



**FPL**

**MAR 03 2004**

L-2004-008

10 CFR 50.36

10 CFR 50.90

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

Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Proposed License Amendments  
Revision of Technical Specifications Surveillance Requirement 4.0.5

In accordance with the provisions of 10 CFR 50.90, Florida Power and Light Company (FPL) requests that Appendix A of Facility Operating Licenses DPR-31 and DPR-41 for Turkey Point Units 3 and 4 be amended to revise the Turkey Point Units 3 & 4 Technical Specifications Surveillance Requirement 4.0.5.

The purpose of these amendments is to update references to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code as the source of requirements for the inservice testing of ASME Code Class 1, 2, and 3 pumps and valves. The proposed amendments delete reference to Section XI of the Code and incorporate reference to the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code). This application is being submitted in accordance with Section 50.55a(f)(5)(ii) of Title 10 of the Code of Federal Regulations to conform the technical specifications to the revised Inservice Testing program.

A description and justification of the amendments request is provided in Enclosure 1. The no significant hazards consideration determination and environmental impact analysis in support of the proposed technical specification changes are provided in Enclosures 2 and 3, respectively. Enclosure 4 provides the proposed marked up technical specification pages. Enclosure 5 provides a clean copy of the proposed changes. Enclosure 6 provides the proposed marked up technical specification bases pages. Enclosure 7 provides the clean technical specification bases pages. FPL has determined that the proposed license amendments do not involve a significant hazards consideration pursuant to 10 CFR 50.92.

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The license amendments proposed by FPL have been reviewed by the Turkey Point Plant Nuclear Safety Committee and the FPL Company Nuclear Review Board. In accordance with 10 CFR 50.91(b)(1), a copy of these proposed license amendments is being forwarded to the State Designee for the State of Florida.

Should there be any questions on this request, please contact Walter Parker at (305) 246-6632.

Very truly yours,

  
Terry O. Jones  
Vice President  
Turkey Point Nuclear Plant

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Enclosures

cc: Regional Administrator, Region II, USNRC  
Senior Resident Inspector, USNRC, Turkey Point Plant  
Florida Department of Health



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**ENCLOSURE 1**

**PROPOSED LICENSE AMENDMENTS APPLICATION**

## 1.0 Description of Proposed Changes

Florida Power and Light Company (FPL) requests that Appendix A of Facility Operating Licenses DPR-31 and DPR-41 for Turkey Point Units 3 and 4 respectively, be amended to revise the Technical Specifications (TS) Surveillance Requirement 4.0.5.

The purpose of these amendments is to update references to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code as the source of requirements for the inservice testing of ASME Code Class 1, 2, and 3 pumps and valves. The proposed amendments delete reference to Section XI of the Code and incorporate reference to the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code). This application is being submitted in accordance with Section 50.55a(f)(5)(ii) of Title 10 of the Code of Federal Regulations to conform the technical specifications to the revised Inservice Testing program.

The proposed changes are consistent with the implementation of the Turkey Point Units 3 and 4 Fourth 10-Year Interval Inservice Testing (IST) Program in accordance with the requirements of 10 CFR 50.55a(f) that is scheduled to commence on February 22, 2004 for Turkey Point Unit 3 and April 15, 2004 for Unit 4. In addition, surveillance interval definitions for "biennially or every 2 years" as used in the ASME OM Code are added to TS 4.0.5.b to ensure consistent use of the terms.

## 2.0 Background

In 1990, the ASME published the initial edition of the ASME OM Code that provides rules for inservice testing of pumps and valves. The ASME OM Code replaced Section XI of the Boiler and Pressure Vessel Code for inservice testing of pumps and valves. The 1995 edition of the ASME OM Code was incorporated by reference into the regulation in 10 CFR 50.55a(b) on September 22, 1999. Since the NRC regulation in 10 CFR 50.55a(f)(4)(ii) requires that inservice testing during successive 10-Year intervals comply with the requirements of the latest edition and addenda of the Code incorporated into 10 CFR 50.55a(b), the TS must be revised to reference the ASME OM Code.

## 3.0 Description and Justification of Proposed Changes

**Change:** Revise TS Surveillance 4.0.5 to read:

**4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:**

- a. Inservice inspection of ASME Code Class 1, 2, and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR50, Section 50.55a.

Inservice testing of ASME Code Class 1, 2 and 3 pumps and valves shall be performed in accordance with the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code) and applicable Addenda as required by 10 CFR 50, Section 50.55a.

