMBER	INDICATION LENGTH		MIN 50%		MIN. 100%		PEAK			MAX. 100%		MAX. 50%		BEAM		THICKNESS			REMARKS
	FROM	TO	SWP.	IN. TO REF.	SWP.	IN. TO REF.	SWP.	IN. TO REF.	+/- DAC AMPL.	SWP.	IN. TO REF.	SWP.	IN. TO REF.	ANGLE	DIR.	SURF. 2	WELD	SURF. 5	
1	(1)						4.4	1.2"	100%					0°	(2)	N/A	9.25"	N/A	REF. SKETCH

(1) For 360°

(2) From reactor vessel head seating surface

Danny J. Settles III 9-24-02

ANII REVIEW: [signature] 9/24/02

WESTINGHOUSE NUCLEAR SERVICES DIVISION
INSPECTION SERVICES

WELD ULTRASONIC EXAMINATION
INSERVICE

PLANT: J. M. Farley	UNIT: 2	SKETCH: APR1-1100
SYSTEM / COMP.: REACTOR VESSEL		PROCEDURE: FNP-ISI-54, REV. 0
EXAMINER: MIXON, W.A.		DATE: 09/19/02

EQUIPMENT	TRANSDUCER			SCAN DIRECTION											CALIBRATION CHECK
INST. S / N: Staveley 136-472F	S/N	0094KW		0094KW					0094KW						INITIAL TIME: 03:15 / 09-19-02
REP. RATE: 1K	SIZE	1.0		1.0					1.0						
	FREQ.	2.25 MHz		2.25 MHz					2.25 MHz						
REJECT: OFF	ANGLE	6° OUT		6° OUT					6° OUT						
DAMPING: 500 OHMS	CALIBRATION REFLECTOR LOCATION	SIGNAL AMPLITUDE	SWEEP POSITION	METAL PATH					DISTANCE FROM SCRIBE / REF. LINE TO						FINAL TIME: 06.18 / 09-19-02
				-20%	-50%	PEAK	+50%	+20%	-20%	-50%	PEAK	+50%	+20%		
FILTER: 1	E	80%	4.9	29.2"	29.2"	29.2"	29.2"	29.2"	1.9"	2.2"	2.5"	4.0"	4.6"		
LIN. CHECK: SAT	D	50%	6.8	32.2"	32.2"	32.2"	32.2"	32 2"	1.7"	2.6"	3.0"	5.5"	6.2"		
	C	35%	7.9	38.2"	38.2"	38 2"	38.2"	38.2"	1.6"	2.4"	4.7"	6.6"	7.8"		
S. U. CABLE: 125' / RG174															
COUPLANT: DEMIN WATER															CAL. BLOCK: ALA-RV-2
															THICKNESS: 14"
	CAL. GAIN	66.4 dB													SURFACE THERMOMETER S/N: 48881
															TEMPERATURE: 88° F

WELD NUMBER	TEMP.	BEAM ANGLE	SCAN	EXAMINATION LIMITATIONS	EXAM SURFACE	RESULTS NI	RESULTS NRI	RESULTS RI	REMARKS
1	102° F	6°	YES	NONE	SMOOTH	X			
				Darryl A. Fletcher LVIII 9-24-02					
				SNII Review: [illegible] 9/24/02					

WESTINGHOUSE NUCLEAR SERVICES DIVISION
INSPECTION SERVICES

WELD ULTRASONIC EXAMINATION
INSERVICE

PLANT	UNIT	SKETCH
J M. Farley	2	APR1-1100
SYSTEM / COMP.		PROCEDURE
REACTOR VESSEL		FNP-ISI-54, REV. 0
EXAMINER Richard Money		DATE 09/19/02

EQUIPMENT	TRANSDUCER			SCAN DIRECTION											CALIBRATION CHECK
INST. S / N Staveley 136-911K	S/N	00TKMN		00TKMN					00TKMN						INITIAL TIME 03:20 / 09-19-02
REP. RATE 1K	SIZE	1.0		1.0					1.0						
	FREQ.	2.25 MHz		2.25 MHz					2.25 MHz						
REJECT OFF	ANGLE	6° IN		6° IN					6° IN						
DAMPING 500 OHMS	CALIBRATION REFLECTOR LOCATION	SIGNAL AMPLITUDE	SWEEP POSITION	METAL PATH					DISTANCE FROM SCRIBE / REF. LINE TO						FINAL TIME 06:16 / 09-19-02
				-20%	-50%	PEAK	+50%	+20%	-20%	-50%	PEAK	+50%	+20%		
FILTER 1	E	80%	4.9	29.2"	29.2"	29.2"	29.2"	29.2"	1.9"	2.2"	2.5"	4.0"	4.6"		
LIN. CHECK SAT	D	50%	6.8	32.2"	32.2"	32.2"	32.2"	32.2"	1.7"	2.6"	3 0"	5.5"	6.2"		
	C	50%	7.9	38 2"	38.2"	38.2"	38.2"	38.2"	1.6"	2.4"	4.7"	6.6"	7.8"		
S. U. CABLE 125' / RG174															
COUPLANT DEMIN WATER															CAL. BLOCK ALA-RV-2
															THICKNESS 14"
	CAL. GAIN	76.6 dB													SURFACE THERMOMETER S/N 48881
															TEMPERATURE 88° F

WELD NUMBER	TEMP.	BEAM ANGLE	SCAN	EXAMINATION LIMITATIONS	EXAM SURFACE	RESULTS NI	NRI	RI	REMARKS
1	102° F	6°	YES	NONE	SMOOTH	X			
				Barry L. Lykins WSI 9-24-02					
				ANII REVIEW: [illegible] 9/24/02					

WESTINGHOUSE NUCLEAR SERVICES DIVISION

ULTRASONIC INDICATION DATA

PLANT: J.M. FARLEY | UNIT: 2 | SKETCH: APR1-1100

SYST. / COMP.: REACTOR VESSEL | PROCEDURE: FNP-ISI-54, REV. 0

EXAMINER: Richard Mowery RICHARD MOWERY | DATE: 9-19-02

LINEARITY AND CAL. CHECK: SAT | CAL. BLOCK THICKNESS: 14"

WELD NUMBER	INDICATION LENGTH		MIN. 50%		MIN. 100%		PEAK			MAX. 100%		MAX. 50%		BEAM		THICKNESS			REMARKS
	FROM	TO	SWP.	IN. TO REF.	SWP.	IN. TO REF.	SWP.	IN. TO REF.	+/- DAC AMPL.	SWP.	IN. TO REF.	SWP.	IN. TO REF.	ANGLE	DIR.	SURF. 2	WELD	SURF. 5	
1	(1)						6.3	1 2"	100%					6° in	(2)	N/A	9.25"	N/A	REF. SKETCH

(1) For 360°

(2) From reactor vessel head seating surface

Darryl D. Sothers LVIII 9-24-02

ANII REVIEW: C G Ward 9/24/02

WESTINGHOUSE NUCLEAR SERVICES DIVISION
INSPECTION SERVICES

WELD ULTRASONIC EXAMINATION
INSERVICE

PLANT: J. M. Farley	UNIT: 2	SKETCH: APR1-1100
SYSTEM / COMP.: REACTOR VESSEL		PROCEDURE: FNP-ISI-54, REV. 0
EXAMINER: Paul Valden II / PAUL VALDEN / J D Finnyah		DATE: 09/19/02

EQUIPMENT	TRANSDUCER			SCAN DIRECTION											CALIBRATION CHECK
INST. S / N: Staveley 136-905K	S/N	00DRRP		00DRRP					00DRRP						INITIAL TIME: 03:26 / 09-19-02
REP. RATE: 1K	SIZE	1.0		1.0					1.0						
	FREQ.	2.25 MHz		2.25 MHz					2.25 MHz						
REJECT: OFF	ANGLE	12°		12°					12°						
DAMPING: 500 OHMS	CALIBRATION REFLECTOR LOCATION	SIGNAL AMPLITUDE	SWEEP POSITION	METAL PATH					DISTANCE FROM SCRIBE / REF. LINE TO						FINAL TIME: 06:14 / 09-19-02
				-20%	-50%	PEAK	+50%	+20%	-20%	-50%	PEAK	+50%	+20%		
FILTER: 1	E	80%	5.2	23.3"	23.4"	23.6"	23.9"	24.4"	2.9"	3.8"	5.3"	7.6"	8.2"		
LIN. CHECK: SAT	D	60%	6 8	32.3"	32.4"	32.7"	32.9"	33.2"	4.7"	5 7"	6.2"	7.3"	9.6"		
	C	50%	8.0	38 4"	38 6"	38.8"	(1)	(1)	4.2"	5.9"	8.0"	(1)	(1)		
S. U. CABLE: 125' / RG174															
COUPLANT: DEMIN WATER															CAL. BLOCK: ALA-RV-2
															THICKNESS: 14"
	CAL. GAIN	70.2 dB													SURFACE THERMOMETER S/N: 48881
															TEMPERATURE: 88° F

WELD NUMBER	TEMP.	BEAM ANGLE	SCAN	EXAMINATION LIMITATIONS	EXAM SURFACE	RESULTS NI	RESULTS NRI	RESULTS RI	REMARKS
1	102°F	12°	YES	NONE	SMOOTH	X			REFERENCE ULTRASONIC INDICATION DATA SHEET FOR GEOMETRY
									(1) NO MEASUREMENTS TAKEN DUE TO WIDTH OF BLOCK
				Harry H. Sotton WHL 9-24-02					
				ANII Review: C G Wand 9/24/02					

WESTINGHOUSE NUCLEAR SERVICES DIVISION

ULTRASONIC INDICATION DATA

PLANT: J.M. FARLEY | UNIT: 2 | SKETCH: APR1-1100

SYST. / COMP.: REACTOR VESSEL | PROCEDURE: FNP-ISI-54, REV. 0

EXAMINER: Paul Valden II PAUL VALDEN | DATE: 9-19-02

LINEARITY AND CAL. CHECK: SAT | CAL. BLOCK THICKNESS: 14"

WELD NUMBER	INDICATION LENGTH		MIN. 50%		MIN. 100%		PEAK			MAX. 100%		MAX. 50%		BEAM		THICKNESS			REMARKS
	FROM	TO	SWP.	IN. TO REF.	SWP.	IN. TO REF.	SWP.	IN. TO REF.	+/- DAC AMPL.	SWP.	IN. TO REF.	SWP.	IN. TO REF.	ANGLE	DIR.	SURF. 2	WELD	SURF. 5	
1	(1)						6.3	1.2"	100%					12°	(2)	N/A	9.25"	N/A	REF. SKETCH

(1) For 360°

(2) From reactor vessel head seating surface

Barry A. Fahler LVIII 9-24-02

ANDT REVIEW: CG Ward 9/24/02

WESTINGHOUSE NUCLEAR SERVICES DIVISION
INSPECTION SERVICES

WELD ULTRASONIC EXAMINATION
INSERVICE

PLANT	UNIT	SKETCH
J. M. Farley	2	APR1-1100
SYSTEM / COMP.		**PROCEDURE**
REACTOR VESSEL		FNP-ISI-54, REV. 0
EXAMINER John W Bell / D Furnyak		**DATE** 09/19/02

EQUIPMENT	TRANSDUCER			SCAN DIRECTION											CALIBRATION CHECK
INST. S / N Staveley 136-904K	S/N	00DRRJ		00DRRJ					00DRRJ						INITIAL TIME 03:10 / 09-19-02
REP. RATE 1K	SIZE	1.0		1.0					1.0						
	FREQ.	2.25 MHz		2.25 MHz					2 25 MHz						
REJECT OFF	ANGLE	16°		16°					16°						
DAMPING 500 OHMS	CALIBRATION REFLECTOR LOCATION	SIGNAL AMPLITUDE	SWEEP POSITION	METAL PATH					DISTANCE FROM SCRIBE / REF. LINE TO						FINAL TIME 06:09 / 09-19-02
				-20%	-50%	PEAK	+50%	+20%	-20%	-50%	PEAK	+50%	+20%		
FILTER 1	E	80%	5.2	29 5"	29.8"	30.2"	30.5"	30.7"	4.0"	4.6"	6.2"	7.8"	8 5"		
LIN. CHECK SAT	D	50%	7.2	32.6"	33.0'	33.3"	(1)	(1)	7.8"	8.3"	9.5"	(1)	(1)		
S. U. CABLE 125' / RG174															
COUPLANT DEMIN WATER															CAL. BLOCK ALA-RV-2
	CAL. GAIN	72.6 dB													THICKNESS 14"
															SURFACE THERMOMETER S/N 48881
															TEMPERATURE 88° F

WELD NUMBER	TEMP.	BEAM ANGLE	SCAN	EXAMINATION LIMITATIONS	EXAM SURFACE	RESULTS NI	NRI	RI	REMARKS
1	102° F	16°	YES	NONE	SMOOTH	X			REFERENCE ULTRASONIC INDICATION DATA SHEET FOR GEOMETRY
									(1) NO MEASUREMENTS TAKEN DUE TO WIDTH OF BLOCK
				Henry N. Jeffries LVIII 9-24-02					
				ANSI REVIEW C. Gilmand 9/24/02					

WESTINGHOUSE NUCLEAR SERVICES DIVISION

ULTRASONIC INDICATION DATA

PLANT: J.M. FARLEY | UNIT: 2 | SKETCH: APR1-1100

SYST. / COMP.: REACTOR VESSEL | PROCEDURE: FNP-ISI-54, REV. 0

EXAMINER: John W Bell | DATE: 9-19-02

LINEARITY AND CAL. CHECK: SAT | CAL. BLOCK THICKNESS: 14"

WELD NUMBER	INDICATION LENGTH		MIN. 50%		MIN. 100%		PEAK			MAX. 100%		MAX. 50%		BEAM		THICKNESS			REMARKS
	FROM	TO	SWP.	IN. TO REF.	SWP.	IN. TO REF.	SWP.	IN. TO REF.	+/- DAC AMPL.	SWP.	IN. TO REF.	SWP.	IN. TO REF.	ANGLE	DIR.	SURF. 2	WELD	SURF. 5	
1	(1)						6.7	1.2"	100%					16°	(2)	N/A	9.25"	N/A	REF. SKETCH

(1) For 360°

(2) From reactor vessel head seating surface

[illegible] 9-24-02

ANII REVIEW: [illegible] 9/24/02

WESTINGHOUSE NUCLEAR SERVICES DIVISION
INSPECTION SERVICES

GENERAL - INDICATION DATA

PLANT J. M. FARLEY UNIT 2 SKETCH APR1-1100

SYSTEM / COMP. REACTOR VESSEL PROCEDURE FNP-ISI-54, REV. 0

EXAMINER John W Bell

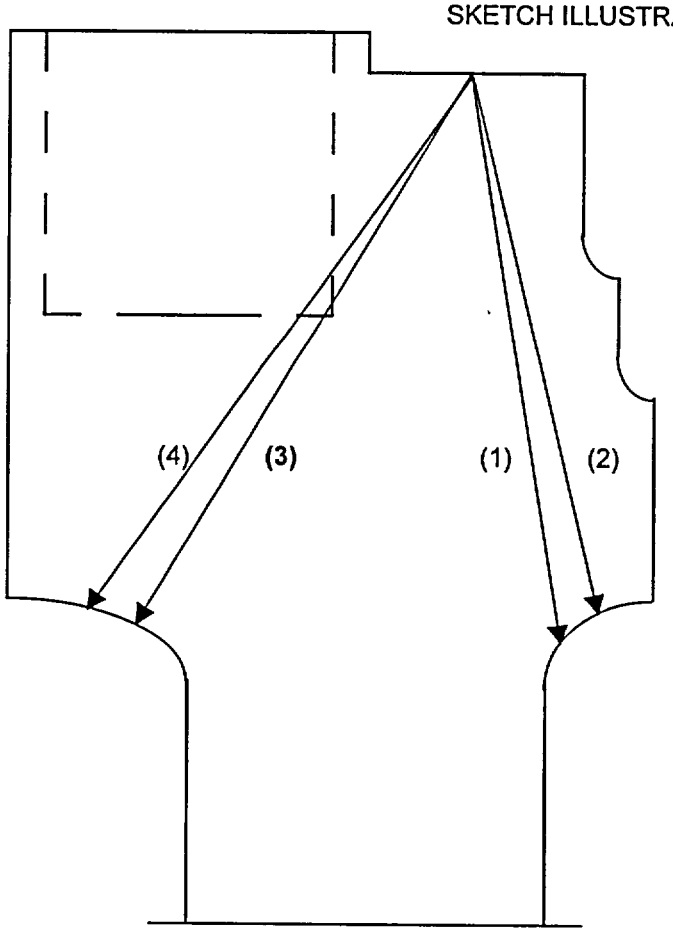
DETECTED BY UT X PT ____ MT ____ VT ____ IDENT. NO. WELD 1

PROVIDE SUFFICIENT INFORMATION TO DESCRIBE SIZE, LOCATION AND TYPE OF INDICATION DESCRIBE EXTRA OR SPECIAL EQUIPMENT IF USED FOR SIZING OR REPORTING. IF NECESSARY INCLUDE SKETCH SHOWING GENERAL CONFIGURATION OF ITEM OR AREA

Geometry reflector information for 0°, 6°, 12° and 16° see sketch below.

(1) 0°, SWP. 4.4 =31.5"
(2) 6°, SWP. 6.3 =31"
(3) 12°, SWP. 6.3 =31"
(4) 16°, SWP. 6.7=31"

SKETCH ILLUSTRATIVE ONLY



WesDyne International	PLANT / UNIT	OUTAGE:
REACTOR VESSEL U.T. EXAMINATION	J.M. FARLEY	3-1-1
	TRANSDUCER I.D. / PROCEDURE: / REV.	
	0° / FNP-ISI-54 / 0	

TRANSDUCER RF WAVEFORM

TRANSDUCER INFORMATION

MANUFACTURER	KBA
FREQUENCY	2.25 MHz
ACTIVE ELEMENT DIMENSION	1.0"
CONNECTOR TYPE	BNC
SERIAL NUMBER	G03136

CHANNEL: N/A

TARGET: D

PRE EXAM

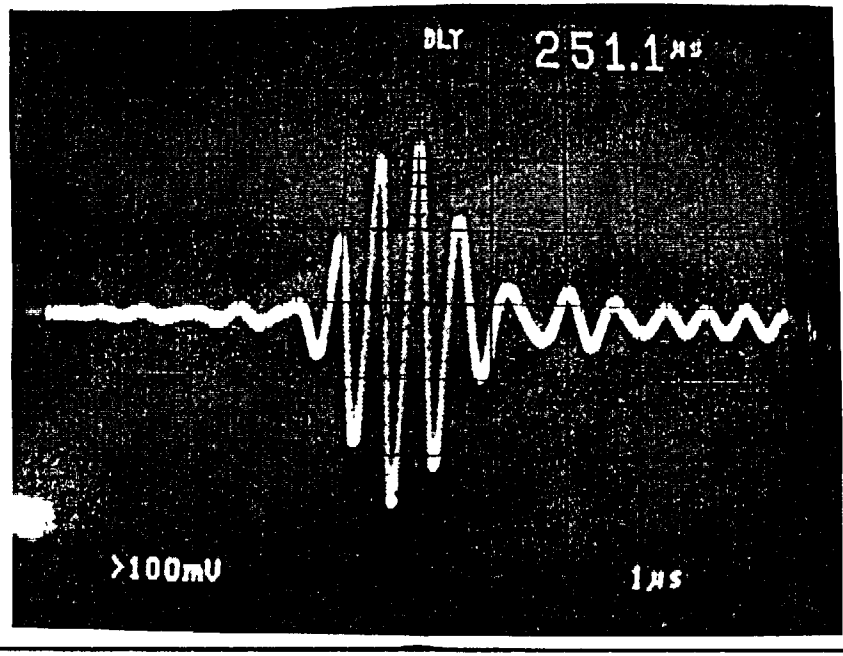
MONITOR OSCILLOSCOPE

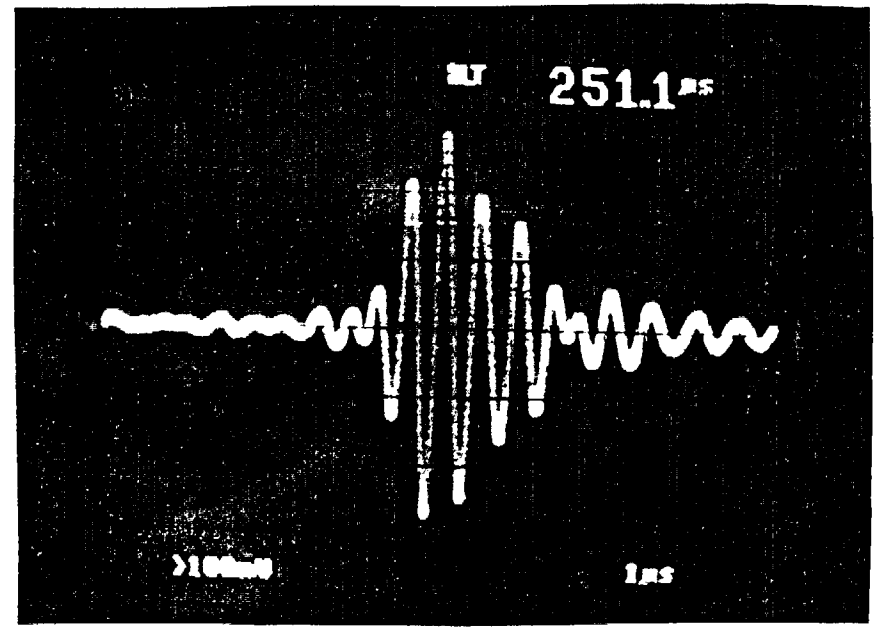
MANUFACTURER	TEKTRONIX	VERTICAL SCALE	100mv / DIV.
MODEL NUMBER	2445B	HORIZONTAL SCALE	1.0uSEC/DIV.
SERIAL NUMBER	B011056	PERFORMED BY	John Bell
CALIBRATION VALID UNTIL	8-21-03	DATE	9-18-02

