TURKEY POINT PLANT
UNIT NO. 3

INSERVICE INSPECTION PLAN

FLORIDA POWER & LIGHT COMPANY
MIAMI, FLORIDA

AUGUST 14, 1979

REVISION RECORD

This page is a record of all revisions made to the Inspection Plan.

- o Revisions are denoted by vertical line(s), with the revision number above the line(s), and adjacent to the applicable change(s) on each page affected.

Revision No.	Date	Reason (ref. document, where applicable)

INSERVICE INSPECTION PLAN

TURKEY POINT, UNIT 3

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INTRODUCTION

This Inspection Plan describes Turkey Point Plant's Unit 3 Inservice Inspection Program for the 40 month period commencing August 14, 1979 and ending December 14, 1982. Prior to the beginning of the second 10-year inspection interval, it is anticipated that this Inspection Plan will be revised to incorporate later versions of ASME, Section XI than those currently in effect.

This Plan, which consists of ASME Class 1, 2 and 3 systems and components (and their supports), was developed by giving due consideration to the following documents:

- 10CFR50.55(a)
- Section XI of the ASME Code
- Section III of the ASME Code
- Section V of the ASME Code
- USNRC Regulatory Guides
  - Regulatory Guide 1.26, Revision 2
  - Regulatory Guide 1.14, Revision 1
- Turkey Point Plant FSAR

This Plan does not address examination requirements of steam generator tubing or augmented inspection programs.

1.0 APPLICABLE EDITIONS AND ADDENDA OF SECTION XI

Pursuant to Title 10 of the Code of Federal Regulations, Part 50, Paragraph 50.55(a), the Inservice Inspection requirements applicable to nondestructive examination and system pressure testing at Turkey Point Plant, Unit 3, are based on the rules set forth in the 1974 Edition of ASME Section XI through Summer 1975 Addenda, hereinafter referred to as ASME Section XI.

As permitted by Paragraph 50.2(v) and 50.55a(g)(4), FPL elects, for certain components, to meet supplemental requirements as set forth in the Edition and Addenda of the Code which have become effective subsequent to the 1974 Edition through the Summer 1975 Addenda of ASME Section XI. Other editions and addenda of ASME Section XI that are adopted are identified in the appropriate sections of this Inservice Inspection Plan. It is the intent of FPL to continually apply appropriate changes in the Code which improve the overall quality of Turkey Point Plant's Inservice Inspection Program.

2.0 SYSTEM BOUNDARIES SUBJECT TO INSERVICE INSPECTION

The development of the Inservice Inspection Program for Turkey Point Plant, Unit 3 required identification of all ASME Class 1, 2 and 3 pressure-retaining components (and their supports) that are subject to examination by IWA-1300 and within the scope of IWA-1100 of ASME Section XI.

The rules of IWA-1100 are presently only applicable to systems containing water, steam, or radioactive materials in light-water cooled nuclear power plants. Turkey Point Plant's Unit 3, Inservice Inspection Program proposes to adhere to the scope limitations of IWA-1100 until appropriate Code rules are developed for systems containing other fluids.

The pressure retaining component classes conform to the classification requirements specified in 10CFR50.2(v) for the reactor coolant pressure boundary and to the guidelines of USNRC Regulatory Guide 1.26 "Quality Group Classifications and Standards for Water, Steam and Radioactive Waste Containing Components of Nuclear Power Plants," for other safety-related systems.

The classification and identification of the components and system boundaries are shown on the plant's piping and instrumentation diagrams (P&ID's). These classification boundaries were developed for the sole purpose of planning, developing, and implementing Turkey Point Plant's Unit 3 Inservice Inspection requirements; and, as such, are limited in use to those examination and testing activities associated with Section XI of the ASME Code. These classifications and identifications correspond with NRC group classification and ASME classes as follows:

NRC Quality Group Classification	ASME Code Class
A	1
B	2
C	3

The following color code on Turkey Point Plant's P&ID's delineates the boundaries of each system whose pressure-retaining components are subject to an inservice examination:

Color	ASME Code Class
Red	Class 1 Components
Blue	Class 2 Components
Green	Class 3 Components

3.0 COMPONENTS SUBJECT TO NONDESTRUCTIVE EXAMINATION

Turkey Point Plant's P&ID's delineate those pressure-retaining components (and their supports) which are subject to the nondestructive examinations required by IWB-2000, IWC-2000, and IWD-2000 of ASME Section XI by means of the color coding specified in Section 2.0 above.

