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

Report Nos.: 50-335/91-24 and 50-389/91-24

Licensee: Florida Power and Light Company
9250 West Flagler Street
Miami, FL 33102

Docket Nos.: 50-335 and 50-389 License Nos.: DPR-67 and NPF-16

Facility Name: St. Lucie 1 and 2

Inspection Conducted: December 2-6, 1991

Inspector: James L. Coley Jr. 1-7-92
J. L. Coley, Jr. Date Signed

Approved by: J. D. Blake 1/6/92
J. D. Blake, Chief Date Signed
Materials and Processes Section
Engineering Branch
Division of Reactor Safety

SUMMARY

Scope:

This routine, unannounced inspection was conducted in the areas of inservice inspection - data review and evaluation and review of nondestructive examination procedures, review of radiographic film for safety related welding, and review of Florida Power and Light (FP&L) long-term erosion/corrosion program (Generic Letter 89-08).

Results:

In the areas inspected, one violation was identified: 50-335/91-24-01, "Failure to Follow Procedure for Properly Identifying Radiographic Film and Documentation of Associated Records", paragraph 5. No deviations were identified. Licensee management involvement and the licensees technical staff assure that technical issues are resolved for a conservative standpoint. The licensee appears to be very sensitive to NRC initiatives and their responses to these initiatives have good technical basis, inservice inspection (ISI) and erosion/corrosion (E/C) records were excellent and indicated that the nondestructive examinations (NDE) have been conservatively performed.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*G. Alexander, ISI Specialist
*G. Boissy, Plant Manager
*F. Carr, Supervisor of Inspections
*K. Crosby, Supervisor, Quality Control (QC)
*B. Dawson, Maintenance Manager
*J. Dyer, Supervisor Maintenance (QC)
*E. Englmeier, Site Quality Manager
*J. Geiger, Vice President, Nuclear Assurance
*T. Geiseinger, Construction QC Supervisor
*K. Mayhew, ISI Coordinator
*L. McLaughlin, Plant Licensing, Manager
*L. Rogers, Electrical Maintenance Supervisor
*D. Sager, Plant Vice President
*D. West, Technical Department Supervisor

Other licensee employees contacted during this inspection included engineers, technicians, and administrative personnel.

NRC Resident Inspector

*M. Scott

*Attended exit interview

2. ISI Data Review and Evaluation Unit 1 (73755)

The inspector reviewed the records described below to determine whether the reported data covered the scope of the examinations required during the current inspection period of the inspection interval as described in the applicable ASME Code and the inservice inspection program accepted by the NRC. In addition, the records were reviewed to ascertain whether the ISI data files were complete and the data were within the previously established acceptance criteria, and to determine whether the license' disposition of adverse findings and subsequent re-examinations were consistent with regulatory requirements.

St. Lucie Unit 1 is presently in the first refueling outage, of the second period, of the second ISI interval. The second interval began February 11, 1988 and will end on February 10, 1998. The applicable code for this inspection interval is American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, 1983 edition with addenda through Summer 1983. Ebasco Services Inc. provided the qualified examination personnel to conduct the NDE services.

In order to perform the review of the ISI records the inspector had to review the following programmatic documents: FP&L's ISI current Outage Plan (Document No. ISI-PSL-100-40-2) for Unit 1, the long term (10-year) Inservice Inspection Plan (ISI-PSL-100-Rev. 3), Relief Request, the licensee implementation of Code Case 408, "Alternative Rules for Examination of Class 2 Piping", and Combustion Engineering's (CE) Document No. CE-NPDS-579 (Combustion Engineering Owners Group Task #626 dated 1990) "Evaluation of Thermal Stresses in Piping Connected to CE Designed Reactor Coolant Systems in Response to NRC Bulletin 88-08 Supplement 3". The inspector also held discussions and reviewed data with the ISI specialist concerning the implementation and status of augmented examinations.

The records listed below for the various NDE methods were reviewed to determine whether the records contained or provided reference to the following documents.

