



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

Mr. Terry D. Hobbs
General Manager, Decommissioning
Crystal River Nuclear Plant (NA2C)
15760 W. Power Line Street
Crystal River, FL 34428-6708

June 27, 2017

SUBJECT: CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT – ISSUANCE OF AMENDMENT 255 FOR THE LICENSE AND PERMANENTLY DEFUELED TECHNICAL SPECIFICATIONS TO REFLECT PERMANENT REMOVAL OF SPENT FUEL FROM THE SPENT FUEL POOLS (TAC NOS. L53146)

Dear Mr. Hobbs:

By application dated August 31, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16243A249), Duke Energy Florida, Inc. (DEF), requested U.S. Nuclear Regulatory Commission (NRC) approval of an Amendment revising the Crystal River Unit 3 (CR-3) Facility Operating License and the Permanently Defueled Technical Specifications (PDS) to reflect removal of all CR-3 spent nuclear fuel from the spent fuel pools and the transfer of the fuel to dry cask storage within the Independent Spent Fuel Storage Installation (ISFSI) located within the CR-3 Protected Area.

The NRC staff has completed its review of the proposed license amendment. The amendment approving the proposed changes is provided in Enclosure 1. Enclosure 2 contains the NRC staff's associated safety evaluation.

A notice of issuance of amendment has been forwarded to the Office of *Federal Register* for publication.

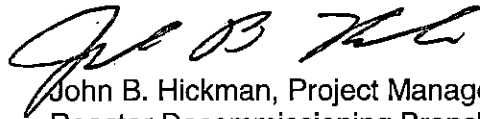
In accordance with 10 CFR 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

T. Hobbs

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If you have any questions, please contact me at 301-415-3017 or via e-mail at John.Hickman@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "John B. Hickman". The signature is fluid and cursive, with the first name "John" being the most prominent.

John B. Hickman, Project Manager
Reactor Decommissioning Branch
Division of Decommissioning, Uranium Recovery,
and Waste Programs
Office of Nuclear Material Safety
and Safeguards

Docket No. 50-302

Enclosures:

1. Amendment No. 255 to
License No. DPR-72
2. Safety Evaluation

cc: ListServe

ENCLOSURE 1

AMENDMENT NO. 255 TO LICENSE NO. DPR-72

DUKE ENERGY FLORIDA, LLC

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

DOCKET NO. 50-302

DUKE ENERGY FLORIDA, LLC
DOCKET NO. 50-302
CRYSTAL RIVER UNIT-3 NUCLEAR GENERATING PLANT
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 255
License No. DPR-72

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to the Crystal River Unit 3 Nuclear Generating Plant (the facility) Facility Operating License No. DPR-72 filed by Duke Energy Florida, LLC, (the licensee), dated August 31, 2016, 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 hereby amended as indicated in the attachment to this license amendment, and Facility Operating License No. DPR-72 is hereby amended to read as follows.

Paragraph 1.E. of Facility Operating License No. DPR-72 is hereby amended to read:

Duke Energy Florida, LLC is technically qualified and financially qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission;

Paragraph 2.A. of Facility Operating License No. DPR-72 is hereby amended to read:

This amended license applies to the Crystal River Unit 3 Nuclear Generating Plant, a pressurized water nuclear reactor and associated equipment (the facility), owned by Duke Energy Florida, LLC. The facility is located on the Gulf of Mexico, about seven and one-half miles northwest of the town of Crystal River, Citrus County, Florida, and is described in the "Final Safety Analysis Report" as supplemented and amended and the Environmental Report as supplemented and amended.

Paragraph 2.C.(2) of Facility Operating License No. DPR-72 is hereby amended to read:

Technical Specifications

The Technical Specifications contained in Appendix A are hereby replaced with the Permanently Defueled Technical Specifications (PDTs). Duke Energy Florida, LLC shall maintain the facility in accordance with the Permanently Defueled Technical Specifications, as revised through Amendment No. 253.

Paragraph 2.C.(14) of Facility Operating License No. DPR-72 is hereby amended to read:

Deleted per Amendment No. 253

Paragraph 2.G. of Facility Operating License No. DPR-72 is hereby amended to read:

This amended license is effective as of the date of issuance. Facility Operating License No. DPR-72, as amended, shall expire at midnight, December 3, 2016.

Duke Energy Florida, LLC submitted the 10 CFR 50.82(a)(1) notification to the Nuclear Regulatory Commission on February 20, 2013. Per 10 CFR 50.51(b), the Facility Operating License No DPR-72 continues in effect until the Commission notifies the licensee that the License has been terminated.

