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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 3.9.4 & 1.9,allowing containment personnel airlock doors to be open during core operations & movement of irradiated fuel in containment.

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FPL

OCT 20 1994

L-94-159
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 -
Personnel Airlock Open During Core Alterations and
Definition of Core Alterations

In accordance with Title 10 Code of Federal Regulations §50.90 (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 Specifications (TS) 3.9.4, Containment Building Penetrations and TS 1.9, Definitions - CORE ALTERATIONS. TS 3.9.4, "Containment Building Penetrations," requires that the containment penetrations be closed during core alterations and movement of irradiated fuel in containment. The proposed change would allow the containment personnel airlock doors to be open during core alterations and movement of irradiated fuel in containment, provided certain conditions are met. In addition, FPL proposes a revision to a footnote of TS 3.9.4, to remove the description of the purpose for imposing the administrative controls. The proposed change to TS 1.9, "CORE ALTERATIONS" (Definition) is to revise the definition of CORE ALTERATIONS to address only those activities which may, in actuality, affect core reactivity.

FPL has determined that these proposed amendments are consistent with the Executive Order to reduce regulatory burden and as such are proposed as a Cost Beneficial Licensing Action (CBLA) with estimated savings over the remaining licensed operating terms of both units, in excess of one-hundred thousand dollars.

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 amendments 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.

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.

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

Very truly yours,

T.F. Plunkett
Vice President
Turkey Point Plant

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
20 day of OCT, 1994.

Cheryl A Kelly

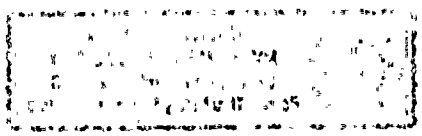
Name of Notary Public (Type or Print)

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 revise the Turkey Point Units 3 and 4 Technical Specification (TS) 1.9, Definitions - CORE ALTERATIONS. Currently, TS 1.9 states that "CORE ALTERATIONS shall be the movement or manipulation of any component within the reactor pressure vessel with the vessel head removed and fuel in the vessel." The proposed change to the definition of "CORE ALTERATIONS" would revise the definition to only address activities which may, in actuality, affect core reactivity.

In addition, FPL proposes to revise TS 3.9.4, Containment Building Penetrations. Currently TS 3.9.4 requires that a Personnel Airlock (PAL) door be closed during core alterations and movement of irradiated fuel within containment. The proposed change would allow both containment PAL doors to be open during core alterations and movement of irradiated fuel in containment provided (a) that at least one personnel airlock door is capable of being closed; (b) the plant is in Mode 6 with at least 23 feet of water above the fuel; and (c) a designated individual is available outside the PAL to close the door. Operability of the containment PAL door includes the requirements that the door is capable of being closed and that any cables or hoses across the PAL door have quick-disconnects to ensure the door is capable of being closed in a timely manner. FPL also proposes a revision to the footnote of TS 3.9.4, to remove the description of the purpose for imposing administrative controls.

DESCRIPTION OF PROPOSED CHANGES

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

1. TS 1.9, "CORE ALTERATIONS" (Definition): Revise the definition to read as follows (with the proposed new requirements in **bold**). Also remove the word "conservative" between the words "safe" and "position."

> **"CORE ALTERATIONS shall be the movement of any fuel, sources, reactivity control components, or other components affecting reactivity within the reactor vessel with the vessel head removed and fuel in the vessel.** Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe conservative position."

Justification: This definition is proposed consistent with NUREG-1431, "Standards Technical Specifications - Westinghouse Plants." Specifically, the definition of CORE ALTERATIONS is revised to include only the movement or manipulation of fuel,

sources, and reactivity control components within the reactor vessel. The current Technical Specifications (TS) define CORE ALTERATIONS as the movement or manipulation of any component within the reactor pressure vessel with the vessel head removed and fuel in the vessel. The revised TS will permit a temporary source range detector or other small components, such as cameras, tools, etc., to be moved or manipulated within the reactor vessel without the activity being considered CORE ALTERATIONS.

The justification for this change is that the insertion of small components into the reactor vessel will, in actuality, have no effect on reactivity since these items displace a small volume of borated water, and sufficient borated water will surround the components and provide the necessary neutron absorption to neutronically isolate the component from the reactor. The consequences of dropping one of these small components into the vessel are bounded by the In-Containment Fuel Handling Accident discussed in Chapter 14.2.1 of the Turkey Point Updated Final Safety Analysis Report (UFSAR).