* Examination results and data sheets
* Examination equipment data
* Calibration data sheets
* Examination evaluation data
* Records on extent of examination
* Records on deviation from program and procedures including justification for deviation
* Records and disposition of findings
* Re-examination data after repairwork
* Identification of NDE materials such a penetrant, penetrant cleaner, couplant, films, tapes, etc.

In addition, the records were reviewed technically for the following:

The method, extent, and technique of examination comply with the licensee's ISI program and applicable NDE procedure.

The examination data are within the acceptance criteria as outlined in the applicable NDE procedure and applicable Code requirements.

The recording, evaluating, and dispositioning of findings are in compliance with the applicable NDE procedure and applicable Code requirements.

Inservice NDE results are compared with the recorded results of prior Section XI examinations.

The method used for NDE was sufficient to determine the full extent of the indication or acceptance.

a. Visual Examination Data Reviewed

VT-1 Examination Procedure NDE 4.1 Rev. 4

Data Sheet No.	Isometric Drawing	System
4.1.004	01-005	Pressurizer
* 4.1.005	01-005	Pressurizer
* Augmented inspection on the header sleeves		
* 4.1.008	01-021A	Loop 1A2SI
* Augmented inspection on elbow between RC-151-FW-1 and RC-151-1-SW-1		
4.1.001	01-22A	Loop 1A2SI
* Augmented inspection on elbow between RC-154-FW-1 and RC-154-1-SW-1		
4.1.012	01-023	Loop 1B1SI
* Augmented inspection on fitting between RC-152-1-SW-1 and RC-152-1-SW-2		
4.1.021	01-038	Pressurizer Relief Line V-1402
4.1.027	01-113-B	Auxiliary Feedwater
4.1.023	01-039-A	Combined SI Piping Loops 1A1 and 1A2
4.1.024	01-039-A	Combined SI Piping Loops 1A1 and 1A2
4.1.025	01-030-C	Combined SI Piping Loops 1A1 and 1A2
4.1.026	01-040-C	Combined SI Piping Loops 1A1 and 1B2

VT-3 Examination Procedure NDE 4.3 Rev. 3

Date Sheet No.	Examination Areas	Comments
4.3.001	AK-01,02,03,040N-1EA,AND ON-1E-B	Reactor Vessel Internals
4.3.010	Mechanical and Welded Attachments	Pressurizer

Date Sheet No. (cont'd)	Examination Areas	Comments
4.3.015	Mechanical and Welded Attachment	Safety Injection
4.3.018	Safety Injection Restraint	SI-968-6212
4.3.027	Mechanical and Welded Attachments	CH-143-11
4.3.035	LPSI Pump 1A and 1B Discharge Support Base	SI-H-83
4.3.036	LPSI Pump 1A and 1B Rigid Sway Strut Assembly	SI-H-174A
4.3.039	LPSI Pump 1A and 1B Discharge Header Strut Assembly	SI-678-32
4.3.054	Safety Injection Tank 1B1 Rigid Sway Support	SI-972-6242
4.3.056	HPSI Pump 1A to Header 1A Base Support	SI-H-172-V
4.3.057	HPSI Pump 1A to Header 1A Spring Can	SI-H-172
4.3.060	Main Steam/Spring Can	MSH-7A
4.3.064	LPSI/HPSI/CS Pumps Loop A Spring Hanger	SI-676-9405
4.3.068	HX1A To CS Header Rigid Sway Strut	CS-678-179
4.3.072	Shutdown Cooling HX1A Inlet Rigid Sway Strut	CC-20-1A
4.3.073	Shutdown Cooling HX1A Inlet Restraint	CC-20-4
4.3.077	Shutdown Cooling HX1A Inlet	CC-H-114
4.3.091	CCW Spring Support	YPH-181
4.3.099	Circulating Water Inlet/Rod and Clamp	YPH-7
4.3.106	Circulating Water Inlet/Box Restraint	ISH-10
4.3.108	Circulating Water Intake/Integral Attachment	ISH-17-1
4.3.113	Aux. Feedwater/Rigid Restraint	BF-1005-307