POST EXAM

MONITOR OSCILLOSCOPE

MANUFACTURER	TEKTRONIX	VERTICAL SCALE	100mv / DIV.
MODEL NUMBER	2445B	HORIZONTAL SCALE	1.0uSEC/DIV.
SERIAL NUMBER	B011056	PERFORMED BY:	John Bell
CALIBRATION VALID UNTIL	8-21-02	DATE	9-19-02





WesDyne International	PLANT / UNIT	OUTAGE:
REACTOR VESSEL U.T. EXAMINATION	J.M. FARLEY	3-1-1
	TRANSDUCER I.D. / PROCEDURE: / REV.	
	6° 0UT / FNP-ISI-54 / 0	

TRANSDUCER RF WAVEFORM

TRANSDUCER INFORMATION

MANUFACTURER	KBA
FREQUENCY	2.25 MHz
ACTIVE ELEMENT DIMENSION	1.0"
CONNECTOR TYPE	BNC
SERIAL NUMBER	0094KW

CHANNEL N/A

TARGET E

PRE EXAM

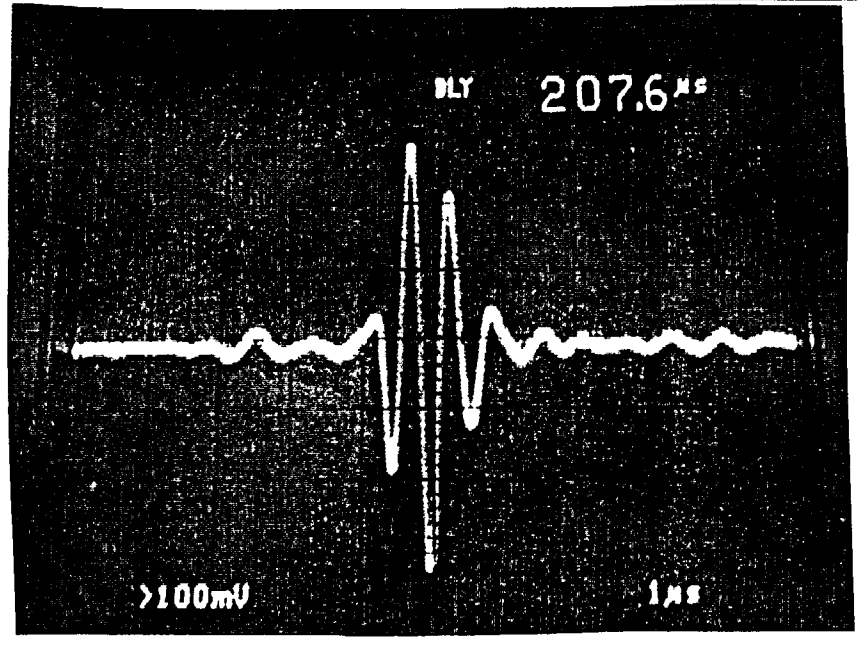
MONITOR OSCILLOSCOPE

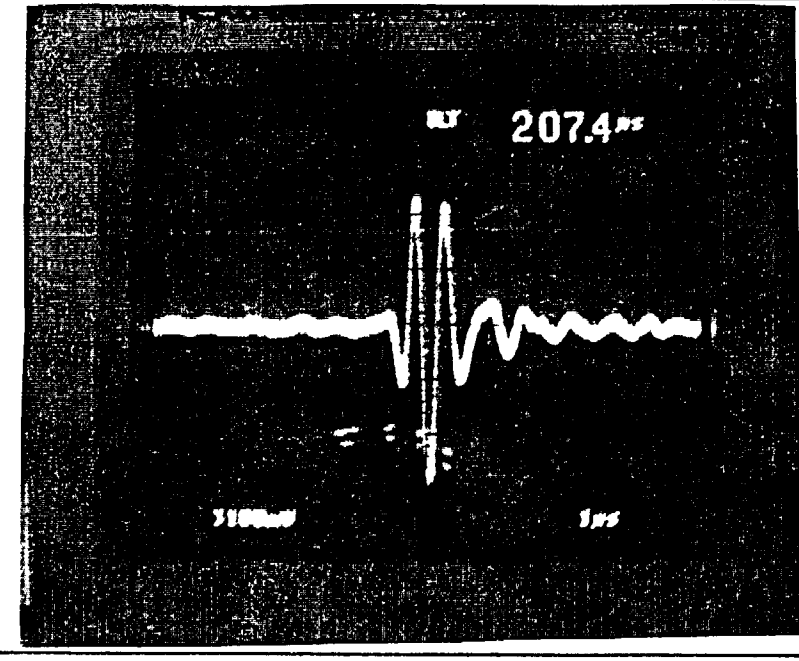
MANUFACTURER	TEKTRONIX	VERTICAL SCALE	100mv / DIV.
MODEL NUMBER	2445B	HORIZONTAL SCALE	1.0uSEC/DIV.
SERIAL NUMBER	B011056	PERFORMED BY:	John Beel
CALIBRATION VALID UNTIL	8-21-03	DATE	9-18-02

POST EXAM

MONITOR OSCILLOSCOPE

MANUFACTURER	TEKTRONIX	VERTICAL SCALE	100mv / DIV.
MODEL NUMBER	2445B	HORIZONTAL SCALE	1 0uSEC/DIV.
SERIAL NUMBER	B011056	PERFORMED BY:	John Beel
CALIBRATION VALID UNTIL	8-21-02	DATE	9-19-02





WesDyne International	PLANT / UNIT	OUTAGE:
REACTOR VESSEL U.T. EXAMINATION	J.M. FARLEY	3-1-1
	TRANSDUCER I.D. / PROCEDURE: / REV.	
	6° IN / FNP-ISI-54 / 0	

TRANSDUCER RF WAVEFORM

TRANSDUCER INFORMATION

MANUFACTURER	KBA
FREQUENCY	2.25 MHz
ACTIVE ELEMENT DIMENSION	1.0"
CONNECTOR TYPE	BNC
SERIAL NUMBER	00TKMN

CHANNEL N/A

TARGET E

PRE EXAM

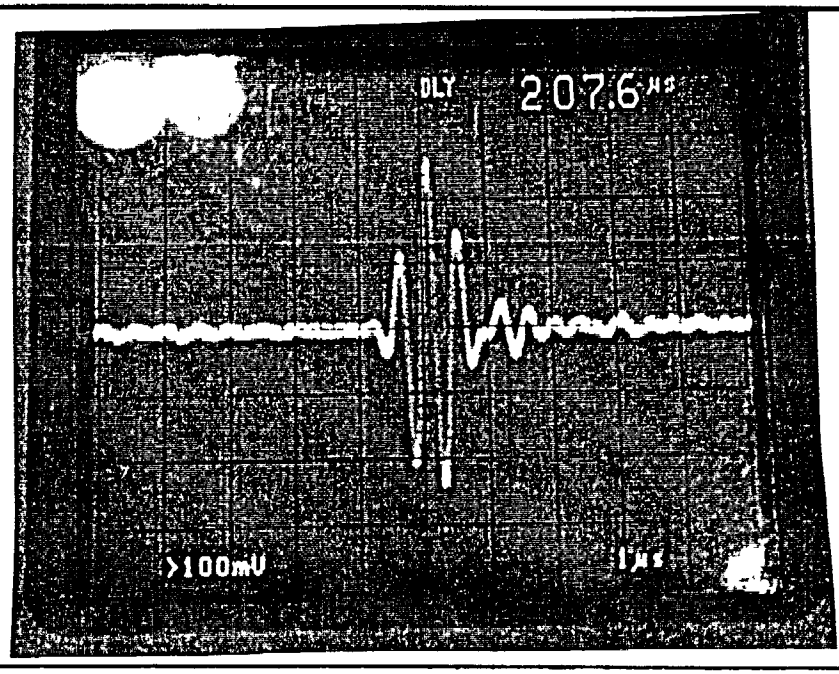
MONITOR OSCILLOSCOPE

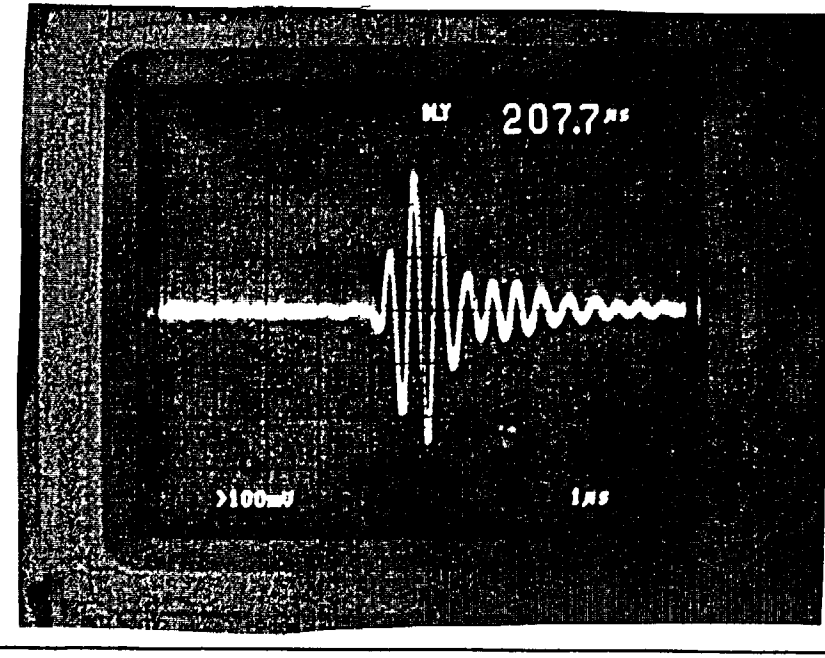
MANUFACTURER	TEKTRONIX	VERTICAL SCALE	100mv / DIV.
MODEL NUMBER	2445B	HORIZONTAL SCALE	1 0uSEC/DIV.
SERIAL NUMBER	B011056	PERFORMED BY.	John Beel
CALIBRATION VALID UNTIL	8-21-03	DATE	9-18-02

POST EXAM

MONITOR OSCILLOSCOPE

MANUFACTURER	TEKTRONIX	VERTICAL SCALE	100mv / DIV.
MODEL NUMBER	2445B	HORIZONTAL SCALE	1 0uSEC/DIV.
SERIAL NUMBER	B011056	PERFORMED BY·	John Beel
CALIBRATION VALID UNTIL	8-21-02	DATE	9-19-02





WesDyne International	PLANT / UNIT	OUTAGE:
REACTOR VESSEL U.T. EXAMINATION	J.M. FARLEY	3-1-1
	TRANSDUCER I.D. / PROCEDURE: / REV.	
	12° / FNP-ISI-54 / 0	

TRANSDUCER RF WAVEFORM

TRANSDUCER INFORMATION

MANUFACTURER	KBA
FREQUENCY	2.25 MHz
ACTIVE ELEMENT DIMENSION	1.0"
CONNECTOR TYPE	BNC
SERIAL NUMBER	00DRRP

CHANNEL N/A

TARGET E

PRE EXAM

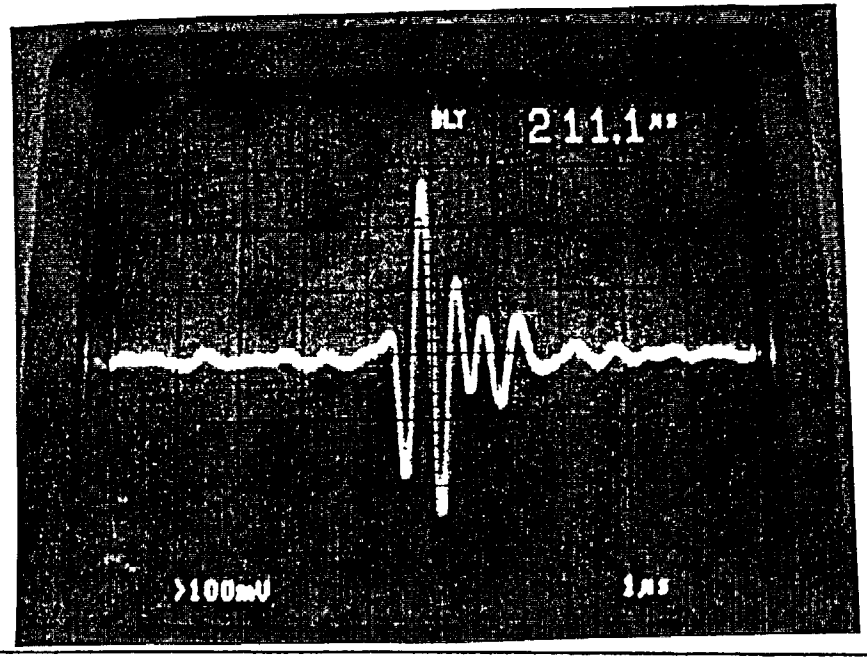
MONITOR OSCILLOSCOPE

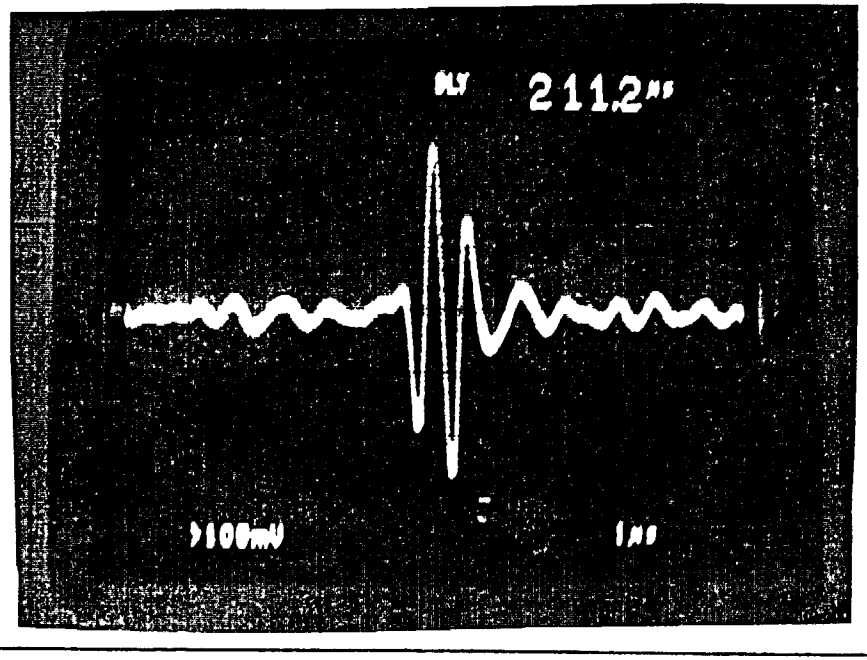
MANUFACTURER	TEKTRONIX	VERTICAL SCALE	100mv / DIV.
MODEL NUMBER	2445B	HORIZONTAL SCALE	1 0uSEC/DIV.
SERIAL NUMBER	B011056	PERFORMED BY	John Beel
CALIBRATION VALID UNTIL	8-21-03	DATE	9-18-02

POST EXAM

MONITOR OSCILLOSCOPE

MANUFACTURER	TEKTRONIX	VERTICAL SCALE	100mv / DIV.
MODEL NUMBER	2445B	HORIZONTAL SCALE	1.0uSEC/DIV.
SERIAL NUMBER	B011056	PERFORMED BY:	John Beel
CALIBRATION VALID UNTIL	8-21-02	DATE	9-19-02





WesDyne International REACTOR VESSEL U.T. EXAMINATION	PLANT / UNIT J.M. FARLEY		OUTAGE: 3-1-1
	TRANSDUCER I.D. 16°	PROCEDURE: FNP-ISI-54	REV. 0

TRANSDUCER RF WAVEFORM

TRANSDUCER INFORMATION

MANUFACTURER	KBA
FREQUENCY	2.25 MHz
ACTIVE ELEMENT DIMENSION	1.0"
CONNECTOR TYPE	BNC
SERIAL NUMBER	00DRRJ

CHANNEL N/A

TARGET E

PRE EXAM

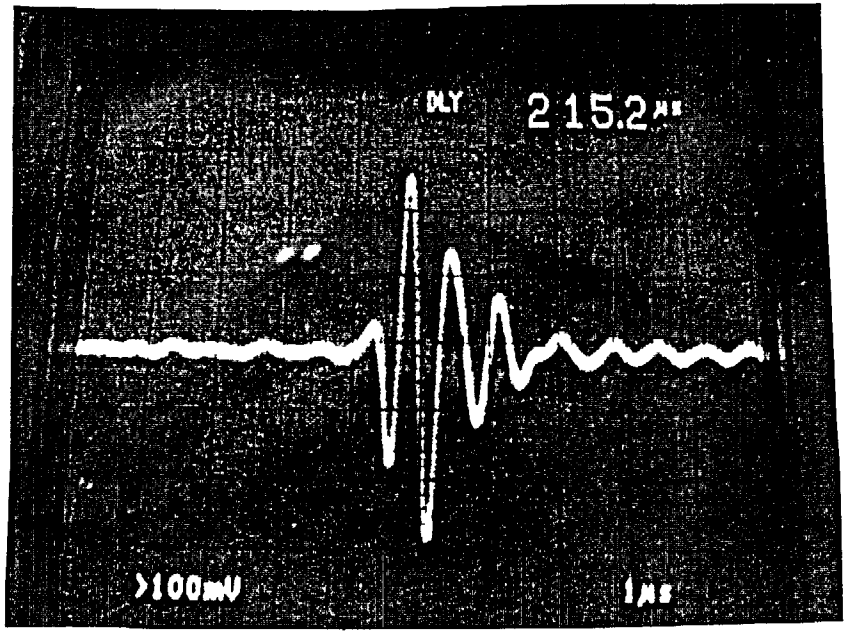
MONITOR OSCILLOSCOPE

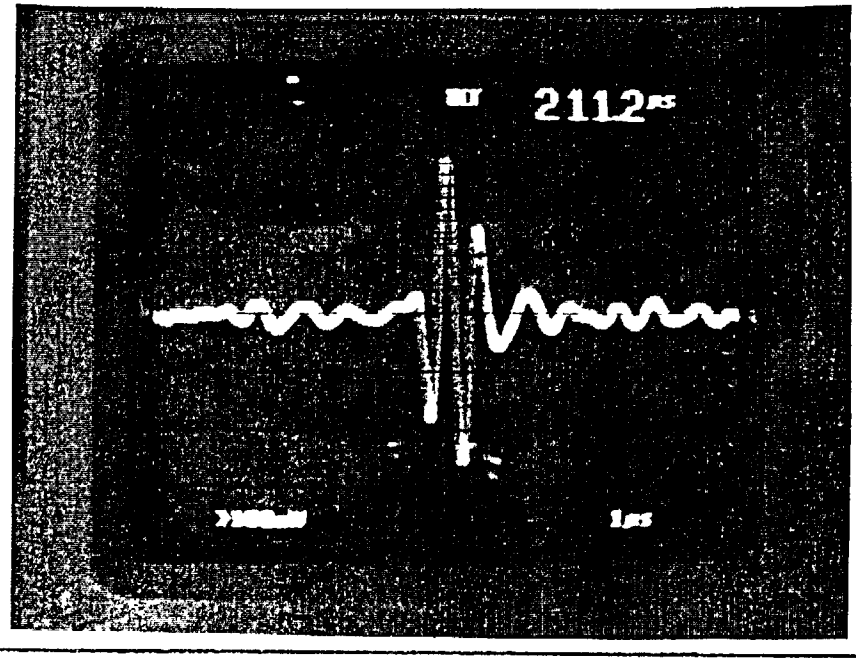
MANUFACTURER	TEKTRONIX	VERTICAL SCALE	100mv / DIV.
MODEL NUMBER	2445B	HORIZONTAL SCALE	1.0uSEC/DIV.
SERIAL NUMBER	B011056	PERFORMED BY:	John Bell
CALIBRATION VALID UNTIL	8-21-03	DATE	9-18-02

POST EXAM

MONITOR OSCILLOSCOPE

MANUFACTURER	TEKTRONIX	VERTICAL SCALE	100mv / DIV.
MODEL NUMBER	2445B	HORIZONTAL SCALE	1.0uSEC/DIV.
SERIAL NUMBER	B011056	PERFORMED BY.	John Bell
CALIBRATION VALID UNTIL	8-21-02	DATE	9-19-02





SHARED

Farley Nuclear Plant
Ultrasonic Instrument Qualification Record

FNP-0-NDE-100.32
Southern Nuclear Operating Company

nstrument

Sheet No. S02F2L007

Manufacturer	Model	Serial No.
Staveley	SONIC 136	136-904K

Transducer

Manufacturer	Size	Frequency	Serial No.
KBA	.50	2.25 MHZ	009TNR

Reference Standard

Type	Serial No.
Mini Angle Beam	4846

Horizontal Linearity

Back Refl.	Signal Position	Back Refl.	Signal Position
1	1.0	6	6.0
2	2.0	7	7.0
3	3.0	8	8 0
4	4.0	9	9 0
5	5 0	10	10.0

Screen Height Linearity

Amplitude Ha	Amplitude Hb	Amplitude Ha	Amplitude Hb
100 FSH	50	50 FSH	25
90 FSH	45	40 FSH	20
80 FSH	40	30 FSH	15
70 FSH	35	20 FSH	9
60 FSH	29	10 FSH	4

Amplitude Control Linearity

Indication Set at % of Full Screen	Indication Limits % of Full Screen	dB Control Change	Instrument Indication % of Full Screen
80%	32% to 48%	-6 dB	40
80%	16% to 24%	-12 dB	20
40%	64% to 96%	+6 dB	80
20%	64% to 96%	+12 dB	82

Instrument Qualification Results

Horizontal Linearity	Screen Height Linearity	Amplitude Control Linearity
Acceptable ☑	Acceptable ☑	Acceptable ☑

Remarks
FINAL

Examiner	Level	Examiner	Level	Date
Paul Valden	II	N/ A	N/A	9/20/2002
Initials PV		Initials		

NDE Level II/III Review	Level	Date
Darryl A. Lofton	III	9-24-02

Revision 3.

