



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 25, 2011

Mr. Mano Nazar  
Executive Vice President and  
Chief Nuclear Officer  
Florida Power and Light Company  
P.O. Box 14000  
Juno Beach, Florida 33408-0420

SUBJECT: TURKEY POINT UNITS 3 AND 4 - ISSUANCE OF AMENDMENTS REGARDING  
TECHNICAL SPECIFICATION CHANGES RELATED TO MOVEMENT OF  
HEAVY LOADS OVER SPENT FUEL (TAC NOS. ME3379 AND ME3380)

Dear Mr. Nazar:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 243 to Renewed Facility Operating License No. DPR-31 and Amendment No. 239 to Renewed Facility Operating License No. DPR-41 for the Turkey Point Plant, Unit Nos. 3 and 4, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated February 16, 2010, as supplemented by letters dated September 21, 2010, December 2, 2010, and February 2, 2011.

The amendments delete TSs 3/4.9.7, "Crane Travel – Spent fuel Storage Areas," 3/4.9.12, "Handling of Spent Fuel Cask," and retain the operational limits associated with TS 3/4.9.7 in licensee controlled documents. The basis for the change is the proposed installation of a new single-failure-proof spent fuel cask handling crane meeting the requirements of NUREG-0554, "Single-Failure-Proof Cranes for Nuclear Power Plants," May 1979.

M. Nazar

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A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jason C. Paige', written over a horizontal line.

Jason C. Paige, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosures:

1. Amendment No. 243 to DPR-31
2. Amendment No. 239 to DPR-41
3. Safety Evaluation

cc w/enclosures: Distribution via Listserv



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT PLANT, UNIT NO. 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 243  
Renewed License No. DPR-31

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Florida Power and Light Company (the licensee) dated February 16, 2010, as supplemented by letters dated September 21, 2010, December 2, 2010, and February 2, 2011, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

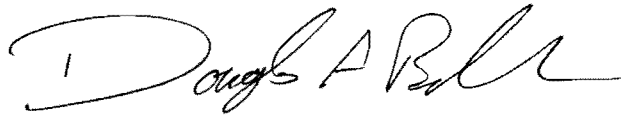
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Renewed Facility Operating License No. DPR-31 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 243 are hereby incorporated into this renewed license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Doug A Broaddus". The signature is written in a cursive style with a large initial "D".

Douglas A. Broaddus, Chief  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Operating License  
and Technical Specifications

Date of Issuance: February 25, 2011



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

FLORIDA POWER AND LIGHT COMPANY

DOCKET NO. 50-251

TURKEY POINT PLANT UNIT NO. 4

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 239  
Renewed License No. DPR-41

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Florida Power and Light Company (the licensee) dated February 16, 2010, as supplemented by letters dated September 21, 2010, December 2, 2010, and February 2, 2011, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Renewed Facility Operating License No. DPR-41 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 239 are hereby incorporated into this renewed license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

- I. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Douglas A. Broaddus, Chief  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Operating License  
and Technical Specifications

Date of Issuance: February 25, 2011

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 243 RENEWED FACILITY OPERATING LICENSE NO. DPR-31

AMENDMENT NO. 239 RENEWED FACILITY OPERATING LICENSE NO. DPR-41

DOCKET NOS. 50-250 AND 50-251

Replace Page 3 of Renewed Operating License DPR-31 with the attached Page 3.

Replace Page 3 of Renewed Operating License DPR-41 with the attached Page 3.

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by amendment number and contain marginal lines indicating the area of change.

Remove pages

xii  
xiii  
3/4 9-7  
3/4 9-13

Insert pages

xii  
xiii  
3/4 9-7  
3/4 9-13

- E. Pursuant to the Act and 10 CFR Parts 40 and 70 to receive, possess, and use at any time 100 milligrams each of any source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactively contaminated apparatus;
  - F. Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of Turkey Point Units Nos. 3 and 4.
3. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified below:
- A. Maximum Power Level

The applicant is authorized to operate the facility at reactor core power levels not in excess of 2300 megawatts (thermal).
  - B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 243 are hereby incorporated into this renewed license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
  - C. Final Safety Analysis Report

The licensee's Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on November 1, 2001, describes certain future inspection activities to be completed before the period of extended operation. The licensee shall complete these activities no later than July 19, 2012.