Date Sheet No. (cont'd)	Examination Areas	Comments
4.3.114	Aux. Feedwater/Sliding Base Support	BF-1005-557
4.3.121	Circulating Water Inlet/Rod and Clamp	YPH-7
4.3.127	Condensate - Suction to Aux. Feed/ Spring Base Assy	CH-143
4.3.131	CCW - Rigid Strut	CC-25-7A
4.3.132	Safety Injection Tank 1B1/Rigid Sway Strut	SI-972-6243A
4.3.136	CCW - Rigid Sway Strut Assembly	1868-6224
4.3.145	CCW-Box Restraint	1868-6233
4.3.146	CCW-Rigid Sway Strut Assembly	CC184-6225

Records selected for review above were records primarily with documented inspection findings. The records included detail sketches or photographs of the discrepancies and these findings were documented on Customer Notification Reports (CNR's). The inspector reviewed the CNR's listed below for the above components to determine if the disposition of the discrepancies were adequate. The following visual examination NCR's were reviewed:

CNRs Reviewed	CNRs Reviewed	CNRs Reviewed
91-1-045	91-1-024	91-1-023
91-1-025	91-1-040	91-1-058
91-1-029	91-1-043	91-1-067
91-1-057	91-1-042	91-1-075
91-1-030	91-1-041	91-1-076
91-1-028	91-1-CCH-114	91-1-077
YPH-181	ISH-10	91-1-079
YPH-7	ISH-17-1	91-1-021
BF-1005-307	91-1-031	91-1-022
CH-143	CC-25-7A	
SI-972-6243A	1868-6224	
CC-1848-6225	1868-6233	

b. Ultrasonic Examination Data Review

Examination Procedure NDE 5.1 Rev. 6

Data Sheet No.	Weld ID	Component	Examination Scans
5.1.001	PRZ-L-3	Pressurizer	0°,45° and 60° S
5.1.001	PRZ-C-2	Pressurizer	0°,45° and 60° S

Examination Procedure NDE 5.2. Rev. 5

Data Sheet No.	Weld ID	Component	Examination
5.2.001	MS-1-FW-1	MS Line 1A1	45° and 60° S
5.2.002	MS-1-SW-18	MS Line 1A1	45° and 60° S
5.3.003	MS-3-1-SW-18	MS Line 1B1	45° and 60° S
5.2.004	MS-1-SWP1	MS Line 1A1	45° and 60° S
5.2.005	MS-1-SW-P1-LS-A	MS Line 1A1	45° and 60° S
5.2.005	MS-1-FW-LS-A	MS Line 1A1	45° and 60° S
5.2.006	MS-29-1-SW-1-LS-A	MS Line 1B1	45° and 60° S
5.2.007	MS-29-1-SW-1-LS-A	MS Line 1B1	45° and 60° S
5.2.008	MS-29-FW-6-LR	MS Line 1B1	45° and 60° S
5.2.008	MS-29-FW-6-SR	MS Line 1B1	45° and 60° S
5.2.008	MS-29-FW-5LS-A	MS Line 1B1	45° and 60° S
5.2.009	MS-1-FW-2	Main Steam	45° and 60° S
5.2.010	BF-14-FW-6	FW to SG-1A1	45° and 60° S
5.2.011	MS-29-FW-6	MS Line 1B1	45° and 60° S
5.2.012	BF-14-2-SW-1	FW to SG-1A1	45° and 60° S
5.2.013	MS-28-FW-1	MS Line 1A1	45° and 60° S
5.2.014	MS-28-1-SW-4-LR	MS Line 1A1	45° and 60° S
5.2.014	MS-28-1-SW-4-SR	MS Line 1A1	45° and 60° S
5.2.014	MS-28-1-FW-1-LS-A	MS Line 1A1	45° and 60° S
5.2.015	MS-33-FW-1	Main Steam	45° and 60° S
5.2.015	MS-33-FW-1-LS-A	Main Steam	45° and 60° S
5.2.016	MS-29-1-SW-1	MS Line 1B1	45° and 60° S
5.2.017	BF-14-FW-2	Feedwater	45° and 60° S

