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 50-251 Turkey Point Plant, Unit 4, Florida Power and Light C 05000251  
 AUTH. NAME PLUNKETT, T.F. AUTHOR AFFILIATION 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 definitions to ensure consistency w/new 10CFR20  
 requirements & changing radiological effluent release rept  
 frequency.

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JUL 20 1993

L-93-154  
10 CFR Part 20  
10 CFR 50.36  
10 CFR 50.36a  
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 -  
10 CFR Part 20 Requirements; Radiological  
Effluent Release Report Frequency

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 to support compliance with the new 10 CFR Part 20 requirements. These requirements became effective June 21, 1991, and are required to be implemented by January 1, 1994. The proposed amendments would also change the frequency of reporting the quantity of principal nuclides released to unrestricted areas in liquid and gaseous effluents from semiannually to annually (to be submitted by April 1 of each year) consistent with an amendment to 10 CFR 50.36a, effective October 1, 1992, made to reduce the regulatory burden on licensees. The quantity of solid waste releases (shipped for burial or disposal) would also be reported on an annual basis.

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 changes 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 are 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.

Florida Power and Light Company requests that these proposed Technical Specification changes be approved by the NRC no later than December 1, 1993, to facilitate implementation of the new 10 CFR Part 20 requirements at Turkey Point as early as January 1, 1994.

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

Very truly yours,

T. F. Plunkett  
Vice President  
Turkey Point Nuclear

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9307280080 930720  
PDR ADDCK 05000250  
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an FPL Group company

*Handwritten:* Add: NKR/DRSS/PRFB

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TFP/TCG/RJT

Attachments

cc: S. D. Ebnetter, Regional Administrator, Region II, USNRC  
R. C. Butcher, Senior Resident Inspector, USNRC, Turkey Point  
W. A. Passetti, Florida Department of Health and Rehabilitative  
Services



STATE OF FLORIDA       )  
                                  ) ss.  
COUNTY OF PALM BEACH )

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

20th day of July, 1993.

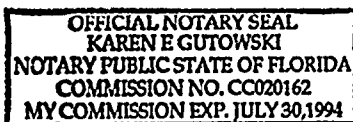
  
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KAREN E. GUTOWSKI  
Name of Notary Public (Type or Print)

NOTARY PUBLIC, in and for the County of  
Palm Beach, State of Florida

My Commission expires July 30, 1994  
Commission No. CC020162

T. F. Plunkett is personally known to me.



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ATTACHMENT 1  
SAFETY ANALYSIS



### SAFETY ANALYSIS

#### DESCRIPTION OF AMENDMENT REQUEST:

The proposed amendments would revise the Turkey Point Units 3 and 4 Technical Specifications to support compliance with the new 10 CFR Part 20 requirements which became effective June 21, 1991, and are required to be implemented by January 1, 1994. Specifically, the changes would (a) revise certain definitions to ensure consistency with the new 10 CFR Part 20; (b) revise the concentration limits for liquid effluent releases to retain operational flexibility consistent with 10 CFR 50, Appendix I; (c) update the site area map to support compliance with the new 10 CFR Part 20; (d) revise the 10 CFR Part 20 references to reflect the corresponding new 10 CFR Part 20 section numbers; (e) revise the administrative controls for record keeping to be consistent with the new 10 CFR 20 requirements; (f) revise the dose measurement distance to ensure areas are conservatively posted as high radiation areas and (g) revise controls for very high radiation areas in compliance with the new 10 CFR Part 20.

The new 10 CFR Part 20 requirements incorporate federal guidance for radiation protection of workers in the nuclear industry issued by the President in 1987 and recommendations of the International Commission on Radiological Protection (ICRP) and the National Council on Radiation Protection and Measurements (NCRP). These requirements not only include updated scientific information on radionuclide uptake and metabolism, but also reflect changes in the basic philosophy of radiation protection. These revised requirements reflect the first complete revision of the NRC's radiation protection requirements since they were established in 1960.

