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10 CFR 50.90

TMI-17-067

November 10, 2017

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

Three Mile Island Nuclear Station, Unit 1
Renewed Facility Operating License No. DPR-50
NRC Docket Nos. 50-289

Subject: License Amendment Request – Proposed Changes to Technical Specifications Sections 1.0, "Definitions," and 6.0, "Administrative Controls" for Permanently Defueled Condition

- References:
1. Letter from J. Bradley Fewell (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Certification of Permanent Cessation of Power Operations for Three Mile Island Nuclear Station, Unit 1," dated June 20, 2017 (NRC Accession No. ML17171A151)
 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 for Three Mile Island Nuclear Station, Unit 1" dated July 10, 2017 (NRC Accession No. ML17191A451)

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC (Exelon) requests amendments to Appendix A, Technical Specifications (TS), of Renewed Facility Operating License No. DPR-50 for Three Mile Island Nuclear Station, Unit 1 (TMI-1).

On May 30, 2017, Exelon announced that it plans to close TMI-1 due to severe economic challenges. Under the terms of this announcement, Exelon agreed to permanently cease operations at TMI-1 on or about September 30, 2019. By letter dated June 20, 2017 (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) that it would permanently cease operations at TMI-1 on or about September 30, 2019.

Once the certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC pursuant to 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 6.0, "*Administrative Controls*" of the TMI-1 TS and defines two new positions for Certified Fuel Handler and Non-Certified Operator in Section 1.0, "*Definitions*." 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 10, 2017 (Reference 2).

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

The proposed changes have been reviewed and approved by the station's Plant Operations Review Committee in accordance with the requirements of the Exelon Quality Assurance Program.

Exelon requests review and approval of this proposed amendment by November 12, 2018, to support the current schedule for the TMI-1 transition to a permanently defueled facility. Once approved, the amendment shall be implemented within 60 days from the effective date of the amendment. Exelon requests that the approved amendment become effective following the docketing of the certifications required by 10 CFR 50.82(a)(1) that TMI-1 has been permanently shutdown and defueled.

There are no regulatory commitments contained within this submittal.

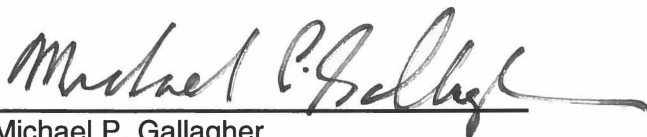
Exelon has concluded that the proposed changes present no significant hazards consideration under the standards set forth in 10 CFR 50.92, "Issuance of amendment."

In accordance with 10 CFR 50.91 "Notice for public comment; State consultation" paragraph (b), Exelon is notifying the Commonwealth of Pennsylvania 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 Paul Bonnett at (610) 765-5264.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 10th day of November 2017.

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

U.S. Nuclear Regulatory Commission

TMI-1 License Amendment Request

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cc: [w/Attachments](#)

Regional Administrator - NRC Region I

NRC Senior Resident Inspector – Three Mile Island Nuclear Station, Unit 1

NRC Project Manager, NRR – Three Mile Island Nuclear Station, Unit 1

NRC Project Manager, NRR – Three Mile Island Nuclear Station, Unit 2

Director, Bureau of Radiation Protection - PA Department of Environmental Resources

Attachment 1
License Amendment Request
Three Mile Island Nuclear Station
Docket No. 50-289

EVALUATION OF PROPOSED CHANGES

Subject: Proposed Changes to Technical Specifications Sections 1.0 and 6.0

- 1.0 SUMMARY DESCRIPTION
- 2.0 DETAILED DESCRIPTION
- 3.0 TECHNICAL EVALUATION
- 4.0 REGULATORY EVALUATION
 - 4.1 Applicable Regulatory Requirements/Criteria
 - 4.2 Precedent
 - 4.3 No Significant Hazards Consideration
 - 4.4 Conclusion
- 5.0 ENVIRONMENTAL CONSIDERATION
- 6.0 REFERENCES

1.0 SUMMARY DESCRIPTION

Pursuant to 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC (Exelon), proposes changes to Appendix A, Technical Specifications (TS) of Renewed Facility Operating License No. DPR-50 for Three Mile Island Nuclear Station, Unit 1 (TMI-1).

On May 30, 2017, Exelon announced that it plans to close TMI-1 due to severe economic challenges. Under the terms of this announcement, Exelon agreed to permanently cease operations at TMI-1 on or about September 30, 2019. By letter dated June 20, 2017 (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 TMI-1 on or about September 30, 2019.

Once the certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC pursuant to 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 TMI-1 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 6.0, "*Administrative Controls*," of the TMI-1 TS to further support plant activities and decommissioning efforts following permanent cessation of operations.

Additionally, by letter dated July 10, 2017 (Reference 2), Exelon submitted a Certified Fuel Handler training program for NRC approval. This proposed LAR will support implementation of this 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 6.0 of the TS. In addition to the changes to address the Certified Fuel Handler position in TS Section 6.0, Certified Fuel Handler and Non-Certified Fuel Handler have been added to TS Section 1.0, "*Definitions*."

The proposed changes would not become effective until both of the following have occurred: 1) the NRC has approved the TMI-1 Certified Fuel Handler training program and 2) Exelon has submitted the required 10 CFR 50.82(a)(1)(ii) certification that TMI-1 has been permanently defueled.

In the development of the proposed TS changes, Exelon reviewed the TS requirements from other plants will or that have permanently shutdown, primarily Oyster Creek (Reference 3), Vermont Yankee (Reference 4), Pilgrim (Reference 5), and Zion (Reference 6). Exelon also evaluated the applicable guidance in NUREG-1430, "Standard Technical Specifications, Babcock and Wilcox (Revision 4)" (Reference 7).

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 proposed TS markups are included in Attachment 2. The specific changes affecting TS Sections 1.0 and 6.0 are described in this section; the supporting technical evaluation is presented in Section 3.0 of this Attachment. Proposed revisions are shown in ***Bold-Italics*** and deletions are

shown using ~~strikethrough~~. All revised formatting, numbering, and wording in TS Section 6.0 is consistent with Section 5.0 of Babcock and Wilcox Plants, Standard Technical Specifications (STS), NUREG-1430, Revision 4 (Reference 7), except where noted to make the specification germane with a permanently defueled reactor.

TS Section 1.0 - Definitions	
Proposed TS Definitions	
<u>Term</u>	<u>Definition</u>
1.28 CERTIFIED FUEL HANDLER	A CERTIFIED FUEL HANDLER is an individual who complies with provisions of the CERTIFIED FUEL HANDLER training program required by Specification 6.3.3.
<u>Term</u>	<u>Definition</u>
1.29 NON-CERTIFIED OPERATOR	A NON-CERTIFIED OPERATOR is a non-licensed operator who complies with the qualification requirements of Specification 6.3.1, but is not a CERTIFIED FUEL HANDLER.

TS Section 6.1 - RESPONSIBILITY	
Current TS	Proposed TS
6.1.1 <i>The Vice President - TMI Unit 1 shall be responsible for TMI-1 operations and may, at any time, delegate his responsibilities in writing to the Plant Manager. He shall delegate the succession of his responsibilities in writing during his absence.</i>	6.1.1 The Vice President - TMI Unit 1 Plant Manager shall be responsible for TMI-1 operations and may, at any time, delegate his responsibilities in writing to the Plant Manager. He shall delegate the succession of his responsibilities in writing during his absence.
6.1.2 <i>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 POWER OPERATION, STARTUP, HOT STANDBY, or HOT SHUTDOWN, 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 SHUTDOWN, an individual with an active SRO license or Reactor Operator license shall be designated to assume the control room command function.</i>	6.1.2 The Control Room Supervisor (CRS) Shift Manager shall be responsible for the control room shift command function. During any absence of the CRS from the control room while the unit is in POWER OPERATION, STARTUP, HOT STANDBY, or HOT SHUTDOWN, 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 SHUTDOWN, an individual with an active SRO license or Reactor Operator license shall be designated to assume the control room command function.

