UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
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July 23, 2001

Mr. Robert Hovey, Vice President
Turkey Point Nuclear Plant
Florida Power and Light Company
9760 SW 34th Street
Florida City, FL 33035

SUBJECT: TURKEY POINT NUCLEAR PLANT - NRC INSPECTION REPORT NOS. 50-250/01-09, 50-251/01-09

Dear Mr. Hovey:

On May 25, 2001, the NRC completed an inspection at your Turkey Point facility regarding your application for license renewal for the Turkey Point, Units 3 and 4 reactor facilities. The enclosed inspection report presents the results of that inspection. The results of this inspection were discussed on June 8, 2001, with members of your staff in an exit meeting open for public observation at the Turkey Point site.

The purpose of this inspection was an examination of activities that support your application for a renewed license for the Turkey Point facilities. The inspection consisted of a selected examination of procedures and representative records, and interviews with personnel regarding the process of scoping and screening plant equipment to select equipment subject to an aging management review. For a sample of plant systems, inspectors performed visual examination of accessible portions of the systems to observe any effects of equipment aging.

The inspection concluded that the scoping and screening portion of your license renewal activities were conducted as described in your License Renewal Application and that documentation supporting your application is in an auditable and retrievable form. With the exception of the items identified in this report, your scoping and screening process was successful in identifying those systems, structures, and commodity groups required to be considered for aging management.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document

Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Should you have any questions concerning this letter, please contact us.

Sincerely,

\RA

Harold O. Christensen
Deputy Director
Division of Reactor Safety

Docket Nos. 50-250, 50-251
License Nos. DPR-31, DPR-41

cc: See next page

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos:	50-250, 50-251
License Nos:	DPR-31, DPR-41
Report No:	50-250/01-09, 50-251/01-09
Licensee:	Florida Power and Light Company (FPL)
Facility:	Turkey Point Nuclear Plant, Units 3 & 4
Location:	9760 SW 34th Street Florida City, FL 33035
Dates:	May 21 - 25, 2001
Inspectors:	B. Crowley, Reactor Inspector R. Moore, Reactor Inspector K. Van Doorn, Reactor Inspector H. Wang, Operations Engineer, NRR
Approved by:	Caudle Julian Team Leader Division of Reactor Safety

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SUMMARY OF FINDINGS

IR 05000250-01-09, IR 05000251-01-09; 05/21-25 /2001; Florida Power and Light Company, Turkey Point Nuclear Plant, Units 3 & 4. License Renewal Inspection Program, Scoping and Screening.

This inspection of License Renewal activities was performed by four regional office engineering inspectors, and one staff member from the office of Nuclear Reactor Regulation. The inspection program followed was NRC Manual Chapter 2516 and NRC Inspection Procedure 71002. This inspection did not identify any "findings" as defined in NRC Manual Chapter 0610. However, the following issues were identified.

> NRC inspectors examined a substantial portion of plant safety related equipment. The NRC's overall conclusion was the material condition of the plant looked good. The only exception was the Stationary screen over the intake cooling water bays which were in very rusty condition (see section II.C.2). But it was noted that Florida Power & Light (FPL) had previously recognized this and written a Condition Report (CR) on the problem and plans to take corrective action.
>
> FPL concluded that the stationary screen is not in scope for license renewal but the traveling screens behind the fixed grate are in scope. The traveling screen would function to protect the safety related intake cooling water pumps in the event of a failure of the fixed grating. NRC agrees with that conclusion.
>
> The inspectors questioned why the Cathodic Protection system used to prevent corrosion to the steel components of the containment and intake structure were not in scope for license renewal. The applicant's position was that no credit is taken for the system to prevent corrosion, and there are other means to protect the steel component from corrosion. The inspectors expressed the view that the Cathodic Protection system should be considered as an aging management program. This issue will be further addressed during the aging management program inspection.
>
> Documentation from the Scoping and Screening process was of good quality, detailed, thorough, and understandable. Minor exceptions were the electrical screening and the fire protection screening documents. The electrical screening document contained errors in references, typos, and confusing language (see section II.B). The fire protection screening document contained errors which originated in the Total Equipment Data Base (TEDB) where some entries for components were duplicated (see section II.D). FPL has written a CR to get these errors corrected.

In reviewing the boundary drawings NRC found four examples where equipment that was in scope was not highlighted. However the equipment was within the license renewal boundary flags, so no drawing correction was needed. The NRC observed that FPL has placed the license renewal boundary flags on the current plant drawings, and believes that is a virtue practice. (See sections II.A.2,5,17,and II.D)

NRC found one boundary drawing of auxiliary building ventilation ducting showing three ducting branches leading into the Chemical and Volume Control System (CVCS) holdup tank rooms

where the ducting is not actually installed in the plant. This drawing error was of negligible safety significance and FPL initiated a CR to correct the drawing. (See section II.A.1)

A list of acronyms used in this report is provided in Attachment 3.

Report Details

I. Inspection Scope

This inspection was conducted by NRC Region II inspectors and members of the NRR staff to interview applicant personnel and to examine a sample of documentation which supports the license renewal application (LRA). This inspection reviewed the results of the applicant's scoping of plant systems and screening of components within those systems to identify the list of components that need evaluation for aging management. The team selected a sample of systems, structures, and commodity groups (SSC) from the LRA scoping results to verify the adequacy of the applicant's scoping and screening documentation and implementation activities. For the selected in-scope systems/structures, the associated boundary drawings, and the active/passive and short/long lived determinations of the selected SSCs were reviewed to confirm the accuracy of the applicant's results. In addition to the in-scope systems and structures, some systems that the applicant had determined not to be in scope for license renewal were selected for inspection. The team reviewed supporting documentation and interviewed applicant personnel to confirm the accuracy of the LRA conclusions. The SSCs selected for review during this inspection are listed in Attachment 2 to this report. For a sample of plant systems, inspectors performed visual examination of accessible portions of the systems to observe any effects of equipment aging.

II. Findings

A. Evaluation of Scoping and Screening of Mechanical Systems

The inspectors evaluated the applicant's scoping and screening process for mechanical components by reviewing a number of plant systems that the applicant determined to be within the scope of license renewal. The applicant performed scoping and screening in two phases. The first phase (plant level scoping) was performed by listing all plant systems and structures and identifying those that met one or more of the criteria of 10 CFR 54.4 for being in the scope of license renewal (LR). The second phase (screening), to determine which components required aging management, consisted of: (1) for systems considered in-scope, identifying intended functions of the system required to meet a criteria of 10CFR 54.4, (2) developing boundary drawings for each in-scope system identifying the portions of the system and the passive components required to perform the intended functions, and (3) identifying which of the required components were long-lived. Scoping and screening results were documented in applicant's License Renewal System/Structure Scoping Report PTN-ENG-LRSP-99-0063, "License Renewal System/Structure Scoping Report," Revision 4, May 10, 2001, and License Renewal Screening Results Summary Reports for each system. The following systems/structures were reviewed:

1. Auxiliary Building Ventilation System (ABVS)

The ABVS provides clean air to the operating areas of the auxiliary building and exhausts air from equipment rooms and open areas through a closed system. The system ensures adequate heat removal and controls the flow of potential airborne radioactivity from low activity areas through higher activity areas to a common ventilation exhaust and to the plant vent stack.

The ABVS consists of supply and exhaust fans, exhaust filters, dampers and associated ducts and controls. The inspectors reviewed the UFSAR, LR boundary drawings, and scoping and screening documents for the system. The applicant considered the majority of the ABVS in LR scope. During the review, the inspectors noted that Boundary Drawing 0-ABVAC-01 showed air supply ducting and dampers into the three CVCS holdup tank rooms. This equipment was not identified as being in LR scope. When questioned about the purpose of these air supplies, the licensee determined that, although shown on the drawing, the ducting and dampers did not exist and were not required. Condition Report (CR) 01-1105 was issued to document this condition and develop corrective action. The inspectors found that the applicant had performed scoping and screening for this system in accordance with the methodology described in the Turkey Point LRA and the rule.

2. Component Cooling Water (CCW) System

The CCW system is a closed loop cooling water system that provides a heat sink for safety-related and non-safety-related components during normal and emergency operation. Some of the more important cooling loads are: the RHR heat exchangers and pump seal coolers; the safety injection pump oil coolers and seal water coolers; the spent fuel pit heat exchanger; the CVC system; the containment spray pump seal coolers; the emergency containment coolers; and various RC system components (pump thermal barrier cooling coils and upper and lower oil coolers). Heat from these systems and components is transferred to the intake cooling water system by the CCW heat exchangers. The major components included are three CCW pumps, three CCW heat exchangers, a CCW head tank, a CCW surge tank, a CCW chemical addition tank, two redundant coolant loops, and associated piping, valves and instrumentation. The inspectors reviewed the UFSAR, DBD 5610-030-DB-001, LR boundary drawings, and scoping and screening documents for the system. The applicant considered all of the CCW system in LR scope. During review of Boundary Drawing 3-CCW-04, the inspectors noted that a segment of pipe containing normally closed valve 3-10-651 was not high-lighted as being in LR scope. Since the piping on both sides of the pipe segment in question was in scope, it appeared that the piping in question should be in scope. Based on discussions with the applicant, this was an inadvertent omission. However, since the high-lighting was only a convenience to aid in NRC review and the official boundaries were marked by flags, the omission of high-lighting was not considered to be significant. The piping segment was within license renewal boundary flags on the drawing. The inspectors found that the applicant had performed scoping and screening for this system in accordance with the methodology described in the Turkey Point LRA and the rule. An inspector performed a field walkdown of accessible portions of the system and found it to be in good condition.