SHARED

Farley Nuclear Plant
Ultrasonic Instrument Qualification Record

FNP-0-NDE-100.32
Southern Nuclear Operating Company

Instrument — Sheet No. S02F2L008

Manufacturer	Model	Serial No.
Staveley	SONIC 136	136-472F

Transducer

Manufacturer	Size	Frequency	Serial No.
KBA	.50	2.25 MHZ	009TNR

Reference Standard

Type	Serial No.
Mini Angle Beam	4846

Horizontal Linearity

Back Refl.	Signal Position	Back Refl.	Signal Position
1	10	6	60
2	20	7	70
3	30	8	80
4	40	9	90
5	50	10	100

Screen Height Linearity

Amplitude Ha	Amplitude Hb	Amplitude Ha	Amplitude Hb
100 FSH	50	50 FSH	25
90 FSH	46	40 FSH	20
80 FSH	40	30 FSH	15
70 FSH	35	20 FSH	10
60 FSH	30	10 FSH	4

Amplitude Control Linearity

Indication Set at % of Full Screen	Indication Limits % of Full Screen	dB Control Change	Instrument Indication % of Full Screen
80%	32% to 48%	-6 dB	38
80%	16% to 24%	-12 dB	18
40%	64% to 96%	+6 dB	82
20%	64% to 96%	+12 dB	88

Instrument Qualification Results

Horizontal Linearity	Screen Height Linearity	Amplitude Control Linearity
Acceptable ☑	Acceptable ☑	Acceptable ☑

Remarks
FINAL

Examiner	Level	Examiner	Level	Date
Paul Valden	II	N/ A	N/A	9/20/2002
Initials P.V.		Initials		

NDE Level II/III Review	Level	Date
Gary A. Lefler	III	9-24-02

Revision 3.

SHARED

Farley Nuclear Plant
Ultrasonic Instrument Qualification Record

FNP-0-NDE-100.32
Southern Nuclear Operating Company

Instrument — Sheet No. S02F2L009

Manufacturer	Model	Serial No.
Staveley	SONIC 136	136-911K

Transducer

Manufacturer	Size	Frequency	Serial No.
KBA	.50	2.25 MHZ	009TNR

Reference Standard

Type	Serial No.
Mini Angle Beam	4846

Horizontal Linearity

Back Refl.	Signal Position	Back Refl.	Signal Position
1	10	6	60
2	20	7	70
3	30	8	80
4	40	9	90
5	50	10	100

Screen Height Linearity

Amplitude Ha	Amplitude Hb	Amplitude Ha	Amplitude Hb
100 FSH	50	50 FSH	25
90 FSH	45	40 FSH	20
80 FSH	40	30 FSH	15
70 FSH	35	20 FSH	10
60 FSH	31	10 FSH	4

Amplitude Control Linearity

Indication Set at % of Full Screen	Indication Limits % of Full Screen	dB Control Change	Instrument Indication % of Full Screen
80%	32% to 48%	-6 dB	39
80%	16% to 24%	-12 dB	20
40%	64% to 96%	+6 dB	81
20%	64% to 96%	+12 dB	80

Instrument Qualification Results

Horizontal Linearity	Screen Height Linearity	Amplitude Control Linearity
Acceptable ☑	Acceptable ☑	Acceptable ✓

Remarks
FINAL

Examiner	Level	Examiner	Level	Date
Paul Valden	II	N/ A	N/A	9/20/2002
Initials P.V.		Initials		

NDE Level II/III Review	Level	Date
[signature]	III	9-24-02

Revision 3.

EXAMINATION SUMMARY
FOR UNIT 2
INTERVAL 3 PERIOD 1 OUTAGE 1

DRAWING APR1-1100B
REACTOR VESSEL FLANGE LIGAMENTS

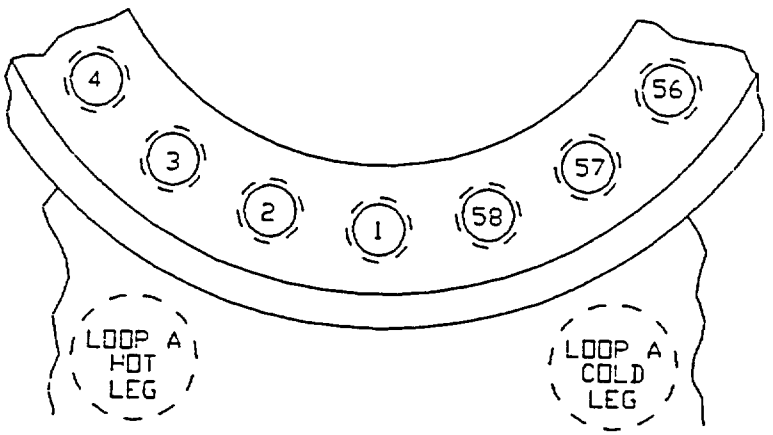
ITEM NO	VOLUMERIC			SURFACE			VISUAL			REMARKS
	NI	NRI	RI	NI	NRI	RI	NI	NRI	RI	
4 thru 9	X									
28 thru 37	X									
44 thru 56	X									

APR1-100B

VESSEL FLANGE LIGAMENTS

Q2311H001

LIGAMENTS SURROUNDING STUD HOLE TO CORRESPOND WITH STUD HOLE NUMBER



LIGAMENTS	FNP FIG	CAL BLOCK
L01 THRU L58	016	ALA-RV-6

VENDOR MANUAL U-214660

REV	DATE	BY	CHK'D	DESCRIPTION	APPR 1	APPR 2	APPR 3	APPR 4
1	7-21-97	HSK	TLS	REVISED PER REA 96-1295 REV 0	DEW			
0	11-22-91	SDH	JAR	ISSUED PER PCN S-91-2-7763.	CAB/R	HGM	RHC/AH	DML

Southern Company Services, Inc.

ALABAMA POWER COMPANY
JOSEPH M. FARLEY NUCLEAR PLANT
UNIT 2

REACTOR VESSEL

SCS DRAWING NUMBER	SHEET	REV
A-356454	3	1

APR1100B HSK -1
CAD AUTOCAD

WESTINGHOUSE NUCLEAR SERVICES DIVISION

THREADS IN FLANGE ULTRASONIC EXAMINATION

PLANT: Farley UNIT: 2 SKETCH: APR1-1100

SYST./COMP.: Reactor Vessel PROCEDURE: FNP-ISI-55, Rev 0

EXAMINER: [illegible] DATE: 9-19-02

EQUIPMENT		TRANSDUCER	STRAIGHT BEAM SCAN DIRECTION 0		CALIBRATION CHECK
INST. S/N	STAVELEY 136-897K	S/N	G19804(SP)		INITIAL TIME
		SIZE	1.0"		0330, 9-19-02
		FREQ.	2.25 MHz		
		ANGLE	0°		
REP. RATE	1K	CALIBRATION REFLECTOR LOCATION	SIGNAL AMPLITUDE	SWEEP POSITION	
REJECT	OFF				
		A	80%	1.8	
DAMPING	500 OHMS	B	60%	3.8	
		C	40%	6 6	
FILTER	1				
					FINAL TIME
LIN. CHECK	SAT				0550, 9-19-02
SU CABLE	6' RG-174				CAL. BLOCK ALA-RV-6
					THICKNESS 15"
COUPLANT	DEMIN WATER				THERMOMETER S/N 48881
		CAL. GAIN	40.4 dB		TEMP. 88° F

THREAD IDENT. (STUD HOLE NUMBER)	TEMP.	SCAN	EXAMINATION LIMITATIONS	SURFACE	RESULTS NI	RESULTS RI	REMARKS
4 thru 9	102° F	YES	NONE	SMOOTH	X		
28 thru 37	102° F	YES	NONE	SMOOTH	X		
44 thru 56	102° F	YES	NONE	SMOOTH	X		
			[illegible] III	9-27-02			
			Level III review CG [illegible] 9/27/02				

EXAMINATION SUMMARY
FOR UNIT 2
INTERVAL 3 PERIOD 1 OUTAGE 1

DRAWING APR1-1200
REACTOR VESSEL INTERNALS

ITEM NO	VOLUMERIC			SURFACE			VISUAL			REMARKS
	NI	NRI	RI	NI	NRI	RI	NI	NRI	RI	
Upper Internals							X			

FNP-2-M-397

"ILLUSTRATIVE ONLY"

APR1-1200

REACTOR VESSEL INTERNALS

Q2B11H001

UPPER INTERNALS

1. THERMOCOUPLE CONDUIT, CONNECTIONS AND SUPPORT BRACKETS ASSOCIATED WITH INSTRUMENT PENETRATIONS ABOVE THE UPPER SUPPORT PLATES
2. INSTRUMENTATION COLUMNS
3. UPPER SUPPORT PLATE KEYWAYS (FOR HEAD ALIGNMENT PINS)
4. FLOW MIXER DEVICES AND FASTENERS
5. SUPPORT COLUMNS AND FASTENERS
6. GUIDE TUBES (EXTERIOR ONLY) AND FASTENERS
7. UPPER CORE PLATE FUEL ASSEMBLY GUIDE PINS
8. UPPER CORE PLATE ALIGNMENT KEYWAYS AND FASTENERS
9. UPPER CORE PLATE

LOWER INTERNALS (INTERIOR)

10. UPPER CORE PLATE ALIGNMENT KEYWAYS AND FASTENERS
11. CORE BARREL FLANGE FLOW NOZZLES
12. CORE BARREL AND VESSEL HEAD ALIGNMENT PINS
13. FLANGE TO UPPER BARREL WELD
14. UPPER BARREL TO LOWER BARREL MID-PLATE WELD
15. UPPER CORE PLATE ALIGNMENT KEY
16. BAFFLE BOLTING AND LOCKING DEVICES
17. LOWER CORE PLATE SUPPORT COLUMN BOLTING
18. LOWER CORE PLATE INSTRUMENT GUIDE TUBE NUT
19. LOWER CORE PLATE ACCESS COVER BOLTING
20. LOWER CORE PLATE FUEL ASSEMBLY GUIDE PINS

LOWER INTERNALS (EXTERIOR)

21. IRRADIATION SPECIMEN BASKET ATTACHMENT WELDS
22. OUTLET NOZZLE TO VESSEL INTERFACE SURFACES
23. CORE BARREL RADIAL SUPPORT KEYS
24. SECONDARY CORE SUPPORT KEYWAYS
25. THERMAL SHIELD ATTACHMENTS

VENDOR MANUAL U-214560

VESSEL INTERIOR

26. CORE BARREL RADIAL SUPPORT KEYWAYS
27. VESSEL INSTRUMENTATION PENETRATIONS
28. R.V. OUTLET NOZZLE/CORE BARREL INTERFACE SURFACES AND INNER RADIUS

REV.	DATE	BY	CHK'D	DESCRIPTION	APPR.1	APPR.2	APPR.3	APPR.4
1	7-21-97	HSK	TLS	REVISED PER REA 96-1295 REV. 0	DEW			
0	11-22-91	MH	SDH	ISSUED PER PCN S-91-2-7763.				

Southern Company Services, Inc. for

ALABAMA POWER COMPANY
JOSEPH M. FARLEY NUCLEAR PLANT
UNIT 2

DRAWING NUMBER	SHEET	REV.
A-356454	6	1

CAD OVERLAY APR11200 HSK-1

PLANT: J.M. FARLEY			PROCEDURE: FNP-ISI-88, REV. 1
UNIT: 2			DATE: 9/23/2002
INTERVAL: 3	PERIOD: 1	OUTAGE: 1	EXAMINER: K Bel[illegible] II
REFERENCE DWGS: APR1-1200			EXAMINER: N/A

COMPONENT	COMPONENT LOCATION	TAPE LOCATION	NI	NRI	RI	REMARKS	EXAMINER INITIALS
Resolution Check Initial		10:26				Acceptable	KB
Wire or banding noted on the refuel pool floor near 180 degree Upper Core Plate Keyway		10:33				Not in examination area	KB
Upper Core Plate Fuel Assembly Guide Pins	0 to 360 Degrees	10:33	X			Examined accessible areas	KB
Upper Core Plate Alignment Keyways and Fasteners	0 to 360 Degrees		X			Examined accessible areas	KB
Upper Core Plate	0 to 360 Degrees	Thru	X			Examined accessible areas	KB
Guide Tubes	0 to 360 Degrees		X			Examined accessible areas	KB
Support Columns, Flow Mixer and Fasteners	0 to 360 Degrees	11:30	X			Examined accessible areas	KB
Resolution Check		11:32				Acceptable	KB
Thermocouple Conduit Connections and Support	0 to 360 Degrees	11:37	X			Examined accessible areas	KB
Brackets Associated with Instrument Penetrations	0 to 360 Degrees		X			Examined accessible areas	KB
above the Upper Support Plates	0 to 360 Degrees	Thru	X			Examined accessible areas	KB
Instrumentation Columns	0 to 360 Degrees		X			Examined accessible areas	KB
Upper Support Plate Keyways (for Head Alignment	0 to 360 Degrees		X			Examined accessible areas	KB
Pins)	0 to 360 Degrees	12:49	X			Examined accessible areas	KB
Black Connector noted on refuel pool floor located by Core Barrel Support Ring Leg nearest Upper Internals Stand		11:16				Not in examination area	KB
Resolution Check Final		12:50				Acceptable	KB

Gary A. Lefler LVIII 9-24-02 ANII REVIEW: [illegible] 9/24/02

APPENDIX D

Setup and Checkout of Remote Underwater Examination Vehicle (Mini Rover, E-Rov, or Equivalent)

	Setup	Initial	Date
1.	Attach the system console, hand controller cable, power cable, and tether to the Mini Rover.	KB	9-23-02
2.	Connect unit to a standard power source (104-120 or 208-240 VAC, 960 watts maximum).	KB	9 23 02
3.	Attach applicable cables to TV camera, lights, video tape recorder, TV monitor and system console.	KB	9-23-02
4.	Turn on TV System.	KB	9-23-02
5.	Test camera focus.	KB	9 23 02
6.	Test Video Tape Recorder.	KB	9-23 02
7.	Test camera lights.	KB	9-23 02
	NOTE: LIGHTS MUST NOT BE TURNED ON FOR MORE THAN 10 SECONDS WHEN OUT OF WATER.		
8.	Test camera movement in the vertical plane. Movement should be approximately 45° above and 55° below the horizontal plane. Verify that the direct-reading compass and depth gauge can be viewed with the camera.	KB	9-23 02
9.	Place Mini Rover or E-ROV into water and verify controlled movement in the horizontal and vertical plane. Maneuver vehicle around the perimeter of the reactor vessel.	KB	9-23-02
10.	Checkout Complete.	KB	9 23 02

Gary A. Lofthus LO III 9-24-02

ANII REVIEW: Cguard 9/24/02

APPENDIX E

Underwater Television System Resolution Checkout Data Sheet

Level II: KENNETH H. BEHANNA
Date: 9-23-02
Plant: J.M. FARLEY UNIT 2
T.V. Camera: E-ROV 2 CAMERA SYSTEM
T.V. Monitor: 9" MONITOR
T.V. Lights: 120 VAC E-ROV 2
Video Tape Recorder: PANASONIC
Resolution Standard: WESDYNE RESOLUTION STANDARD

	Resolution Standard			Resolution
	Approximate Depth	Distance	Angle (Degrees)	Acceptable
1.	~ 24"	~ 1'	~ 0° ± 45°	YES
2.	~ 24"	~ 2'	~ 0° ± 45°	YES
3.	~ 24"	~ 4'	~ 0° ± 45°	YES
4.	~ 24"	~ 6'	~ 0° ± 45°	YES

Examiner(s): [signature] II

[signature] LVIII 9-24-02
ANII REVIEW: [signature] 9/24/02

EXAMINATION SUMMARY
FOR UNIT 2
INTERVAL 3 PERIOD 1 OUTAGE 1

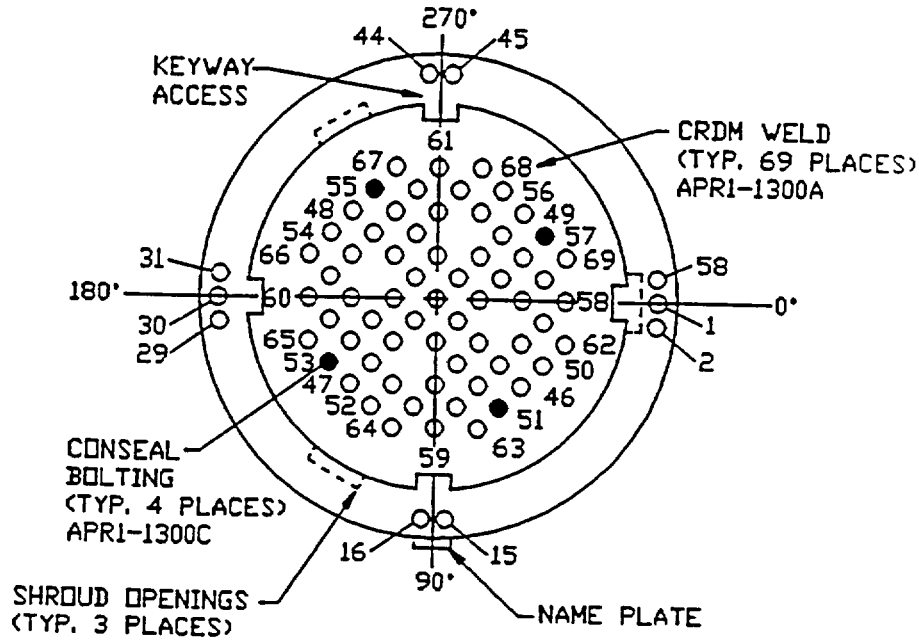
DRAWING APR1-1300
REACTOR VESSEL CLOSURE HEAD

ITEM NO	VOLUMERIC			SURFACE			VISUAL			REMARKS
	NI	NRI	RI	NI	NRI	RI	NI	NRI	RI	
PEN 58				X						

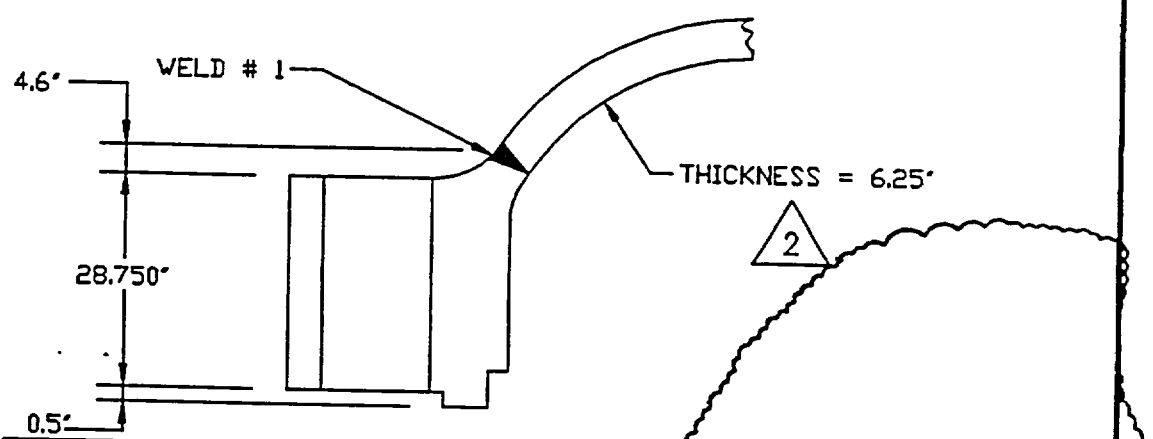
APR1-1300

REACTOR VESSEL CLOSURE HEAD

Q2B11H001



CLOSURE HEAD WELDS



VENDOR MANUAL U-214660		
WELD #	FNP FIG.	CAL. BLOCK
1	005	ALA/APR RV-3

REV.	DATE	BY	CHK'D	DESCRIPTION	DFW CAB/R APPR.1	HGM APPR.2	RKC/AH APPR.3	DML APPR.4
2	10-21-97	TLS	JAR	REVISED PER REA 97-1566 REV.0				
0	11-22-91	SDH	JAR	ISSUED PER PCN S-91-2-7763.				