3. This license amendment is effective as of the date Duke Energy Florida, LLC submits written notifications that all spent fuel has been transferred from the spent fuel pool to the ISFSI, and shall be implemented within 60 days. Implementation of the amendment shall also include revision of the facility's Quality Assurance Program Description and Compliance Procedure CP-0500; "SPECIAL ACTIONS AND REPORTING REQUIREMENTS" to incorporate the commitment contained in the licensee's application dated August 31, 2016.

FOR THE NUCLEAR REGULATORY COMMISSION



Bruce A. Watson, Chief
Reactor Decommissioning Branch
Division of Decommissioning, Uranium Recovery,
and Waste Programs,
Office of Nuclear Material Safety
and Safeguards.

Attachment:
Changes to the Facility Operating License
and Technical Specifications

Date of Issuance: *June 27, 2017*

ATTACHMENT TO LICENSE AMENDMENT NO.255

FACILITY OPERATING LICENSE NO. DPR-72

DOCKET NO. 50-302

Replace the pages of Facility Operating License DPR-72 and Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Operating License No. DPR-72

<u>Remove</u>	<u>Insert</u>
1	1
2	2
3	3
4	4

Technical Specifications

<u>Remove</u>	<u>Insert</u>
All pages	i
	ii
	4.0-1
	5.0-1
	5.0-2



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

DUKE ENERGY FLORIDA, LLC

DOCKET NO. 50-302

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 255
License No. DPR-72

1. The Nuclear Regulatory Commission (the Commission) having found that:
 - A. The application filed by Florida Power Corporation*** (the licensee), as supplemented by letter dated December 9, 1976, 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 1;
 - B. Construction of the Crystal River Unit 3 Nuclear Generating Plant (facility) has been substantially completed in conformity with Provisional Construction Permit No. CPPR-51 and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;
 - E. Duke Energy Florida, LLC is technically qualified and financially qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission;
 - F. The licensee has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements," of the Commission's regulations;
 - G. The issuance of this operating license will not be inimical to the common defense and security or to the health and safety of the public;

***On April 29, 2013, the name "Florida Power Corporation" was changed to "Duke Energy Florida, Inc." On August 1, 2015, Duke Energy Florida, Inc. converted to a limited liability company and the name was changed to "Duke Energy Florida, LLC."

- H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. DPR-72 subject to the conditions for protection of the environment set forth herein is in accordance with 10 CFR Part 51, (formerly Appendix D to 10 CFR Part 50), of the Commission's regulations and all applicable requirements have been satisfied;
 - I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Part 30, 40 and 70, including 10 CFR Sections 30.33, 40.32, 70.23 and 70.31.
2. Facility Operating License No. DPR-72, issued to the licensee, is hereby amended in its entirety to read as follows:
- A. This amended license applies to the Crystal River Unit 3 Nuclear Generating Plant, a pressurized water nuclear reactor and associated equipment (the facility), owned by Duke Energy Florida, LLC. The facility is located on the Gulf of Mexico, about seven and one-half miles northwest of the town of Crystal River, Citrus County, Florida, and is described in the "Final Safety Analysis Report" as supplemented and amended and the Environmental Report as supplemented and amended.
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) Duke Energy Florida, LLC, pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess and use the facility;
 - (2) The licensee to possess the facility at the designated location in Citrus County, Florida, in accordance with the procedures and limitations set forth in this license;
 - (3) Duke Energy Florida, LLC, pursuant to the Act and 10 CFR Part 70, to possess at any time special nuclear material configured as reactor fuel, in accordance with the limitations for storage as described in the Final Safety Analysis Report, as supplemented and amended;
 - (4) Duke Energy Florida, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70 to possess at any time any byproduct, source and special nuclear material as sealed neutron sources used previously for reactor startup, as fission detectors, and sealed sources for reactor instrumentation and to possess and use at any time any byproduct, source, and special nuclear material as sealed sources for radiation monitoring equipment calibration in amounts as required;
 - (5) Duke Energy Florida, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components;

- (6) Duke Energy Florida, LLC, 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 the facility;
- (7) Duke Energy Florida, LLC, pursuant to the Act and 10 CFR Parts 30 and 70, to receive and possess, but not separate, that byproduct and special nuclear materials associated with four (4) fuel assemblies (B&W Identification Numbers 1A-01, 04, 05 and 36 which were previously irradiated in the Oconee Nuclear Station, Unit No. 1) acquired by Florida Power Corporation*** from Duke Power Company for use as reactor fuel in the facility.