Examination Procedure NDE-5.3. Rev. 4

Data Sheet No.	Weld ID	Component	Examination
5.3.001	RC-115-6-503	RC Loop A	45° RL
5.3.001	RC-115-FW-3-500F	RC Loop A	45° RL
5.3.001	RC-115-6-503	RC Loop A	45° RL
5.3.002	RC-115-6-503-LS-A	RC Loop A	45° and 60° S
5.3.002	RC-115-6-503-LS-B	RC Loop A	45° and 60° S
5.3.002	RC-115-3-503-LS-A	RC Loop A	45° and 60° S
5.3.002	RC-115-3-503-LS-B	RC Loop A	45° and 60° S
5.3.003	RC-115-FW-1-500K	RC Loop A	45° and 60° S
5.3.003	1A-1-112-B	RC Loop A	45° and 60° S

Examination Procedure NDE 5.4 Rev. 8

Data Sheet No.	Weld ID	Component	Examination
5.4.001	SI-113-FW-7	Loop 1A2-SI	45° and 60° RL
5.4.001	SI-113-6-SW-3	Loop 1A2-SI	45° and 60° RL
5.4.001	SI-113-6-SW-2	Loop 1A2-SI	45° and 60° RL

Data Sheet No. (cont'd)	Weld ID	Component	Examination
5.4.001	SI-113-6-SW-1	Loop 1A2-SI	45° and 60° RL
5.4.002	SI-113-FW-8	Loop 1A2-SI	45° and 60° RL
5.4.003	SI-113-12-SW-2	Loop 1A2-SI	45° and 60° RL
5.4.003	SI-113-12-SW-3	Loop 1A2-SI	45° and 60° RL
5.4.003	SI-113-12-FW-12	Loop 1A2-SI	45° and 60° RL
5.4.004	SI-113-11-SW-1	Loop 1A2-SI	45° and 60° RL
5.4.004	SI-113-FW-11A	Loop 1A2-SI	45° and 60° RL
5.4.004	SI-113-FW-11	Loop 1A2-SI	45° and 60° RL
5.4.005	SI-113-FW-13	Loop 1A2-SI	45° and 60° RL
5.4.005	SI-113-FW-1	Loop 1A2-SI	45° and 60° RL
5.4.006	SI-113-9-SW-1	Loop 1A2-SI	45° and 60° RL
5.4.006	SI-113-FW-10	Loop 1A2-SI	45° and 60° RL
5.4.006	SI-113-8-SW-1	Loop 1A2-SI	45° and 60° RL
5.4.007	SI-149-2-SW-1	Loop 1A2-SI	45° and 60° RL
5.4.008	SI-151-FW-2	Loop 1B2-SI	45° and 60° RL
5.4.008	Fitting #4	Loop 1B2-SI	45° and 60° RL
5.4.016	Fitting #3	Loop 1B2-SI	45° and 60° RL
5.4.031	SI-151-FW-1	Loop 1B2-SI	45° and 60° RL
			45° and 60° S

The inspectors' reviewed of FP&L's NDE Procedure 5.4 Rev. 8 and the above examination records revealed that this licensee uses 45° and 60° refracted longitudinal wave transducers on all stainless steel piping welds. This inspection technique is the best method for ensuring 100% coverage and defect detection in austentic stainless steel. Licensee's normally do not perform 100% refracted longitudinal wave examination stainless steel using 45° and 60° transducers because refracted longitudinal wave transducers are difficult to use and require highly trained examiners to use them correctly. FP&L's commitment to safety and excellence over cost is typified by enhanced examination techniques such as this.

