

# PRIORITY 1

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 AUTH. NAME      AUTHOR AFFILIATION  
 PLUNKETT, T.F.      Florida Power & Light Co. *See Proposed Change To*  
 RECIP. NAME      RECIPIENT AFFILIATION *Tech*  
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SUBJECT: Application for amends to licenses DPR-31 & DPR-41, allowing *Specs.*  
 18 steps misalignment at or below 90% of RTP & maintain 12  
 steps requirement above 90% of RTP.

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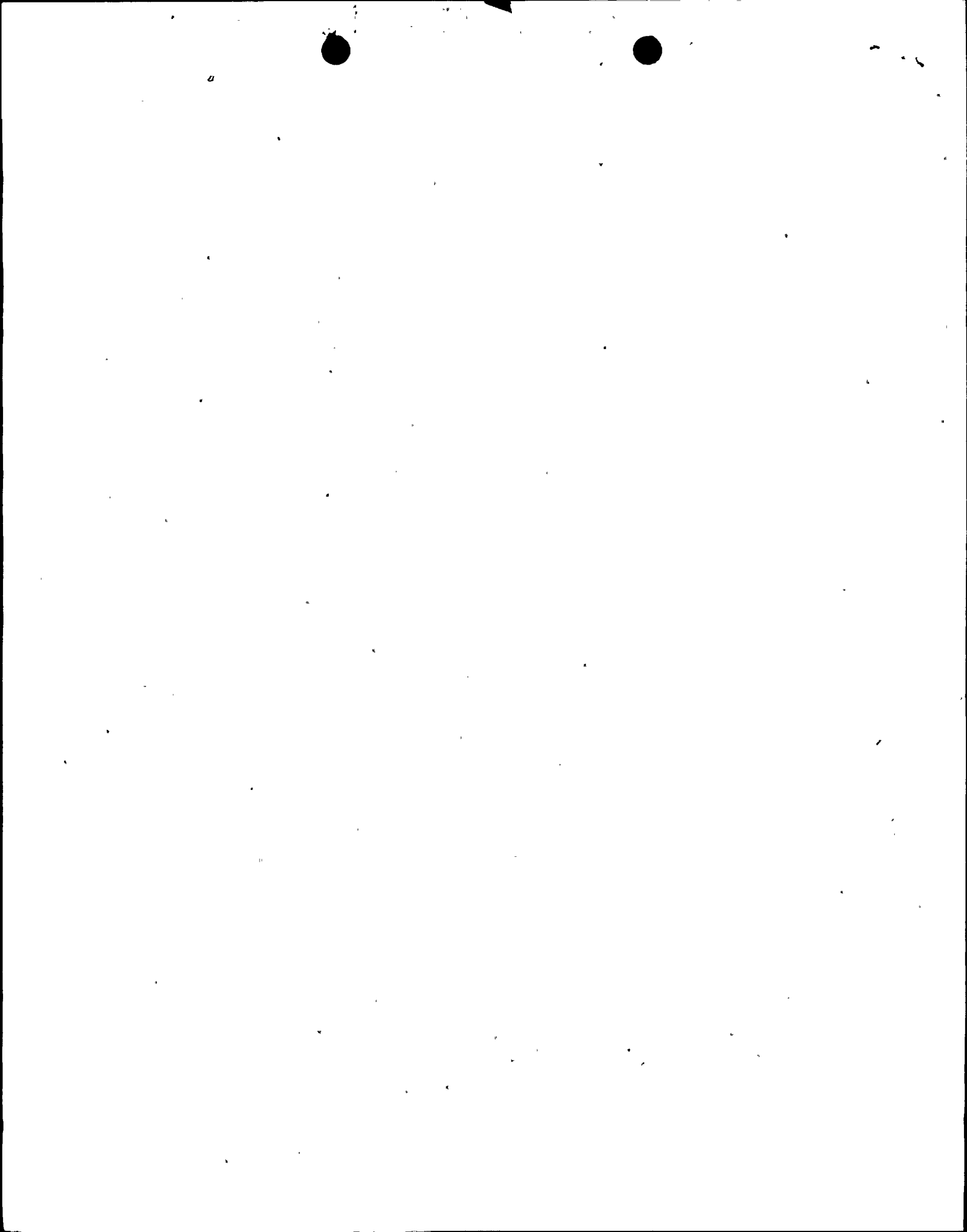
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FPL

