

TURKEY POINT UNIT 3

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1995 REFUELING OUTAGE INSERVICE INSPECTION REPORT

Executive Summary

The remaining scheduled ISI examinations for the first period were performed during the Turkey Point Unit 3 outage.

100% of the A, B, and C steam generator tubes were eddy current tested. Two tubes were plugged during this outage.

The NIS-1 summary report includes an explanation of Reactor Coolant piping branch connection welds examined for a "set in" rather than a "set-on" configuration. The final examinations were performed to satisfy the corrective action on this issue.

The NIS-2 forms discuss the repairs and replacements which took place since the previous Unit 3 submittal and during the 1995 refueling/ maintenance outage.

Visual examination and functional testing of snubbers was completed in accordance with ASME Section XI and Technical Specifications. Visual examinations did not reveal any failures. There were no snubber failures in the functional test sample.

The inservice inspection summary tables detail the class 1 and class 2 examinations performed during the second outage of the first period of the third ten-year interval.

Selected class 1 and class 2 vessels, piping and supports were examined with surface, volumetric, and visual examination techniques in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and the Turkey Point Units 3 and 4 ISI Program.

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**TURKEY POINT UNIT 3
1995 REFUELING OUTAGE**

Form NIS-1 Owners' Data Report for Inservice Inspections

FORM NIS-1 OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

Page 1 of 8

1. Owner: Florida Power and Light Company, 700 Universe Blvd. Juno Beach, Florida 33408
2. Plant: Florida Power & Light Company, Turkey Point Nuclear Power Plant, P.O. Box 4332, Princeton, Florida 33032
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.	Nat'l Board No.
Reactor Pressure Vessel	Babcock and Wilcox	3PSRV1	N/A	N-160
Steam Generator A	Westinghouse	16A-5885-1 FSGT-3001 3E2110A	N/A	N-740
Steam Generator B	Westinghouse	16A-5885-2 FSGT-3002 3E2110B	N/A	N-742
Steam Generator C	Westinghouse	16A-5885-3 FSGT-3003 3E2110C	N/A	N-744
Pressurizer	Westinghouse	3T200	N/A	N-720
Reactor Coolant Pump C	Westinghouse	3P200C	N/A	N/A
Regenerative Heat Exchanger	Westinghouse	3E200	N/A	N/A
Reactor Coolant System	Bechtel	N/A	N/A	N/A
Safety Injection System	Bechtel	N/A	N/A	N/A
Chemical and Volume Control System	Bechtel	N/A	N/A	N/A

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Component or Appurtenance	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	Nat'l Board No.
Residual Heat Removal	Bechtel	N/A	N/A	N/A
Main Feedwater System	Bechtel	N/A	N/A	N/A
Main Steam System	Bechtel	N/A	N/A	N/A

8. Examination Dates : From 08/28/95 to 10/8/95
9. Inspection Period Identification : First Period - 02/22/94 to 02/21/97
10. Inspection Interval Identification: Third Interval, from 02/22/94 to 02/21/04
11. Applicable Edition of Section XI 1989 Addenda none
12. Date/Revision of Inspection Plan: 06/23/95 Rev. 2
13. Abstract of examinations and test. Include a list of examinations and tests and a statement concerning status of work required for the inspection plan.

An Inservice Examination of selected Class 1, 2, and 3 components and piping systems of Florida Power and Light's Turkey Point Unit 3 was performed during the 1995 Refueling outage. This outage began on August 28, 1995, and ended on October 8, 1995. This was the second outage of the first period of the third ten year interval.

The components and piping systems examined were selected in accordance with the Turkey Point Third Ten Year Inservice Inspection Program, which was prepared in accordance with the requirements of the ASME Section XI, 1989 Edition.

Manual ultrasonic, radiographic, visual, magnetic particle, and liquid penetrant non-destructive techniques were used to examine components, piping, and their supports. The examinations were performed by FPL personnel, supported by examiners supplied by

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Raytheon Engineers and Constructors. A listing of examinations performed is attached to this summary.

Eddy Current examinations on Steam Generators A, B, and C were conducted by FPL personnel from September 14, 1995, through September 19, 1995. A total of 9576 tubes were examined. 2 tubes were plugged in Steam Generator B during this outage. See the attached NIS-BB report for the summary of examination results.

The Class 2 Feedwater Nozzle piping augmented examinations were 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. No reportable indications were found.

Snubber functional testing and visual examinations were conducted in accordance with Turkey Point Plant Technical Specifications. Examination and testing services were supplied by Pacific Scientific, Inc. See the attached report for the summary of examination results.

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

The examinations performed for the first period meet or exceed the requirements of Program B of Section XI.

14. Abstract of Results of Examinations and Tests.

Class 1

Reactor Pressure Vessel

One-third of the Reactor Pressure Vessel Closure Head studs, nuts, and washers were examined. No reportable indications were found.

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Steam Generators

The Inlet and Outlet manway bolting of all three steam generators were examined. The examinations were conducted at the request of the plant due to difficulty in removing the manway bolts from #C# generator. 28 of the #C# steam generator manway bolts were replaced. One bolt on #A# generator and 4 bolts on #B# generator were replaced. Baseline examinations were performed on new bolts. No reportable indications were found.

