



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-348/88-14, 50-364/88-14

Licensee: Alabama Power Company
600 North 18th Street
Birmingham, AL 35291-0400

Docket Nos.: 50-348, 50-364

License Nos.: NPF-2, NPF-8

Facility Name: Farley 1 & 2

Inspection Conducted: April 11-15, 1988

Inspectors: R. W. Newsome 5-10-88
R. W. Newsome Date Signed

R. W. Newsome for 5-10-88
J. L. Coley Date Signed

Approved by: B. R. Crowley for 5/11/88
J. J. Blake, Chief Date Signed
Materials and Processes Section
Division of Reactor Safety

SUMMARY

Scope: This routine, announced inspection was in the areas of Unit 1 inservice inspection (ISI) activities including the remote ultrasonic (UT) examination of the reactor vessel welds, manual nondestructive examination (NDE) conducted on the balance of plant piping welds and components, and the eddy current (EC) examinations conducted on the steam generator (SG) tubing. A review of the Unit 1, first interval, hydrostatic test program was conducted to determine system testing completeness and a commitment agreed to by the licensee as a result of the December 1987, Unit 2, through wall crack in the Loop B safety injection system (SIS) was addressed.

Results: No violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *R. Coleman, Systems Performance Supervisor
- *S. Fulmer, Supervisor, Safety Audit and Engineering Review
- *D. Hartline, Systems Performance Engineering Supervisor
- *C. Levy, General Plant Engineer
- *W. Shipman, Assistant General Manager, Support
- *G. Waymire, General Plant Engineer

Other licensee employees contacted included engineers, technicians, security force members, and office personnel.

Other Organizations

- J. Campbell, ISI Coordinator, Westinghouse Electric Corp. (W)
- K. Jones, Southern Company Services (SCS) Level III
- D. Kunek, Reactor Vessel ISI Level III, W

NRC Resident Inspector

- *W. Bradford, Senior Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on April 15, 1988, with those persons indicated in paragraph 1 above. The inspectors described the areas inspected and discussed in detail the inspection findings. No dissenting comments were received from the licensee. The following new items were identified during this inspection:

(Open) Inspector followup Item (IFI) 50-348/88-14-01, Final Disposition of Reactor Vessel Indications, Paragraph 5.b.(1)(a).

(Open) IFI 50-348/88-14-02, Valve QV198 is Incorrectly Identified on CVCS Dwg. D-175039 Revision 22 Sheet 2, Paragraph 6.a.

(Open) IFI 50-348/88-14-03, Second Interval Hydrostatic Test Scheduling, Paragraph 6.b.

(Open) IFI 50-348/88-14-04, Clarification of Relief Request Approval for Service Water Piping, Component Cooling Piping, and Chemical and Volume Control System Piping, Paragraph 6.b.

The licensee did identify some material as proprietary during this inspection, but this material is not included in this inspection report.

NOTE: An alphabetical tabulation of acronyms and abbreviations used in this report is listed in Paragraph 8.

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Inservice Inspection (ISI) - Nondestructive Examinations (NDE) Unit 1

The inspectors examined documents, activities and records as indicated below to determine whether ISI was being conducted in accordance with applicable procedures, regulatory requirements, and licensee commitments. The applicable codes for ISI are the American Society of Mechanical Engineers Boiler and Pressure Vessel (ASME B&PV) Code, Section XI, 1974 Edition with addenda through Summer 1975 for the first interval, third period, outage number three and the ASME B&PV Code, Section XI, 1983 Edition with Summer 1983 addenda for the second interval, first period, outage number one. Westinghouse (W) is the ISI contractor and Southern Company Services (SCS) is providing the licensee's technical overview of the ISI activities. Conam Inspection Services personnel are conducting a second review of all Steam Generator EC examination data.

a. Review of Procedures Unit 1 and 2 (73052)

- (1) The inspectors reviewed the procedures indicated below to determine whether the procedures were consistent with regulatory requirements and licensee commitments. The procedures were also reviewed in the areas of procedure approval, requirements for qualification of NDE personnel and compilation of required records; and if applicable, division of responsibility between the licensee and contractor personnel if contractor personnel are involved in the ISI effort.