3.1 ASME CLASS 1 COMPONENTS

Class 1 Table of this Plan identifies the examination requirements of Table IWB-2600 of ASME Section XI. These requirements will be applied to those components identified by the color red on Turkey Point Plant's referenced P&ID's.

3.2 ASME CLASS 2 COMPONENTS

Class 2 Table of this Plan identifies the examination requirements of Table IWC-2600 of ASME Section XI. These requirements will be applied to those components identified by the color blue on Turkey Point Plant's referenced P&ID'S.

3.3 ASME CLASS 3 COMPONENTS

Class 3 Table of this Plan identifies the examination requirements of Subsection IWD of ASME Section XI. These requirements will be applied to the appropriate components identified by the color green on Turkey Point Plant's referenced P&ID's.

3.4 REACTOR COOLANT PUMP FLYWHEEL

3.4.1 The Inservice Inspection Program for a reactor coolant pump flywheel examination was developed to meet the guidance of USNRC Regulatory Guide 1.14, "Reactor Coolant Pump Flywheel Integrity". At the intervals suggested, the reactor coolant pump flywheel will be examined and evaluated to the specified acceptance criteria.

4.0 INSPECTION SCHEDULE

4.1 The Inspection Interval shall comply with the Inspection Program B, as defined in IWA-2420.

4.2 The Inservice Inspection Interval for ASME Class 1 components constitutes a ten year interval of service, commencing December 14, 1972. This Inspection Plan defines the Inservice Inspection requirements for the Third Period of that Interval for ASME Class 1, 2 and 3 components (and their supports).

4.3 Turkey Point Plant, Unit 3 will be implementing ASME Class 2 and 3 examination requirements for the first time in accordance with this Inspection Plan. For the remainder of the current ten year Inspection Interval, the percentage of the required examinations completed shall only be those which would have been scheduled had Class 2 and 3 requirements been implemented at the beginning of the interval and the required examinations divided evenly among each of the three Periods.

4.4 As permitted by IWA-2400 of ASME Section XI, the Inservice Inspection Interval for ASME Class 1, 2 and 3 components (and their supports) may be extended as necessary, to compensate for any prolonged out-of-service circumstances of the plant.

4.5 The Inservice Inspection Interval for the reactor coolant pump flywheel shall be a ten year interval of service commencing on December 14, 1972. For areas of high stress concentration at the bore and keyways, a reduced interval of approximately three years shall be applied. The ten year Examination Plan shall describe the distribution of examinations within the Inspection Interval in accordance with the requirements of USNRC Regulatory Guide 1.14.

5.0 EXTENT AND FREQUENCY

5.1 ASME Class 1, 2 and 3 components and systems (and their supports), as listed in the Class 1, Class 2 and Class 3 Tables respectively, shall be examined to the extent and frequency as required in Table IWB-2500, Table IWC-2500 and Article IWD-2000.

6.0 EXAMINATION METHODS

6.1 ASME Class 1, 2 and 3 components and systems (and their supports) shall be examined by the required visual, surface or volumetric methods. These examinations shall include one or a combination of the following techniques: visual, liquid penetrant, magnetic particle, ultrasonic or radiographic examination. These methods, shall as a minimum, be in accordance with the rules of IWA-2000 of ASME Section XI. Alternate examination methods, a combination of methods, or newly develoed techniques, may be substituted as permitted in IWA-2240.

6.2 VOLUMETRIC EXAMINATIONS

6.2.1 Ultrasonic Examinations

6.2.1.1 For ferritic vessels with wall thickness of 2-1/2 inches or greater, an ultrasonic examination shall be conducted in accordance with the rules of Appendix I of ASME Section XI.

6.2.1.2 For ferritic piping systems, an ultrasonic examination shall be conducted in accordance with the rules of Appendix III of later Edition and Addenda of ASME Section XI.

6.2.1.3 For components other than those listed in 6.2.1.1 and 6.2.1.2, an ultrasonic examination shall be conducted in accordance with the rules of Article 5 of ASME Section V.

6.2.1.4 All indications which produce a response greater than 50% of the reference level shall be recorded.

6.2.1.5 All indications which produce a response greater than 100% of the reference level shall be investigated to the extent that the operator can evaluate the shape, identity, and location of all such reflectors in terms of the acceptance/rejection standards of IWA-3100 (b) of ASME Section XI. The length of reflectors shall be measured between points which give amplitudes equal to 100% of the reference level.