c. Liquid Penetrant Examination Data Review

Examination Procedure NDE 3.3. Rev. 3

Data Sheet No.	Weld ID
3.3.001	SI-131-SW-1
3.3.001	SI-131-SW-2
3.3.001	SI-215-SW-2
3.3.008	SI-213-FW-1
3.3.010	SI-213-FW-2
3.3.014	SI-151-FW-1
3.3.014	SI-131-SW-6
3.3.034	RC-154-FW-1
3.3.034	SI-149-FW-4
3.3.034	SI-149-3-SW-1

Data Sheet No. (cont'd)	Weld ID
3.3.034	SI-149-3-SW-2
3.3.043	SI-151-1-SW-9
3.3.050	SI-208-1-SW-2
3.3.053	SI-475-FW-7B
3.3.055	SI-406-FW-1

d. Magnetic Particle Examination Data Review

Examination Procedure NDE 2.2 Rev. 3

Data Sheet No.	Weld ID	Component
2.2.004	1A-1-112-B	Reactor Coolant Piping
2.2.006	MS-28-5-SW-1	Main Steam Loop 1A1
2.2.012	BF-14-1-SW-2	Main Feedwater To SG
2.2.013	BF-14-2-SW-1	Feedwater To SG 1A1

The data reviewed for each of the above NDE methods revealed that FP&L has a very technical competent and conservative ISI program. Documentation provided for the above examinations was excellent.

Certification records for the examiners listed below, who had been utilized for the above examinations, were reviewed by the inspector and found to be satisfactory:

Ebasco Services Inc. Examiners Certifications

Name	UT	PT	MT	VT	Eye Test Date
R. B	II	II	NA	II	9/10/91
M. B.	I	I	NA	NA	9/16/91
B. B.	II	II	II	NA	1/30/91
S. C.	II	II	II	NA	2/5/91
P. K.	II	II	II	II VT-1	3/20/91
C. L.	III	II	II	II	10/22/91
R. L.	II	II	II	II	1/11/91
D. M.	I	II	II	II VT-1	10/31/91
P. N.	II	II	II	II	9/22/91
C. P.	III	III	III	II	9/17/91
R. V.	II	II	II		9/16/91

FP&L Examiner Certifications

F. C.	III	II	III	NA	6/12/91
W. M.	III	III	NA	NA	2/01/91
D. N.	III	II	NA	III	3/27/91
C. R.	II	II	II	II	3/27/91

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

3. Review of ISI Procedures - Unit 1 (73755)

The inspector reviewed the recently revised procedures listed below to ascertain whether the procedures adequately implemented the requirements of the 1983 ASME Code with addenda through Summer 1983 which is required for 2nd Interval ISI examinations on Unit 1. The following procedures were also reviewed to ensure that they adequately covered all required aspects of the approved ISI program, including licensee commitments to perform certain augmented inspections, proper approvals, adequate record retention, qualification of NDE examination personnel, technical content, and methods of recording, evaluating and dispositioning findings:

Procedure No. and Revision	Title of Procedure
NDE-2.2 Rev. 3	Magnetic Particle Examination
NDE-3.3 Rev. 3	Liquid Penetrant Examination Using the Solvent Removal Visible Dye Technique
NDE-5.4 Rev. 8	Ultrasonic Examination of Austenitic Piping Welds
NDE-5.2 Rev. 5	Ultrasonic Examination of Ferritic Piping Welds
NDE-5.1 Rev. 6	Ultrasonic Examination of Pressure Vessel Welds, Except Reactor Vessels
NDE-4.3 Rev. 3	Visual Examination VT-3/VT-4
NDE-4.1 Rev. 4	Visual Examination VT-1: Welds/Bolting/ Bushing/Washers
NDE-5.3 Rev. 4	Ultrasonic Examination of Primary Coolant Piping Welds
NDE-5.16 Rev. 3	Ultrasonic Examination Technique for the Evaluation of Cracking in Feedwater Piping (NRC Bulletin 79-13)
NDE-5.11 Rev. 4	Ultrasonic Examination of Dissimilar Metal Piping Welds
NDE-5.12 Rev. 3	Manual Ultrasonic Examination of Reactor Vessel Flange to Shell and Stud Hole Threads (Reg. Guide 1.150 implemented)