The proposed amendments would also revise the Technical Specifications to change the frequency of reporting the quantity of the principal nuclides released to unrestricted areas in liquid and gaseous effluents from semiannually to annually (to be submitted by April 1 of each year). This is consistent with an amendment to 10 CFR 50.36a, effective October 1, 1992, made to reduce the regulatory burden on licensees. The quantity of solid waste releases (shipped for burial or disposal) would also be reported on an annual basis.

The change to 10 CFR 50.36a was one of several changes made to the regulations to reduce the regulatory burden on licensees without reducing the protection for the public health and safety or the common defense and security. The reporting requirement for solid waste releases is not addressed by the revised 10 CFR 50.36a. However, reporting the quantity of solid waste releases on an annual basis rather than semiannually is consistent with the proposed changes for liquid and gaseous effluents.

#### PROPOSED TECHNICAL SPECIFICATION CHANGES:

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



1. Technical Specifications INDEX - ADMINISTRATIVE CONTROLS (pg. xxiii): change the title of the "Semiannual Radioactive Effluent Release Report" to read "Annual Radioactive Effluent Release Report".

Justification: The change is administrative in nature to implement the revised reporting requirement in 10 CFR 50.36a which changed the reporting frequency for the quantity of the principal radionuclides released to unrestricted areas in liquid and gaseous effluents from semiannually to annually. The Nuclear Regulatory Commission has determined that the change in reporting frequency would not reduce protection of the public health and safety. The public health and safety determination appears in a document entitled "Report on Special Review of Existing NRC Regulations by the Committee to Review Generic Requirements" issued on April 13, 1992. The reporting requirement for solid waste releases is not addressed by the revised 10 CFR 50.36a. However, reporting the quantity of solid waste releases on an annual basis rather than semiannually is consistent with the proposed changes for liquid and gaseous effluents.

2. Technical Specifications DEFINITIONS (pg. 1-3): Revise the definition of MEMBER(S) OF THE PUBLIC (TS 1.15), to be consistent with the definition contained in the new 10 CFR 20.1003.

Justification: This change is administrative in nature to facilitate implementation of the new 10 CFR Part 20 requirements.

3. Technical Specifications DEFINITIONS (pg. 1-5): Revise the definition of SITE BOUNDARY (TS 1.27), to be consistent with the definition contained in the new 10 CFR 20.1003.

Justification: This change is administrative in nature to facilitate implementation of the new 10 CFR Part 20 requirements.

4. Technical Specifications DEFINITIONS (pg. 1-6): Revise the definition of UNRESTRICTED AREA (TS 1.34) to be consistent with the definition contained in the new 10 CFR 20.1003.

Justification: This change is administrative in nature to facilitate implementation of the new 10 CFR Part 20 requirements.

5. Technical Specifications 3.3.3.5, 3.3.3.6, 3.11.2.6 and 4.11.4.2: Revise the title of the "Semiannual Radioactive Effluent Release Report" to read "Annual Radioactive Effluent Release Report".

Justification: The changes are administrative in nature to implement the revised reporting requirement in 10 CFR 50.36a which changed the reporting frequency for the quantity of the principal radionuclides released to unrestricted areas in liquid and gaseous effluents from semiannually to annually. The Nuclear Regulatory Commission has determined that the change in reporting frequency would not reduce protection of the public health and safety. The public health and safety determination appears in a document entitled "Report on Special Review of Existing NRC Regulations by the Committee to Review Generic Requirements" issued on April 13,



1992. The reporting requirement for solid waste releases is not addressed by the revised 10 CFR 50.36a. However, reporting the quantity of solid waste releases on an annual basis rather than semiannually is consistent with the proposed changes for liquid and gaseous effluents.

6. Technical Specification 3.11.1.1: Change the wording "limited to the concentrations specified in 10 CFR Part 20, Appendix B, Table II" to read "limited to 10 times the concentrations specified in 10 CFR Part 20, Appendix B, Table 2".

