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

December 30, 2014

Mr. Michael J. Pacilio
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: THREE MILE ISLAND NUCLEAR STATION, UNIT 1 - ISSUANCE OF AMENDMENT TO ELIMINATE CERTAIN TECHNICAL SPECIFICATIONS REPORTING REQUIREMENTS (TAC NO. MF0628)

Dear Mr. Pacilio:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 284 to Renewed Facility Operating License No. DPR-50 for the Three Mile Island Nuclear Station, Unit 1 (TMI-1), in response to your application dated February 4, 2013, as supplemented by letters dated March 24, 2014, and September 26, 2014.

The amendment deletes various TMI-1 reporting requirements contained in the Technical Specifications.

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

Sincerely,

John G. Lamb, Senior Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-289

Enclosures:
1. Amendment No. 284 to Renewed DPR-50
2. Safety Evaluation

cc w/encls: Distribution via Listserv

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

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-289

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 284
Renewed License No. DPR-50

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

   A. The application for amendment by Exelon Generation Company, LLC (the licensee), dated February 4, 2013, as supplemented by letters dated March 24, 2014, and September 26, 2014, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with rules and regulations of the Commission;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.c.(2) of Renewed Facility Operating License No. DPR-50 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 284, are hereby incorporated in the license. The Exelon Generation Company shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days from the date of issuance. In addition, the licensee shall include the revised information in the next Updated Safety Analysis Report update submitted to the NRC in accordance with 10 CFR 50.71(e), as described in the licensee's application dated February 4, 2013, as supplemented by letters dated March 24, 2014, and September 26, 2014, and evaluated in the NRC staff's safety evaluation enclosed with this amendment.

FOR THE NUCLEAR REGULATORY COMMISSION

Meena K. Khanna, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical Specifications
and Renewed Facility Operating License

Date of Issuance: December 30, 2014

ATTACHMENT TO LICENSE AMENDMENT NO. 284

RENEWED FACILITY OPERATING LICENSE NO. DPR-50

DOCKET NO. 50-289

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

Remove	Insert
Page 4	Page 4

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

Remove	Insert
v	v
3-46	3-46
6-12	6-12
6-13	6-13
6-25	6-25

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 284 are hereby incorporated in the license. The Exelon Generation Company shall operate the facility in accordance with the Technical Specifications.

(3) Physical Protection

Exelon Generation Company shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822), and the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans[1], submitted by letter dated May 17, 2006, is entitled: "Three Mile Island Nuclear Station Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan, Revision 3." The set contains Safeguards Information protected under 10 CFR 73.21.

Exelon Generation Company shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Exelon Generation Company CSP was approved by License Amendment No. 275.

(4) Fire Protection

Exelon Generation Company shall implement and maintain in effect all provisions of the Fire Protection Program as described in the Updated FSAR for TMI-1.

Changes may be made to the Fire Protection Program without prior approval by the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire. Temporary changes to specific fire protection features which may be necessary to accomplish maintenance or modifications are acceptable provided that interim compensate measures are implemented.

(5) The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

a. Identification of a sampling schedule for the critical parameters and control points for these parameters;
b. Identification of the procedures used to measure the values of the critical parameters;
c. Identification of process sampling points;
d. Procedure for the recording and management of data;

[1] The Training and Qualification Plan and Safeguards Contingency Plan are Appendices to the Security Plan.

TABLE OF CONTENTS

3.9 DELETED

3.10 MISCELLANEOUS RADIOACTIVE MATERIALS SOURCES

Applicability

Applies to byproduct, source, and special nuclear radioactive material sources.

Objective

To assure that leakage from byproduct, source, and special nuclear radioactive material sources does not exceed allowable limits.

Specification

3.10.1 The source leakage test performed pursuant to Specification 4.13 shall be capable of detecting the presence of 0.005 μCi of radioactive material on the test sample. If the test reveals the presence of 0.005 μCi or more of removable contamination, it shall immediately be withdrawn from use, decontaminated, and repaired, or be disposed of in accordance with Commission regulations. Sealed sources are exempt from such leak tests when the source contains 100 μCi or less of beta and/or gamma emitting material or 5 μCi or less of alpha emitting material.