CAD AUTOCAD APR11300 TLS-2

Southern Company Services, Inc. for

ALABAMA POWER COMPANY
JOSEPH M. FARLEY NUCLEAR PLANT
UNIT 2

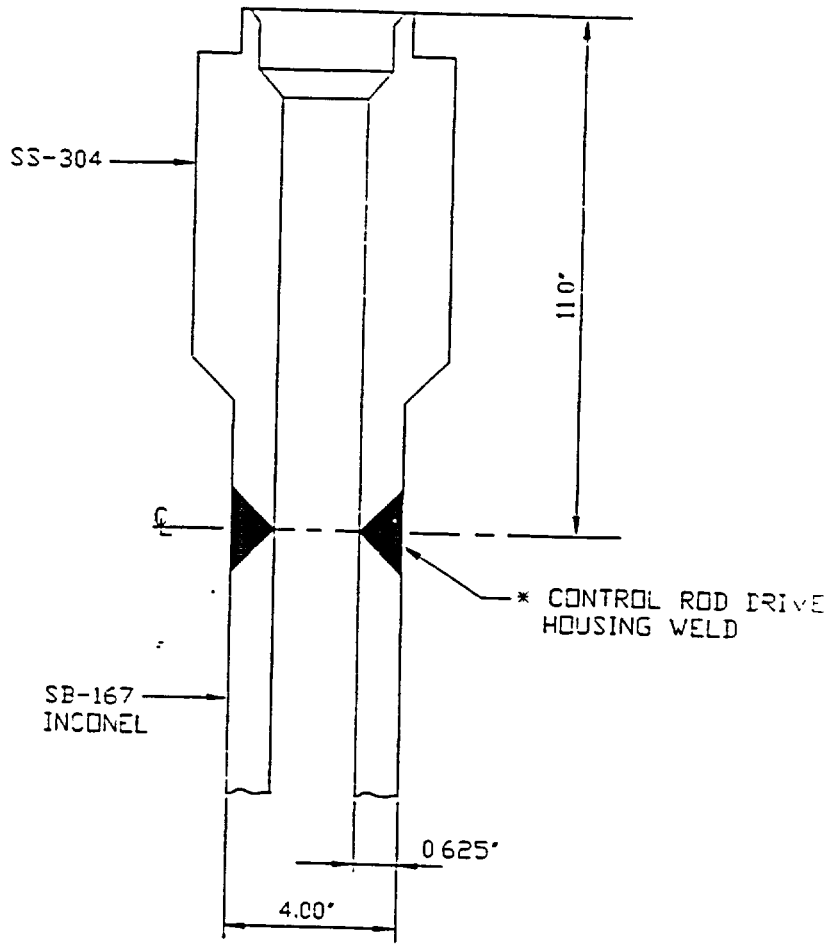
REACTOR VESSEL

SCS DRAWING NUMBER	SHEET	REV.
A-356454	8	2

APP:-1300A

CRDM HOUSING WELDS

Q2B11H001



WELD #	FNP FIG	CAL. BLOCK
* 1 THRU 69	022	N/A

VENDOR MANUAL U-214660

PEV	DATE	BY	CHK'D	DESCRIPTION	APPR 1	APPR 2	APPR 3	APPR 4
1	7-21-97	HSK	TLS	REVISED PER REA 96-1295 REV.0	DEW			
0	11-22-91	SDH	JAR	ISSUED PER PCN S-91-2-7763.	CAB/R	HGM	P/C/AH	DML

Southern Company Services, Inc for REACTOR VESSEL

ALABAMA POWER COMPANY
JOSEPH M FARLEY NUCLEAR PLANT
UNIT 2

SCS DRAWING NUMBER: A-356454 | SHEET 9 | REV 1

CAD AUTOCAD APR1300A HSK-1

Farley Nuclear Plant
Liquid Penetrant Examination Record

SHARED

FNP-0-NDE-100.5
PT-F-FORM 001
Southern Nuclear Operating Company

Unit	Component Number	Procedure/Rev./TCN	Sheet No.
2	APR1-1300-58	FNP-0-NDE-100 5 / 6.0 / N/A	S02F2P006 Page 1 of 1

Thermometer

Mfg/Ser. No. PTC / 48890
Cal. Due Date 2/5/2003

Surface Temp. 94 ° F

Manufacturer Magnaflux

Penetrant Materials

	Type	Batch
Cleaner / Remover	SKC-S	02E05K
Penetrant	SKL-SP	96J02K
Developer	SKD-S2	02G07K

Component Configuration
CRD HOUSING WELDS

% of Length Coverage 100
% of Area Coverage 100

Date 9/26/2002

Ind. No.	Results	Dwell Time	Indication Desc. / Exam Limitations / etc.	Remarks
NA	NI	10	NA	NA

Primary Examiner	ASNT Level	Initials	Assistant Examiner	ASNT Level	Initials	Non-Technical Review	Date
Joseph D Funyak	II	JDF	N/ A	N/A		Barry A. Rifflers	9-27-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
Barry A. Rifflers	III 9-27-02	100	C G Wand	9/27/02

Revision 6.

EXAMINATION SUMMARY
FOR UNIT 2
INTERVAL 3 PERIOD 1 OUTAGE 1

DRAWING APR1-1300B
REACTOR VESSEL STUDS, NUTS and WASHERS

ITEM NO	VOLUMERIC			SURFACE			VISUAL			REMARKS
	NI	NRI	RI	NI	NRI	RI	NI	NRI	RI	
S01		X								
S14		X								
S15		X								
S24		X								
S25		X								
S27		X								
S28		X								
S29		X								
S30		X								
S31		X								
S32		X								
S51		X								
S52		X								
S53		X								
S54		X								
S55		X								
S56		X								
S57		X								
S58		X								
N01							X			
N14							X			
N15							X			
N24							X			
N25							X			
N27							X			
N28							X			
N29							X			
N30							X			
N31							X			
N32							X			
N51							X			
N52							X			
N53							X			
N54							X			
N55							X			

EXAMINATION SUMMARY
FOR UNIT 2
INTERVAL 3 PERIOD 1 OUTAGE 1

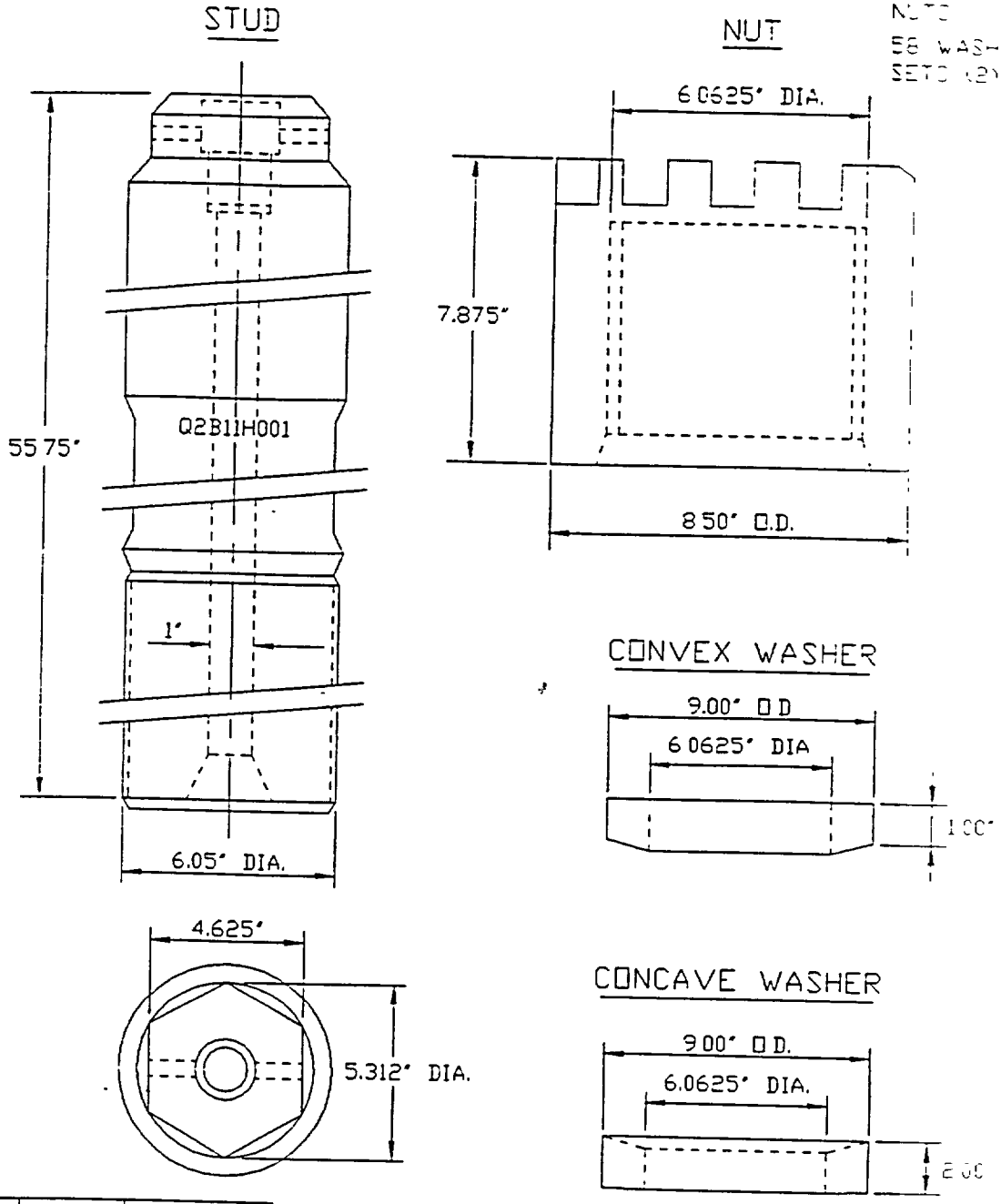
DRAWING APR1-1300B
REACTOR VESSEL STUDS, NUTS and WASHERS

ITEM NO	VOLUMERIC			SURFACE			VISUAL			REMARKS
	NI	NRI	RI	NI	NRI	RI	NI	NRI	RI	
N56							X			
N57							X			
N58							X			
W01							X			
W14							X			
W15							X			
W24							X			
W25							X			
W27							X			
W28							X			
W29							X			
W30				X					X	IER-001
W31							X			
W32							X			
W51							X			
W52							X			
W53							X			
W54							X			
W55							X			
W56							X			
W57							X			
W58							X			

APR1-1300B

REACTOR VESSEL STUDS, NUTS, AND WASHERS

56 STUDS AND NUTS
56 WASHER SETS (2)



ITEM	FNP FIG	CAL BLOCK		
STUDS	016	ALA-36	VENDOR MANUAL U-214660	
1	7-21-97	HSK	TLS	REVISED PER REA 96-1295 REV 0
0	11-22-91	SDH	JAR	ISSUED PER PCN S-91-2-7763.
REV	DATE	BY	CHK'D	DESCRIPTION

DEW			
CAB/P	HGM	RVC/AH	DIM
APPP 1	APPP 2	APPP 3	APPP 4

CAD AUTOCAD APR1300B HSK-1

Southern Company Services, Inc. for

ALABAMA POWER COMPANY
JOSEPH M. FARLEY NUCLEAR PLANT
UNIT 2

REACTOR VESSEL

SCS DRAWING NUMBER: A-356454 | SHEET 10 | REV 1

SHARED

Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S01	9/21/2002	S02F2U025 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. 50 Shape / Round
Frequency/Mode 10 0 / Long
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55.75"
Cal. Temp 80 °F
Cal. In 11.15 00 AM
Cal. Chk. 1130
Cal. Out 1 00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7 6" are OD Notches.

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°				NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II		Andrew Mixon	II		Lynda Duke	9-24-02

SNC NDE Level II/III Review: Date 9 21-02 | Percentage of Code Coverage 100 | ANII Review | Date 9/27/02

Revision 4 0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S14	9/21/2002	S02F2U026 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. 50 Shape / Round
Frequency/Mode 10.0 / Long
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11:15 00 AM
Cal. Chk. 1130
Cal. Out 1 00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54.25 and #5 at 7 6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top. No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	AM	Lynda Duke	9-24-02

SNC NDE Level II/III Review		Date	Percentage of Code Coverage	ANII Review	Date
[illegible]	L/ III	9-27-02	100	[illegible]	9/27/02

Revision 4 0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S15	9/21/2002	S02F2U027 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. 50 Shape / Round
Frequency/Mode 10 0 / Long.
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11.15 00 AM
Cal. Chk. 1130
Cal. Out 1 00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration				Zone 2 Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA	#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54.25 and #5 at 7 6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Ref. Measurements Wmax	Smax	Thickness 1"<--	C/L	-->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations.

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	[illegible]	Lynda Duke	9-24-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
[illegible] LV III	9 27-02	100	[illegible]	9/27/02

Revision 4 0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S24	9/21/2002	S02F2U028 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4.0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. .50 Shape / Round
Frequency/Mode 10 0 / Long
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11:15 00 AM
Cal. Chk. 1130
Cal. Out 1.00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7 6" are OD Notches.

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	AM	Lynda Duke	9-24-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
[illegible] w III	9-27-02	100	[illegible]	9/27/02

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S25	9/21/2002	S02F2U029 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100.39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. 50 Shape / Round
Frequency/Mode 10 0 / Long
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11:15.00 AM
Cal. Chk. 1130
Cal. Out 1:00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration				Zone 2 Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3.8	NA	#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7.6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations.

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	AM	Lynda Duke	9-24-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
[illegible] Lv III	9-27-02	100	[illegible]	9/27/02

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S27	9/21/2002	S02F2U030 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100.39 4.0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. .50 Shape / Round
Frequency/Mode 10.0 / Long.
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11.15 00 AM
Cal. Chk. 1130
Cal. Out 1 00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54.25 and #5 at 7 6" are OD Notches.

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top. No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II		Andrew Mixon	II		Lynda Duke	9-24-02

SNC NDE Level II/III Review		Date	Percentage of Code Coverage	ANII Review	Date
	Lv III	9-27-02	100		9/27/02

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S28	9/21/2002	S02F2U031 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100.39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. 50 Shape / Round
Frequency/Mode 10 0 / Long
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11:15.00 AM
Cal. Chk. 1130
Cal. Out 1:00:00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54.25 and #5 at 7 6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations.

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	[illegible]	Lynda Duke	9-24-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
[illegible] II/III	9-27-02	100	[illegible]	9/27/02

Revision 4 0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S29	9/21/2002	S02F2U032 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. 50 Shape / Round
Frequency/Mode 10 0 / Long.
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55.75"
Cal. Temp 80 °F
Cal. In 11.15 00 AM
Cal. Chk. 1130
Cal. Out 1 00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54.25 and #5 at 7 6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations.

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	[illegible]	Lynda Duke	9-24-02

SNC NDE Level II/III Review		Date	Percentage of Code Coverage	ANII Review	Date
[illegible]	LV III	9-27-02	100	[illegible]	9/27/02

Revision 4 0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S30	9/21/2002	S02F2U033 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. 50 Shape / Round
Frequency/Mode 10 0 / Long
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11:15 00 AM
Cal. Chk. 1130
Cal. Out 1:00.00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3.8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7.6" are OD Notches.

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°		●		NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II		Andrew Mixon	II		Lynda Duke	9-24-02

SNC NDE Level II/III Review: Lv III — Date 9-27-02 — Percentage of Code Coverage 100 — ANII Review — Date 9/27/02

Revision 4 0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S31	9/21/2002	S02F2U034 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	

Frequency 6 Rep Rate FIX

Mode P/E Filter ON

Damping 400 Reject OFF

Search Unit

Transducer Mfg. Panametrics

Serial No. 239864

Model No. A111S

Size / No. 50 Shape / Round

Frequency/Mode 10.0 / Long.

"A" Dimension NA

Nom Angle 0 ° Meas Angle NA °

Cable Type /No. Conn. RG 174 / 0

Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36

Thickness 55 75"

Cal. Temp 80 °F

Cal. In 11:15 00 AM

Cal. Chk. 1130

Cal. Out 1:00 00 PM

Ref. Blk. No. N/A

Reflector/dB NA / NA

Amp/Sweep NA % NA

Zone 1 Calibration				Zone 2 Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA	#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7.6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Ref. Measurements Wmax	Smax	Thickness 1"<--	C/L	-->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	[illegible]	Lynda Duke	9-24-02

SNC NDE Level II/III Review		Date	Percentage of Code Coverage	ANII Review	Date
[illegible]	W II	9-27-02	100	[illegible]	9/27/02

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S32	9/21/2002	S02F2U035 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. 50 Shape / Round
Frequency/Mode 10 0 / Long.
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11:15 00 AM
Cal. Chk. 1130
Cal. Out 1 00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7.6" are OD Notches.

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top. No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	[illegible]	Lynda Duke	9-24-02

SNC NDE Level II/III Review		Date	Percentage of Code Coverage	ANII Review	Date
[illegible]	LV III	9-27-02	100	[illegible]	9/27/02

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S51	9/21/2002	S02F2U036 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. 50 Shape / Round
Frequency/Mode 10 0 / Long
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11:15 00 AM
Cal. Chk. 1130
Cal. Out 1:00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7 6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top. No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	[illegible]	Lynda Duke	9-24-02

SNC NDE Level II/III Review [illegible] LV III Date 9-27-02 Percentage of Code Coverage 100 ANII Review [illegible] Date 9/27/02

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S52	9/21/2002	S02F2U037 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. .50 Shape / Round
Frequency/Mode 10 0 / Long
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11 15 00 AM
Cal. Chk. 1130
Cal. Out 1 00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration				Zone 2 Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA	#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7 6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Ref. Measurements Wmax	Smax	Thickness 1"<--	C/L	-->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	[illegible]	Lynda Duke	9-24-02

SNC NDE Level II/III Review [illegible] LV III Date 9-27-02 Percentage of Code Coverage 100 ANII Review [illegible] Date 9/27/02

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S53	9/21/2002	S02F2U038 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	

Frequency 6 Rep Rate FIX

Mode P/E Filter ON

Damping 400 Reject OFF

Search Unit

Transducer Mfg. Panametrics

Serial No. 239864

Model No. A111S

Size / No. .50 Shape / Round

Frequency/Mode 10 0 / Long

"A" Dimension NA

Nom Angle 0 ° Meas Angle NA °

Cable Type /No. Conn. RG 174 / 0

Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36

Thickness 55.75"

Cal. Temp 80 °F

Cal. In 11:15 00 AM

Cal. Chk. 1130

Cal. Out 1 00 00 PM

Ref. Blk. No. N/A

Reflector/dB NA / NA

Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3.8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7 6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top. No limitations.