<u>Procedure ID</u>	<u>Title</u>
FNP-ISI-47 (R-0)	Manual Ultrasonic Examination of Welds In Vessels
FNP-ISI-206 (R-0)	Manual Ultrasonic Examination of Welds
FNP-154-ALA (R-1)	Remote Inservice Inspection of Reactor Vessels

<u>Procedure ID</u> (cont'd)	<u>Title</u>
FNP-ISI-70 (R-0)	Magnetic Particle Examinations
FNP-ISI-11 (R-0)	Liquid Penetrant Examination
FNP-DOC-101 (R-0)	Preservice And Inservice Examination Procedure Documentation
MRS 2.4.2-APC-6 (R-3)	Digital Multi-Frequency Eddy Current Inspection of Preservice and Inservice Heat Exchanger Tubing
ALA-1 (R-0)	Data Analysis Test Program

- (2) The inspectors reviewed the UT procedures to ascertain whether they had been reviewed and approved in accordance with the licensee's established QA procedures. The procedures were reviewed for technical adequacy and for conformance with the ASME Code, Section V, Article 5 and other licensee commitments/requirements in the following areas: type of apparatus used; extent of coverage of weldment; calibration requirements; search units; beam angles; DAC curves; reference level for monitoring discontinuities; method for demonstrating penetration; limits for evaluating and recording indications; recording significant indications; and, acceptance limits.
- (3) The inspectors reviewed EC procedures MRS-2.4.2 APC-6 and ALA-1 for technical content relative to: multichannel examination equipment is specified; method of examination is specified including probe speed during inspection; method of calibration and calibration sequence; description of calibration reference standard; applicable criteria for test data interpretation and indication reporting parameters; and, acceptance criteria.
- (4) The inspectors reviewed PT procedure FNP-ISI-11 to ascertain whether it had been reviewed and approved in accordance with the licensee's established QA procedures. The above procedure was reviewed for technical adequacy and conformance with the ASME Code Section V, Article 6, and other licensee commitments/requirements in the following areas: specified method; penetrant material identification; penetrant materials analyzed for sulfur; penetrant materials analyzed for total halogens; acceptable pre-examination surface; drying time; method of penetrant application; surface temperature; solvent removal; surface drying prior to developing; type of developer; examination technique; evaluation technique; and procedure requalification.

- (5) The inspectors reviewed MT procedure FNP-ISI-70 to ascertain whether it had been reviewed and approved in accordance with the licensee's established QA procedures. The procedure was reviewed for technical adequacy and for conformance with the ASME Code Section V, Article 7, and other licensee commitments/requirements in the following areas: examination method; contrast of dry powder particle color with background; surface temperature; suspension medium for wet particles; viewing conditions; examination overlap and directions; pole or prod spacing; current or lifting power (yoke); and, acceptance criteria.

b. Observation of Work and Work Activities Unit 1 (73753)

The inspectors observed work activities and reviewed certification records of equipment, materials and NDE personnel which had been and will be utilized during the required ISI examinations during this outage. The observations and reviews conducted by the inspectors are documented below.

- (1) The inspectors observed calibration activities and the in-process ultrasonic examinations being conducted on portions of the welds indicated below. The observations were compared with the applicable procedures and the Code in the following areas: availability of and compliance with approved Non-destructive Examination (NDE) procedure; use of knowledgeable NDE personnel; use of NDE personnel qualified to the proper level; type of apparatus used; extent of coverage of weldment; calibration requirements; search units; beam angles; DAC curves; reference level for monitoring discontinuities; method of demonstrating penetration; limits of evaluating and recording indications; recording significant indications; and, acceptance limits.

<u>Weld ID</u>	<u>Sketch</u>	<u>Description</u>	<u>Exam. Code</u>
3	ALA-1-0101	Reactor Vessel Middle Shell Course Long. Weld	1974S75
4	ALA-1-0101	Reactor Vessel Middle Shell Course Long. Weld	1974S75
6	ALA-1-0101	Reactor Vessel Lower Shell Course Long. Weld	1974S75
16	ALA-2-4101	9" Main Steam Pipe Weld	1983S83

<u>Weld ID</u>	<u>Sketch</u>	<u>Description</u>	<u>Exam. Code</u>
17	ALA-2-4101	9" Main Steam Pipe Weld	1983S83
18	ALA-2-4101	9" Main Steam Pipe Weld	1983S83
19	ALA-2-4101	9" Main Steam Pipe Weld	1983S83
20	ALA-2-4101	9" Main Steam Pipe Weld	1983S83

- (a) While observing the RV weld inspections, the inspectors observed data being recorded relative to a small indication located at approximately 255" below the RV flange, adjacent to Weld #6, one of the two lower shell course longitudinal welds. The data was being recorded in order to establish the orientation and dimensions of the indication necessary in order to determine the acceptability of the indication relative to the acceptance criteria in ASME B&PV Code Section XI. This particular indication appeared to be very near the interface between the RV ferritic steel plate base material and the stainless steel cladding on the inside surface of the RV.