TS Section 6.2 - ORGANIZATION	
Current TS	Proposed TS
<p>6.2.1 <u>CORPORATE</u></p> <p>6.2.1.1 <i>An onsite and offsite organization shall be established for unit operation and corporate management. The onsite and offsite organization shall include the positions for activities affecting the safety of the nuclear power plant.</i></p> <p>6.2.1.2 <i>Lines of authority, responsibility and communication shall be established and defined from the highest management levels through intermediate levels to and including operating organization positions. These relationships shall be documented and updated as appropriate, in the form of organizational charts. These organizational charts will be documented in the Updated FSAR and updated in accordance with 10 CFR 50.71e.</i></p> <p>6.2.1.3 <i>The Chief Nuclear Officer shall have corporate responsibility for overall plant nuclear safety and shall take measures to ensure acceptable performance of the staff in operating, maintaining, and providing technical support so that continued nuclear safety is assured.</i></p>	<p>6.2.1 <u>CORPORATE ONSITE AND OFFSITE ORGANIZATIONS</u></p> <p>6.2.1.4 An onsite Onsite and offsite organizations shall be established for unit operation facility staff and corporate management. The onsite and offsite organization shall include the positions for activities affecting the safety of the nuclear power plant safe storage and handling of spent nuclear fuel.</p> <p>a. Lines of authority, responsibility and communication shall be established and defined from the highest management levels through intermediate levels to and including operating facility organization positions. These relationships shall be documented and updated as appropriate, in the form of organizational charts descriptions. These organizational charts descriptions will be documented in the Updated FSAR and updated in accordance with 10 CFR 50.71e.</p> <p>b. The Vice President—TMI Unit 1Plant Manager shall be responsible for overall site facility safe operation and shall have control over those onsite activities necessary for safe operation storage and maintenance of the site spent nuclear fuel.</p> <p>c. The Chief Nuclear Officer A responsible officer shall have corporate responsibility for overall plant nuclear safety the safe storage and handling of spent nuclear fuel and shall take measures to ensure acceptable performance of the staff in operating, maintaining, and providing technical support so that continued nuclear safety is assured to the facility to ensure safe management of spent nuclear fuel.</p> <p>d. Individuals who train the operating staff CERTIFIED FUEL HANDLERS and those who carry out the health physics and quality assurance functions shall have sufficient organizational freedom to be independent of operational pressures, however, they may report to the appropriate onsite manager on site; however, these individuals shall have sufficient organizational freedom to ensure their ability to perform their assigned functions.</p>

<p>6.2.2 UNIT STAFF</p> <p>6.2.2.1 <i>The Vice President – TMI Unit 1 shall be responsible for overall site safe operation and shall have control over those on site activities necessary for safe operation and maintenance of the site.</i></p> <p>6.2.2.2 <i>The unit staff organization shall meet the following:</i></p> <ul style="list-style-type: none"> a. <i>Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.</i> b. <i>At least one licensed Reactor Operator shall be present in the control room when fuel is in the reactor.</i> c. <i>At least two licensed Reactor Operators shall be in the control room during reactor startup, scheduled reactor shutdown and during recovery from reactor trips.</i> d. <i>The Shift Manager or Control Room Supervisor shall be in the control room at all times other than cold shutdown conditions ($T_{ave} < 200^{\circ}F$) when he shall be onsite.</i> e. <i>An individual ## qualified pursuant to 6.3.2 in radiation protection procedures shall be on site when fuel is in the reactor.</i> f. <i>All REFUELING OPERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.</i> 	<p>6.2.2 UNIT STAFF FACILITY STAFF</p> <p>6.2.2.1 [Relocated to Section 6.2.1.b above and revised to reflect the wording in 5.2.1.b of NUREG-1430 (Reference 7).]</p> <p>6.2.2.2 The unitfacility staff organization shall meet the following:</p> <ul style="list-style-type: none"> a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1 one Shift Manager and one NON-CERTIFIED OPERATOR. b. 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) licensed Reactor Operator shall be present in the control room when fuel is in the reactor. c. At least two licensed Reactor Operators shall be in the control room during reactor startup, scheduled reactor shutdown and during recovery from reactor trips. The NON-CERTIFIED OPERATOR position may be filled by a CERTIFIED FUEL HANDLER. d. The Shift Manager or Control Room Supervisor shall be in the control room at all times other than cold shutdown conditions ($T_{ave} < 200^{\circ}F$) when he shall be onsite. shall be a CERTIFIED FUEL HANDLER. e. An individual ## qualified pursuant to 6.3.2 in radiation protection procedures shall be on site when fuel is in the reactor during movement of fuel and during the movement of loads over the fuel. The position may be vacant for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions. f. All REFUELING OPERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation. Oversight of fuel handling operations shall be provided by a CERTIFIED FUEL HANDLER.
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<p>g. <i>A Site Fire Brigade ## of at least 5 members shall be maintained onsite at all times. The Site Fire Brigade shall not include members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency.</i></p> <p>h. <i>The Shift Technical Advisor shall serve in an advisory capacity to the Shift Manager on matters pertaining to the engineering aspects assuring safe operation of the unit.</i></p> <p>## <i>The individual of item 6.2.2.2e and the Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.</i></p> <p>6.2.2.3 <i>Individuals who train the operating staff and those who carry out the health physics and quality assurance function shall have sufficient organizational freedom to be independent of operational pressures, however, they may report to the appropriate manager on site.</i></p>	<p>g. A Site Fire Brigade ## of at least 5 members shall be maintained onsite at all times. The Site Fire Brigade shall not include members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency. Except for the Shift Manager, shift crew composition may be one less than the minimum requirement of Specification 6.2.2.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 the following conditions are met:</p> <p>1) No fuel movement is in progress; 2) No movement of loads over the spent fuel is in progress.</p> <p>This provision does not permit any shift crew position to be unstaffed upon shift change due to an incoming shift crewman being late or absent.</p> <p>h. The Shift Technical Advisor shall serve in an advisory capacity to the Shift Manager on matters pertaining to the engineering aspects assuring safe operation of the unit.</p> <p>## The individual of item 6.2.2.2e and the Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.</p> <p>6.2.2.3 [Relocated to Section 6.2.1.d above and revised.]</p>
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TABLE 6.2-1
MINIMUM SHIFT CREW COMPOSITION⁽ⁱⁱⁱ⁾

LICENSE CATEGORY QUALIFICATIONS	$T_{ave} > 200^\circ$	$T_{ave} \leq 200^\circ$
SRO ^(iv)	2	1 ⁽ⁱ⁾
RO ^(iv)	2	1
Non-Licensed Auxiliary		
Operator	2	1
Shift Technical Advisor	1 ⁽ⁱⁱ⁾	None Required

(i) Does not include the Licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling, supervising (a) irradiated fuel handling and transfer activities onsite, and (b) all unirradiated fuel handling and transfer activities to and from the Reactor Vessel.

(ii) May be on a different shift rotation than licensed personnel.

(iii) Except for the Shift Manager, shift crew composition may be one less than the minimum requirements 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 of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an incoming shift crewman being late or absent.

(iv) Pursuant to the requirements of 10 CFR 50.54(m).