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	[illegible]	Lynda Duke	9-24-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
[illegible] LV III	9-27-02	100	[illegible]	9/27/02

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S54	9/21/2002	S02F2U039 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	

Frequency 6 Rep Rate FIX

Mode P/E Filter ON

Damping 400 Reject OFF

Search Unit

Transducer Mfg. Panametrics

Serial No. 239864

Model No. A111S

Size / No. .50 Shape / Round

Frequency/Mode 10 0 / Long

"A" Dimension NA

Nom Angle 0 ° Meas Angle NA °

Cable Type /No. Conn. RG 174 / 0

Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36

Thickness 55.75"

Cal. Temp 80 °F

Cal. In 11 15 00 AM

Cal. Chk. 1130

Cal. Out 1 00 00 PM

Ref. Blk. No. N/A

Reflector/dB NA / NA

Amp/Sweep NA % NA

Zone 1 Calibration				Zone 2 Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA	#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7 6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Ref. Measurements Wmax	Smax	Thickness 1"<--	C/L	-->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[signature]	Andrew Mixon	II	[signature]	Lynda Duke	9-24-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
[signature] Lv III	9-27-02	100	[signature]	9/27/02

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S55	9/21/2002	S02F2U040 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	

Frequency 6 Rep Rate FIX

Mode P/E Filter ON

Damping 400 Reject OFF

Search Unit

Transducer Mfg. Panametrics

Serial No. 239864

Model No. A111S

Size / No. .50 Shape / Round

Frequency/Mode 10 0 / Long

"A" Dimension NA

Nom Angle 0 ° Meas Angle NA °

Cable Type /No. Conn. RG 174 / 0

Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36

Thickness 55 75"

Cal. Temp 80 °F

Cal. In 11:15 00 AM

Cal. Chk. 1130

Cal. Out 1 00 00 PM

Ref. Blk. No. N/A

Reflector/dB NA / NA

Amp/Sweep NA % NA

Zone 1 Calibration				Zone 2 Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA	#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7 6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"
0°	○	●	○	NA									

Notes:

Examination/Limitation Remarks: RPV Studs examined from the top No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	[illegible]	Lynda Duke	9-24-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
Danny A. Lotter LV III	9-27-02	100	[illegible]	9/27/02

Revision 4 0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S56	9/21/2002	S02F2U041 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. .50 Shape / Round
Frequency/Mode 10 0 / Long
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11:15 00 AM
Cal. Chk. 1130
Cal. Out 1·00.00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7 6" are OD Notches.

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top. No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	[illegible]	Lynda Duke	9-24-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
Darryl R. Griffin Lvl III	9-27-02	100	C G Ward	9/27/02

Revision 4 0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S57	9/21/2002	S02F2U042 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100.39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. .50 Shape / Round
Frequency/Mode 10.0 / Long.
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55.75"
Cal. Temp 80 °F
Cal. In 11:15 00 AM
Cal. Chk. 1130
Cal. Out 1 00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration				Zone 2 Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA	#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54.25 and #5 at 7 6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Ref. Measurements Wmax	Ref. Measurements Smax	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
0°	○	●	○	NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	[illegible]	Lynda Duke	9-24-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
[illegible]	9-27-02	100	[illegible]	9/27/02

Revision 4.0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.39
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-1300-S58	9/21/2002	S02F2U043 Page 1 of 1

Procedure/Rev /TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 39 4 0 N/A	Ultragel II / 01125	48881 2/5/2003	S02F2L010

Instrument

Make/Model Panametrics / Epoch II

Serial No. 91043406

	Zone 1	Zone 2
Reference	61	66
Scanning	67	73
Pulser	HIGH	
Frequency 6	Rep Rate FIX	
Mode P/E	Filter ON	
Damping 400	Reject OFF	

Search Unit

Transducer Mfg. Panametrics
Serial No. 239864
Model No. A111S
Size / No. .50 Shape / Round
Frequency/Mode 10 0 / Long
"A" Dimension NA
Nom Angle 0 ° Meas Angle NA °
Cable Type /No. Conn. RG 174 / 0
Cable Length 6'

Calibration Block

Cal. Blk. No ALA-36
Thickness 55 75"
Cal. Temp 80 °F
Cal. In 11.15 00 AM
Cal. Chk. 1130
Cal. Out 1 00 00 PM
Ref. Blk. No. N/A
Reflector/dB NA / NA
Amp/Sweep NA % NA

Zone 1 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#5	80	3 8	NA

Zone 2 Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
#3	80	8 0	NA

Calibration Remarks:
Calibration reflectors #3 at 54 25 and #5 at 7.6" are OD Notches

Comp Temp. 84 °F | Configuration - REACTOR VESSEL STUDS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Ref. Measurements Wmax	Smax	Thickness 1"<--	C/L	-->1"	Notes:
0°				NA										

Examination/Limitation Remarks: RPV Studs examined from the top No limitations

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NA to (2) NA

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Richard Money	II	[illegible]	Andrew Mixon	II	AM	Lynda Duke	9-24-02

SNC NDE Level II/III Review		Date	Percentage of Code Coverage	ANII Review	Date
Gary H. Loftus	LV III	9-27-02	100	[illegible]	9/27/02

Revision 4 0

Farley Nuclear Plant
Visual Examination Record VT-1

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FNP-0-NDE-100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N01 REACTOR VESSEL NUTS	APR1-1300	S02F2V096

Photos	Sketch	Resolution	Technique	
[ ] Yes [ ] B/W [x] No [ ] Color	[ ] Yes [x] No	[x] 1/32" Division (Scale) [x] 1/32" Line (Gray Card)	[x] Direct [ ] Video [ ] Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
[x] Mirror [ ] N/A [ ] Magnifier [ ] CCTV	[x] Ambient [x] Flashlight [ ] Droplight	[x] Scale [ ] Depth Gauge [ ] Level [ ] Micrometer [ ] Comparator [ ] _____ [ ] Caliper [ ] Weld Gauge [ ] _____		

Examiner/Initial	Level
Examiner/Initial John W Bell JWB Sig. John W Bell	III
Examiner/Initial N/ A Sig	N/A

Date (Month-Day-Year) 9/20/2002

[ ] WELDS AND BASE MATERIAL VT-1

	SAT	*UN-SAT	N/A
Ground Blend Material	[ ]	[ ]	[x]
Undercut	[ ]	[ ]	[x]
Corrosion Build-up	[ ]	[ ]	[x]
Gouges	[ ]	[ ]	[x]
Evidence of Leakage	[ ]	[ ]	[x]
Arc Strikes	[ ]	[ ]	[x]
Cracks	[ ]	[ ]	[x]
Other**	[ ]	[ ]	[x]

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

[x] BOLTS, STUDS, AND WASHERS VT-1

	SAT	*UN-SAT	N/A
Loose Members	[ ]	[ ]	[x]
Cracks	[x]	[ ]	[ ]
Corrosion	[x]	[ ]	[ ]
Gouges	[x]	[ ]	[ ]
Thread Damage	[x]	[ ]	[ ]
Deformation	[x]	[ ]	[ ]
Protective Coating	[x]	[ ]	[ ]
Evidence of Leakage	[ ]	[ ]	[x]
Other **	[ ]	[ ]	[x]

Comments NA

	ANII Review C G Wand	Date 9/21/02
Reviewed By Henry A. Lothers	Level III	Date 9-21-02

Revision 1.0

Farley Nuc. lant
Visual Examination Record VT-1

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FNP-0-I 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N14 REACTOR VESSEL NUTS	APR1-1300	S02F2V069

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☐ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial Sig.	Level
Paul DiValerio	II
Examiner/Initial N/ A Sig.	N/A
Date (Month-Day-Year) 9/19/2002	

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☑	☐	☐
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review	Date 9/21/02
Reviewed By	Level III	Date 9-20-02

Revision 1.0

Farley Nuc[illegible] lant
Visual Examination Record VT-1

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FNP-0-I 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N15 REACTOR VESSEL NUTS	APR1-1300	S02F2V070

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100.21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☐ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial Sig.	Level
Paul DiValeno / Paul DiValeno	II
N/ A	N/A

Date (Month-Day-Year) 9/19/2002

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☑	☐	☐
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review [illegible]	Date 9/21/02
Reviewed By Henry A. Lathers	Level III	Date 9-20-02

Revision 1.0

Farley Nuc ant
Visual Examination Record VT-1

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FNP-0-1 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N24 REACTOR VESSEL NUTS	APR1-1300	S02F2V071

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100.21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☐ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial Sig.	Level
Paul DiValeno	II
Examiner/Initial N/ A Sig.	N/A
Date (Month-Day-Year) 9/19/2002	

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☑	☐	☐
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review	Date 9/21/02
Reviewed By	Level III	Date 9-20-02

Revision 1.0

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Visual Examination Record VT-1

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FNP-0-I 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N25 REACTOR VESSEL NUTS	APR1-1300	S02F2V072

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☐ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial Sig.	Level
Paul DiValeno	II
Examiner/Initial N/A Sig.	N/A

Date (Month-Day-Year) 9/19/2002

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☑	☐	☐
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review	C G Kind	Date 9/21/02
Reviewed By Harry A. Loftus	Level III		Date 9-20-02

Revision 1.0

Farley Nuc. Plant
Visual Examination Record VT-1

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FNP-0-I 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N27 REACTOR VESSEL NUTS	APR1-1300	S02F2V097

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell JWB Sig. John W Bell	III
Examiner/Initial N/ A Sig	N/A
Date (Month-Day-Year) 9/20/2002	

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Ward	Date 9/21/02
Reviewed By [signature]	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

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FNP-0-[illegible] 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N28 REACTOR VESSEL NUTS	APR1-1300	S02F2V098

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100.21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools			Examiner/Initial John W Bell JWB Sig. John W Bell	Level III
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Micrometer ☐ Caliper	☐ Depth Gauge ☐ Comparator ☐ Weld Gauge	☐ Level ☐ _____ ☐ _____	Examiner/Initial N/ A Sig.	Level N/A
					Date (Month-Day-Year) 9/20/2002	

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review CGWard	Date 9/21/02
Reviewed By [illegible]	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

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FNP-0-N[illegible] 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N29 REACTOR VESSEL NUTS	APR1-1300	S02F2V099

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell JWB Sig. John W Bell	III
N/ A Sig.	N/A

Date (Month-Day-Year) 9/20/2002

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review [illegible]	Date 9/21/02
Reviewed By [illegible]	Level III	Date 9-21-02

Revision 1.0

Farley Nu... Plant
Visual Examination Record VT-1

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FNP-0-I 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N30 REACTOR VESSEL NUTS	APR1-1300	S02F2V100

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell JWB Sig. John W Bell	III
N/ A Sig.	N/A

Date (Month-Day-Year) 9/20/2002

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review CG Ward	Date 9/21/02
Reviewed By Darryl A. Lotten	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

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FNP-0-N[illegible] 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N31 REACTOR VESSEL NUTS	APR1-1300	S02F2V101

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell Sig. John W Bell JWB	III
N/ A Sig.	N/A

Date (Month-Day-Year) 9/20/2002

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Wand	Date 9/21/02
Reviewed By Larry A. Lofton	Level III	Date 9-21-02

Revision 1.0

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Visual Examination Record VT-1

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FNP-0-N 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N32 REACTOR VESSEL NUTS	APR1-1300	S02F2V102

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools			
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Micrometer ☐ Caliper	☐ Depth Gauge ☐ Comparator ☐ Weld Gauge	☐ Level ☐ _____ ☐ _____	

Examiner/Initial	Level
John W Bell JWB Sig John W Bell	III
Examiner/Initial N/ A Sig.	N/A
Date (Month-Day-Year) 9/20/2002	

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Hand	Date 9/21/02
Reviewed By Darryl L. Lofton	Level III	Date 9-21-02

Revision 1.0

Farley Nu... Plant
Visual Examination Record VT-1

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FNP-0-I 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N51 REACTOR VESSEL NUTS	APR1-1300	S02F2V103

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
Sig. John W Bell JWB	III
Examiner/Initial N/ A Sig.	N/A
Date (Month-Day-Year) 9/20/2002	

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review CGWard	Date 9/21/02
Reviewed By Danny A. Lothrop	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

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FNP-0-N 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N52 REACTOR VESSEL NUTS	APR1-1300	S02F2V104

Photos	Sketch	Resolution	Technique
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote

WO / WA NA
Procedure No. FNP-0-NDE-100 21
Revision No. 1 0 / N/A

Equipment	Lighting	Tools	
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____	

Examiner/Initial John W Bell JWB
Sig. John W Bell — Level III
Examiner/Initial N/ A
Sig. — Level N/A
Date (Month-Day-Year) 9/20/2002

☐ WELDS AND BASE MATERIAL VT-1

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review	C G Ward	Date 9/21/02
Reviewed By	Level	III	Date 9-21-02

Revision 1.0

Farley Nuc. Plant
Visual Examination Record VT-1

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FNP-0-N 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N53 REACTOR VESSEL NUTS	APR1-1300	S02F2V105

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell JWB Sig. John W Bell	III
N/ A Sig.	N/A

Date (Month-Day-Year) 9/20/2002

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Ward	Date 9/21/02
Reviewed By Darryl L. Lotter	Level III	Date 9-21-02

Revision 1.0

Farley Nu Plant
Visual Examination Record VT-1

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FNP-0-I 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N54 REACTOR VESSEL NUTS	APR1-1300	S02F2V106

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100.21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
Sig. John W Bell JWB	III
Examiner/Initial N/A Sig.	N/A
Date (Month-Day-Year) 9/20/2002	

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Wood	Date 9/21/02
Reviewed By Larry A. Lotton	Level III	Date 9-21-02

Revision 1.0

Farley Nuc.. Plant
Visual Examination Record VT-1

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FNP-0-N 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N55 REACTOR VESSEL NUTS	APR1-1300	S02F2V107

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
Sig. John W Bell JWB	III
Examiner/Initial N/A Sig	N/A
Date (Month-Day-Year) 9/20/2002	

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Wardl	Date 9/21/02
Reviewed By Douglas L. Lothes	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

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FNP-0-N[illegible] 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N56 REACTOR VESSEL NUTS	APR1-1300	S02F2V108

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools			Examiner/Initial John W Bell Sig. John W Bell JWB	Level III
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☐ Flashlight ☐ Droplight	☑ Scale ☐ Micrometer ☐ Caliper	☐ Depth Gauge ☐ Comparator ☐ Weld Gauge	☐ Level ☐ _____ ☐ _____	Examiner/Initial N/ A Sig.	Level N/A
					Date (Month-Day-Year) 9/20/2002	

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Ward	Date 9/21/02
Reviewed By Darryl L. Joffrion	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

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FNP-0-N[illegible].00.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N57 REACTOR VESSEL NUTS	APR1-1300	S02F2V109

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell JWB Sig. John W Bell	III
N/ A Sig.	N/A

Date (Month-Day-Year) 9/20/2002

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Ward	Date 9/21/02
Reviewed By Darryl Lothers	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

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FNP-0-N[illegible]00.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-N58 REACTOR VESSEL NUTS	APR1-1300	S02F2V110

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell JWB Sig. John W Bell	III
N/A Sig.	N/A

Date (Month-Day-Year) 9/20/2002

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review	C G Wood	Date 9/21/02
Reviewed By Gary A. Hoffman	Level	III	Date 9-21-02

Revision 1.0

Farley Nuc. Plant
Visual Examination Record VT-1

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FNP-0-N__-100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W01 REACTOR VESSEL WASHERS	APR1-1300	S02F2V077

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell JWB Sig. John W Bell	III
N/ A Sig.	N/A

Date (Month-Day-Year) 9/20/2002

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

Reviewed By [signature]	ANII Review [signature]	Date 9/21/02
	Level III	Date 9-21-02

Revision 1.0

Farley Nuc... lant
Visual Examination Record VT-1

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FNP-0-N...-100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W14 REACTOR VESSEL WASHERS	APR1-1300	S02F2V073

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools			Examiner/Initial Sig.	Level
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☐ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Micrometer ☐ Caliper	☐ Depth Gauge ☐ Comparator ☐ Weld Gauge	☐ Level ☐ _____ ☐ _____	Paul DiValerio Paul DiValerio	II
					Examiner/Initial Sig. N/ A	Level N/A
					Date (Month-Day-Year) 9/19/2002	

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☑	☐	☐
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review	C G Ward	Date 9/21/02
Reviewed By Gary A. Lotthes	Level III		Date 9-20-02

Revision 1.0

Farley Nuc. Plant
Visual Examination Record VT-1

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FNP-0-NDE-100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W15 REACTOR VESSEL WASHERS	APR1-1300	S02F2V074

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100.21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools			Examiner/Initial Sig.	Level
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☐ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Micrometer ☐ Caliper	☐ Depth Gauge ☐ Comparator ☐ Weld Gauge	☐ Level ☐ _____ ☐ _____	Paul DiValerio Examiner/Initial Sig. N/A	II Level N/A
					Date (Month-Day-Year) 9/19/2002	

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☑	☐	☐
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Wood	Date 9/21/02
Reviewed By Gary A. Hoffman	Level III	Date 9-20-02

Revision 1.0

Farley Nuc... ant
Visual Examination Record VT-1

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FNP-0-I 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W24 REACTOR VESSEL WASHERS	APR1-1300	S02F2V075

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100.21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☐ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial Sig.	Level
Paul DiValeno Paul DiValeno	II
N/ A	N/A

Date (Month-Day-Year) 9/19/2002

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☑	☐	☐
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Ward	Date 9/21/02
Reviewed By Gary A. Loftus	Level III	Date 9-20-02

Revision 1.0

Farley Nuc... Plant
Visual Examination Record VT-1

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FNP-0-N... E-100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W25 REACTOR VESSEL WASHERS	APR1-1300	S02F2V076

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100.21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☐ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial Sig.	Level
Paul DiValerio	II
N/ A	N/A

Date (Month-Day-Year) 9/19/2002

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☑	☐	☐
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Wood	Date 9/21/02
Reviewed By Gary A Lofton	Level III	Date 9-20-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

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FNP-0-N[illegible] 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W27 REACTOR VESSEL WASHERS	APR1-1300	S02F2V078

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100.21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools			Examiner/Initial John W Bell Sig. John W Bell JWB	Level III
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Micrometer ☐ Caliper	☐ Depth Gauge ☐ Comparator ☐ Weld Gauge	☐ Level ☐ _____ ☐ _____	Examiner/Initial N/A Sig.	Level N/A
					Date (Month-Day-Year) 9/20/2002	

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review [illegible]	Date 9/21/02
Reviewed By [illegible]	Level III	Date 9-21-02

Revision 1 0

Farley Nuclear Plant
Visual Examination Record VT-1

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FNP-0-NDE-100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W28 REACTOR VESSEL WASHERS	APR1-1300	S02F2V079

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools			
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Micrometer ☐ Caliper	☐ Depth Gauge ☐ Comparator ☐ Weld Gauge	☐ Level ☐ _____ ☐ _____	

Examiner/Initial John W. Bell Sig. John W Bell JWB	Level III
Examiner/Initial N/ A Sig.	Level N/A
Date (Month-Day-Year) 9/20/2002	

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Wand	Date 9/21/02
Reviewed By Danny A. Lothes	Level III	Date 9-21-02

Revision 1.0

Farley Nuc. Plant
Visual Examination Record VT-1

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FNP-0-N 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W29 REACTOR VESSEL WASHERS	APR1-1300	S02F2V081

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100.21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell Sig. John W Bell JWB	III
Examiner/Initial N/A Sig.	N/A
Date (Month-Day-Year) 9/20/2002	

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Wand	Date 9/21/02
Reviewed By Darryl L. Loffler	Level III	Date 9-21-02

Revision 1.0

Farley Nu . Plant
Visual Examination Record VT-1

SHARED

FNP-0- -100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W30 REACTOR VESSEL WASHERS	APR1-1300	S02F2V082

Photos	Sketch	Resolution	Technique	
☑ Yes ☐ B/W ☐ No ☑ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell Sig. John W Bell JWB	III
N/ A Sig.	N/A
Date (Month-Day-Year) 9/20/2002	