3. Control Building Ventilation System (CBVS)

The CBVS consists of three separate systems, the control room ventilation system (CRVS), the computer/cable spreading room ventilation system (CSRVS) and the DC equipment/inverter room ventilation system (DCVS). The CRVS provides filtered and conditioned ventilation to the control room and consists of two emergency supply fans, charcoal and HEPA filters, three air-conditioning units, two exhaust fans, dampers, a radiation monitor and other process instrumentation, and supply and return ducts. The CSRVS maintains the temperature and humidity requirements of the vital electrical equipment in the cable spreading room and computer room and consists of two independent 100% capacity chilled water trains. Each chiller package consists of an air cooled condenser, a water chiller, a water pump, an air

separator and a surge tank. Each train is connected to three air handling units. The DCVS provides cooling to the DC equipment and inverter rooms and consists of one non-safety related split-system air conditioning unit and two non-safety related self-contained air conditioning units.

The inspectors reviewed the UFSAR, LR boundary drawings, and scoping and screening documents for the system. The applicant considered all of the three CBVS systems to be in LR scope, except the DCVS vent ducts and exhaust fans in the four battery rooms. Discussion with applicant personnel and review of the license renewal summary report determined that the exhaust vents and fans improve the ambient conditions in the battery rooms, but are not required to maintain low hydrogen concentrations. Therefore, the exhaust vents and fans were not required to be included in LR scope. The inspectors found that the applicant had performed scoping and screening for this system in accordance with the methodology described in the Turkey Point LRA and the rule.

4. Chemical Volume Control System (CVCS)

The CVCS consists of components and systems required to: maintain proper water inventory in the RCS, including makeup for leakage: transfer, add, and adjust concentration of boron for reactivity control; provide seal water for RC pump shaft seals; chemistry control of reactor coolant; and process reactor coolant letdown. The system contains piping and valves and the following major components: boric acid storage tanks, demineralizers, a boric acid batching tank, a volume control tank, holdup tanks, boric acid transfer pumps, charging pumps, and a non-regenerative heat exchanger. The inspectors reviewed the UFSAR, LR boundary drawings, and scoping and screening documents for the system. The applicant considered all of the major components and essentially all of the associated piping, including instrumentation piping, in scope for license renewal. The inspectors found that the applicant had performed scoping and screening for this system in accordance with the methodology described in the Turkey Point LRA and the rule. An inspector performed a field walkdown of accessible portions of the system and found it to be in good condition.

5. Feedwater (FW) and Blowdown System

The FW and blowdown system consists of piping and components required to provide water to the steam generators to maintain an adequate heat sink for the RCS, provide for isolation of FW and blowdown following a loss-of-coolant accident or steam line break, and assist in maintaining steam generator water chemistry. The system consists of three subsystems: main feedwater, steam generator blowdown, and standby steam generator feedwater. In addition to piping and valves, the system consists of the following major components: main feedwater pumps, standby steam generator feedwater pumps, demineralized water storage tank, and high pressure feedwater heaters. The inspectors reviewed the UFSAR, LR boundary drawings, and scoping and screening documents for the system. The applicant considered all of the standby steam generator feedwater system in scope. For the main feedwater system, the major components and essentially all of the piping and valves downstream of the main feedwater heaters to the steam generators were in scope. In addition, the blowdown system piping and valves from the steam generators to the flow control valves were in scope. The inspectors found that the applicant had performed scoping and screening for this system in accordance with the methodology described in the Turkey Point LRA and the rule. However, the following discrepancies were identified.

The inspectors noted that Boundary Drawing 0-FW-01 did not high-light the standby steam generator feedwater pump diesel engine and its fuel tank as being in LR scope. Based on discussions with the applicant, the high-lighting of in-scope piping and components on the boundary drawings was only for ease of NRC review. The official in-scope boundaries were marked with flags. Although the diesel engine and its fuel tank were not high-lighted, they were within the flagged boundaries. After further review, the applicant found that the diesel engine, its fuel tank and related valves were not listed as being in scope in License Renewal Screening Summary Report PTN-ENG-LRSC-99-0085 and consequently were not screened for aging management. During the inspection, the applicant issued revision 2 to License Renewal Screening Summary Report PTN-ENG-LRSC-99-0085 to include the diesel and its accessories. However, upon screening, the applicant concluded that since the engine, fuel tank and associated accessories are all mounted on a single skid, the entire assembly is considered to be an active component, and aging management is not required.

During review of Boundary Drawings 3-FW-04 and 4-FW-04, the inspectors noted that Steam Generator Blowdown Control Valves CV-3-6275A (Unit 3) and CV-4-6275A (Unit 4) were in LR scope but the instrument air (IA) supply to operate the valves was not in scope. The drawings indicated that these normally open valves failed in the “as is” position. Since the valves are required to close on a Phase A isolation signal and were in LR scope for containment integrity and to maintain steam generator inventory (for design bases events, SBO, ATWS, and fire protection), the inspectors questioned why the IA for the valves was not in LR scope. After further review, the applicant determined that upon loss of power or a Phase A signal the valves would fail closed. Therefore, IA is not needed for the valves to operate to the safe position. Therefore, the IA supply to the valves does not need to be in LR scope. However, since the design documentation (UFSAR , DBDs, and P&IDs) is not clear, the applicant decided to prepare UFSAR/DBD comment user forms and a drawing change package to provide a clarification of the failure mode for these valves. An inspector performed a field walkdown of accessible portions of the system and found it to be in good condition.

6. Feedwater Heaters, Drains, and Vents

The feedwater heaters, drains, and vents system provides for: (1) increased thermal efficiency via the regenerative heating principle, (2) a continuous flow path for extraction steam condensate to return to the feedwater system, and (3) air removal and over-pressure protection for each feedwater heater component. The high pressure heaters are downstream of the feedwater pumps and are considered part of the feedwater system. The low pressure heaters receive water from the condensate pumps. The feedwater heaters, drains and vents system consists of two trains with five low pressure heaters each. The major components are heaters, heater drain pumps and tanks, reheater drain tanks, and moisture separator reheaters. The system does not perform a safety-related function. The inspector reviewed the applicable sections of the UFSAR and the applicant’s documentation of the decision basis for scoping and screening. The applicant determined that the feedwater heaters, drains, and vents system was not in scope. The inspectors found this conclusion acceptable and determined that the applicant had performed scoping and screening for this system in accordance with the methodology described in the Turkey Point LRA and the rule.

7. Reactor Coolant System (RCS)

The RCS consist of systems and components designed to contain and support the nuclear fuel, contain the reactor coolant, and transfer the heat form the reactor to the steam and power conversion system. For each unit, the system consists of three heat transfer loops connected in parallel to the reactor vessel (RV). Each loop contains a steam generator, a pump, loop piping, and instrumentation. The pressurizer surge line is connected to one of the loops. Piping connections are provided in the RC piping for auxiliary systems, such as safety injection (SI) and residual heat removal (RHR). For licensee renewal, the applicant included the following components in the LRA under the RCS: reactor coolant piping, regenerative and excess letdown heat exchangers, presssurizer, RV, RV internals, reactor coolant pumps, and steam generators. The inspectors reviewed the UFSAR, LR boundary drawings, and scoping and screening documents for the system. All of the major components and associated piping, including instrumentation piping and the Reactor Coolant pump oil collection system, were considered in scope by the applicant. The inspectors found that the applicant had performed scoping and screening for this system in accordance with the methodology described in the Turkey Point LRA and the rule.

8. Sample System - NSSS and Secondary

The NSSS sampling system provides for remote sampling and laboratory analysis of reactor coolant and other primary plant systems. The system consists of piping/tubing, valves, three heat exchangers, a delay coil, four sample pressure vessels, and instrumentation. The inspectors reviewed the UFSAR, LR boundary drawings, and scoping and screening documents for the system. The applicant considered the equipment inside the containment, up to the first isolation valve outside the containment, and the CCW side of the heat exchangers to be in LR scope.

The secondary sampling system provides remote sampling and laboratory analysis of secondary plant systems. The system consists of piping/tubing, valves, coolers, and instrumentation. The inspectors reviewed the LR boundary drawings, and scoping and screening documents for the system. The applicant considered, (1) the piping/tubing, valves, and coolers between the first isolation valve on the connection to the MS piping and the first isolation valves downstream of the sample coolers, and (2) the piping/tubing and valves between the second containment isolation valve located outside the containment and the connections to the steam generator blowdown piping inside the containment, to be in LR scope. The inspectors found that the applicant had performed scoping and screening for these systems in accordance with the methodology described in the Turkey Point LRA and the rule.

9. Auxiliary Feedwater (AFW) system & Condensate Storage Tanks (CST)

The AFW system supplies feedwater to the steam generators when normal feedwater sources are not available. The CSTs provide a water source for use by the AFW system to support safe shutdown of the plant. The system consists of three steam driven turbine pumps, storage tanks and the piping and valves to align the water source through the pumps to the steam generators. The inspectors reviewed the system scoping and screening documents, LRA boundary drawings, UFSAR section 9.11 and performed field walkdowns of the accessible portions of the system. The inspectors verified that the system safety functions specified in the UFSAR section 9.11 were incorporated into the applicant's LRA scoping and screening documents. The inspectors concluded that the applicant had appropriately scoped and screened this system and

identified the mechanical components and their functions that were subject to aging management consistent with the LRA and the rule.

