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

July 10, 2017

Mr. Brian R. Sullivan
Site Vice President
Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360-5508

SUBJECT: PILGRIM NUCLEAR POWER STATION – ISSUANCE OF AMENDMENT REGARDING ADMINISTRATIVE CONTROLS FOR PERMANENTLY DEFUELED CONDITION (CAC NO. MF9304)

Dear Mr. Sullivan:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 246 to Renewed Facility Operating License No. DPR-35 for the Pilgrim Nuclear Power Station. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated February 14, 2017, as supplemented by letter dated May 25, 2017.

This amendment revises certain staffing and training requirements, reports, programs, and editorial changes contained in the TS Table of Contents; Section 1.0, "Definitions"; Section 4.0, "Design Features"; and Section 5.0, "Administrative Controls," that will no longer be applicable once Pilgrim is permanently defueled.

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

Sincerely,

John G. Lamb, Senior Project Manager
Special Projects and Process Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-293

Enclosures:
1. Amendment No. 246 to Renewed Facility Operating License No. DPR-35
2. Safety Evaluation

cc: Listserv

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

ENTERGY NUCLEAR GENERATION COMPANY

ENTERGY NUCLEAR OPERATIONS, INC.

PILGRIM NUCLEAR POWER STATION

DOCKET NO. 50-293

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 246
Renewed License No. DPR-35

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment filed by Entergy Nuclear Operations, Inc. (the licensee), dated February 14, 2017, as supplemented by letter dated May 25, 2017, 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.

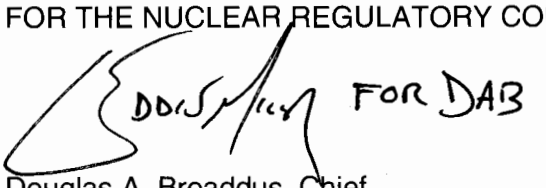
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Renewed Facility Operating License No. DPR-35 is hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 246, are hereby incorporated in the renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment becomes effective upon the licensee's submittal of the certifications required by 10 CFR 50.82(a)(1) and shall be implemented within 60 days from the amendment effective date.

FOR THE NUCLEAR REGULATORY COMMISSION



Douglas A. Broaddus, Chief
Special Projects and Process Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. DPR-35
and Technical Specifications

Date of Issuance: July 10, 2017

ATTACHMENT TO LICENSE AMENDMENT NO. 246

PILGRIM NUCLEAR POWER STATION

RENEWED FACILITY OPERATING LICENSE NO. DPR-35

DOCKET NO. 50-293

Replace the following pages of the Renewed Facility Operating License and Appendix A, Technical Specifications, with the attached revised pages. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Renewed Facility Operating License No. DPR-35

REMOVE	INSERT
-3-	-3-

Appendix A, Technical Specifications

REMOVE	INSERT
iii	iii
1-1	1-1
1-4	1-4
1-5	1-5
4.0-1	4.0-1
5.0-1	5.0-1
5.0-2	5.0-2
5.0-3	5.0-3
5.0-4	5.0-4
5.0-5	5.0-5
5.0-7	5.0-7
5.0-12	5.0-12
5.0-13	5.0-13
5.0-15	5.0-15
5.0-16	5.0-16

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

ENO is authorized to operate the facility at steady state power levels not to exceed 2028 megawatts thermal.

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 246, are hereby incorporated in the renewed operating license. The licensee shall operate the facility in accordance with the Technical Specifications.

C. Records

ENO shall keep facility operating records in accordance with the requirements of the Technical Specifications.

D. Equalizer Valve Restriction - DELETED

E. Recirculation Loop Inoperable - DELETED

F. Fire Protection

ENO shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the SER dated December 21, 1978 as supplemented subject to the following provision:

ENO may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

G. Physical Protection

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 combined set of plans, which contain Safeguards Information protected under 10 CFR 73.21, is entitled: "Pilgrim Nuclear Power Station Physical Security, Training and Qualification, and Safeguards Contingency Plan, Revision 0" submitted by letter dated October 13, 2004, as supplemented by letter dated May 15, 2006.

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The licensee's CSP was approved by License Amendment No. 236, as supplemented by changes approved by: Amendment Nos. 238, 241, and 244.

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The succeeding frequently used terms are explicitly defined so that a uniform interpretation of the specifications may be achieved.

ACTION	ACTION shall be that part of a specification which prescribes remedial measures required under designated conditions.
AUTOMATIC PRIMARY CONTAINMENT ISOLATION VALVES	Are primary containment isolation valves which receive an automatic primary containment group isolation signal.
CERTIFIED FUEL HANDLER	A CERTIFIED FUEL HANDLER is an individual who complies with the provisions of the CERTIFIED FUEL HANDLER Training and Retraining Program.
COLD CONDITION	Reactor coolant temperature equal to or less than 212°F.
CORE ALTERATION	CORE ALTERATION shall be the movement of any fuel, sources, or reactivity control components, within the reactor vessel with the vessel head removed and fuel in the vessel. The following exceptions are not considered to be CORE ALTERATIONS: a. Movement of source range monitors, local power range monitors, intermediate range monitors, traversing incore probes, or special movable detectors (including undervessel replacement); and b. Control rod movement, provided there are no fuel assemblies in the associated core cell. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.
CORE OPERATING LIMITS REPORT (COLR)	The COLR is a reload-cycle specific document that provides core operating limits for the current operating reload cycle. These cycle specific core operating limits shall be determined for each reload cycle in accordance with Specification 5.6.5. Plant operation within these operating limits is addressed in individual specifications.
DESIGN POWER	DESIGN POWER means a steady state power level of 2028 thermal megawatts.
FIRE SUPPRESSION WATER SYSTEM	A FIRE SUPPRESSION WATER SYSTEM shall consist of: a water source(s); gravity tank(s) or pump(s); and distribution piping with associated sectionalizing control or isolation valves. Such valves shall include hydrant post indicator valves and the first valve ahead of the water flow alarm device on each sprinkler, hose standpipe or spray system riser.
HOT STANDBY CONDITION	HOT STANDBY CONDITION means operation with coolant temperature greater than 212°F, system pressure less than 600 psig, the main steam isolation valves closed and the mode switch in startup.
IMMEDIATE	IMMEDIATE means that the required action will be initiated as soon as practicable considering the safe operation of the unit and the importance of the required action.

NON-CERTIFIED OPERATOR	A NON-CERTIFIED OPERATOR is a non-licensed operator who complies with the qualification requirements of Specification 5.3.1, but is not a CERTIFIED FUEL HANDLER.
OPERABLE - OPERABILITY	A system, subsystem, division, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, division, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s).
OPERATING	OPERATING means that a system or component is performing its intended functions in its required manner.
OPERATING CYCLE	Interval between the end of one refueling outage and the end of the next subsequent refueling outage.
PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)	The PTLR is the Pilgrim-Specific document that provides the reactor vessel Pressure-Temperature (P-T) Curves, including heat up and cool down rates and fluence and Adjusted Reference Temperature limits for Specification 3.6.A. These pressure and temperature limits shall be determined for each fluence period in accordance with Specification 5.5.9.
PRIMARY CONTAINMENT INTEGRITY	PRIMARY CONTAINMENT INTEGRITY means that the drywell and pressure suppression chamber are intact and all of the following conditions are satisfied: 1. All manual containment isolation valves on lines connected to the reactor coolant system or containment which are not required to be open during accident conditions are closed. 2. At least one door in each airlock is closed and sealed 3. All blind flanges and manways are closed. 4. All automatic primary containment isolation valves and all instrument line check valves are operable or at least one containment isolation valve in each line having an inoperable valve shall be deactivated in the isolated condition. 5. All containment isolation check valves are operable or at least one containment valve in each line having an inoperable valve is secured in the isolated position.
PROTECTIVE ACTION	An action initiated by the protection system when a limit is reached. A PROTECTIVE ACTION can be at a channel or system level.