The Final Safety Analysis Report supplement as revised on November 1, 2001, described above, shall be included in the next scheduled update to the Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following the issuance of this renewed license. Until that update is complete, the licensee may make changes to the programs described in such supplement without prior Commission approval, provided that the licensee evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.



- E. Pursuant to the Act and 10 CFR Parts 40 and 70 to receive, possess, and use at any time 100 milligrams each of any source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactively contaminated apparatus;
  - F. Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of Turkey Point Units Nos. 3 and 4.
3. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified below:
- A. Maximum Power Level

The applicant is authorized to operate the facility at reactor core power levels not in excess of 2300 megawatts (thermal).
  - B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 239 are hereby incorporated into this renewed license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
  - C. Final Safety Analysis Report

The licensee's Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on November 1, 2001, describes certain future inspection activities to be completed before the period of extended operation. The licensee shall complete these activities no later than April 10, 2013.

The Final Safety Analysis Report supplement as revised on November 1, 2001, described above, shall be included in the next scheduled update to the Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following the issuance of this renewed license. Until that update is complete, the licensee may make changes to the programs described in such supplement without prior Commission approval, provided that the licensee evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 243 TO  
RENEWED FACILITY OPERATING LICENSE NO. DPR-31 AND  
AMENDMENT NO. 239 TO RENEWED FACILITY OPERATING LICENSE NO. DPR-41  
FLORIDA POWER AND LIGHT COMPANY  
TURKEY POINT PLANT, UNIT NOS. 3 AND 4  
DOCKET NOS. 50-250 AND 50-251

## 1.0 INTRODUCTION

By letter dated February 16, 2010 (Agencywide Document and Management System (ADAMS) Accession No. ML100600441), and as supplemented by letters dated September 21, 2010 (ADAMS Accession No. ML102790194), December 2, 2010 (ADAMS Accession No. ML103490453), and February 2, 2011 (ADAMS Accession No. ML110460120), Florida Power and Light Company (FPL, the licensee) proposed an amendment to the Technical Specifications (TSs) for Turkey Point Plant, Units 3 and 4. The requested changes would revise the TSs by deleting TS 3/4.9.7, "Crane Travel – Spent Fuel Storage Areas," retain the operational limits associated with TS 3/4.9.7 in licensee controlled documents, and delete TS 3/4.9.12, "Handling of Spent Fuel Cask." Part of the basis for the change is the proposed installation of a new single-failure-proof spent fuel cask handling crane meeting the requirements of NUREG-0554, "Single-Failure-Proof Cranes for Nuclear Power Plants," May 1979.

The supplements dated September 21, 2010, December 2, 2010, and February 2, 2011, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on May 18, 2010 (75 FR 27831).

## 2.0 REGULATORY EVALUATION

### 2.1 Content of Technical Specifications

Section 182a of the Atomic Energy Act of 1954, as amended (the Act) requires applicants for nuclear power plant operating licenses to include the TSs as part of the license. The Commission's regulatory requirements related to the content of TSs are set forth in Section 50.36 of Title 10 of the *Code of Federal Regulations* (10 CFR). The regulation requires that the TSs include items in specific categories, including: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs);

Enclosure

(3) surveillance requirements; (4) design features; and (5) administrative controls. The regulation does not specify the particular requirements to be included in the TSs.

The four criteria defined by 10 CFR 50.36(c)(2)(ii) for determining whether particular items are required to be included in the TS LCOs, are as follows:

(A) *Criterion 1.* Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

(B) *Criterion 2.* A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

(C) *Criterion 3.* A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

(D) *Criterion 4.* A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

As noted in the *Federal Register* Notice (60 FR 36953) accompanying the issuance of 10 CFR 50.36, the rule reflects that TSs were intended to be reserved for those conditions or limitations upon reactor operation necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. That is, the condition is of controlling importance to operational safety. When the TSs involve physical, designed-in features that prevent operations staff from immediately exceeding the assumptions in the bounding analysis in the course of operations, then the TSs would not be of controlling importance to safety and could be relocated to the Updated Final Safety Analysis Report (UFSAR) or other similarly controlled document. Existing TSs that fall within or satisfy any of the above criteria must be retained in the TSs; those that do not fall within or satisfy these criteria may be deleted, provided appropriate licensing-basis information is relocated to licensee controlled documents.

