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50-251 Turkey Point Plant, Unit 4, Florida Power and Light C 05000251
AUTH.NAME AUTHOR AFFILIATION
PLUNKETT,T.F. Florida Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION
Document Control Branch (Document Control Desk)

SUBJECT: Application for amends to licenses DPR-31 & DPR-41,revising TS 4.6.2.1.d, "CSS" surveillance interval for air or smoke flow test through CS header from at least once per 5 yrs to at least once per 10 yrs,per GL 93-05 & NUREG-1366.

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FPL

APR 19 1994

L-94-036
10 CFR 50.36
10 CFR 50.90

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

Gentlemen:

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Proposed License Amendments -
Containment Spray System Surveillance Requirements

In accordance with 10 CFR 50.90, Florida Power and Light Company (FPL) requests that Appendix A of Facility Operating Licenses DPR-31 and DPR-41 be amended to revise the Turkey Point Units 3 and 4 Technical Specification (TS) 4.6.2.1 d., Containment Spray Systems. The proposed license amendments will change the surveillance interval specified for air or smoke flow test through the containment spray header from "at least once per 5 years" to "at least once per 10 years." The proposed surveillance interval is consistent with both Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation" and NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements." Approval of the proposed amendments is requested by December 31, 1994.

FPL believes that these proposed amendments are consistent with the Executive Order to reduce regulatory burden and as such is proposed consistent with the generic line item improvement.

FPL has determined that the proposed license amendments do not involve a significant hazards consideration pursuant to 10 CFR 50.92. A description of the amendment request is provided in Attachment 1. The no significant hazards determination in support of the proposed Technical Specification change is provided in Attachment 2. Attachment 3 provides the proposed revised Technical Specification changes. Attachment 4 provides the revised corrected Technical Specifications page.

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. The proposed amendments have been reviewed by the Turkey Point Plant Nuclear Safety Committee and the FPL Company Nuclear Review Board.

Should there be any questions on this request, please contact us.

Very truly yours,

T.F. Plunkett
Vice President
Turkey Point Plant

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TFP/RJT/rt

Attachments

cc: S. D. Ebneter, Regional Administrator, Region II, USNRC
T. P. Johnson, Senior Resident Inspector, USNRC, Turkey Point
W. A. Passetti, Florida Department of Health and Rehabilitative Services

STATE OF FLORIDA)
) ss.
COUNTY OF DADE)

T. F. Plunkett being first duly sworn, deposes and says:

That he is Vice President, Turkey Point Nuclear Plant, of Florida Power and Light Company, the Licensee herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information and belief, and that he is authorized to execute the document on behalf of said Licensee.

T. F. Plunkett

Subscribed and sworn to before me this

12 day of April, 1994.

Cheryl A Kelly

CHERYL A. KELLY

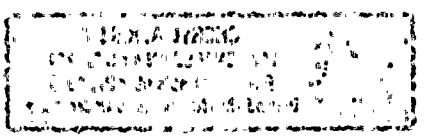
Name of Notary Public (Type or Print)

NOTARY PUBLIC, in and for the County of Dade, State of Florida

CHERYL A. KELLY
MY COMMISSION # CC 223781
EXPIRES: September 27, 1996
Bonded Thru Notary Public Underwriters

My Commission expires _____
Commission No. _____

T. F. Plunkett is personally known to me.



ATTACHMENT 1

DESCRIPTION OF AMENDMENTS REQUEST

DESCRIPTION OF AMENDMENTS REQUEST

Introduction

Florida Power and Light Company (FPL) proposes to change Turkey Point Units 3 and 4 Technical Specification (TS) 4.6.2.1 d., Containment Spray Systems. The proposed license amendments will change the surveillance interval specified for air or smoke flow test through the containment spray header from "at least once per 5 years" to "at least once per 10 years." The revision will extend the surveillance interval for performing these flow tests through each spray header to verify each spray nozzle is unobstructed.

The proposed surveillance interval is consistent with both Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation" and NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements." FPL considers these proposed amendments as line-item improvements to the existing facility Technical Specifications.

Description of Proposed Changes

FPL proposes to change the following Technical Specification in support of the proposed amendments.

1. TS 4.6.2.1 d.: Change the surveillance interval from "at least once per 5 years" to "at least once per 10 years", such that the revised Technical Specification will read as follows:

> "At least once per 10 years by performing an air or smoke flow test through each spray header and verifying each spray nozzle is unobstructed."

Justification: In accordance with Generic Letter 93-05, FPL proposes to extend the surveillance interval for the air or smoke flow test to 10 years. In NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements", the NRC discussed problems encountered with the containment spray system that had been uncovered by means of testing. Three cases were specifically identified and in all cases the problem involved a construction error. One of the three cases involved Turkey Point Unit 4. In August 1978, while preparing for a spray nozzle flow test FPL discovered that the restricting orifices were not installed in the branch connections from the containment spray headers to the emergency filter spray system. This incident has since been corrected and no problems have been encountered since.

In Generic Letter 93-05, San Onofre Unit 1 reported to the NRC that a containment spray system (CSS) air flow test indicated that several nozzles were blocked. Investigation of this incident revealed that the obstructions were the result of a coating material that had been applied to the inner diameter (ID)

surface of the carbon steel CSS piping 14 years earlier. Although Turkey Point Units 3 and 4 containment spray piping is constructed of carbon steel material, no coating has been applied to the ID surface of the piping. As a result, Turkey Point has not experienced obstruction of flow through the spray nozzles.