3.10.2 A complete inventory of licensed radioactive materials in possession shall be maintained current at all times.

Bases

The limitations on removable contamination for sources requiring leak testing, including alpha emitters, are based on 10 CFR 70.39(c) limits for plutonium. This limitation will ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values.

6.9 REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following identified reports shall be submitted to the Administrator of the NRC Region 1 Office unless otherwise noted.

6.9.1 Routine Reports

A. DELETED

B. Annual Reports. Annual reports covering the activities of the unit as described below during the previous calendar year shall be submitted prior to March 1 of each year. (A single submittal maybe made for the station. The submittal should combine those sections that are common to both units at the station.)

1. DELETED

2. The following information on aircraft movements at the Harrisburg International Airport:

   a. The total number of aircraft's movements (takeoffs and landings) at the Harrisburg International Airport for the previous twelve-month period.

   b. The total number of movements of aircraft larger than 200,000 pounds at the Harrisburg International Airport for the previous twelve-month period, broken down into scheduled and non-scheduled (including military) takeoffs and landings, based on a current estimate provided by the airport manager or his designee.

3. DELETED

4. DELETED

5. DELETED

C. DELETED

6.9.2 DELETED

(Pages 6-14, 6-15, and 6-16 deleted)

6.17 DELETED

6.18 TECHNICAL SPECIFICATIONS (TS) BASES CONTROL PROGRAM

This program provides a means for processing changes to the Bases of these Technical Specifications.

a. Changes to the Bases of the TS shall be made under appropriate administrative controls and reviews.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 284

TO RENEWED FACILITY OPERATING LICENSE NO. DPR-50

TO DELETE CERTAIN TECHNICAL SPECIFICATION REPORTING REQUIREMENTS

EXELON GENERATION COMPANY, LLC

THREE MILE ISLAND NUCLEAR STATION, UNIT 1

DOCKET NO. 50-289

1.0 INTRODUCTION

By application dated February 4, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13037A051), as supplemented by letters dated March 24, 2014, and September 26, 2014 (ADAMS Accession Nos. ML14084A270 and ML14269A351, respectively), Exelon Generation Company, LLC (Exelon, or the licensee) requested changes to the Technical Specifications (TSs) for Three Mile Island Nuclear Station, Unit 1 (TMI-1). Specifically, the licensee requested to delete certain TS reporting requirements.

The proposed amendment would delete the TMI-1 reporting requirements contained in the Administrative Controls Section of TS, specifically Section 6.9.1.A, Sections 6.9.1.B.3 through 6.9.1.B.5, and Section 6.17. Additionally, TS Section 3.10.1 would be revised to remove a special report requirement. The proposed amendment would delete the TMI-1 Sealed Source Contamination Special Report and the Startup Report, as well as the plant-specific annual reports regarding periodic Leak Reduction Program tests, Pressurizer Power Operated Relief Valve (PORV) and Pressurizer (PZR) safety valve challenges, specific activity analysis in which the primary coolant exceeds the limits of TS 3.1.4.1, and major changes to radioactive waste treatment systems. The licensee states that the proposed changes do not alter or change any existing reporting obligations required by Title 10 of the *Code of Federal Regulations* (10 CFR) and maintain consistency with applicable regulatory requirements.

The supplements dated March 24, 2014, and September 26, 2014, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the U.S. Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on March 19, 2013 (78 FR 16882).

2.0 BACKGROUND

In October of 1973, Regulatory Guide (RG) 1.16, Revision 1, "Reporting of Operating Information" (ADAMS Accession No. ML13226A218), was published by the NRC to provide an acceptable basis for meeting the reporting requirements of the facility operating license. In particular, this RG provided a description of each of the periodic reports, including annual reports and the Startup Report that licensees are required to submit to demonstrate compliance with the TS reporting requirements. Subsequently, in August 2009, via the *Federal Register* (74 FR 40244, August 11, 2009), the NRC withdrew RG 1.16 because it was no longer needed on the basis that TS reporting requirements are contained in 10 CFR 50, as well as other parts of 10 CFR Chapter 1. In addition, guidance on the content and frequency of required reports are contained in Chapter 5, "Administrative Controls," of the Improved Standard Technical Specifications (ISTS) provided in NUREG -1430, Volume 1, "Standard Technical Specifications, Babcock and Wilcox Plants." Even though TMI-1 is not formally committed to RG 1.16, the intent of the licensee's proposed License Amendment Request (LAR) is to be consistent with the NRC's regulatory requirements as prescribed in 10 CFR Part 50 and as indicated in the *Federal Register* Notice which withdrew RG 1.16.

