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10 CFR 50.90

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U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Clinton Power Station
Facility Operating License No. NPF-62
NRC Docket No. 50-461

Subject: License Amendment Request – Proposed Changes to Technical Specifications Section 5.0 Administrative Controls for Permanently Defueled Condition

References:
1. Letter from Michael P. Gallagher (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Certification of Permanent Cessation of Power Operations," dated June 20, 2016 (ML16172A137)
2. Letter from Michael P. Gallagher (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Request for Approval of Certified Fuel Handler Training Program," dated July 18, 2016 (ML16200A236)

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit" Exelon Generation Company, LLC (EGC) requests amendments to Appendix A, Technical Specifications (TS), of Facility Operating License No. NPF-62 for Clinton Power Station (CPS).

On June 2, 2016, EGC announced that it plans to close CPS, Unit 1 due to deteriorating economics. Under the terms of this announcement, EGC agreed to permanently cease operations at CPS by June 1, 2017. By letter dated June 20, 2016 (Reference 1), EGC provided formal notification to the U.S. Nuclear Regulatory Commission (NRC) pursuant to 10 CFR 50.4(b)(8) and 10 CFR 50.82(a)(1)(i) of EGC's determination to permanently cease operations at CPS by June 1, 2017.

Once the certifications for permanent cessation of operations and removal of fuel from the reactor vessel are docketed for CPS in accordance with 10 CFR 50.82(a)(1)(i) and (ii), and pursuant to 10 CFR 50.82(a)(2), the 10 CFR 50 license will no longer authorize operation of the reactor or placement or retention of fuel in the reactor vessel. The basis for this proposed License Amendment Request (LAR) is that certain TS administrative controls may be revised or removed to reflect the permanently defueled condition.

Specifically, this LAR proposes changes to the organization, staffing, and training requirements contained in Section 5.0, "Administrative Controls" of the CPS TS. This proposed amendment also supports implementation of the Certified Fuel Handler training program that was submitted to the NRC for approval by letter dated July 18, 2016 (Reference 2).

Attachment 1 to this letter provides a detailed description and evaluation of the proposed changes to the TS. Attachment 2 contains the marked-up TS pages depicting the proposed changes.

EGC has concluded that the proposed changes present no significant hazards consideration under the standards set forth in 10 CFR 50.92, "Issuance of amendment."

The proposed changes have been reviewed and approved by the CPS Plant Operations Review Committee in accordance with the requirements of the EGC Quality Assurance Program.

EGC requests review and approval of this proposed amendment by April 4, 2017, to support the current schedule for the CPS transition to a permanently defueled facility. Once approved, the amendment shall be implemented within 60 days from the effective date of the amendment. EGC requests that the approved amendment become effective following the docketing of the certifications required by 10 CFR 50.82(a)(1) that CPS has been permanently shutdown and defueled.

There are no regulatory commitments contained within this submittal.

In accordance with 10 CFR 50.91 "Notice for public comment; State consultation," paragraph (b), EGC is notifying the State of Illinois of this application for license amendment by transmitting a copy of this letter and its attachments to the designated State Official.

If you have any questions concerning this submittal, please contact Mr. Timothy A. Byam at (630) 657-2818.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 28th day of July 2016.

Respectfully,

Michael P. Gallagher
Vice President, License Renewal & Decommissioning
Exelon Generation Company, LLC

Attachments: 1. Evaluation of Proposed Changes
2. Markup of Proposed Technical Specifications Pages

cc: NRC Regional Administrator, Region III
NRC Senior Resident Inspector – Clinton Power Station
Illinois Emergency Management Agency – Division of Nuclear Safety

Attachment 1

License Amendment Request

Clinton Power Station

Docket No. 50-461

EVALUATION OF PROPOSED CHANGES

Subject: Proposed Changes to Technical Specifications Section 5.0

1.0 SUMMARY DESCRIPTION

Pursuant to 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (Exelon), proposes changes to Appendix A, Technical Specifications (TS) of Facility Operating License No. NPF-62 for Clinton Power Station (CPS), Unit 1.

On June 2, 2016, Exelon announced that it plans to close CPS, Unit 1 due to deteriorating economics. Under the terms of this announcement, Exelon agreed to permanently cease operations at CPS by June 1, 2017. By letter dated June 20, 2016 (Reference 1), Exelon provided formal notification to the U.S. Nuclear Regulatory Commission (NRC) pursuant to 10 CFR 50.4(b)(8) and 10 CFR 50.82(a)(1)(i) of Exelon's determination to permanently cease operations at CPS by June 1, 2017.

Once the certifications for permanent cessation of operations and removal of fuel from the reactor vessel are docketed for CPS in accordance with 10 CFR 50.82(a)(1)(i) and (ii), and pursuant to 10 CFR 50.82(a)(2), the 10 CFR 50 license will no longer authorize operation of the reactor or placement or retention of fuel in the reactor vessel.

In order to support activities at CPS once the site is in a permanently shutdown and defueled condition, some administrative controls may no longer be applicable and can be deleted or revised. Therefore, this License Amendment Request (LAR) proposes changes that would delete or revise certain organization, staffing, and training requirements contained in Section 5.0, "Administrative Controls," of the CPS TS to further support plant activities and decommissioning efforts following permanent cessation of operations.

Additionally, by letter dated July 18, 2016 (Reference 2), Exelon submitted a Certified Fuel Handler training program for NRC approval. This proposed LAR will support implementation of the Certified Fuel Handler training program once approved, since licensed reactor operators will no longer be required to support plant operations. The need for licensed reactor operators is specified in Section 5.0 of the TS.

The proposed changes would not become effective until all of the following have occurred: the NRC has approved the CPS Certified Fuel Handler training program and the submittal of the required 10 CFR 50.82(a)(1)(ii) certification that CPS has been permanently defueled.