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

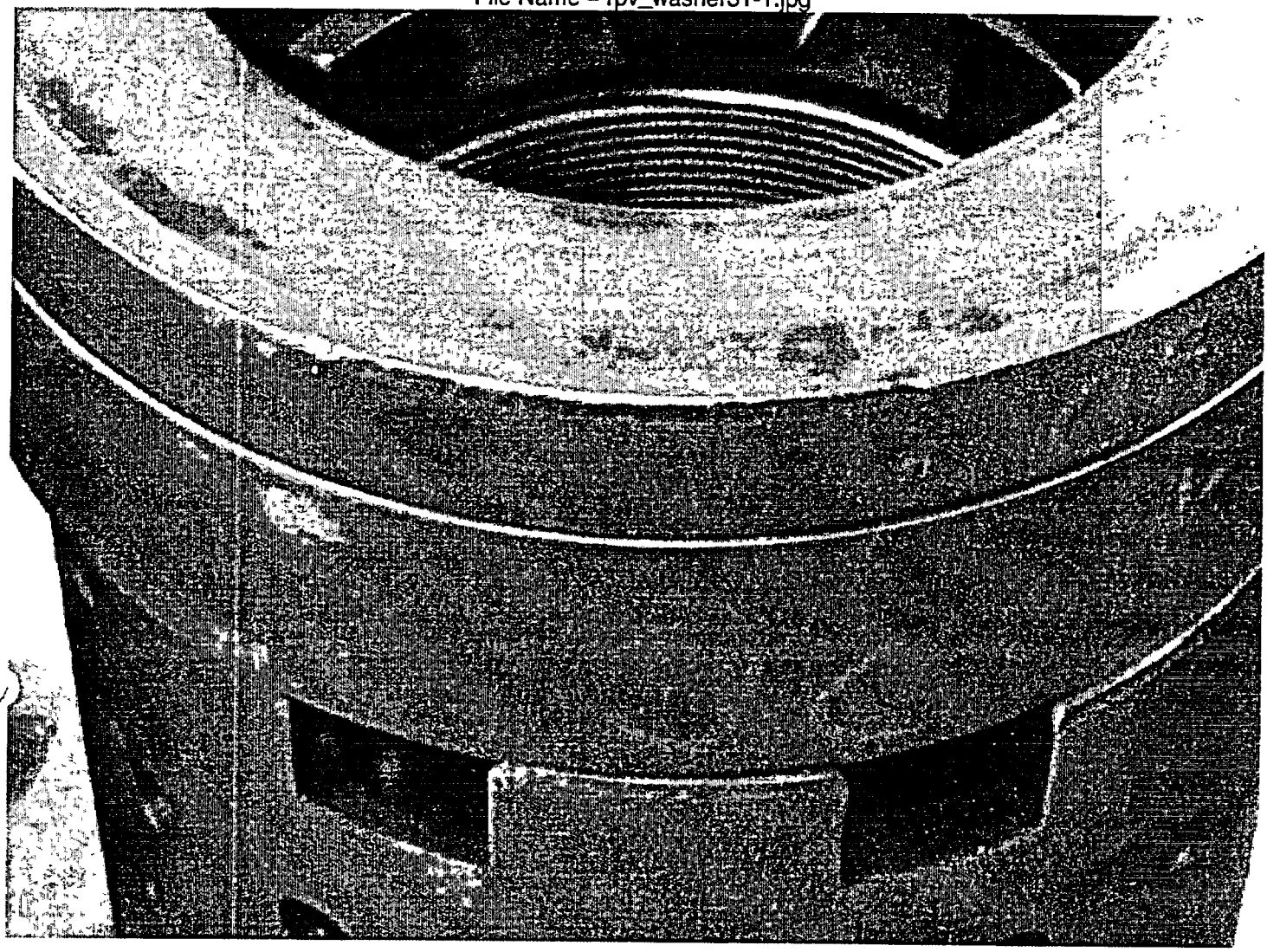
☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☑	☐

Comments Washer 30 UNSAT due to ding/metal role back of small 'T' Washer for ~3" on flat outer side edge, photos taken

See IER-001	ANII Review [signature]	Date 10/1/02
Reviewed By [signature]	Level III	Date 9-21-02

Revision 1.0

File Name = rpv_washer31-1.jpg



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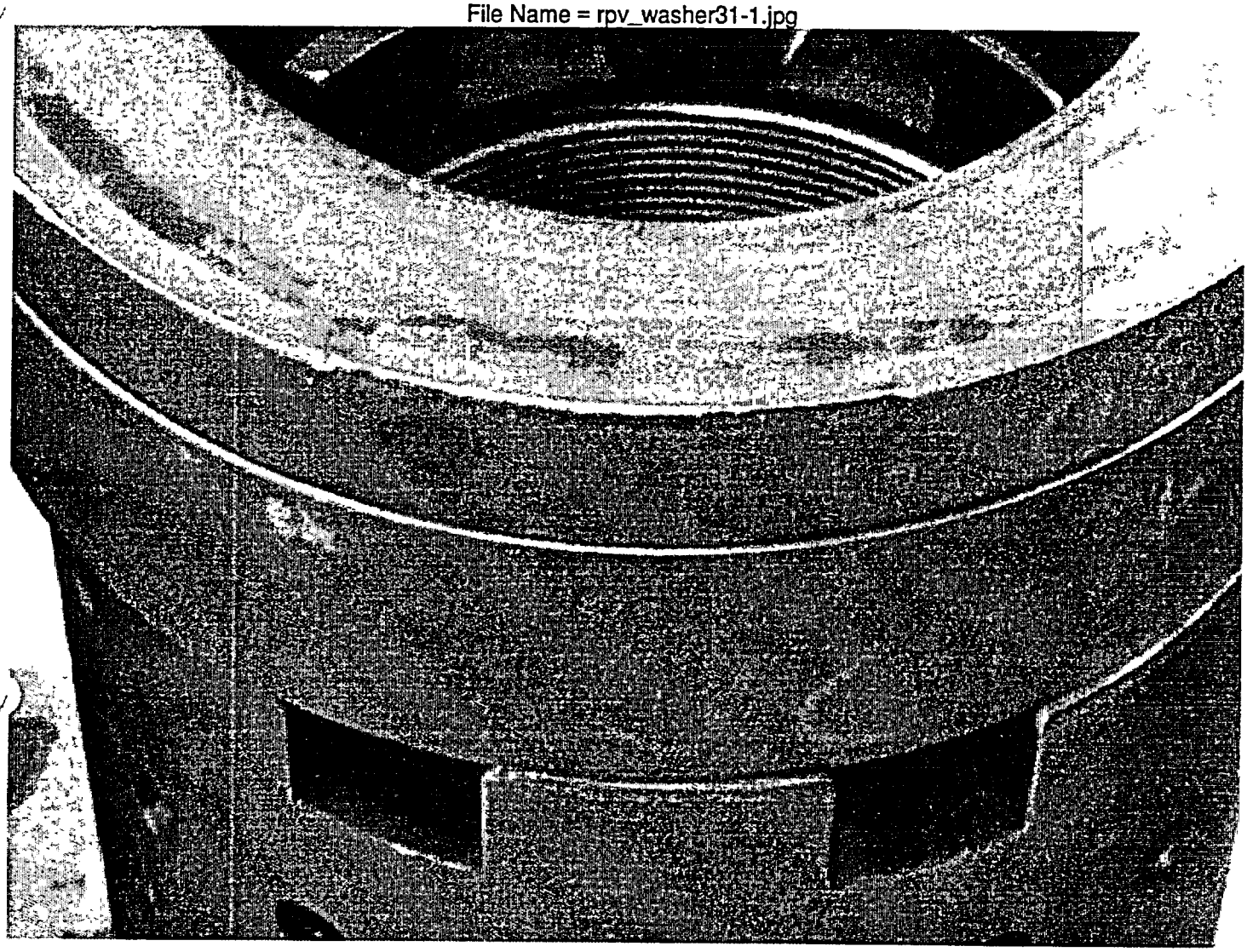


Farley Nuclear Plant
Liquid Penetrant Examination Record

SHARED

FNP-0-NDE-100.5
PT-F-FORM 001
Southern Nuclear Operating Company

Unit	Component No.	Procedure/Rev./TCN	Sheet No.
2	APR1-1300-W30	FNP-0-NDE-100.5 Rev. 4 6	Page 1 of 1

Thermometer

Mfg/Ser. No. PTC / 48881
Cal. Due Date 2-25-03

Surface Temp. 83 °F

Manufacturer MAGNAFLUX

Penetrant Materials

	Type	Batch
Cleaner / Remover	SKC-S	99J01K
Penetrant	SKL-SP	96J02K
Developer	SKD-S2	96J08K

Component Configuration: WASHER

% of Length Coverage 100%
% of Area Coverage 100%

Date 9-23-02

Ind. No.	Results	Dwell Time	Indication Desc. / Exam Limitations / etc.	Remarks
N/A	NI	12 mins.	Supplement Exam of VT. AREA Plus (+) 1 inch.	Reference VT-1 Sheet S02F2V082

IER-001 Gal 9-27-02

Primary Examiner	ASNT Level	Initials	Assistant Examiner	ASNT Level	Initials	Non-Technical Review	Date
John W. Bell	II	JWB	N/A			Lynda Duke	9-24-02

SNC NDE Level II/III Review		Date	Percentage of Code Coverage	ANII Review	Date
[illegible]	III	9-27-02	N/A	[illegible] 10/25/02	10/1/02

Revision 6.

Farley Nuc. Plant
Visual Examination Record VT-1

SHARED

FNP-0-N .00.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W31 REACTOR VESSEL WASHERS	APR1-1300	S02F2V083

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial Sig.	Level
John W Bell JWB John W Bell	III
Examiner/Initial N/ A Sig.	N/A
Date (Month-Day-Year) 9/20/2002	

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Wood	Date 9/21/02
Reviewed By Gary A. Roffler	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

SHARED

FNP-0-N[illegible] 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W32 REACTOR VESSEL WASHERS	APR1-1300	S02F2V084

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools			
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Micrometer ☐ Caliper	☐ Depth Gauge ☐ Comparator ☐ Weld Gauge	☐ Level ☐ _____ ☐ _____	Examiner/Initial John W Bell JWB Sig. John W Bell Examiner/Initial N/ A Sig Date (Month-Day-Year) 9/20/2002

Level III
Level N/A

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Wand	Date 9/21/02
Reviewed By Gary A. Griffin	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

SHARED

FNP-0-N[illegible] 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W51 REACTOR VESSEL WASHERS	APR1-1300	S02F2V085

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools			Examiner/Initial John W Bell Sig. John W Bell JWB	Level III
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Micrometer ☐ Caliper	☐ Depth Gauge ☐ Comparator ☐ Weld Gauge	☐ Level ☐ _____ ☐ _____	Examiner/Initial N/A Sig.	Level N/A
					Date (Month-Day-Year) 9/20/2002	

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review [illegible]	Date 9/21/02
Reviewed By [illegible]	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

SHARED

FNP-0-N[illegible] 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W52 REACTOR VESSEL WASHERS	APR1-1300	S02F2V086

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools			Examiner/Initial John W Bell Sig. John W Bell JWB	Level III
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Micrometer ☐ Caliper	☐ Depth Gauge ☐ Comparator ☐ Weld Gauge	☐ Level ☐ _____ ☐ _____	Examiner/Initial N/ A Sig.	Level N/A
					Date (Month-Day-Year) 9/20/2002	

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

Reviewed By		ANII Review	Date 9/21/02
		Level III	Date 9-21-02

Revision 1.0

Farley Nuc.. Plant
Visual Examination Record VT-1

SHARED

FNP-0-N 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W53 REACTOR VESSEL WASHERS	APR1-1300	S02F2V088

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial Sig.	Level
John W. Bell JWB	III
Examiner/Initial N/ A Sig.	N/A
Date (Month-Day-Year) 9/20/2002	

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review E G Wand	Date 9/21/02
Reviewed By Henry P. Loftus	Level III	Date 9-21-02

Revision 1.0

Farley Nu... Plant
Visual Examination Record VT-1

SHARED

FNP-0-N 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W54 REACTOR VESSEL WASHERS	APR1-1300	S02F2V089

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100.21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools			
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Micrometer ☐ Caliper	☐ Depth Gauge ☐ Comparator ☐ Weld Gauge	☐ Level ☐ _____ ☐ _____	

Examiner/Initial John W Bell Sig. John W Bell JWB	Level III
Examiner/Initial N/ A Sig.	Level N/A
Date (Month-Day-Year) 9/20/2002	

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review CG Ward	Date 9/21/02
Reviewed By Danny R. Lofties	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

SHARED

FNP-0-N[illegible] 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W55 REACTOR VESSEL WASHERS	APR1-1300	S02F2V090

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell JWB Sig. John W Bell	III
N/ A Sig.	N/A

Date (Month-Day-Year) 9/20/2002

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Ward	Date 9/21/02
Reviewed By Danny A. Lothes	Level III	Date 9-21-02

Revision 1.0

Farley Nu[illegible] Plant
Visual Examination Record VT-1

SHARED

FNP-0-N[illegible] 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W56 REACTOR VESSEL WASHERS	APR1-1300	S02F2V091

Photos	Sketch	Resolution	Technique	
[ ] Yes [ ] B/W [x] No [ ] Color	[ ] Yes [x] No	[x] 1/32" Division (Scale) [x] 1/32" Line (Gray Card)	[x] Direct [ ] Video [ ] Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools		
[x] Mirror [ ] N/A [ ] Magnifier [ ] CCTV	[x] Ambient [x] Flashlight [ ] Droplight	[x] Scale [ ] Depth Gauge [ ] Level [ ] Micrometer [ ] Comparator [ ] _____ [ ] Caliper [ ] Weld Gauge [ ] _____		

Examiner/Initial John W Bell JWB Sig. John W Bell	Level III
Examiner/Initial N/A Sig.	Level N/A
Date (Month-Day-Year) 9/20/2002	

[ ] WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	[ ]	[ ]	[x]
Undercut	[ ]	[ ]	[x]
Corrosion Build-up	[ ]	[ ]	[x]
Gouges	[ ]	[ ]	[x]
Evidence of Leakage	[ ]	[ ]	[x]
Arc Strikes	[ ]	[ ]	[x]
Cracks	[ ]	[ ]	[x]
Other**	[ ]	[ ]	[x]

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

[x] BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	[ ]	[ ]	[x]
Cracks	[x]	[ ]	[ ]
Corrosion	[x]	[ ]	[ ]
Gouges	[x]	[ ]	[ ]
Thread Damage	[x]	[ ]	[ ]
Deformation	[x]	[ ]	[ ]
Protective Coating	[x]	[ ]	[ ]
Evidence of Leakage	[ ]	[ ]	[x]
Other **	[ ]	[ ]	[x]

Comments NA

	ANII Review C G Ward	Date 9/21/02
Reviewed By Darryl L Lothes	Level III	Date 9-21-02

Revision 1.0

Farley Nu.. Plant
Visual Examination Record VT-1

SHARED

FNP-0-N 100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W57 REACTOR VESSEL WASHERS	APR1-1300	S02F2V092

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
Sig John W Bell JWB	III
Examiner/Initial N/A Sig.	N/A
Date (Month-Day-Year) 9/20/2002	

☐ **WELDS AND BASE MATERIAL VT-1**

	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ **BOLTS, STUDS, AND WASHERS VT-1**

	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

	ANII Review C G Ward	Date 9/21/02
Reviewed By Gary A Hoffman	Level III	Date 9-21-02

Revision 1.0

Farley Nu... Plant
Visual Examination Record VT-1

SHARED

FNP-0-N ...100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-W58 REACTOR VESSEL WASHERS	APR1-1300	S02F2V093

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☑ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA NA Procedure No. FNP-0-NDE-100 21 Revision No. 1 0 / N/A

Equipment	Lighting	Tools		
☑ Mirror ☐ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☑ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial	Level
John W Bell JWB Sig. John W Bell	III
N/ A Sig.	N/A

Date (Month-Day-Year) 9/20/2002

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments NA

Reviewed By [signature]	ANII Review [signature]	Date 9/21/02
	Level III	Date 9-21-02

Revision 1.0

EXAMINATION SUMMARY
FOR UNIT 2
INTERVAL 3 PERIOD 1 OUTAGE 1

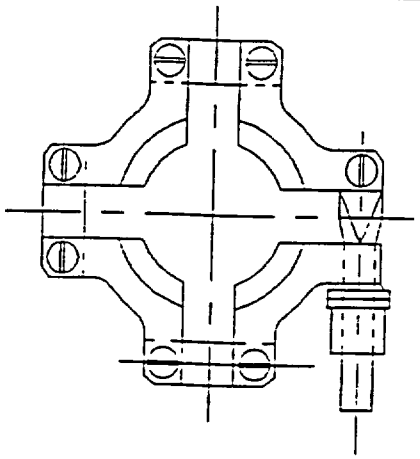
DRAWING APR1-1300C
REACTOR VESSEL CLOSURE HEAD CONOSEAL BOLTING

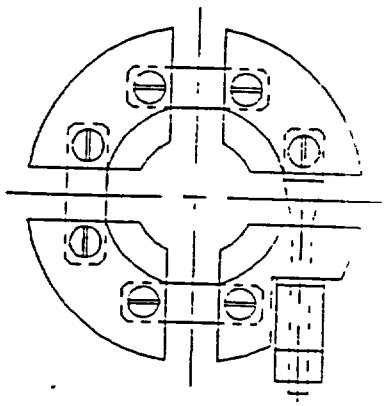
ITEM NO	VOLUMERIC			SURFACE			VISUAL			REMARKS
	NI	NRI	RI	NI	NRI	RI	NI	NRI	RI	
PEN 51							X			

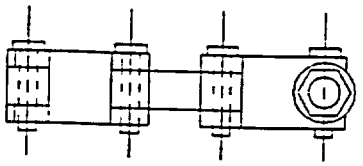
APR1-3000

REACTOR VESSEL CLOSURE HEAD
CONOSEAL BOLTING

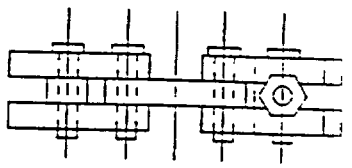
C2311H001



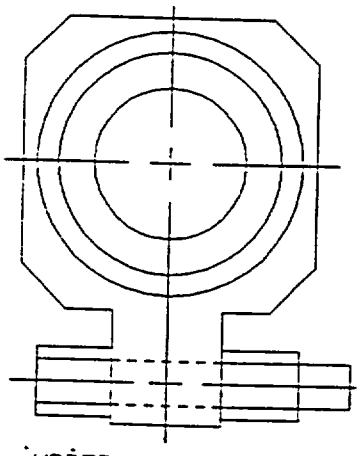




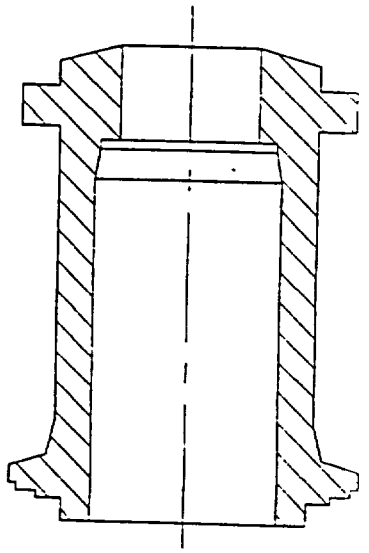
LOWER CLAMP



UPPER CLAMP



UPPER POSITIONER



MALE FLANGE

ASSEMBLIES	BOLTED UNITS PER ASSEMBLY	NO BOLTS PER UNIT	TOTAL NO BOLTS
4	3	1	12

VENDOR MANUAL U-214660

REV	DATE	BY	CHK'D	DESCRIPTION	APPP1	APPP2	APPP3	APPP4
1	7-21-97	HSK	TLS	REVISED PER REA 96-1295 REV.0	DEW			
0	11-22-91	SDH	JAR	ISSUED PER PCN S-91-2-7763.	CAB/R	HGM	RKC/AH	DML

LAU APR1300C HSK-1 AUTOCAD

Southern Company Services, Inc.