Subsequent discussions with AP, SCS, and W personnel disclosed that an additional small indication had been noted during the Weld #6 examination. This indication is located approximately 323" below the RV flange, some 48" below the other indication.

Further discussions with the licensee disclosed that during this inspection, volumetric indications were detected during the examination of Weld #7, the other lower shell course longitudinal weld. Also, indications were detected during an ISI examination in 1984, in the Loop 2, outlet nozzle-to-shell weld, designated as Weld 21 on drawing ALA-1-1100, and this weld is scheduled to be examined during this inspection.

The licensee has decided to enlist the aid of an additional ultrasonic inspection system, UDRPS, to assist in the indication dimensioning and positioning process because the indications adjacent to Weld 6 appear to be very near the clad/basemetal interface and may have to be declared surface indications under the standards for evaluation in the ASME B&PV Code and may possibly fall into a rejectable category. Also, the licensee wishes to utilize the UDRPS to better characterize the indications noted in Weld 21.

Not all of the RV weld examinations had been completed by the end of this inspection and the final dimensioning and subsequent disposition of the detected indications had not been completed. The inspectors informed the licensee that in order to track and later review the final disposition of the currently known indications and any other indications that might be identified during the remaining RV examinations, that the following item would be opened and identified as IFI 50-348/88-14-01, Final Disposition of Reactor Vessel Indications.

- (b) In association with the examinations of the reactor vessel welds utilizing the W remote examination tool, the inspectors reviewed the "Reactor Vessel Examination Program Plan" to confirm the extent of weldment coverage, calibration requirements, search units, search unit overlap requirements, beam angles, DAC curves, reference level for indication detection, and indication recording limits.
 - (c) The circumferential examination of Welds 16 thru 20, on Sketch ALA-2-4101, required the use of a 30° shear wave examination because a 45° sound beam does not extend to the I.D. of the pipe due to the ratio of pipe O.D./I.D. and the thickness of the pipe wall. The inspectors observed and independently verified the ultrasonic equipment calibration on calibration Block Number ALA-030 with the 30° shear wave probe and observed portions of the circumferential examination of these welds with the 30° shear wave.
- (2) The inspectors conducted an ultrasonic verification examination, using W equipment, on portions of Weld 16, Sketch ALA-2-4101. The examination was performed in order to evaluate the technical adequacy of the ultrasonic examination procedure being used by the licensee's contractor to perform ultrasonic examinations and to assess the validity of the information being reported by the ultrasonic examiners. The verification examination indicated that the procedure used to conduct the examinations appears to be adequate for the application and the reported information compared favorably with the verification examination.
- (c) The following listed ultrasonic equipment and materials certification records were reviewed:

Ultrasonic Instruments

<u>Manufacturer/Model</u>	<u>Serial No.</u>
Sonic/MK-1	784523

<u>Manufacturer/Model</u>	<u>Serial No.</u>
Sonic/MK-1	00890E
Sonic/MK-1	07853E

The inspectors reviewed spectrum analysis data for the ultrasonic transducers tabulated below:

<u>Size</u>	<u>Frequency</u>	<u>Serial No.</u>
1.5	2.25 MHz	Y8003
1.5	2.25 MHz	Y11572
1.5	2.25 MHz	Y11575
1.0	1.0 MHz	C02600
1.0	2.25 MHz	53734

<u>Size</u>	<u>Frequency</u>	<u>Serial No.</u>
.75	2.25 MHz	T-2230
.75	1.0 MHz	T-2234
.375	2.25 MHz	031255
.75	5.0 MHz	J19135
.25	2.25 MHz	M17430

Ultrasonic Couplant Batch 8767, Sonotrace 40

Ultrasonic Calibration Blocks, ALA-030, ALA-RV-5, ALA-RV-7, ALA-24, and ALA-26.

- (4) The inspectors reviewed the below listed liquid penetrant materials certification records to ascertain if the sulfur and halogen content of the material was within acceptable content limits.