- b. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda and the ASME OM Code and applicable Addenda shall be applicable as follows in these technical specifications:

ASME Boiler and Pressure Vessel Code and the ASME OM Code and applicable Addenda terminology for <u>inservice inspection and testing activities</u>	Required frequencies for performing inservice inspection and testing <u>activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days

- c. The provisions of Specification 4.0.2 are applicable to the above required frequencies for performing inservice inspection and testing activities.
- d. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements.
- e. Nothing in the ASME Boiler and Pressure Vessel Code or the ASME OM Code shall be construed to supersede the requirements of any Technical Specification.

#### 4.0 Justification and Effects on Safety

By final rule issued on September 22, 1999 (64 FR 51370) the NRC amended 10 CFR 50.55a(f)(4)(ii) to require licensees to update their IST program to the latest approved edition of the ASME OM Code incorporated by reference into 10 CFR 50.55a(b).

The Technical Specification for Turkey Point Units 3 and 4 currently reference the ASME Boiler and Pressure Vessel Code, Section XI, as the source of the IST requirements for ASME Code 1, 2, and 3 components. The Code of record for the ongoing Third 10-Year IST interval is the 1989 Edition of the ASME Boiler and Pressure Vessel Code, Section XI, with no Addenda. The proposed changes to TS Surveillance Requirements 4.0.5 would revise IST requirements to reference the ASME OM Code for the fourth successive 10-Year intervals for Turkey Point Units 3 and 4. The proposed changes to TS Surveillance Requirements 4.0.5 are necessary for consistency with the IST requirements of 10 CFR 50.55a. Section 10 CFR 50.55a(f)(5)(ii) requires licensees to submit an application to revise their technical specifications. The IST requirements of 10 CFR 50.55a(f) for nuclear power plants have been demonstrated and accepted by the NRC as providing an adequate level of protection to the public health and safety. The proposed changes to TS Surveillance Requirements 4.0.5, conform the technical specifications to the requirements of 10 CFR 50.55a(f) and will not adversely affect nuclear safety.

In addition, surveillance interval definitions for “biennially or every 2 years” as used in the ASME OM Code would be added to TS 4.0.5.b to ensure consistent application of the terms for ASME OM Code activities. The addition of these terms and frequencies to the TS will allow for their use in performing ASME OM Code activities and allow for the application of TS 4.0.2. These terms and frequencies are not used elsewhere in the existing TS, and accordingly, there will be no adverse effect on other existing TS requirements.

The revised technical specification bases pages reflect the proposed Technical Specification 4.0.5 changes and are provided in Enclosures 6 and 7.

## ENCLOSURE 2

### NO SIGNIFICANT HAZARDS CONSIDERATIONS

#### Introduction

Florida Power and Light Company (FPL) requests that Appendix A of Facility Operating Licenses DPR-31 and DPR-41 for Turkey Point Units 3 and 4, respectively, be amended to revise the references to the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, as the source of requirements for the inservice testing of ASME Code Class 1, 2, and 3 pumps and valves. Consistent with the Turkey Point Units 3 and 4 Inservice Testing program for the Fourth 10-Year interval, the appropriate reference is the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code).

#### No Significant Hazards Considerations

The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with a proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. A discussion of these standards as they relate to this change request follows.

***1. Will operation of the facility in accordance with this proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?***

The proposed changes do not involve a significant increase in the probability of an accident previously evaluated because no such accidents are affected by the proposed changes. The amendments application proposes to revise the Turkey Point Units 3 and 4 Technical Specifications Surveillance Requirement 4.0.5. The proposed changes would revise the technical specifications to conform to the requirements of 10 CFR 50.55a(f) regarding the inservice testing of pumps and valves for the Fourth 10-Year interval. The current Turkey Point Units 3 and 4 Technical Specifications reference the ASME Code, Section XI, requirements for the inservice testing of ASME Code Class 1, 2, and 3 pumps and valves. The proposed changes would reference the ASME OM Code, which is consistent with 10 CFR Section 50.55a(f). In addition, surveillance interval definitions for "biennially or every 2 years" as used in the ASME OM Code would be added to TS surveillance requirement 4.0.5.b to ensure consistent interpretation of the terms.

2. *Will operation of the facility in accordance with this proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?*

The proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated because no new or different accident initiators are introduced by these proposed changes.

3. *Will operation of the facility in accordance with this proposed change involve a significant reduction in a margin of safety?*

The proposed changes do not involve a significant reduction in a margin of safety because there are no changes to initial conditions contributing to accident severity or consequences. Thus, there is no significant reduction in a margin of safety.