6.2.2 Radiographic Examination

6.2.2.1 Radiographic examinations shall be conducted in accordance with Article 2 of ASME Section V.

6.3 SURFACE EXAMINATION

6.3.1 Liquid Penetrant Examination

6.3.1.1 Liquid penetrant examinations shall be conducted in accordance with Article 6 of ASME Section V.

6.3.2 Magnetic Particle Examination

6.3.2.1 Magnetic particle examinations shall be conducted in accordance with Article 7 of ASME Section V.

6.4 VISUAL EXAMINATION

6.4.1 Visual examination shall be conducted in accordance with the requirements of IWA-2210 of the later Edition of Section XI.

6.5 REACTOR COOLANT PUMP FLYWHEEL

6.5.1 Reactor coolant pump flywheels shall be examined by the required surface and volumetric methods, in accordance with the requirements of IWA-2200 of ASME Section XI.

7.0 EVALUATION OF EXAMINATION RESULTS

7.1 The evaluation of nondestructive examination results for ASME Class 1, 2 and 3 components (and their supports) shall be in accordance with Article IWB-3000, IWC-3000 and IWD-3000, respectively.

If acceptance standards for a particular Component, Examination Category, or Examination Method are not specified in the ASME Section XI Code Division, indications that exceed the acceptance standards for materials and welds specified in the Section III Edition applicable to the construction of the component shall be evaluated to determine disposition.

7.2 The evaluation of the results of visual examinations conducted in conjunction with system pressure tests shall be in accordance with Article IWA-5000.

7.3 Indications that were recorded in previous Preservice or Inservice Inspections and which were not characterized as propagating flaws will be considered as acceptable for continued service, provided the acceptance standards are met.

7.4 The evaluation of any buried components shall be performed in accordance with Article IWD-2000.

8.0 REPAIR REQUIREMENTS

8.1 Repairs to ASME Class 1, 2 and 3 components (and their supports) shall be performed in accordance with the Owner's Design Specification and Construction Code of the component or system. Later editions of the Construction Code or ASME Section III, either in its entirety or portions thereof, can also be used. If repair welding can not be performed in accordance with these requirements, then Article 4000 will be used.

8.2 Examinations associated with repairs or modifications shall meet the applicable design and inspection Code requirements as described in the following paragraphs:

8.2.1 Whenever ASME Class 1, 2 or 3 system modifications or repairs have been made which involve new strength welds on components greater than 2 inches diameter, the new welds shall receive both surface and 100 percent volumetric examinations, as applicable.

8.2.2 Whenever system modifications or repairs have been made which involve new strength welds on ASME Class 1, 2 or 3 components of 2 inches or less, a surface examination shall be performed.

8.3 Surface defects in ASME Class 1, 2 or 3 bolts, studs, and nuts may be removed by mechanical means provided the removal of that defect does not alter the basic configuration of the item. Bolts, studs and nuts that have defects that cannot be removed by mechanical means shall be replaced.

8.4 Repair of a reactor coolant pump flywheel that has unacceptable defects shall be performed in accordance with USNRC Regulatory Guide 1.14.

9.0 SYSTEM PRESSURE TESTS

9.1 System pressure tests shall be conducted in accordance with IWA-5000.

9.2 ASME Class 1 Components

9.2.1 Whenever the reactor coolant system is closed after it has been opened, the system shall be leak tested to nominal operating pressure per Article IWB-5000. Temperature and pressure requirements as stated in Turkey Point Plant's "Technical Specifications" shall not be exceeded.

9.2.2 At or near the end of each Inspection Interval, a hydrostatic pressure test shall be performed on ASME Class 1 systems and components. This test shall be conducted in accordance with the requirements of Article IWB-5000. Test pressures and temperatures shall be maintained for at least 4 hours for insulated systems and 10 minutes for non-insulated systems and components prior to performing the visual examination. Temperature and pressure requirements as stated in Turkey Point Plant's "Technical Specifications" shall not be exceeded.

9.3 ASME Class 2 Components

9.3.1 System pressure tests shall be performed at nominal operating pressure each Inspection Period on the exempt components to IWC-5000.

9.3.2 At or near the end of each Inspection Interval, a hydrostatic pressure test shall be performed on ASME Class 2 non-exempted systems and components. This test shall be conducted in accordance with the requirements of Article IWC-5000. When ASME Class 1 systems and components are also being pressurized, the pressure and temperature shall comply with the requirements of Paragraph 9.2.2 of this document.

9.4 ASME Class 3 Components

9.4.1 System and component pressure tests shall be performed at nominal operating pressure each Inspection Period to IWD-5000.

9.4.2 System pressure tests shall be performed at the hydrostatic pressure at, or near, the end of each Inspection Interval to IWD-5000.