<u>Materials</u>	<u>Batch Number</u>
Liquid Penetrant	85L045
Cleaner/Remover	87K046, 87L009
Developer	85M035

- (5) The inspectors reviewed documentation indicating that a ten pound lift test had been performed on magnetic particle AC yoke 4309 and a review of magnetic particle material certification records for Batch Numbers 86G028 and 85B028 indicated the sulfur and halogen content of the material was within acceptable content limits.

- (6) The inspectors observed the Eddy Current activities indicated below. The observations were compared with the applicable procedures and the Code in the following areas: method for maximum sensitivity is applied; method for determining materials permeability; method of examination has been recorded; examination equipment has been calibrated using the applicable calibration reference; amplitude and phase has been established with the use of the applicable calibration reference and is recalibrated at predetermined frequency; required coverage of steam generator tubes occurs during the examination; acceptance criteria is specified or referenced and is consistent with the procedure or the ASME Code; and, results are consistent with acceptance criteria.

- (a) In-process tube data acquisition and an equipment calibration verification for SG-C, was observed for the following steam generator tubes:

<u>SG-A</u> <u>Tube ID</u>			<u>SG-B</u> <u>Tube ID</u>			<u>SG-C</u> <u>Tube ID</u>		
<u>Row</u>	<u>Column</u>	<u>Method</u>	<u>Row</u>	<u>Column</u>	<u>Method</u>	<u>Row</u>	<u>Column</u>	<u>Method</u>
15	61	RPC	6	49	Bob.	3	38	Bob.
12	63	RPC	6	48	Bob.	2	38	Bob.
5	53	RPC	8	92	Bob.	2	39	Bob.
1	53	RPC	3	92	Bob.	3	39	Bob.
22	54	RPC	3	83	Bob.	4	39	Bob.
2	46	RPC	3	82	Bob.	12	59	Bob.
						3	41	Bob.
						2	41	Bob.
						3	40	Bob.
						4	40	Bob.
						37	32	Bob.

- (b) The inspectors observed the in-process EC data analysis and evaluation, and equipment calibration verification checks, being conducted by W (primary) and Conam (secondary) on the below listed SG tubes:

W Evaluation

<u>SG-A</u> <u>Tube ID</u>			<u>SG-B</u> <u>Tube ID</u>			<u>SG-C</u> <u>Tube ID</u>		
<u>Row</u>	<u>Column</u>	<u>Type</u>	<u>Row</u>	<u>Column</u>	<u>Type</u>	<u>Row</u>	<u>Column</u>	<u>Type</u>
2	54	RPC	4	65	Bob.	23	46	8x1
2	55	RPC	4	64	Bob.	24	47	8x1
2	56	RPC	4	63	Bob.	23	44	8x1

<u>SG-A</u> <u>Tube ID</u> (cont'd)			<u>SG-B</u> <u>Tube ID</u>			<u>SG-C</u> <u>Tube ID</u>		
Row	Column	Method	Row	Column	Method	Row	Column	Method
2	59	RPC	3	93	Bob.	27	44	8x1
2	60	RPC	3	92	Bob.	28	44	8x1
2	61	RPC	3	91	Bob.	34	44	8x1
2	62	RPC	3	90	Bob.	25	42	8x1
2	63	RPC	3	89	Bob.	23	42	8x1
2	64	RPC	3	88	Bob.	24	41	8x1
2	65	RPC	4	51	Bob.	23	40	8x1
2	66	RPC	4	50	Bob.	28	40	8x1
2	67	RPC	4	49	Bob.	31	40	8x1
2	68	RPC	4	48	Bob.	31	35	8x1
2	69	RPC	3	71	Bob.	34	36	8x1
			3	70	Bob.	35	35	8x1
			3	69	Bob.			

Conam Evaluation

<u>SG-A</u> <u>Tube ID</u>			<u>SG-C</u> <u>Tube ID</u>		
Row	Column	Type	Row	Column	Type
2	15	RPC	16	70	8x1
2	17	RPC	4	68	8x1
2	18	RPC	7	68	8x1
2	19	RPC	13	68	8x1
2	21	RPC	15	68	8x1
2	22	RPC	16	68	8x1
2	23	RPC	19	68	8x1
			25	68	8x1
			31	68	8x1
			40	68	8x1
			31	65	8x1
			28	66	8x1
			16	66	8x1

- (c) While observing the evaluation activities for the above listed tubes, the inspectors jointly evaluated a sample of the data with both the primary and secondary analysts. No significant discrepancies were noted.
- (d) Certification records for EC calibration standards Z4420, Z5180, and tube support ring Z5181 were reviewed for material type, correct fabrication, and artificial flaw location/size.