## 2.2 Single-Failure-Proof Crane Guidelines

In NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants," the U. S. Nuclear Regulatory Commission (NRC) staff provided regulatory guidelines for control of heavy load lifts to assure safe handling of heavy loads in areas where a load drop could impact on stored spent fuel, fuel in the reactor core, or equipment that may be required to achieve safe shutdown or permit continued decay heat removal. Section 5.1.1 of NUREG-0612 provides guidelines for reducing the likelihood of dropping heavy loads and provides criteria for establishing safe load paths; procedures for load-handling operations; training of crane operators; design, testing, inspection, and maintenance of cranes and lifting devices; and analyses of the impact of heavy load drops. The guidelines in Section 5.1.6 address measures to further reduce the probability

of a load-handling accident through installation and operation of a highly reliable load handling system. These measures include use of a single-failure-proof crane to improve reliability through increased factors of safety and through redundancy or duality in certain active components. Criteria for design of single-failure-proof cranes are included in NUREG-0554, "Single-Failure-Proof Cranes for Nuclear Power Plants."

In Regulatory Issue Summary 2005-25, Supplement 1, the NRC staff described operating experience that indicated single operational errors resulted in synthetic round sling failures. The staff considered this condition incompatible with the intent of single-failure-proof handling systems. However, operating experience suggested that metallic slings resist similar load handling errors. Accordingly, the staff included guidance in Revision I to Section 9.1.5, "Overhead Heavy Load Handling System," of the NRC Standard Review Plan, NUREG-0800, specifying the use of metal slings (chain or wire rope) when use of a single-failure-proof handling system is necessary.

### 2.3 Fuel Handling System Design Basis

The spent fuel cask handling crane and each unit's spent fuel handling crane are capable of travel over the Turkey Point spent fuel pits in each unit's auxiliary building. The spent fuel handling crane and the spent fuel cask handling crane are described in the Turkey Point UFSAR, Section 9.5.4, and "Fuel Handling System."

The spent fuel handling crane is a traveling bridge with a top-running trolley mounted on an overhead structure. The spent fuel handling crane trolley is equipped with two hoists, one on each side of the bridge. The hoists are provided with limit switches, overload sensors and other safety features to withstand two-blocking, load hang-ups and other overloading, mis-reeving, and single cable failures. The capacity of each hoist is two tons. In addition, an in-line weight sensing system is provided for each hoist to limit the lifting load to preclude accidental fuel damage should binding occur. When lifting over spent fuel, the total load is limited to 2000 pounds (lbs) by procedures, limit switches, and load sensors.

The existing Turkey Point spent fuel cask handling crane is a 105/15 ton (main/auxiliary hook capacity) cask crane of the overhead bridge type, and it services both units for spent fuel cask handling operations. The crane is located outdoors, where it can access each unit's auxiliary building, as well as adjacent outside laydown areas and the plant road. The crane is not currently single-failure-proof and its original design included only static seismic factors. Access to the cask handling/storage area of each unit's spent fuel pool is through an opening in the Auxiliary Building's roof and east wall, which is normally closed, by an inverted "L" shaped door. The crane is prevented from carrying a load over the fuel storage areas of the spent fuel pools by electrical interlocks.

The dose consequences of a fuel handling accident are described in Turkey Point UFSAR Chapter 14.2.1, "Fuel Handling Accidents." The dose consequences for the limiting case were based on the non-mechanistic assumption that all the fuel rods in the equivalent of one assembly are damaged to the extent that all their gap activity is released. Existing TS 3/4.9.7 prohibits loads in excess of 2000 lbs from travel over fuel assemblies. The bases for this load restriction support analyses assumptions that limit the activity released on a load drop to no



more than the contents of the gap activity in a single fuel assembly and prevent a load drop from distorting fuel in the storage racks that would result in a critical geometry.