In the development of the proposed TS changes, Exelon reviewed the TS requirements from other plants that have permanently shutdown, primarily Vermont Yankee (Reference 4), Kewaunee (Reference 7), Millstone Unit 1 (Reference 5), and Zion (Reference 6). Exelon also evaluated the applicable guidance in NUREG-1434, "Standard Technical Specifications - General Electric Plants (BWR/6)" (Reference 3).

This LAR provides a discussion and description of the proposed TS changes, a technical evaluation of the proposed TS changes and information supporting a finding of No Significant Hazards Consideration (NSHC).

2.0 DETAILED DESCRIPTION

The specific proposed changes affecting CPS TS Sections 1.1 and 5.0 are described below with the supporting technical evaluation presented in the following Section 3.0, "Technical Evaluation."

TS Section 1.1 - Definitions	
Proposed TS	
Term	Definition
CERTIFIED FUEL HANDLER	A CERTIFIED FUEL HANDLER is an individual who complies with provisions of the CERTIFIED FUEL HANDLER training program required by Specification 5.3.2.

TS Section 5.1 - Responsibility	
Current TS	**Proposed TS**
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, and modification to systems or equipment that affect nuclear safety.*	5.1.1 The plant manager shall be responsible for overall ~~unit~~***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, and modification to systems or equipment that affect ~~nuclear safety~~***safe storage and maintenance of spent nuclear fuel***.
5.1.2 The shift supervisor (SS) shall be responsible for the control room command function. During any absence of the SS from the control room while the unit is in MODE 1, 2 or 3, 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 SS from the control room while the unit is in MODE 4 or 5, an individual with an active SRO license or Reactor Operator (RO) license shall be designated to assume the control room command function.	5.1.2 The shift supervisor (SS) shall be responsible for the ~~control room~~***shift*** command function. ~~During any absence of the SS from the control room while the unit is in MODE 1, 2 or 3, 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 SS from the control room while the unit is in MODE 4 or 5, an individual with an active SRO license or Reactor Operator (RO) license shall be designated to assume the control room command function.~~

TS Section 5.2 - Organization	
Current TS	**Proposed TS**
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*	5.2.1 Onsite and Offsite Organizations Onsite and offsite organizations shall be established for ~~unit operation~~***facility staff*** and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting ~~safety of the nuclear power plant~~***safe storage and handling of spent 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 USAR;	communication shall be defined and established throughout highest management levels, intermediate levels, and all ~~operating~~***facility*** 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~~***facility*** specific titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications, shall be documented in the USAR;
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;	b. The plant manager shall be responsible for overall safe operation of the ~~plant~~***facility*** and shall have control over those onsite activities necessary for safe ~~operation~~ ~~***storage*** and maintenance of ~~the plant~~***spent nuclear fuel***;
c. A specified corporate executive 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	c. A specified corporate executive shall have corporate responsibility for ~~overall plant nuclear safety~~ ***the safe storage and handling of spent nuclear fuel*** 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~~ ***facility to ensure safe management of spent nuclear fuel***; and
d. The individuals who train the operating staff, carry out radiation protection, 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.	d. The individuals who train the ~~operating staff~~***CERTIFIED FUEL HANDLERs***, carry out radiation protection, 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~~***ability to perform their assigned functions.***
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 on site while the unit is in MODE 1, 2, or 3.*	*5.2.2* ~~Unit~~***Facility*** Staff The ~~unit~~***facility*** 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 on site while the unit is in MODE 1, 2, or 3.~~***Each duty shift shall be composed of at least one shift supervisor and one Non-certified Operator. The Non-***

	certified Operator position may be filled by a CERTIFIED FUEL HANDLER.
b. At least one licensed RO shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, or 3, at least one licensed SRO shall be present in the control room.	b. ~~At least one licensed RO shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, or 3, at least one licensed SRO shall be present in the control room.~~ ***At all times when nuclear fuel is stored in the spent fuel pool, 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.***
c. Shift crew composition may be one less than the minimum requirements of 10 CFR 50.54(m)(2)(i) and Specifications 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours to accommodate unexpected absence of on-duty shift crew members, provided immediate action is taken to restore the shift crew composition within the minimum requirements.	c. Shift crew composition may be one less than the minimum requirements of ~~10 CFR 50.54(m)(2)(i) and~~ Specification~~s~~ 5.2.2.a ~~and 5.2.2.g~~ for a period of time not to exceed 2 hours to accommodate unexpected absence of on-duty shift crew members, provided immediate action is taken to restore the shift crew composition within the minimum requirements.
d. A radiation protection technician 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.	d. A radiation protection technician shall be on site ~~when fuel is in the reactor~~***during the movement of fuel and during the movement of loads over fuel***. 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.
e. Deleted.	e. ~~Deleted.~~ ***Oversight of fuel handling operations shall be provided by a CERTIFIED FUEL HANDLER.***
f. The operations manager or at least one operations middle manager shall hold an SRO license for Clinton Power Station.	f. ~~The operations manager or at least one operations middle manager shall hold an SRO license for Clinton Power Station.~~ ***The shift supervisor shall be a CERTIFIED FUEL HANDLER.***
g. The Shift Technical Advisor (STA) shall provide advisory technical support to the SS in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.	g. ~~The Shift Technical Advisor (STA) shall provide advisory technical support to the SS in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.~~ ***Deleted***
TS Section 5.3 - Unit Staff Qualifications	
Current TS	**Proposed TS**

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, with the following exception: the licensed operators who shall comply only with the requirements of 10 CFR 55.*	5.3 ~~Unit~~***Facility*** Staff Qualifications 5.3.1 Each member of the ~~unit~~***facility*** staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1-1978~~, with the following exception: the licensed operators who shall comply only with the requirements of 10 CFR 55~~. ***5.3.2 An NRC-approved training and retraining program for CERTIFIED FUEL HANDLER shall be maintained.***
TS Section 5.4 Procedures	
Current TS	**Proposed TS**
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;* *c. Quality assurance for effluent and environmental monitoring; and* *d. All programs specified in Specification 5.5.*	5.4.1 Written procedures shall be established, implemented, and maintained covering the following activities: a. The ~~applicable~~ procedures ***applicable to safe storage of nuclear fuel*** 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; c. Quality assurance for effluent and environmental monitoring; and d. All programs specified in Specification 5.5.