10. Containment Isolation

Containment isolation is an engineered safety feature that provides for the closure or integrity of containment penetrations to prevent leakage of material to the environment. Containment isolation is described in UFSAR section 6.6. Evaluation of this isolation function for process systems that have license renewal functions in addition to the containment isolation function is included in that systems screening evaluation. Process systems whose only license renewal function is containment isolation include Breathing Air, Nitrogen and Hydrogen, and Containment Purge. The inspectors reviewed the scoping and screening documents for these systems, the LRA boundary drawings and UFSAR section 6.6. The inspectors concluded that the applicant had appropriately scoped and screened these systems and identified the mechanical components and their functions that were subject to aging management consistent with the LRA and the rule.

11. Containment Post Accident Monitoring and Control

These systems provide for monitoring the condition of the containment post accident environment and include in the mechanical area the functions of hydrogen monitoring and control, air particulate and gas monitoring, sampling, and pressure monitoring. Equipment included in these subsystems are pumps, pressure detectors, air monitors, and tubing, piping, and valves to route the containment atmosphere through the monitors and back to containment. The inspectors reviewed the system scoping and screening documents, LRA boundary drawings, and UFSAR sections 7.5, 9.12, 9.14, and 11.2.3. The inspectors verified that the system safety functions specified in the UFSAR sections 7.5, 9.12, 9.14, and 11.2.3 were incorporated into the applicant's LRA scoping and screening documents. The inspectors concluded that the applicant had appropriately scoped and screened this system and identified the mechanical components and their functions that were subject to aging management consistent with the LRA and the rule.

12. Containment Spray System (CS)

The CS functions in conjunction with the Emergency Containment Cooling system to limit containment post-accident peak pressure and temperature to within design limits. The system is composed of two motor-driven horizontal centrifugal pumps which take suction from the refueling water storage tank or containment sump, associated valves, spray headers, and piping to direct flow from the water sources and into containment through the residual heat removal system heat exchangers. The inspectors reviewed the system scoping and screening documents, LRA boundary drawings, UFSAR section 6.4 and performed field walkdowns of the accessible portions of the system. The system safety functions specified in the UFSAR section 6.4 were incorporated into the applicant's LRA scoping and screening documents. The inspectors concluded that the applicant had appropriately scoped and screened this system and identified the mechanical components and their functions that were subject to aging management consistent with the LRA and the rule.

13. Emergency Containment Cooling (ECC) & Filtration Systems (ECFS)

The Emergency Containment Cooling (ECC) works in conjunction with the Containment Spray System under accident conditions to prevent exceeding containment design pressure and temperature as a result of a design basis accidents (DBA). The Emergency Containment Filtration System (ECFS) is designed to reduce the iodine concentration in the containment atmosphere following a DBA to ensure the off-site radiation dose will not exceed the guidelines of 10 CFR 100 at the site boundary. The ECC consists of three fan cooling units located in containment. The ECFS consists of three filter units located in containment. The inspectors reviewed the systems' scoping and screening documents, LRA boundary drawings, and UFSAR section 6.3. The system safety functions specified in the UFSAR section 6.3 were incorporated into the applicant's LRA scoping and screening documents. The inspectors concluded that the applicant had appropriately scoped and screened this system and identified the mechanical components and their functions that were subject to aging management consistent with the LRA and the rule.

14. Residual Heat Removal System (RHR)

The RHR system delivers borated water to the Reactor Coolant System from the RWST or the containment sump during a DBA. In conjunction with the SI system, the RHR system provides emergency core cooling to prevent damage to the reactor core. The system consists of two independent, redundant trains, each containing a pump, heat exchanger, and interconnecting piping between the RCS loops, containment sumps, SI, CS, and the chemical volume and control system. The inspectors reviewed the system scoping and screening documents, LRA boundary drawings, UFSAR section 6.2 and performed field walkdowns of the accessible portions of the system. The inspectors verified that the system safety functions specified in the UFSAR section 6.2 were incorporated into the applicant's LRA scoping and screening documents. The inspectors concluded that the applicant had appropriately scoped and screened this system and identified the mechanical components and their functions that were subject to aging management consistent with the LRA and the rule.

15. Safety Injection System (SI)

The safety injection system provides emergency core cooling and reactivity control during and following a design basis accidents (DBA). The system includes two motor-driven horizontal centrifugal pumps, water storage tanks, safety injection accumulator tanks, associated valves, piping and supports. The inspectors reviewed the system scoping and screening documents, LRA boundary drawings, UFSAR section 9.1.1 and performed field walkdowns of the accessible portions of the system. The system safety functions specified in the UFSAR section 9.1.1 were incorporated into the applicant's LRA scoping and screening documents. The inspectors concluded that the applicant had appropriately scoped and screened this system and identified the mechanical components and their functions that were subject to aging management consistent with the LRA and the rule.

16. Circulating Water System (CWS) and Condenser

The condenser serves to condense steam from the main turbine and provide the water source for main feedwater. The CWS provides cooling water to the condenser. The system consists of four pumps per unit with associated piping, valves, and instrumentation. The pumps take suction from the cooling canal at the intake structure and discharge at the opposite end of the

cooling canal. The condenser and CWS have no safety-related functions. The inspectors reviewed the UFSAR, Section 10.2 and CWS drawings. The inspectors also conducted a partial walkdown of the CWS. The applicant concluded that the condenser and the CWS were not in scope for License Renewal (LR). The inspectors found that conclusion acceptable.

17. Emergency Diesel Generator (EDG) and Support Systems

The EDGs provide AC power to the onsite electrical distribution system to assure the capability for a safe and orderly shutdown if power is unavailable from another source and are relied upon for postulated fires, anticipated transients without scram, and station blackout events. Four EDGs are provided for two unit operation. Each is provided with support systems to assure proper operation which include Air Intake and Exhaust, Air Start, Fuel Oil, Cooling Water, and Lube Oil. The inspectors reviewed the UFSAR, Sections 8.2 and 9.15; LR boundary drawings; and scoping and screening documents for the EDGs and associated support systems. An inspector also conducted a walkdown of the EDGs and associated support systems. The applicant concluded that the EDGs and associated support systems were in scope for LR.

The inspectors noted that boundary drawings 3/4-EDG-01 and 02 did not include highlighting of the intake and exhaust components although these were considered in scope. License renewal boundary flags were provided on plant drawings to indicate these components were in scope. The inspectors concluded that the missing highlighting was a minor omission. The inspectors concluded that the applicant had performed scoping and screening for the EDGs and associated systems in accordance with the methodology described in the Turkey Point LRA and the rule.

18. Emergency Diesel Generator Building Ventilation Systems

The EDG ventilation systems are required to operate to prevent overheating of components when the EDGs are running to assure continued operation of the EDGs. The Unit 3 system consists of one wall mounted fan and associated ductwork for each EDG. The Unit 4 systems consist of fans and associated ductwork for the EDG room, the EDG control room, and the 3D and 4D switchgear rooms. The inspectors reviewed the UFSAR, Section 8.2; LR boundary drawings; and scoping and screening documents for the systems. In addition, an inspector conducted a walkdown of the systems. The applicant concluded that the systems were in scope for LR. The inspectors concluded that the applicant had performed scoping and screening for the EDG ventilation systems in accordance with the methodology described in the Turkey Point LRA and the rule.

19. Instrument Air (IA) System

The IA system provides a dry, oil-free source of air for instrumentation and controls and pneumatic valves. The system contains both electric and diesel driven compressors and associated valves, instruments, piping, orifices, tubing, fittings, flasks/tanks, filters, strainers, and heat exchangers. The inspectors reviewed the UFSAR, Section 9.17; LR boundary drawings; the IA design basis document; and scoping and screening documents for IA. The system contains some components which are safety-related and some which are include in the Environmental Qualification (EQ) Program. Also portions of the system are relied on for postulated fires and station blackout events. The licensee concluded that the safety-related and EQ portions of the system, Portions relied on for fires and station blackout, and portions whose failure could prevent satisfactory accomplishment of the safety-related functions of systems

were included in the scope for LR. The inspectors concluded that the applicant had performed scoping and screening for the IA system in accordance with the methodology described in the Turkey Point LRA and the rule.

20. Intake Cooling Water (ICW) System

The ICW system provides cooling water to remove heat from the CCW system and the Turbine Plant Cooling Water system. The system for each unit consists of three pumps, two redundant piping headers, and associated valves and instrumentation. The pumps take suction from the cooling canal at the intake structure and discharge at the opposite end of the canal. The inspectors reviewed the UFSAR, Section 9.6.2; LR boundary drawings; and scoping and screening documents for the ICW system. The inspectors also walked down the outside portions of the system. The applicant concluded that the portions of the system which assure cooling water to the CCW system were in scope for LR. The inspectors concluded that the applicant had performed scoping and screening for the ICW system in accordance with the methodology described in the Turkey Point LRA and the rule.

21. Spent Fuel Pool Cooling (SFPC) System

The SFPC system removes decay heat from the spent fuel pool and filters and demineralizes the water in the pool. Each unit has a spent fuel pool and SFPC system which consists of two pumps, one emergency pump, a purification pump, a skimmer pump, six filters, a demineralizer, one heat exchanger and associated piping, valves, and instrumentation. The inspectors reviewed the UFSAR, Section 9.3 and Appendix 14D; LR boundary drawings; and scoping and screening documents for the SFPC system. The applicant concluded that all but the skimmer loop portion of the SFPC system was in scope for LR. The inspectors concluded that the applicant had performed scoping and screening for the SFPC system in accordance with the methodology described in the Turkey Point LRA and the rule.