Justification: The requirements for Technical Specifications on radioactive effluents from nuclear power reactors are provided in 10 CFR 50.36a. These requirements indicate that compliance with effluent Technical Specifications will keep average annual releases of radioactive material in effluents at small percentages of the limits specified in 10 CFR 20.106. 10 CFR 50.36a states that operational flexibility is permitted, compatible with considerations of health and safety, to assure the public is provided a dependable source of power even under unusual operating conditions which may temporarily result in releases higher than such small percentages, but still within the limits specified in 10 CFR 20.106 which references 10 CFR Part 20, Appendix B, Table II concentrations. 10 CFR 50.36a also states that when using operational flexibility, best efforts shall be made to keep levels of radioactive materials in effluents as low as reasonably achievable in accordance with the guidance in 10 CFR 50, Appendix I.

Technical Specification 3.11.1.1 currently requires that the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS be limited to the concentrations specified in 10 CFR Part 20, Appendix B, Table II, Column 2. The annual dose to a member of the public upon which these concentrations are based is 500 mrem. Although 10 CFR 20.106 allows effluent concentrations to be averaged over a year, the Technical Specifications require that liquid effluent releases be limited to these concentrations at all times (i.e., for instantaneous releases). More restrictive limits were incorporated into the Technical Specifications by the NRC to assure that the dose limits of 10 CFR 50, Appendix I or the dose limits of 40 CFR 190 are not exceeded.

The liquid effluent concentration limits stated in Appendix B, Table 2, Column 2, of the new 10 CFR Part 20 requirements are based on a total effective dose equivalent of 50 mrem in a year. It does not appear to be warranted to limit releases to concentrations based on 50 mrem in a year, since a release concentration corresponding to a dose of 500 mrem in a year which applies at all times assures that the values in 10 CFR 50, Appendix I are not likely to be exceeded.

Operational history at the Turkey Point Plant has demonstrated that the use of the concentration values associated with 10 CFR 20.106 as Technical Specification limits which apply at all times has resulted in calculated doses to a MEMBER OF THE PUBLIC that are small percentages of the limits of 10 CFR 50, Appendix I. Therefore, the use of concentration values which correspond to annual doses of 500



mrem (ten times the concentration values stated in the new 10 CFR Part 20, Appendix B, Table 2, Column 2) should not have a negative impact on the ability to continue to operate within the limits of 10 CFR 50, Appendix I and 40 CFR 190, which are a fraction of the 10 CFR 20.1301 limits.

7. Technical Specification 3.11.4: Change the reference from "10 CFR 20.405(c)" to "10 CFR 20.2203(a) (4)".

Justification: This change is administrative in nature in order to reference the corresponding section number in the new 10 CFR Part 20.

8. Technical Specification 5.1.3: Change the second sentence (referring to the site area map) from "Definition of UNRESTRICTED AREAS within the SITE BOUNDARY that are accessible to MEMBERS OF THE PUBLIC, shall be as shown in Figure 5.1-1" to read "The UNRESTRICTED AREAS and SITE BOUNDARY shall be as shown in Figure 5.1-1."

Justification: This change is administrative in nature to facilitate implementation of the new 10 CFR Part 20 requirements. FPL does control access to the areas currently designated as UNRESTRICTED AREAS within the EXCLUSION AREA; these areas will not be UNRESTRICTED AREAS as defined in the new Part 20 regulations.

9. Technical Specification Figure 5.1-1: Delete Note 1 and the reference to this note. Revise the site boundary to reflect additional land owned by FPL.

Justification: The areas referred to in Note 1 are no longer considered UNRESTRICTED AREAS as defined in the new 10 CFR Part 20. The changes to the site boundary reflect land to the north and south of S.W. 344 Street owned by FPL.

10. Technical Specification 6.9.1.2 a: Rewrite the first sentence to read "A tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) for whom monitoring was required, receiving deep dose equivalent exposures greater than ...." Also in the last sentence of this paragraph, substitute the wording "deep dose equivalent" for the wording "whole-body dose". In the footnote \*\* change the reference from "20.407 of 10 CFR Part 20" to "20.2206 of 10 CFR Part 20".

Justification: The changes are administrative in nature to facilitate implementation of the new 10 CFR Part 20 requirements, and to reference the corresponding section number in the new 10 CFR Part 20. Consistent with the requirements of the new 10 CFR Part 20, the proposed change will require retention of dose records only for those individuals for whom monitoring is required as opposed to all individuals who enter radiation control areas. This change does not alter any requirements or responsibilities for protection of the public and employees against radiation hazards.