Added per
Amdt. 15,
7-24-78

C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Section 50.54 and 50.59 of Part 50, Section 70.32 of 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 or incorporated below:

(1) Deleted per Amendment No. 247

(2) Technical Specifications

The Technical Specifications contained in Appendix A are hereby replaced with the Permanently Defueled Technical Specifications (PDTS). Duke Energy Florida, LLC shall maintain the facility in accordance with the Permanently Defueled Technical Specifications, as revised through Amendment No. 255.

(3) Deleted per Amendment No. 247

(4) Deleted per Amendment No. 20 dated 7-3-79

(5) Deleted per Amendment No. 247

(6) Deleted per Amendment No. 21, 7-3-79

(7) Deleted per Amendment No. 247

(8) Deleted per Amendment No. 247

(9) Deleted per Amendment No. 247

(10) Deleted per Amendment No. 247

(11) Deleted per Amendment No. 247

(12) Deleted per Amendment No. 237

(13) Deleted per Amendment No. 229

(14) Deleted per Amendment No. 255

(15) Deleted per Amendment No. 247

***On April 29, 2013, the name "Florida Power Corporation" was changed to "Duke Energy Florida, Inc." On August 1, 2015, Duke Energy Florida, Inc. converted to a limited liability company and the name was changed to "Duke Energy Florida, LLC."

D. Physical Security

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Physical Security Plan, Revision 5," and "Safeguards Contingency Plan, Revision 4," submitted by letter dated May 16, 2006, and "Guard Training and Qualification Plan, Revision 0," submitted by letter dated September 30, 2004, as supplemented by letters dated October 20, 2004, and September 29, 2005.

E. Deleted per Amendment No. 247 .

F. In accordance with the requirement imposed by the October 8, 1976, order of the United States Court Appeals for the District of Columbia Circuit in Natural Resources Defense Council v. Nuclear Regulatory Commission, No. 74-1385 and 74-1586, that the Nuclear Regulatory Commission "shall make any licenses granted between July 21, 1976 and such time when the mandate is issued subject to the outcome of the proceedings herein," the license issued herein shall be subject to the outcome of such proceedings.

G. This amended license is effective as of the date of issuance. Facility Operating License No. DPR-72, as amended, shall expire at midnight, December 3, 2016.

Amdt. #97
March 31, 1987

Duke Energy Florida, LLC submitted the 10 CFR 50.82(a)(1) notification to the Nuclear Regulatory Commission on February 20, 2013. Per 10 CFR 50.51(b), the Facility Operating License No DPR-72 continues in effect until the Commission notifies the licensee that the License has been terminated.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Attachments:
Appendices A & B - Technical Specifications

Date of Issuance: Jan 28 1977

Facility Operating License No. DPR-72
Amendment No. 255

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4.0 DESIGN FEATURES 4.0-1

5.0 ADMINISTRATIVE CONTROLS 5.0-1

4.0 DESIGN FEATURES

4.1 Site

The 4,738 acre site is characterized by a 4,400 foot minimum exclusion radius centered on the Reactor Building; isolation from nearby population centers; sound foundation for structures; an abundant supply of cooling water; an ample supply of power; and favorable conditions of hydrology, geology, seismology, and meteorology.

4.2 Not Used

4.3 Fuel Storage

Spent fuel shall not be stored in the spent fuel pool.

5.0 ADMINISTRATIVE CONTROLS

5.8 High Radiation Area

5.8.1 Pursuant to 10 CFR 20, paragraph 20.1601(c), alternative methods are used to control access to high radiation areas. Each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation (measured at 30 cm) is > 100 mrem/hr but < 1000 mrem/hr, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP).

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device that continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device that continuously integrates the radiation dose in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel are aware of them.
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance.

5.8.2 In addition to the requirements of Specification 5.8.1, areas with radiation levels ≥ 1000 mrem/hr at 30 cm from the radiation source or from any surface penetrated by the radiation but less than 500 rads/hr at 1 meter from the radiation source or from any surface penetrated by the radiation shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the Shift Supervisor or health physics supervision. Doors shall remain locked except during periods of access by personnel.

Direct or remote (such as closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.

(continued)

5.8 High Radiation Area (continued)

- 5.8.3 For individual high radiation areas with radiation levels of ≥ 1000 mrem/hr at 30 cm from the radiation source or from any surface penetrated by the radiation but less than 500 rads/hr at 1 meter from the radiation source or from any surface penetrated by the radiation, accessible to personnel, that are located within large areas such as reactor containment, where no enclosure exists for purposes of locking, or that are not continuously guarded, and where no enclosure can be reasonably constructed around the individual area, that individual area shall be barricaded and conspicuously posted, and a flashing light shall be activated as a warning device.
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ENCLOSURE 2

SAFETY EVALUATION

DUKE ENERGY FLORIDA, INC.