Procedure No. and Revision (cont'd)	Title of Procedure
NDE-5.13 Rev. 4	Ultrasonic Examination of Nozzle Inner Radius Areas
NDE-5.18 Rev. 3	Ultrasonic Thickness Measurements

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

4. Review and Evaluation of FP&L's Long Term Erosion/Corrosion (E/C) Program For Unit-1 (NRC Generic Letter 89-08) (92701)

Background

On May 2, 1989, NRC issued Generic Letter 89-08 which requested that licensees provided assurances that a long term erosion/corrosion monitoring program, consisting of systematic measures to ensure erosion/corrosion does not lead to degradation of single phase and two phase high energy carbon steel systems.

FP&L has had a long established two-phase wall thinning inspection program and single phase inspections began immediately at their Turkey Point Plant following the 1986 Surry 2 event. NRC staff reviewed the E/C program at Turkey Point in August 1988 in support of NUREG-1344 and determined that FP&L met NUMARC guidelines for inspection for E/C in single-phase lines. However, the staff found that the licensee had not implemented formalized procedures or administrative controls to ensure continued long-term implementation of its erosion/corrosion monitoring program for piping and components within the licensing basis. FP&L's letter of response to Generic Letter 89-08, dated July 21, 1989, informed NRC that a corporate procedure was developed to define the responsibilities within FP&L for the continuation of the E/C programs at Turkey Point Units 3 and 4 and St. Lucie Units 1 and 2. In addition, the licensee stated that due to the continuing effort necessary to ensure the integrity of high energy piping systems, and experience gained from previous inspection program, FP&L's engineering staff would be upgrading its engineering standard for this process.

The inspector reviewed the programmatic and inspection procedures listed below to ensure that the licensee had formalized procedures and administrative controls to ensure continued implementation of its E/C monitoring program for St. Lucie Unit 1.

- JPN-PSL-SEMP-91-031 Rev. 2, High Energy Piping Inspection Program Guidelines for 1991 Refueling Outage REA-SLN-86-072-1B Rev. 2
- E/C-PSL-1-001 Rev. 0 Field Change 1, St. Lucie Unit 1, Fall 1991 Refueling Outage Erosion/Corrosion Examination Plan
- NDE 5.18 Rev. 3 Ultrasonic Thickness Measurements

The inspector's review revealed that FP&L uses the Electric Power Research Institutes (EPRI) CHEC and CHECMATE computer programs, industry data, and previous inspection data as predictive tools for determining and prioritizing inspection locations. FP&L Nuclear Engineering has inputted St. Lucie Unit 1 operational and as-built piping data into the CHEC and CHECMATE computer programs. The CHEC and CHECMATE computer programs predict piping and components susceptible to E/C based on the inputted data for identification and inspection during future refueling outages. In estimating E/C wear rates the CHECMATE program utilizes the following parameters: material composition, PH and water chemistry, temperature and pressure, oxygen, flow path geometry, flow velocity and moisture content (two-phase flow only). When ultrasonic examinations reveals component/piping wall thickness to be below the established minimum wall thickness or predicted to violate that minimum during the next operating cycle the components/piping are replaced, inspections are also expanded to properly bound the E/C problem and correct its cause.