B. Evaluation of Scoping and Screening of Electrical Systems

The inspectors observed that the scoping and screening of electrical systems employed significantly different methods than the mechanical or structural disciplines. During this inspection the inspectors reviewed an Engineering Evaluation report PTN-ENG-LRSC-99-0056, Rev. 4, 5/10/01, License Renewal Screening Results Summary Report for Electrical/I&C Component Commodity Groups. The procedure described how the applicant accomplished scoping and screening of electrical commodities to determine those needing an aging management review. The electrical screening document contained errors in references, typos, and confusing language. Paragraph 6.0 of that document references “Table 5-2" but there is no table 5-2 in the document. Paragraph 6.1.3 contains a confusing phrase “(see Section 6.1.3)”. Table 6.1 “License Renewal & Environmental Qualification Scope Comparison” intends to quote 10 CFR 54.4 and 50.49 but contains several typos and uses the word “containment” in place of “reactor” in three places.

The method used to determine which electrical and I&C components are subject to an aging management review was organized based on component commodity groups. The primary difference in this method versus the one used for mechanical systems and structures is the order in which the component scoping and screening steps are performed. This method was selected for use with the electrical and I&C components since most electrical and I&C

components are active, thus, the applicant concluded that this method provided the most efficient means for determining electrical and I&C components that require an aging management review. The method is consistent with the industry guidance documented in NEI 95-10.

Commodity groups within the scope of license renewal were identified beginning with the generic industry list from NEI 95-10, Appendix B. Additional items were added from review of plant specific design controlled drawings, the plant equipment database, and interface with the parallel mechanical and civil/structural system screening efforts. The component list was iteratively reviewed by FPL engineering staff and an industry peer group. A description and function for each of the electrical and I&C component commodity groups were identified. The list of electrical commodity groups was then narrowed to those that perform an intended function without moving parts or without a change in configuration or properties, i.e. the criterion of 10 CFR 54.21(a)(1)(i). Passive component commodity groups that are not subject to replacement based on a qualified life or specified time period, i.e. the screening criterion of 10 CFR 54.21(a)(1)(ii) were next identified as requiring an aging management review. Electrical and I&C component commodity groups included in the 10 CFR 50.49 Environmental Qualification Program were considered to be subject to replacement based on qualified life, and thus eliminated from the list. Next certain passive, long-lived electrical and I&C component commodity groups that do not support license renewal in scope system intended functions were eliminated.

The resulting list of electrical and I&C component commodity groups subject to an aging management review was:

• Insulated Cables and Connections (including splices, connectors, and terminal blocks and splices) not included in the Environmental Qualification Program

• Uninsulated Ground Conductors

• Twenty-two electrical/I&C penetration assemblies that are in the scope of license renewal but not included in the Environmental Qualification Program.

The inspectors found the methodology and the conclusions reached by the applicant to be satisfactory.

C. Evaluation of Scoping and Screening of Structural Components

1. Containment Building

The containment building of both units of Turkey Point Power Plant is a domed concrete, steel reinforced structure that houses the reactor vessel, reactor coolant system (RCS), and other important systems which interface with the RCS. PTN-ENG-LRSP-99-0063, “License Renewal System/Structure Scoping Report”, Revision 4, 5/10/01, lists the containment buildings as safety-related in Table 2.1-2, structure containing safety-related and non safety-related systems in Table 2.2-1, structure relied on for fire protection in Table 2.3.1-2, structure for pressurized thermal shock in Table 2.3.3-1, structure for Anticipated Transient Without Scram (ATWS) equipment in Table 2.3.4-2, and structure for Station Blackout (SBO) equipment in Table 2.3.5-2. The polar crane is listed as non safety-related that could affect safety-related structures and

is evaluated separately. The applicant assessment concluded that the containment building is within the scope of license renewal. The inspectors concurred with this assessment.

Section 2.1 of PTN-ENG-LRSC-99-0049, "License Renewal Screening Results Summary Report, Containment Structure and Internal Structural Components", Revision 4, 5/14/01, further subdivides the containment building into two component/commodity sets. The sets are the containment structure and the internal structural components. The same section also lists that some structural components located inside the containment structure are screened for aging management review in other screening documents. Table 5.1-1 of the containment screening document lists the containment structure screening results. A few structural components were screened out and the applicant concluded that they do not need an aging management review. The inspectors agreed with that assessment.

The only structural component the inspectors questioned was the containment Cathodic Protection system. The inspectors consider that the system is used to prevent corrosion to the steel components of the containment structure and it should be in scope. The applicant's position was that no credit is taken for the system to prevent corrosion, and there are other means to protect the steel component from corrosion. The applicant further states that "even if the Cathodic Protection system fails, the steel components of the containment structure will still be protected." The inspectors expressed the view that the Cathodic Protection system should be considered as an aging management program. This issue will be further addressed during the aging management program inspection.

2. Intake Structure

The Turkey Point Intake Structure is a Class 1 reinforced concrete and steel structure consisting of eight intake bays. The Intake Structure supports six Class 1 Intake Cooling Water Pumps, eight Class 3 Circulating Water Pumps, and three Class 3 Screen Wash Pumps. At the inlet to each bay, there is a stationary screen that collects large debris to prevent damaging the traveling screens. There are eight traveling screens, one for each intake bay, located just downstream of the stationary screens.

License renewal document PTN-ENG-LRSP-99-0063, "License Renewal System/Structure Scoping Report lists the Turkey Point intake structure as safety-related and performing safety-related functions in Table 2.1-2, part of the structure as non safety-related which could affect safety-related structures in Table 2.2-3, structure containing safety-related and non safety-related systems in Table 2.2-1, structure relied on for fire protection in Table 2.3.1-2, and structures for SBO equipment in Table 2.3.5-2. From the system point of view, the intake structure is within the license renewal scope. The inspectors concurred with this assessment. Section 5.1.3 of PTN-ENG-LRSC-99-0037 indicates that the evaluation boundary includes the intake bays, the laydown area, and the cooling water valve pits. Using the guidance of NEI 95-10, the applicant screened out the active components in Section 5.1.5. The applicant also screened out the stationary screen, traveling screen guideways, turning vanes, intake weir pit, and the Cathodic Protection system because they either do not perform an intended safety function or they are active. As for the Cathodic Protection system, the applicant's assessment is the same as indicated in the Containment Building section. The inspectors expressed the view that the Cathodic Protection system should be considered as an aging management program. This issue will be addressed further during a future inspection.

The inspectors raised a concern about the stationary screen that was concluded by the applicant not to need an aging management review. The concern is that large debris might damage the stationary screen and make it inoperable, or the damaged screen may drift into the intake structure to damage the traveling screens. The applicant stated that Turkey Point cooling water system is a closed system, naturally cooled using the several mile long cooling canal and does not use raw salt water as a source of supply. The debris in the cooling canal is mainly dead grass and occasionally some small marine life and there no large debris to impact the screen. The applicant further stated that even if the traveling screens became inoperable, there will be enough cooling water suction supply for the six Class 1 Intake Cooling Water pumps to achieve a safe plant shutdown. The inspectors found the applicant's conclusion acceptable.

The inspectors walked down the Intake Structure and found the structure and system are well maintained. The only concern the inspectors observed was that all the stationary screens were rusted and some are corroded badly. The applicant stated that they is aware of the situation through Maintenance Rule condition monitoring. Condition report (CR) 99-0958 evaluated the problem and states "the corrosion is located in an area which is not subject to large forces and, therefore, does not represent a structural concern at this time. Future inspections are scheduled to be performed during the next three refueling outages under work orders (WOs) 30019908, 30019909, 30019934, and 30019935." The inspectors concluded that the applicant is monitoring the situation.

3. Auxiliary Building

The auxiliary building is constructed on a concrete foundation mat with bearing walls and slabs. The auxiliary building houses Class 1 systems and has been designed and constructed to Class 1 requirements. Failure of the auxiliary building, or certain portions thereof, could result in adverse interaction with equipment, systems, etc., important to safety.

License renewal document PTN-ENG-LRSP-99-0063 lists the auxiliary building as a safety-related structure in Table 2.1-2, as a structure containing safety-related and non safety-related systems in Table 2.2-1, as a structure containing non safety-related systems which could affect safety-related systems in Table 2.2-2, as a structure relied on for fire protection in Table 2.3.1-2, and a structure for SBO equipment. The applicant assesses that the entire auxiliary building is within the scope of license renewal. The inspectors agreed with this assessment.

Section 5.14.3 of Attachment 5.14 to document PTN-ENG-LRSC-99-0037 states that the auxiliary building evaluation boundary is the exterior surface of the building except on the west side where the boundary also includes the breezeway between the auxiliary building and the control building. Part of the spent fuel storage facility is located inside the auxiliary building including the spent fuel storage pit. The only structural components that have been screened out are the non nuclear safety masonry walls. The screening result is listed in Table 5.14.1. The inspectors concurred with the screening results.

4. Turbine Building

The Turkey Point turbine building is a Class 3 structure and is primarily an open steel frame structure supported on concrete mat foundations. The building is located just west of the Unit 3 and Unit 4 reactor buildings. In addition to the non safety-related steam turbines, electric generators, etc., the turbine building also houses some safety-related equipment.

License renewal document PTN-ENG-LRSP-99-0063 lists part of the turbine building as safety-related in Table 2.1-2, a structure containing safety-related and non safety-related systems in Table 2.2-1, a non safety-related structure which could affect safety-related structures in Table 2.2-3, a structure relied on for fire protection in Table 2.3.1-2, a structure for ATWS equipment in Table 2.3.4-2, and a structure for SBO equipment in Table 2.3.5-2. Therefore, the applicant concluded that the turbine building is within the scope of license renewal. The inspectors concurred with this determination.