JUL 26 1995

L-95-160  
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  
Rod Misalignment Requirement for  
Movable Control Assemblies

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 modify the Turkey Point Units 3 and 4 Technical Specifications 3/4.1.3.1, "Movable Control Assemblies - Group Height," and 3/4.1.3.2, "Position Indication Systems - Operating," and their associated BASES. The proposed amendments would allow  $\pm$  18 steps misalignment at or below 90% of Rated Thermal Power (RTP) and maintain the  $\pm$  12 steps requirement above 90% of RTP.

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 changes is provided in Attachment 2. Attachment 3 provides the proposed revised Technical Specifications.

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.

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The proposed license 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

OIH

Attachments

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



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STATE OF FLORIDA       )  
                                  ) ss.  
COUNTY OF DADE       )

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

That he is Vice President, Turkey Point 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*  
T. F. Plunkett

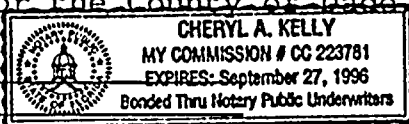
Subscribed and sworn to before me this

26 day of July, 1995.

*Cheryl A. Kelly*  
Name of Notary Public (Type or Print)

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

My Commission expires \_\_\_\_\_  
Commission No. \_\_\_\_\_



T. F. Plunkett is personally known to me.

**ATTACHMENT 1**

**DESCRIPTION OF AMENDMENTS REQUEST**

9507310198



## DESCRIPTION OF AMENDMENTS REQUEST

### Description and Purpose

The Proposed License Amendments would modify the Turkey Point Units 3 and 4 Technical Specifications 3/4.1.3.1, "Movable Control Assemblies - Group Height," 3/4.1.3.2, "Position Indication Systems - Operating," and their associated BASES. The proposed changes would allow  $\pm 18$  steps misalignment at or below 90% of Rated Thermal Power (RTP) and maintain the  $\pm 12$  steps requirement above 90% of RTP.

### Background

Experience with the Analog Rod Position Indication (ARPI) System shows that indicated misalignment could be greater than  $\pm 12$  steps. Technical Specification 3.1.3.2, Action Statement a. requires that an incore flux map be taken every 8 hours to verify the actual location of the rods when the indicated rod misalignment is greater than  $\pm 12$  steps. However, in most cases these flux maps have shown that there was no actual rod misalignment.

The proposed changes would allow  $\pm 18$  steps misalignment at or below 90% of RTP and maintain the  $\pm 12$  steps requirement above 90% of RTP. Changing the Technical Specifications to allow  $\pm 18$  steps misalignment will reduce the use of the flux mapping system. Frequent use of the flux mapping system may lead to more maintenance work required on the system, and may result in an As Low as is Reasonably Achievable (ALARA) concern. Also, the number of power transients (shutdowns) initiated as a result of control rod misalignment, as required by the current Technical Specifications, will be reduced.

### Description of Proposed Changes

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

1. Technical Specification 3.1.3.1 Limiting Condition for Operation. Technical Specification 3.1.3.1 is changed to introduce the term "Allowed Rod Misalignment" to replace the constant " $\pm 12$  steps" and to introduce the limit of  $\pm 12$  steps above 90% of RTP and  $\pm 18$  steps at or below 90% of RTP.

Justification: Power distribution calculations with rod misalignments of 30 steps (18 steps indicated + 12 steps



uncertainty) show that the increase in peaking factors will be accommodated at or below 90% of RTP. The justification for this proposed change is provided in the Analysis Section below.

2. Technical Specification 3.1.3.1, ACTION Statement b. The ACTION Statement is changed to require the operator to restore the misaligned rods within one hour, or reduce power below 90% of RTP and re-confirm the misalignment at or below 90% of RTP. If the rods are misaligned by more than  $\pm 18$  steps, then be in HOT STANDBY within the following six hours.