System Description

Turkey Point's Units 3 and 4 containment spray system is designed to spray cool water into the containment atmosphere when appropriate in the event of a loss-of-coolant accident and thereby ensure that the containment pressure does not exceed its licensed design value. This system is composed of two containment spray pumps, two spray ring headers and nozzles, and the necessary piping and valves. The system also utilizes two residual heat removal pumps, two residual heat exchangers and associated valves and piping of the safety injection system for the long term recirculation phase of containment spray. The containment spray headers consist of two main headers, both of which contain five straight parallel horizontal fingers. Each header contains typically 86 nozzles, manufactured from brass. Turkey Point Units 3 and 4 containment spray header piping is constructed of carbon steel with no coating applied.

Bases of Proposed Changes

Existing TS 4.6.2.1 d. requires that the containment spray system be demonstrated operable at least once per 5 years by performing an air or smoke flow test through each spray header and verifying that each spray header is unobstructed. This testing yields no quantitative data on flowrates exiting the nozzles and only verifies that there is flow. NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements", discussed containment spray system inoperabilities that had been identified by surveillance testing. The only problems found in PWR containment spray systems during testing were either those that were construction related or, in the case of San Onofre Unit 1, those that were as a result of nozzle clogging by sodium silicate, a coating material that was applied to the inner diameter surface of the carbon steel piping. The incident at San Onofre Unit 1 is discussed further, in a following paragraph. As discussed above, neither of these cases is a problem at Turkey Point Units 3 and 4.

Seven surveillance air flow tests have been performed at Turkey Point Units 3 and 4 from 1978 through 1991. Either Hastings Air-Meters or infrared thermography were used for flow verification and all tests clearly demonstrated that obstructions did not exist for any of the spray nozzles. FPL considers the findings and recommendations of Generic Letter 93-05 and NUREG-1366 with respect to the containment spray header air or smoke flow test are compatible with plant operating experience at both Turkey Point Units 3 and 4.

On June 11, 1991, San Onofre Unit 1 reported to the NRC that a containment spray system air flow test indicated that several nozzles were blocked. Investigation of this incident revealed that the obstructions were the result of a coating material that had been applied to the inner diameter surface of the plant's carbon steel CSS piping 14 years earlier (ref: Generic Letter 93-05). This coating material was identified as sodium silicate. The containment spray header piping at Turkey Point Units 3 and 4 are constructed of carbon steel with no coating applied to the inner diameter surface of the CSS piping. The containment spray nozzles are constructed of bronze. The incident involving coated, carbon steel piping is not applicable to the Turkey Point containment spray systems and FPL considers the bases (Generic Letter 93-05) for the staff recommendation to extend the smoke or air flow test interval to 10 years is applicable to both Turkey Point Units 3 and 4.

The proposed interval for the containment spray header smoke or air flow test is consistent with the revised Standard Technical Specifications for Westinghouse plants, NUREG-1431, wherein the 10 year interval is considered adequate due to the passive design of the spray nozzles.

ATTACHMENT 2

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

Description of Proposed License Amendments

Florida Power and Light Company (FPL) proposes to change Turkey Point Units 3 and 4 Technical Specification (TS) 4.6.2.1 d., Containment Spray Systems. The proposed license amendments will change the surveillance interval specified for air or smoke flow test through the Containment spray header from "at least once per 5 years" to "at least once per 10 years." The revision will extend the surveillance interval for performing these flow tests through each spray header to verify each spray nozzle is unobstructed.

The proposed surveillance interval is consistent with both Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation" and NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements." FPL considers these proposed amendments as line-item improvements to the existing facility TS.

Introduction

The Nuclear Regulatory Commission has provided standards for determining whether a significant hazards consideration exists (10 CFR 50.92 (c)). A proposed amendment to an operating license for a facility involves no significant hazards consideration, if 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 below for the proposed amendment.

Discussion

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

The proposed amendments extend the surveillance interval required for performing a qualitative smoke or air flow test on the containment spray headers. This surveillance test is not designed to track degradation of equipment by monitoring or trending performance. The air and smoke flow test is a test of the passive design of the containment spray nozzles, i.e., the testing demonstrates whether or not the nozzles are clogged. A single failure rendering a significant number of nozzles inoperable as a result of clogging is considered not credible. The changes being proposed do not affect assumptions contained in plant safety analyses, the physical design and/or operation of the plant, nor do they affect Technical Specifications that preserve safety analysis assumptions. Therefore, operation of

the facility in accordance with the proposed amendments would not involve a significant increase in the probability or consequences of an accident previously analyzed.

(2) **Operation of the facility in accordance with the proposed amendments would not create the possibility of a new or different kind of accident from any accident previously evaluated.**

The proposed amendments extend the surveillance interval required for performing a qualitative smoke or air flow test on the containment spray headers. The changes being proposed will not change the physical plant or the modes of plant operation defined in the Facility License. The change does not involve the addition or modification of equipment nor does it alter the design or operation of plant systems. Therefore, operation of the facility in accordance with the proposed amendments would not create the possibility of a new or different kind of accident from any accident previously evaluated.

(3) **Operation of the facility in accordance with the proposed amendments would not involve a significant reduction in a margin of safety.**

The revised surveillance interval proposed by this submittal will not change or otherwise influence the degree of operability assumed for the containment spray system in the plant safety analyses. The changes being proposed do not alter the bases for assurance that safety-related activities are performed correctly or the basis for any Technical Specification that is related to the establishment of or maintenance of a safety margin. Therefore, operation of the facility in accordance with the proposed amendments would not involve a significant reduction in a margin of safety.

Summary

Based on the above discussion, FPL has determined that the proposed amendments 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 the proposed changes do not involve a significant hazards consideration as defined in 10 CFR 50.92.