The proposed changes are shown on the marked-up CPS TS pages included as Attachment 2.

3.0 TECHNICAL EVALUATION

This technical evaluation is for administrative changes to CPS TS Section 5, "Administrative Controls." All reformatting and renumbering is in accordance with Section 5.0 of the BWR/6 Standard Technical Specifications (STS), NUREG-1434, Revision 4 (Reference 3). The reformatting, renumbering, and rewording process involves no technical changes to the existing TS, except where specifically noted. Editorial rewording, (either adding or deleting) is made consistent with STS except where noted to make the specification germane with a permanently defueled reactor.

The majority of the accident events discussed in Chapter 15 of the CPS Updated Safety Analysis Report (USAR) are not applicable to the reactor in its decommissioned state. The remaining Chapter 15 events applicable to CPS during decommissioning are:

- Fuel Handling Accidents

- Postulated Radioactive Releases Due to Liquid Radwaste Tank Failures
- Cask Drop Accident

The Fuel Handling Accident (FHA) is the limiting Chapter 15 dose event for CPS in its decommissioned state.

TS Section 1.1 – Definitions

The definition of the term Certified Fuel Handler is being added to ensure consistent understanding and application. Further discussion of the Certified Fuel Handler is included in several proposed TS Section 5 amendments below.

TS Section 5.1 – Responsibility

TS Section 5.1 "Responsibility," provides a description and requirements regarding certain key operational management responsibilities. The section includes certain requirements associated with reactor operation that will no longer be permitted following submittal of the certifications required by 10 CFR 50.82(a). Therefore, those requirements are not needed for a permanently defueled condition because 10 CFR 50.82(a)(2) prohibits Exelon from operating the plant or placing fuel in the reactor vessel.

TS 5.1.1 – TS 5.1.1 is being revised to more appropriately refer to "facility" operation, rather than "unit" operation. The proposed change also replaces "nuclear safety" with the term "safe storage and maintenance of spent nuclear fuel."

The terms "unit" and "unit operation" are typically associated with an operating reactor. The proposed administrative change revises these terms, where applicable in this TS Section, with terms such as "facility" or "facility staff," which are considered more appropriate in representing the permanently shutdown and defueled condition.

The term "safe storage and maintenance of spent nuclear fuel" is considered analogous to the term "nuclear safety" for a plant that will be in the permanently defueled condition. The proposed change replaces "nuclear safety" with the analogous phrase, which serves to narrow the focus of nuclear safety concerns to those associated with safely maintaining spent nuclear fuel. This change removes the implication that CPS can return to operation once the final certification required by 10 CFR 50.82(a)(1)(ii) is submitted to the NRC.

TS 5.1.2 – TS 5.1.2 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.

This section is being revised to replace the term "control room" with "shift" to more appropriately reflect the defueled command function. The TS is also being changed to eliminate the Mode dependency for this function and personnel qualifications associated with an operating plant. The proposed change establishes the shift supervisor as having command of the shift. Associated activities (e.g., fuel handling) do not necessarily rely on the main control room (MCR). The MCR will remain the physical center of the command function; however, since control of activities may be performed either remotely from the MCR or locally in the plant, the location of the command center is functionally where the shift supervisor is located. The proposed TS change recognizes that the delegation of command and control is unnecessary once CPS is in the permanently defueled condition with fuel in the Spent Fuel Pool (SFP). Any event involving loss of SFP cooling would evolve slowly enough that no immediate response

would be required to protect the health and safety of the public or station personnel. Adequate communications capability is provided to allow facility personnel to safely manage storage and handling of irradiated fuel without reliance on the MCR for the command function.

TS Section 5.2 – Organization

The terms "unit," "unit operation," and "plant" are typically associated with an operating reactor. The proposed administrative change revises these terms, where applicable in this TS Section, with terms such as "facility" or "facility staff," which are considered more appropriate in representing the permanently shutdown and defueled condition.

The terms "safe storage and maintenance of spent nuclear fuel," "safe storage and handling of spent nuclear fuel," and "safe management of spent nuclear fuel" are considered analogous to the terms "nuclear safety" and "safety of the nuclear power plant" for a facility that will be in the permanently defueled condition. The proposed changes in this TS Section serve to narrow the focus of nuclear safety concerns to those associated with safely maintaining spent nuclear fuel. These changes remove the implication that CPS can return to operation once the final certification required by 10 CFR 50.82(a)(1)(ii) is submitted to the NRC.

TS 5.2.1 "Onsite and Offsite Organizations" - The introduction to TS 5.2.1 identifies that organizational positions are established that are responsible for the safety of the nuclear plant. The section includes certain requirements associated with reactor operation that will no longer be permitted following submittal of the certifications required by 10 CFR 50.82(a). Therefore, those requirements are not needed for a permanently defueled condition because 10 CFR 50.82(a)(2) prohibits Exelon from operating the plant or placing fuel in the reactor vessel.

TS 5.2.1.a – The proposed TS change administratively changes the term "operating" organization to "facility" organization. It also changes the term "plant" specific to "facility" specific.

TS 5.2.1.b – This TS identifies the organizational position responsible for safe operation of the nuclear plant and for control of activities necessary for the safe operation and maintenance of the plant.