PROTECTIVE FUNCTION	A system PROTECTIVE ACTION which results from the PROTECTIVE ACTION of the channels monitoring a particular plant condition.
REACTOR POWER OPERATION	REACTOR POWER OPERATION is any operation with the mode switch in the "Startup" or "Run" position with the reactor critical and above 1% design power.
REACTOR VESSEL PRESSURE	Unless otherwise indicated, REACTOR VESSEL PRESSURES listed in the Technical Specifications are those measured by the reactor vessel steam space detectors.
REFUELING INTERVAL	REFUELING INTERVAL applies only to In-service Code Testing Program surveillance tests. For the purpose of designating frequency of these code tests, a REFUELING INTERVAL shall mean at least once every 24 months.
REFUELING OUTAGE	REFUELING OUTAGE is the period of time between the shutdown of the unit prior to a refueling and the startup of the plant after that refueling. For the purpose of designating frequency of testing and surveillance, a REFUELING OUTAGE shall mean a regularly scheduled outage; however, where such outages occur within 11 months of completion of the previous REFUELING OUTAGE, the required surveillance testing need not be performed until the next regularly scheduled outage.
SAFETY LIMIT	The SAFETY LIMITS are limits below which the reasonable maintenance of the cladding and primary systems are assured. Exceeding such a limit is cause for unit shutdown and review by the Nuclear Regulatory Commission before resumption of unit operation. Operation beyond such a limit may not in itself result in serious consequences, but it indicates an operational deficiency subject to regulatory review.
SECONDARY CONTAINMENT INTEGRITY	SECONDARY CONTAINMENT INTEGRITY means that the reactor building is intact and the following conditions are met: 1. At least one door in each access opening is closed. 2. The standby gas treatment system is operable. 3. All automatic ventilation system isolation valves are operable or secured in the isolated position.
SIMULATED AUTOMATIC ACTUATION	SIMULATED AUTOMATIC ACTUATION means applying a simulated signal to the sensor to actuate the circuit in question.
SOURCE CHECK	A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to a radioactive source.
STAGGERED TEST BASIS	A STAGGERED TEST BASIS shall consist of: (a) a test schedule for n systems, subsystems, trains, or other designated components obtained by dividing the specified test interval into n equal subintervals; (b) the testing of one system, subsystem, train or other designated components at the beginning of each subinterval.

4.0 DESIGN FEATURES

4.1 Site Location

Pilgrim Nuclear Power Station is located on the western shore of Cape Cod Bay in the Town of Plymouth, Plymouth County, Massachusetts and contains approximately 517 acres owned by Entergy Nuclear as shown on FSAR Figures 2.2-1 and 2.2-2. The site boundary is posted and a perimeter security fence provides a distinct security boundary for the protected area of the station.

The reactor (center line) is located approximately 1800 feet from the nearest property boundary.

4.2 Deleted

4.3 Fuel Storage

4.3.1 Criticality

4.3.1.1 The spent fuel storage racks are designed and shall be maintained with:

a. Fuel assemblies having a maximum k-infinity of 1.32 for standard core geometry, calculated at the burnup of maximum bundle reactivity, and an average U-235 enrichment of 4.6 % averaged over the axial planar zone of highest average enrichment; and

b. $K_{eff} \leq 0.95$ if fully flooded with unborated water, which includes an allowance for uncertainties as described in Section 10.3.5 of the FSAR.

(continued)

5.0 ADMINISTRATIVE CONTROLS

5.1 Responsibility

5.1.1 The plant manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

The plant manager or his designee shall approve, prior to implementation, each proposed test, experiment, or modification to systems or equipment that affect nuclear safety.

5.1.2 The control room supervisor (CRS) shall be responsible for the shift command function.

5.0 ADMINISTRATIVE CONTROLS

5.2 Organization

5.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for facility staff and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting safety of the nuclear fuel.

a. Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all operating organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements, including the plant-specific titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications, shall be documented in the Pilgrim Station Final Safety Analysis Report (FSAR);

b. The plant manager shall be responsible for overall safe operation of the facility and shall have control over those onsite activities necessary for safe storage and maintenance of the nuclear fuel;

c. The specified corporate officer for Pilgrim shall have corporate responsibility for the safe storage and handling of nuclear fuel and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the facility to ensure safe management of nuclear fuel; and

d. The individuals who train the CERTIFIED FUEL HANDLERS, carry out health physics, or perform quality assurance functions may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their ability to perform their assigned functions.

5.2.2 Facility Staff

The facility staff organization shall include the following:

a. Each duty shift shall be composed of at least one control room supervisor and one NON-CERTIFIED OPERATOR. The NON-CERTIFIED OPERATOR position may be filled by a CERTIFIED FUEL HANDLER.

(continued)

5.2 Organization

5.2.2 Facility Staff (continued)

b. At least one person qualified to stand watch in the control room (NON-CERTIFIED OPERATOR or CERTIFIED FUEL HANDLER) shall be present in the Control Room when nuclear fuel is stored in the spent fuel pool.

c. Oversight of fuel handling operations shall be provided by a CERTIFIED FUEL HANDLER.

d. Shift crew composition may be less than the minimum requirement of 5.2.2.a for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements and all of the following conditions are met:

1) No fuel movements are in progress;

2) No movement of loads over fuel are in progress; and

3) No unmanned shift positions during shift turnover shall be permitted while the shift crew is less than the minimum.

e. Deleted

f. An individual qualified in radiation protection procedures shall be on site during fuel handling operations and during movement of heavy loads over the fuel storage racks. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

g. Deleted

h. The control room supervisor shall be a CERTIFIED FUEL HANDLER.

i. Deleted

5.0 ADMINISTRATIVE CONTROLS

5.3 Facility Staff Qualifications

5.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 for comparable positions with exceptions specified in the Quality Assurance Program Manual (QAPM).

5.3.2 An NRC approved training and retraining program for CERTIFIED FUEL HANDLERs shall be maintained.

5.0 ADMINISTRATIVE CONTROLS

5.4 Procedures

5.4.1 Written procedures shall be established, implemented, and maintained covering the following activities:

a. The procedures applicable to the safe storage of nuclear fuel recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978;

b. Deleted

c. Quality assurance for effluent and environmental monitoring;

d. Fire Protection Program implementation; and

e. All programs specified in Specification 5.5.

5.5 Programs and Manuals

5.5.2 Deleted

5.5.3 Not Used

5.5.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

(continued)

5.0 ADMINISTRATIVE CONTROLS

5.6 Reporting Requirements

The following reports shall be submitted in accordance with 10 CFR 50.4.

5.6.1 Not Used

5.6.2 Annual Radiological Environmental Operating Report

The Annual Radiological Environmental Operating Report covering the operation of the facility during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include a summary of the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

(Continued)

5.6 Reporting Requirements

5.6.3 Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the facility shall be submitted in accordance with 10 CFR 50.36a by May 15th of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the facility. The material provided shall be consistent with the objectives outlined in the ODCM and process control procedures and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

5.6.4 Not Used

5.6.5 Core Operating Limits Report (COLR)

a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:

1. Table 3.1.1 – APRM High Flux trip level setting
2. Table 3.2.C –APRM Upscale trip level setting
3. 3.11.A – Average Planar Linear Heat Generation Rate (APLHGR)
4. 3.11.B – Linear Heat Generation Rate (LHGR)
5. 3.11.C –Minimum Critical Power Ratio (MCPR)
6. 3.11.D – Power/Flow Relationship During Power Operation

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel," (through the latest NRC approved amendment at the time the reload analyses are performed as specified in the COLR).

