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L-91-348
10 CFR 50.55a

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

Gentlemen:

Re: Turkey Point Unit 3
Docket No. 50-250
Inservice Inspection Report

ASME Code, Section XI, (IWA-6230) requires that Inservice Inspection (ISI) Summary Reports be submitted within 90 days of completion of ISI conducted during a refueling outage. Please find attached the reports listed below, in accordance with the provisions of this requirement.

Form NIS-1 Owners' Data Report for Inservice Inspections.

Form NIS-BB Owners' Data Report of Eddy Current Examinations.

Form NIS-2 Owners' Data Report of Repairs and Replacements.

Summary of Visual Examinations and Functional Testing of Snubbers.

Summary of Inservice Inspection Examinations.

Should there be any questions concerning this report, please contact us.

Very truly yours,

T.F. Plunkett by VAK

T. F. Plunkett
Vice President
Turkey Point Nuclear

TFP/GS

attachment

cc: Stewart D. Ebnetter, Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant

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FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS
As required by the Provisions of the ASME Code Rules Page 1 of 11

1. Owner: Florida Power and Light Company, 700 Universe Blvd.
Juno Beach, Florida 33408
2. Plant: Turkey Point Nuclear Power Plant, P.O. Box 3088,
Florida City, Florida 33034
3. Plant Unit: 3
4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date : December 14, 1972
6. National Board Number for Unit: N/A
7. Components Inspected:

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Pressure Vessel	Babcock and Wilcox	610-0116 3PSRV1	N/A	N-160
Pressurizer	Westinghouse	16A-5883 3T200	N/A	N-720
Steam Generator A	Westinghouse	16A-5885-1 FSGT-3001 3E210A	N/A	N-740
Steam Generator B	Westinghouse	16A-5885-2 FSGT-3002 3E210B	N/A	N-742
Steam Generator C	Westinghouse	16A-5885-3 FSGT-3003 3E210C	N/A	N-744
Regenerative Heat Exchanger	Westinghouse	3E200	N/A	N/A
Reactor Coolant Pump A	Westinghouse	3P200A	N/A	N/A
Reactor Coolant Pump B	Westinghouse	3P200B	N/A	N/A
Reactor Coolant Pump C	Westinghouse	3P200C	N/A	N/A
Reactor Coolant Piping	Bechtel	See line nos. on page 9 of 11	N/A	N/A

Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Residual Heat Removal Piping	Bechtel	See line nos. on page 9 of 11	N/A	N/A
Safety Injection Piping	Bechtel	See line nos. on page 9 of 11	N/A	N/A
Chemical and Volume Control Piping	Bechtel	See line nos. on page 9 of 11	N/A	N/A
Containment Spray Piping	Bechtel	See line nos. on page 9 of 11	N/A	N/A
Main Steam Piping	Bechtel	See line nos. on page 9 of 11	N/A	N/A
Steam Generator Blowdown Piping	Bechtel	See line nos. on page 9 of 11	N/A	N/A
Feedwater Piping	Bechtel	See line nos. on page 9 of 11	N/A	N/A
Component Cooling Piping	Bechtel	See line nos. on page 9 of 11	N/A	N/A
Auxiliary Feedwater Piping	Bechtel	See line nos. on page 9 of 11	N/A	N/A
Intake Cooling Water Piping	Bechtel	See line nos. on page 9 of 11	N/A	N/A

8. Examination Dates : From 12/11/90 to 10/1/91
9. Inspection Interval: From 2/22/84 to 2/21/94
Inspection Period : From 12/11/90 to 2/21/94

NIS-1 Report (continued)

10. Abstract of examinations and statement concerning status of work required for current interval:

The Inservice Examination of selected Class 1 and 2 components and piping systems of Florida Power and Light's Turkey Point Unit 3 was performed during the Emergency Diesel Addition Outage. This outage began on December 11, 1990 and ended on October 1, 1991. This was the first outage of the third period and the fifth outage of the second ten year interval.