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

DOCKET NO. 50-302

SAFETY EVALUATION BY
THE OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
RELATED TO THE AMENDMENT TO PERMANENTLY DEFUELED
TECHNICAL SPECIFICATIONS TO REFLECT PERMANENT REMOVAL OF
SPENT FUEL FROM THE SPENT FUEL POOLS
DOCKET NO. 50-302
FACILITY OPERATING LICENSE NO. DPR-72

1.0 INTRODUCTION

By application dated August 31, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16243A249), Duke Energy Florida, Inc. (DEF), requested U.S. Nuclear Regulatory Commission (NRC) approval of an Amendment revising the Crystal River Unit 3 (CR-3) Facility Operating License and the Permanently Defueled Technical Specifications (PDTS) to reflect removal of all CR-3 spent nuclear fuel from the spent fuel pools and its transfer to dry cask storage within the Independent Spent Fuel Storage Installation (ISFSI) located within the CR-3 Protected Area.

2.0 BACKGROUND

CR-3 has been shutdown since September 26, 2009, and the final removal of fuel from its reactor vessel was completed on May 28, 2011. On February 5, 2013, DEF announced that CR-3 would be retired, and notified the NRC on February 20, 2013 of the permanent cessation of power operations and that CR-3 had removed all fuel from the reactor. Pursuant to 10 CFR 50.82(a)(2), the NRC has docketed these certifications and therefore the 10 CFR Part 50 license for CR-3 no longer authorizes operation of the reactor or emplacement or retention of fuel in the reactor vessel. CR-3 is authorized to possess and store irradiated nuclear fuel.

3.0 REGULATORY EVALUATION

In 10 CFR 50.36, the Commission established its regulatory requirements related to the content of Technical Specifications (TSs). In doing so, the Commission placed emphasis on those matters related to the prevention of accidents and the mitigation of accident consequences; the Commission noted that applicants were expected to incorporate into their TSs "those items that are directly related to maintaining the integrity of the physical barriers designed to contain radioactivity." ["Technical Specification for Facility Licenses; Safety Analysis Reports," 33 FR 18610 (December 17, 1968)]. Pursuant to 10 CFR 50.36, TSs are required to include items in the following five categories: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls. However, the rule does not specify the particular requirements to be included in a plant's TSs.

On July 22, 1993, the Commission published a Policy Statement (58 FR 39132) on the scope and purpose of TSs for nuclear power plants. This Policy Statement included guidance criteria to be used in determining which of the LCOs and associated surveillances should remain in the TSs. The Policy Statement established four criteria to define the scope of equipment and parameters to be included in the improved standard technical specifications. These criteria were developed for licenses authorizing operation and focused on instrumentation to detect degradation of the reactor coolant system pressure boundary and on equipment or process variables that affect the integrity of fission product barriers during design-basis accidents (DBAs) or transients. The fourth criterion refers to the use of operating experience and probabilistic risk assessment to identify and include in the TS structures, systems, and components shown to be significant to public health and safety. These criteria, codified by 10 CFR 50.36, are the source of the TS requirements for facilities licensed under 10 CFR Part 50. A general discussion of these considerations is provided below.

Criterion 1 of 10 CFR 50.36(c)(2)(ii)(A) states that TS LCOs must be established for "installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary." Since the CR-3 facility no longer has fuel in the reactor and is no longer licensed to operate, this criterion is not applicable.

Criterion 2 of 10 CFR 50.36(c)(2)(ii)(B) states that TS LCOs must be established for a "process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier." The purpose of this criterion is to capture those process variables that have initial values assumed in the DBA and transient analyses, and which are monitored and controlled during power operation. Since the CR-3 facility no longer has fuel in the reactor and is no longer licensed to operate, this criterion is not applicable.

Criterion 3 of 10 CFR 50.36(c)(2)(ii)(C) states that TS LCOs must be established for structures, systems, or components (SSCs) that are part of the primary success path and which function or actuate to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The intent of this criterion is to capture into the TS those SSCs that are part of the primary success path of a safety sequence analysis. The primary success path of a safety sequence analysis consists of a combination and sequences of equipment needed to operate (including consideration of the single failure criterion), so that the plant response to DBAs and transients limits the consequences of these events to within the appropriate acceptance criteria. Since fuel will have been removed from the spent fuel pool at the CR-3 facility prior to implementation of this amendment, this criterion is not applicable.