The justification to delete the word "conservative" in the definition is to ensure the proposed definition for CORE ALTERATIONS is identical to the wording specified in NUREG-1431.

2. TS 3.9.4 - Containment Building Penetrations: Revise the current TS 3.9.4b. to read (with the proposed new requirements in **bold**):

c. A minimum of one door in each airlock is closed **or, both doors of the containment personnel airlock may be open if:**

1) at least one personnel airlock door is capable of being closed,

2) the plant is in MODE 6 with at least 23 feet of water above the fuel, and

3) a designated individual is available outside the personnel airlock to close the door.

Justification: The proposed change revises TS 3.9.4, "Containment Building Penetrations", to allow the containment personnel airlock doors to be open during fuel movement and core alterations provided (a) that at least one PAL door is capable of being closed; (b) the plant is in Mode 6 (REFUELING) with at least 23 feet of water above the fuel; and (c) a designated individual is available outside the PAL to close the door. Operability of the containment PAL door includes the requirements that the door is capable of being closed and that any cables or hoses across the PAL door have quick-disconnects to ensure the door is capable of being closed in a timely manner.

The purpose of the LIMITING CONDITION FOR OPERATION is to prevent the escape of radioactive material in the event of an in-containment fuel handling accident. This assumption is reflected in the analysis for this accident as documented in the Turkey Point UFSAR, Chapter 14.2.1, "Fuel Handling Accidents."

Experience has shown that the cycling of the containment PAL doors during refueling has led to more frequent maintenance of the doors and their interlocks, raising the concern that the door may be unavailable in the event of an accident. In addition, the assumption that there is no radioactive release following a postulated in-containment fuel handling accident may be incorrect because some release may occur as personnel exit through the PAL. In fact, the current fuel handling accident for Turkey Point assumes that in the event of an in-containment fuel handling accident, all of the iodines and noble gases that become airborne within the containment are assumed to escape and reach the site boundary and low population zone with no credit taken for the containment building barrier or for decay or deposition taken. The personnel inside containment would also increase their exposure post-accident waiting in containment to exit.

The proposed change contains restrictions on allowing both PAL doors to be open to ensure that at least one door will be available to perform its safety function. The restriction to be in Mode 6 with at least 23 feet of water above the fuel provides sufficient time to respond to a loss of shutdown cooling and ensures a minimum water level exists to provide sufficient shielding during fuel movement. Operability of the containment PAL door includes the requirements that the door is capable of being closed and that any cables or hoses across the PAL door have quick-disconnects to ensure the door is capable of being closed in a timely manner. Requiring that a designated individual is available outside of containment, to close the door following evacuation of the containment will minimize the release of radioactive material. Administrative guidelines will be established describing the responsibilities and appropriate actions of the designated individual, in the event of an in-containment fuel handling accident. These guidelines will include the responsibility to communicate with the control room, responsibility for accounting for all personnel entering and exiting containment, responsibility to ensure the door is capable of being closed in the event of an in-containment fuel handling accident, maximum time the containment doors can be held open in the event of a fuel handling accident and the administrative controls to ensure refueling integrity is re-established in the event of an in-containment fuel handling accident.

3. TS 3.9.4 - Containment Building Penetrations: Rewrite the footnote to read:

"Exception may be taken **under Administrative Controls for opening of certain valves and airlocks.**"

Justification: The proposed change removes the requirement that this exception is only applicable during the performance of surveillance or testing. Technical Specification 3/4.9.4 allows for certain valves and interlocks to be open under Administrative Controls. These Administrative Controls are not specifically spelled out, but provide FPL with the responsibility of applying appropriate engineering judgement based on the unit's operational configuration. Consistent with the surveillance requirements of TS 3.6.3 of NUREG-1431, "Standard Technical Specifications - Westinghouse Plants," FPL proposes that the reason for the Administrative Controls be deleted. The operability requirements for the valves and interlocks will be maintained under the provisions of Administrative Controls, without being affected by the reason the Administrative Controls are in place. FPL considers the proposed change as administrative in nature, since the proposed wording is consistent with the intent of NUREG-1431 and does not create an unanalyzed condition.