- (7) The inspector reviewed the qualification documentation for the below listed W and Conam examiners in the following areas: employer's name; person certified; activity qualified to perform; effective period of certification; signature of employer's designated representative; basis used for certification; and annual visual acuity, color vision examination, and periodic recertification.

<u>Company</u>	<u>Examiner</u>	<u>Method - Level</u>							
		<u>UT</u>	<u>PT</u>	<u>MT</u>	<u>EC</u>	<u>VT</u>	<u>1</u>	<u>2</u>	<u>3</u>
Conam	DMC	-	-	-	III	-	-	-	-
Conam	MAG	-	-	-	IIA	-	-	-	-
Conam	CLG	-	-	-	IIA	-	-	-	-
Conam	MJM	-	-	-	IIA	-	-	-	-
Conam	JPT	-	-	-	IIA	-	-	-	-
<u>W</u>	WFS	-	-	-	III	-	-	-	-
<u>W</u>	TEG	-	-	-	IIA	-	-	-	-
<u>W</u>	VL	-	-	-	IIA	-	-	-	-
<u>W</u>	BC	-	-	-	III	-	-	-	-
<u>W</u>	EPL	-	-	-	IIA	-	-	-	-
<u>W</u>	JJC	-	-	-	IIA	-	-	-	-
<u>W</u>	LDL	-	-	-	III	-	-	-	-
<u>W</u>	JVK	-	-	-	II	-	-	-	-
<u>W</u>	DMM	-	-	-	I	-	-	-	-
<u>W</u>	BJA	II	II	II	-	II	-	II	-
<u>W</u>	RPL	I	-	-	-	-	-	-	-
<u>W</u>	RAH	III	-	-	-	-	-	-	-
<u>W</u>	DK	III	-	-	-	-	-	-	-
<u>W</u>	GP	II	-	-	-	-	-	-	-
<u>W</u>	TJW	II	-	-	-	-	-	-	-
<u>W</u>	HMA	I	I	I	-	I	I	I	I
<u>W</u>	RSC	I	II	II	-	I	I	I	I
<u>W</u>	WWM	II	II	II	-	II	II	II	II
<u>W</u>	GAM	II	II	II	-	II	II	II	II
<u>W</u>	RLS	III	III	-	-	II	-	II	-

c. Inservice Inspection, Data Review and Evaluation, Unit 1 (73755)

- (1) Records of completed balance of plant welds and component nondestructive examinations were selected and reviewed to ascertain whether: the method(s), technique and extent of the examination complied with the ISI plan and applicable NDE procedures; findings were properly recorded and evaluated by qualified personnel; programmatic deviations were recorded as

required; personnel, instruments, calibration blocks and NDE materials (penetrants, couplants) were designated. Records selected for this review are listed below.

<u>Sketch No.</u>	<u>Item/Weld ID</u>	<u>NDE Method</u>
ALA-1-5200	R. C. Pump B Seal House Flange	UT
ALA-2-4101	5	UT
ALA-2-4101	4	MT
ALA-2-4101	28	MT
ALA-2-4500	9	UT
ALA-2-4500	10	UT
ALA-2-4500	11	UT
ALA-2-4500	12	UT
ALA-2-4500	24	UT
ALA-2-4500	44	UT
ALA-2-4101	21	UT
ALA-2-4101	22	UT
ALA-2-4101	23	UT
ALA-2-4101	24	UT
ALA-2-4101	25	UT
ALA-2-4500	13	UT
ALA-1-5200	Bolts - 890, 742, 797, 751	MT
ALA-2-4508	36	PT
ALA-2-4508	54	PT
ALA-2-4508	44L1	PT
ALA-2-4508	44L2	PT

(2) Steam Generator Tubing Eddy Current Examination Data Review

- (a) The inspectors reviewed records of the eddy current examinations indicated below. The reviews were compared with the applicable procedures and the Code in the following areas: the multichannel Eddy Current examination equipment has been identified; material permeability has been recorded; method of examination has been recorded; and, results are consistent with acceptance criteria.