Criterion 4 of 10 CFR 50.36(c)(2)(ii)(D) states the TS LCOs must be established for SSCs which operating experience or probabilistic risk assessment has shown to be significant to public health and safety. The intent of this criterion is that risk insights and operating experience be factored into the establishment of TS LCOs. Since fuel will have been removed from the spent fuel pool at the CR-3 facility prior to implementation of this amendment, this criterion is not applicable.

Addressing administrative controls, 10 CFR 50.36(c)(5) states that administrative controls "are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner." The

particular administrative controls to be included in the TSs, therefore, are the provisions that the Commission deems essential for the safe operation of the facility that are not already covered by other regulations. Accordingly, the NRC staff has determined that administrative control requirements that are not specifically required under Section 50.36(c)(5), and which are not otherwise necessary to obviate the possibility of an abnormal situation, or an event giving rise to an immediate threat to the public health and safety, may be relocated to more appropriate documents (e.g., Quality Assurance Program, Security Plan, or Emergency Plan), which are subject to regulatory controls. Similarly, while the required content of TS administrative controls is specified in 10 CFR 50.36(c)(5), particular details of these controls may be relocated to other licensee-controlled documents, where the 10 CFR 50.59 change evaluation process ensures that the licensee is providing adequate regulatory control.

The QA program is a logical candidate for relocations of administrative controls due to the controls imposed by such regulations as Appendix B to 10 CFR Part 50, the existing NRC-approved QA plans and commitments to industry QA standards, and the established QA program change control process in 10 CFR 50.54(a).

The NRC Administrative Letter (AL) 95-06, "Relocation of Technical Specification Administrative Controls Related to Quality Assurance," (<http://www.nrc.gov/reading-rm/doc-collections/gen-comm/admin-letters/1995/al95006.html>) provides guidance to licensees requesting amendments that relocate administrative controls to NRC-approved QA program descriptions, where subsequent changes are controlled pursuant to 10 CFR 50.54(a). AL 95-06 provides specific guidance in the areas of: (1) independent safety engineering group, (2) reviews and audits, (3) procedure review process, and (4) records and record retention.

Some relocations are specifically discussed in AL 95-06, while others are similar in nature to those discussed in the AL. Relocations not specifically discussed in AL 95-06 are evaluated with respect to the appropriateness of the relocation. Editorial changes are allowed without basis by 10 CFR 50.54(a)(3) and therefore are not explicitly evaluated in this safety evaluation report.

4.0 TECHNICAL EVALUATION

The licensee is currently in the process of preparing to transfer all the spent nuclear fuel from the SFP to an ISFSI. After all the spent nuclear fuel has been transferred from the SFP to the ISFSI, many of the requirements in the license or technical specifications are inapplicable or are no longer appropriate. The licensee has proposed multiple changes to the license and technical specifications to reflect the change in status of spent fuel storage.

AREVA submitted an Application for Amendment 14, to the standardized NUHOMS Certificate of Compliance (CoC) No. 1004 for Spent Fuel Storage Casks, Revision 0, on April 16, 2015 (ADAMS Accession No. ML15114A056). AREVA submitted a revision to the above referenced Application for Amendment 14 of this CoC on November 11, 2015 (ADAMS Accession No. ML15331A350). This revision requests the removal of language in the TSs that required a TC containing a DSC be returned to the spent fuel pool following a drop of over 15 inches, and instead permit the general licensee to determine the best available option for inspection of the TC/DSC by either returning it to the spent fuel pool or an alternate means. The CoC was

amended on December 19, 2016 (ADAMS Accession No. ML16265A064). Amendment 14, to the standardized NUHOMS CoC No. 1004 for Spent Fuel Storage Casks was published in the Federal Register on January 25, 2017 and was effective on April 25, 2017. With the issuance of amendment 14 to CoC No. 1004, there is no longer a requirement to be able to return spent fuel to the spent fuel pools.

Each of the proposed changes is evaluated below based on the premise that the changes will not take effect until after all the spent nuclear fuel has been transferred to the ISFSI.

4.1 Facility Operating License Changes

The licensee has proposed changes to License Conditions (LC) 1.E and 2.A to reflect that Duke Energy Florida, LLC completely owns CR-3, and all previous co-owners have been removed from the license. Currently LC 1.E. and 2.A. refer to "the licensee" and Duke Energy Florida as separate entities. This is a hold-over from when the license referred to multiple licensees who owned the facility and to Duke Energy as the one licensee who operated the facility. The last of the facility co-owners were removed from the license by amendment no. 250 (ADAMS Accession No. ML16293A191). Because of the minority co-owners were removed by previous amendment, and Duke Energy Florida, LLC is the sole owner and operator of the facility, these proposed changes are administrative in nature and are, therefore acceptable.