The areas chosen for cycle 11 E/C inspection were as follows:

- Turbine Crossunder piping
- Moisture separator reheater (MSR) shell side drain piping and fitting between the MSRs and the four LP heaters
- Mainsteam inlet to MSR "D" tubeside
- MSR "A" tubeside discharge to drain collector tank "B"
- HP Heater 5A extraction steam piping
- Feedwater pump "A and B" to heater drain pump "B" inlets
- High pressure heater drain pump discharge orifices, tees and LCV's
- LP Heater 3 to LP heater 2 heater drain LCV area
- Condensate and feedwater system orifices and tees
- Steam/Generator blowdown and feedwater piping inside containment
- LP Heater 3B heater vent at condenser

One hundred and sixteen inspection data sheets resulted for the above inspections and the expanded inspections. The inspector selected the data reports list below for review and to determine if the licensee's corrective actions appeared satisfactory:

Data Sheet	Component/System	Item ID
PSL-1-EC-91-002	Heater Drain	12HD3-3-P-4-8
PSL-1-EC-91-003	Heater Drain	10HD118-1-E-3-10

Data Sheet (cont'd)	Component/System	Item ID
PSL-1-EC-91-005	Heater Drain	10HD118-1-E-4-10
PSL-1-EC-91-010	Heater Drain	14HD39-4-P-9-19
PSL-1-EC-91-011	Heater Drain	14HD40-4-P-3-19
PSL-1-EC-91-015	Heater Drain	14HD84-5-P-24-54
PSL-1-EC-91-017	Heater Drain	20HD43-2-P-13-30
PSL-1-EC-91-021	Heater Drain	6HD-11-E-15-38
PSL-1-EC-91-023	Heater Drain	20HD43-2-R-2-31
PSL-1-EC-91-032	Main Steam	8MS24-3-E-6-16
PSL-1-EC-91-039	Heater Drain	14HD84-1-P-19-44
PSL-1-EC-91-042	Main Steam	8MS24-3-P-6-12
PSL-1-EC-91-043	Condensate	24C50-2-P-9-20
PSL-1-EC-91-055	Condensate	24C38-3-T-1-11
PSL-1-EC-91-069	Heater Drain	14HD84-1-P-20-46
PSL-1-EC-91-072	Heater Drain	14HD84-5-P-23-52A
PSL-1-EC-91-073	Heater Drain	14HD84-1-P-19-44
PSL-1-EC-91-079	BlowDown	I-2B1-0-P-14-30
PSL-1-EC-91-080	BlowDown	I-2B1-0-E-1-3
PSL-1-EC-91-083	Main Steam	8MS26-5-E-14-42

The records for the above examinations were excellent, detail drawings and photographs documented the equipment involved and the areas of concern. Corrective action appeared to be satisfactory. The information reviewed revealed an aggressive and conservative E/C program is presently in place for Unit 1 and should improve as more data becomes available.

In addition to the above internal surface piping/component E/C program. The inspector reviewed visual examination data for a licensee augmented inspection program initiated this inspection period for ASME Class 2 and 3 components, piping, and supports located in the intake structure, yard and pipe tunnel which are subject to external corrosion damage caused by adverse environment conditions. The inspector's review of NDE procedures identified in paragraph 3 above, also revealed that these procedures had requirements for examiners to report boric acid corrosion on components in areas where they perform their NDE examinations. The inspector noted that data for these inspections was excellent. These boric acid inspections are above and beyond the established program for boric acid corrosion required by Generic Letter 88-05

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

5. Review of Radiographic Film - Unit 1 (57090)

The inspector reviewed radiographic film and their associated records for the ASME Class 2 Plant modification welds listed below. This review was performed to determine whether the radiographic film and associated records had been prepared, evaluated, and maintained in accordance with the licensee's approved radiographic procedures Nos. TS-9.2 and TS-9.3.1.