<u>SG-A</u> <u>Tube ID</u>			<u>SG-B</u> <u>Tube ID</u>			<u>SG-C</u> <u>Tube ID</u>		
<u>Row</u>	<u>Column</u>	<u>Type</u>	<u>Row</u>	<u>Column</u>	<u>Type</u>	<u>Row</u>	<u>Column</u>	<u>Type</u>
19	8	Bob.	5	3	Bob.	18	11	Bob.
22	9	Bob.	4	4	Bob.	5	18	Bob.
20	12	Bob.	5	13	Bob.	6	21	Bob.
21	15	Bob.	38	29	Bob.	7	22	Bob.
8	22	Bob.	9	33	Bob.	24	25	Bob.
40	33	Bob.	17	58	Bob.	23	26	Bob.
21	51	Bob.	25	63	Bob.	25	26	Bob.
29	13	RPC	31	50	RPC	20	26	RPC
15	19	RPC	7	28	RPC	3	27	RPC
13	27	RPC	24	37	RPC	12	48	RPC
4	18	8x1						
7	23	8x1						
11	29	8x1						

- (b) At the conclusion of the NRC inspection all examinations had not been completed. The inspectors discussed the EC program and status with the licensee and the preliminary EC examination status for the steam generators is listed below.

	<u>SG-A</u>	<u>SG-B</u>	<u>SG-C</u>
Tubes with reportable indications	38	27	28
Possible tubes to be plugged	3	1	20
Tubes Scheduled	Bob.	3290	3285
	8x1	665	680
	RPC	131	94
Tubes Analyzed	Bob.	3285	3272
	8x1	659	151
	RPC	147	0

Within the areas inspected, no violations or deviations were identified.

6. ISI First Interval Hydrostatic Test Program Review - Unit 1 (73051) (73052) (73755)

The Alabama Power Company ISI program for the Farley Nuclear Plant Unit 1 is conducted in accordance with requirements of Paragraph 4.0.5.a.2 of the Technical Specifications, which in turn invokes the requirements in 10 CFR 50.55a(g). 10 CFR 50.55a(g) requires that piping and components of boiling and pressurized water reactor plants be examined and pressure

tested to the requirements of Section XI of the ASME Code and that the examinations and tests be completed during each of four ten-year intervals. The ten-year intervals are calculated from the start date of commercial operation of the facility.

The date of commercial operation for Farley Unit 1 is December 1, 1977, and the first interval examinations and testing should have been completed in 1987. However, since Section XI of the ASME Boiler and Pressure Vessel Code allows extension of the interval of up to one year so that the interval can be made to correspond to a plant's outage schedule, the final completion date allowed by the code for the first interval examination and testing on Unit 1 will be December 1, 1988. However, the licensee's hydrostatic program for the first interval was complete and testing in progress this outage was for the first period of the second interval.

The inspector reviewed the ISI program for ASME Code Class 1, 2 and 3 components, the ten year inspection plan for ASME Class 1 and 2 components, the ten year inspection plan for ASME Class 3 components and six hydrostatic test procedures. Test procedure interfaces of systems were confirmed and select relief requests were also examined to determine if the licensee had invoked the relief granted as requested.

The six ASME Class 2 hydrostatic test procedures listed below were reviewed for technical content and the hydrostatic boundaries were re-established on drawings using the procedure's valve line-up sheets to verify test completeness.

<u>Test No.</u>	<u>Procedure No.</u>	<u>Description of Test</u>
Hydro No. 8	FNP-1-STP-160.8	CVCS Low Pressure Letdown
Hydro No. 9	FNP-1-STP-160.9	VCT, Connecting Lines and Charging Pumps Suction
Hydro No. 11	FNP-1-STP-160.11	Letdown Line from 600 PSI Piping to VCT
Hydro No. 13	FNP-1-160.13	Train B Main Steam, Main Feedwater, Aux. Feedwater, S/G Blowdown and Chemical Inspection
Hydro No. 15	FNP-1-STP-160.16	Train A Containment Spray
Hydro No. 17	FNP-1-STP-160.17	Train B Containment Spray

The inspectors review of Alabama Power Company's hydrostatic program, plans and procedures for Class 1 and 2 components revealed that the licensee had fulfilled their 1st interval commitments as delineated in their program. First interval plans accurately implemented the program,

procedures were well written, valve lineup sheets listed all valves within the test and second verifications of the valve positions were performed. Test boundary changes required because of the mode of operation were reconciled. Responsible test personnel were knowledgeable of their systems and test requirements and final test records were complete and auditable.