(Continued)

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Area

5.7.1 Pursuant to 10 CFR 20, paragraph 20.1601(c), in lieu of the requirements of 10 CFR 20.1601, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation 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). Individuals qualified in radiation protection procedures (e.g., radiation protection personnel) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates ≤ 1000 mrem/hr, provided they are otherwise following facility radiation protection procedures for entry into such high radiation areas.

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 rate 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 at the frequency specified by the radiation protection manager in the RWP.

5.7.2 In addition to the requirements of Specification 5.7.1, areas with radiation levels ≥ 1000 mrem/hr 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 control room supervisor on duty or radiation protection supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that shall specify the dose rate levels in the immediate work areas and the maximum allowable stay times for individuals in those areas. In lieu of the stay time specification of the RWP, 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)

5.7 High Radiation Area

5.7.3 For individual high radiation areas with radiation levels of > 1000 mrem/hr, accessible to personnel, that are located within large areas such as reactor containment, where no enclosure exists for purposes of locking, or that cannot be 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.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 246 TO

RENEWED FACILITY OPERATING LICENSE NO. DPR-35

ENTERGY NUCLEAR GENERATION COMPANY

ENTERGY NUCLEAR OPERATIONS, INC.

PILGRIM NUCLEAR POWER STATION

DOCKET NO. 50-293

1.0 INTRODUCTION

By application dated February 14, 2017 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17053A468), as supplemented by letter dated May 25, 2017 (ADAMS Accession No. ML17163A181), Entergy Nuclear Operations, Inc. (Entergy or the licensee), submitted a request for changes to the Pilgrim Nuclear Power Station (Pilgrim) Technical Specifications (TSs). The proposed changes would revise certain staffing and training requirements, reports, programs, and editorial changes contained in the TS Table of Contents; Section 1.0, "Definitions"; Section 4.0, "Design Features"; and Section 5.0, "Administrative Controls," that will no longer be applicable once Pilgrim is permanently defueled.

The supplemental letter dated May 25, 2017, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the U.S. Nuclear Regulatory Commission (NRC) staff's proposed no significant hazards consideration determination as published in the *Federal Register* on March 28, 2017 (82 FR 15380).

2.0 BACKGROUND

By letter dated November 10, 2015 (ADAMS Accession No. ML15328A053), the licensee submitted Notification of Permanent Cessation of Power Operations for Pilgrim. In this letter, Entergy provided notification to the NRC of its intent to permanently cease power operations no later than June 1, 2019. After certifications of permanent cessation of power operations and permanent removal of fuel from the reactor vessel for Pilgrim are submitted in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Section 82(a)(1)(i) and (ii), the 10 CFR Part 50 license will no longer authorize reactor operation or placement or retention of fuel in the reactor vessel. As a result, licensed reactor operators will no longer be required to support plant operating activities. Instead, Certified Fuel Handlers (CFHs) will perform activities associated with decommissioning and irradiated fuel handling and management.

3.0 REGULATORY EVALUATION

The construction permit for Pilgrim was issued by the Atomic Energy Commission (AEC) on August 26, 1968, a low-power license was issued on June 8, 1972, and a full-power license was issued on September 15, 1972. The plant design approval for the construction phase was based on the proposed General Design Criteria (GDC) published by the AEC in the *Federal Register* (32 FR 10213) on July 11, 1967 (hereinafter referred to as "draft GDC"). The AEC published the final rule that added Appendix A to 10 CFR Part 50, "General Design Criteria for Nuclear Power Plants," in the *Federal Register* (36 FR 3255) on February 20, 1971 (hereinafter referred to as "final GDC").

Differences between the draft GDC and final GDC included a consolidation from 70 to 64 criteria. In accordance with a staff requirements memorandum from S. J. Chilk to J. M. Taylor, "SECY-92-223 – Resolution of Deviations Identified during the Systematic Evaluation Program," dated September 18, 1992 (ADAMS Accession No. ML003763736), the Commission decided not to apply the final GDC to plants with construction permits issued prior to May 21, 1971, which includes Pilgrim. The Pilgrim Updated Final Safety Analysis Report (UFSAR), Appendix F, provides an evaluation of the design bases of Pilgrim against the draft GDC.

Although the original approval basis for Pilgrim was the draft GDC, the licensee for Pilgrim had made changes to the facility over the life of the plant that may have invoked some of the final GDC. The extent to which the final GDC have been invoked can be found in specific sections of the UFSAR and in other Pilgrim design and licensing basis documentation. For convenience, the licensee and the NRC staff usually refer to the final GDC rather than the draft GDC when discussing licensing actions.

The regulations under 10 CFR 50.82(a)(1) require that when a licensee has determined to permanently cease operations that the licensee shall, within 30 days, submit a written certification to the NRC, consistent with the requirements of 10 CFR 50.4(b)(8), and once fuel has been permanently removed from the reactor vessel, the licensee shall submit a written certification to the NRC that meets the requirements of 10 CFR 50.4(b)(9). On November 10, 2015, Entergy notified the NRC that Pilgrim would permanently cease operations no later than June 1, 2019. Entergy recognizes that approval of these proposed changes is contingent upon the submittal of the certifications required by 10 CFR 50.82(a)(1).

The regulations under 10 CFR 50.82(a)(2) state: "Upon docketing of the certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel, or when a final legally effective order to permanently cease operations has come into effect, the 10 CFR part 50 license no longer authorizes operation of the reactor or emplacement or retention of fuel into the reactor vessel."

The regulations under 10 CFR 50.36 establish the requirements for TSs.
Paragraph 10 CFR 50.36(c)(5), Administrative Controls, identifies that an Administrative Controls section shall be included in the TSs and shall include provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner. This license amendment request is proposing changes to the Administrative Controls section, with conforming changes proposed to additional sections, consistent with the pending decommissioning status of the plant. This request applies the principles identified in 10 CFR 50.36(c)(6), Decommissioning, for a facility which has submitted certifications required by 50.82(a)(1) and proposes changes to the

Administrative Controls appropriate for the Pilgrim permanently defueled condition. As 10 CFR 50.36(c)(6) states, this type of change should be considered on a case-by-case basis.

The regulations under 10 CFR 50.54(m) establish the requirements for having Reactor Operators and Senior Reactor Operators (SROs) licensed in accordance with 10 CFR Part 55 based on plant conditions. Given the impending permanent cessation of operation for Pilgrim, the requirements of this section will no longer apply once the certifications required by 10 CFR 50.82(a)(1) have been docketed and it will be permissible to remove those positions from the TSs.

4.0 TECHNICAL EVALUATION

The review of the changes is broken into the following sections: (1) Table of Contents; (2) Section 1.0, "Definitions"; (3) Section 4.0, "Design Features"; (4) Section 5.1, "Responsibility"; (5) Section 5.2, "Organization"; (6) Section 5.3, "Unit Staff Qualifications"; (7) Section 5.4, "Procedures"; (8) Section 5.5.2, "Primary Coolant Outside Containment"; (9) Section 5.6.2, "Annual Radiological Environmental Operating Report," and Section 5.6.3, "Radioactive Effluent Release Report"; and (10) Section 5.7, "High Radiation."