The components and piping systems examined were selected per the Second Ten Year Inspection Plan, which was prepared in accordance with the requirements of the 1980 Edition of ASME Section XI with addenda through Winter 1981.

Manual and Mechanized ultrasonic, visual, magnetic particle, and liquid penetrant non-destructive techniques were used to examine the components, piping, and their supports. The Manual examinations were performed by FP&L personnel, supported by examiners supplied by Ebasco Services Inc. The RPV Internal examinations were performed by Westinghouse Energy Systems personnel, with FP&L personnel reviewing the work performed. The RPV Mechanized examinations were conducted by Southwest Research Institute.

Eddy Current examinations were conducted by FP&L personnel from April 6, 1991 through June 6, 1991 on Steam Generators A, B, and C. A total of 9,598 tubes were examined. See the attached NIS-BB report for the summary of examination results.

The augmented Feedwater Nozzle examination program was conducted during this outage on all three Steam Generators. The entire area from the nozzle ramp to a point one pipe diameter out on the far side of the elbow was examined with ultrasonics.

Snubber functional testing and visual examinations were conducted in accordance with Turkey Pt. Unit 3 Plant technical specifications and Section XI. Examination and testing services were supplied by Qualtech Testing Services Inc.

System Pressure testing was conducted by the plant to applicable Plant Technical Specifications and Procedures and Section XI.

The number of examinations performed during this outage and the cumulative total of exams exceed the requirements of Program B of ASME Section XI.

NIS-1 Report (continued)

11. Abstract of Conditions Noted
12. Abstract of Corrective Measures Recommended and Taken

Class 1

Reactor Pressure Vessel

A full RPV examination was conducted using mechanized Ultrasonic and remote Visual methods. These examinations did not locate any unacceptable flaws. A mechanically created gouge was seen on the RPV Head Seal Surface. This gouge has not changed since its discovery. The examinations covered the vessel circumferential welds, all nozzle to safe-end welds, RPV internals, the upper RPV head, and one-third of the RPV closure head studs, nuts, and washers.

The flange to dome weld on the closure head had several linear surface indications on the outside surface which were removed by grinding. An engineering evaluation accepted the resulting cavity to be used as-is.

During installation, two RPV Closure Head studs were damaged. New studs were examined for replacements, and several additional new studs were examined in case further replacements became necessary.

Steam Generators

The supports for Steam Generator C were examined. No unacceptable conditions were noted.

Pressurizer

The pressurizer support skirt, one circumferential and one longitudinal weld, and the safety nozzle inner radius were examined using Ultrasonic, Liquid Penetrant, Magnetic Particle, and Visual examination methods. No unacceptable conditions were noted.

Reactor Coolant Pumps

Reactor Coolant Pump A studs, nuts, flywheel, integral attachments, and pump supports were examined. No reportable indications were detected.

Reactor Coolant Pump B studs, nuts, flywheel, integral attachments, and pump supports were examined. One unacceptable linear indication was detected on one of the integral attachments, and

NIS-1 Report (continued)

subsequently removed. No other reportable indications were detected.

Reactor Coolant Pump C casing welds, studs, nuts, integral attachments, and pump supports were examined. No reportable indications were detected.

Reactor Coolant Piping

Surface and volumetric examinations using Liquid Penetrant and Ultrasonic methods were conducted on selected welds. Acceptable surface and geometric indications were detected. No unacceptable conditions were noted.

Valve and flange bolting were examined. Boric acid crystals were found on numerous areas. These were cleaned, in some cases, replaced at the option of the maintenance crews, and re-examined. No unacceptable conditions were noted.

Visual examinations were performed on component supports. No unacceptable conditions were noted.

During the Outage, the RTD lines were removed and the short section of piping that remained was capped. Baseline examinations were performed on the new welds.