To reflect the change in safety concerns from an operating plant to a permanently defueled plant, the responsibility for the control of activities necessary for the safe operation and maintenance of the plant is changed to the responsibility for safe storage and maintenance of the spent nuclear fuel.

TS 5.2.1.c – This TS identifies the organizational position responsible for overall nuclear plant safety.

To reflect the change in safety concerns from an operating plant to a permanently defueled plant, the responsibility for ensuring nuclear safety is changed to the responsibility for ensuring safe storage, handling, and management of spent nuclear fuel.

TS 5.2.1.d – This paragraph addresses the requirement for organizational independence of the personnel who train the operations staff, radiation protection personnel, and quality assurance personnel from operating pressures.

The proposed change replaces the term "operating staff" with "CERTIFIED FUEL HANDLERs" as defined in TS 1.1, "Definitions." In the defueled condition, the primary responsibility of managing safe storage of the spent nuclear fuel will be performed by the Certified Fuel Handlers. Additionally, since the plant will not be permitted to operate, the

phrase "their independence from operating pressures" is being changed to "their ability to perform their assigned functions." These changes reflect the changed function of the previous operating staff to a focus on safe handling and storage of spent nuclear fuel, and to remove the implication that CPS can return to operation once the certifications required by 10 CFR 50.82(a)(1) are submitted to the NRC.

TS 5.2.2 "Unit Staff" – The title of this subsection and the introductory statement for TS 5.2.2 is being revised to more appropriately refer to "Facility" Staff, rather than "Unit" Staff to reflect the permanently shutdown and defueled condition.

TS 5.2.2.a – TS 5.2.2.a requires a non-licensed operator to be assigned if fuel is in the reactor and an additional non-licensed operator if the reactor is operating in MODE 1, 2, or 3. This requirement is being deleted to reflect a permanently defueled reactor.

TS 5.2.2.a is being replaced by a new requirement for each on duty shift to be composed of a minimum shift crew composition of at least one shift supervisor and one Non-certified Operator. The Non-certified Operator position may be filled by either a Non-certified Operator or by a Certified Fuel Handler. Since plant operations can never recur at CPS once the certifications required by 10 CFR 50.82(a)(1) are submitted to the NRC, the minimum staffing requirement is changed to a minimum crew compliment of one shift supervisor and one Non-certified Operator. The number and complexity of operating systems of an operating plant will be reduced to the systems required to provide and support spent fuel pool cooling. The new proposed crew compliment is sufficient to monitor spent fuel pool parameters, such as pool level and temperature, while maintaining the ability to ensure spent fuel handling operations are carried out in a safe manner. Moreover, the spectrum of credible accidents and operational events, and the quantity and complexity of activities required for safety have been greatly reduced from that at an operating plant. The shift supervisor will be qualified as a Certified Fuel Handler in accordance with TS 5.2.2.f. 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.

TS 5.2.2.b – This section establishes the requirement for when licensed Reactor Operators (RO) and Senior Reactor Operators (SRO) are required to be in the MCR. Following the certifications required by 10 CFR 50.82(a)(1) being submitted to the NRC, CPS will not be required to have operators licensed pursuant to 10 CFR 55; therefore, TS 5.2.2.b will not apply.

The proposed change to this section reflects the requirement for having one qualified watch stander (either a Non-certified Operator or Certified Fuel Handler) in the control room when fuel is stored in the spent fuel pool. This reflects the reduced requirement for control room personnel training and qualification for a plant authorized for nuclear fuel storage only. CPS has submitted a Certified Fuel Handler training program for NRC approval in Reference 2. Non-certified Operators will support the facility through performance of tasks not requiring qualification as a Certified Fuel Handler. The training and qualification for the Non-certified Operator will be determined in accordance with the requirements of 10 CFR 50.120, "Training and qualification of nuclear power plant personnel," which requires training programs to be derived using a Systems Approach to Training (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 Part 50, and the CPS license will no longer authorize operation following submittal of the certifications

required by 10 CFR 50.82(a)(1), the Non-certified Operator training program nonetheless aligns with those requirements. 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 derived from the analysis which describe desired performance after training, (3) training design and implementation 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. There will be a sufficient number of individuals qualified as Non-certified Operators or Certified Fuel Handlers to staff the facility twenty four hours per day, seven days per week. Additional on-shift staffing will be provided to satisfy applicable security, fire protection, and emergency preparedness requirements.

The MCR 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 plant, the location of the command center is functionally where the shift supervisor is located, in accordance with proposed TS 5.1.2. Activities that could be performed from the MCR that have the potential to affect forced cooling of spent nuclear fuel include changing the electrical power distribution system alignment.

All spent fuel handling activities including starting and stopping cooling water pumps are performed in the MCR or locally at the SFP. Indications and/or alarms are also received in the control room that would be indicative of spent fuel pool abnormalities. The shift supervisor is responsible for directing response to those abnormalities, from either the control room or local to the SFP, in accordance with applicable response procedures.

For any condition, incident, or event that occurs when the Non-certified Operator is in the control room alone and is not within the scope of qualifications that are possessed by the Non-certified Operator, the shift supervisor will be immediately contacted for direction by phone, radio, and/or plant page system. This philosophy is deemed acceptable because the necessity to render immediate actions to protect the health and safety of the public is not challenged.

TS 5.2.2.c – This section addresses the conditions under which the minimum shift compliment may be reduced due to unexpected circumstances. It allows for shift crew composition to be less than the minimum requirement of 10 CFR 50.54(m) and Specifications 5.2.2.a and 5.2.2.g 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.