The licensee proposed to Eliminate License Condition 2.C.(14) related to mitigation strategy. License Condition 2.C.(14) requires the development and maintenance of strategies for addressing large fires and explosions which must address certain specified key areas. The NRC issued this license condition on August 23, 2007, to incorporate the requirements for the Interim Compensatory Measures (ICM) Order EA-02-026, Section B.5.b mitigation strategies (dated February 25, 2002). Subsequently, 10 CFR 50.54(hh)(2) became effective on May 26, 2009. The requirements in section 50.54(hh) set forth mitigation strategies and response procedure requirements for loss of large areas of the plant due to explosions or fire. However, as stated in 10 CFR 50.54(hh)(3), this section does not apply to a defueled reactor that has submitted the certification for permanent removal of fuel under 10 CFR 50.82(a). On November 28, 2011, the NRC issued a letter that rescinded Item B.5.b of the ICM Order EA-02-26. Therefore, neither the ICM Order nor 10 CFR 50.54(hh) continue to apply to CR-3. Because 10 CFR 50.54(hh) does not apply to CR-3 and Item B.5.b of the ICM Order EA-02-26 has been rescinded, there is no longer a need for CR-3 to develop and maintain mitigation strategies for addressing large fires and explosions. Based on the above, the proposed deletion of License Condition 2.C.(14) is acceptable.

The licensee has proposed to revise License Condition 2.G. Currently LC 2.G states: "This amended license is effective as of the date of issuance. Facility Operating License No. DPR-72, as amended, shall expire at midnight, December 3, 2016." The licensee has proposed to add to the existing text: "Duke Energy Florida, LLC submitted the 10 CFR 50.82(a)(1) notification to the Nuclear Regulatory Commission on February 20, 2013. Per 10 CFR 50.51(b), the Facility Operating License No. DPR-72 continues in effect until the Commission notifies the licensee that the License has been terminated." This proposed change simply restates the 10 CFR 50.51(b) provision to clarify the extension of the license until termination irrespective of the original expiration date. This change is administrative in nature and therefore acceptable.

The licensee also proposed several administrative changes to the license. Page 2 of the CR-3 Facility Operating License has a statement that this revised page was submitted on 2-24-77. This statement is being proposed for deletion as it does not tie to a specific section of the facility operating license and may confuse rather than clarify. Other than for historical purposes, there is no need to keep this statement as it provides no valuable information. Additionally, the license proposed to reformat the pages by moving up text and eliminating blank spaces and pages. These changes are administrative in nature and are therefore acceptable.

4.2 Technical Specification Changes

The licensee has proposed to delete PDS Section 1.0, "Use and Application," which includes: "Definitions," "Logical Connectors," "Completion Times," and "Frequency." As will be discussed later in this safety evaluation, all the PDS that use or refer to the definition of actions, logical connectors, completion times, or frequency are to be deleted. As a result of the deletion of any reference to actions, logical connectors, completion times, or frequency, they need not be defined in the PDS. Therefore the proposed deletion of the definitions of actions, logical connectors, completion times, or frequency is administrative in nature and acceptable.

The licensee has proposed to delete PDS Section 3.0, which includes: "Limited Conditions for Operation (LCO) Applicability," and "Surveillance Requirement (SR) Applicability." As will be discussed later in this safety evaluation, all the PDS that use or refer to LCOs or SRs are to be deleted. Without any reference to LCOs or SRs there is no need for them to be defined in the PDS. The proposed deletion is administrative and acceptable.

The licensee has proposed to delete PDS Section 3.7, "Plant Systems," which includes: PDS 3.7.13, "Spent Fuel Pool Water Level," 3.7.14 "Spent Fuel Pool Boron Concentration," and 3.7.15 "Spent Fuel Assembly Storage." PDS 3.7.13 specifies the minimum water level in the spent fuel pool during movement of irradiated fuel assemblies in the spent fuel pool and provides surveillance and action requirements for not meeting the specification. PDS 3.7.14, specifies the minimum boron concentration in the spent fuel pool during movement or storage of fuel assemblies in the spent fuel pool and provides surveillance and action requirements for not meeting the specification. PDS 3.7.15, specifies restrictions on the placement of fuel assemblies within the spent fuel pool, to ensure the reactivity (K_{eff}) of the spent fuel pools will always remain < 0.95 , assuming the pools to be flooded with unborated water, and provides surveillance and action requirements for not meeting the specification. Following the transfer of all spent fuel to the ISFSI, the spent fuel pool will no longer be used for spent fuel storage. Additionally, as discussed below, the licensee is adding a limitation in the PDS which prohibits storage of spent fuel in the spent fuel pool. With spent fuel storage no longer allowed in the spent fuel pool the specifications included in PDS 3.7 are no longer needed, so the proposed deletion is acceptable.

