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SUBJECT: Forwards NSHC & revised Tech Specs re pump & valve testing program,per 871116 request.

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DECEMBER 30 1987

L-87-541

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

Gentlemen:

Re: St. Lucie Unit 1
Docket Nos. 50-335 and 50-389
Proposed License Amendment
Pump and Valve Testing Program Technical Specifications

By letter L-87-469, dated November 16, 1987, Florida Power & Light Company (FPL) proposed to revise various Technical Specifications with respect to the St. Lucie 1 Pump and Valve Program.

The proposed amendment was discussed with the NRC Staff in a conference call on December 22, 1987. During the conference call, it was requested that FPL amplify the no significant hazards consideration submitted in FPL's November 16, 1987 letter. Also, various administrative corrections were discussed with respect to the same letter. The attached no significant hazards consideration and the administrative correction replace Attachments 2 and 3 of FPL letter L-87-469 dated November 16, 1987.

If additional information is required about this submittal, please contact us.

Very truly yours,

C. O. Woody
Executive Vice President

COW/EJW/gp

Attachments

cc: Dr. J. Nelson Grace, Regional Administrator, Region II, USNRC
Mr. Lyle Jerrett, Florida Department of Health and Rehabilitative Services
Senior Resident Inspector, USNRC, St. Lucie Plant

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ATTACHMENT 2

EVALUATION

As required by 10 CFR 50.55a(g), FPL updated the Inservice Inspection (ISI) and Inservice Testing (IST) programs, together with proposed Technical Specification amendments for St. Lucie Unit 1, to the requirements of the 1974 Edition through Summer 1975 Addenda of the ASME Boiler and Pressure Vessel Code. The ISI and IST programs were submitted to the NRC in July and September of 1977. On December 20, 1977, the NRC granted relief, on an interim basis, pending completion of a detailed review of the programs. On April 2, 1985, the NRC issued a safety evaluation on the St. Lucie Unit 1 IST Program, and, in particular, the requests for relief from regulatory requirements applicable to the program.

The proposed amendments which were submitted in 1977, removed reference to a specific Edition and Addenda of Section XI of the ASME Boiler and Pressure Vessel Code for inservice testing and, instead, proposed a new Specification 4.0.5 addressing Surveillance Requirements for inservice inspection and testing.

The subject revised amendment maintains a similar format as was originally submitted. Differences which exist between the original 1977 submittals and the revised submittals are a result of using a more recent revision of the Combustion Engineering - Standard Technical Specifications (CE-STS).

The following Specifications are either added, revised, or deleted with respect to the St. Lucie Unit 1 Pump and Valve Testing Program:

Specification	Revison
4.0.5	New Specification 4.0.5 is added to specify the pump and valve test requirements. This addition reflects wording in the CE-STS.
4.1.2.1.a.1	Boration Systems - Shutdown Flow Paths: The surveillance activity for testing each power operated or automatic valve in the flow path required for boron injection has been removed from the technical specifications. This activity is included in the St. Lucie Unit 1 Pump and Valve Program.
4.1.2.2.a.1	Boration Systems - Operation Flow Paths: The surveillance activity for testing each power operated or automatic valve in the flow path required for boron injection has been removed from the technical specifications. This activity is included in the St.Lucie Unit 1 Pump and Valve Program.
4.1.2.2.c.1	Boration Systems - Operating Flow Paths: The 18 month surveillance activity for cycling each power operated valve in the flow path that is <u>not</u> testable during plant operation has been removed from the technical specifications. This activity is included in St. Lucie Unit 1 Pump and Valve Program.

Specification	Revison (con't)
4.1.2.3	Boration Systems - Charging Pumps (shutdown): The surveillance activities of starting the pump and verifying pump operation for at least 15 minutes have been removed from the technical specifications. This activity is included in St. Lucie Unit 1 Pump and Valve Program. Also, the surveillance activity of verifying electrical power form an OPERABLE emergency bus has been removed. The operability requirement in Modes 5 and 6 for electrical power sources are maintained as required in the Electrical Power System portion of the St. Lucie Unit 1 Technical Specifications. The new Surveillance Requirements refer to testing pursuant to Specification 4.0.5 (ASME Pump and Valve test requirements).
4.1.2.4	Boration Systems - Charging Pumps (operating): The surveillance activities of starting the pump and verifying pump operation for at least 15 minutes have been removed from the technical specifications. These activities are included in the St. Lucie Unit 1 Pump and Valve Program. The new Surveillance Requirements refer to testing pursuant to Specification 4.0.5 (ASME Pump and Valve test requirements).
4.1.2.5	Boration Systems - Boric Acid Pumps (shutdown): The surveillance activities of starting the pump and verifying pump operation for at least 15 minutes have been removed from the Technical Specifications. These activities are included in the St. Lucie Unit 1 Pump and Valve Program. The new Surveillance Requirement refers to testing pursuant to Specification 4.0.5 (ASME Pump and Valve test requirements).
4.1.2.6	Boration Systems - Boric Acid Pumps (operating): The surveillance activities of starting the pump and verifying pump operation for at least 15 minutes have been removed from the Technical Specifications. These activities are included in the St. Lucie Unit 1 Pump and Valve Program. The new Surveillance Requirement refers to testing pursuant to Specification 4.0.5 (ASME Pump and Valve test requirements).
4.4.2	Reactor Coolant System - Safety Valves (shutdown): The reference to Surveillance Requirement 4.4.3 (Surveillance Requirement for Safety Valves-Operating) has been removed. The safety valves will be demonstrated OPERABLE in accordance with Section XI of the ASME Boiler and Pressure Vessel Code as referenced in new Specification 4.0.5. This activity is included in the St. Lucie Unit 1 Pump and Valve Program.