10.0 RECORDS AND REPORTS

Records and reports developed from those examinations performed in accordance with this Inspection Plan shall be maintained in accordance with Article IWA-6000.

11.0 RELIEF REQUESTS

Relief requests for ASME Class 1, 2 and 3 components are identified in Appendix A to this Inspection Plan. However, Paragraphs IWB-1220 and IWC-1220 of ASME Section XI exempt certain components from examinations, where specific conditions are met. These exemptions have been applied to the components listed on Class 1, Class 2 and Class 3 Tables with the result that only those non-exempt components are listed herein.

APPENDIX "A"

- RELIEF REQUEST BASIS -

RELIEF REQUEST NO. 1

Examination Requirements:

(1) Class 1, Table IWB-2600, Examination Category Table IWB-2500

(a) B-G-1 Pressure-retaining bolting, 2-inches and larger in diameter, when removed. Volumetric examination is required on RPV closure studs and nuts.

(b) B-G-2 Pressure-retaining bolting, smaller than 2-inches in diameter. Visual examination is required on bolting.

(2) Class 2, Table IWC-2600, Examination Category Table IWC-2520.

(a) C-D Pressure-retaining bolting exceeding 1-inch in diameter. Visual and either surface or volumetric examinations are required on bolting.

Relief Requested: Examination Category definitions B-G-1, B-G-2 and C-D as provided in the later editions and addenda of Section XI. In later editions of the Code, Class 1 bolting exactly 2-inches in diameter is shifted from Category B-G-1 to B-G-2 by revision of the Category definition. Similarly, Class 2 bolting between 1 and 2-inch diameter is eliminated from Category C-D of the later editions of the Code.

Basis for Relief:

(1) These portions of the later Code are adopted pursuant to paragraph (g) of 10CFR50.55a as revised in the proposed rule published in the Federal Register, Volume 44-No. 13 on January 18, 1979. This rule change approves for use later Edition and Addenda of the Code. Paragraph g(4) (iv) of the rule change allows the adoption of portions of later approved editions and addenda to the Code provided that all related requirements of the respective editions and addenda are met. It is felt that the above stated adoptions are in compliance with the proposed change in the regulations.

Alternate Examinations: No alternate or augmented examinations are necessary in this case.

RELIEF REQUEST NO. 2

Examination Requirement: Class 1, Table IWB-2600, Examination Category Table IWB-2500.

B-1-1 Interior Clad Surfaces of Reactor Vessels.

B-1-2 Interior Clad Surfaces of Vessels other than Reactor Vessels.

Relief Requested: From visual examination requirements of interior clad surface area (patches) of pressure vessels.

Basis for Relief: Analysis has shown that flaws which may initiate in the reactor vessel cladding, at locations other than nozzles, are not likely to propagate through the clad-base metal interface. Because of this data, the need to confirm the initiation of clad fissures is not considered relevant. Detection of flaws in the nozzle area is covered by the requirement to volumetrically examine the nozzle to vessel welds and nozzle inside radiused section. This exam will detect the presence of flaws which may have propagated through the cladding into the base material. Accordingly, the ASME has completely eliminated the B-I-1 and B-I-2 examination Categories from later editions of Section XI.

Performing these cladding examinations constitutes needless radiation exposure to personnel with no compensatory increase in safety. Florida Power & Light, therefore, will not perform the above mentioned examinations in the remaining inspection period. The examinations will not be required for subsequent intervals since the requirements have been deleted from the Code.

Alternate Examinations: No alternate or augmented examinations are considered necessary in this case.

RELIEF REQUEST NO. 3

Examination Requirement: Class 1, Table IWB-2600, Examination Category Table IWB-2500.

B-O Pressure-retaining welds in Control Rod Drive Housings. Perform volumetric examination to include 100% of the welds in 10% of the peripheral housings during each Inspection Interval.

Relief Requested: Perform surface examination of the pressure-retaining welds in the Control Rod Drive Housings, as provided for in the later Edition and Addenda of Section XI.

Basis for Relief:

(1) These portions of the later Code are adopted pursuant to paragraph (g) of 10CFR50.55a as revised in the proposed rule published in the Federal Register, Volume 44-No. 13 on January18, 1979. This rule change approves later Edition and Addenda of the Code. Paragraph g(4) (iv) of the rule change allows the adoption of portions of later approved editions and addenda to the Code provided that all related requirements of the respective editions and addenda are met. It is felt that the above stated adoptions are in compliance with the proposed change in the regulations.

(2) Volumetric examinations of these welds are impractical due to design configuration, accessibility and materials of construction.