ALABAMA POWER COMPANY
JOSEPH M FARLEY NUCLEAR PLANT
UNIT 2

REACTOR VESSEL

SCS DRAWING NUMBER	SHEET	REV
A-356454	11	1

Farley Nuc Plant
Visual Examination Record VT-1

SHARED

FNP-0 :-100.21
Southern Nuclear Operating Company

Plant / Unit	Line Number/Examination Area/Weld No.	Drawing Number	Sheet Number
Farley / 2	APR1-1300-PEN 51 CRD HOUSING BOLTING	APR1-1300	S02F2V165

Photos	Sketch	Resolution	Technique	
☐ Yes ☐ B/W ☑ No ☐ Color	☐ Yes ☑ No	☑ 1/32" Division (Scale) ☐ 1/32" Line (Gray Card)	☑ Direct ☐ Video ☐ Remote	WO / WA N/A Procedure No. FNP-0-NDE-100 21 Revision No. 1.0 / N/A

Equipment	Lighting	Tools		
☐ Mirror ☑ N/A ☐ Magnifier ☐ CCTV	☑ Ambient ☐ Flashlight ☐ Droplight	☑ Scale ☐ Depth Gauge ☐ Level ☐ Micrometer ☐ Comparator ☐ _____ ☐ Caliper ☐ Weld Gauge ☐ _____		

Examiner/Initial Sig.	Level
Terry G Carraher	II
N/A	N/A

Date (Month-Day-Year) 10/7/2002

☐ WELDS AND BASE MATERIAL VT-1	SAT	*UN-SAT	N/A
Ground Blend Material	☐	☐	☑
Undercut	☐	☐	☑
Corrosion Build-up	☐	☐	☑
Gouges	☐	☐	☑
Evidence of Leakage	☐	☐	☑
Arc Strikes	☐	☐	☑
Cracks	☐	☐	☑
Other**	☐	☐	☑

* Provide details on unsat areas by use of supplemental data sheet.
** Provide details on other areas examined

☑ BOLTS, STUDS, AND WASHERS VT-1	SAT	*UN-SAT	N/A
Loose Members	☐	☐	☑
Cracks	☑	☐	☐
Corrosion	☑	☐	☐
Gouges	☑	☐	☐
Thread Damage	☑	☐	☐
Deformation	☑	☐	☐
Protective Coating	☑	☐	☐
Evidence of Leakage	☐	☐	☑
Other **	☐	☐	☑

Comments Bolting was removed for examination.

Reviewed By	ANII Review	Date 10/7/02
	Level III	Date 10-7-02

Revision 1.0

1.2

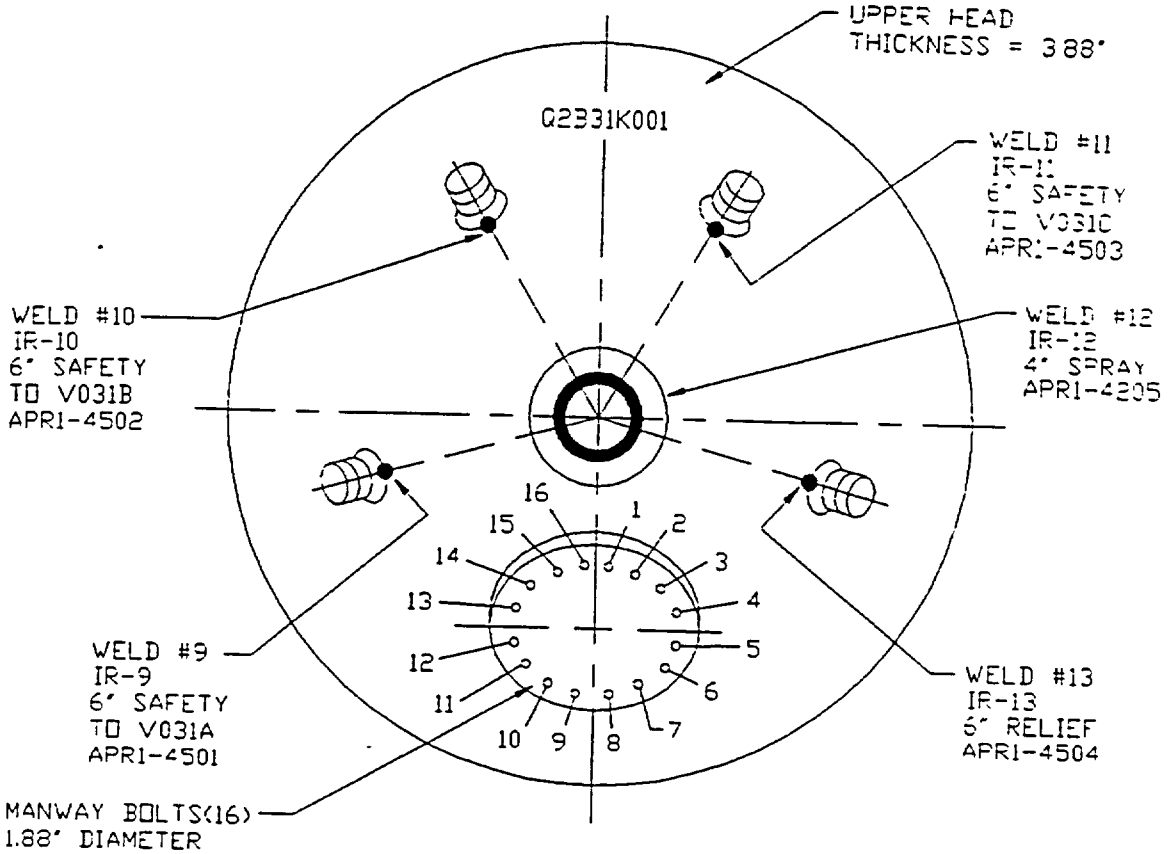
EXAMINATION SUMMARY
FOR UNIT 2
INTERVAL 3 PERIOD 1 OUTAGE 1

DRAWING APR1-2100A
PRESSURIZER NOZZLE TO VESSEL WELDS

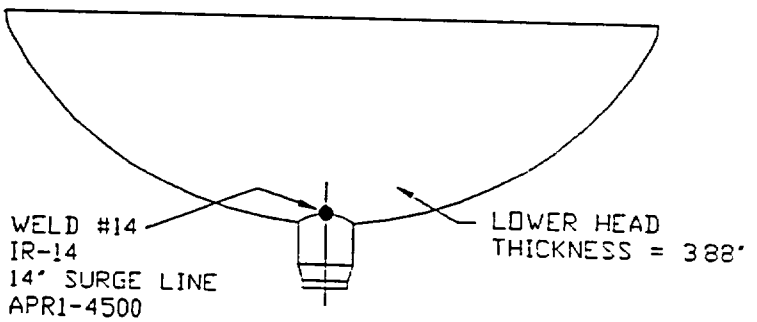
ITEM NO	VOLUMERIC			SURFACE			VISUAL			REMARKS
	NI	NRI	RI	NI	NRI	RI	NI	NRI	RI	
9	X			X						
9IR	X									
10	X			X						
10IR	X									

APR1-2100A

PRESSURIZER NOZZLE TO VESSEL WELDS



WELD #	FNP FIG.	CAL. BLOCK
9	008	APR-7
IR-9	008	APR-38
10	008	APR-7
IR-10	008	APR-38
11	008	APR-7
IR-11	008	APR-38
12	008	APR-7
IR-12	008	APR-38
13	008	APR-7
IR-13	008	APR-38
14	008	APR-7
IR-14	008	APR-39



VENDOR MANUAL U-2131.7

NOTE
6 NOZZLE TO VESSEL WELDS
16 MANWAY BOLTS

REV	DATE	BY	CHK'D	DESCRIPTION	CAB/R APPP 1	HGM APPP 2	RKC/AH APPR 3	DML APPR 4
1	7-21-97	HSK	TLS	REVISED PER REA 96-1295 REV 0	DEW			
0	11-22-91	SDH	JAR	ISSUED PER PCN S-91-2-7763.				

Southern Company Services, Inc for

ALABAMA POWER COMPANY
JOSEPH M FARLEY NUCLEAR PLANT
UNIT 2

PRESSURIZER

SCS DRAWING NUMBER	SHEET	REV
A-356454	13	1

CAD APR2100A HSK-1
AUTOCAD

WELD EXAMINATION SUMMARY SHEET

Sheet No. S02F2S079

Weld Number: APR1-2100-9

Examination Area: PRZ UPPER HD. TO NOZZLE WELD

Figure No.	Procedure	Cal Block	Exam Requirements
APR1-2100	FNP-0-NDE-100.11 FNP-0-NDE-100.34	APR-7	B-D/B3.110/

The following data sheets are included in this package

Data Sheet No.	Angle	Results	Remarks
S02F2M001		NI	
S02F2U012	45	NI	
S02F2U013	60	NI	
S02F2U015	70	NI	

Comments:

SUPPLEMENTAL SURFACE EXAMINATION. RR-6 75% ASME CODE COVERAGE.

(Describe limitation in comments)

Percent on required area examined - Surface	100
Percent of required volume examined - Volumetric	75
Relief Request Number/Required?	RR-6
Code Case used (If applicable)	NA
IER Number (If applicable)	NA

ITS Review: Harry A. Lightles **Date:** 8-24-02

SHARED

Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.34
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-2100-9	9/20/2002	S02F2U012 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 34 6 0 N/A	Ultragel II / 01125	48890 2/5/2003	S02F2L005

Instrument

Instrument Staveley / SONIC 136
Serial No. 136-905K

	Axial dB	Circ dB
Reference	40	40
Scanning	52	52

Reject OFF
Frequency 2 25
Mode P/E
Damping 500 OHMS

Search Unit

Transducer Mfg. Panametrics
Serial Number 267694
Model No. ANGLE
Size / No. 5"X1" Shape Rect
Frequency/Mode 2.25 / Shear
"A" Dimension .75
Nom Angle 45 °
Meas Angle 45 °
Cable Type / No. Conn. RG174 / 0
Cable Length 12'

Calibration Block

Cal. Blk. No APR-7
Thickness 3 5
Cal. Temp 94 °F
Cal. In 8·15
Cal. Chk. 1305
Cal. Out 15 30
Ref. Blk. No. A01146
Reflector/dB SDH / 40
Amp/Sweep 40 % / 2.0

Axial Scan Calibration				Circ Scan Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
1/4	80	2 0	.88	1/4	80	2 0	88
1/2	60	4 0	1 80	1/2	60	4 0	1 80
3/4	45	6 0	2 65	3/4	45	6 0	2 65
1T	10	8 0	3 50	1T	10	8 0	3 50
5/4	26	10 0	N/A	5/4	26	10 0	N/A

Calibration Remarks:
N/A

Comp Temp. 94 °F | Configuration - PRZ UPPER HD TO NOZZLE WELD | Wo Loc. Weld C/L | Lo Loc. TDC

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Reference Measurement W1	Wmax	W2	Sweep Position S1	Smax	S2	Thickness 1"<--	C/L	-->1"	Notes:
8	●	○	○	NA														
7	●	○	○	NA														
5	●	○	○	NA														
2	●	○	○	NA														

Examination/Limitation Remarks: Nozzle Limits 2 Scan
RR-6 + 75% Composite Coverage

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
47"	1"	5 (L) NL 2 (L) NL 7 and 8 (W) NL	5- From NL to NL 2- From 34" to NL	From (5) NL to (2) NL

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Joseph D Funyak	II	JDF	Paul Valden	II	P.V.	Lynda Duke	9-21-02

SNC NDE Level II/III Review		Date	Percentage of Code Coverage	ANII Review	Date
Daniel Loftus	III	9-24-02	75	[signature]	9/24/02

Revision 6.0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.34
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-2100-9	9/20/2002	S02F2U013 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 34 6.0 N/A	Ultragel II / 01225	48890 2/5/2003	S02F2L005

Instrument

Instrument Staveley / SONIC 136
Serial No. 136-905K

	Axial dB	Circ dB
Reference	47.2	47 2
Scanning	59 2	59 2

Reject OFF
Frequency 2 25
Mode P/E
Damping 500 OHMS

Search Unit

Transducer Mfg. Panametrics
Serial Number 276054
Model No. A403S
Size / No. 5"X1" Shape Rect
Frequency/Mode 2.25 / Shear
"A" Dimension .75
Nom Angle 60 °
Meas Angle 58 °
Cable Type / No. Conn. RG174 / 0
Cable Length 12'

Calibration Block

Cal. Blk. No APR-7
Thickness 3 5
Cal. Temp 94 °F
Cal. In 8 20
Cal. Chk. 1315
Cal. Out 15'32
Ref. Blk. No. A01146
Reflector/dB SDH / 47 2
Amp/Sweep 55 % / 1 8

Axial Scan Calibration				Circ Scan Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
1/4	80	2 0	1 67	1/4	80	2 0	1.67
1/2	50	4 0	3.22	1/2	50	4 0	3 22
3/4	35	6 0	4 82	3/4	35	6 0	4 82
1T	12	8 0	6 41	1T	12	8 0	6 41
5/4	16	10 0	N/A	5/4	16	10 0	N/A

Calibration Remarks:
NA

Comp Temp.	Configuration -	Wo Loc.	Lo Loc.
94 °F	PRZ UPPER HD TO NOZZLE WELD	Weld C/L	TDC

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Reference Measurement W1	Wmax	W2	Sweep Position S1	Smax	S2	Thickness 1"<--	C/L	<--->1"	Notes:
8	●	○	○	NA														
7	●	○	○	NA														
5	●	○	○	NA														
2	●	○	○	NA														

Examination/Limitation Remarks: Nozzle Limits 2 Scan
RR-6 *75% Composite Coverage

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
47"	1"	5 (L) NL 2 (L) NL 7 and 8 (W) NL	5- From NL to NL 2- From 3 4" to NL	From (5) NL to (2) NL

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Joseph D Funyak	II	JDF	Paul Valden	II	P.V.	Lynda Auke	9-21-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage *	ANII Review	Date
[signature] LW III	9-24-02	75	[signature]	9/24/02

Revision 6 0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.34
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-2100-9	9/20/2002	S02F2U015 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 34 6 0 N/A	Ultragel II / 01225	48890 2/5/2003	S02F2L005

Instrument

Instrument Staveley / SONIC 136
Serial No. 136-905K

	Axial dB	Circ dB
Reference	50 4	50 4
Scanning	62.4	62 4

Reject OFF
Frequency 2 25
Mode P/E
Damping 500 OHMS

Search Unit

Transducer Mfg. Panametrics
Serial Number 267701
Model No. ANGLE
Size / No. .5"X1" Shape Rect.
Frequency/Mode 2 25 / Shear
"A" Dimension 90
Nom Angle 70 °
Meas Angle 70 °
Cable Type / No. Conn. RG174 / 0
Cable Length 12'

Calibration Block

Cal. Blk. No APR-7
Thickness 3 5
Cal. Temp 94 °F
Cal. In 8 25
Cal. Chk. 1330
Cal. Out 15·34
Ref. Blk. No. A01146
Reflector/dB SDH / 50 4
Amp/Sweep 55 % / 1 9

Axial Scan Calibration				Circ Scan Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp	Sweep Div.	Wmax
1/4	80	4 0	2 47	1/4	80	4 0	2.47
1/2	45	8 0	4 72	1/2	45	8 0	4.72

Calibration Remarks:
NA

Comp Temp. 94 °F
Configuration - PRZ UPPER HD TO NOZZLE WELD
Wo Loc. Weld C/L
Lo Loc. TDC

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Reference Measurement W1	Wmax	W2	Sweep Position S1	Smax	S2	Thickness 1"<--	C/L	-->1"	Notes:
8	●	○	○	NA														
7	●	○	○	NA														
5	●	○	○	NA														
2	●	○	○	NA														

Examination/Limitation Remarks: Nozzle Limits 2 Scan

RR-6 * 75% Composite Coverage

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
47"	1"	5 (L) NL 2 (L) NL 7 and 8 (W) NL	5- From NL to NL 2- From 3.4" to NL	From (5) NL to (2) NL

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Joseph D Funyak	II	JDF	Paul Valden	II	P.V.	Lynda Duke	9-21-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
Harry H. Loftus W III	9-24-02	* 75	C G Ward	9/24/02

Revision 6 0

Farley Nuclear Plant
Magnetic Particle Examination Record

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FNP-0-NDE-100.11
MT-F-FORM 002
Southern Nuclear Operating Company

Unit	Weld Number	Procedure/Rev./TCN	Sheet No.
2	APR1-2100-9	FNP-0-NDE-100.11 / 4 0 / N/A	S02F2M001 Page 1 of 1

Thermometer

Mfg /Ser. No. PTC / 48890
Cal. Due Date 2/5/2003

Surface Temp. 98 ° F

Magnetizing Yoke

Mfg.: Magnaflux Y-6 Power AC
Serial No.: A999638
Pole Spacing: 8"
Field Indicator S/N: MFI-02
Field Indicator Acceptable [Y/N] Yes

MT Materials

Mfg.: Magnaflux
Batch Number: 95H062
Color: Red
Type: N/A

.Component Configuration
PRZ UPPER HD. TO NOZZLE WELD

% of Length Coverage 100
% of Area Coverage 100

Date 9/17/2002

Ind. No.	Results	Indication Desc. / Exam Limitations / etc.	Remarks
NA	NI	NA	NA

Remarks: NA

Supplemental Surface exam. RR-6

Primary Examiner	ASNT Level	Initials	Assistant Examiner	ASNT Level	Initials	Non-Technical Review	Date
John W. Bell	II	JWB	Joseph D Funyak	II	JDF	Lynda Duke	9-19-02

SNC NDE Level II/III Review		Date	Percentage of Code Coverage	ANII Review	Date
Danny A. Lothes	III	9-24-02	100	CGWard	9/24/02

Revision 4.

WELD EXAMINATION SUMMARY SHEET

Sheet No. S02F2S077

Weld Number: APR1-2100-9IR

Examination Area: PRZ NOZ-INSIDE RADIUS

Figure No.	Procedure	Cal Block	Exam Requirements
APR1-2100	FNP-0-NDE-100.38	ALA-38	B-D/B3.120/

The following data sheets are included in this package

Data Sheet No.	Angle	Results	Remarks
S02F2U006	20	NI	

Comments:

(Describe limitation in comments)

Percent on required area examined - Surface	NA
Percent of required volume examined - Volumetric	100
Relief Request Number/Required?	NA
Code Case used (if applicable)	NA
IER Number (if applicable)	NA

ITS Review: Gary A. Lofties **Date:** 9-21-02

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.38
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-2100-9IR	9/17/2002	S02F2U006 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 38 2 0 N/A	Ultragel II / 01125	48890 2/5/2003	S02F2L001

Instrument

Instrument Staveley / SONIC 136

Serial No. 136-905K

	Axial dB	Circ dB
Reference	NA	63 8
Scanning	NA	69.8

Reject OFF

Frequency 2 25

Mode P/E

Damping 200 OHMS

Search Unit

Transducer Mfg. KBA

Serial Number L30469

Model No. SWS

Size / No. 5" Shape Round

Frequency/Mode 2 25 / Long

"A" Dimension 7

Nom Angle 20 °

Meas Angle 20 °

Cable Type / No. Conn. RG174 / 0

Cable Length 12'

Calibration Block

Cal. Blk. No ALA-38

Thickness 6 01

Cal. Temp 79 °F

Cal. In 14 45

Cal. Chk. 1545

Cal. Out 17.55

Ref. Blk. No. A01146

Reflector/dB 2"Rad/53 8

Amp/Sweep 80 % / 8

Axial Scan Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
NA			

Circ Scan Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
A	80	3 0	2 65
B	60	5.0	3 24
C	40	7 0	3 99

Calibration Remarks:

Wmax from end of block

Comp Temp. 98 °F Configuration - PRZ NOZ-INSIDE RADIUS Wo Loc. NA Lo Loc. NA

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Reference Measurement W1	Wmax	W2	Sweep Position S1	Smax	S2	Thickness 1"<--	C/L	-->1"	Notes:
8				NA														
7				NA														

Examination/Limitation Remarks: No limitations Dal 9-26-02

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NL to (2) NL

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Joseph D Funyak	II	JDF	John W Bell	II	JWB	Lynda Duke	9-19-02

SNC NDE Level II/III Review	Date	Percentage of Code Coverage	ANII Review	Date
Danny A. Lotter	9-26-02	100	[illegible]	9/24/02

Revision 2 0

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Farley Nuclear Plant

FNP-0-NDE-100.38

Ultrasonic Performance Record for Inner Radius Examinations

Southern Nuclear Operating Company

Plant/Unit: Farley / 2		Sheet No. S02F2U004	Page 1 of 1
Instrument Manufacturer: Staveley	Model: SONIC 136	Serial No.: 136-905K	
Search Unit Type/Manufacturer: KBA	Size: .5" Frequency: 2.25 MHz	Angle: 20 °	Serial No.: L30469
Search Unit Cable Type: RG 174	Length / Number Connectors: 12' / 0	Calibration Block Serial No. And Thickness: ALA-38 / 6.01	
Couplant Batch Number: Ultragel II / 01125	Demonstration of Flaw Detectability	☑ Acceptable	

BEAM SPREAD MEASUREMENTS

	Surface Distance			Metal Path		
Notch A	100%	50%	20%	100%	50%	20%
Maximum	2.56	N/A	N/A	3 07	N/A	N/A
Near	N/A	2 36	2 2	N/A	3 03	2.99
Far	N/A	2 83	3 11	N/A	3 17	3 26
Notch B						
Maximum	3 24	N/A	N/A	4 02	N/A	N/A
Near	N/A	3 04	2.82	N/A	3 96	3 94
Far	N/A	3 48	3 67	N/A	4 08	4 15
Notch C						
Maximum	3 99	N/A	N/A	4 95	N/A	N/A
Near	N/A	3 64	3 48	N/A	4 87	4 83
Far	N/A	4 32	4 43	N/A	5 04	5 10

Remarks:

Examiner: Joseph D. Funyak	SNT Level: II	Examiner: Paul Valden	SNT Level: II	Date: 9/17/2002
NDE Level II/III Review		SNT Level: III		Date: 9-27-02

Revision 2.0

WELD EXAMINATION SUMMARY SHEET

Sheet No. S02F2S078

Weld Number: APR1-2100-10

Examination Area: PRZ UPPER HD. TO NOZZLE WELD

Figure No.	Procedure	Cal Block	Exam Requirements
APR1-2100	FNP-0-NDE-100.11 FNP-0-NDE-100.34	APR-7	B-D/B3.110/

The following data sheets are included in this package

Data Sheet No.	Angle	Results	Remarks
S02F2M002		NI	
S02F2U016	45	NI	
S02F2U017	60	NI	
S02F2U018	70	NI	

Comments:

SUPPLEMENTAL SURFACE EXAMINATION. RR-6 75% ASME CODE COVERAGE.