11. Technical Specifications 6.9.1.4: Revise the title of the "Semiannual Radioactive Effluent Release Report" to "Annual Radioactive Effluent Release Report." Change the issuance date of this report to be consistent with an annual reporting period.

Justification: The changes are administrative in nature to implement the revised reporting requirement in 10 CFR 50.36a which changed the reporting frequency for the quantity of the principal radionuclides released to unrestricted areas in liquid and gaseous effluents from semiannually to annually (to be submitted April 1 of each year). The Nuclear Regulatory Commission has determined that the change in reporting frequency would not reduce protection of the public health and safety. The public health and safety determination appears in a document entitled "Report on Special Review of Existing NRC Regulations by the Committee to Review Generic Requirements" issued on April 13, 1992. The reporting requirement for solid waste releases is not addressed by the revised 10 CFR 50.36a. However, reporting the quantity of solid waste releases on an annual basis rather than semiannually is consistent with the proposed changes for liquid and gaseous effluents.

12. Technical Specification 6.12.1: The proposed revisions are as follows: (a) change the reference "20.203(c) (5) of 10 CFR Part 20" to "20.1601(c) of 10 CFR Part 20"; (b) change the reference "20.203(c)" to "20.1601(a)"; (c) change the intensity of radiation from "1000 mR/h at 45 cm (18 in.)" to read "1000 mrem/hr at 30 cm (12 in.)", and (d) change the unit of measurement from "mR/h" to "mrem/hr."

Justification: The changes are administrative in nature to facilitate implementation of the new 10 CFR Part 20 requirements for high radiation areas, and to reference the corresponding section number in the new 10 CFR Part 20.

The changes provide wording and measurement distances consistent with the definition of high radiation area in 10 CFR 20.1003, and identify the maximum dose associated with a high radiation area. The revised 10 CFR Part 20 also requires that additional controls be in place to prevent unauthorized or inadvertent access to very high radiation areas (i.e., those areas where radiation levels are 500 rads/hour or more at one meter from a radiation source). The proposed change will ensure that additional measures are in place for controlling access to very high radiation areas.

13. Technical Specification 6.12.2: The proposed revisions are as follows: (a) substitute the wording "mrem/hr at 30 cm. (12 in.) and less than 500 rads/hr at 1 meter" for the wording "mR/h at 45 cm (18 in.)" in the first paragraph and (b) substitute the wording "mrem/hr and less than 500 rads/hr" for the wording "mR/h" in the second paragraph.

Justification: These changes are administrative in nature to facilitate implementation of the new 10 CFR Part 20 requirements for high radiation areas, and to reference the corresponding section number in the new 10 CFR Part 20.



The changes provide wording and measurement distances consistent with the definition of high radiation area in 10 CFR 20.1003, and identify the maximum dose associated with a high radiation area. The revised 10 CFR Part 20 also requires that additional controls be in place to prevent unauthorized or inadvertent access to very high radiation areas (i.e., those areas where radiation levels are 500 rads/hour or more at one meter from a radiation source). The proposed change will ensure that additional measures are in place for controlling access to very high radiation areas.

14. Technical Specification 6.13.2, 6.14.2 and 6.15.1: Revise the title of the "Semiannual Radioactive Effluent Release Report" to the title "Annual Radioactive Effluent Release Report".

Justification: The changes are administrative in nature to implement the revised reporting requirement in 10 CFR 50.36a which changed the reporting frequency for the quantity of the principal radionuclides released to UNRESTRICTED AREAS in liquid and gaseous effluents from semiannually to annually. The Nuclear Regulatory Commission has determined that the change in reporting frequency would not reduce protection of the public health and safety. The public health and safety determination appears in a document entitled "Report on Special Review of Existing NRC Regulations by the Committee to Review Generic Requirements" issued on April 13, 1992. The reporting requirement for solid waste releases is not addressed by the revised 10 CFR 50.36a. However, reporting the quantity of solid waste releases on an annual basis rather than semiannually is consistent with the proposed changes for liquid and gaseous effluents.