(a) Ultrasonic examination will not provide meaningful results due to the geometric configuration of the joint, the internal configuration (thermal sleeve pressed in the CRD tube) and material properties (inconel-to-stainless steel welds).

(b) Radiographic examination cannot be performed without removing the control rod from the housing. The radiographic examination results will not be conclusive due to the interference of the thermal sleeve.

(3) Florida Power & Light believes that the later Edition and Addenda of Section XI provides more assurance to the overall structural integrity of the components.

Alternate Examinations: No alternate or augmented examinations are necessary in this case.

RELIEF REQUEST NO. 4

Examination Requirement: Class 1, Table IWB-2600, Examination Category Table IWB-2500.

B-H Integrally-welded vessel supports. Perform volumetric examination on 10% of the weld circumference of support skirts, and 100% of the weld lug attachment to the vessel during each Inspection Interval.

Relief Requested: Perform surface examination of the integrally-welded vessel supports, as provided in the later Edition and Addenda of Section XI.

Basis for Relief:

(1) These portions of the later Code are adopted pursuant to paragraph (g) of 10CFR50.55a as revised in the proposed rule published in the Federal Register, Volume 44-No. 13 on January 18, 1979. This rule change approves later Edition and Addenda of the Code. Paragraph g(4) (iv) of the rule change allows the adoption of portions of later approved editions and addenda to the Code provided that all related requirements of the respective editions and addenda are met. It is felt that the above stated adoptions are in compliance with the proposed change in the regulations.

(2) Volumetric examinations on numerous integrally-welded supports are found to be impractical. Because of their design and configuration, these welds are not generally conducive to meaningful nor conclusive ultrasonic or radiographic examinations.

(3) Performing examinations to these items which are not conducive to volumetric examinations, under adverse conditions of dose rates as high as 15 R/hr, provides no additional information to the component's structural integrity.

(4) Florida Power & Light believes that the later Edition and Addenda of Section XI provide more assurance to the overall stuctural integrity of the components.

Alternate Examinations: No alternate or augmented examinations are necessary this case.

RELIEF REQUEST NO. 5

Examination Requirements: Class 1, IWB-2600, Examination Category Table IWB-2500.

B-K-1 Support Members for Piping, Valves and Pumps. 25% of the integrally welded external supports are required to be volumetrically examined during the Inspection Interval.

Relief Requested: Perform surface examination of 100% of the integrally welded external supports whose support base material design thickness is 5/8 in. and greater, as provided in the later edition of Section XI.

Basis for Relief:

(1) These portions of the later Code are adopted pursuant to paragraph (g) of 10CFR50.55a as revised in the proposed rule published in the Federal Register, Volume 44 - No. 13 on January 18, 1979. This rule change approves later edition and addenda of the Code. Paragraph g(4) (iv) of the rule change allows the adoption of portions of later approved editions and addenda to the Code provided that all related requirements of the respective editions and addenda are met. It is felt that the above stated adoptions are in compliance with the proposed change in the regulations.

(2) Volumetric examinations on numerous integrally welded supports are found to be impractical. Because of the design and configuration, these welds are not generally conducive to meaningful nor conclusive ultrasonic or radiographic examinations.

(3) Florida Power & Light believes that the later edition and addendas of Section XI provides more assurance to the overall structural integrity of the components.

Alternate Examinations: No alternative or augmented examinations are necessary in this case.

RELIEF REQUEST NO. 6

Examination Requirement: Class 1, Table IWB-2600, Examination Category Table IWB-2500.

B-L-2 Pump Casings. Perform a visual examination of the internal pressure boundary surfaces on one pump in each of the group of pumps performing similar functions in the system during each Inspection Interval.

Relief Requested: Perform a visual examination of the required pump(s) internal surfaces only if disassembled for maintenance, not at a specified time during the Inspection Interval.

Basis for Relief:

(1) To perform the visual examination requires the pump to be disassembled resulting in large expenditures of manhours and man-rem with essentially no compensating increase in plant safety. Based on actual data compiled from the disassembly of a reactor coolant pump, it is expected that approximately 1000 man-hours and 50 man-rem will be expended in the disassembly, inspection and reassembly of one pump. performing this visual examination under such adverse conditions as high dose rates (30-40 R/hr) and as-cast surface conditions, provides little additional information as to the pump's casing integrity.

(2) The structural integrity afforded by the existing pump casing material will not significantly degrade over its lifetime. The reactor coolant pump casing material, cast stainless steel (ASTM A351-CF8), is widely used in the nuclear industry and has performed extremely well. The presence of some delta ferrite (typically 5% or more) imparts substantially increases resistance to interganular stress corrosion cracking. The delta ferrite also results in improved resistance to pitting corrosion in chloride containing enviroments.