Pressurizer Surge Piping

The surge line was examined for movement in accordance with IE Notice 88-11. Evidence of movement was detected (crushed insulation noted.) An engineering evaluation of the line determined that this was acceptable, as the movement was expected and essentially the same as previous examinations.

Residual Heat Removal Piping

Surface and volumetric examinations using Liquid Penetrant and Ultrasonic methods were conducted on selected welds. Acceptable surface and geometric indications were detected. No unacceptable conditions were noted.

Visual examinations were performed on component supports. Several drawing discrepancies were noted. These are being updated as part of the system walkdown and drawing reconstitution effort currently being performed at Turkey Point. Other problems identified included bent rods, painted scales, and broken grout. These were

NIS-1 Report (continued)

accepted as-is or cleaned. None of these indications affected the functionality of the supports.

Safety Injection Piping

Surface and volumetric examinations using Liquid Penetrant and Ultrasonic methods were conducted on selected welds. Acceptable surface and geometric indications were detected. No unacceptable conditions were noted.

Visual examinations on the interior surface of two valves was performed. A nick was detected on one valve body seat. Subsequent pressure testing showed that the valve did not leak and the indication was accepted as-is.

Visual examinations were performed on component supports. One spring hanger was found to be non-function due to mechanical damaged from an outside source not related to inservice use. This spring can was replaced and additional examinations were performed on the line to determine if other supports may have been damaged. No other unacceptable conditions were noted.

Chemical and Volume Control Piping

Surface examinations were performed on selected welds. No unacceptable indications were noted.

Visual examinations were performed on selected supports and flange bolting. No unacceptable indications were noted.

Class 2

Steam Generators

The "CL" weld on steam generator C (transition cone to upper shell) was examined. This examination was performed as part of an ongoing program by FPL to monitor this weld in the Turkey Point Steam Generators. This is due to concern with cracking that has been detected in this weld at other plants. Acceptable pitting and slag inclusions were detected.

Residual Heat Removal Piping

Visual examinations were performed on selected supports. Drawing discrepancies were noted. Load scales on spring cans were painted and needed cleaning, inadequate thread engagement and paint on

NIS-1 Report (continued)

spherical bearings was noted. These were accepted as-is or cleaned. No unacceptable conditions were found.

Safety Injection Piping

Selected welds were examined by liquid penetrant techniques. Acceptable indications were noted on 1 weld. An unacceptable indication was found on 1 weld. After an evaluation, it was determined to be a surface lap caused during the manufacturing process. No other indications were detected.

Containment Spray Piping

Visual examinations were performed on selected supports. Drawing discrepancies were noted. No unacceptable conditions were found.

Main Steam Piping

Magnetic Particle, Penetrant, Ultrasonic, and Radiographic examinations were performed. Acceptable slag and porosity were detected in 1 weld. No unacceptable indications were noted.

Steam Generator Blowdown Piping

Magnetic Particle and Ultrasonic examinations were performed on selected welds. One linear indication was detected. The evaluation determined it to be a surface scratch. No unacceptable indications were detected.

Visual examinations were performed on selected supports. Loose nuts were detected on 1 support, which were subsequently tightened. Incomplete thread engagement was found on 1 support. This was accepted as-is by engineering evaluation. One support was examined due to the failure of an adjacent snubber.

Main Feedwater Piping

An augmented examination was performed on all three feedwater piping systems. This consisted on an ultrasonic exam on the piping from the bottom of the Steam Generator nozzle ramp to one pipe diameter upstream of the first elbow to pipe weld. No indications were detected.

NIS-1 Report (continued)

Magnetic Particle and Ultrasonic examinations were performed on selected welds. Geometric indications were detected. No unacceptable indications were found.

7. Components Inspected:

Line numbers for the Piping systems examined this outage.