Inspection Report No.	Weld ID No.	Support Line No.	Comments
M90-1673	001K	CH Line 0544	SAT
M90-1675	001K	2F-1-CH-0544	(1) Film ID missing and/or not legible on film segments (2) Radiographer dated his examination as September 4, 1990. The film was read on March 22, 1990 and subsequent shots taken on March 23, 1990. Therefore, the Radiographer's date is meaningless for this record.
M90-1676	001N	2F-1-CH-0544	Film ID not legible and/or incomplete
M90-1682	014A	CH-0A01	SAT
M90-1683	013A	CH-0A01	SAT
M90-1684	005A	CH-0A01	SAT
M90-1685	004A	CH-0A01	SAT
M90-1686	013A	CH-0939	Missing two film from package received from vault (film was later found but not in vault)
M90-1688	014A	2F-1-CH-0939	SAT
M90-1690	31A	CH-553	SAT
M90-1691	30A	2F-1-CH-0553	Radiographer did not sign or date Radiographic Inspection Report (RIR) for radiographs taken on March 24, 1991
M90-1692	13A	CH-553	SAT
M90-1693	012A	2F-1-CH-553	SAT
M90-2673	009R3	2F-1-HVS-0010	SAT
M90-2259	96	2F-1-HVS-0010	SAT
M90-2743	97	2F-1-HVS-0010	SAT
M90-22621	98	2F-1-HVS-0010	SAT

Inspection Report No. (cont'd)	Weld ID No.	Support Line No.	Comments
M90-2262	99	2F-1-HVS-0010	SAT
M90-2263	100	2F-1-HVS-0010	SAT
M90-2264	101	2F-1-HVS-0010	Film ID on Film Interval 6-0 Has Weld No. and Date Only.
M90-2265	102	2F-1-HVS-0010	SAT
	103	2F-1-HVS-0010	RIR Missing Inspection Report No., No. of Exposures, and No. of Film

The inspector's review was only a sample of the available film for Unit 1, and quality assurance (QA) discrepancies were apparent as indicated above. The licensee corrected the above discrepancies and committed to perform a review to be completed by January 15, 1992 of all radiographs and their documentation for the past two years. However, FP&L's Radiographic Procedure #TS 9.3 paragraph 14.F requires that, permanent, non permanent and INFO film, shall have the following identification permanently included on each film by use of lead characters during exposure or by visible light imprinted.

*FPL-PSL No._____ Unit number

*PC/M or CWO No.

*System or Component Identification and Drawing No., and Rev. No.

*Weld No. or part number (as applicable)

*Weld Repair Report No. (If applicable)

*Date

In addition, paragraph 17.B.1 of radiographic procedure No. TS 9.3 requires that, the radiographic inspection report shall include as a minimum all of the information indicated. This item was reported to the licensee as violation 50-335/91-24-01, Failure to Follow Procedure for Properly Identifying Radiographic Film and Documentation of Associated Records. The inspector's technical review of the above radiographs to insure discrepancies are properly dispositioned was satisfactory.

6. Exit Interview

The inspection scope and results were summarized on December 6, 1991, with those persons indicated in paragraph 1. The inspector described the areas

inspected and discussed in detail the inspection results listed below. Proprietary information is not contained in this report. Dissenting comments were not received from the licensee.

(Open) SL-4 violation 50-335/91-24-01, "Failure to Follow Procedure for Properly Identifying Radiographic Film and Documentation of Associated Records" paragraph 5.

7. Acronyms and Initialisms

ASME	-	American Society of Mechanical
Aux	-	Auxiliary
B&PV	-	Boiler and Pressure Vessel
CCW	-	Component Cooling Water
CE	-	Combustion Engineering
CH	-	Charging
CNR	-	Customer Notification Report
Dtd	-	Dated
E/C	-	Erosion/Corrosion
FP&L	-	Florida Power and Light
FW	-	Feedwater
ID	-	Identification
ISI	-	Inservice Inspection
LP	-	Low Pressure
MS	-	Main Steam
MSR	-	Moisture Separator Reheater
MT	-	Magnetic Test
NDE	-	Nondestructive Examination
No.	-	Number
NRC	-	Nuclear Regulatory Commission
PSL	-	Plant Saint Lucie
PT	-	Liquid Penetrant Test
QA	-	Quality Assurance
QC	-	Quality Control
REV	-	Revision
RIR	-	Radiographic Inspection Report
SG	-	Steam Generator
SI	-	Safety Injection
SL	-	Severity Level
TS	-	Technique Sheet
UT	-	Ultrasonic Test