TABLE 6.2-1
MINIMUM SHIFT CREW COMPOSITION⁽ⁱⁱⁱ⁾

LICENSE CATEGORY QUALIFICATIONS	$T_{ave} > 200^\circ$	$T_{ave} \leq 200^\circ$
SRO ^(iv)	2	1 ⁽ⁱ⁾
RO ^(iv)	2	1
Non-Licensed Auxiliary		
Operator	2	1
Shift Technical Advisor	1 ⁽ⁱⁱ⁾	None Required

~~(i) Does not include the Licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling, supervising (a) irradiated fuel handling and transfer activities onsite, and (b) all unirradiated fuel handling and transfer activities to and from the Reactor Vessel.~~

~~(ii) May be on a different shift rotation than licensed personnel.~~

[(iii). [Removed/Reformatted to 6.2.2.g. above]]

~~(iv) Pursuant to the requirements of 10 CFR 50.54(m).~~

TS Section 6.3 - UNIT FACILITY STAFF QUALIFICATIONS	
Current TS	Proposed TS
6.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1 of 1978 for comparable positions unless otherwise noted in the Technical Specifications, with the following exceptions: 1) the licensed operators who shall comply only with the requirements of 10 CFR 55, and 2) individuals who do not meet ANSI/ANS 3.1 of 1978, Section 4.5, are not considered technicians or maintenance personnel for purposes of determining qualifications but are permitted	6.3.1 Each member of the unit facility staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1 of 1978 for comparable positions unless otherwise noted in the Technical Specifications. with the following exceptions: 1) the licensed operators who shall comply only with the requirements of 10 CFR 55, and 2) individuals Individuals who do not meet ANSI/ANS 3.1 of 1978, Section 4.5, are not considered technicians or maintenance personnel for purposes of determining qualifications but are permitted

<i>to perform work for which qualification has been demonstrated.</i>	to perform work for which qualification has been demonstrated.
6.3.3 <i>The Shift Technical Advisors shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in unit design, response and analysis of transients and accidents.</i>	6.3.3 The Shift Technical Advisors shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in unit design, response and analysis of transients and accidents <i>-NRC-approved training and retraining program for CERTIFIED FUEL HANDLERS shall be maintained.</i>

TS Section 6.4 TRAINING	
Current TS	Proposed TS
6.4.1 <i>A training program for the Fire Brigade shall be maintained and shall meet or exceed the requirements of Section 600 of the NFPA Code.</i>	6.4 DELETED [Relocated/Pagination Change]

TS Section 6.5	
Current TS	Proposed TS
6.5 <i>DELETED</i> (Pages 6-4 through 6-8 deleted)	6.5 DELETED [Relocated/Pagination Change] (Pages 6-4 through 6-89 deleted)

TS Section 6.6 – REPORTABLE EVENT ACTION	
Current TS	Proposed TS
6.6 <i>REPORTABLE EVENT NOTIFICATION</i> 6.6.1 <i>The following actions shall be taken for REPORTABLE EVENTS:</i> a. <i>The Nuclear Regulatory Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50.</i>	6.6 REPORTABLE EVENT NOTIFICATION <i>DELETED</i> 6.6.1 The following actions shall be taken for REPORTABLE EVENTS: a. The Nuclear Regulatory Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50.

TS Section 6.7 - SAFETY LIMIT VIOLATION	
Current TS	Proposed TS
<p>6.7 SAFETY LIMIT VIOLATION</p> <p>6.7.1 <i>The following actions shall be taken in the event a Safety Limit is violated:</i></p> <p>a. The reactor shall be shutdown and operation shall not be resumed until authorized by the Nuclear Regulatory Commission.</p> <p>b. An immediate report shall be made to the Plant Manager, and Vice President-TMI Unit 1, and the event shall be reported to NRC in accordance with 10 CFR 50.72.</p> <p>c. A complete analysis of the circumstances leading up to and resulting from the occurrence shall be prepared by the unit staff. This report shall include analysis of the effects of the occurrence and recommendations concerning operation of the unit and prevention of recurrence. This report shall be submitted to the Plant Manager and the Vice President-TMI Unit 1. The safety limit violation report shall be submitted to NRC in accordance with 10 CFR 50.73.</p>	<p>6.7 SAFETY LIMIT VIOLATION DELETED</p> <p>6.7.1 The following actions shall be taken in the event a Safety Limit is violated:</p> <p>a. The reactor shall be shutdown and operation shall not be resumed until authorized by the Nuclear Regulatory Commission.</p> <p>b. An immediate report shall be made to the Plant Manager, and Vice President-TMI Unit 1, and the event shall be reported to NRC in accordance with 10 CFR 50.72.</p> <p>c. A complete analysis of the circumstances leading up to and resulting from the occurrence shall be prepared by the unit staff. This report shall include analysis of the effects of the occurrence and recommendations concerning operation of the unit and prevention of recurrence. This report shall be submitted to the Plant Manager and the Vice President-TMI Unit 1. The safety limit violation report shall be submitted to NRC in accordance with 10 CFR 50.73.</p>

TS Section 6.8 - PROCEDURES AND PROGRAMS	
Current TS	Proposed TS
<p>6.8.1 <i>Written procedures <...></i></p> <p>a. <i>The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.</i></p> <p><...></p> <p>c. <i>Refueling Operations.</i></p> <p><...></p> <p>j. <i>Deleted</i></p>	<p>6.8.1 Written procedures <...></p> <p>a. The applicable procedures applicable to safe storage of nuclear fuel recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.</p> <p><...></p> <p>c. Refueling-Fuel Handling Operations.</p> <p><...></p> <p>j. Deleted [Removed/last item in list]</p>

<p>6.8.3 <i>Temporary changes to procedures of 6.8.1, above, may be made provided:</i></p> <p><...></p> <p>b. <i>The change is approved by two members of the licensee's management staff knowledgeable in the area affected by the procedure. For changes which may affect the operational status of unit systems or equipment, at least one of these individuals shall be a member of unit management or supervision holding a Senior Reactor Operator's License on the unit.</i></p>	<p>6.8.3 Temporary changes to procedures of 6.8.1, above, may be made provided:</p> <p><...></p> <p>b. The change is approved by two members of the licensee's management staff knowledgeable in the area affected by the procedure. For changes which may affect the operational status of unitfacility systems or equipment, at least one of these individuals shall be a member of unit operations management or supervision holding a Senior Reactor Operator's License on the unit who is a CERTIFIED FUEL HANDLER.</p>
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3.0 TECHNICAL EVALUATION

This technical evaluation is for administrative changes to TMI-1 Technical Specifications (TS) Section 6, "Administrative Controls." All revised formatting, numbering, and wording is consistent with the Section 5.0 of the Babcock and Wilcox Plants Standard Technical Specifications (STS), NUREG-1430, Revision 4 (Reference 7), except where noted to make the specification germane with a permanently defueled reactor. As a result, the TS should be more readily readable, and therefore understandable, by plant operators as well as other users. The reformatting, renumbering, repagination, and rewording process involves no technical changes to the existing TS, except where specifically noted.

TS Section 1.0 – Definitions

The definition of two new terms "1.28 - CERTIFIED FUEL HANDLER" and "1.29 - NON-CERTIFIED OPERATOR" are proposed to be added to ensure consistent understanding and application throughout the TS. Further discussion of the CERTIFIED FUEL HANDLER and NON-CERTIFIED OPERATOR are included in several of the proposed TS Section 6.0 revisions below.

TS Section 6.1 – Responsibility

TS Section 6.1 "Responsibility," provides a description and requirements regarding certain key operational management responsibilities. The section includes inherent responsibilities associated with reactor operation that are no longer applicable following submittal of the certifications required by 10 CFR 50.82(a)(1). Therefore, those responsibilities are different 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.

This section defines the individuals with overall responsibility for facility operation following permanent cessation of operations. This section is being revised to change the individuals responsible for overall management functions germane with a permanently defueled reactor.

TS 6.1.1 – TS 6.1.1 describes the managerial position with responsibility for overall plant operations following permanent shutdown. The assignment of the position for this responsibility is changed from the Vice-President – TMI Unit 1 to the Plant Manager. The Plant Manager will be the senior position at the facility and will be duly authorized with sufficient authority to carry out the specific responsibilities as described in TS 6.1.1 and TS 6.2.1.b. Although not an Exelon corporate officer, the Plant Manager will be vested by Exelon with similar authority over activities

subject to the safe storage and handling of spent nuclear fuel. The Plant Manager will be duly authorized by Exelon with sufficient authority and organizational freedom to identify, initiate, recommend, and provide solutions at a defueled facility.

The Plant Manager will report to a "responsible officer" (Vice President or higher) within the Exelon corporate organization who will have the necessary authority and full responsibility for the safe management, storage, and handling of spent nuclear fuel. This reporting chain and authority will be established and maintained in the Quality Assurance Manual.

When the Plant Manager is absent from the facility, he/she will delegate in writing the succession of responsibility to a principal alternate manager with equivalent nuclear power plant experience and training. The delegation of authority will be established and maintained in the Quality Assurance Manual.