15. BASES SECTION 3/4.11 RADIOACTIVE EFFLUENTS: The BASES for Sections 3.0 and 4.0 of the Turkey Point Units 3 and 4 Technical Specifications are revised to reflect the above proposed changes.



ATTACHMENT 2

DETERMINATION OF NO SIGNIFICANT HAZARDS DETERMINATION



## DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

### Description of Proposed License Amendments

The proposed amendments would revise the Turkey Point Units 3 and 4 Technical Specifications to support compliance with the new 10 CFR Part 20 requirements which became effective June 21, 1991, and are required to be implemented by January 1, 1994. Specifically, the proposed changes would (a) revise certain definitions to ensure consistency with the new 10 CFR Part 20; (b) revise the concentration limits for liquid effluent releases to retain operational flexibility consistent with 10 CFR 50, Appendix I; (c) update the site area map to support compliance with the new 10 CFR Part 20; (d) revise the 10 CFR Part 20 references to refer to the new 10 CFR Part 20 section numbers; (e) revise the administrative controls for record keeping to be consistent with the new 10 CFR Part 20 requirements; (f) revise the dose measurement distance to ensure areas are conservatively posted as high radiation areas; and (g) revise the controls for very high radiation areas in compliance with the new 10 CFR Part 20.

The proposed amendments would also revise the Technical Specifications to change the frequency of reporting the quantity of principal nuclides released to unrestricted areas in liquid and gaseous effluents from semiannually to annually (to be submitted by April 1 of each year) consistent with an amendment to 10 CFR 50.36a, effective October 1, 1992, made to reduce the regulatory burden on licensees. The amendment to 10 CFR 50.36a did not address the quantity of solid waste releases (shipped for burial or disposal); however, to be consistent with the proposed changes for gaseous and liquid effluents, the quantity of solid waste releases would also be reported on an annual basis.

### 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 amendments would not involve a significant increase in the probability or consequences of an accident previously evaluated.

The changes being proposed to facilitate implementation of the new 10 CFR Part 20 requirements or revise the reporting frequency for the Radiological Effluent Release Report are either administrative in nature or are necessary for operational flexibility. Compliance with the limits of the new 10 CFR Part 20 will be demonstrated by operating



within the limits of 10 CFR 50, Appendix I and 40 CFR 190. The proposed changes do not involve any change to the configuration or method of operation of any plant equipment that is used to mitigate the consequences of an accident. Also, the proposed changes do not affect any assumptions or conditions in any of the Updated Final Safety Analysis Report (UFSAR) accident analyses. Since the UFSAR accident analyses remain bounding, their radiological consequences are not adversely affected.

Therefore, the probability or consequences of an accident previously evaluated are not affected.

- (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 changes being proposed to facilitate implementation of the new 10 CFR Part 20 requirements or revise the reporting frequency for the Radiological Effluent Release Report are administrative in nature, or are required for operational flexibility. Compliance with the limits of the new 10 CFR Part 20 will be demonstrated by operating within the limits of 10 CFR 50, Appendix I and 40 CFR 190. They do not involve any change to the configuration or method of operation of any plant equipment used to mitigate the consequences of an accident. Accordingly, no new failure modes have been defined for any plant system or component important to safety, nor has any new limiting single failure been identified as a result of the proposed changes.

Therefore, the possibility of a new or different kind of accident from any accident previously evaluated would not be created.

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

The changes being proposed to facilitate implementation of the new 10 CFR Part 20 requirements or revise the reporting frequency for the Radiological Effluent Release Report are administrative in nature, or are required for operational flexibility. Compliance with the limits of the new 10 CFR Part 20 will be demonstrated by operating within the limits of 10 CFR 50, Appendix I and 40 CFR 190. The changes in measurement distances for the determination of high radiation areas will not result in an increase in individual or cumulative occupational radiation exposure since it will result in more conservative identification of high radiation areas. Margins of safety as discussed in the Technical Specification BASES are not affected by these changes.

Therefore, a significant reduction in a margin of safety would not be involved.

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Attachment 2  
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#### Summary

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