Based on the reasoning presented above, FPL has determined that the requested changes involve no significant hazards consideration.

**ENCLOSURE 3**

**ENVIRONMENTAL CONSIDERATION**

The proposed license amendments are administrative in nature and do not affect the physical aspect or operation of components or structures within the restricted area as defined in 10 CFR Part 20. The proposed amendments involve no significant increase in the amounts and no significant increase in the types of any effluents that may be released off site, and no significant increase in individual or cumulative occupational radiation exposure. FPL has concluded that the proposed amendments involve no significant hazards consideration and therefore, meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Hence, pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment need not be prepared in connection with issuance of the amendments.

**ENCLOSURE 4**

**MARK-UP PAGES OF PROPOSED  
TECHNICAL SPECIFICATION CHANGES**

**Affected TS Pages**

**3/4 0-3**

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## APPLICABILITY

### SURVEILLANCE REQUIREMENTS

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4.0.1 Surveillance Requirements shall be met during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement. Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. Surveillance Requirements do not have to be performed on inoperable equipment.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with a maximum allowable extension not to exceed 25% of the surveillance interval. If an ACTION item requires periodic performance on a "once per . . ." basis, the above frequency extension applies to each performance after the initial performance. Exceptions to this Specification are stated in the individual Specifications.

4.0.3 If it is discovered that a Surveillance was not performed within its specified frequency, then compliance with the requirement to declare the Limiting Condition of Operation not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed.

If the surveillance is not performed within the delay period, the Limiting Condition of Operation must immediately be declared not met, and the applicable ACTION(s) must be entered.

When the Surveillance is performed within the delay period and the Surveillance is not met, the Limiting Condition of Operation must immediately be declared not met, and the applicable ACTION(s) must be entered.

4.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the Surveillance Requirement(s) associated with a Limiting Condition for Operation has been performed within the stated surveillance interval or as otherwise specified. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements.

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:

- a. ~~Inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a.~~

Inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code) and applicable Addenda as required by 10 CFR 50, Section 50.55a.

**APPLICABILITY**

**SURVEILLANCE REQUIREMENTS (CONTINUED)**

- b. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda and the ASME OM Code and applicable Addenda shall be applicable as follows in these Technical Specifications:

<u>ASME Boiler and Pressure Vessel Code and the ASME OM Code and applicable Addenda terminology for inservice inspection and testing activities</u>	<u>Required frequencies for performing inservice inspection and testing activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
<u>Biennially or every 2 years</u>	<u>At least once per 731 days</u>

- c. The provisions of Specification 4.0.2 are applicable to the above required frequencies for performing inservice inspection and testing activities.
- d. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements.
- e. Nothing in the ASME Boiler and Pressure Vessel Code or the ASME OM Code shall be construed to supersede the requirements of any Technical Specification.

4.0.6 Surveillance Requirements shall apply to each unit individually unless otherwise indicated as stated in Specification 3.0.5 for individual specifications or whenever certain portions of a specification contain surveillance parameters different for each unit, which will be identified in parentheses, footnotes or body of the requirement.

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**ENCLOSURE 5**

**CLEAN COPY OF PROPOSED TECHNICAL SPECIFICATIONS PAGES**

**Affected Pages**

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## APPLICABILITY

### SURVEILLANCE REQUIREMENTS

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4.0.1 Surveillance Requirements shall be met during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement. Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. Surveillance Requirements do not have to be performed on inoperable equipment.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with a maximum allowable extension not to exceed 25% of the surveillance interval. If an ACTION item requires periodic performance on a "once per . . ." basis, the above frequency extension applies to each performance after the initial performance. Exceptions to this Specification are stated in the individual Specifications.

4.0.3 If it is discovered that a Surveillance was not performed within its specified frequency, then compliance with the requirement to declare the Limiting Condition of Operation not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed.

If the surveillance is not performed within the delay period, the Limiting Condition of Operation must immediately be declared not met, and the applicable ACTION(s) must be entered.

When the Surveillance is performed within the delay period and the Surveillance is not met, the Limiting Condition of Operation must immediately be declared not met, and the applicable ACTION(s) must be entered.

4.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the Surveillance Requirement(s) associated with a Limiting Condition for Operation has been performed within the stated surveillance interval or as otherwise specified. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements.

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:

- a. Inservice inspection of ASME Code Class 1, 2, and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a.

Inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code) and applicable Addenda as required by 10 CFR 50, Section 50.55a.

APPLICABILITY

SURVEILLANCE REQUIREMENTS (CONTINUED)

- b. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda and the ASME OM Code and applicable Addenda shall be applicable as follows in these Technical Specifications:

<u>ASME Boiler and Pressure Vessel Code and the ASME OM Code and applicable Addenda terminology for inservice inspection and testing activities</u>	<u>Required frequencies for performing inservice inspection and testing activities</u>
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days
Biennially or every 2 years	At least once per 731 days

- c. The provisions of Specification 4.0.2 are applicable to the above required frequencies for performing inservice inspection and testing activities.
- d. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements.
- e. Nothing in the ASME Boiler and Pressure Vessel Code or the ASME OM Code shall be construed to supersede the requirements of any Technical Specification.

4.0.6 Surveillance Requirements shall apply to each unit individually unless otherwise indicated as stated in Specification 3.0.5 for individual specifications or whenever certain portions of a specification contain surveillance parameters different for each unit, which will be identified in parentheses, footnotes or body of the requirement.

Enclosure 6 to L-2004-008

**ENCLOSURE 6**

**MARK UP PAGES OF  
PROPOSED TECHNICAL SPECIFICATION BASES**

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**TECHNICAL SPECIFICATION BASES**

**3/4.0 APPLICABILITY (Continued)**

Specification 4.0.4 establishes the requirement that all applicable surveillances must be met before entry into an OPERATIONAL MODE or other condition of operation specified in the Applicability statement. The purpose of this specification is to ensure that system and component OPERABILITY requirements or parameter limits are met before entry into a MODE or condition for which these systems and components ensure safe operation of the facility. This provision applies to changes in OPERATIONAL MODES or other specified conditions associated with plant shutdown as well as startup.

Under the provisions of this specification, the applicable Surveillance Requirements must be performed within the specified surveillance interval to ensure that the Limiting Conditions for Operation are met during initial plant startup or following a plant outage.

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 4.0.4 do not apply because this would delay placing the facility in a lower MODE of operation.

Specification 4.0.5 establishes the requirement that inservice inspection of ASME Code Class 1, 2, and 3 components and ~~inservice testing of ASME Code Class 1, 2, and 3 pumps and valves~~ shall be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50.55a. Inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code) and applicable Addenda as required by 10 CFR 50.55a.

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code or the ASME OM Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout the Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. The requirements of Specification 4.0.4 to perform surveillance activities before entry into an OPERATIONAL MODE or other specified condition takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows pumps and valves to be tested up to one week after return to normal operation. The Technical Specification definition of OPERABLE does not allow a grace period before a component, that is not capable of performing its specified function, is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.

Specification 4.0.6 delineates the applicability of the surveillance activities to Unit 3 and Unit 4 operations.

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**TECHNICAL SPECIFICATION BASES**

**3/4.1 REACTIVITY CONTROL SYSTEMS (Continued)**

**3/4.1.2 BORATION BORATION SYSTEMS (Continued)**

The ACTION statement restrictions for the boration flow paths allow continued operation in mode 1 for a limited time period with either boration source flow path or the normal flow path to the RCS (via the regenerative heat exchanger) inoperable. In this case, the plant capability to borate and charge into the RCS is limited and the potential operational impact of this limitation on mode 1 operation must be addressed. With both the flow path from the boric acid tanks and the regenerative heat exchanger flow path inoperable, immediate initiation of action to go to COLD SHUTDOWN is required but no time is specified for the mode reduction due to the reduced plant capability with these flow paths inoperable.

Two charging pumps are required to be OPERABLE to ensure single functional capability in the event an assumed failure renders one of the pumps or power supplies inoperable. Each bus supplying the pumps can be fed from either the Emergency Diesel Generator or the offsite grid through a startup transformer.

The boration capability of either flow path is sufficient to provide the required SHUTDOWN MARGIN in accordance with Figure 3.1-1 from expected operating conditions after xenon decay and cooldown to 200°F. The maximum expected boration capability requirement occurs at EOL peak xenon conditions without letdown such that boration occurs only during the makeup provided for coolant contraction. This requirement can be met for a range of boric acid concentrations in the boric acid tank and the refueling water storage tank. The range of boric acid tanks requirements is defined by Technical Specification 3.1.2.5.

With the RCS temperature below 200°F, one boron injection source flow path is acceptable without single failure consideration on the basis of the stable reactivity condition of the reactor and the additional restrictions prohibiting CORE ALTERATIONS and positive reactivity changes in the event the single boron injection system source flow path becomes inoperable.