TS 6.1.2 – TS 6.1.2 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 TS section is being revised to replace the terminology "Control Room Supervisor" with "Shift Manager" and "Control Room" with "shift" to more appropriately reflect the defueled command function. Safe operation in the permanently defueled condition consists primarily of ensuring safe management of the irradiated fuel that is stored onsite. The TS is also being changed to eliminate the Mode dependency for this function and operator license qualifications associated with an operating plant. The proposed change establishes the Shift Manager as having command of the shift. Associated activities (e.g., fuel handling) do not necessarily rely on the control room. 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 plant, the location of the command center is functionally where the Shift Manager is located, therefore the requirement to have a licensed Operator in the control room is no longer necessary. The proposed TS changes recognize that the delegation of authority for command and control aspects are different in a permanently shutdown and defueled plant from that for an operating plant when the Shift Manager leaves the control room. With TMI-1 permanently shutdown and defueled, the number of relevant controls located in the control room and the gradual nature of abnormal or accident situations would not warrant that the command function remain in the control room. Adequate communications capability is provided to allow operators to appropriately safely manage storage and handling of irradiated fuel without reliance on the control room for the command function.

TS Section 6.2 – Organization

TS 6.2 "Organization," provides a description and requirements regarding the corporate and facility organization. The section includes certain requirements associated with reactor operation that are no longer permitted following submittal of the certifications required by 10 CFR 50.82(a)(1). 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.

The terms "unit," "unit operation," and "plant" are typically associated with an operating reactor. The proposed change revises these terms with "facility" or "facility staff." These terms are administrative changes that are more appropriate for a site undergoing decommissioning and reflect that TMI-1 will be permanently shutdown and defueled. This change is proposed

throughout this LAR. In all cases that this change is made, overall management and staff responsibilities and the description of the facility remain unchanged.

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 TMI-1 can return to operation once the certifications required by 10 CFR 50.82(a)(1) are submitted to the NRC.

TS 6.2.1 – The proposed TS change revises the section title from "Corporate" to "Onsite and Offsite Organizations." The reformatted TS section discusses both corporate and onsite organizations. This change is considered administrative in nature and is consistent with the format of TS 5.2.1 of STS.

TS 6.2.1.1 – This TS identifies the onsite and offsite organizational positions that are responsible for safe operation of the nuclear plant. The proposed TS (6.2.1) changes the format of this paragraph to reflect the introductory statement of TS 5.2.1 in STS. The reformatting, renumbering, and rewording process is administrative and involves no technical changes to the existing TS. The paragraphs following this introductory statement are renumbered as subparts a through d. Proposed TS 6.2.1.b and 6.2.1.d, reflect information relocated from TS 6.2.2.1 and 6.2.2.3, respectively. The proposed changes reflect a permanently defueled reactor and require that positions be established that are responsible for the safe management of the spent nuclear fuel.

TS 6.2.1.2 – TS 6.2.1.2 is renumbered to TS 6.2.1.a; this change is editorial in nature. The proposed TS change administratively changes the term "operating" organization to "facility" organization. The documentation of the organization is being changed from organizational charts to organizational descriptions. These descriptions will be maintained in the Updated Final Safety Analysis Report (UFSAR) and other appropriate documents (e.g., Quality Assurance Manual). This change is consistent with the format of TS 5.2.1.a of STS.

TS 6.2.1.b [Proposed] – TS 6.2.2.1 is relocated and renumbered to TS 6.2.1.b; this change is editorial in nature. The proposed change to this paragraph modifies the onsite organizational position responsible for ensuring that the facility is maintained in a safe condition. Following plant shutdown and permanent cessation of operations, nuclear safety will focus predominately on ensuring the safe control and management of spent nuclear fuel. To reflect the change in nuclear safety focus from an operating plant to a permanently shutdown and defueled facility, the responsibility for controlling the activities related to the safe storage, control, and maintenance of spent nuclear fuel is being changed from the TMI-1 Site Vice President to the Plant Manager. This section is being modified to be consistent with the applicable guidance and format TS 5.2.1.b of STS with the exception that it is adapted to reflect a permanently defueled condition.

TS 6.2.1.3 – TS 6.2.1.3 is renumbered to TS 6.2.1.c; this change is editorial in nature. The proposed change to this section modifies the offsite organizational position responsible for ensuring that the facility is maintained in a safe condition. Following plant shutdown and permanent cessation of operations, nuclear safety will focus predominately on ensuring the safe control and management of spent nuclear fuel. The assignment of this responsibility is changed from the Chief Nuclear Officer (CNO) to a "responsible officer." "Responsible officer" is defined

in 10 CFR 50.2. The responsible officer will be a corporate position that is vested with executive authority over facility activities. This proposed change provides Exelon the flexibility to assign overall responsibility to a designated corporate officer position other than the CNO. The CNO is considered a corporate officer position. The CNO position has no qualification requirements beyond the applicable requirements established in ANSI/ANS 3.1-1978.

TS 6.2.1.d [Proposed] – TS 6.2.2.3 is relocated and renumbered to TS 6.2.1.d; this change is editorial in nature. The proposed change replaces the term "operating staff" with "CERTIFIED FUEL HANDLERS" as defined in the proposed addition to 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 proposed to be 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 TMI-1 can return to operation once the certifications required by 10 CFR 50.82(a)(1) are submitted to the NRC. This section is being modified to be consistent with the applicable guidance and format TS 5.2.1.d of STS with the exception that it is adapted to reflect a permanently defueled condition.

TS 6.2.2 – The title of this subsection and the introductory statement for TS 6.2.2 is being revised to more appropriately refer to "Facility" Staff, rather than "Unit" Staff to reflect the permanently shutdown and defueled condition. This change is editorial in nature.

TS 6.2.2.1 – TS 6.2.2.1 is relocated and renumbered to TS 6.2.1.b; this change is editorial in nature. The paragraph is revised as discussed in TS 6.2.1b above. This change is consistent with the format of TS 5.2.1.b of STS.

TS 6.2.2.2 – The proposed change modifies this paragraph to reflect the introductory statement of TS 5.2.2 in STS. The reformatting, renumbering, repaginating, and rewording process is administrative and involves no technical changes to the existing TS. The paragraphs following this introductory statement are renumbered as subparts a through g. The remaining subparts are removed as part of the TS reformatting outlined in this submittal.

TS 6.2.2.2.a – TS 6.2.2.2.a is renumbered to TS 6.2.2.a; this change is editorial in nature. TS 6.2.2.a describes the minimum on-duty shift composition as listed in TABLE 6.2-1. This specification is being modified to require each on-duty shift to be composed of a minimum shift crew composition of at least one Shift Manager and one NON-CERTIFIED OPERATOR, since plant operations can never recur at TMI-1 once the certifications required by 10 CFR 50.82(a)(1) are submitted to the NRC. A NON-CERTIFIED OPERATOR is defined in the proposed addition to TS 1.0, "Definitions." The NON-CERTIFIED OPERATOR position may be filled by either a NON-CERTIFIED OPERATOR or by a CERTIFIED FUEL HANDLER in accordance with proposed TS 6.2.2.c. The Shift Manager cannot be counted as the required 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 Manager will be qualified as a CERTIFIED

FUEL HANDLER in accordance with proposed TS 6.2.2.d. 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. TABLE 6.2-1, Minimum Shift Crew Composition is being deleted. The associated "Notes" are either being deleted or reformatted into new specifications and are addressed individually below.

TS 6.2.2.2.b – TS 6.2.2.2.b is renumbered to TS 6.2.2.b; this change is editorial in nature. This TS establishes the requirement for one licensed Reactor Operator (RO) to be in the control room when fuel is in the reactor. Following the certifications required by 10 CFR 50.82(a)(1) being submitted to the NRC, TMI-1 will not be required to have operators licensed pursuant to 10 CFR 55; therefore, TS 6.2.2.2.b will not apply.

This section is changed to reflect 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. TMI-1 has submitted a CERTIFIED FUEL HANDLER training program for NRC approval in Reference 2. 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 spent 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 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 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 plant, the location of the command center is functionally where the Shift Manager is located, in accordance with proposed TS 6.1.2.