Specification	Revison (con't)
4.4.3	Reactor Coolant System - Safety Valves (operating): Reference to a specific Edition and Addenda of the ASME Code has been removed. The safety valves will be demonstrated OPERABLE in accordance with Section XI of the ASME Boiler and Pressure Vessel Code as referenced in new Specification 4.0.5. This activity is included in the St. Lucie Unit 1 Pump and Valve Program.
4.5.2	Emergency Core Cooling Systems - ECCS Subsystems - Tavg $\geq$ 325° F: The surveillance activities of starting both the HPSI and LPSI pumps and verifying pump operation for at least 15 minutes have been removed. These activities are included in the St. Lucie Unit 1 Pump and Valve Program. The surveillance activities of verifying the HPSI and LPSI pump discharge pressures; surveillance items 4.5.2.b.1.b and 4.5.2.b.2.b have been moved to surveillance items f.1 and f.2, respectively. The new surveillance items require verification of the total developed head on recirculation flow for both the HPSI and LPSI pumps. The original discharge pressures were used to calculate the total developed head for the pumps. The surveillance activities of cycling each testable, power operated valve in the flow path and cycling each valve in the flow path that is not testable during plant operation have been removed. These activities are included in the St. Lucie Unit 1 Pump and Valve Program. The surveillance activity of verifying electrical power from an OPERABLE emergency bus has been removed. The operability requirements for electrical power sources are maintained as required in the Electrical Power System portion of the St. Lucie Unit 1 Technical Specifications. The surveillance activity of verifying that the containment sump isolation valves open upon a recirculation actuation signal has been changed from a 31 day surveillance (4.5.2.b.3) to a new 18 month surveillance (4.5.2.e.3). The containment sump isolation valves are tested in accordance with the St. Lucie Unit 1 Valve Program and will continue to be tested on a frequency consistent with the approved Edition and Addenda of the ASME Code. The basis for verifying these valves open on a recirculation isolation signal every 31 days has not been determined. Therefore, it is proposed to perform this surveillance activity on an 18-month interval, consistent with the CE-STS, St. Lucie Unit 2 Technical Specifications and the periodic integrated test of the Engineered Safety Features.

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ATTACHMENT 3

NO SIGNIFICANT HAZARDS CONSIDERATION

The standards used to arrive at a determination that a request for amendment involves no significant hazards consideration are included in the Commission's regulations, 10 CFR 50.92, which states that no significant hazards considerations are involved if the operation of the facility in accordance with the 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. Each standard is discussed as follows:

(1) Operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated.

The addition to Technical Specification Section 4.0, Surveillance Requirements, is a change to achieve consistency between the St. Lucie Unit 1 Technical Specifications and the St. Lucie Unit 2 Technical Specifications. The intent of the Specifications has not been changed. The change incorporates the format/wording of the Combustion Engineering - Standard Technical Specifications and the St. Lucie Unit 2 Technical Specifications which have been previously approved by the staff.

Reference to Surveillance Requirements of a specific Edition and Addenda of Section XI of the ASME Boiler and Pressure Vessel Code have been removed. A new Specification 4.0.5 has been added to provide Surveillance Requirements for Inservice Testing (IST) of ASME Code Class 1, 2 and 3 Components in accordance with Section XI of the Code and applicable addenda as required by 10 CFR 50.55a(g). The addition of a new Specification 4.0.5 will establish the relationship between the Technical Specification and the Code of Federal Regulations that deal with IST and the ASME Code. The pump and valve surveillance activities which have been removed from the Technical Specifications are contained in Section XI of the ASME Code and, therefore, are included in the St. Lucie Unit 1 Pump and Valve Program. The IST program will remain in effect as a licensee-controlled document referenced in the Technical Specifications instead of the program itself being a Technical Specification.