DISCUSSION

Containment Closure

Technical Specification 3.9.4, "Containment Building Penetrations," requires that a minimum of one PAL door, as well as other containment penetrations (except as permitted under Administrative Controls), be closed during core alterations and movement of irradiated fuel within the containment. This requirement is more conservative than the assumptions used in the Turkey Point Updated Final Safety Analysis Report (UFSAR), Chapter 14.2.1, "Fuel Handling Accidents." The accident analysis assumes that in the event of a fuel handling accident in containment, all of the iodines and noble gases that become airborne within the containment are assumed to escape and reach the site boundary and low population zone with no credit taken for the containment building barrier or for decay or deposition taken. The fuel handling accident analysis also assumes a minimum water level of 23 feet above the top of the fuel and a minimum decay time of 50 hours prior to fuel movement.

During a refueling outage, other work inside containment does not stop during fuel movement and core alterations. This requires that personnel operate the PAL doors to enter and exit the containment. During the Unit 3, 1994 refueling outage, from the period of April 10 - April 12, 1994 when the PAL doors were closed for fuel movement, there were approximately 4000 entries made into containment. Assuming an average of 4 persons per PAL cycle, the doors (which weigh in excess of 1000 pounds each) were cycled over 300 times a day. FPL also believes that the crowding of personnel in the PAL during shift changes may cause an increase in personnel contaminations. The excessive cycling of the PAL doors was not anticipated in the design and, as a result of the heavy use, more frequent maintenance of the door hinge pin, the door seals, the packing of the equalizing valve, and other components have occurred.

From a practical standpoint, the current TS 3.9.4 will not prevent all radioactive releases from the containment following a fuel handling accident. There are a large number of people in containment during a refueling outage, even during fuel movement and core alterations. Should a fuel handling accident occur inside containment, the airlock doors would be cycled several times to evacuate personnel from containment. With each PAL cycle, more containment air would be released. While waiting to exit the containment building, the workers inside containment would be unnecessarily exposed to the post-accident released activity. Alternatively, the Nuclear Plant Supervisor would have the option to invoke 10 CFR 50.54(x) and order both doors opened while personnel within the containment are evacuated, and then close the doors. In either case, it is assumed that there would be a release of activity into the atmosphere. Under the proposed change, the containment could be evacuated more quickly without invoking 10 CFR 50.54(x) and then refueling integrity re-established. This would reduce dose to workers in the event of an accident without increasing dose to the general public.

Fuel Handling Accident

Current Design Basis Analysis

The current UFSAR Chapter 14.2.1 In-Containment Fuel Handling Accident Analysis for Turkey Point does not incorporate all of the assumptions of Regulatory Guide 1.25 (ref. 1). The Turkey Point design basis was established prior to the issuance of this Regulatory Guide. FPL recalculated the doses resulting from the original design basis fuel handling accident, using best-estimate values for specific inputs. Table 1 is provided to summarize the list of assumptions used in the re-analyses.

The original design basis accident analysis did include the following major assumptions:

- Damage is limited to one row of fuel rods (15 fuel rods) from a single fuel assembly.
- In calculating offsite exposure it is assumed that the incident occurs in containment and that the activity is discharged to the atmosphere at the ground level through doors. This assumption is conservative since the ventilation system exhaust to atmosphere at an elevated point and the containment doors are closed.

The results of this recalculation are as follows:

- Site Boundary Dose

  0.348 rem - thyroid and 0.12 rem - whole body

- Low Population Zone (LPZ) Dose

  0.0339 rem - thyroid and 0.012 rem - whole body

These values are consistent with the UFSAR Chapter 14.2.1 Fuel Handling Accident Analysis dose values at the site boundary of 0.35 rem - thyroid and 0.12 rem - whole body.

Revised Design Basis Analysis

In support of this submittal, FPL is revising the design basis for Turkey Point's In-Containment Fuel Handling Accident Analysis to be consistent with Regulatory Guide (RG) 1.25. The thyroid dose calculation uses the methodology of Regulatory Guide 1.25, while the whole body doses are calculated using Regulatory Guide 1.109 (ref. 2) methodology. Table 2 is provided to summarize the list of assumptions used in the revised design basis analyses. The results of this reanalysis are as follows:

- Site Boundary Dose

  2.54 rem - thyroid and 0.008 rem - whole body

- Low Population Zone (LPZ) Dose

  0.247 rem - thyroid and 0.001 rem - whole body

The UFSAR will be revised and updated following the approval of this proposed license amendment to include the new design basis In-Containment Fuel Handling Accident Analysis.