In May of 1997, Generic Letter (GL) 97-02, "Revised Contents of the Monthly Operating Report," (ADAMS Accession No. ML031110047) provided the results of the NRC's assessment of its information gathering needs, which identified duplicative reporting, and determined that some reports could be reduced in scope or eliminated. Although GL 97-02 was specific to the Monthly Operating Report, the licensee's proposed LAR seeks to eliminate, in a similar fashion, redundant reports that are no longer considered warranted.

3.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act of 1954, as amended (the Act), requires applicants for nuclear power plant operating licenses to state TS to be included as part of the license. The Commission's regulatory requirements related to the content of TS are set forth in 10 CFR 50.36, "Technical specifications." The regulation requires that TS include items in five specific categories, including: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements; (4) design features; and (5) administrative controls. Section 50.36(c)(3), "Surveillance requirements," are requirements related to test, calibration, or inspection to ensure that the necessary quality of systems and components is maintained, that facility operation will be within the safety limits and that the LCO will be met. Section 50.36(c)(5), "Administrative controls," are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to ensure safe operation of the facility.

The specific content of the administrative controls section of the TS is, therefore, related to those programs and reports that the Commission deems essential for the safe operation of the facility, which are not adequately covered by regulations or other regulatory requirements. Accordingly, the NRC staff may determine that specific requirements, such as those associated with this change, may be removed from the administrative controls in the TS if they are not explicitly required by 10 CFR 50.36(c)(5) and are not otherwise necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety.

4.0 TECHNICAL EVALUATION

The amendment proposes deletion of the reporting requirements for the following specific plant activities:

- TS 3.10 - Miscellaneous Radioactive Materials Sources
- TS 6.9.1.A - Startup Report
- TS 6.9.1.B.3 - Periodic Leak Reduction Program tests
- TS 6.9.1.B.4 - PORV and PZR Safety Valve Challenges
- TS 6.9.1.B.5 - Specific activity analysis in which the primary coolant exceeded limits of TS 3.1.4.1
- TS 6.17 - Major changes to radioactive waste treatment systems

4.1 General Discussion

As stated above, the licensee proposes to delete certain reporting requirements from its TSs. Applying the Commission's Final Policy Statement criterion to identify design conditions and associated surveillances to be retained in standard technical specifications (STS) as LCOs resulted in the improved STS (NUREGs 1430-1434). Licensees may, over time, voluntarily make changes to take advantage of the evolution in policy and guidance as to the required content and preferred format of TSs.

TMI-1 TSs are not updated to the latest version of the STS. The NRC encourages licensees to use the improved STS as the basis for complete revisions to their TSs; however, Commission policy also allows for selective incorporation of improved STS requirements.

In general, licensees cannot justify TS changes solely on the basis of adopting the model STS. Changes that result in relaxation (less restrictive conditions, as described below) of TS requirements require detailed justification. In electing to implement TS changes modeled on STS, proposed changes to a number of requirements can be less restrictive. When requirements have been shown to give little or no safety benefit, their relaxation or removal from the TSs may be appropriate. For changes not related to relocating TSs to licensee-controlled documents, the NRC staff makes a determination that the proposed changes are consistent with licensing practices, the Commission's regulations, and that the proposed changes maintain adequate safety.

The following provides the NRC staff's assessment for the licensee's specific proposed changes.