The boron capability required below 200°F is sufficient to provide a SHUTDOWN MARGIN of 1%  $\Delta k/k$  after xenon decay and cooldown from 200°F to 140°F. This condition requires either 2,900 gallons of at least 3.0 wt% (5245 ppm) borated water per unit from the boric acid storage tanks or 20,000 gallons of 1950 ppm borated water from the RWST.

The charging pumps are demonstrated to be OPERABLE by testing as required by Section XI of the ASME OM code or by specific surveillance requirements in the specification. These requirements are adequate to determine OPERABILITY because no safety analysis assumption relating to the charging pump performance is more restrictive than these acceptance criteria for the pumps.

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**TECHNICAL SPECIFICATION BASES**

**3/4.4 REACTOR COOLANT SYSTEM (Continued)**

**3/4.4.2 SAFETY VALVES (Continued)**

Demonstration of the safety valves' lift settings will occur only during shutdown and will be performed in accordance with the provisions of Section ~~XI~~ of the ASME OM Boiler and Pressure Code. The pressurizer code safety valves' lift settings allows a +2%, -3% setpoint tolerance for OPERABILITY; however, the valves are reset to within  $\pm 1\%$  during the surveillance to allow for drift.

**3/4.4.3 PRESSURIZER**

The 12-hour periodic surveillance is sufficient to ensure that the maximum water volume parameter is restored to within its limit following expected transient operation. The maximum water volume (1133 cubic feet) ensures that a steam bubble is formed and thus the RCS is not a hydraulically solid system. The requirement that both backup pressurizer heater groups be OPERABLE enhances the capability of the plant to control Reactor Coolant System pressure and establish natural circulation.

**3/4.4.4 RELIEF VALVES**

The opening of the power-operated relief valves (PORVs) fulfills no safety-related function and no credit is taken for their operation in the safety analysis for MODE 1, 2 or 3. Equipment necessary to establish PORV operability in Modes 1 and 2 is limited to Vital DC power and the Instrument Air system. Equipment necessary to establish block valve operability is limited to an AC power source. Each PORV has a remotely operated block valve to provide a positive shutoff capability should a PORV fail in the open position.

The OPERABILITY of the PORVs and block valves is determined on the basis of their being capable of performing the following functions:

- A. Manual control of PORVs to control reactor coolant system pressure. This is a function that is used as a back-up for the steam generator tube rupture and to support plant shutdown in the event of an Appendix R fire. These functions are considered to be important-to-safety, or Quality Related per the FPL Quality Assurance program.
- B. Maintaining the integrity of the reactor coolant pressure boundary. This is a function that is related to controlling identified leakage and ensuring the ability to detect unidentified reactor coolant pressure boundary leakage.

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**ENCLOSURE 7**

**CLEAN COPY OF  
PROPOSED TECHNICAL SPECIFICATIONS BASES PAGES**

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**TECHNICAL SPECIFICATION BASES**

**3/4.0 APPLICABILITY (Continued)**

Specification 4.0.4 establishes the requirement that all applicable surveillances must be met before entry into an OPERATIONAL MODE or other condition of operation specified in the Applicability statement. The purpose of this specification is to ensure that system and component OPERABILITY requirements or parameter limits are met before entry into a MODE or condition for which these systems and components ensure safe operation of the facility. This provision applies to changes in OPERATIONAL MODES or other specified conditions associated with plant shutdown as well as startup.

Under the provisions of this specification, the applicable Surveillance Requirements must be performed within the specified surveillance interval to ensure that the Limiting Conditions for Operation are met during initial plant startup or following a plant outage.

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 4.0.4 do not apply because this would delay placing the facility in a lower MODE of operation.

Specification 4.0.5 establishes the requirement that inservice inspection of ASME Code Class 1, 2, and 3 components shall be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50.55a. Inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with the ASME Code for Operation and Maintenance of Nuclear Power Plants (ASME OM Code) and applicable Addenda as required by 10 CFR 50.55a.

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code or the ASME OM Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout the Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. The requirements of Specification 4.0.4 to perform surveillance activities before entry into an OPERATIONAL MODE or other specified condition takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows pumps and valves to be tested up to one week after return to normal operation. The Technical Specification definition of OPERABLE does not allow a grace period before a component, that is not capable of performing its specified function, is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.

Specification 4.0.6 delineates the applicability of the surveillance activities to Unit 3 and Unit 4 operations.