Discussion of the Results

NUREG-0800, "Standard Review Plan", Section 15.7.4, "Radiological Consequences of Fuel Handling Accidents" (ref. 3), describes the acceptance criteria for this event as, "the calculated doses at the exclusion boundary are well within the exposure guidelines of 10 CFR Part 100. 'Well within' shall mean 25% or less of 10 CFR Part 100, i.e., 75 Rem to the thyroid and 6 Rem for the whole-body doses." (Note: Turkey Point is not licensed to the Standard Review Plan.)

Neither the current nor the revised design basis fuel handling accident analysis take credit for the containment building barriers (Tables 1 and 2, Assumption 12). The results of the calculations performed show that the offsite dose consequences of a fuel assembly dropped inside containment are well within the 10 CFR Part 100 limits. Therefore, FPL believes that the proposed change does not result in a significant hazard.

CONTROL ROOM VENTILATION

General Design Criterion (GDC) 19 - Control Room states the following:

> "A control room shall be provided from which actions can be taken to operate the nuclear power unit safely under normal conditions and to maintain it in a safe condition under accident conditions, including loss-of-coolant accidents. Adequate radiation protection shall be provided to permit access and occupancy of the control room under accident conditions without personnel receiving radiation exposures in excess of 5 rem whole body, or its equivalent to any part of the body, for the duration of the accident.
>
> Equipment at appropriate locations outside the control room shall be provided (1) with a design capability for prompt hot shutdown of the reactor, including necessary instrumentation and controls to maintain the unit in a safe condition during hot shutdown, and (2) with a potential capability for subsequent cold shutdown of the reactor through the use of suitable procedures."

Reference (4) provided the NRC with information on FPL's Turkey Point Units 3 and 4 current compliance with GDC 19. The Turkey Point control room is designed with an emergency ventilation system, which is actuated by various safety signals and the Process Radiation Monitoring System (PRMS). The PRMS functions to (a) provide early warning of a system or equipment malfunction which could lead to a radiological health hazard; (2) initiate pressurization of the main control room on detection of radiation in the normal air intake duct or containment atmosphere; and (c) prevent the uncontrolled release of radioactivity to the environment. To accomplish these functions, radiation monitors are used in various radwaste release streams and plant processes. These monitors provide continuous readout as well as control functions which isolate the affected release stream upon high radiation levels.

The PRMS provides means to prevent the ingress of radioactivity to the control room during an accident such that the radiation exposures of the personnel in the control room is limited to 5 rem whole body, or its equivalent to any part of the body for the duration of the accident. The PRMS monitor R-11 (Containment Air Particulate Monitor) and R-12 (Containment Air Particulate Gas Monitor) and initiate control room isolation and pressurization on high radiation level in containment.

The PRMS also monitors the airstream of the control room normal air intake duct using RAD-6642 and RAD-6643 (Control Room Ventilation Radiation Monitors) and provides an automatic initiation of control room pressurization on detection of radioactivity levels higher than the predetermined value. This predetermined value is based on 10 CFR Part 50 Appendix A GDC-19 dose limits.

The PRMS was designed to control the radioactive release from the plant under accident conditions such as a Loss of Coolant Accident (LOCA). Since the doses expected from a LOCA event are significantly higher than the doses expected from a In-Containment Fuel Handling Accident, the requirements of GDC-19 are satisfied by the Process Radiation Monitoring System.

REFERENCES:

1. Regulatory Guide 1.25, "Assumptions Used for Evaluating the Potential Radiological Consequences of a Fuel Handling Accident in the Fuel Handling and Storage Facility for Boiling and Pressurized Water Reactors," dated March 23, 1972.

2. Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I," Revision 1, dated October 1977.

3. NUREG-0800, "Standard Review Plan", Section 15.7.4, "Radiological Consequences of Fuel Handling Accidents," Revision 1, dated July 1981.

4. Letter, R. E. Uhrig (FPL) to USNRC, concerning "Post TMI-Requirements Control Room Habitability", L-81-285, dated July 9, 1981.

Table 1

SUMMARY OF THE ASSUMPTIONS USED IN THE CURRENT UFSAR FUEL HANDLING ACCIDENT ANALYSIS (UFSAR Chapter 14.2.1)

The following assumptions were included in the reanalysis of the current UFSAR In-Containment Fuel Handling Accident Analysis:

1) Core inventories at time zero and half-lives for iodines and noble gases are taken from UFSAR Tables 14F-1 and 14F-2.

2) The core inventories are assumed to decay for 50 hours prior to any fuel movement.

3) One row of fuel rods (15 fuel rods) from a single dropped fuel assembly are assumed to be damaged. There are 157 assemblies in the core.