All spent fuel handling activities are performed locally near the Spent Fuel Pool (SFP). 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 and changing the electrical power distribution system alignment. Indications and/or alarms are also received in the control room that would be indicative of spent fuel pool abnormalities. The Shift Manager 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 Manager 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 6.2.2.2.c – TS 6.2.2.2.c is renumbered to TS 6.2.2.c; this change is editorial in nature. This section establishes the requirement for two licensed Reactor Operators (RO) during reactor startup, shutdown, and trip recovery. TMI-1 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 docketed. As a result, TS 6.2.2.2.c will not apply. The specification is being modified to allow the NON-CERTIFIED OPERATOR position to be filled by either a NON-CERTIFIED OPERATOR or by a CERTIFIED FUEL HANDLER (refer to discussion in TS 6.2.2.2.b). The minimum shift crew composition in proposed TS 6.2.2.a with either a Shift Manager and NON-CERTIFIED OPERATOR, or a Shift Manager and a CERTIFIED FUEL HANDLER, is appropriate for the safe management of spent irradiated nuclear fuel at a permanently defueled facility.

TS 6.2.2.2.d – TS 6.2.2.2.d is renumbered to TS 6.2.2.d; this change is editorial in nature. This section establishes the requirement for the Shift Manager or Control Room Supervisor to be in the control room at all times other than cold shutdown conditions ($T_{ave} < 200^{\circ}\text{F}$). Once the certifications required by 10 CFR 50.82(a) are submitted to the NRC; NRC regulations stipulated in 10 CFR 50.82(a)(2) will no longer authorize operation of the reactor or placement or retention of fuel into the reactor vessel under the 10 CFR Part 50 license. TMI-1 will not be required to have operators licensed pursuant to 10 CFR 55; therefore, TS 6.2.2.2.d will not apply.

This proposed change adds the requirement that the Shift Manager be a CERTIFIED FUEL HANDLER. This requirement ensures that the senior individual on shift is appropriately trained and qualified, in accordance with a NRC-approved CERTIFIED FUEL HANDLER training program, to supervise shift activities. TMI-1 has submitted a CERTIFIED FUEL HANDLER training program for NRC approval in Reference 2. The TMI-1 management structure will not require positions above the Shift Manager to be a CERTIFIED FUEL HANDLER or attend equivalent training. TMI-1 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 6.3.1) and need not be qualified as CERTIFIED FUEL HANDLERS.

TS 6.2.2.2.e – TS 6.2.2.2.e is renumbered to TS 6.2.2.e; this change is editorial in nature. This section establishes the requirement for a person qualified in radiation protection procedures to be onsite when fuel is in the reactor. This requirement is being modified to require an individual qualified in radiation protection procedures to be present onsite during the movement of fuel and during the movement of loads over fuel. The requirements of the associated "###" Note, which allow a vacancy to occur for a period not to exceed 2 hours, is being incorporated into the specification. 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 procedures are required to be present.

TS 6.2.2.2.f – TS 6.2.2.2.f is renumbered to TS 6.2.2.f; this change is editorial in nature. This section establishes that all refueling operations be directly observed and supervised by a licensed SRO or SRO Limited to Fuel Handling. Once the certifications required by 10 CFR 50.82(a)(1) are submitted to the NRC; NRC regulations stipulated in 10 CFR 50.82(a)(2) will no longer authorize the emplacement or retention of fuel in the reactor vessel will not be permitted. This specification is changed to establish the requirement for having oversight of fuel handling operations in the SFP be performed by a CERTIFIED FUEL

HANDLER. This requirement ensures that movement of irradiated fuel is performed under the oversight of an individual who has been trained and qualified on the procedures, processes, requirements and standard for safe movement of irradiated fuel. Oversight of fuel handling operations refers to the authorization from the Shift Manager/CERTIFIED FUEL HANDLER to move fuel, because proposed TS 6.2.2.d requires the Shift Manager to be a CERTIFIED FUEL HANDLER.

TS 6.2.2.2.g – TS 6.2.2.2.g is renumbered as TS 6.2.2.g; this change is editorial in nature. This paragraph requires a site fire brigade of at least 5 members at all times. This specification is proposed to be deleted since the fire protection program will conform with the requirements in 10 CFR 50.48(f) during decommissioning to address the potential for fires that could result in a radiological hazard. The regulation is applicable regardless of whether a requirement for a fire protection program is included in the TS.

The fire protection program is expected to change throughout the various phases of decommissioning. Initially, with spent fuel removed from the reactor and stored in the SFP, it is appropriate to develop and maintain a comprehensive decommissioning fire protection program to provide assurance that the probability of fires affecting the spent nuclear fuel or other radiological hazards is minimized and that the consequences of fire are adequately mitigated. As decommissioning progresses and the spent nuclear fuel is moved to the ISFSI, the fire protection requirements for the plant may be scaled down in accordance with the diminishing radiological hazard. TMI-1 will continue to utilize the defense-in-depth concept, placing special emphasis on detection and suppression in order to minimize radiological release to the environment. Initially, the fire brigade will be maintained with 5 members. However, after all fuel has been removed from the reactor vessel and support system operation has been minimized (systems are no longer required to support fuel maintenance have been de-energized and oils drained), an evaluation will be performed to determine the acceptability to reduce the current 5-member fire brigade to a 3-member (minimum 2-member) incipient brigade. The reduction in the required members of the fire brigade cannot be made until after the evaluation is completed and the requirements of the referenced NEIL Standard (Reference 8) and RG 1.191 (Reference 9) are established. The Fire Protection Program will continue to be contained and controlled in TMI Administrative Procedure (AP)-1038, "Administrative Controls – Fire Protection Program." Additionally, NUREG-1430, Babcock and Wilcox Plants Standard Technical Specifications (STS) (Reference 7), does not contain requirements requiring fire brigade.

Proposed TS 6.2.2.g incorporates the elements from with Note (iii) associated with TABLE 6.2-1. The requirement allows for shift crew composition to be less than the minimum requirement of TABLE 6.2-1 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. The proposed revision addresses the conditions under which the minimum shift compliment may be reduced, due to unforeseen circumstances. It allows for shift crew composition to be less than the minimum requirement of the proposed TS 6.2.2.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. It also ensures that no fuel movement or movement of loads over the spent fuel occur during an absence. The proposed change does not permit any shift crew position to be unstaffed during movements of fuel or load over fuel, as well as during shift change, due to absence or tardiness of an oncoming shift crew member.

TS 6.2.2.2.h – This section establishes the requirements for the Shift Technical Advisor (STA) position. This paragraph is proposed for deletion 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 to the NRC, the requirements of this specification will no longer be applicable because the TMI-1 Part 50 license no longer will authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. This paragraph is being removed as part of the TS reformatting outlined in this submittal which is editorial in nature.

Note ##: – The Note ## is being deleted and removed as part of the TS reformatting outlined in this submittal. Note ## was incorporated into proposed TS 6.2.2.e discussed above.

TS 6.2.2.3 – TS 6.2.2.3 is relocated and renumbered to TS 6.2.1.d; this change is editorial in nature. The paragraph is revised as discussed in TS 6.2.1.d [Proposed] above. This change is consistent with the format of TS 5.2.1.d of STS.

Page 6-1a is proposed to be deleted as part of the repagination of TS Section 6.0. This modification is editorial in nature.

TABLE 6.2-1 – This Table is being deleted and removed as part of the TS reformatting outlined in this submittal. Minimum Shift Crew composition requirements have been incorporated into proposed TS 6.2.2.a (see TS 6.2.2.2.a discussion).

TABLE 6.2-1, Note (i) – This note is longer required and is being deleted (see TS 6.2.2.2.f discussion). Once the certifications required by 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 TMI-1 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 a SRO license. Requirements for a CERTIFIED FUEL HANDLER to oversee fuel handling operations is provided in proposed TS 6.2.2.f (see TS 6.2.2.2.f discussion). This Note is being removed as part of the TS reformatting outlined in this submittal.

TABLE 6.2-1, Note (ii) – This note is longer required and is being deleted as the STA position that this note applies to is no longer required (see TS 6.2.2.2.h discussion). This Note is being removed as part of the TS reformatting outlined in this submittal.