The licensee has proposed the deletion of the current contents of PDS Section 4.3, "Fuel Storage," which includes PDS 4.3.1, "Criticality," PDS 4.3.2, "Drainage," and PDS 4.3.3, "Capacity." PDS 4.3.1, specifies fuel enrichment, K_{eff} [K_{eff} is the average number of neutrons from one fission that cause another fission], rack design, and pool storage location requirements to ensure that fuel stored in the pool is protected from accidental criticality. PDS 4.3.2, specifies fuel pool design requirements to prevent drainage. PDS 4.3.3, specifies storage capacity limits for fuel assemblies in the spent fuel pool. The license has also proposed

the replacement of the contents of PDTS 4.3, with the statement: "Spent fuel shall not be stored in the spent fuel pool." Following the transfer of all spent fuel to the ISFSI, the spent fuel pool will no longer be used for spent fuel storage. The licensee is adding a limitation in the PDTS which prohibits storage of spent fuel in the spent fuel pool. With spent fuel storage no longer allowed in the spent fuel pool the specifications currently included in PDTS 4.3 are no longer needed, therefore the proposed deletion is acceptable. The proposed revision to PDTS 4.3, provides a prohibition against the storage of spent fuel in the spent fuel pool, which supports the licensee's other proposed changes and ensures that fuel will not be placed in a spent fuel pool that has regulatory controls removed, and is therefore acceptable.

The licensee has proposed to relocate PDTS 5.1, "Responsibility," to the Quality Assurance Program Description (QAPD) except for PDTS 5.1.2, which specifies that the shift supervisor is responsible for the shift command function. The transfer of the administrative controls in PDTS 5.1 is consistent with the guidance in AL 95-06, is an administrative change that does not modify any of the administrative controls, and therefore, is acceptable. The position of shift supervisor described in PDTS 5.1.2, is a holdover from the control room function of supervising multiple functions of an operating nuclear power plant. With the limited requirements for supervision of the passive fuel storage at the ISFSI or with respect to the decommissioning of the former power generation facility, that position is no longer required and the proposed deletion of PDTS 5.1.1 is acceptable.

The licensee has proposed to revise PDTS 5.2, "Organization," by relocating to the QAPD PDTS 5.2.1, except for the portion of PDTS 5.2.1.c, related to individuals who train Certified Fuel Handlers, which will be deleted, and by deleting PDTS 5.2.2. The transfer of the administrative controls in PDTS 5.2.1, is consistent with the guidance in AL 95-06, is an administrative change that does not modify any of the administrative controls, and therefore, is acceptable. The portion of PDTS 5.2.1 to be deleted specifies requirements for individuals who train Certified Fuel Handlers. Following the transfer of all spent fuel to the ISFSI, and the new prohibition from placing fuel in the spent fuel pool, there will no longer be a need for Certified Fuel Handlers; therefore this proposed deletion is acceptable. PDTS 5.2.2, "Unit Staff," currently specifies the organizations and positions for activities affecting the safe storage of irradiated fuel in the spent fuel pool. The licensee's QAPD addresses any necessary organizational requirements for the fuel in the ISFSI. Therefore, the deletion of PDTS 5.2.2, after the fuel has been moved will have no impact given the organizational requirements set forth in the licensee's QAPD and is acceptable.

The licensee has proposed the relocation of PDTS 5.3, "Unit Staff Qualifications," to the QAPD except for the portion related to the Certified Fuel Handler training program. The transfer of the administrative controls in PDTS 5.3 is consistent with the guidance in AL 95-06, is an administrative change that that does not modify those portions of PDTS 5.3 being relocated, and therefore, is acceptable. Section 5.3.2, specifies: "A training and retraining program for the Certified Fuel Handler positions shall be maintained under the direction of the General Manager Decommissioning." Following the transfer of all spent fuel to the ISFSI, and the new PDTS 4.3 prohibition from storing spent fuel in the spent fuel pools, there will no longer be a need for Certified Fuel Handlers, which obviates the need for the associated training program. Therefore, this proposed deletion is acceptable.