The Turkey Point Units 3&4 turbine building is screened for license renewal in Attachment 5.15 of license renewal document PTN-ENG-LRSC-99-0037. The systems that perform safety-related functions are those associated with the 4160V Switchgear and 480V Load Center. Table 5.15.1 lists all components that have been screened. The only components that are screened out are the non-nuclear safety (NNS) concrete foundations, walls, floors, roof, and masonry block walls. The safety-related switchgear and load center are protected with Class I concrete enclosures, therefore, the failure of the NNS concrete foundations, walls, floors, and roof will not affect the safety functions of these equipment. The concrete masonry block walls do not support any equipment that perform an intended safety function. The inspectors agreed with this assessment.

5. Control Building

The control building is a three story reinforced concrete structure, designed to Class I requirements similar to the Class I areas of the auxiliary building. The control building walls and roof are designed to withstand the effects of missile impacts. The control building is located west of the auxiliary building between the two containment structures. License renewal document PTN-ENG-LRSP-99-0063 lists the control building as a safety-related structure in Table2.1-2, structure containing safety-related and non safety-related systems in Table 2.2-1, a structure relied on for fire protection in Table 2.3.1-2, a structure for ATWS equipment in Table 2.3.4-2, and a structure for SBO equipment in Table 2.3.5-2, therefore, the control building is within the scope of license renewal. The inspectors concurred with this assessment.

Attachment 5.12 of PTN-ENG-LRSC-99-0037 describes the control building as having three safety-related functions, one non safety-related function, and to have fire protection, ATWS, and SBO functions. The evaluation boundary of the control building is the outside wall of the building as indicated in Figure 5.12.1. The boundary specifically excludes the fire protection monitoring station just outside of the west wall at elevation 18', which is screened separately in Attachment 5.18 of PTN-ENG-LRSC-99-0037. The non safety-related elevator and elevator vestibule on the same level is excluded. All structural components of the control building are screened to be in scope and to have an aging management review except the non nuclear safety (NNS) masonry concrete block walls. Failure of the masonry walls will not interact with safety-related system or equipment to affect their intended functions. The inspector agreed with the applicant’s assessment.

6. Radwaste Building

The radwaste building is a reinforced concrete structure designed to Class I requirements. The building is separated into two parts; the radwaste solidification area and the radwaste evaporation area. It contains three liquid hold-up tanks (10,000 gals each) in separated tank rooms in the radwaste solidification part of the building and a radwaste volume control tank in

the radwaste evaporation area. The applicant assesses that the radwaste building does not contain any safety-related equipment and does not perform any 10 CFR 54.4 intended functions, therefore, the radwaste building is not within the scope of license renewal.

The inspectors raised a concern about a rupture of either the liquid hold-up tanks or the radwaste volume control tank. The applicant provided the inspectors a writeup from the Turkey Point UFSAR which describes the rupture of the tanks. Section 14.2.2 of the Turkey Point UFSAR states that "In the event of tank rupture, the surrounding wall will contain the liquid and no uncontrolled release will occur." The inspectors agreed with this conclusion.

Section 14.2.3 of the Turkey Point UFSAR states, "Rupture of this tank (radwaste volume control tank) is assume to release all of the contained noble gases. The offsite whole body doses due to the radwaste volume control tank rupture are 0.038 rem at the exclusion boundary and 0.036 rem at the low population zone. The whole body doses do not exceed the acceptance criteria of 0.5 rem whole body dose for a waste gas failure." "In analysis of the consequences of the rupture of a hold-up tank, it is assumed that 100% of the contained noble gas activity is released. This activity is much less than that available for possible release from a waste gas decay tank." The UFSAR further states in dose evaluation that "Assuming that the incident occurred immediately after a refueling shutdown following operation with 1% defective fuel, the offsite whole body dose would be 0.064 rem at the exclusion boundary and 0.062 rem at the low population zone." The inspectors questioned the relative calculated dose values between a volume control tank and a waste decay tank.

The applicant then provided the inspectors with a copy of a Westinghouse Topical Report, WCAP-14276, "Florida Power and Light Company Turkey Point Unit 3&4 - Updating Licensing Report," Revision 1, December, 1995. Section 3.2.15.5 shows the results of the analyses of the rupture of a gas decay tank located in the auxiliary building to be the whole body doses of 0.064 at the exclusion boundary and 0.062 at the low population zone. This tank has a larger capacity than that located in the radwaste evaporation area. Therefore, rupture of the radwaste volume control tank in the radwaste building will not result in exceeding the dose limit of 0.5 rem due to a postulated waste gas system failure. The inspectors agreed with the applicant that the radwaste building in not within the license renewal scope.

7. Cooling Water Canals

The cooling water canal system serves as the plant ultimate heat sink. It is a closed loop cooling system made up of several miles of earthen canals that provides removal of waste heat from plant discharged circulating water prior to reuse at the intake structure. Engineering document PTN-ENG-LRSP-99-0063 lists the cooling water canal as non safety-related which could affect safety-related structures in Table 2.2-3, a structure relied on for fire protection in Table 2.3.1-2, and a structure for SBO equipment in Table 2.3.5-2, and concludes that the cooling water canal system is within the scope of license renewal. The inspectors concured with this assessment.

Engineering document PTN-ENG-LRSC-99-0037 describes the evaluation boundary of the cooling water canal system as the entire network of earthen canals which starts at the discharge structure on the west side of the power block and ends at the intake structure on the east side of the power block. The screening results for the cooling water canals are listed in Table 5.5.1. The only component eliminated from the screening process was the sheet pile at the cofferdam because it does not perform any intended safety function. Even if the cofferdam were to

completely degrade, allowing communication of waters between Biscayne Bay and the cooling water canals, the cooling water canals would still perform their function. The inspectors agreed with the screening results.

8. Emergency Diesel Generator Buildings

The Turkey Point power plant has two emergency diesel generator (EDG) buildings. The original two diesel generators are housed in the Unit 3 EDG building. In 1990 and 1991 two additional EDG units were added and the Unit 4 EDG building was designed and constructed to house the additional units. Both the Units 3 and 4 EDG buildings are Class 1 reinforced concrete structures. The first floor of each building is divided into bays housing one of the two EDGs. Both structures contain steel tanks for fuel oil storage and starting air receivers.

Section 4.2 of Engineering document PTN-ENG-LRSP-99-0063 lists the EDG buildings as being within the scope of license renewal. The inspectors concurred with this decision.

Section 5.11.3 of Engineering document PTN-ENG-LRSC-99-0037 states that the evaluation boundary of the EDG building is the exterior surface of the buildings including appurtenances. Duct banks, electrical vaults, and manholes located outside the EDG buildings are screened under “Yard Structures.” The screening results of the emergency diesel generator buildings are presented in Table 5.11.1. Applying its screening process, the applicant states that none of the included components within the evaluation boundary were eliminated by the screening process. The inspectors agreed with the results.

9. Discharge Structures

The discharge structures are the engineering features located along the west edge of the plant secured area. The Unit 3 discharge structure includes a concrete seal well, north and south concrete headwalls, and associated steel framing and platforms. The Unit 4 discharge structure includes a concrete seal well, south concrete headwall, and steel frames and platforms. Engineering document PTN-ENG-LRSP-99-0063 assesses the discharge structures as non safety-related structures whose failure could prevent safety-related systems or structures from performing their intended functions, therefore, the Turkey Point Units 3&4 discharge structures are within the scope of license renewal. The inspectors agreed with this assessment.

The discharge structures are classified as Class I in the Turkey Point 3&4 UFSAR but are identified as Class III structures by the maintenance rule. Section 5.6.3 of PTN-ENG-LRSC-99-0037 states that the evaluation boundary of the discharge structures includes the seal wells, concrete headwalls, and associated steel framing and platforms. In the screening process, the applicant, using NEI 95-10 as guidelines, eliminates all components within the evaluation boundary except the safety-related Intake Cooling Water (ICW) pipe headwalls, since only the ICW pipe headwalls can affect the safety function of the ICW system.

The inspectors walked down the discharge structures to ensure that failure of any of the other concrete walls will not prevent the function of the ICW system. The inspectors found that the concrete walls are at a distance from the ICW pipe headwalls and their height is such that, any failure will not affect the ICW pipe headwalls. The inspectors agreed with the applicant’s assessment.

10. Fire Rated Assemblies

Fire barriers are structures provided as part of the fire protection system to ensure that one train of redundant equipment necessary to achieve and maintain hot standby and cold shutdown conditions remains free from fire damage. Fire barriers provide a means of limiting fire travel by compartmentalization and containment. Fire rated assemblies at Turkey Point include walls, floors, ceilings, doors, fire dampers, penetration seals, electric conduit seals, raceway protections, structural steel fireproofing, manhole covers and hatches, and radiant energy shields.

Section 4.2 of Engineering document PTN-ENG-LRSP-99-0063 lists all in-scope structures and their intended functions. For fire rated assemblies (system 16A), the intended functions are to protect safety-related systems, structures and components relied upon to remain functional during and following design basis events. Fire rated assemblies are relied on in safety analyses or plant evaluations to perform a function that demonstrates compliance with NRC regulations for fire protection therefore they are in scope for license renewal. The inspectors agreed with the assessment.

Fire dampers are provide to prevent the spread of fire through HVAC penetrations. They are screened in their associated mechanical system. Radiant energy shields are located in the containment and are, therefore, screened with the containment structure.

Section 5.2.3 of PTN-ENG-LRSC-99-0037 states that the evaluation boundary for a fire rated assembly is the external surface of that assembly. The screening results are listed in Figure 5.2.1. Using the guidance provided in NEI 95-10, the applicant concludes that none of the fire rated assemblies within the evaluation boundary and listed in Figure 5.2.1 were eliminated from the screening process. The inspectors concurred with the applicant's screening results.