Justification: This proposed change is required in order to clarify operator action in the event of a rod misalignment above 90% of RTP. The one hour requirement to restore the rod position is consistent with current ACTION Statement c. If the misalignment is less than  $\pm 18$  steps, the operator will have the option to reduce power below 90% power and evaluate the misalignment condition, or proceed to HOT STANDBY. The six hours allocated to proceed to HOT STANDBY is consistent with current Technical Specifications.

3. Technical Specification 3.1.3.1 ACTION Statement c. The ACTION Statement is added to restore the misaligned rod to operable within one hour, or be in HOT STANDBY within the following six hours.

Justification: The proposed change is required in order to clarify operator action in the event of a rod misalignment at or below 90% of RTP. The one hour requirement is to restore the rod position consistent with current ACTION Statement c. If the misalignment is greater than  $\pm 18$  steps, the operator will proceed to HOT STANDBY. The six hours allocated to be in HOT STANDBY is consistent with current specifications.

4. Technical Specification 3.1.3.1, ACTION Statement d. The ACTION Statement is changed to delete the reference to " $\pm 12$  steps" and replace it with the "Allowed Rod Misalignment." Also, reference to Technical Specification 3.1.3.1.c was changed to 3.1.3.1.d.

Justification: The proposed change is consistent with the changes to the Limiting Condition for Operation and ACTION Statements a. and b. The changes to the reference are necessary since new ACTION Statement c. was added.

5. Technical Specification Surveillance Requirement 4.1.3.1, ACTION Statement d. The Surveillance Requirement is changed to delete the reference to " $\pm 12$  steps" and replace it with the "Allowed Rod Misalignment."

Justification: The proposed change is consistent with the changes to the Limiting Condition for Operation and ACTION Statements a. and b.

6. Technical Specification 3.1.3.2 Limiting Condition for Operation. The Limiting Condition for Operation is changed to delete the reference to " $\pm 12$  steps" and replace it with the "Allowed Rod Misalignment." Also, the range of rod travel was changed from 228 to All Rods Out. The definition of "All Rods Out" is specified in the Core Operating Limits Report (COLR).

Justification: The proposed change is consistent with the changes to the Limiting Condition for Operation of Specification 3.1.3.1. The introduction of All Rods Out is consistent with Amendment 167/161 which approved the removal of Technical Specification 3.1.3.6, "Rod Insertion Limit" from the Technical Specifications and placement into the COLR.

7. Technical Specification 3.1.3.2, ACTION Statement b. The ACTION Statement is changed to delete the reference to " $\pm 12$  steps" and replace it with the "Allowed Rod Misalignment."

Justification: The proposed change is consistent with the changes to the Limiting Condition for Operation of Technical Specification 3.1.3.1.

8. Technical Specification Surveillance Requirement 4.1.3.2.1. The Surveillance Requirement is changed to delete the reference to " $\pm 12$  steps" and replace it with the "Allowed Rod Misalignment."

Justification: The proposed change is consistent with the changes to the Limiting Condition for Operation of Technical Specification 3.1.3.1.

9. BASES to Technical Specification 3/4.1.3. The BASES are changed to delete the reference to " $\pm 12$  steps" and replace it with the "Allowed Rod Misalignment." One line was added to detail the reasoning of the power dependent rod misalignment allowance. Also the "228 steps" was changed for "All Rods Out."

Justification: The BASES were changed to be consistent with the changes to the Limiting Condition for Operation of Specification 3.1.3.1. The changes to "All Rods Out" was done to clarify that this parameter may change from cycle to cycle. The definition of "All Rods Out" is specified in the COLR.

10. Technical Specification 6.9.1.7 Item 4. is added to reflect that the definition of "All Rods Out" is specified in the COLR. The section which specifies the analytical methods used to determine the Rod Bank Insertion Limits is changed to reflect that the same methodology is used to define the "All Rods Out" position.

Justification: The introduction of "All Rods Out" is consistent with Amendment 167/161 which approved the removal of Technical Specification 3.1.3.6, "Rod Insertion Limit" from the Technical Specifications and placement into the COLR.