TABLE 6.2-1, Note (iii) – This note is incorporated into proposed TS 6.2.2.g (see TS 6.2.2.2.g discussion). This note is longer required and is being removed as part of the TS reformatting outlined in this submittal.

TABLE 6.2-1, Note (iv) – The regulations under 10 CFR 50.54(m) establish the requirement for having ROs and SROs licensed pursuant to 10 CFR 55 based on plant conditions. Once the certifications required by 10 CFR 50.82(a)(1) have been submitted pursuant to the NRC, the requirements of 10 CFR 50.54(m) will no longer be applicable since the 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' license specified in 10 CFR 55. No exemption from 10 CFR 50.54(m)(2)(i) is needed or requested to support this change, based on the NRC's response to a similar request from Vermont Yankee Nuclear Power Station (VYNPS) in June 2014 (Reference 13).

TS 6.3 – Unit Staff Qualifications – The title of this subsection is being revised to more appropriately refer to "Facility" Staff Qualifications, rather than "Unit" Staff Qualifications to reflect the permanently shutdown and defueled condition. This change is editorial in nature.

TS 6.3.1 – The term "unit" is being proposed to be changed to "facility" to reflect the permanently shutdown and defueled condition consistent with other changes in this LAR. This change is editorial in nature. This section establishes that each member of the unit staff meet or exceed the minimum qualifications specified in ANSI/ANS 3.1 of 1978. Following the certifications required by 10 CFR 50.82(a)(1) being submitted to the NRC, TMI-1 will not be required to have operators licensed pursuant to 10 CFR 55; therefore, exception 1) no longer applies and the requirement is being removed.

TS 6.3.3 – This section requires the Shift Technical Advisor (STA) to have a bachelor's degree or equivalent. As stated in the justification for 6.2.2.2.h, the STA position is only required for a plant authorized for power operations; therefore, the qualification requirements for the STA position will no longer be required. TS 6.3.3 is being changed to require that an NRC approved training and retraining program for the CERTIFIED FUEL HANDLERS 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 10 CFR Part 50, and the TMI-1 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 SAT 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.

TS 6.4 – Training

With the deletion of TS 6.4.1 (as discussed below), there are no remaining TSs under Section 6.4, "Training," therefore this heading is being removed and Section 6.4 is being marked as "DELETED" and repaginated as part of the TS reformatting and repagination. This change is editorial in nature.

TS 6.4.1 – This section requires a training program for the fire brigade be maintained to meet or exceed the requirements of Section 600 of the NFPA Code. This specification is proposed to be deleted since the fire protection program is required to conform with 10 CFR 50.48(f) during decommissioning to address the potential for fires that could result in a radiological hazard. The regulation is applicable regardless of whether a requirement for a fire protection program is included in the TSs. The Fire Protection Program will continue to be contained and controlled in TMI Administrative Procedure (AP)-1038, "Administrative Controls – Fire Protection Program." Additionally, NUREG-1430, Babcock and Wilcox Plants Standard Technical Specifications (STS) (Reference 7), does not contain requirements requiring fire brigade training.

TS 6.5 – Currently marked "DELETED." This proposed change relocates this item for a change in pagination and is editorial in nature. The annotation at the bottom of page 6-3 is being relocated to page 6-2 and is being updated to reflect that pages 6-3 through 6-10 are deleted.

TS 6.6 – Reportable Event Action

With the deletion of TS 6.6.1 (as discussed below), there are no remaining TSs under Section 6.6, "Reportable Event Action," therefore this heading is being removed and Section 6.6 is being marked as "DELETED" and repaginated as part of the TS reformatting and repagination. This change is editorial in nature.

TS 6.6.1 – This section specifies that Licensee Event Reports (LER) shall be submitted pursuant to the requirements of 10 CFR 50.73. The actions of this section are required by regulation and it is not necessary to restate the requirements in the Technical Specifications. Existing administrative procedures control the LER process and detail the required actions currently specified in the TS. Additionally, NUREG-1430, Babcock and Wilcox Plants Standard Technical Specifications (STS) (Reference 7), does not include a TS related to 10 CFR 50.73 reporting requirements. This section is being proposed to be deleted.

TS 6.7 – Safety Limit Violation

With the deletion of TS 6.7.1 (as discussed below), there are no remaining TSs under Section 6.7, "Safety Limit Violation," therefore this heading is being removed and Section 6.7 is being marked as "DELETED" and repaginated as part of the TS reformatting and repagination. This change is editorial in nature.

TS 6.7.1 – This section defines the requirements to shutdown the reactor and report the event if a Safety Limit is exceeded. This section is proposed to be deleted. Safety Limits are provided to establish criteria that ensures the prevention of damage to the fuel cladding and reactor coolant pressure boundary during reactor operation that could result in the release of fission products. Once the certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC pursuant to 10 CFR 50.82(a)(1)(i) and (ii), NRC regulations stipulated in 10 CFR 50.82(a)(2) will no longer authorize operation of the reactor or placement of fuel into the reactor vessel under the 10 CFR 50 license. Based on these considerations there is no potential for the Safety Limits to be exceeded and therefore this section may be deleted from the TS.

TS 6.3 through TS 6.7 – These TS paragraphs are being relocated to page 6-2 as part of the repagination of the TS section. A Note at the bottom of page 6-3 (Pages 6-4 through 6-8 deleted) is being modified to read "(pages 6-3 through 6-10 deleted)." This proposed change is editorial in nature and is part of the repagination of TS Section 6.

TS 6.8 – Procedures and Programs

TS 6.8.1.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, Quality Assurance Program Requirements (Operation), Revision 2, Appendix A, "Typical Procedures for Pressurized Water Reactors and Boiling Water Reactors," February 1978 (Reference 10). Since operating and refueling the reactor will both be prohibited by the 10 CFR Part 50 license once the certifications required by 10 CFR 50.82(a)(1) have been docketed, 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 spent fuel pool and transfer from the spent fuel pool to dry fuel storage casks. Procedures governing responses to fuel handling accidents, personnel injuries, spent fuel pool events and external events provide the necessary guidance to mitigate the consequences of such events. No change to TMI-1's actions in response to a fuel handling accident is proposed.

TS 6.8.1.c – This proposed change is to specify that procedures are required for fuel handling operations, rather than refueling operations, because refueling (placement of fuel back in the reactor) will be prohibited by the 10 CFR Part 50 license once the certifications required by 10 CFR 50.82(a)(1)(i) and (ii) have been submitted to the NRC. Procedures governing fuel handling operations will provide the guidance necessary to ensure safe handling of spent fuel in the spent fuel pool and transfer from the spent fuel pool to dry fuel storage casks. Procedures governing responses to fuel handling accidents, personnel injuries, spent fuel pool events and external events provide the necessary guidance to mitigate the consequences of such events. No change to TMI-1's response to a fuel handling accident is being proposed in this submittal.

TS 6.8.1.j – This specification was previously deleted and the placeholder for this TS ("j." - last item in TS 6.8.1) is proposed to be removed as part of the TS reformatting outlined in this submittal. This change is editorial in nature.

TS 6.8.3.b – The term "unit" is being proposed to be changed to "facility" to reflect the permanently shutdown and defueled condition consistent with other changes in this LAR. This change is editorial in nature. Another proposed change to this specification changes one of the two approvers of temporary procedure changes that may affect the operational status of the facility systems or equipment to be a member of operations management or supervision who is a CERTIFIED FUEL HANDLER. The requirement for the manager to hold a Senior Reactor Operator License is proposed to be removed and replaced by the requirement to be a CERTIFIED FUEL HANDLER. 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 10 CFR Part 50 license no longer will authorize operation of the reactor or emplacement or retention of fuel in the reactor vessel. The submission of 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 a SRO license.

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, 2017(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 TMI-1 no later than September 30, 2019. Once all of the fuel has been permanently removed from the reactor, Exelon will submit the written certification required by 10 CFR 50.82(a)(1)(ii).

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 TMI-1 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.