(3) Florida Power & Light feels that adequate safety margins are inherent to the basic pump design that the health and safety of the public will not be adversely affected by deferring the visual examination of the pump internal pressure boundary surfaces only when the pumps are required to be disassembled for maintenance.

Alternate Examinations: No alternate or augmented examinations are considered necessary in this case.

RELIEF REQUEST NO. 7

Examination Requirement: Class 1, Table IWB-2600, Examination Category Table IWB-2500.

B-L-1 Pressure retaining welds in pump casings. Perform a volumetric examination, to include 100% of the pressure-retaining welds, on one pump in each group of pumps performing similar function in the system during each Inspection Interval.

Relief Requested: Perform volumetric examination of the required pump(s) weld surfaces only if disassembled for maintenance, not at a specified time during the Inspection Interval.

Basis for Relief:

(1) Ultrasonic techniques have not been developed to meet the Code requirements.

(2) Radiographic examination is not possible without the complete disassembly of the pump. To perform this examination, large expenditures of manhours and man-rem are required with essentially no compensating increase in plant safety. Based on actual data compiled from the disassembly of a reactor coolant pump, it is expected that approximately 1000 man-hours and 50 man-rem exposure will be expended in the disassembly, inspection and reassembly of one pump. Performing this examination under such adverse conditions as high dose rates (30-40 R/hr) provides little additional information as to the pump's casing integrity.

(3) Florida Power & Light feels that adequate safety margins are inherent in the basic pump design and that the health and safety of the public will not be adversely affected by deferring the volumetric examination of the pump casing pressure boundary weld surfaces only when the pumps are required to be disassembled for maintenance.

(4) In the event that an ultrasonic examination technique is developed that meets the Code requirements, the intent of the Code will be followed.

Alternate Examinations: No alternate or augmented examinations are considered necessary in this case.

RELIEF REQUEST NO. 8

Examination Requirement: Class 1, Table IWB-2600, Examination Category Table IWB-2500.

B-M-2 Valve Bodies. Perform a visual examination of the internal pressure boundary surfaces of one valve in each group of valves of the same constructional design, manufacturing method and manufacturer that perform similar functions in the system during each inspection interval.

Relief Requested: Perform a visual examination of the required valve(s) internal surfaces only if disassemled for maintenance, not at a specified time during the inspection interval.

Basis for Relief:

(1) The requirement to disassemble primary system valves for the sole purpose of performing a visual examination of the internal pressure boundary surfaces has only a very small potential of increasing plant safety margins and a very disproportionate impact on expenditures of plant manpower and radiation exposure.

(2) Performing these visual examinations under such adverse conditions of dose rates as high as 10 R/hr and as-cast surface conditions, provides little additional information as to the valve's internal surface integrity.

(3) The performance of both carbon and stainless cast valve bodies has been excellent in all PWR applications. Based on this experience and both industry and regulatory acceptance of these alloys, continued excellent service performance is anticipated.

(4) Florida Power & Light believes a more practical approach would be to examine the internal pressure boundary of only those valves that require disassembly for maintenance purposes. This would essentially provide an equivalent sampling of primary system valves, reduce radiation exposure to plant personnel and give adequate assurance that the integrity of these components is being maintained.

Alternate Examinations: An examination of the internal pressure boundary surfaces will be performed, to the extent practical, each time a valve is disassembled for maintenance purposes.