NUREG-0612, Section 5.1.2, "Spent Fuel Pool Area-PWR," provides guidelines for handling heavy loads in the spent fuel pool area. In summary, the guidelines are: (1) install a single-failure-proof crane; or (2) prevent heavy loads from going over the spent fuel pool by installing mechanical stops or electrical interlocks; or (3) analyze the effects of a heavy load drop over the spent fuel pool. The Turkey Point current licensing basis includes an analysis of the effects of a heavy load drop over the spent fuel pool. The accident evaluated for the existing spent fuel cask handling crane is the drop of a single element cask, as evaluated in UFSAR Section 14.2.1.3, "Cask Drop Accident." This cask drop accident analysis included assumptions that a single element spent fuel cask drop damages multiple fuel assemblies that have decayed in excess of 1525 hours. Existing TS 3/4.9.12 specifies the spent fuel cask configuration and fuel aging requirements that must be met before the spent fuel cask can be moved in the spent fuel storage area.

With regard to the storage of the current inventory and the anticipated future generation of spent fuel at Turkey Point, FPL plans to develop an Independent Spent Fuel Storage Installation (ISFSI). In a typical cask loading campaign, the casks are loaded with spent fuel assemblies inside the spent fuel pool area; then the cask is lifted out of the pool using the spent fuel cask handling crane and placed in a cask handling facility where it is prepared for transfer to the ISFSI storage facility. The cask assembly for this system is a multiple fuel assembly configuration, in contrast to the single fuel assembly configuration as currently specified by TS 3/4.9.12. To support movement of a heavier, multiple-assembly cask in the spent fuel cask handling area, FPL has installed an upgraded crane satisfying the single-failure-proof criteria of NUREG-0554.

### 3.0 TECHNICAL EVALUATION

The NRC staff evaluated the proposed criteria applied to the design and operation of the replacement crane against the guidelines of NUREG-0612 regarding protection against potential load drops. Based on the criteria applied to the design and operation of the spent fuel handling crane, the staff evaluated TS 3/4.9.7 against the criteria of 10 CFR 50.36(c)(2)(ii) to determine whether it is appropriate to delete TS 3/4.9.7 and retain the operational limits in the UFSAR. The NRC staff evaluated TS 3/4.9.12 against the criteria of 10 CFR 50.36(c)(2)(ii) to determine whether it is appropriate to delete the TS based on the design and operation of a single-failure-proof crane that satisfies the guidelines per NUREG-0612.

The staff reviewed the licensee's bases for the proposed TS changes against the criteria in 10 CFR 50.36. In addition, the NRC staff independently evaluated the proposed TS changes against the requirements in 10 CFR 50.36 and determined that TS 3/4.9.7 and TS 3/4.9.12 are only applicable to Criterion 2.

Criterion 2 applies to a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis described in the UFSAR that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Initial conditions captured under Criterion 2 are not limited to only process variables assumed in safety analyses, but also include certain active design features and operating restrictions needed to

preclude unanalyzed accidents. Active design features are intended to be those design features under the control of operations personnel (i.e., licensed operators and personnel who perform control functions at the direction of licensed operators). Should a specific LCO considered for relocation involve a physical, designed-in plant feature that prevents the operations staff from immediately placing the plant in an unanalyzed condition in the course of operations (one that would require a design change before operators could exceed the limits of the LCO), that LCO would not satisfy Criterion 2.

The limitation on the weight of items lifted over spent fuel imposed by TS 3/4.9.7 was not mechanically related to the fuel handling accident assumption of damage to fuel equivalent to a gap release from all the fuel in a single assembly. Nevertheless, procedures, limit switches, and load sensors limit the maximum load that can be lifted by either spent fuel handling crane hoist to values less than 2000 lbs. In addition, the configuration of the spent fuel handling crane limits the scope of material that could reasonably be lifted over stored spent fuel. Therefore, the load limit of TS 3/4.9.7 cannot be readily exceeded by fuel handling operations personnel, and the load limit does not satisfy Criterion 2 of 10 CFR 50.36. Although the load limit is important to ensure the assumed level of fuel damage would not be exceeded, it is not of controlling importance to safety. The licensee stated that the description of the measures to prevent exceeding the load limit would be retained in the Turkey Point UFSAR. Thus, the proposed deletion of TS 3/4.9.7 is acceptable.