4.1 Proposed Changes to TS Table of Contents

Current Table of Contents

The current Table of Contents has Section 4.2 labeled as "Reactor Core," and Section 5.3 labeled as "Unit Staff Qualifications."

Proposed Changes to the Table of Contents

Entergy has proposed to delete "Reactor Core" in Section 4.2. Entergy has proposed to change the title of Section 5.3 from "Unit Staff Qualifications" to "Facility Staff Qualifications."

NRC Staff Technical Review of the Proposed Changes to the Table of Contents

The proposed change to delete "Reactor Core" in Section 4.2 is further discussed in Section 4.3 below.

The proposed change to Section 5.3 from "Unit Staff Qualifications" to "Facility Staff Qualifications" is an administrative change and is further discussed in Section 4.6 below. This administrative change reflects the fact that Pilgrim will be permanently shutdown and defueled after submitting the certifications required by 10 CFR 50.82(a)(1). The term "unit" implies operating; the term "facility" more appropriately represents the permanently defueled condition.

NRC Staff Conclusion of the Proposed Changes to the Table of Contents

The NRC reviewed the proposed administrative changes to the Table of Contents. The NRC staff finds the proposed changes to the Table of Contents acceptable since they do not involve technical changes.

4.2 Proposed Changes to TS Section 1.0, "Definitions"

Current TS Section 1.0

The current Pilgrim TS Section 1.0 does not have a definition for a CFH or a Non-Certified Operator.

Proposed Changes to TS Section 1.0

Entergy proposed to add the following two definitions to TS Section 1.0:

CERTIFIED FUEL HANDLER	A CERTIFIED FUEL HANDLER is an individual who complies with the provisions of the CERTIFIED FUEL HANDLER Training and Retraining Program.
NON-CERTIFIED OPERATOR	A NON-CERTIFIED OPERATOR is a non-licensed operator who complies with the qualification requirements of Specification 5.3.1, but is not a CERTIFIED FUEL HANDLER.

NRC Staff Technical Evaluation of Proposed Changes to TS Section 1.0

The licensee proposed to modify TS Section 1.0 to include new definitions for a CFH and a Non-Certified Operator. The CFH Training and Retraining Program for Pilgrim was previously approved by the NRC staff on April 12, 2017 (ADAMS Accession No. ML17058A325). The proposed TS 5.3.2 (see Section 4.6 of this safety evaluation) states that an NRC-approved training and retraining program for CFHs shall be maintained. The NRC staff reviewed the proposed definition for a CFH and finds that it is acceptable.

The terminology "Non-Certified Operator" is used in the proposed renamed TS 5.2.2, "Facility Staff." Also, the proposed renamed TS 5.3, "Facility Staff Qualifications," Section 5.3.1 defines qualification requirements that are applicable to all members of the facility staff, and therefore, extend to the Non-Certified Operator. The NRC staff reviewed the proposed definition for a Non-Certified Operator and finds that it is acceptable.

NRC Staff Conclusion of Proposed Changes to TS Section 1.0

The NRC reviewed the proposed administrative changes to TS Section 1.0. The NRC staff finds the proposed changes to TS Section 1.0 acceptable.

4.3 Proposed Changes to TS Section 4.0, "Design Features"

Current TS Section 4.0

The current TS 4.2, Reactor Core, states the following:

> The reactor vessel core design shall be as described in the CORE OPERATING LIMITS REPORT and shall be limited to those fuel assemblies which have been analyzed with NRC approved codes and methods and approved by the NRC in its acceptance of Amendment 22 of GESTAR II.

Proposed Change to TS 4.0

Entergy has proposed to delete TS 4.2, Reactor Core.

NRC Staff Technical Evaluation of Proposed Changes to TS Section 4.0

Entergy proposed to delete TS 4.2, Reactor Core, because it will no longer apply in the permanently defueled condition. Once the certifications required by 10 CFR 50.82(a)(1) have been submitted to the NRC, fuel assemblies will no longer be authorized to be retained or emplaced in the Pilgrim reactor vessel, pursuant to 10 CFR 50.82(a)(2).

NRC Staff Conclusion of Proposed Changes to TS Section 4.0

In accordance with 10 CFR 50.82(a)(2), Entergy will no longer be authorized for operation of the reactor or emplacement or retention of fuel in the Pilgrim reactor vessel after Entergy submits both certifications described in 10 CFR 50.82(a)(1). Therefore, TS 4.2 will not be needed after Entergy submits both certifications required by 10 CFR 50.82(a)(1). The NRC staff finds that the proposed deletion of TS 4.2 reflects the scope of the activities that would result from the permanent cessation of operations and permanent fuel removal and, therefore, is acceptable.

4.4 Proposed Changes to TS Section 5.1, "Responsibility"

Current TS Section 5.1

5.1.1 The plant manager shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

The plant manager or his designee shall approve, prior to implementation, each proposed test, experiment, or modification to systems or equipment that affect nuclear safety.

5.1.2 The control room supervisor (CRS) shall be responsible for the control room command function. During any absence of the CRS from the control room while the unit is in an operational mode other than Cold Shutdown or Refueling, an individual with an active Senior Reactor Operator (SRO) license shall be designated to assume the control room command function. During any absence of the CRS from the control room while the unit is in Cold Shutdown or Refueling, an individual with an active SRO license or Reactor Operator (RO) license shall be designated to assume the control room command function.

Proposed Changes to TS Section 5.1

Entergy proposed the following change to TS 5.1.1:

The plant manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

> The plant manager or his designee shall approve, prior to implementation, each proposed test, experiment, or modification to systems or equipment that affect nuclear safety.

Entergy proposed the following change to TS 5.1.2:

> The control room supervisor (CRS) shall be responsible for the shift command function.

NRC Staff Technical Evaluation of Proposed Changes to TS Section 5.1

The TS Section 5.1 identifies the responsibilities for the control room command function associated with modes of plant operation, and is based on personnel positions and qualifications for an operating plant. It identifies the need for a delegation of authority for command in an operating plant when the principal assignee leaves the control room.

In TS 5.1.1, Entergy proposed to change "unit" to "facility"; this is an administrative change. This administrative change reflects the fact that Pilgrim will be permanently shutdown and defueled after submitting to the NRC the certifications required by 10 CFR 50.82(a)(1). The term "unit" implies operating; the term "facility" more appropriately represents the permanently shutdown and defueled condition. Overall management and Pilgrim staff responsibilities and the description of the facility are unchanged.

Entergy proposed to change TS 5.1.2 to eliminate the discussion about transfer of control of the control room command function when the control room supervisor leaves the control room and eliminate the mode dependency for this function and personnel qualifications associated with an operating plant. The proposed change establishes the control room supervisor as having command of the shift. Delegation of command is unnecessary once Pilgrim is in the permanently defueled condition with fuel in the spent fuel pool (SFP). Any event involving loss of SFP cooling would evolve slowly. While the shift would continue to be staffed with qualified personnel consistent with the proposed TS 5.2.2 (see Section 4.5 of this safety evaluation), continuous staffing of the control room by the control room supervisor would not be necessary to protect the environment and the health and safety of the public.

NRC Staff Conclusion of Proposed Changes to TS Section 5.1

The change from "unit" to "facility" is an administrative change. The control room supervisor shall be responsible for the shift command function at Pilgrim. Once the certifications required by 10 CFR 50.82(a)(1) have been submitted to the NRC, the Pilgrim 10 CFR Part 50 license will no longer authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. Therefore, there will be no operational modes at Pilgrim after Entergy submits to the NRC both certifications required by 10 CFR 50.82(a)(1). The NRC staff finds that the delegation of control room command is unnecessary once Pilgrim is in the permanently defueled condition with fuel in the SFP since any event involving loss of SFP cooling would evolve slowly. The NRC staff finds that the CFH will have command function regardless of his/her location in the facility and still protect the environment and the health and safety of the public. The NRC staff finds that the proposed changes to TS 5.1 reflect the scope of activities that would result from the permanent cessation of operations and permanent fuel removal and, therefore, are acceptable.