11. Yard Structures

The Turkey Point 3&4 yard structures include concrete foundations for miscellaneous in-scope equipment and structures, concrete trenches for in-scope piping and utilities, and concrete duct banks and electrical manholes for in-scope electrical systems, that are not included within an existing in-scope structures.

Engineering document PTN-ENG-LRSP-99-0063 assesses the yard structures as structures containing safety-related and non safety-related systems in Table 2.2-1, relied on for fire protection in Table 2.3.1-2, and for ATWS equipment in Table 2.3.4-2. Therefore, all yard structures are considered to be within the scope of license renewal. The inspectors agreed with this assessment.

Section 5.13.3 of PTN-ENG-LRSC-99-0037 states that the evaluation boundary for each yard structure is the exterior surface of the structure. For trenches and duct banks, the structure boundary terminates at the point it enters a separate structure. The screening results for the yard structures are presented in Tables 5.13.1, 5.13.2, and 5.13.3.

Some non safety-related yard structures may have potential for seismic interaction with safety-related equipment. Consequently, non safety-related items that could potentially interact with safety-related equipment are considered to be in scope and needing aging management review.

Using the guidance from NEI 95-10, the applicant did not eliminate any yard structure components from the scope of license renewal in its screening process. The inspectors walked down portions of the yard structures to assess the current condition of the yard structures and found there was nothing out of the ordinary. All structures seem to be in acceptable condition. The inspectors agreed with the applicant's screening results.

12. Polar Cranes

The reactor polar cranes and associated rails are seismically qualified Class I structures in the unloaded configuration. The crane provides a means for lifting and handling heavy loads inside the containment structures. The primary components of a polar crane consist of the crane buckets attached to the containment building, the runway rail supported by the crane buckets, the end trucks that ride on the runway rail, the bridge girder that span between the end trucks, the walkway and railing mounted outside one of the girders, the electrical enclosures mounted on the walkway, the cab suspended beneath bridge girder, the trolley rails on top of the bridge girders, and the trolley that rides on the trolley rails.

Engineering document PTN-ENG-LRSP-99-0063 scopes the reactor polar crane as a non safety-related structure whose failure could prevent safety-related systems, structures, or components from performing their intended functions as specified in 10CFR54.4(a)(2). The applicant determined that the reactor polar crane is within the scope of license renewal. The inspectors agreed with the determination.

Section 5.3.3 of PTN-ENG-LRSC-99-0037 states that the evaluation boundary of the reactor polar crane includes everything associated with the polar crane from the crane rail support buckets attached to the containment building to the main and auxiliary hooks, including rails, end trucks, girders, hoists, trolley, and associated sub-components. All the structural components or component types associated with the polar crane are listed in Tables 5.3.1 (Unit 3) and 5.3.2 (Unit 4).

Using the guidance in NEI 95-10, the following components were eliminated from the screening process because they are active components:

- Polar crane end trucks
- Polar crane trolley active sub-components
- Wire rope
- Hook/hook block assembly

The inspectors agreed with the screening results.

13. Spent Fuel Storage and Handling

Spent fuel is stored in the Unit 3 and Unit 4 spent fuel storage pits. The spent fuel storage pit is designed for the underwater storage of spent fuel assemblies and control rods after removal from the reactor. The pit is lined on the interior surface with stainless steel liner plate. Stainless steel storage racks sitting on the pit floor are provided to hold spent fuel assemblies. The racks

are designed so that it is impossible to insert fuel assemblies in other than the prescribed locations.

The spent fuel handling at Turkey Point includes all the equipment and tools necessary to remove spent fuel from the reactor vessel, transport spent fuel to the spent fuel pit, place spent fuel in the appropriate storage rack cell, and remove spent fuel to the spent fuel storage pit for alterative storage. The major equipment required for spent fuel handling includes the reactor cavity seal ring, the manipulator crane, the fuel transfer system, the fuel transfer tube, the spent fuel bridge, the fuel handling tools, and the spent fuel cask crane.

Spent fuel storage includes all the structural components necessary to store spent fuel in the spent fuel storage pit, excluding the concrete structure. The major structural components required for spent fuel storage are the spent fuel pit liner, the keyway gate, and the spent fuel storage racks.

Engineering document PTN-ENG-LRSP-99-0063 lists the spent fuel storage and handling facilities as safety-related structures in Table 2.1-2 and non safety-related structure that could affect safety-related structures in Table 2.2-3, and determines that the spent fuel storage and handling facility is within the scope of license renewal. The inspectors concurred with this decision.

Section 5.4.3 of PTN-ENG-LRSC-99-0037 states the evaluation boundary for the spent fuel storage and handling equipment includes the spent fuel pit area, the transfer canal, the refueling canal, and part of the reactor cavity, plus the cask crane. Using the guidance from NEI 95-10, the applicant determined that the following items are not in scope and thus do not require an aging management review:

- Handling tools - not long lived
- Reactor cavity seal ring inflatable rubber seal - not long lived
- Drive mechanism - active
- Conveyor assemblies and active sub-components - active
- Hoist and active sub-components - active
- Spent fuel pit sliding concrete door and motor - active
- Manipulator crane active features - active

The inspectors agreed with the applicant's assessment.

14. The "C" Bus Electrical Switchgear Enclosure

The "C" bus electrical switchgear enclosure is a sheet metal structure with a 18' x 18' reinforced concrete foundation. Section 8.1.4-5 of the UFSAR states that for each unit, a non safety-related 125V DC bus provides power to the non safety-related C-bus 4.16kV and 480 V switchgear, C-bus transformer relay panel, and the turbine emergency oil pump. The inspectors reviewed Drawings 5610-C-1177, "Auxiliary Power Upgrade C-Bus Transformer Complex Foundation, Unit 3." Revision 3, 1/26/84 and Drawing 5610-C-1178, "Auxiliary Power Upgrade C-Bus Transformer Unit 4 Plans, Sections and Details," Revision 4, 3/6/88 and walked down the Unit 3 enclosure. The inspectors found that the metal enclosure was supplied by the manufacturer and only houses non safety-related electrical equipment. There is no safety-related equipment near-by, therefore, the failure of the enclosure will not affect any safety-

related systems, structures, or components. The inspectors agree that this enclosure is not in the scope of license renewal.

15. Plant Vent Stack

The plant vent stack is a steel tubular structure used for releasing processed gases to the atmosphere. The stack is supported at its base by the auxiliary building roof and laterally restrained near the top by the Unit 4 containment structure. Section 4.2 of PTN-ENG-LRSP-99-0063 indicates the stack is assigned as system 111K and considers its structural failure could impact safety-related equipment, therefore, it is within the scope of license renewal. The inspectors concurred with this assessment.

Section 5.19.3 of PTN-ENG-LRSC-99-0037 defines the evaluation boundary of the plant vent stack as “includes the vent stack and its supporting structural members up to and including the anchor bolts, excluding the auxiliary building and the containment building.” The applicant utilized the guidance in NEI 95-10 for its screening process and concluded that the entire stack and its supporting structural members are in scope and need aging management review. The inspectors agreed with this conclusion.

16. Diesel Driven Fire Pump Enclosure

The diesel driven fire pump is protected from the external environment by a prefabricated enclosure. The structure is anchor bolted to an 18" thick reinforced concrete foundation. Table 2.3.1-2 of PTN-ENG-LRSP-99-0063 shows that the diesel driven fire pump enclosure is designated as system 079K and provides protection for fire protection equipment, therefore, it is within the scope of license renewal. The inspectors agreed with that assessment.

Section 5.9.3 of PTN-ENG-LRSC-99-0037 describes the evaluation boundary of the diesel driven fire pump enclosure as the exterior surface of the structure. The prefabricated enclosure, the anchor bolts, and the concrete foundation are all within the evaluation boundary. The applicant, in Section 5.9.4 of this document, states that all structural components within the evaluation boundary need aging management review. None of the included components were eliminated by the screening process. The inspectors agreed with this evaluation.

17. Turkey Point Units 1&2 Chimneys

The Turkey Point fossil Units 1&2 concrete chimneys located directly north of Unit 3, do not perform any safety-related functions, or directly protect safety-related equipment. The chimneys are designed to Class I seismic loads (0.15g) and wind loads (145 mph hurricane and 225 tornado). However, the postulated failure of the chimneys still has the potential to cause an adverse interaction with units 3&4 nuclear safety-related systems, structures, or components (SSC). Section 4.2 of PTN-ENG-LRSP-99-0063 designates the chimneys as system 079D and classifies the chimneys as non safety-related SSC whose failure could prevent safety-related SSC from performing its intended functions. Therefore, the chimneys are determined to be within the scope of license renewal. The inspectors agreed with this determination.

The evaluation boundary of the chimneys is the exterior surface of the chimney structures, as described in Section 3.7.3 of PTN-ENG-LRSC-99-0037. There are no components associated with the Turkey Point Units 1&2 chimneys other than the chimneys and their concrete

foundations. The applicant determined that the chimneys and their foundations are in scope for license renewal and require aging management review. The inspectors concurred with this decision.

18. Fire Protection Monitoring Station

The fire protection monitoring station is a reinforced concrete and concrete block structure located at elevation 18'-0" adjacent to the west wall of the control building. It is a two room structure. One room is designated as the monitoring station and the other a guard rest area. The fire protection monitoring station contains numerous video screens used to monitor various areas throughout the plant for fire detection in lieu of fire watches. Section 4.2 of PTN-ENG-LRSP-99-0063 designates the fire protection monitoring station as system 111J and describes it as a structure relied on in a safety analysis to perform a function that demonstrates compliance with NRC regulations for fire protection. The applicant, therefore, designates the fire protection monitoring station as within the scope of license renewal. The inspectors agreed with the applicant's conclusion that the station is within the scope of license renewal.