Requirements of the ASME Section XI Inservice Testing Program and, therefore, the St. Lucie Unit 1 Inservice Testing Program, provide for measurement and evaluation of pump mechanical characteristics as well as additional measurement and evaluation of pump hydraulic characteristics. These activities are performed to determine pump operational readiness. Also, requirements of the ASME Section XI Testing Program provide for additional measurement and evaluation for determining valve operational readiness. The St. Lucie Unit 1 Inservice Testing Program provides a level of quality in testing of pumps and valves consistent with recent versions of the ASME Section XI Code and,

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therefore, the removal of certain pump and valve surveillance activities from the Technical Specifications does not involve a reduction in the level of quality in testing of pumps and valves at St. Lucie Unit 1.

The surveillance activity of verifying electrical power from an operable emergency bus has been removed from individual specifications in that the operability requirements for electrical power sources are maintained as required for the Electrical Power System portion of the St. Lucie Unit 1 Technical Specifications.

The surveillance activity of verifying that the containment sump isolation valves open upon a Recirculation Actuation Signal has been changed from a 31-day surveillance activity to an 18-month surveillance activity. This change is being made to achieve consistency with the Combustion Engineering-Standard Technical Specifications and the St. Lucie Unit 2 Technical Specifications. As required by the St. Lucie Unit 1 Technical Specifications, the manual recirculation actuation signal feature is tested on an 18 month frequency as are the other manual engineered safety features. Also, as required by the ASME Valve Program the containment sump isolation valves are tested on a quarterly basis. A review of the surveillance activity sheets for verifying that the containment sump isolation valves open upon a recirculation actuation signal has been completed for an 18 month period from May 1986 to October, 1987 and no failures were observed. The containment sump isolations valves on St. Lucie Unit 1 are similar to the valves on St. Lucie Unit 2 in that they are 24 inch valves manufactured by Henry Pratt.

An addition to the Turbine Cycle-Safety Valves action statement has been made to show that the provisions of Specification 3.0.4 are not applicable for entry into an OPERATIONAL MODE. This change is being made to achieve consistency with the Combustion Engineering-Standard Technical Specifications. This is consistent with the Technical Specifications, in that Startup and/or Power Operation is allowable with safety valves inoperable within the limitations of the ACTION requirements.

Therefore, based on the above, the changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

(2) Use of the modified specification would not create the possibility of a new or different kind of accident from any accident previously evaluated.

The addition to Technical Specification Section 4.0, Surveillance Requirements, is a change to achieve consistency between the St. Lucie Unit 1 Technical Specifications and the St. Lucie Unit 2 Technical Specifications. The intent of the Specifications has not been changed. The change incorporates the format/wording of the Combustion Engineering - Standard Technical Specifications and the St. Lucie Unit 2 Technical Specifications which have been previously approved by the staff.

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Reference to Surveillance Requirements of a specific Edition and Addenda of Section XI of the ASME Boiler and Pressure Vessel Code have been removed. A new Specification 4.0.5 has been added to provide Surveillance Requirements for Inservice Testing of ASME Code Class 1, 2 and 3 Components in accordance with Section XI of the Code and applicable addenda as required by 10 CFR 50.55a(g). The pump and valve surveillance activities which have been removed from the Technical Specifications are contained in Section XI of the ASME Code and, therefore, are included in the St. Lucie Unit 1 Pump and Valve Program. The IST program will still be governed by the Commission's rules and regulations.

Requirements of the ASME Section XI Inservice Testing Program and, therefore, the St. Lucie Unit 1 Inservice Testing Program, provide for measurement and evaluation of pump mechanical characteristics as well as additional measurement and evaluation of pump hydraulic characteristics. These activities are performed to determine pump operational readiness. Also, requirements of the ASME Section XI Testing Program provide for additional measurement and evaluation for determining valve operational readiness. The St. Lucie Unit 1 Inservice Testing Program provides a level of quality in testing of pumps and valves consistent with recent versions of the ASME Section XI Code and, therefore, the removal of certain pump and valve surveillance activities from the Technical Specifications does not involve a reduction in the level of quality in testing of pumps and valves at St. Lucie Unit 1.

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that Startup and/or Power Operation is allowable with safety valves inoperable within the limitations of the ACTION requirements.

Therefore, based on the above, the changes would not create the possibility of a new or different kind of accident from any accident previously evaluated.

(3) Use of the modified specification would not involve a significant reduction in a margin of safety.

The addition to Technical Specification Section 4.0, Surveillance Requirements, is a change to achieve consistency between the St. Lucie Unit 1 Technical Specifications and the St. Lucie Unit 2 Technical Specifications. The intent of the Specifications has not been changed. The change incorporates the format/wording of the Combustion Engineering - Standard Technical Specifications and the St. Lucie Unit 2 Technical Specifications which have previously been approved by the staff.

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Therefore, based on the above, the changes do not involve a significant reduction in a margin of safety.

In conclusion, we have determined that the amendment request does not (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (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; and therefore does not involve a significant hazards consideration.