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**TECHNICAL SPECIFICATION BASES**

**3/4.1 REACTIVITY CONTROL SYSTEMS (Continued)**

**3/4.1.2 BORATION BORATION SYSTEMS (Continued)**

The ACTION statement restrictions for the boration flow paths allow continued operation in mode 1 for a limited time period with either boration source flow path or the normal flow path to the RCS (via the regenerative heat exchanger) inoperable. In this case, the plant capability to borate and charge into the RCS is limited and the potential operational impact of this limitation on mode 1 operation must be addressed. With both the flow path from the boric acid tanks and the regenerative heat exchanger flow path inoperable, immediate initiation of action to go to COLD SHUTDOWN is required but no time is specified for the mode reduction due to the reduced plant capability with these flow paths inoperable.

Two charging pumps are required to be OPERABLE to ensure single functional capability in the event an assumed failure renders one of the pumps or power supplies inoperable. Each bus supplying the pumps can be fed from either the Emergency Diesel Generator or the offsite grid through a startup transformer.

The boration capability of either flow path is sufficient to provide the required SHUTDOWN MARGIN in accordance with Figure 3.1-1 from expected operating conditions after xenon decay and cooldown to 200°F. The maximum expected boration capability requirement occurs at EOL peak xenon conditions without letdown such that boration occurs only during the makeup provided for coolant contraction. This requirement can be met for a range of boric acid concentrations in the boric acid tank and the refueling water storage tank. The range of boric acid tanks requirements is defined by Technical Specification 3.1.2.5.

With the RCS temperature below 200°F, one boron injection source flow path is acceptable without single failure consideration on the basis of the stable reactivity condition of the reactor and the additional restrictions prohibiting CORE ALTERATIONS and positive reactivity changes in the event the single boron injection system source flow path becomes inoperable.

The boron capability required below 200°F is sufficient to provide a SHUTDOWN MARGIN of 1%  $\Delta k/k$  after xenon decay and cooldown from 200°F to 140°F. This condition requires either 2,900 gallons of at least 3.0 wt% (5245 ppm) borated water per unit from the boric acid storage tanks or 20,000 gallons of 1950 ppm borated water from the RWST.

The charging pumps are demonstrated to be OPERABLE by testing as required by the ASME OM code or by specific surveillance requirements in the specification. These requirements are adequate to determine OPERABILITY because no safety analysis assumption relating to the charging pump performance is more restrictive than these acceptance criteria for the pumps.

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**ATTACHMENT 1**  
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**TECHNICAL SPECIFICATION BASES**

**3/4.4 REACTOR COOLANT SYSTEM (Continued)**

**3/4.4.2 SAFETY VALVES (Continued)**

Demonstration of the safety valves' lift settings will occur only during shutdown and will be performed in accordance with the provisions of the ASME OM Code. The pressurizer code safety valves' lift settings allows a +2%, -3% setpoint tolerance for OPERABILITY; however, the valves are reset to within  $\pm 1\%$  during the surveillance to allow for drift.

**3/4.4.3 PRESSURIZER**

The 12-hour periodic surveillance is sufficient to ensure that the maximum water volume parameter is restored to within its limit following expected transient operation. The maximum water volume (1133 cubic feet) ensures that a steam bubble is formed and thus the RCS is not a hydraulically solid system. The requirement that both backup pressurizer heater groups be OPERABLE enhances the capability of the plant to control Reactor Coolant System pressure and establish natural circulation.

**3/4.4.4 RELIEF VALVES**

The opening of the power-operated relief valves (PORVs) fulfills no safety-related function and no credit is taken for their operation in the safety analysis for MODE 1, 2 or 3. Equipment necessary to establish PORV operability in Modes 1 and 2 is limited to Vital DC power and the Instrument Air system. Equipment necessary to establish block valve operability is limited to an AC power source. Each PORV has a remotely operated block valve to provide a positive shutoff capability should a PORV fail in the open position.

The OPERABILITY of the PORVs and block valves is determined on the basis of their being capable of performing the following functions:

- A. Manual control of PORVs to control reactor coolant system pressure. This is a function that is used as a back-up for the steam generator tube rupture and to support plant shutdown in the event of an Appendix R fire. These functions are considered to be important-to-safety, or Quality Related per the FPL Quality Assurance program.
- B. Maintaining the integrity of the reactor coolant pressure boundary. This is a function that is related to controlling identified leakage and ensuring the ability to detect unidentified reactor coolant pressure boundary leakage.