Section 5.18.3 of PTN-ENG-LRSC-99-0037 describes the evaluation boundary for the fire protection monitoring station as the exterior surface of the enclosure. The control building west wall is not part of the fire protection monitoring station, hence is not within its evaluation boundary. Table 5.18.1 states all structural components comprising the fire protection monitoring station are in scope and need aging management review. The inspectors concurred with this screening result.

D. Evaluation of Scoping and Screening of Fire Protection Systems

The LRA states that Fire Protection equipment protects plant equipment in the event of a fire, to ensure safe plant shutdown, and to minimize the risk of a radioactive release to the environment. Fire Protection equipment consists of Fire Water Supply including sprinklers, Halon Suppression, Fire Dampers, RCP Oil Collection, Alternate Shutdown, Safe Shutdown, and Fire Detection and Protection. Individual components that constitute Alternate Shutdown and Safe Shutdown were screened with their respective systems. Fire Detection and Protection was screened with Electrical equipment. The majority of the Fire Protection systems at Turkey Point are common to Units 3 and 4.

The inspectors examined boundary diagrams listed in Table 2.3-5 of the LRA which show the evaluation boundaries for the portions of Fire Protection systems that the applicant concluded are within the scope of license renewal. The inspectors observed that on drawing 0-FP-04 fire hydrant shutoff valves were not "highlighted" to indicate them being in scope for license renewal. The applicant's response was that mechanical pressure boundary components which are in the scope of license renewal are defined on drawings by license renewal boundary flags and the highlighting of components within these boundaries was only provided for ease of review on drawings provided to the NRC. The boundary flags have been included on current plant drawings to designate equipment in the scope of license renewal, which the inspectors concluded was a good initiative. The inspectors agreed with the applicant's position that highlighting discrepancies are insignificant and require no change to plant documentation. The inspectors found no significant discrepancies in the Fire Protection boundary drawings.

During this inspection the inspectors reviewed an Engineering Evaluation report PTN-ENG-LRSC-99-0041, Rev. 4, 5/10/01 License Renewal Screening Results Summary Report for Fire Protection and Transformer Deluge Systems. The document described the Fire Protection systems and, included several attached tables which list fire protection components. The tables presented the applicant's conclusions of their scoping and screening effort on mechanical fire protection equipment to determine those components needing an aging management review.

The inspectors noted several inconsistencies in the fire protection screening document 99-0041. Attachment 5.1.1, page 6 of 7, had two entries for components 3-10-630 & 631. One entry for each component addresses sprinklers for transformer deluge systems and says that the sprinklers are not in scope for license renewal. The inspectors asked the applicant if this was an inaccurate entry because the sprinklers should have been in scope. The applicant reviewed the issue and concluded that the entry was inaccurate and the sprinklers are in scope. The applicant concluded that the cause of the error was that the sprinklers were incorrectly classified in the plant Total Equipment Data Base (TEBD) as "NNS" i.e. Not Nuclear Safety Related, when they should have been classified as "QR" i.e. Quality Related. A Condition Report (CR# 01-1100) was generated by the applicant to correct this plant documentation discrepancy. Additionally, applicant representatives stated that a complete review of all Fire Protection components identified as "NNS" in the Fire Protection Screening document will be performed by the applicant to verify the correct safety classification and documents will be revised accordingly. The inspectors found this corrective action to be conservative and responsive to the problem.

Attachment 5.1.3, page 11 of 27, had entries that say fire hydrants 10-HY-2 and 10-HY-22 are not in scope, which is correct. Page 15 had entries for valves 10-PIV-58 & 59, the isolation valves for hydrants 2 & 22, saying they also are not in scope, and the "Description" entry for valve 59 was inaccurate. However page 25 had entries for "PIV-58" and "PIV-59" saying those valves are in scope, which is inaccurate. The applicant found that duplicate entries for 10-PIV-58 and 59, which were labeled "PIV-58" and "PIV-59" also existed in the TEDB. This problem was also addressed in the above mentioned Condition Report. The applicant stated they will review again the Fire Protection screening document to look for additional duplicate entries and revise accordingly.

The inspectors asked the applicant to provide a list of recent Fire Protection modifications and a schedule of when these modifications will be included in the Updated Final Safety Analysis Report (UFSAR) and the LRA. The applicant provided a table to show recent Plant Change Modifications (PC/M) packages that were implemented to address Fire Protection and Thermo-lag Appendix R commitments. The table showed that only one PC/M 97-052 remains to be updated in the UFSAR and this is scheduled before the end of 2001. Any additions needed to the LRA will be included with the anticipated LRA update.

The inspectors observed that the documentation discrepancies found by NRC, although minor, seemed to have a common origin of inaccuracies and duplication of entries in the plant TEDB. Overall, the inspectors concluded that the results of the applicant's scoping and screening efforts on Fire Protection were acceptable.

Exit Meeting Summary

The results of this inspection were discussed on June 8, 2001 with members of the FPL staff in an exit meeting open for public observation at the Turkey Point site. The applicant acknowledged the findings presented and presented no dissenting comments. During the inspection the inspectors asked the licensee whether any of the material examined during the inspection should be considered proprietary. Some proprietary information was reviewed by the inspectors during the inspection but none is included in this report.

ATTACHMENT 1

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Applicant

B. Beisler, License Renewal Group
S. Franzone, Licensing Manager
S. Hale, License Renewal Lead
R. Hovey, Vice President
T. Jones, Plant Manager
F. Prieto, License Renewal Group
E. Thompson, Project Manager
Tony Menocal, License Renewal Group

NRC

H. Christensen, Deputy Division Director
K. Clark, NRC Public Affairs
C. Patterson, Senior Resident Inspector
R. Reyes, Resident Inspector
L. Wert, Branch Chief

LIST OF DOCUMENTS REVIEWED

Engineering Documents

NEI 95-10, "Industry Guidelines for Implementing the Requirements of 10 CFR Part 54 – The License Renewal Rule," Revision 1, Nuclear Energy Institute, January 2000.

ENG-QI 5.3, License Renewal System/Structure Scoping Report, Rev. 4, 5/10/01

ENG-QI 5.4, License Renewal Screening, Rev 3, 5/13/01.

5610-075-DB-001, Design Basis Document, AFW System, rev. 10

5610-013-DB-001, Design Basis Document-Instrument Air System, Revision 8

Appendix R Essential Equipment List, Revision 17

WCAP-14276, "Florida Power and Light Company Turkey Point Units 3&4 - Updating Licensing Report," Revision 1, December, 1995. Section 3.2.15, Page 3-128

Licensing Documents

Turkey Point Units 3&4 Updated Final Safety Analysis Report, Rev. 17

Application For Renewed Operating License - Turkey Point Nuclear Plant Units 3 & 4

PTN-ENG-LRSP-99-0063, “License Renewal System/Structure Scoping Report,” Revision 4, May 10, 2001

License Renewal Screening Results Summary Reports

PTN-ENG-LRSC-99-0026, Revision 1, Intake Cooling Water System
PTN-ENG-LRSC-99-0029, Revision 3, Spent Fuel Pool Cooling System
PTN-ENG-LRSC-99-0030, Revision 1, Component Cooling Water System
PTN-ENG-LRSC-99-0032, Revision 2, EDG Building Ventilation Systems
PTN-ENG-LRSC-99-0037, Revision 6, Structures and Structural Components
PTN-ENG-LRSC-99-0039, Revision 2, Containment Spray System
PTN-ENG-LRSC-99-0041, Revision 4, Fire Protection and Transformer Deluge System
PTN-ENG-LRSC-99-0042, Revision 2, Boron Addition and Supply System
PTN-ENG-LRSC-99-0043, Revision 3, Auxiliary Building and Electrical Equipment Room Ventilation Systems
PTN-ENG-LRSC-99-0049, Revision 4, Containment Structure and Internal Structural Components
PTN-ENG-LRSC-99-0052, Revision 4, Sample System (NSSS)
PTN-ENG-LRSC-99-0056, Revision 4, Electrical/I&C Component Commodity Groups
PTN-ENG-LRSC-99-0061, Revision 2, Safety Injection and Accumulator Systems
PTN-ENG-LRSC-99-0067, Revision 3, Condensate Storage System
PTN-ENG-LRSC-99-0068, Revision 3, Auxiliary Feedwater System
PTN-ENG-LRSC-99-0070, Revision 2, Chemical and Volume control System
PTN-ENG-LRSC-99-0071, Revision 3, EDG Fuel Oil Systems
PTN-ENG-LRSC-99-0073, Revision 2, Emergency Containment Cooling and Filter Systems
PTN-ENG-LRSC-99-0074, Revision 2, Sample System (Secondary)
PTN-ENG-LRSC-99-0076, Revision 2, EDG Lube Oil Systems
PTN-ENG-LRSC-99-0077, Revision 2, EDG Air Start Systems
PTN-ENG-LRSC-99-0078, Revision 2 EDG Cooling Water Systems,
PTN-ENG-LRSC-99-0079, Revision 2, Reactor Vessel and Reactor Coolant System
PTN-ENG-LRSC-99-0080, Revision 2, Containment Post Accident Evaluation and Process Radiation Monitoring Systems
PTN-ENG-LRSC-99-0081, Revision 2, Residual Heat Removal System
PTN-ENG-LRSC-99-0085, Revision 1, Feedwater and Blowdown System (System 074)
PTN-ENG-LRSC-99-0086, Revision 2, Hydrogen and Nitrogen Systems,
PTN-ENG-LRSC-99-0087, Revision 5, Instrument Air System
PTN-ENG-LRSC-99-0088, Revision 4, Control Building Ventilation Systems
PTN-ENG-LRSC-99-0092, Revision 2, Breathing Air System
PTN-ENG-LRSC-99-0097, Revision 2, Emergency Diesel Generators