10 CFR 50.36 "*Technical specifications.*"

(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, 2017 (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 TMI-1 no later than September 30, 2019. Upon submittal of the final certification pursuant to 10 CFR 50.82(a)(1)(ii) TMI-1 will no longer be licensed to operate. The proposed changes delete or modify certain TMI-1 TS administrative controls that are no longer applicable to a permanently shutdown and defueled facility.

10 CFR 50.54 "*Condition 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 shutdown 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 Reactor Operators (ROs) and Senior Reactor Operators (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

TMI-1 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 Manager 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 10, 2017 (Reference 2), Exelon submitted a request for NRC approval of Certified Fuel Handler training program for TMI-1. This request was submitted pursuant to 10 CFR 50.2.

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, TMI-1 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 approved at Oyster Creek Nuclear Generating Station (DPR-16), for which an amendment was issued on February 7, 2017 (Reference 3), and Pilgrim Nuclear Power Station, for which an amendment was issued on July 10, 2017 (Reference 5); and which are in effect for the permanently shutdown and defueled Vermont Yankee Nuclear Power Station (DPR-28), for which an amendment was issued on December 22, 2014 (Reference 4) and for the permanently shutdown and defueled Kewaunee Power Station (DPR-43), for which an amendment was issued on February 3, 2015 (Reference 11).

The proposed changes are also consistent with the TS administrative control requirements currently in effect for the permanently shutdown and defueled Millstone Nuclear Power Station (DPR-21), for which an amendment was substantively revised on March 31, 2001 (Reference 12); and the permanently shutdown and defueled Zion Nuclear Power Station, for which an amendment was issued on December 30, 1999 (Reference 6).

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 add, revise and/or remove certain requirements contained within the Three Mile Island Nuclear Station, Unit 1 (TMI-1), Technical Specifications (TS), Section 1.0, "Definitions" and Section 6.0 "Administrative Controls." The TS requirements being changed would be applicable once Exelon has certified that all fuel has permanently been removed from the TMI-1 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 TMI-1 no longer will 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 TMI-1 has permanently ceased operation and certified a permanently defueled condition. The proposed changes would revise the TMI-1 TS by deleting or modifying certain portions of the TS administrative controls described in Section 6.0 of the TS that are no longer applicable to a permanently shutdown and defueled facility. Additionally, the "Certified Fuel Handler" and "Non-Certified Operator" would be added to Section 1.0 of the TS to define these positions that are applicable to permanently shutdown and defueled facility. These changes are administrative in nature.

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 changes do not directly 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.

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 the TS definitions and administrative controls have no impact on facility plant Structures, Systems, and Components (SSCs) affecting the

safe storage of spent irradiated fuel, or on the methods of operation of such SSCs, or on the actual handling and storage of spent irradiated fuel. The proposed changes do not result in different or more adverse failure modes or accidents than previously evaluated because the reactor will be permanently shutdown and defueled and TMI-1 will no longer be authorized to operate the reactor.

The proposed changes do not affect systems credited in the accident analyses at TMI-1. 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, create new failure modes, or change any modes of operation. 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 TS administrative controls once the TMI-1 facility has been permanently shutdown and defueled. As specified in 10 CFR 50.82(a)(2), the 10 CFR 50 license for TMI-1 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 proposed changes are limited to those portions of the administrative TSs that are related to the safe storage and maintenance of spent irradiated fuel. The proposed TS changes do not affect plant design, hardware, system operation, or procedures for accident mitigation systems. There is no change in the established safety margins for these systems. The requirements that are proposed to be added, revised and/or deleted from the TMI-1 TS are not credited in the existing accident analysis for the applicable postulated accidents ; therefore, they do not contribute to the margin of safety associated with the accident analysis. Certain postulated design basis accidents (DBAs) involving the reactor are no longer possible because the reactor will be permanently shutdown and defueled and TMI-1 will no longer be authorized to operate the reactor.

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

of safety.

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 adding, deleting or modifying certain TS administrative controls in support of proposed decommissioning efforts to reflect the permanently shutdown and defueled condition at TMI-1. 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.

6.0 REFERENCES

1. Letter from J. Bradley Fewell (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Certification of Permanent Cessation of Power Operations for Three Mile Island Nuclear Station, Unit 1," dated June 20, 2017 (NRC Accession No. ML17171A151)
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 for Three Mile Island Nuclear Station, Unit 1" dated July 10, 2017 (NRC Accession No. ML17191A451)
3. NRC Safety Evaluation for Oyster Creek Nuclear Generating Station in License Amendments 290, License No. DPR-16, Date of Issuance March 7, 2017 (ADAMS Accession No. ML16235A413)
4. Vermont Yankee Nuclear Power Station, Amendment 260, License No. DPR-28, Date of Issuance December 22, 2014 (ADAMS Accession No. ML14217A072)
5. Pilgrim Nuclear Power Station, Amendment No. 246, License No. DPR-35, Date of Issuance July 10, 2017 (ADAMS Accession No. ML17066A130)
6. NRC Safety Evaluation for Zion Nuclear Station in License Amendments 180 and 167 (for Units 1 and 2 respectively (License Nos. DPR-39 and DPR-48)), dated December 30, 1999 (ADAMS Accession Nos. ML003672704 and ML003672696)

7. NUREG-1430, "Standard Technical Specifications, Babcock and Wilcox (Revision 4)," Manuscript Completed: October 2012, Date Published: April 2012
8. Nuclear Electric Insurance Limited (NEIL) Loss Control Manual, January 2016 Edition
9. Regulatory Guide 1.191, "Fire Protection Program for Nuclear Power Plants During Decommissioning and Permanent Shutdown," May 2001
10. Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," Revision 2, February 1978
11. Kewaunee Power Station, Amendment 215, License No. DPR-43, Date of issuance February 13, 2015 (ADAMS Accession No. ML14237A045)
12. NRC Safety Evaluation for Millstone Power Station Unit 1 in License Amendment 106 to DPR-21, dated November 9, 1999 (ADAMS Accession Nos. ML993330283 and ML993330269)
13. Letter, NRC to Entergy Nuclear Operations, Inc., "Vermont Yankee Nuclear Power Station - Request for Exemption from the Requirements of 10 CFR 50.54(m) (TAC No. MF2990)," dated June 18, 2014 (ML14147A216)

Attachment 2

Proposed Technical Specifications (Marked-Up Pages)

**Three Mile Island Nuclear Station
Renewed Facility Operating License No. DPR-50
NRC Docket No. 50-289**

Changes to the staffing and training requirements for the TMI-1 staff contained in Section 1.0, Definitions and Section 6.0, Administrative Controls, of the TMI-1 Technical Specifications (TS).

TS Pages

1-8a
6-1
6-1a
6-2
6-3
6-9
6-10
6-11

1.28 CERTIFIED FUEL HANDLER

A CERTIFIED FUEL HANDLER is an individual who complies with provisions of the CERTIFIED FUEL HANDLER training program required by Specification 6.3.3.

1.29 NON-CERTIFIED OPERATOR

A NON-CERTIFIED OPERATOR is a non-licensed operator who complies with the qualification requirements of Specification 6.3.1, but is not a CERTIFIED FUEL HANDLER.

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The Vice President TMI Unit 1 **Plant Manager** shall be responsible for TMI-1 operations and may, at any time, delegate his responsibilities in writing to the Plant Manager. He shall delegate the succession of his responsibilities in writing during his absence.

6.1.2 The Control Room Supervisor (CRS) **Shift Manager** shall be responsible for the control room **shift** command function. During any absence of the CRS from the control room while the unit is in POWER OPERATION, STARTUP, HOT STANDBY, or HOT SHUTDOWN, 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 GOLD SHUTDOWN or REFUELING SHUTDOWN, an individual with an active SRO license or Reactor Operator license shall be designated to assume the control room command function.

6.2 ORGANIZATION

6.2.1 CORPORATE ONSITE AND OFFSITE ORGANIZATIONS

6.2.1.1 An **Onsite** and offsite organization shall be established for unit operation **facility staff** and corporate management. The onsite and offsite organization shall include the positions for activities affecting the safety of the nuclear power plant **safe storage and handling of spent nuclear fuel**.