(Describe limitation in comments)	
Percent on required area examined - Surface	100
Percent of required volume examined - Volumetric	75
Relief Request Number/Required?	RR-6
Code Case used (If applicable)	NA
IER Number (If applicable)	NA

ITS Review: Harry A. Rifflus **Date:** 9-24-02

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.34
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-2100-10	9/20/2002	S02F2U016 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 34 6 0 N/A	Ultragel II / 01125	48890 2/5/2003	S02F2L005

Instrument

Instrument Staveley / SONIC 136

Serial No. 136-905K

	Axial dB	Circ dB
Reference	40	40
Scanning	52	52

Reject OFF

Frequency 2 25

Mode P/E

Damping 500 OHMS

Search Unit

Transducer Mfg. Panametrics

Serial Number 267694

Model No. ANGLE

Size / No. 5"X1" Shape Rect.

Frequency/Mode 2 25 / Shear

"A" Dimension .75

Nom Angle 45 °

Meas Angle 45 °

Cable Type / No. Conn. RG174 / 0

Cable Length 12'

Calibration Block

Cal. Blk. No APR-7

Thickness 3 5

Cal. Temp 94 °F

Cal. In 8:15

Cal. Chk. 1340

Cal. Out 15 30

Ref. Blk. No. A01146

Reflector/dB SDH / 40

Amp/Sweep 40 % / 2.0

Axial Scan Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
1/4	80	2 0	88
1/2	60	4 0	1 80
3/4	45	6.0	2 65
1T	10	8 0	3.50
5/4	26	10 0	N/A

Circ Scan Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
1/4	80	2 0	.88
1/2	60	4 0	1 80
3/4	45	6'0	2 65
1T	10	8 0	3 50
5/4	26	10 0	N/A

Calibration Remarks:

NA

Comp Temp. 94 °F | Configuration - PRZ UPPER HD. TO NOZZLE WELD | Wo Loc. Weld C/L | Lo Loc. TDC

Scan Dir.	Results NI	Results NRI	Results RI	Ind No.	% DAC	Length L1	Length Lmax	Length L2	Reference Measurement W1	Reference Measurement Wmax	Reference Measurement W2	Sweep Position S1	Sweep Position Smax	Sweep Position S2	Thickness 1"<--	Thickness C/L	Thickness -->1"	Notes:
8	●	○	○	NA														
7	●	○	○	NA														
5	●	○	○	NA														
2	●	○	○	NA														

Examination/Limitation Remarks: Nozzle Limits 2 Scan

RR-6 *75% Composite Coverage

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
47"	1"	5 (L) NL 2 (L) NL 7 and 8 (W) NL	5- From NL to NL 2- From 3 4" to NL	From (5) NL to (2) NL

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Joseph D Funyak	II	JDF	Paul Valden	II	P.V.	Lynda Duke	9-21-02

SNC NDE Level II/III Review [signature] LVIII Date 9-24-02 Percentage of Code Coverage *75 ANII Review [signature] Date 9/24/02

Revision 6 0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.34
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-2100-10	9/20/2002	S02F2U017 Page 1 of 1

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 34 6 0 N/A	Ultragel II / 01125	48890 2/5/2003	S02F2L005

Instrument

Instrument Staveley / SONIC 136

Serial No. 136-905K

	Axial dB	Circ dB
Reference	47.2	47 2
Scanning	59.2	59 2

Reject OFF

Frequency 2 25

Mode P/E

Damping 500 OHMS

Search Unit

Transducer Mfg. Panametrics

Serial Number 276054

Model No. A403S

Size / No. .5"X1" Shape Rect

Frequency/Mode 2.25 / Shear

"A" Dimension .75

Nom Angle 60 °

Meas Angle 58 °

Cable Type / No. Conn. RG174 / 0

Cable Length 12'

Calibration Block

Cal. Blk. No APR-7

Thickness 3 5

Cal. Temp 94 °F

Cal. In 8:20

Cal. Chk. 1355

Cal. Out 15 32

Ref. Blk. No. A01146

Reflector/dB SDH / 47 2

Amp/Sweep 55 % / 1.8

Axial Scan Calibration				Circ Scan Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
1/4	80	2 0	1 67	1/4	80	2 0	1 67
1/2	50	4 0	3 22	1/2	50	4 0	3 22
3/4	35	6 0	4.82	3/4	35	6 0	4 82
1T	12	8 0	6 41	1T	12	8 0	6 41
5/4	16	10 0	N/A	5/4	16	10 0	N/A

Calibration Remarks:

N/A

Comp Temp. 94 °F | Configuration - PRZ UPPER HD TO NOZZLE WELD | Wo Loc. Weld C/L | Lo Loc. TDC

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Reference Measurement W1	Wmax	W2	Sweep Position S1	Smax	S2	Thickness 1"<--	C/L	-->1"	Notes:
8	●	○	○	NA														
7	●	○	○	NA														
5	●	○	○	NA														
2	●	○	○	NA														

Examination/Limitation Remarks: Nozzle Limits 2 Scan RR-6 *75 Composite Coverage

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
47"	1"	5 (L) NL 2 (L) NL 7 and 8 (W) NL	5- From NL to NL 2- From 3 4" to NL	From (5) NL to (2) NL

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Joseph D. Funyak	II	JDF	Paul Valden	II	P.V.	Lynda Duke	9-21-02

SNC NDE Level II/III Review [signature] Date LV III 9-24-02 Percentage of Code Coverage *75 ANII Review [signature] Date 9/24/02

Revision 6 0

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Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.34
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-2100-10	9/20/2002	S02F2U018 Page ___ of ___

Procedure/Rev./TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 34 6 0 N/A	Ultragel II / 01225	48890 2/5/2003	S02F2L005

Instrument

Instrument Staveley / SONIC 136
Serial No. 136-905K

	Axial dB	Circ dB
Reference	50 4	50 4
Scanning	62 4	62 4
Reject	OFF	
Frequency	2 25	
Mode	P/E	
Damping	500 OHMS	

Search Unit

Transducer Mfg. Panametrics
Serial Number 267701
Model No. ANGLE
Size / No. 5"X1" Shape Rect
Frequency/Mode 2.25 / Shear
"A" Dimension .90
Nom Angle 70 °
Meas Angle 70 °
Cable Type / No. Conn. RG174 / 0
Cable Length 12'

Calibration Block

Cal. Blk. No APR-7
Thickness 3 5
Cal. Temp 94 °F
Cal. In 8 25
Cal. Chk. 1405
Cal. Out 15.34
Ref. Blk. No. A01146
Reflector/dB SDH / 50 4
Amp/Sweep 55 % / 1 9

Axial Scan Calibration				Circ Scan Calibration			
Cal. Refl.	Signal Amp.	Sweep Div.	Wmax	Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
1/4	80	4 0	2.47	1/4	80	4.0	2 47
1/2	45	8 0	4 72	1/2	45	8 0	4 72

Calibration Remarks:
NA

Comp Temp. 94 °F | Configuration - PRZ UPPER HD TO NOZZLE WELD | Wo Loc. Weld C/L | Lo Loc. TDC

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Reference Measurement W1	Wmax	W2	Sweep Position S1	Smax	S2	Thickness 1"<--	C/L	-->1"	Notes:
8	●	○	○	NA														
7	●	○	○	NA														
5	●	○	○	NA														
2	●	○	○	NA														

Examination/Limitation Remarks: Nozzle Limits 2 Scan

RR-6 * 75 Composite Coverage

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
47"	1"	5 (L) NL 2 (L) NL 7 and 8 (W) NL	5- From NL to NL 2- From 3 4" to NL	From (5) NL to (2) NL

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Joseph D Funyak	II	JDF	Paul Valden	II	PV.	Lynda Duke	9-21-02

SNC NDE Level II/III Review: Henry A. Lathy W III Date 9-24-02 | Percentage of Code Coverage * 75 | ANII Review: C Ghrand Date 9/24/02

Revision 6 0

Farley Nuclear Plant
Ultrasonic Performance Record

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FNP-0-NDE-100.34
Southern Nuclear Operating Company

Plant/Unit: Farley / 2		Sheet No. S02F2U009	Page 1 of 1
Instrument Manufacturer: Staveley	Model: SONIC 136	Serial No.: 136-905K	
Search Unit Type/Manufacturer Beam: Panametrics	Size: .5"X1" Frequency: 2.25 MHz	Angle: 70 °	Serial No.: 267701
Search Unit Cable Type: RG174	Length / Number Connectors: 12 / 0	Calibration Block Serial No. And Thickness: APR-7 / 3.5	
Couplant Batch Number: Ultragel II / 01125	Demonstration of Flaw Detectability	☑ Acceptable	

BEAM SPREAD MEASUREMENT

	Surface Distance	Metal Path	
1/4 T Hole			
Minimum (20% DAC Near)	1 57	1 73	
Minimum (50% DAC Near)	1 77	1.92	
Maximum Signal	2 32	2 43	
Minimum (50% DAC Far)	2.90	2.92	
Minimum (20% DAC Far)	3 27	3 30	
1/2 T Hole			
Minimum (20% DAC Near)	3 22	3 58	
Minimum (50% DAC Near)	3 67	3.99	
Maximum Signal	4 41	4 69	
Minimum (50% DAC Far)	5 80	6 10	
Minimum (20% DAC Far)	6 95	7 15	
3/4 T Hole			
Minimum (20% DAC Near)	NA	NA	
Minimum (50% DAC Near)	NA	NA	
Maximum Signal	NA	NA	
Minimum (50% DAC Far)	NA	NA	
Minimum (20% DAC Far)	NA	NA	

Remarks: NA

Examiner	ASNT Level	Examiner	ASNT Level	Date
Joseph D. Funyak	II	N/ A	N/A	9/18/2002
NDE Level II/III Review		ASNT Level		Date
Danny R. Lothes		III		9-21-02

Revision 6.

Farley Nuclear Plant
Ultrasonic Performance Record

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FNP-0-NDE-100.34
Southern Nuclear Operating Company

Plant/Unit Farley / 2		Sheet No. S02F2U010	Page 1 of 1
Instrument Manufacturer Staveley	Model SONIC 136		Serial No. 136-905K
Search Unit Type/Manufacturer Beam Panametrics	Size .5"X1" Frequency 2.25 MHz	Angle NA °	Serial No. 276054
Search Unit Cable Type RG174	Length / Number Connectors 12 / 0	Calibration Block Serial No. And Thickness APR-6 / 5.5	
Couplant Batch Number Ultragel II / 01125	Demonstration of Flaw Detectability	☑ Acceptable	

BEAM SPREAD MEASUREMENT

	Surface Distance	Metal Path	
1/4 T Hole			
Minimum (20% DAC Near)	1 23	1 43	
Minimum (50% DAC Near)	1.35	1.52	
Maximum Signal	1.67	1.80	
Minimum (50% DAC Far)	2 05	2.14	
Minimum (20% DAC Far)	2 25	2 32	
1/2 T Hole			
Minimum (20% DAC Near)	2 55	3 0	
Minimum (50% DAC Near)	2 72	3 19	
Maximum Signal	3.22	3.59	
Minimum (50% DAC Far)	3.96	4 23	
Minimum (20% DAC Far)	4 32	4 60	
3/4 T Hole			
Minimum (20% DAC Near)	3 91	4 62	
Minimum (50% DAC Near)	4 17	4 88	
Maximum Signal	4 82	5 42	
Minimum (50% DAC Far)	5 85	6 37	
Minimum (20% DAC Far)	6 25	6 71	

Remarks: NA

Examiner	ASNT Level	Examiner	ASNT Level	Date
Joseph D. Funyak	II	N/ A	N/A	9/18/2002
NDE Level II/III Review Darryl A. Lothes		ASNT Level III		Date 9-21-02

Revision 6.

Farley Nuclear Plant
Ultrasonic Performance Record

SHARED

FNP-0-NDE-100.34
Southern Nuclear Operating Company

Plant/Unit: Farley / 2		Sheet No. S02F2U011	Page 1 of 1
Instrument Manufacturer: Staveley	Model: SONIC 136	Serial No.: 136-905K	
Search Unit Type/Manufacturer Beam: Panametrics	Size: .5"X1" Frequency: 2.25 MHz	Angle: 45 °	Serial No.: 267694
Search Unit Cable Type: RG174	Length / Number Connectors: 12 / 0	Calibration Block Serial No. And Thickness: APR-7 / 3.5	
Couplant Batch Number: Ultragel II / 01125	Demonstration of Flaw Detectability	☑ Acceptable	

BEAM SPREAD MEASUREMENT

	Surface Distance	Metal Path	
1/4 T Hole			
Minimum (20% DAC Near)	.57	1.05	
Minimum (50% DAC Near)	70	1.10	
Maximum Signal	87	1 18	
Minimum (50% DAC Far)	1 05	1.40	
Minimum (20% DAC Far)	1 15	1.45	
1/2 T Hole			
Minimum (20% DAC Near)	1 40	2 25	
Minimum (50% DAC Near)	1 55	2.35	
Maximum Signal	1 80	2 43	
Minimum (50% DAC Far)	2 00	2 66	
Minimum (20% DAC Far)	2 13	2.80	
3/4 T Hole			
Minimum (20% DAC Near)	2.18	3 35	
Minimum (50% DAC Near)	2 30	3 42	
Maximum Signal	2 61	3 61	
Minimum (50% DAC Far)	3 05	4 02	
Minimum (20% DAC Far)	3 78	4 12	

Remarks: NA

Examiner	ASNT Level	Examiner	ASNT Level	Date
Joseph D. Funyak	II	N/ A	N/A	9/18/2002
NDE Level II/III Review		**ASNT Level**		**Date**
Danny A. Lotten		III		9-24-02

Revision 6.

Farley Nuclear Plant
Magnetic Particle Examination Record

SHARED

FNP-0-NDE-100.11
MT-F-FORM 002
Southern Nuclear Operating Company

Unit	Weld Number	Procedure/Rev./TCN	Sheet No.
2	APR1-2100-10	FNP-0-NDE-100 11 / 4.0 / N/A	S02F2M002 Page 1 of 1

Thermometer

Mfg /Ser. No. PTC / 48890
Cal. Due Date 2/5/2003

Surface Temp. 98 °F

Magnetizing Yoke

Mfg.: Magnaflux Y-6
Serial No.: A999638
Pole Spacing: 8"
Field Indicator S/N: MFI-02
Field Indicator Acceptable [Y/N] Yes
Power AC

MT Materials

Mfg.: Magnaflux
Batch Number: 95H062
Color: Red
Type: N/A

Component Configuration
PRZ UPPER HD TO NOZZLE WELD

% of Length Coverage 100
% of Area Coverage 100

Date 9/17/2002

Ind. No.	Results	Indication Desc. / Exam Limitations / etc.	Remarks
NA	NI	NA	NA

Remarks: NA

Supplemental Surface exam. RR-6

Primary Examiner	ASNT Level	Initials	Assistant Examiner	ASNT Level	Initials	Non-Technical Review	Date
John W Bell	II	JWB	Joseph D Funyak	II	JDF	Lynda Duke	9-19-02

SNC NDE Level II/III Review: Douglas Lofties III Date 9-21-02

Percentage of Code Coverage: 100

ANII Review: C Gh[illegible] Date 9/24/02

Revision 4.

WELD EXAMINATION SUMMARY SHEET

Sheet No. S02F2S076

Weld Number: APR1-2100-10IR

Examination Area: PRZ NOZ-INSIDE RADIUS

Figure No.	Procedure	Cal Block	Exam Requirements
APR1-2100	FNP-0-NDE-100.38	ALA-38	B-D/B3.120/

The following data sheets are included in this package

Data Sheet No.	Angle	Results	Remarks
S02F2U008	20	NI	

Comments:

(Describe limitation in comments)

Percent on required area examined - Surface	NA
Percent of required volume examined - Volumetric	100
Relief Request Number/Required?	NA
Code Case used (if applicable)	NA
IER Number (if applicable)	NA

ITS Review: Gary A. Loftus

Date: 9-21-02

SH RED

Farley Nuclear Plant
Ultrasonic Calibration and Examination Record

FNP-0-NDE-100.38
Southern Nuclear Operating Company

Unit	Sketch/Component Number	Date	Sheet No.
2	APR1-2100-10IR	9/17/2002	S02F2U008 Page 1 of 1

Procedure/Rev /TCN	Couplant/Batch No.	ThermometerSN/Cal Due Date	Linearity Sheet No.
FNP-0-NDE-100 38 2 0 N/A	Ultragel II / 01125	48890 2/5/2003	S02F2L001

Instrument

Instrument Staveley / SONIC 136

Serial No. 136-905K

	Axial dB	Circ dB
Reference	NA	63 8
Scanning	NA	69 8

Reject OFF

Frequency 2 25

Mode P/E

Damping 200 OHMS

Search Unit

Transducer Mfg. KBA

Serial Number L30469

Model No. SWS

Size / No. 5" Shape Round

Frequency/Mode 2 25 / Long

"A" Dimension 7

Nom Angle 20 °

Meas Angle 20 °

Cable Type / No. Conn. RG174 / 0

Cable Length 12'

Calibration Block

Cal. Blk. No ALA-38

Thickness 6 01

Cal. Temp 79 °F

Cal. In 14·45

Cal. Chk. 1600

Cal. Out 17 55

Ref. Blk. No. A01146

Reflector/dB 2"RAD/53 8

Amp/Sweep 80 % / 8

Axial Scan Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
NA			

Circ Scan Calibration

Cal. Refl.	Signal Amp.	Sweep Div.	Wmax
A	80	3 0	2 65
B	60	5 0	3.24
C	40	7 0	3 99

Calibration Remarks:

Wmax from end of block

Comp Temp. 98 °F | Configuration - PRZ NOZ-INSIDE RADIUS | Wo Loc. NA | Lo Loc. NA

Scan Dir.	Results NI	NRI	RI	Ind No.	% DAC	Length L1	Lmax	L2	Reference Measurement W1	Wmax	W2	Sweep Position S1	Smax	S2	Thickness 1"<--	C/L	-->1"	Notes:
8	•			NA														
7	•			NA														

Examination/Limitation Remarks: No Limitations Dal 9-21-02

Total Length of Weld	Crown Width	Total Length of Weld Examined	Extent of Perpendicular Scans (W)	Extent of Parallel Scans (L)
NA	NA	5 (L) NA 2 (L) NA 7 and 8 (W) NA	5- From NA to NA 2- From NA to NA	From (5) NL to (2) NL

Primary Examiner	Level	Initials	Assistant Examiner	Level	Initials	Non-Technical Review	Date
Joseph D Funyak	II	JDF	John W Bell	II	JWB	Lynda Duke	9-19-02

SNC NDE Level II/III Review: Darryl Hoffman III Date 9-21-02

Percentage of Code Coverage 100

ANII Review: [signature] Date 9/24/02

Revision 2 0