Class 1

REACTOR COOLANT

31"-RCS-1301
 29"-RCS-1304
 2"-RCS-1307
 10"-RCS-1307
 3"-RCS-1307
 27.5"-RCS-1307
 31"-RCS-1302
 29"-RCS-1305
 2"-RCS-1306
 27.5"-RCS-1306
 31"-RCS-1303
 29"-RCS-1308
 27.5"-RCS-1309
 14"-RC-1302
 12"-RC-1301
 4"-RC-1301
 4"-RC-1302
 4"-RC-1303
 4"-RC-1304

REACTOR COOLANT
(CONT)

4"-RC-1305
 4"-RC-1306
 3"-RC-1304
 2"-RC-1301
 2"-RC-1302
 2"-RC-1303
 2"-RC-1310

RESIDUAL HEAT
REMOVAL

14"-RHR-1301
 8"-RHR-1301
 8"-RHR-1302

CHEMICAL AND
VOLUME CONTROL

3"-CH-1301
 3"-CH-1302
 2"-CH-1301
 1.5"-CH-1301
 2"-CH-1304
 2"-CH-1306

SAFETY INJECTION

10"-SI-1301
 10"-SI-1302
 10"-SI-1303
 2"-SI-1301
 2"-SI-1302
 2"-SI-1303
 2"-SI-1305
 2"-SI-1306

Class 2

SAFETY INJECTION

16"-SI-2301
 10"-SI-2302
 10"-SI-2303
 8"-SI-2302

RESIDUAL HEAT
REMOVAL

14"-RHR-2301
 10"-RHR-2303
 8"-SI-2309

FEEDWATER

14"-FWA-2302
 14"-FWB-2303
 14"-FWB-2305
 14"-FWC-2306
 18"-FWC-2305
 6"-FWB-2302
 6"-FWC-2303

STEAM GENERATOR
BLOWDOWN

6"-BDC-2303
 6"-BDC-2306

CONTAINMENT SPRAY

6"-CS-2301

MAIN STEAM

31"-MSC-2303
 26"-MSC-2303
 14"-MSA-2301
 14"-MSA-2302
 26"-MSC-2306
 14"-MSC-2305
 14"-MSC-2306

NIS-1 Report (continued)

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

OWNER : FLORIDA POWER AND LIGHT COMPANY

By: James Scarola

Date: 12/16/91

CERTIFICATE OF AUTHORIZATION NO. (IF APPLICABLE): N/A
EXPIRATION DATE: N/A

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/ or the State or Province of DADE COUNTY and employed by ARKWRIGHT MUTUAL INSURANCE COMPANY of NORWOOD, MASSACHUSETTS have inspected the components described in this OWNERS' Data Report during the period 12/11/90 to 12/11/91, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in the Owners' Data Report in accordance with the requirements of the ASME Code, Section XI. By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the examinations, and neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

James B. Scarola
Inspector's Signature

Date: Dec. 17, 1991

Factory Mutual Systems
8230 (N)(I)
National Board, State,
Province, and Endorsements

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NIS-1 Report (continued)

1. Owner: Florida Power and Light Company, 700 Universe Blvd.
Juno Beach, Florida 33408
(Name and Address of Owner)
2. Plant: TURKEY POINT NUCLEAR POWER PLANT, P.O. BOX 3088,
FLORIDA CITY, FLORIDA 33034
(Name and address of Plant)
3. Plant Unit: 3
4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date : December 14, 1972
6. National Board Number for Unit: N/A

Report Number	Organization	Description of Services
ESI-PTN-3-91	FPL	Inservice Inspection Final Report
	FPL	Eddy Current Examination of Steam Generators Final Report
Project 3940	SwRI	1990 Inservice Examination of the Reactor Pressure Vessel at Turkey point Plant, Unit 3
	Westinghouse	Reactor Vessel Internals 40-Month Report, Outage 2-3-1 (1991)
	FPL	Summary Report of Hydrostatic Testing Program Turkey Point Unit No. 3 1990-91 Diesel Generator Addition Outage
	FPL	Summary Report Visual Examination and Functional Testing of Snubbers