4.5 Proposed Changes to TS Section 5.2, "Organization"

Current TS Section 5.2

The current TS 5.2.1, "Onsite and Offsite Organizations," and TS 5.2.2, "Unit Staff," state the following:

5.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting safety of the nuclear power plant.

a. Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all operating organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements, including the plant-specific titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications, shall be documented in the Pilgrim Station Final Safety Analysis Report (FSAR);

b. The plant manager shall be responsible for overall safe operation of the plant and shall have control over those onsite activities necessary for safe operation and maintenance of the plant;

c. A specified corporate officer for Pilgrim shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety; and

d. The individuals who train the operating staff, carry out health physics, or perform quality assurance functions may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their independence from operating pressures

5.2.2 Unit Staff

The unit staff organization shall include the following:

a. A non-licensed operator shall be on site when fuel is in the reactor and an additional non-licensed operator shall be assigned when the reactor is in an operational mode other than Cold Shutdown or Refueling.

b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in an operational mode other than Cold Shutdown or Refueling, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.

c. At least two licensed ROs shall be present in the control room during reactor startup, scheduled reactor shutdown and during recovery from reactor trips.

d. Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and 5.2.2.a and 5.2.2.i for a period of time not to exceed 2 hours in order to accommodate unexpected absence of onduty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

e. Higher grade licensed operators may take the place of lower grade licensed or unlicensed personnel.

f. An individual qualified in radiation protection procedures shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

g. Deleted

h. The operations manager or assistant operations manager shall hold a Senior Reactor Operator License.

i. When the unit is in an operational mode other than Cold Shutdown or Refueling, an individual shall provide advisory technical support to the unit operations shift crew in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operations of the unit. This individual shall meet the qualifications specified by ANSI/ANS 3.1-1993 as endorsed by RG 1.8, Rev. 3, 2000.

Proposed Changes to TS 5.2

Entergy proposed the following changes to TS 5.2.1 and TS 5.2.2:

5.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for facility staff and corporate management, respectively. These organizations shall include the positions for activities affecting safety of the nuclear fuel.

a. Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all operating organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements, including the plant-specific titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications, shall be documented in the Pilgrim Station Final Safety Analysis Report (FSAR);

b. The plant manager shall be responsible for overall safe operation of the facility and shall have control over those onsite activities necessary for safe storage and maintenance of the nuclear fuel;

c. A specified corporate officer for Pilgrim shall have corporate responsibility for the safe storage and handling of nuclear fuel and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the facility to ensure safe management of nuclear fuel; and

d. The individuals who train the CERTIFIED FUEL HANDLERS, carry out health physics, or perform quality assurance functions may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their ability to perform their assigned functions.

5.2.2 Facility Staff

The facility staff organization shall include the following:

a. Each duty shift shall be composed of at least one control room supervisor and one NON-CERTIFIED OPERATOR. The NON-CERTIFIED OPERATOR position may be filled by a CERTIFIED FUEL HANDLER.

b. At least one person qualified to stand watch in the control room (NON-CERTIFIED OPERATOR or CERTIFIED FUEL HANDLER)

shall be present in the Control Room when nuclear fuel is stored in the spent fuel pool.

c. Oversight of fuel handling operations shall be provided by a CERTIFIED FUEL HANDLER.

d. Shift crew composition may be less than the minimum requirement of 5.2.2.a for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements and all of the following conditions are met:

1) No fuel movements are in progress;

2) No movement of loads over fuel are in progress; and

3) No unmanned shift positions during shift turnover shall be permitted while the shift crew is less than the minimum.

e. Deleted

f. An individual qualified in radiation protection procedures shall be on site during fuel handling operations and during movement of heavy loads over the fuel storage racks. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

g. Deleted

h. The control room supervisor shall be a CERTIFIED FUEL HANDLER.

i. Deleted

NRC Staff Technical Evaluation of the Proposed Changes to TS 5.2

In TS 5.2.1, Entergy proposed to change (1) the "safety of the nuclear power plant" to the "safety of the nuclear fuel"; (2) "safe operation and maintenance of the plant" to "safe storage and handling of nuclear fuel"; and (3) "nuclear safety" to "safe management of nuclear fuel." Once Entergy submits to the NRC the certifications required in 10 CFR 50.82(a)(1), Pilgrim's 10 CFR Part 50 license will no longer authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. Entergy will still be responsible for the safety of the spent fuel in the SFP and/or the dry casks, as well as any handling of the spent fuel.

In TS 5.2.1, Entergy proposed to change "unit" and "plant" to "facility"; this is an administrative change. This administrative change reflects that Pilgrim will be permanently shutdown and defueled after submitting to the NRC the certifications required by 10 CFR 50.82(a)(1). The term "unit" and "plant" implies operating; the term "facility" more appropriately represents a permanently shut down and defueled condition.

There are no changes to TS 5.2.1.a.

The TS 5.2.1.b identifies the organizational position responsible for the safe operation of the facility, and for control of activities necessary for the safe storage and maintenance of the spent fuel. To reflect the permanently defueled condition, the responsibility for control of activities necessary for the safe operation and maintenance of the facility is changed to the responsibility for safe storage and maintenance of the nuclear fuel. The change from "plant" to "facility" is administrative, as discussed above.

The TS 5.2.1.c identifies the organizational position responsible for overall facility safety. Entergy proposed to change the responsibility from "for overall plant nuclear safety" to "the safe storage and handling of nuclear fuel," and the responsibility for providing technical support to "the plant to ensure nuclear safety" is changed to "the facility to ensure safe management of nuclear fuel." This reflects the fact that Pilgrim will be permanently shutdown and defueled after submitting to the NRC the certifications required by 10 CFR 50.82(a)(1).

The TS 5.2.1.d addresses the requirement for organizational independence of the personnel who train the operations staff, health physics personnel, and quality assurance personnel from operating pressures. Entergy proposed to replace "operating staff" with "CERTIFIED FUEL HANDLERS" and to replace "their independence from operating pressures" to "their ability to perform their assigned functions." This reflects the fact that Pilgrim will be permanently shutdown and defueled after submitting to the NRC the certifications required by 10 CFR 50.82(a)(1).

In TS 5.2.2, Entergy proposed to change "unit" to "facility"; this is an administrative change. This administrative change reflects the fact that Pilgrim will be permanently shutdown and defueled after submitting the certifications required by 10 CFR 50.82(a)(1). The term "unit" implies operating; the term "facility" more appropriately represents the permanently shut down and defueled condition.

The current version of TS 5.2.2.a stipulates when non-licensed operators must be onsite or assigned to the operating shift, based on the status of fuel in the reactor or operational mode. Since Pilgrim will no longer be authorized to operate the reactor or emplace or retain fuel in the reactor vessel once the certifications under 10 CFR 50.82(a)(1) are submitted to the NRC, there will no longer be operational modes at Pilgrim. Entergy proposed to change the minimum requirement to a minimum crew complement of one control room supervisor, and one Non-Certified Operator. This reflects the reduced number of systems, compared to an operating reactor, required to provide and support SFP cooling and monitor SFP parameters, such as SFP level and temperature, while still maintaining the ability to ensure spent fuel handling operations are carried out in a safe manner. The spectrum of credible accidents and operational events, and the quantity and complexity of activities required for safety will be greatly reduced from that at an operating plant. The control room supervisor will be qualified as a CFH in accordance with the proposed TS 5.2.2.h. In this position, this individual will retain command and control responsibility for operational decisions and will be responsible for the functions required for event reporting and emergency response.