In the February 16, 2010, letter, the licensee stated that FPL was in the process of upgrading the spent fuel cask handling crane to a single-failure-proof crane design (design rated load of 130 tons for the main hoist and 25 tons for the auxiliary hoist), which includes the replacement of the main and auxiliary hoists, trolley, bridge and electronics. The licensee also described that a crane support structure upgrade would be implemented consistent with the increased load handling capabilities of the spent fuel cask handling crane.

The licensee described that the design of the single-failure-proof crane would meet applicable requirements of NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants," July 1980; NUREG-0554, "Single-Failure Proof Cranes for Nuclear Power Plants," May 1979; ASME NOG-1, "Rules for Construction of Overhead and Gantry Cranes (Top Running Bridge, Multiple Girder)," May 2005; and CMAA 70-04, "Specifications for Top Running Bridge & Gantry Type Multiple Girder Electric Overhead Traveling Cranes," January 2004. The licensee provided an evaluation of compliance with NUREG-0554 criteria as Attachment 3 to the license amendment request.

The NRC staff reviewed the criteria applied to the design of the crane and criteria for operation of the upgraded crane. The criteria applied to the design of the replacement crane generally satisfied the criteria of NUREG-0554 and any minor exceptions were noted, adequately justified, and accepted by the NRC staff. In addition, the licensee stated that implementing procedures would conform to the guidelines of NUREG-0612. In the letter dated December 2, 2010, which was provided in response to an NRC staff request for information, the licensee stated that the Turkey Point UFSAR and plant procedures will be revised to require the use of the single-failure-proof Spent Fuel Cask Crane and Cask Lifting Yoke Assembly (designed per American National Standards Institute guidance document, ANSI N-14.6, "American National Standard for Special Lifting Devices for Shipping Containers Weighing 10,000 Pounds (4500 kg) or More For Nuclear Materials") when lifting a spent fuel cask loaded with spent fuel assemblies. For all other

single-failure-proof lifts, the licensee described that Turkey Point procedures will specify the use of special lifting devices designed in accordance with ANSI N-14.6 or metal slings (chain or wire rope). By letter dated February 2, 2011, the licensee confirmed that installation and testing of the replacement crane, as described in the license amendment request, had been completed.

With a spent fuel cask handling crane installed that conforms to the single-failure-proof handling system guidelines of NUREG-0612 and NUREG-0554, the staff has found that the likelihood of a handling system failure is very small. Per NUREG-0612, for infrequently handled heavy loads, such as spent fuel storage and transportation casks, the frequency of a load drop is sufficiently small that analyses of the potential consequences are not necessary to demonstrate an acceptable level of safety. Therefore, an update of the spent fuel cask drop analysis is not necessary, and the licensee's proposal to revise the UFSAR for each unit to remove the cask-drop accident from the licensing basis is acceptable. With the cask-drop design basis accident removed from the licensing basis, Criterion 2 of 10 CFR 50.36 no longer applies to cask handling activities, and the proposed deletion of TS 3/4.9.12 is acceptable.

#### 4.0 STATE CONSULTATION

Based upon a letter dated May 2, 2003, from Michael N. Stephens of the Florida Department of Health, Bureau of Radiation Control, to Brenda L. Mozafari, Senior Project Manager, U.S. Nuclear Regulatory Commission, the State of Florida does not desire notification of issuance of license amendments.

#### 5.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (75 FR 27831). Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

#### 6.0 CONCLUSION

The NRC staff has reviewed the proposed deletion of technical specifications related to movement of heavy loads at Turkey Point, Units 3 and 4. The staff found that the weight limit for loads handled over spent fuel as not of controlling importance to safety and can be adequately controlled as information contained in the Turkey Point UFSAR. The staff also found that, following completion of the installation and testing of a new, single-failure-proof spent fuel cask handling crane, the frequency of a spent fuel cask drop would be sufficiently small that the load drop analysis could be removed from the Turkey Point UFSAR. Therefore, consistent with the requirements of 10 CFR 50.36, the proposed deletion of the associated TS 3/4.9.7 limit on loads handled over spent fuel and the TS 3/4.9.12 limits on spent fuel cask handling is acceptable.

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: S. Jones  
D. Hoang

Date: February 25, 2011

M. Nazar

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A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

**/RA/**

Jason C. Paige, Project Manager  
Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosures:

1. Amendment No. 243 to DPR-31
2. Amendment No. 239 to DPR-41
3. Safety Evaluation

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