TURKEY POINT PLANT UNIT 3
FIRST 10-YEAR INSERVICE EXAMINATION PLAN
CLASS 1

ASME SECT. XI ITEM NO.	ASME SECT. XI CATEGORY	EXAMINATION AREA IDENTIFICATION	EXAMINATION METHOD	REMARKS
		REACTOR VESSEL		
B1.1	B-A	Longitudinal and circumferential shell welds in core region	Volumetric	
B1.2	B-B	Longitudinal and circumferential welds in shell (other than those of Category B-A and B-C) and meridional and circumferential seam welds in bottom head and closure head (other than those of Category B-C)	Volumetric	
B1.3	B-C	Vessel-to-flange and head-to-flange circumferential welds	Volumetric	
B1.4	B-D	Primary nozzle-to-vessel welds and nozzle inside radiused section	Volumetric	
B1.5	B-E	Vessel penetrations , including control rod drive and instrumentation penetrations	Visual	Per IWA-5000
B1.6	B-F	Nozzle-to-safe end welds	See Remarks	See Item No. B4.1.
B1.7	B-G-1	Closure studs , in place	See Remarks	Not applicable.
B1.8	B-G-1	Closure studs and nuts , when removed	Volumetric and Surface	See Relief Request #1.
B1.9	B-G-1	Ligaments between threaded stud holes	Volumetric	See Relief Request #1.
B1.10	B-G-1	Closure washers	Visual	See Relief Request #1.
B1.11	B-G-2	Pressure-retaining bolting	See Remarks	Not applicable
B1.12	B-H	Integrally-welded vessel supports	See Remarks	Integral support pads on nozzles. Excluded by Code.
B1.13	B-I-1	Closure Head Cladding	See Remarks	See Relief Request #2.
B1.14	B-I-1	Vessel Cladding	See Remarks	See Relief Request #2.
B1.15	B-N-1	Vessel Interior	Visual	
B1.16	B-N-2	Interior attachments and core support structures	See Remarks	Not applicable to PWRs.
B1.17	B-N-3	Core-support structures	Visual	
B1.18	B-O	Control rod drive housings	Surface	See Relief Request #3.
B1.19	B-P	Exempted components	Visual	Per IWA-5000.
		PRESSURIZER		
B2.1	B-B	Longitudinal and circumferential welds	Volumetric	
B2.2	B-D	Nozzle-to-vessel welds and nozzle-to-vessel radiused section	Volumetric	Nozzle-to-vessel welds are not applicable.
B2.3	B-E	Heater penetrations	Visual	Per IWA-5000.
B2.4	B-F	Nozzle-to-safe end welds	See Remarks	See Item No. B4.1.
B2.5	B-G-1	Pressure-retaining bolts and studs , in place	See Remarks	Not applicable.
B2.6	B-G-1	Pressure-retaining bolts and studs , when removed	See Remarks	Not applicable.
B2.7	B-G-1	Pressure-retaining bolting	See Remarks	Not applicable.
B2.8	B-H	Integrally-welded vessel supports	Volumetric	
B2.9	B-I-2	Vessel cladding	See Remarks	See Relief Request #2.
B2.10	B-P	Exempted components	Visual	Per IWA-5000.
B2.11	B-G-2	Pressure-retaining bolting	Visual	

TURKEY POINT PLANT UNIT 3
FIRST 10-YEAR INSERVICE EXAMINATION PLAN
CLASS 1

ASME SECT. XI ITEM NO.	ASME SECT. XI CATEGORY	EXAMINATION AREA IDENTIFICATION	EXAMINATION METHOD	REMARKS
		HEAT EXCHANGERS AND STEAM GENERATORS		
B3.1	B-B	Longitudinal and circumferential welds , including tube sheet-to-head or shell welds on the primary side	Volumetric	
B3.2	B-D	Nozzle-to-head welds and nozzle inside radiused section on the primary side	Volumetric	Nozzle-to-head welds are not applicable for the Steam Generators , and nozzle inside radiused section is not applicable for the Heat Exchangers.
B3.3	B-F	Nozzle-to-safe end welds	See Remarks	See Item No. B4.1.
B3.4	B-G-1	Pressure-retaining bolts and studs , in place	See Remarks	Not applicable.
B3.5	B-G-1	Pressure-retaining bolts and studs , when removed	See Remarks	Not applicable.
B3.6	B-G-1	Pressure-retaining bolting	See Remarks	Not applicable.
B3.7	B-H	Integrally-welded vessel supports	Surface	See Relief Request #4. Not applicable for the Steam Generators.
B3.8	B-I-2	Vessel Cladding	See Remarks	See Relief Request #2. Not applicable for the Heat Exchangers.
B3.9	B-P	Exempted components	See Remarks	Not applicable.
B3.10	B-G-2	Pressure-retaining bolting	Visual	Not applicable for the Heat Exchangers.
		PIPING PRESSURE BOUNDARY		
B4.1	B-F	Safe-end to piping welds and safe-end in branch piping welds	Volumetric and Surface	
B4.2	B-G-1	Pressure-retaining bolts and studs , in place	See Remarks	Not applicable.
B4.3	B-G-1	Pressure-retaining bolts and studs , when removed	See Remarks	Not applicable.
B4.4	B-G-1	Pressure-retaining bolting	See Remarks	Not applicable.
B4.5	B-J	Circumferential and longitudinal pipe welds	Volumetric	
B4.6	B-J	Branch pipe connection welds exceeding six in. diameter	Volumetric	
B4.7	B-J	Branch pipe connection welds six in. diameter and smaller	Surface	
B4.8	B-J	Socket welds	Surface	
B4.9	B-K-1	Integrally welded supports	Volumetic or Surface	See Relief Request #5.
B4.10	B-K-2	Support components	Visual	
B4.11	B-P	Exempted components	Visual	Per IWA-5000.
B4.12	B-G-2	Pressure-retaining bolting	Visual	