#### **Bases for Proposed Change**

RCCA misalignments up to 30 steps (18 steps indicated + 12 steps uncertainty) were evaluated for impact on peaking factors and reactivity worth. A review of the results of the transient analyses showed that adequate conservatism exists in the analyses to offset the penalties associated with an increased rod misalignment.

Power distributions were evaluated under steady state and load follow conditions with a rod misalignment of 30 steps (18 step indicated + 12 steps uncertainty) showing that the increase in peaking factors could be accommodated at or below 90% of RTP. The analysis supporting these conclusions is provided in Attachment 4.



**ATTACHMENT 2**

**DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION**

## NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

### Description of Proposed License Amendments

In Technical Specification 3.1.3.1, a change is proposed to the Limiting Condition for Operation to introduce the term "Allowed Rod Misalignment" to replace the constant " $\pm 12$  steps." Also, a change is proposed to allow  $\pm 18$  steps misalignment at or below 90% of Rated Thermal Power (RTP) and  $\pm 12$  steps misalignment above 90% of RTP. A change is proposed to ACTION items b and c and Surveillance Requirement 4.1.3.1.1 to use "Allowed Rod Misalignment" instead of " $\pm 12$  steps."

In Technical Specification 3.1.3.2, a change is proposed to the the Limiting Condition for Operation to use "Allowed Rod Misalignment" instead of " $\pm 12$  steps," to be consistent with Technical Specification 3.1.3.1. Also, a change is proposed to ACTION item b.1 and Surveillance Requirement 4.1.3.2.1 to use "Allowed Rod Misalignment" instead of " $\pm 12$  steps."

In Technical Specification 3.1.3.2; a change is proposed to the Limiting Condition for Operation range of rod travel from 228 to "All Rods Out." The introduction of "All Rods Out" is consistent with Amendment 167/161 which approved the removal of Technical Specification 3.1.3.6, "Rod Insertion Limit" from the Technical Specifications and placement into the COLR.

In Technical Specification BASES 3/4.1.3, a change is proposed to use "Allowed Rod Misalignment" instead of " $\pm 12$  steps." Also the "228 steps" was changed for "All Rods Out." The changes to "All Rods Out" was done to clarify that this parameter may change from cycle to cycle. The definition of "All Rods Out" is specified in the COLR.

### 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 amendments.



**Discussion**

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

The proposed limits on rod misalignment do not increase the probability of an accident. The Technical Specifications' allowed increase in peaking factor limits as power is reduced accommodates an increase in rod misalignment of  $\pm 18$  steps below 90% of RTP. The initial conditions remain unchanged from that assumed in the Updated Final Safety Analysis Report (UFSAR). Therefore, this proposed change poses no significant increase in the probability or consequences of any accident previously evaluated.

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

No new accident scenarios, failure mechanisms or limiting single failure are introduced as a result of implementing the proposed rod misalignment criteria. The institution of the proposed rod misalignment criteria will have no adverse effect, nor does it challenge, the performance of any other safety related system. Therefore, the proposed amendment does not in any way 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 amendment would not involve a significant reduction in the margin of safety.

Operation of the facility in accordance with the proposed amendment would not involve a significant reduction in the margin of safety. The margin of safety, as defined in the BASES for the Technical Specifications, is not significantly affected by the changes to the rod misalignment limit. The Technical Specifications' allowed increase in peaking factor limits as power is reduced accommodates an increase in rod misalignment of  $\pm 18$  steps below 90% of RTP. The initial conditions remain unchanged from that assumed in the UFSAR. Since the peaking factor limits are not modified, the proposed change does not constitute a significant reduction in the margin of safety.

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Attachment 2  
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### Summary

Based on the above discussion, FPL has determined that the proposed amendment does not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the probability of a new or different kind of accident from any previously evaluated, or (3) involve a significant reduction in a margin of safety; and therefore, does not involve a significant hazards consideration as defined in 10 CFR §50.92.

ATTACHMENT 3

MARKED-UP TECHNICAL SPECIFICATIONS CHANGES

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