This paragraph is being revised to remove references to 10 CFR 50.54(m)(2)(i) and TS 5.2.2.g. Once the certifications required by 10 CFR 50.82(a)(1) have been submitted, the requirements of 10 CFR 50.54(m) will no longer be applicable because the CPS Part 50 license no longer will authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. These certifications also obviate need for the operators' licenses specified in 10 CFR 55 and the requirement for the Shift Technical Advisor (STA) position discussed in TS 5.2.2.g.

TS 5.2.2.d – This section establishes the requirement for a person qualified in radiation protection measures to be onsite when fuel is in the reactor. To reflect a permanently defueled condition, this requirement is being modified to require an individual qualified in

radiation protection measures to be present on-site during the movement of fuel and during the movement of loads over fuel. Following submittal of the certification of permanent removal of fuel from the reactor vessel to the SFP, fuel will no longer be permitted to be emplaced or retained in the vessel. The modified TS reflect those remaining activities where individuals qualified in radiation protection measures are required to be present.

TS 5.2.2.e – This paragraph was previously deleted. This section is revised to establish the requirement for oversight of fuel handling operations in the SFP to be performed by a Certified Fuel Handler. Oversight of fuel handling operations indicates that the responsible Certified Fuel Handler will authorize commencement of fuel handling activities, monitor the progress of fuel movements, and take appropriate actions in response to emergencies. Fuel moves and heavy load moves that could affect the safe handling and storage of spent nuclear fuel would be approved by the shift supervisor. Proposed TS 5.2.2.f requires the shift supervisor to be a Certified Fuel Handler.

TS 5.2.2.f – This section establishes the requirement for the operations manager or a middle manager to hold an SRO license. This paragraph is being deleted. Once the certifications required by 10 CFR 50.82(a)(1) have been submitted, the requirements of 10 CFR 50.54(m) will no longer be applicable because the CPS Part 50 license no longer will 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 55. Therefore, there is no longer a need for operations management staff to hold an SRO license.

This proposed change adds the requirement that the shift supervisor be a Certified Fuel Handler. This requirement ensures that the senior individual on shift is appropriately trained and qualified, in accordance with the NRC-approved Certified Fuel Handler training program, to supervise shift activities. The CPS management structure will not require positions above the shift supervisor to be a Certified Fuel Handler or attend equivalent training. CPS has determined that, once the plant 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, management oversight of the plant can be performed by individuals meeting the applicable requirements of ANSI/ANS 3.1-1978 (as required by TS 5.3.1) and need not be qualified as Certified Fuel Handlers.

TS 5.2.2.g – This section establishes the requirements for the Shift Technical Advisor (STA) position. This paragraph is deleted to remove the requirements for the STA since that 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, the requirements of this specification will no longer be applicable because the CPS Part 50 license no longer will authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel.

TS Section 5.3 - Unit Staff Qualifications

The section title for TS 5.3 is being revised to more appropriately refer to "Facility" Staff Qualifications, rather than "Unit" Staff Qualifications.

TS 5.3.1 – This section establishes that each member of the unit staff meet or exceed the minimum qualifications specified in ANSI/ANS 3.1-1978. The TS provided an exception that required licensed operators to meet the requirements of 10 CFR 55. Following the certifications required by 10 CFR 50.82(a)(1) being submitted to the NRC, CPS will not be required to have operators licensed pursuant to 10 CFR 55; therefore, the exception no longer applies and the

requirement is being removed. The term "unit" is being changed to "facility" to be more appropriate with a defueled condition, which is consistent with other changes in this LAR.

TS 5.3.2 –TS 5.3.2 is being added to establish that an NRC-approved Certified Fuel Handlers Training and Retraining Program shall be maintained. The Certified Fuel Handler training program ensures that the qualifications of fuel handlers are commensurate with the tasks to be performed and the conditions requiring response. 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 Part 50, and the CPS license will no longer authorize operation following submittal of the certifications required by 10 CFR 50.82(a)(1), the Certified Fuel Handler training program nonetheless aligns with those requirements. The Certified Fuel Handler training program provides adequate confidence that appropriate SAT based training of personnel who will perform the duties of a Certified Fuel Handler is conducted to ensure the facility is maintained in a safe and stable condition. CPS has submitted a Certified Fuel Handler training program for NRC approval in Reference 2.

TS Section 5.4 - Procedures

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

TS 5.4.1.a - The applicability of this TS is being revised to address only procedures applicable to the safe storage of nuclear fuel recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978. The proposed change reduces the scope of the TS to requiring only the establishment, implementation, and maintenance of written procedures applicable to the safe storage of nuclear fuel. This change recognizes the reduced requirements associated with the protection of stored nuclear fuel as opposed to the operation of the nuclear power plant. This change is consistent with that approved for Crystal River Unit 3 (Reference 9).

There are no changes proposed to TS 5.4.1.b, c or d.

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

The proposed changes have been evaluated to determine whether applicable regulations and requirements continue to be met. Exelon has determined that the proposed changes do not require any exemptions or relief from regulatory requirements.

10 CFR 50.82 "Termination of license."

"(a) For power reactor licensees —

(1) (i) When a licensee has determined to permanently cease operations the licensee shall, within 30 days, submit a written certification to the NRC, consistent with the requirements of § 50.4(b)(8);

(ii) 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 § 50.4(b)(9) and;…

(2) 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."

By letter dated June 20, 2016 (Reference 1), Exelon provided formal notification to the NRC pursuant to 10 CFR 50.82(a)(1)(i) of Exelon's contingent determination to permanently cease operations at CPS by June 1, 2017.

10 CFR 50.36 "Technical specifications."

"(c) Technical specifications will include items in the following categories:…

(5) *Administrative Controls*. 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 TS generally are requirements the NRC deems necessary to support the safe operation of a facility that are not already covered by other regulations. Although 10 CFR 50.36 includes these requirements, they are predominately specified in support of an operating plant. Once CPS is in a permanently shutdown and defueled condition, certain administrative controls described in the TS will no longer be required and can be deleted or modified as reflected in this LAR.