TURKEY POINT PLANT UNIT 3
FIRST 10-YEAR INSERVICE EXAMINATION PLAN
CLASS 1

ASME SECT. XI ITEM NO.	ASME SECT. XI CATEGORY	EXAMINATION AREA IDENTIFICATION	EXAMINATION METHOD	REMARKS
		PUMP PRESSURE BOUNDARY		
B5.1	B-G-1	Pressure-retaining bolts and studs , in place	Volumetric	See Relief Request #1.
B5.2	B-G-1	Pressure-retaining bolts and studs , when removed	Volumetric and Surface	See Relief Request #1.
B5.3	B-G-1	Pressure-retaining bolting	Visual	See Relief Request #1.
B5.4	B-K-1	Integrally-welded supports	Volumetric or Surface	See Relief Request #5.
B5.5	B-K-2	Support components	Visual	
B5.6	B-L-1	Pump casing welds	Volumetric	See Relief Request #7.
B5.7	B-L-2	Pump casings	Visual	See Relief Request #6.
B5.8	B-P	Exempted components	See Remarks	Not applicable.
B5.9	B-G-2	Pressure-retaining bolting	Visual	
		VALVE PRESSURE BOUNDARY		
B6.1	B-G-1	Pressure-retaining bolts and studs , in place	See Remarks	Not applicable.
B6.2	B-G-1	Pressure-retaining bolts and studs , when removed	See Remarks	Not applicable.
B6.3	B-G-1	Pressure-retaining bolting	See Remarks	Not applicable.
B6.4	B-K-1	Integrally welded supports	See Remarks	Not applicable.
B6.5	B-K-2	Support components	See Remarks	Not applicable.
B6.6	B-M-1	Valve-body welds	See Remarks	Not applicable.
B6.7	B-M-2	Valve bodies	Visual	See Relief Request #8.
B6.8	B-P	Exempted components	Visual	Per IWA-5000.
B6.9	B-G-2	Pressure-retaining bolting	Visual	

TURKEY POINT PLANT UNIT 3
FIRST 10-YEAR INSERVICE EXAMINATION PLAN
CLASS 2

ASME SECT. XI ITEM NO.	ASME SECT. XI CATEGORY	EXAMINATION AREA IDENTIFICATION	EXAMINATION METHOD	REMARKS
		PRESSURE VESSELS		
C1.1	C-A	Circumferential butt welds	Volumetric	
C1.2	C-B	Nozzle-to-vessel welds	Volumetric	
C1.3	C-C	Integrally-welded supports	Surface	
C1.4	C-D	Pressure-retaining bolting	Visual and either surface or volumetric	See Relief Request #1.
		PIPING		
C2.1	C-F , C-G	Circumferential butt welds	Volumetric	
C2.2	C-F , C-G	Longitudinal weld joints in fittings	Volumetric	
C2.3	C-F , C-G	Branch pipe-to-pipe weld joints	Volumetric	
C2.4	C-D	Pressure-retaining bolting	Visual and either surface or volumetric	See Relief Request #1.
C2.5	C-E-1	Integrally-welded supports	Surface	
C2.6	C-E-2	Support components	Visual	
		PUMPS		
C3.1	C-F , C-G	Pump casing welds	See Remarks	Not applicable.
C3.2	C-D	Pressure-retaining bolting	Visual and either surface or volumetric	See Relief Request #1.
C3.3	C-E-1	Integrally-welded supports	See Remarks	Not applicable.
C3.4	C-E-2	Support components	Visual	
		VALVES		
C4.1	C-F , C-G	Valve body welds	See Remarks	Not applicable.
C4.2	C-D	Pressure-retaining bolting	Visual and either surface or volumetric	See Relief Request #1.
C4.3	C-E-1	Integrally-welded supports	See Remarks	Not applicable.
C4.4	C-E-2	Support components	See Remarks	Not applicable.

TURKEY POINT PLANT UNIT 3
FIRST 10-YEAR INSERVICE EXAMINATION PLAN
CLASS 3

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100% of the components and systems shall be examined and tested in accordance with IWA-5000 ; IWD-5000 ; and IWD-2600 by the expiration of the inspection interval.

100% of the components and systems (and their supports) shall be examined in accordance with IWA-5240 and IWD-2600 while in operation or during system inservice testing , by the expiration of each inspection period of the inspection interval.