The licensee has proposed the relocation of PDTS 5.6, "Procedures, Programs and Manuals," to the QAPD or Compliance Procedure CP-0500, "SPECIAL ACTIONS AND REPORTING REQUIREMENTS (CP-0500), except for PDTS 5.6.2.17, "Technical Specification (TS) Bases Control Program," which is to be deleted. The transfer of the administrative controls in PDTS 5.6 is consistent with the guidance in AL 95-06, is an administrative change that that does not modify those portions of PDTS 5.6 being relocated, and therefore, is acceptable. PDTS 5.6.2.17, specifies the process for changes to the TS Bases. Currently the TS Bases are all related to storage of spent fuel in the spent fuel pool, specifically the requirements in PDTS 3.7, which the licensee would delete as described above. Following the transfer of all spent fuel to the ISFSI, the spent fuel pool will no longer be used for spent fuel storage. Therefore the bases for now deleted TS requirements are no longer needed, and the proposed deletion of PDTS 5.6.2.17, is acceptable.

The license has proposed to relocate TS 5.7, "Reporting Requirements," to CP-0500 in its entirety. CP-0500 is part of the FSAR and therefore subject to the requirements of 10 CFR 50.59. Maintaining these relocated requirements in accordance with 10 CFR 50.59 provides adequate control based on the ISFSI-only status of the facility. The transfer of the administrative controls in TS 5.7 is consistent with the guidance in AL 95-06, is an administrative change that that does not modify TS 5.7, and therefore, is acceptable.

The licensee has proposed the deletion of the Permanently Defueled Technical Specification Bases in its entirety. Currently the TS Bases are all related to storage of spent fuel in the spent fuel pool, specifically the requirements in PDTS 3.0, and PDTS 3.74.2, which the licensee would delete as described above. Following the transfer of all spent fuel to the ISFSI, the spent fuel pool will no longer be used for spent fuel storage. Therefore the bases for now deleted TS requirements would no longer be needed, and the proposed deletion of the Bases is acceptable.

Other editorial changes were proposed by the licensee to facilitate the transfer of the TS requirements to the QAPD and to delete section numbers which were deleted by prior amendments. These changes are administrative in nature and are acceptable.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment includes changes to requirements with respect to installation or use of a facility component located within the protected area and changes to recordkeeping, reporting, or administrative procedures or requirements. NRC staff has determined that the amendment involves 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 amendment involves no significant hazards consideration (81 FR 73432; October 25, 2016), and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusions set forth in 10 CFR 51.22(c)(9) and 10 CFR 51.22(c)(10)(ii). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

6.0 STATE CONSULTATION

On February 2, 2017, the State of Florida was notified of the proposed change to the DEF license and TSs to reflect the transfer of the spent fuel from the spent fuel pool to the ISFSI. The State had no comments.

7.0 CONCLUSION

The changes proposed by this license amendment request will delete requirements that are rendered not applicable following the transfer of spent nuclear fuel to the ISFSI and relocate administrative controls consistent with NRC Administrative Letter 95-06. On the basis of its review, NRC staff concluded that the licensee's request will adequately address the regulatory safety requirements for a permanently shut-down nuclear power facility with the spent nuclear fuel transferred to dry cask storage in an ISFSI. The staff, therefore, concludes that the license amendment request is acceptable.

The staff 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; and 2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendment will not be inimical to the common defense and security nor to the health and safety of the public.

8.0 REFERENCES

1. Letter from Duke Energy Florida to U.S. Nuclear Regulatory Commission, "Crystal River Unit 3 -Certification of Permanent Cessation of Power Operations and that Fuel Has Been Permanently Removed from the Reactor," dated February 20, 2013, (ADAMS Accession No. ML13056A005).
2. Letter from U.S. Nuclear Regulatory Commission to Jon A. Franke, Crystal River Nuclear Plant, "Crystal River Unit 3 Nuclear Generating Plant Certification of Permanent Cessation of Operation and Permanent Removal of Fuel from the Reactor," dated March 13, 2013, (ADAMS Accession No. ML 13058A380).
3. Letter from Duke Energy Florida to U.S. Nuclear Regulatory Commission, "Crystal River Unit 3 – License Amendment Request #323, Revision 0, Permanently Defueled Technical Specifications for the Independent Spent Fuel Storage Installation to Reflect Permanent Removal of Spent Fuel from the Spent Fuel Pools," dated August 31, 2016, (ADAMS Accession No. ML16243A249).
4. Direct Final Rule, "List of Approved Spent Fuel Storage Casks: AREVA Inc., Standardized NUHOMS® Cask System, Certificate of Compliance No. 1004, Amendment No. 14, and Revision 1 of the Initial Certificate, Amendment Nos. 1 Through 11, and Amendment No. 13," January 25, 2017, (82 FR 8353)

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