In the proposed TS 5.2.2.b, Pilgrim will not be required to have operators licensed pursuant to 10 CFR Part 55 once the certifications of 10 CFR 50.82(a)(1) have been submitted to the NRC. Entergy proposed to change TS 5.2.2.b to reflect the requirement for having one qualified watch stander (either a Non-Certified Operator or CFH) in the control room when fuel is stored in the

SFP. This reflects the reduced requirement for control room personnel training and qualification for a facility that is no longer authorized to operate the reactor or emplacement or retention of fuel in the reactor vessel once the certifications of 10 CFR 50.82(a)(1) have been submitted to the NRC. The training and qualification for the Non-Certified Operator will be determined in accordance with the systems approach to training (SAT) as defined in 10 CFR 55.4. This process ensures that the Non-Certified Operator will be qualified to perform the functions necessary to monitor and ensure safe storage of fuel. The SAT process requires: (1) systematic analysis of the jobs to be performed; (2) learning objectives to be derived from the analysis which describe desired performance after training; (3) training design and implementation to be based on the learning objectives; (4) evaluation of trainee mastery of the objectives during training; and (5) evaluation and revision of the training based on the performance of trained personnel in the job setting. On page 7 of the letter dated February 14, 2017, Entergy stated that there will be a sufficient number of individuals qualified as CFHs to staff the facility 24 hours a day, 7 days a week. Entergy described that additional on-shift staffing will be provided to satisfy applicable security, fire protection, and emergency preparedness requirements. The licensee stated the control room will remain the physical center of the command function; however, since control of activities may be performed either remotely from the control room or locally in the facility, the location of the command center is functionally where the control room supervisor is located in accordance with the proposed TS 5.1.2. Entergy stated that activities that could be performed from the control room that have the potential to affect forced cooling of spent nuclear fuel include starting and stopping cooling water pumps, as well as changing the electrical power distribution system alignment.

On page 7 of the letter dated February 14, 2017, the licensee stated that all spent fuel handling activities are performed locally at the SFP. Indications and/or alarms are also received in the control room that would be indicative of SFP abnormalities. The control room supervisor is responsible for directing the response to those abnormalities, from either the control room or local to the SFP in accordance with applicable Pilgrim response procedures. For any conditions, incidents, or events that occur when the Non-Certified Operator is in the control room alone and are not within the scope of qualifications that are possessed by the Non-Certified Operator, the Pilgrim control room supervisor will be immediately contacted for direction by phone, radio, and/or Pilgrim page system.

In the proposed TS 5.2.2.c, Pilgrim will not be required to have operators licensed pursuant to 10 CFR Part 55 once the certifications of 10 CFR 50.82(a)(1) have been submitted to the NRC. Entergy proposed to have oversight of fuel handling operations performed by a CFH. This new requirement ensures that movement of irradiated fuel is only performed under the oversight of an individual who has been trained and qualified on the procedures, processes, requirements and standards for safe movement of irradiated fuel. Oversight of fuel handling operations refers to the authorization from the control room supervisor/CFH to move fuel, because the proposed TS 5.2.2.h requires the control room supervisor to be a CFH.

The TS 5.2.2.d addresses the conditions under which the minimum shift complement may be reduced. It allows for shift crew composition to be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and TS 5.2.2.a and TS 5.2.2.i for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members, provided immediate action is taken to restore the shift crew composition to within the minimum requirements. Entergy proposed to remove the reference to 10 CFR 50.54(m)(2)(i), because Pilgrim will not return to operation once the certifications under 10 CFR 50.82(a)(1) are submitted to the NRC, and the requirement for licensed operating personnel will no longer be

required to protect public health and safety. Entergy proposed to remove the reference to TS 5.2.2.i to be consistent with the proposed change to delete TS 5.2.2.i.

The TS 5.2.2.e allows for higher grade licensed operators to take the place of lower grade personnel. Once the certifications under 10 CFR 50.82(a)(1) are submitted to the NRC, licensed operators will not be required in the permanently defueled condition; therefore, Entergy proposed to delete TS 5.2.2.e.

The TS 5.2.2.f establishes the requirement for a person qualified in radiation protection procedures to be onsite when fuel is in the reactor. This TS section also allows for the position to be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position. Entergy proposed to revise the condition of TS 5.2.2.f, so that an individual qualified in radiation protection procedures is present onsite during the movement of fuel and during the movement of loads over fuel, because fuel will not be able to be emplaced or retained in the reactor vessel once the certifications under 10 CFR 50.82(a)(1) are submitted to the NRC.

Entergy did not propose any changes to TS 5.2.2.g.

The TS 5.2.2.h establishes the requirement for the operations manager, or an assistant operations manager, to hold a SRO license. Entergy proposed to revise TS 5.2.2.h to replace the requirement with a requirement that the control room supervisor be a CFH. The certifications under 10 CFR 50.82(a)(1) have been submitted to the NRC, the requirements of 10 CFR 50.54(m) will no longer be applicable, because the Pilgrim 10 CFR Part 50 license will no longer authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. These certifications also obviate the need for the operators' licenses specified in 10 CFR Part 55. Therefore, there is no longer a need for operations management staff to hold a SRO license. Replacing this with a requirement that the control room supervisor be a CFH ensures that the senior individual on shift is appropriately trained and qualified in accordance with the NRC-approved fuel handler training program, to supervise shift activities. The Pilgrim management structure will not require positions above the control room supervisor to be a CFH or attend equivalent training. Entergy stated that once Pilgrim is permanently shutdown and defueled, the time available to mitigate credible events is expected to be greater than that for current design basis events. As such, Entergy states that Pilgrim management oversight of the facility can be performed by individuals meeting the applicable requirements of American National Standards Institute (ANSI) / American Nuclear Society (ANS) 3.1-1978 (as required by TS 5.3.1) and need not be qualified as CFHs.

The TS 5.2.2.i establishes the requirements for a technical advisor position. Entergy proposed to delete TS 5.2.2.i, because this position is only required for a plant authorized for power operations. Once the certifications required by 10 CFR 50.82(a)(1) have been submitted to the NRC, the requirements of TS 5.2.2.i will no longer be applicable because the Pilgrim 10 CFR Part 50 license will no longer authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel.

NRC Staff Conclusion of the Proposed Changes to TS 5.2

Once the certifications under 10 CFR 50.82(a)(1) have been submitted to the NRC, the Pilgrim 10 CFR Part 50 license will no longer authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. The proposed changes to the Pilgrim organization reflect the fact that Pilgrim will be permanently defueled so the focus is changed from operating

nuclear safety to the safe storage and handling of nuclear fuel. Once Pilgrim is permanently shutdown and defueled, the time available to mitigate credible events is expected to be greater than that for current design basis events. The NRC staff reviewed the proposed changes and finds that the proposed changes to TS 5.2 reflect the scope of the activities that would result from the permanent cessation of operations and permanent fuel removal, and therefore, are acceptable.