"(6) *Decommissioning.* This paragraph applies only to nuclear power reactor facilities that have submitted the certifications required by § 50.82(a)(1) and to non-power reactor facilities which are not authorized to operate. Technical specifications involving safety limits, limiting safety system settings, and limiting control system settings; limiting conditions for operation; surveillance requirements; design features; and administrative controls will be developed on a case-by-case basis."

As noted above, by letter dated June 20, 2016 (Reference 1), Exelon provided formal notification to the NRC pursuant to 10 CFR 50.82(a)(1)(i) of Exelon's determination to permanently cease operations at CPS by June 1, 2017. Upon submittal of the final certification pursuant to 10 CFR 50.82(a)(1)(ii) CPS will no longer be licensed to operate. The proposed changes delete or modify certain CPS TS administrative controls that are no longer applicable to a permanently shutdown and defueled facility.

10 CFR 50.54 "Conditions of licenses."

"(m)(1) A senior operator licensed pursuant to part 55 of this chapter shall be present at the facility or readily available on call at all times during its operation, and shall be present at the facility during initial start-up and approach to power, recovery from an unplanned or unscheduled shut-down or significant reduction in power, and refueling, or as otherwise prescribed in the facility license."

In 10 CFR 50.54(m), the NRC established the requirement for having ROs and SROs licensed pursuant to 10 CFR 55 based on plant conditions. Since the initial certification

has been submitted pursuant to 10 CFR 50.82(a)(1)(i) (Reference 1) and once the final certification required by 10 CFR 50.82(a)(1)(ii) has been submitted, the requirements of 10 CFR 50.54(m) will no longer be applicable since the 10 CFR 50 license at CPS 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' license specified in 10 CFR 55; therefore, there is no longer a need for operations management staff to hold an SRO license. The shift supervisor will be qualified as a Certified Fuel Handler defined in 10 CFR 50.2. 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.

10 CFR 50.2 "Definitions."

"Certified fuel handler means, for a nuclear power reactor facility, a non-licensed operator who has qualified in accordance with a fuel handler training program approved by the Commission."

By letter dated July 18, 2016 (Reference 2), Exelon submitted a request for NRC approval of a Certified Fuel Handler training program for CPS.

10 CFR 55.2 "Scope."

"The regulations in this part apply to --

(a) Any individual who manipulates the controls of any utilization facility licensed under parts 50, 52, or 54 of this chapter,

(b) Any individual designated by a facility licensee to be responsible for directing any licensed activity of a licensed operator.

(c) Any facility license."

As noted above, since the initial certification has been submitted pursuant to 10 CFR 50.82(a)(1)(i) (Reference 1) and once the final certification required by 10 CFR 50.82(a)(1)(ii) has been submitted, CPS will no longer be authorized to operate. Therefore, there is no longer a need for operations staff to hold RO or SRO licenses and the requirements of 10 CFR 55.2 would not be applicable.

4.2 Precedent

The proposed changes are consistent with the existing TS administrative control requirements currently in effect for the permanently shutdown and defueled Vermont Yankee Nuclear Power Station, for which an amendment was issued on December 22, 2014 (Reference 4); for the permanently shutdown and defueled Kewaunee Power Station, for which an amendment was issued on February 13, 2015 (Reference 7); for the permanently shutdown and defueled Millstone Nuclear Power Station, Unit 1, for which an amendment was issued on November 9, 1999 (Reference 5); for the permanently shutdown and defueled Zion Nuclear Power Station, for which an amendment was issued on December 30, 1999 (Reference 6); and for the permanently shutdown and defueled Crystal River Nuclear Plant, Unit 3, for which an amendment was issued on July 11, 2014 (Reference 9).

The proposed changes are also consistent with the proposed TS administrative control requirements submitted for NRC approval for the James A. FitzPatrick Nuclear Power

Plant, which was submitted on January 15, 2016 (Reference 8) as supplemented by an RAI response provided in a letter dated June 3, 2016 (Reference 10).

4.3 No Significant Hazards Consideration

Exelon has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

The proposed changes would revise and/or remove certain requirements contained within Technical Specification (TS) Section 5.0, Administrative Controls, of the Clinton Power Station (CPS) TS. The TS requirements being changed would be applicable once it has been certified that all fuel has permanently been removed from the CPS reactor in accordance with 10 CFR 50.82(a)(1)(ii). Once the final certification is submitted documenting the permanent cessation of operations and permanent fuel removal, the 10 CFR 50 license for CPS will no longer authorize operation of the reactor or placement of fuel in the reactor vessel, in accordance with 10 CFR 50.82(a)(2).

The discussion below addresses each of these criteria and demonstrates that the proposed amendment does not constitute a significant hazard.

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed changes would not take effect until CPS has permanently ceased operation and entered a permanently defueled condition. The proposed changes would revise the CPS TS by deleting or modifying certain portions of the TS administrative controls described in Section 5.0 of the TS that are no longer applicable to a permanently shutdown and defueled facility.

The proposed changes do not involve any physical changes to plant structures, systems, and components (SSCs) or the manner in which SSCs are operated, maintained, modified, tested, or inspected. The proposed changes do not involve a change to any safety limits, limiting safety system settings, limiting control settings, limiting conditions for operation, surveillance requirements, or design features.

The deletion and modification of provisions of the facility administrative controls do not affect the design of SSCs necessary for safe storage of spent irradiated fuel or the methods used for handling and storage of such fuel in the Spent Fuel Pool (SFP). The proposed changes are administrative in nature and do not affect any accidents applicable to the safe management of spent irradiated fuel or the permanently shutdown and defueled condition of the reactor.