4) A power level peaking factor of 1.5 times the core average is assumed.

5) Iodine released to the gap is 5.7%, noble gases released to gap to 20%.

6) Of the iodines released to the refueling cavity water from the gas gap, only 1/500 (DF_p = 500) escape from the cavity water surface to the environment.

7) Of the noble gases released to the refueling cavity water, 100% (DF_p = 1) escapes from the cavity water to the environment.

8) The North Boundary Exclusion Radius is assumed to be the site boundary and has a χ/Q of 1.54×10^{-4} sec/m^3. The χ/Q of the Low Population Zone (LPZ) is assumed to be 1.50×10^{-5} sec/m^3.

9) The Adult Inhalation Thyroid Dose Conversion Factors (DCF) from Regulatory Guide (RG) 1.25 were used to calculate the thyroid doses.

10) The breathing rate used for 0-2 hour thyroid dose is 3.47×10^{-4} m^3/sec.

11) The whole body doses were calculated assuming submergence in a semi-infinite cloud of noble gases.

12) All of the iodines and noble gases that become airborne within the containment are assumed to escape and reach the site boundary and low population zone with no credit taken for the containment building barrier or for decay or deposition taken.

Table 2

SUMMARY OF THE ASSUMPTIONS USED IN REGULATORY GUIDE (RG) 1.25 FUEL HANDLING ACCIDENT ANALYSIS

The following assumptions were included in the analysis:

1) Core inventories at time zero and half-lives for iodines and noble gases are taken from UFSAR Tables 14F-1 and 14F-2.

2) The core inventories are assumed to decay for 100 hours prior to any fuel movement.

3) One row of fuel rods (15 fuel rods) from a single dropped fuel assembly are assumed to be damaged. There are 157 assemblies in the core.

4) A power level peaking factor of 1.65 times the core average is assumed.

5) Iodine released to the gap is 10%, noble gases (except Kr-85) released to gap to 10%, Kr-85 released to the gap is 30%.

6) Of the iodines released to the refueling cavity water from the gas gap, only 1/100 (DF_p = 100) escape from the cavity water surface to the environment.

7) Of the noble gases released to the refueling cavity water, 100% (DF_p = 1) escapes from the cavity water to the environment.

8) The North Boundary Exclusion Radius is assumed to be the site boundary and has a χ/Q of 1.54×10^{-4} sec/m^3. The χ/Q of the Low Population Zone (LPZ) is assumed to be 1.50×10^{-5} sec/m^3.

9) The Adult Inhalation Thyroid Dose Conversion Factors (DCF) of RG 1.25 were used to calculate the thyroid doses.

10) The breathing rate used for 0-2 hour thyroid dose is 3.47×10^{-4} m^3/sec.

11) The dose factors for exposure to a semi-infinite cloud of noble gases from RG 1.109 are used to calculate the whole body doses.

12) All of the iodines and noble gases that become airborne within the containment are assumed to escape and reach the site boundary and low population zone with no credit taken for the containment building barrier or for decay or deposition taken.

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 revise the Turkey Point Units 3 and 4 Technical Specification (TS) 1.9, Definitions - CORE ALTERATIONS. Currently, TS 1.9 states that "CORE ALTERATIONS shall be the movement or manipulation of any component within the reactor pressure vessel with the vessel head removed and fuel in the vessel." The proposed change to the definition of "CORE ALTERATIONS" would revise the definition to only address activities which may, in actuality, affect core reactivity.

In addition, FPL proposes to revise TS 3.9.4, Containment Building Penetrations. Currently TS 3.9.4 requires that a Personnel Airlock (PAL) door be closed during core alterations and movement of irradiated fuel within containment. The proposed change would allow both containment PAL doors to be open during core alterations and movement of irradiated fuel in containment provided (a) that at least one personnel airlock door is capable of being closed; (b) the plant is in Mode 6 with at least 23 feet of water above the fuel; and (c) a designated individual is available outside the PAL to close the door. Operability of the containment PAL door includes the requirements that the door is capable of being closed and that any cables or hoses across the PAL door have quick-disconnects to ensure the door is capable of being closed in a timely manner. FPL also proposes a revision to the footnote of TS 3.9.4, to remove the description of the purpose for imposing administrative controls.