4.6 Proposed Changes to TS Section 5.3, "Unit Staff Qualifications"

Current TS 5.3

The current TS 5.3 states:

> 5.3 Unit Staff Qualifications
>
> 5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 for comparable positions with exceptions specified in the Entergy Quality Assurance Program Manual (QAPM).
>
> 5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Reactor Operator (SRO) and a licensed Reactor Operator (RO) are those individuals who, in addition to meeting the requirements of Specification 5.3.1, perform the functions described in 10 CFR 50.54(m).

Proposed Changes to TS 5.3

Entergy proposed the following changes to TS 5.3:

> 5.3 Facility Staff Qualifications
>
> 5.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978 for comparable positions with exceptions specified in the Quality Assurance Program Manual (QAPM).
>
> 5.3.2 An NRC approved training and retraining program for CERTIFIED FUEL HANDLERs shall be maintained.

NRC Staff Technical Evaluation of the Proposed Changes to TS 5.3

The proposed change to TS 5.3 from "Unit Staff Qualifications" to "Facility Staff Qualifications" is an administrative change. This administrative change reflects that Pilgrim will be permanently shutdown and defueled after submitting to the NRC the certifications under 10 CFR 50.82(a)(1). The term "unit" implies operating; the term "facility" more appropriately represents the permanently shut down and defueled condition.

In TS 5.3.1, Entergy proposed to revise the title of the QAPM by removing specific reference to the Entergy corporate QAPM. This change will allow Pilgrim to transition from the Entergy corporate QAPM to a site-specific QAPM during the decommissioning process. Entergy does not propose to change the qualification standards or exceptions to the standards. The proposed change is acceptable based on the licensee maintaining the requisite requirements to the

minimum qualifications of staff, including any exceptions identified in the current approved corporate QAPM, in the Pilgrim site-specific QAPM to be used during decommissioning process. Any changes to the QAPM will be required to be submitted to the NRC in accordance with the applicable provisions of 10 CFR 50.54(a).

The TS 5.3.2 defines SROs and ROs as the individuals who perform the functions defined in the regulations under 10 CFR 50.54(m). Entergy proposed to delete this statement, because neither 10 CFR 50.54(m) nor the requirement for licensed operators per 10 CFR Part 55 apply following the submittal of the certifications under 10 CFR 50.82(a)(1). Entergy proposed to add new language to TS 5.3.2 to require that an NRC-approved fuel handler training program for the CFHs be maintained. The fuel handler training program approved by the NRC ensures that the qualifications of CFHs are commensurate with the tasks to be performed and the conditions requiring response. The regulation under 10 CFR 50.120, "Training and qualification of nuclear power plant personnel," requires training programs to be derived using a SAT as defined in 10 CFR 55.4. Although the requirements of 10 CFR 50.120 apply to holders of an operating license issued under 10 CFR Part 50, and the Pilgrim license will no longer authorize operation following submittal of the certifications required by 10 CFR 50.82(a)(1), the Pilgrim CFH Training and Retraining Program nonetheless aligns with those requirements. The CFHs are non-licensed operators and the requirement of 10 CFR 50.120 apply to all non-licensed operators for Part 50 licenses. The Pilgrim CFH Training and Retraining Program provides adequate confidence that appropriate SAT based training of personnel who will perform the duties of a CFH is conducted to ensure the facility is maintained in a safe and stable condition.

NRC Staff Conclusion of the Proposed Changes to TS 5.3

Once the certifications under 10 CFR 50.82(a)(1) have been submitted to the NRC, the Pilgrim 10 CFR Part 50 license will no longer authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. The proposed changes to the Pilgrim facility staff qualifications reflect the fact that Pilgrim will be permanently defueled so the focus is changed from operating nuclear safety to the safe storage and handling of nuclear fuel. Once Pilgrim is permanently shutdown and defueled, the time available to mitigate credible events is expected to be greater than that for current design basis events. The NRC staff reviewed the proposed changes and finds the proposed changes to TS 5.3 reflect the scope of the activities that would result from the permanent cessation of operations and permanent fuel removal, and, therefore, are acceptable.

4.7 Proposed Changes to TS Section 5.4, "Procedures"

Current TS 5.4

The current TS 5.4 states:

> 5.4 Procedures
>
> 5.4.1 Written procedures shall be established, implemented, and maintained covering the following activities:
>
> a. The applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978;

b. The emergency operating procedures required to implement the requirements of NUREG-0737 and NUREG-0737, Supplement 1, as stated in Generic Letter 82-33;

c. Quality assurance for effluent and environmental monitoring;

d. Fire Protection Program implementation; and

e. All programs specified in Specification 5.5.

Proposed Changes to TS 5.4

The following are the proposed changes to TS 5.4:

5.4 Procedures

5.4.1 Written procedures shall be established, implemented, and maintained covering the following activities:

a. The procedures applicable to the safe storage of nuclear fuel recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978;

b. Deleted

c. Quality assurance for effluent and environmental monitoring;

d. Fire Protection Program implementation; and

e. All programs specified in Specification 5.5.

NRC Staff Technical Evaluation of the Proposed Changes to TS 5.4

The TS 5.4 provides a description and requirements regarding administration of written procedures and will remain applicable with the reactor permanently defueled. As such, it is retained and revised to reflect a permanently defueled condition. Relevant procedures drawings and instructions will continue to be controlled per 10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Power Plants and Fuel Reprocessing Plants," Criterion VI, "Document Control." Activities involving security and emergency planning and preparedness will continue to be controlled by procedure.

In TS 5.4.1.a, Entergy proposed to revise the applicability for this TS to procedures applicable to the safe storage of nuclear fuel recommended in Regulatory Guide 1.33, Revision 2, Appendix A. Since operating and refueling the reactor will both be prohibited by the 10 CFR Part 50 license once the certifications under 10 CFR 50.82(a)(1) have been submitted to the NRC, procedures associated with these activities will no longer need to be maintained. Procedures governing fuel handling operations will provide the guidance necessary to ensure safe handling of spent fuel in the SFP and transfer from the SFP to dry fuel storage casks. Procedures governing responses to fuel handling accidents, personnel injuries, SFP events and external events provide the necessary guidance to mitigate the consequences of such events.

No change to Pilgrim's actions in response to a fuel handling accident is proposed by the licensee.

The TS 5.4.1.b requires establishment, implementation, and maintenance of emergency operating procedures that implement the requirements of NUREG-0737 and NUREG-0737, Supplement 1, as stated in Generic Letter 82-33. The TS 5.4.1.b is proposed to be deleted as Generic Letter 82-33 was only addressed to licensees of operating reactors, applicants for operating licenses, and holders of construction permits, none of which will apply to Pilgrim in the permanently defueled condition. Procedures governing the site response to accidents, events and injuries will provide the necessary guidance to mitigate the consequences of such events.

Entergy has proposed no changes to TS 5.4.1.c through e.

NRC Staff Conclusion of the Proposed Changes to TS 5.4

Once the certifications under 10 CFR 50.82(a)(1) have been submitted to the NRC, the Pilgrim 10 CFR Part 50 license will no longer authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. The proposed changes to the Pilgrim procedures reflect the fact that Pilgrim will be permanently defueled so the focus is changed from operating nuclear safety to the safe storage and handling of nuclear fuel. Once Pilgrim is permanently shutdown and defueled, the time available to mitigate credible events is expected to be greater than that for current design basis events. The NRC staff reviewed the proposed changes and finds the proposed changes to TS 5.4 reflect the scope of the activities that would result from the permanent cessation of operations and permanent fuel removal and, therefore, are acceptable.