In a permanently defueled condition, the only credible accidents are the Fuel Handling Accident (FHA), Postulated Radioactive Releases Due to Liquid Radwaste Tank Failures, and Cask Drop Accident. Other accidents such as Loss of Coolant Accident, Loss of Feedwater, and Reactivity and Power Distribution Anomalies will no longer be applicable to a permanently defueled reactor plant.

The probability of occurrence of previously evaluated accidents is not increased, since extended operation in a permanently defueled condition will be the only

operation allowed, and therefore, bounded by the existing analyses. Additionally, the occurrence of postulated accidents associated with reactor operation is no longer credible in a permanently defueled reactor. This significantly reduces the scope of applicable accidents.

The proposed changes in the administrative controls do not affect the ability to successfully respond to previously evaluated accidents and do not affect radiological assumptions used in the evaluations. The proposed changes narrow the focus of nuclear safety concerns to those associated with safely maintaining spent nuclear fuel. These changes remove the implication that CPS can return to operation once the final certification required by 10 CFR 50.82(a)(1)(ii) is submitted to the NRC. Any event involving safe storage of spent irradiated fuel or the methods used for handling and storage of such fuel in the SFP would evolve slowly enough that no immediate response would be required to protect the health and safety of the public or station personnel. Adequate communications capability is provided to allow facility personnel to safely manage storage and handling of irradiated fuel. As a result, no changes to radiological release parameters are involved. There is no effect on the type or amount of radiation released, and there is no effect on predicted offsite doses in the event of an accident.

Therefore, the proposed changes do not involve a significant increase in the probability or consequence of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed changes to delete and/or modify certain TS administrative controls have no impact on facility SSCs affecting the safe storage of spent irradiated fuel, or on the methods of operation of such SSCs, or on the handling and storage of spent irradiated fuel itself. The proposed changes do not result in different or more adverse failure modes or accidents than previously evaluated because the reactor will be permanently shut down and defueled and CPS will no longer be authorized to operate the reactor. The proposed changes will continue to require proper control and monitoring of safety significant parameters and activities.

The proposed changes do not result in any new mechanisms that could initiate damage to the remaining relevant safety barriers in support of maintaining the plant in a permanently shutdown and defueled condition (e.g., fuel cladding and SFP cooling). Since extended operation in a defueled condition will be the only operation allowed, and therefore bounded by the existing analyses, such a condition does not create the possibility of a new or different kind of accident.

The proposed changes do not alter the protection system design or create new failure modes. The proposed changes do not involve a physical alteration of the plant, and no new or different kind of equipment will be installed. Consequently, there are no new initiators that could result in a new or different kind of accident.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

The proposed changes involve deleting and/or modifying certain TS administrative controls once the CPS facility has been permanently shutdown and defueled. As specified in 10 CFR 50.82(a)(2), the 10 CFR 50 license for CPS will no longer authorize operation of the reactor or emplacement or retention of fuel into the reactor vessel following submittal of the certifications required by 10 CFR 50.82(a)(1). As a result, the occurrence of certain design basis postulated accidents are no longer considered credible when the reactor is permanently defueled.

The only remaining credible accidents are the FHA, the Postulated Radioactive Releases Due to Liquid Radwaste Tank Failures, and the Cask Drop Accident. The FHA is the limiting Chapter 15 dose event for CPS in its decommissioned state. The proposed changes do not adversely affect the inputs or assumptions of any of the design basis analyses that impact the FHA.

The proposed changes are limited to those portions of the TS administrative controls that are not related to the safe storage and maintenance of spent irradiated fuel. These proposed changes do not directly involve any physical equipment limits or parameters. The requirements that are proposed to be revised and/or deleted from the CPS TS are not credited in the existing accident analysis for the remaining applicable postulated accidents; therefore, they do not contribute to the margin of safety associated with the accident analysis. Certain postulated DBAs involving the reactor are no longer possible because the reactor will be permanently shut down and defueled and CPS will no longer be authorized to operate the reactor.

Therefore, the proposed changes do not involve a significant reduction in the margin of safety.

Based on the above, Exelon concludes that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of no significant hazards consideration is justified.

4.4 Conclusion

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

5.0 ENVIRONMENTAL CONSIDERATION

The proposed amendment involves deleting or modifying certain TS administrative controls in support of proposed decommissioning efforts to reflect the permanently shutdown and defueled condition at CPS. The proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the

proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9).

In addition, the proposed changes involve changes to recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10).

Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

5.0 REFERENCES

1. Letter from Michael P. Gallagher (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Certification of Permanent Cessation of Power Operations," dated June 20, 2016 (ML16172A137)
2. Letter from Michael P. Gallagher (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Request for Approval of Certified Fuel Handler Training Program," dated July 18, 2016 (ML16200A236)
3. NUREG-1434, "Standard Technical Specifications - General Electric Plants (BWR/6)," Revision 4
4. Letter from U.S. NRC to Entergy Nuclear Operations, Inc., "Vermont Yankee Nuclear Power Station - Issuance of Amendment to Renewed Facility Operating License RE: Changes to the Administrative Controls Section of the Technical Specifications (TAC No. MF2991)," dated December 22, 2014 (ML14217A072)
5. Millstone Power Station, Unit 1, License Amendment 106 to Facility Operating License No. DPR-21, dated November 9, 1999 (ADAMS Accession Nos. ML993330283 and ML993330269)
6. Zion Nuclear Station, Units 1 and 2, License Amendments 180 and 167 to Facility Operating License Nos. DPR-39 and DPR-48, respectively, dated December 30, 1999 (ADAMS Accession Nos. ML003672704 and ML003672696)
7. Letter from U.S. NRC to Dominion Energy Kewaunee, Inc., "Kewaunee Power Station - Issuance of Amendment for Permanently Shutdown and Defueled Technical Specifications and Certain License Conditions (TAC No. MF1952)," dated February 13, 2015 (ML14237A045)
8. Letter from Brian Sullivan (Entergy Nuclear Operations, Inc.) to U.S. Nuclear Regulatory Commission, "license Amendment Request – Revision to Technical Specification Administrative Controls for Permanently Defueled Condition," dated January 15, 2016 (ADAMS Accession No. ML16015A456).
9. Letter from U.S. NRC to Crystal River Nuclear Plant, "Crystal River Unit 3 - Issuance of Amendment to the Facility Operating License Regarding Changes to the Administrative Controls Section of the Technical Specifications (TAC No. MF1504)," dated July 11, 2014 (ML14097A145)
10. Letter from Brian R. Sullivan (Entergy Nuclear Operations, Inc.) to U. S. Nuclear Regulatory Commission, "Response to Request for Additional Information (RAI)