Pressurizer

The upper shell to head weld and the adjoining longitudinal seam weld were volumetrically examined. No reportable indications were found.

The inner radius of the safety, relief, and spray lines were volumetrically examined. No reportable indications were found.

The Pressurizer support was visually examined. No reportable indications were found.

Reactor Coolant Pumps

The bore and keyways of Reactor Coolant Pump 3C flywheel were volumetrically examined. No reportable indications were found.

Regenerative Heat Exchanger

A VT-3 examination was performed to look for accumulated boron crystals. A VT-2 exam was performed during plant startup in accordance with the approved relief request. The VT-2 and VT-3 examinations did not reveal any indications of leakage.

Reactor Coolant Piping

Reactor Coolant piping welds and supports were examined using surface, volumetric, and visual techniques. One linear indication was found using liquid penetrant techniques. The indication was determined to be a surface anomaly that had not been removed during construction. No reportable indications were found.

Chemical and Volume Control Piping

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Chemical and Volume Control piping supports were examined using visual techniques. No reportable indications were found.

Other Class 1

During the last Unit 3 refueling outage, FPL discovered that a number of Reactor Coolant branch connection welds were being examined incorrectly. The technique used during baseline examinations and previous outages was developed for a "set-in" branch connection configuration. Turkey Point's branch connections are of the "set-on" type. The ultrasonic technique used did not cover the Code required area.

FPL initiated a review of piping configurations as part of the corrective action. This review did not reveal any other types of weld configurations that had been misidentified. A second part of the corrective action was to reexamine the affected branch connections. During this outage, the remaining affected branch connections were examined, including the high stress Pressurizer surge line weld. Calibration blocks were borrowed from Prairie Island and Beaver Valley in order to properly examine the welds. No reportable indications were noted. These examinations complete the corrective action initiated by FPL.

Component support RS-1 was not examined as scheduled. This support is located next to the pressurizer and was difficult to reach. Special scaffolding would have been required to obtain adequate access. Due to the high radiation in the area, this examination was canceled and another support will be chosen at a later date, if required.

Weld 4"-RC-1305-19 was not examined as scheduled. The weld was covered by a component support clamp. Due to the high radiation in the area, this examination was canceled and another weld will be chosen at a later date, if required.

The selection process to be used for substituted examination areas will follow Section XI rules.

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Class 2

Steam Generators

Steam Generator shell welds and inner radius sections were examined with the applicable surface and volumetric techniques. Acceptable inclusions were found. No reportable indications were found.

Residual Heat Removal Piping

Residual Heat Removal piping welds and supports were examined using surface, volumetric, and visual techniques. Inadequate thread engagement was found on one support. This was accepted as-is by engineering evaluation. No other reportable indications were found.

Main Steam Piping

Main Steam piping welds were examined using surface techniques. No reportable indications were found.

Main Feedwater Piping

Main Feedwater piping welds and supports were examined using surface and volumetric techniques. No reportable indications were found.

Augmented examinations were performed on the piping off the Steam Generator Feedwater nozzles on all three loops. No reportable indications were found.

Safety Injection Piping

Safety Injection piping welds and supports were examined using surface, volumetric, and visual techniques. One support was found to have a bent integral attachment (examined under category F-A.) An engineering evaluation showed this integral attachment to have been welded into this position, possibly during construction, and was not a service related condition. No corrective action was required. A surface examination of the integral attachment was performed as part of the ISI plan. This

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examination showed numerous unacceptable indications. An expanded sample examination was performed. No reportable indications were found in that sample. No other reportable indications were found. The support was redesigned to eliminate the integral attachment and a new baseline examination was performed on the support.

Other Class 2

The steam generator main steam nozzle to shell weld and the inner radius section were rescheduled for this outage. This was done to reduce future radiation exposure as the area was partially uncovered for other weld examinations. This substitution of exams meets the applicable Code requirements for Category C-B, Inspection Program B, and other applicable parts of Section XI.

15. Abstract of Corrective Measures

The integral attachment with the surface examination indications found on the High Pressure Safety Injection line was removed. The support was redesigned to eliminate the integral attachments. As part of the corrective action, the ISI group has been requested to examine additional supports and their integral attachments during the next outage.

No other corrective measures were required.

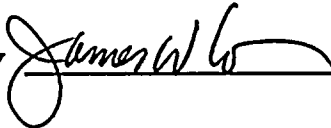
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We certify that a) the statements made in this report are correct, b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI, and c) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. N/A

Expiration Date N/A

Date: 12/18/95 Signed: Florida Power & Light

By 

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 Dade County, Florida, and employed by Arkwright Mutual Insurance Company of Norwood, Massachusetts, have inspected the components described in this Owner's Report during the period 8/28/95 to 10/8/95, and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in the Owner's Data 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.


Inspector's Signature

NB 8230
National Board, State,
Province, and Endorsements

Date: 12/19/95

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