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 change in the definition of CORE ALTERATIONS would allow the movement of a temporary source range detector or other small components, such as cameras, tools, etc., within the reactor vessel without the activity being considered CORE ALTERATIONS. The potential exists, however small, that an object can be

dropped into the reactor vessel. However, the justification for this change, is that the insertion of small components into the reactor vessel will have no effect on core reactivity since these items displace a small volume of borated water, and sufficient borated water will surround the components and provide the necessary neutron absorption to neutronically isolate the components from the reactor. The consequences of dropping one of these small components into the vessel are bounded by the In-Containment Fuel Handling Accident Analysis discussed in Chapter 14.2.1 of the Turkey Point Updated Final Safety Analysis Report (UFSAR). Therefore, the proposed change is bounded by the current and the proposed In-Containment Fuel Handling Accident Analyses and will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change to TS 3.9.4 would allow the containment personnel airlock (PAL) doors to be open during fuel movement and core alterations. Currently, a single PAL door is closed during fuel movement and core alterations to prevent the escape of radioactive material in the event of a in-containment fuel handling accident. The PAL is not an initiator of an accident. Whether the PAL doors are open or closed during fuel movement and core alterations has no affect on the probability of any accident previously evaluated.

Allowing the PAL doors to be open during fuel movement and core alterations does not increase the consequences from a fuel handling accident. The calculated offsite doses are well within the limits of 10 CFR Part 100. In addition, the calculated doses are larger than the expected doses because the calculation does not incorporate the closing of the PAL door after the containment is evacuated. The proposed change should significantly reduce the dose to workers in containment in the event of a fuel handling accident by reducing the time required to evacuate the containment. The proposed change will also significantly decrease the wear on the PAL doors and, consequently, increase the availability of the PAL doors in the event of an accident.

The proposed change to the footnote of TS 3.9.4 is administrative in nature, and does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The changes being proposed do not affect assumptions contained in plant safety analyses or the physical design 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 change in the definition of CORE ALTERATIONS would allow the movement of a temporary source range detector or other small components, such as cameras, tools, etc., within the reactor vessel without the activity being considered CORE ALTERATIONS. The potential exists however small, that an object can be dropped into the reactor vessel. However, the justification for this change, is that the insertion of small components into the reactor vessel will have no effect on core reactivity since these items displace a small volume of borated water, and sufficient borated water will surround the components and provide the necessary neutron absorption to neutronically isolate the components from the reactor. The consequences of dropping one of these small components into the vessel are bounded by the In-Containment Fuel Handling Accident Analysis discussed in Chapter 14.2.1 of the Turkey Point UFSAR. Therefore the proposed change is bounded by the current and the proposed In-Containment Fuel Handling Accident Analyses and will not create the possibility of a new or different kind of accident.

The proposed change to Specification 3.9.4 affects a previously evaluated accident, i.e., in-containment fuel handling accident. Both the current and the proposed In-Containment Fuel Handling Accident Analysis assume that all of the iodines and noble gases that become airborne within the containment escape and reach the site boundary and low population zone with no credit taken for the containment building barrier or for decay or deposition taken. Since the proposed change does not involve the addition or modification of equipment nor does it alter the design of plant systems and the revised analysis is consistent with the current In-Containment Fuel Handling Accident Analysis, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change to the footnote of TS 3.9.4 is administrative in nature and does 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 change in the definition of CORE ALTERATIONS would allow the movement of a temporary source range detector or other small components, such as cameras, tools, etc., within the reactor vessel without the activity being considered CORE ALTERATIONS. The potential exists however small, that an object can be dropped into the reactor vessel. However, the justification for this

change, is that the insertion of small components into the reactor vessel will have no effect on core reactivity since these items displace a small volume of borated water, and sufficient borated water will surround the components and provide the necessary neutron absorption to neutronically isolate the components from the reactor. The consequences of dropping one of these small components into the vessel are bounded by the Fuel Handling Accident Analysis discussed in Chapter 14.2.1 of the Turkey Point UFSAR. Therefore, the proposed change is bound by the current In-Containment Fuel Handling Accident Analyses and as a result will not involve a significant reduction in a margin of safety.

The margin of safety as defined by 10 CFR Part 100 has not been reduced. There is no increase in calculated offsite dose resulting from a fuel handling accident in containment and the calculated dose is a small fraction of the limits given in 10 CFR Part 100. The proposed changes 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.

The proposed change to the footnote of TS 3.9.4 is administrative in nature and does not relate to or modify the safety margins defined in, and maintained by, the Technical Specifications.

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; therefore, the proposed changes do not involve a significant hazards consideration as defined in 10 CFR 50.92.