However, the inspectors review did reveal two findings that the licensee was requested to take action on because they affected the second interval program. These findings and the initial verbal licensee responses are as follows:

- a. Valve QV-198 was listed in first interval plan as a test boundary valve. This valve was identified on Drawing D-175039 as QV-193. Further review revealed the plan to be accurate and the drawing to be in error. This drawing error was also carried over to the second interval drawings. The licensee committed to revise the drawing to clarify the valve's identification. The licensee's action will be tracked with Inspector Followup Item 50-348/88-14-02, Valve QV-198 is Incorrectly Identified on CVCS Drawing D-175039 Rev. 22 Sheet 2.
- b. The inspector reviewed the second interval plan to determine if the tests performed during the first interval, to the 1974 Edition of the ASME Code, were scheduled correctly with the requirements of the 1983 Edition of the Code that will be used for the second interval tests. The inspectors discovered that the tests were not scheduled in accordance with Table IWC-2500-1, Note 5, of the 1983 Edition of the Code. The licensee stated that the second interval tests were scheduled as delineated in the plan to prevent too many tests falling in the last period of the interval. The licensee however, agreed that a relief request or plan modification was applicable and agreed to take appropriate corrective action. This item will be tracked with Inspection Followup Item 50-348/88-14-03, Second Interval Hydrostatic Test Scheduling.

In addition to the above, the inspectors reviewed the program and relief requests for Class 3 components. The review of relief requests was conducted only on Class 3 components because the licensee had requested relief from the hydrostatic test requirements on the entire Class 3 program with the exception of portions of the auxiliary feedwater system and portions of the chemical and volume control system. The inspector's review revealed that the actual relief requests were not definitive and lacked technical basis. In addition, NRC's Safety Evaluation Report for the service water, component cooling water, and chemical and volume control systems was written such that, it appeared to the inspectors that the NRC reviewer had not granted relief to the extent requested in the program. The licensee contacted the inspectors by telephone on April 18, 1988, and stated that NRC (NRR) would be contacted to determine whether the extent of the relief requested for these systems, had been granted. Clarification would also be requested of the Safety Evaluation

Report relief request approvals for items nine and ten of the report. This item will be tracked with Inspector Followup Item 50-348/88-14-04, Clarify Relief Request Approval for Service Water Piping, Component Cooling Piping and Chemical and Volume Control System Piping.

Within the areas examined, no violation or deviation was identified.

7. Independent Inspection Unit 1

Licensee's Unit 1 commitment relative to the SIS cracked weld in Unit 2. (Refer to NRC report 50-348, 364/87-36 for specific details)

During the review of original fabrication radiographs for all similar system welds in the SIS Unit 1, a possible indication was noted in Weld D, Loop 3, as shown on Isometric/Grinnel Spool Number EG686/JF-16-38. (Same as weld #3 shown on ISI isometric drawing ALA-143). The licensee agreed to radiograph this weld during the next Unit 1 scheduled outage. Weld D, Loop 3, was radiographed and these film and associated documentation was reviewed by the inspectors. The radiographs reviewed did not show any evidence of the possible indication noted previously. This commitment is considered fulfilled.

8. Acronyms and Abbreviations

AC	-	Alternating Current
AP	-	Alabama Power
ASME	-	American Society of Mechanical Engineers
B&PV	-	Boiler and Pressure Vessel
Bob.	-	Bobbin Coil
CVCS	-	Chemical Volume Control System
DAC	-	Distance Amplitude Curve
EC	-	Eddy Current
Exam.	-	Examination
ID	-	Identification
I.D.	-	Inside diameter
IFI	-	Inspector Followup Item
ISI	-	Inservice inspection
MHz	-	Megahertz
MT	-	Magnetic Particle Test
NDE	-	Nondestructive Examination
No.	-	Number
NPF	-	Nuclear Power Facility
NRC	-	Nuclear Regulatory Commission
NRR	-	Nuclear Reactor Regulation
O.D.	-	Outside diameter
PT	-	Liquid penetrant
QA	-	Quality Assurance
R	-	Revision

R.C. - Reactor Coolant
RPC - Rotating Pancake Coil
RV - Reactor Vessel
SCS - Southern Company Services
SG - Steam Generator
SIS - Safety Injection System
UDRPS - Ultrasonic Data Recording and Processing System
UT - Ultrasonic
VCT - Volume Control Tank
VT - Visual
W - Westinghouse Electric Corporation