Regarding Revision to Technical Specifications (TS) Administrative Controls for Staffing and Training Upon Permanent Cessation of Operation (CAC No. MF7280) – Supplement 1," dated June 3, 2016 (ML16155A326)

Attachment 2

Proposed Technical Specifications (Marked-Up Pages)

Clinton Power Station
Facility Operating License No. NPF-62
NRC Docket No. 50-461

Changes to the staffing and training requirements for the CPS staff contained in Section 5.0, Administrative Controls, of the CPS Technical Specifications (TS).

TS Pages
1.0-1
5.0-1
5.0-2
5.0-3
5.0-4
5.0-5
5.0-6

1.0 USE AND APPLICATION

1.1 Definitions

----------NOTE----------
The defined terms of this section appear in capitalized type and are applicable throughout these Technical Specifications and Bases.

Term	Definition
ACTIONS	ACTIONS shall be that part of a Specification that prescribes Required Actions to be taken under designated Conditions within specified Completion Times.
AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)	The APLHGR shall be applicable to a specific planar height and is equal to the sum of the LHGRs for all the fuel rods in the specified bundle at the specified height divided by the number of fuel rods in the fuel bundle at the height.
CHANNEL CALIBRATION	A CHANNEL CALIBRATION shall be the adjustment, as necessary, of the channel output such that it responds within the necessary range and accuracy to known values of the parameter that the channel monitors. The CHANNEL CALIBRATION shall encompass all devices in the channel required for channel OPERABILITY and the CHANNEL FUNCTIONAL TEST. Calibration of instrument channels with resistance temperature detector (RTD) or thermocouple sensors may consist of an inplace qualitative assessment of sensor behavior and normal calibration of the remaining adjustable devices in the channel. The CHANNEL CALIBRATION may be performed by means of any series of sequential, overlapping, or total channel steps.
CHANNEL CHECK	A CHANNEL CHECK shall be the qualitative assessment, by observation, of channel behavior during operation. This determination shall include, where possible, comparison of the channel indication and status to other indications or status derived from independent instrument channels measuring the same parameter.

(continued)

CERTIFIED FUEL HANDLER

A CERTIFIED FUEL HANDLER is an individual who complies with provision of the CERTIFIED FUEL HANDLER training program required by TS 5.3.2.

5.0 ADMINISTRATIVE CONTROLS

5.1 Responsibility

facility

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, and modification to systems or equipment that affect nuclear safety.

safe storage and maintenance of spent nuclear fuel

5.1.2 The shift supervisor (SS) shall be responsible for the control room command function. During any absence of the SS from the control room while the unit is in MODE 1, 2, or 3, 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 SS from the control room while the unit is in MODE 4 or 5, an individual with an active SRO license or Reactor Operator (RO) license shall be designated to assume the control room command function.

shift

5.0 ADMINISTRATIVE CONTROLS

5.2 Organization

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 USAR;

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 executive 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~~, carr radiation protection, 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 on site while the unit is in MODE 1, 2, or 3.~~

(continued)

facility staff

safe storage and handling of spent nuclear fuel

facility

facility

facility

the safe storage and handling of spent nuclear fuel

spent nuclear fuel

storage

facility to ensure safe management of spent nuclear fuel

CERTIFIED FUEL HANDLERs

ability to perform their assigned functions

Facility

facility

Each duty shift shall be composed of at least one shift supervisor and one Non-certified Operator. The Non-certified Operator position may be filled by a CERTIFIED FUEL HANDLER.

5.2 Organization

Facility

5.2.2 Unit Staff (continued)

At all times when nuclear fuel is stored in the spent fuel pool, 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.

b. At least one licensed RO shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, or 3, at least one licensed SRO shall be present in the control room.

c. Shift crew composition may be one less than the minimum requirements of 10 CFR 50.54(m)(2)(i) and Specifications 5.2.2.a and 5.2.2.g for a period of time not to exceed 2 hours to accommodate unexpected absence of on-duty shift crew members, provided immediate action is taken to restore the shift crew composition within the minimum requirements.

during the movement of fuel and during the movement of loads over fuel

d. A radiation protection technician 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.

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

e. Deleted.

The shift supervisor shall be a CERTIFIED FUEL HANDLER.

f. The operations manager or at least one operations middle manager shall hold an SRO license for Clinton Power Station.

g. The Shift Technical Advisor (STA) shall provide advisory technical support to the SS in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

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Facility

5.0 ADMINISTRATIVE CONTROLS

facility

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, with the following exception: the licensed operators who shall comply only with the requirements of 10 CFR 55.

5.3.2 An NRC-approved training and retraining program for the CERTIFIED FUEL HANDLER shall be maintained.

5.0 ADMINISTRATIVE CONTROLS

5.4 Procedures

applicable to safe storage of nuclear fuel

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;

c. Quality assurance for effluent and environmental monitoring; and

d. All programs specified in Specification 5.5.