License Renewal Boundary Drawings

Auxiliary Ventilation	0-ABVAC-01,& 02 Rev. 0
Control Building Ventilation	0-CBVAC-01, 02, & 03 Rev. 0
Component Cooling Water	3/4-CCW-01, 02, 03, & 04, Rev. 0
	3-CCW-05, Rev 0
Chemical & Volume Control	0-CVCS-01 & 02 Rev. 0
	3/4-CVCS-01, 02, & 03 Rev. 0
Feedwater	0-FW-01, & 02 Rev. 0
	3/4-FW-01, 02, 03, & 04 Rev. 0
Reactor Coolant	3/4-RCS-01 02, 03, & 04, Rev. 0
Secondary Sampling	3/4-SAMP-01, & 02 Rev. 0
Primary Sampling	3/4-SAMP-03, Rev. 0
Auxiliary Feedwater	3/4-AFW-01, 02, & 03, Rev. 0
	0-AFW-01 & 02, AFW, Rev. 0
Condensate Storage	3/4-COND-01, Rev. 0
Containment Spray	3/4-CS-01, 02. & 03, Rev. 0
Residual Heat Removal	3/4-RHR-01, Rev. 0
Safety Injection	3/4-SI-01, 02, & 03, Rev. 0
Containment Post Accident Monitoring & Control	3/4-PAMC-01 & 02, Rev. 0
Emergency Containment Filters	3/4-ECF-01, Rev. 0
Breathing Air	3/4-BA-01, Rev. 0
EDG Air Start	3/4-EDG-01 & 02, Rev. 0
EDG Fuel Oil	3/4-EDG-03 and 04, Rev. 0
EDG Lube Oil and Cooling Water	3/4-EDG-05 and 06, Rev. 0
EDG Building HVAC	4-EDVAC-01, Rev. 0
Instrument Air	0-IA-01, Rev. 0
Instrument Air	3/4-IA-01, 02, 03, 04, and 05, Rev. 0
Instrument Air	3-IA-06, 07, 08, and 09, Rev. 0
Intake Cooling Water	3/4-ICW-01 and 02, Rev. 0
Spent Fuel Pool Cooling	3/4-SFP-01 and 02, Rev. 0
Main Steam	3/4-MS-01 and 03, Rev. 0
Fire Protection	0-FP-01 through 0-FP-10

Plant Drawings

5614-M-3050, Sheet 1, Residual Heat Removal, Rev. 25
5613-M-3010, Sheet 3, Circulating Water System Lube Water to Circulating Water Pumps, Rev. 12
5614-M-3010, Sheet 1, Circulating Water System, Rev. 12
5614-M-3010, Sheet 3, Circulating Water System Lube Water to Circulating Water Pumps, Rev. 9
5610-C-1177, Auxiliary Power Upgrade C-Bus Transformer Complex Foundation - Unit 3, Rev 3
5610-C-1168, Sheet 1, Cooling Canals Systems Layout, Rev. 10
5610-C-430, Radwaste Solidification Building Solidification Area, Foundation Plan - Sheet 1, Rev. 4
5610-C-410, Radwaste Solidification Building Evaporation Area Foundation Plan, Rev. 10

5610-C-1729, Auxiliary Building Concrete Masonry Walls, Floor plan at El. 6'-0" & 10'-0", Rev. 1
5610-C-1730, Auxiliary and Turbine Building Concrete Masonry Walls, Floor Plan at El. 18'-0", Rev. 1.

ATTACHMENT 2

TURKEY POINT UNITS 3 & 4
LICENSE RENEWAL SCOPING INSPECTION
INSPECTION SAMPLE

MECHANICAL SYSTEMS

System Name	System in License Renewal Scope?	Screening Results Application Section
Auxiliary Building Ventilation	Yes	2.3.3.10
Auxiliary Feedwater and Condensate Storage	Yes	2.3.4.3
Circulating Cooling Water	**No**	
Component Cooling Water	Yes	2.3.3.2
Condenser	**No**	
Containment Isolation	Yes	2.3.2.3
Containment Post-Accident Monitoring And Control	Yes	2.3.2.7
Containment Spray	Yes	2.3.2.2
Control Building Ventilation	Yes	2.3.3.11
Chemical and Volume Control	Yes	2.3.3.4
Electrical Equipment Room Ventilation	Yes	2.3.3.10
Emergency Containment Cooling	Yes	2.3.2.1
Emergency Containment Filtration	Yes	2.3.2.6
Emergency Diesel Generator and Support Systems	Yes	2.3.3.15
Emergency Diesel Generator Building Ventilation	Yes	2.3.3.12
Feedwater and Blowdown	Yes	2.3.4.2
Feedwater Heaters, Drains, and Vents	**No**	
Fire Protection	Yes	2.3.3.14
Instrument Air	Yes	2.3.3.8
Intake Cooling Water	Yes	2.3.3.1
Reactor Coolant	Yes	2.3.1
Residual Heat Removal	Yes	2.3.2.5
Safety Injection	Yes	2.3.2.4
Sample System - NSSS and Secondary	Yes	2.3.3.6
Spent Fuel Pool Cooling	Yes	2.3.3.3

TURKEY POINT UNITS 3 & 4
LICENSE RENEWAL SCOPING INSPECTION
SELECTED INSPECTION SAMPLE

STRUCTURES

Structure Name	**Structure in License Renewal Scope?**	**Screening Results Application Section**
Auxiliary Building (includes Fuel Handling Building and New Electrical Equipment Room)	Yes	2.4.2.1
"C" Bus Electrical Switchgear Enclosures	**No**	
Containments	Yes	2.4.1
Control Building	Yes	2.4.2.3
Cooling Water Canals	Yes	2.4.2.4
Diesel Driven Fire Pump Enclosure	Yes	2.4.2.5
Discharge Structure	Yes	2.4.2.6
Electrical Penetration Rooms	Yes	2.4.2.7
Emergency Diesel Generator Buildings	Yes	2.4.2.8
Fire Protection Monitoring Station	Yes	2.4.2.9
Fire Rated Assemblies	Yes	2.4.2.10
Intake Structure	Yes	2.4.2.11
Main Steam and Feedwater Platforms	Yes	2.4.2.12
Plant Vent Stack	Yes	2.4.2.13
Polar Cranes	Yes	2.4.1
Radwaste Building	**No**	
Spent Fuel Storage and Handling	Yes	2.4.1&2.4.2.14
Turbine Building	Yes	2.4.2.15
Turbine Gantry Cranes	Yes	2.4.2.16
Turkey Point Units 1 and 2 Chimneys	Yes	2.4.2.17
Yard Structures (includes equipment foundations, concrete footings for structural steel supports, pipe trenches, and duct banks)	Yes	2.4.2.18

TURKEY POINT UNITS 3 & 4
LICENSE RENEWAL SCOPING INSPECTION
SELECTED INSPECTION SAMPLE

ELECTRICAL SYSTEMS

System Name	System in License Renewal Scope?	Screening Results Application Section
125 VDC and 120 VAC	Yes	2.5
4.16 KV	Yes	2.5
240 KV Switchyard	**No**	
480 V Switchgear & Motor Control Centers	Yes	2.5
ATWS Mitigating System Actuation Circuitry (AMSAC)	Yes	2.5
Communications	Yes	2.5
Containment Electrical Penetrations (conductor and non-metallic portions)	Yes	2.5
Emergency Load Sequencer	Yes	2.5
Emergency Response Facility and Plant Computer	Yes	2.5
Engineering Safeguards	Yes	2.5
Fire and Smoke Detection	Yes	2.5
Lightning Protection	Yes	2.5
Nuclear Instrumentation (Incore and Excore)	Yes	2.5
Process Radiation Monitoring	Yes	2.5
Qualified Safety Parameter Display System (QSPDS)	Yes	2.5
Reactor Protection	Yes	2.5
Start-Up Transformers	**No**	

ATTACHMENT 3

LIST OF ACRONYMS USED

ABVS	Auxiliary Building Ventilation System
AFW	Auxiliary Feedwater system
AMR	Aging Management Review
ATWS	Anticipated Transient Without a Scram
CBVS	Control Building Ventilation System
CCW	Component Cooling Water
CR	Condition Report
CRVS	Control Room Ventilation System
CS	Containment Spray system
CSRVS	Computer/Cable Spreading Room Ventilation System
CST	Condensate Storage Tank
CVCS	Chemical Volume and Control System
CWS	Circulating Water System
DBA	Design Basis Accident
DBD	Design Basis Document
DCVS	DC Equipment/Inverter Room Ventilation System
ECC	Emergency Containment Cooling system
ECFS	Emergency Containment Filtration System
EDG	Emergency Diesel Generator
EQ	Environmental Qualification program
FW	Feedwater
HEPA	High Efficiency Particulate Air filters
HVAC	Heating Ventilation and Air Conditioning
ICW	Intake Cooling Water system
IA	Instrument Air
LR	License Renewal
LRA	License Renewal Application
MS	Main Steam
NNS	Non Nuclear Safety Related
NRR	NRC Office of Nuclear Reactor Regulation
NSSS	Nuclear Steam Supply System
P&IDs	Piping and Instrumentation Diagrams
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
RHR	Residual Heat Removal
RV	Reactor Vessel
SBO	Station Blackout event
SI	Safety Injection
SFPC	Spent Fuel Pool Cooling system
SSC	Systems, Structures, and Commodity Groups
TEDB	Total Equipment Data Base
UFSAR	Updated Final Safety Analysis Report