4.8 Proposed Changes to TS Section 5.5.2, "Primary Coolant Sources Outside Containment"

Current TS 5.5.2

Current TS 5.5.2 states:

> 5.5.2 Primary Coolant Sources Outside Containment
>
> This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include the Core Spray (CS), High Pressure Coolant Injection (HPCI), Residual Heat Removal (RHR), Reactor Core Isolation Cooling (RCIC), Reactor Water Cleanup (RWCU) [Let Down portion], Radwaste Collection System from Reactor Building, sampling system (From Recirc and RWCU), and Standby Gas Treatment (SGTS). The program shall include the following:
>
> a. Preventive maintenance; and
>
> b. Periodic visual inspection to identify and estimate leakage.

Proposed Change to TS 5.5.2

Entergy proposed to delete TS 5.5.2.

NRC Staff Technical Evaluation of the Proposed Change to TS 5.5.2

The Primary Coolant Sources Outside Containment program was established to minimize leakage from portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident. Entergy proposed to delete this program, because these conditions can no longer exist for a permanently defueled facility.

NRC Staff Conclusion of the Proposed Change to TS 5.5.2

Once the certifications under 10 CFR 50.82(a)(1) have been submitted to the NRC, the Pilgrim 10 CFR Part 50 license will no longer authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. The proposed deletion of the Primary Coolant Sources Outside Containment program reflects the fact that Pilgrim will be permanently defueled so the focus is changed from operating nuclear safety to the safe storage and handling of nuclear fuel. Once Pilgrim is permanently shutdown and defueled, the time available to mitigate credible events is expected to be greater than that for current design basis events. The NRC staff reviewed the proposed changes and finds the proposed changes to TS 5.5.2 reflect the scope of the activities that would result from the permanent cessation of operations and permanent fuel removal and, therefore, are acceptable.

4.9 Proposed Changes to TS Section 5.6.2, "Annual Radiological Environmental Operating Report," and TS Section 5.6.3, "Radioactive Effluent Release Report"

Current TS 5.6.2 and TS 5.6.3

Current TS 5.6.2 and 5.6.3 state:

> 5.6.2 Annual Radiological Environmental Operating Report
>
> The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.
>
> The Annual Radiological Environmental Operating Report shall include a summary of the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons

for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

5.6.3 Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a by May 15th of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and process control procedures and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

Proposed Changes to TS 5.6.2 and TS 5.6.3

5.6.2 Annual Radiological Environmental Operating Report

The Annual Radiological Environmental Operating Report covering the operation of the facility during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include a summary of the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

5.6.3 Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the facility shall be submitted in accordance with 10 CFR 50.36a by May 15th of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the facility. The material provided shall be consistent with the objectives outlined in the ODCM and process control procedures and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

NRC Staff Technical Evaluation of the Proposed Changes to TS 5.6.2 and TS 5.6.3

Entergy proposed to change "unit" to "facility" in TS 5.6.2 and TS 5.6.3. This administrative change that reflects that Pilgrim will be permanently shutdown and defueled after submitting to the NRC the certifications under 10 CFR 50.82(a)(1). The term "unit" implies operating; the term "facility" more appropriately represents the permanently shut down and defueled condition.

NRC Staff Conclusion of the Proposed Changes to TS 5.6.2 and TS 5.6.3

The proposed changes to TS 5.6.2 and TS 5.6.3 are administrative and the NRC staff finds the proposed changes to TS 5.6.2 and TS 5.6.3 acceptable since it involves no technical changes.

4.10 Proposed Changes to TS Section 5.7, "High Radiation"

Current TS 5.7

5.7.1 Pursuant to 10 CFR 20, paragraph 20.1601(c), in lieu of the requirements of 10 CFR 20.1601, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation 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). Individuals qualified in radiation protection procedures (e.g., radiation protection personnel) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates ≤ 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas.

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 rate 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 at the frequency specified by the radiation protection manager in the RWP.

5.7.2 In addition to the requirements of Specification 5.7.1, areas with radiation levels ≥ 1000 mrem/hr 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 SRO on duty or

radiation protection supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that shall specify the dose rate levels in the immediate work areas and the maximum allowable stay times for individuals in those areas. In lieu of the stay time specification of the RWP, 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.

5.7.3 For individual high radiation areas with radiation levels of > 1000 mrem/hr, accessible to personnel, that are located within large areas such as reactor containment, where no enclosure exists for purposes of locking, or that cannot be 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.

Proposed Changes to TS 5.7

5.7.1 Pursuant to 10 CFR 20, paragraph 20.1601(c), in lieu of the requirements of 10 CFR 20.1601, each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation 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). Individuals qualified in radiation protection procedures (e.g., radiation protection personnel) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates ≤ 1000 mrem/hr, provided they are otherwise following facility radiation protection procedures for entry into such high radiation areas.

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 rate 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 at the frequency specified by the radiation protection manager in the RWP.

5.7.2 In addition to the requirements of Specification 5.7.1, areas with radiation levels ≥ 1000 mrem/hr 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 control room supervisor on duty or radiation protection supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that shall specify the dose rate levels in the immediate work areas and the maximum allowable stay times for individuals in those areas. In lieu of the stay time specification of the RWP, 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.

5.7.3 For individual high radiation areas with radiation levels of > 1000 mrem/hr, accessible to personnel, that are located within large areas such as reactor containment, where no enclosure exists for purposes of locking, or that cannot be 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.

NRC Staff Technical Evaluation of the Proposed Changes to TS 5.7

In TS 5.7.1, Entergy proposed to replace the term "plant" with the term "facility." This administrative change reflects the fact that Pilgrim will be permanently shutdown and defueled after submitting to the NRC the certifications under 10 CFR 50.82(a)(1). The term "unit" implies operating; the term "facility" more appropriately represents the permanently shut down and permanently defueled condition.

In TS 5.7.2, Entergy proposed to replace the reference to the "SRO" with a reference to "control room supervisor." Once the certifications under 10 CFR 50.82(a)(1) have been submitted to the NRC, the Pilgrim 10 CFR Part 50 license will no longer authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. These certifications also obviate the need for the operators' licenses specified in 10 CFR Part 55. Therefore, there is no longer a need for SROs. Replacing the SRO with a control room supervisor will continue to ensure that the senior individual on shift remains in control. The control room supervisor will be trained and qualified in accordance with the NRC-approved fuel handler training program.

There are no proposed changes to TS 5.7.3.

NRC Staff Conclusion of the Proposed Changes to TS 5.7

Once the certifications under 10 CFR 50.82(a)(1) have been submitted to the NRC, the Pilgrim 10 CFR Part 50 license will no longer authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. The proposed changes to TS 5.7 reflect the fact that Pilgrim will be permanently defueled so the focus is changed from operating nuclear safety to the safe storage and handling of nuclear fuel. Once Pilgrim is permanently shutdown and defueled, the time available to mitigate credible events is expected to be greater than that for current design basis events. The NRC staff reviewed the proposed changes and finds the proposed changes to TS 5.7 reflect the scope of the activities that would result from the permanent cessation of operations and permanent fuel removal and, therefore, are acceptable.

5.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Commonwealth of Massachusetts official was notified of the proposed issuance of the amendment on May 24, 2017. The Commonwealth of Massachusetts official had no comments.

6.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 published in the *Federal Register* on March 28, 2017 (82 FR 15380). Accordingly, the 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.

7.0 CONCLUSION

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) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: J. Lamb

Date: July 10, 2017

SUBJECT: PILGRIM NUCLEAR POWER STATION - ISSUANCE OF AMENDMENT RE: ADMINISTRATIVE CONTROLS FOR PERMANENTLY DEFUELED CONDITION (CAC NO. MF9304) DATED JULY 10, 2017

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