6.2.1.2 a. Lines of authority, responsibility and communication shall be established and defined from the highest management levels through intermediate levels to and including operating **facility** organization positions. These relationships shall be documented and updated as appropriate, in the form of organizational charts **descriptions**. These organizational charts **descriptions** will be documented in the Updated FSAR and updated in accordance with 10 CFR 50.71e.

b. **The Vice President TMI Unit 1 Plant Manager shall be responsible for overall site facility safe operation and shall have control over those on site activities necessary for safe operation storage and maintenance of the site spent nuclear fuel.**

6.2.1.3 c. The Chief Nuclear Officer **A responsible officer** shall have corporate responsibility for overall plant nuclear safety **the safe storage and handling of spent nuclear fuel** and shall take measures to ensure acceptable performance of the staff in operating, maintaining, and providing technical support so that continued nuclear safety is assured **to the facility to ensure safe management of spent nuclear fuel.**

d. **Individuals who train the operating staff CERTIFIED FUEL HANDLERS and those who carry out the health physics and quality assurance functions shall have sufficient organizational freedom to be independent of operational pressures, however, they may report to the appropriate manager on site; however, these individuals shall have sufficient organizational freedom to ensure their ability to perform their assigned functions.**

6.2.2 UNIT FACILITY STAFF

6.2.2.1 The Vice President TMI Unit 1 shall be responsible for overall site safe operation and shall have control over those on site activities necessary for safe operation and maintenance of the site.

6.2.2.2 The unit **facility** staff organization shall meet the following:

a. Each on-duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1 **one Shift Manager and one NON-CERTIFIED OPERATOR.**

b. **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) licensed Reactor Operator shall be present in the control room when fuel is in the reactor.**

- c. ~~At least two licensed Reactor Operators shall be present in the control room during reactor startup, scheduled reactor shutdown and during recovery from reactor trips. **The NON-CERTIFIED OPERATOR position may be filled by a CERTIFIED FUEL HANDLER.**~~
- d. ~~The Shift Manager or Control Room Supervisor shall be in the control room at all times other than cold shutdown conditions ($T_{ave} < 200^{\circ}\text{F}$) when he shall be onsite **shall be a CERTIFIED FUEL HANDLER.**~~
- e. ~~An individual ##-qualified pursuant to 6.3.2 in radiation protection procedures shall be on site when fuel is in the reactor **during movement of fuel and during the movement of loads over the fuel. The position may be vacant for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.**~~
- f. ~~All REFUELING OPERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation. **Oversight of fuel handling operations shall be provided by a CERTIFIED FUEL HANDLER.**~~
- g. ~~A Site Fire Brigade ## of at least 5 members shall be maintained onsite at all times. The Site Fire Brigade shall not include members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency. **Except for the Shift Manager, shift crew composition may be one less than the minimum requirement of Specification 6.2.2.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 the following conditions are met:**
 - 1) **No fuel movement is in progress;**
 - 2) **No movement of loads over the spent fuel is in progress.****This provision does not permit any shift crew position to be unstaffed upon shift change due to an incoming shift crewman being late or absent.**~~
- h. ~~The Shift Technical Advisor shall serve in an advisory capacity to the Shift Manager on matters pertaining to the engineering aspects assuring safe operation of the unit.~~

~~6.2.2.3 Individuals who train the operating staff and those who carry out the health physics and quality assurance function shall have sufficient organizational freedom to be independent from operating pressures, however they may report to the appropriate manager on site.~~

~~## The individual of item 6.2.2.2e and the Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.~~

TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION⁽ⁱⁱⁱ⁾

LICENSE CATEGORY QUALIFICATIONS	$T_{ave} > 200^{\circ}$	$T_{ave} \leq 200^{\circ}$
SRO ^(iv)	2	4 ⁽ⁱⁱ⁾
RO ^(iv)	2	4
Non-Licensed Auxiliary Operator	2	4
Shift Technical Advisor	1 ⁽ⁱⁱ⁾	None Required

(i) ~~Does not include the Licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling, supervising (a) irradiated fuel handling and transfer activities onsite, and (b) all unirradiated fuel handling and transfer activities to and from the Reactor Vessel.~~

(ii) ~~May be on a different shift rotation than licensed personnel.~~

(iii) ~~Except for the Shift Manager, shift crew composition may be one less than the minimum requirements 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 of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an incoming shift crewman being late or absent.~~

(iv) ~~Pursuant to the requirements of 10 CFR 50.54(m).~~

6.3 UNIT FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the ~~unit~~ **facility** staff shall meet or exceed the minimum qualifications of ANSI/ANS 3.1 of 1978 for comparable positions unless otherwise noted in the Technical Specifications, ~~with the following exceptions: 1) the licensed operators who shall comply only with the requirements of 10 CFR 55, and 2) individuals who do not meet ANSI/ANS 3.1 of 1978, Section 4.5, are not considered technicians or maintenance personnel for purposes of determining qualifications but are permitted to perform work for which qualification has been demonstrated.~~

6.3.2 The management position responsible for radiological controls shall meet or exceed the qualifications of Regulatory Guide 1.8 of 1977. Each radiological controls technician/supervisor shall meet or exceed the qualifications of ANSI-N 18.1-1971, paragraph 4.5.2/4.3.2, or be formally qualified through an NRC approved TMI-I Radiation Controls training program. All radiological controls technicians will be qualified through training and examination in each area or specific task related to their radiological controls functions prior to their performance of those tasks.

6.3.3 ~~The Shift Technical Advisors shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in unit design, response and analysis of transients and accidents.~~ **NRC-approved training and retraining program for CERTIFIED FUEL HANDLERS shall be maintained.**

6.4 TRAINING DELETED

6.4.1 ~~A training program for the Fire Brigade shall be maintained and shall meet or exceed the requirements of Section 600 of the NFPA Code.~~

6.5 DELETED

DELETED

6.6 REPORTABLE EVENT ACTION *DELETED*

~~6.6.1 The following actions shall be taken for REPORTABLE EVENTS:~~

- ~~a. The Nuclear Regulatory Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR 50.~~

6.7 SAFETY LIMIT VIOLATION *DELETED*

~~6.7.1 The following actions shall be taken in the event a safety limit is violated:~~

- ~~a. The reactor shall be shutdown and operation shall not be resumed until authorized by the Nuclear Regulatory Commission.~~
- ~~b. An immediate report shall be made to the Plant Manager, and Vice President TMI Unit 1, and the event shall be reported to NRC in accordance with 10 CFR 50.72.~~
- ~~c. A complete analysis of the circumstances leading up to and resulting from the occurrence shall be prepared by the unit staff. This report shall include analysis of the effects of the occurrence and recommendations concerning operation of the unit and prevention of recurrence. This report shall be submitted to the Plant Manager and the Vice President TMI Unit 1. The safety limit violation report shall be submitted to NRC in accordance with 10 CFR 50.73.~~

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented and maintained covering the items referenced below:

- a. The applicable procedures ***applicable to safe storage of nuclear fuel*** recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.
- b. Surveillance and test activities of equipment that affects nuclear safety and radioactive waste management equipment.
- c. ~~Refueling~~ ***Fuel Handling*** Operations.
- d. Security Plan Implementation.
- e. Fire Protection Program Implementation.
- f. Emergency Plan Implementation.
- g. Process Control Program Implementation.
- h. Offsite Dose Calculation Manual Implementation.
- i. Quality Assurance Program for effluent and environmental monitoring using the guidance in Regulatory Guide 4.15, Revision 1.
- j. ~~Deleted~~

6.8.2 Further, each procedure required by 6.8.1 above, and substantive changes thereto, shall be reviewed and approved prior to implementation and shall be reviewed periodically as set forth in administrative procedures.

6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:

- a. The intent of the original procedure is not altered;
- b. The change is approved by two members of the licensee's management staff knowledgeable in the area affected by the procedure. For changes which may affect the operational status of ~~unit~~ ***facility*** systems or equipment, at least one of these individuals shall be a member of ~~unit~~ ***operations*** management or supervision holding a Senior Reactor Operator's License on the unit ***who is a CERTIFIED FUEL HANDLER.***
- c. The change is documented, reviewed and approved within 14 days of implementation.