4.2 TS 3.10.1 - Miscellaneous Radioactive Materials Sources Special Report

TMI-1 TS LCO 3.10, "Miscellaneous Radioactive Materials Sources," is applicable to byproduct, source, and special nuclear radioactive material sources. The objective of the LCO is to assure that leakage from these sources does not exceed allowable limits. TS 3.10.1 states that:

> The source leakage test performed pursuant to Specification 4.13 shall be capable of detecting the presence of 0.005 microcurie (μCi) of radioactive material on the test sample. If the test reveals the presence of 0.005 μCi or more of removable contamination, it shall immediately be withdrawn from use, decontaminated, and repaired, or be disposed of in accordance with Commission regulations; **and a Special Report of the test results that show the presence of > .005 μCi of removable contamination shall be prepared and submitted to the NRC Region I Administrator within 90 days after completion of the test.** Sealed sources are exempt from such leak tests when the source contains 100 μCi or less of beta and/or gamma emitting material or 5 μCi or less of alpha emitting material.

Exelon proposes deletion of the special reporting requirement as shown in bold above.

The licensee states, in part, that "[t]he limitations on removable contamination for sources requiring leak testing are based on 10 CFR 70.39(c), "[Specific] licenses for the manufacture or initial transfer of calibration or reference sources," which states:

> Each person licensed under this section shall perform a dry wipe test upon each source containing more than 0.1 microcurie of plutonium prior to transferring the source to a general licensee under § 70.19. This test shall be performed by wiping the entire radioactive surface of the source with a filter paper with the application of moderate finger pressure. The radioactivity on the paper shall be measured by using radiation detection instrumentation capable of detecting 0.005 microcurie of plutonium. If any such test discloses more than 0.005 microcurie of radioactive material, the source shall be deemed to be leaking or losing plutonium and shall not be transferred to a general licensee under § 70.19.

Based on the above paragraph, the licensee's application justifies the deletion by stating:

> The focus of the requirement as specified above is to ensure that leakage from byproduct, source, and special nuclear material sources will not exceed allowable intake values. Additionally, TMI Unit 1 TS requires that if the test reveals the presence of 0.005 microcurie or more of removable contamination, it shall immediately be withdrawn from use, decontaminated, and repaired, or be disposed of in accordance with the regulation.
>
> The regulation prohibits the transfer of such material and current TMI, Unit 1 TS controls the potential for exposure and contamination of a leaking source. Additionally, identification of a source exceeding the allowable limits would be entered into the corrective action program, which would drive the determination of the cause and identify corrective actions. The proposed amendment would delete the requirement to submit a special report in the event radioactive material sources exceed the allowable limits for transfer. There is no requirement in 10 CFR 70 to submit the results of sealed source leak testing. Since the test results are general information in nature, and are not required by statute, the means and frequency of submittal of the sealed source leakage data is not restricted by 10 CFR 70. Accordingly, this proposed change to delete the

> reporting requirement in TS 3.10.1 does not alter or change any existing reporting obligation required by 10 CFR and maintains consistency with applicable regulatory requirements.

The regulations in 10 CFR 50.36, "Technical Specifications," require that a licensee must follow its specified TS Required Actions when an LCO is not met. The licensee is not proposing any changes to the TS 3.10 requirements other than the deletion of the special reporting requirement as shown in bold above. TS 3.10.1 requires, "if the test reveals the presence of 0.005 μCi or more of removable contamination, it shall immediately be withdrawn from use, decontaminated, and repaired, or be disposed of in accordance with Commission regulations." Since this wording is retained in the licensee's TSs, the proposed deletion is consistent with the STS NUREG-1430, Revision 4, and identification of a source exceeding the allowable limits would be entered into the licensee's corrective action program, which is subject to NRC audit. Therefore, the special report in TS 3.10.1 would not provide any new or additional information for the NRC staff. Therefore, the NRC staff finds the deletion of the subject reporting requirement is acceptable.

4.3 TS 6.9.1.A - Startup Report

The startup report is a summary of plant startup and power escalation testing following receipt of the operating license, increases in licensed power level, installation of nuclear fuel with a different design or manufacturer than the current fuel, and modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the unit. The content of the report is specified in TMI-1 TS 6.9.1.a. The report addresses tests identified in the Updated Final Safety Analysis Report (UFSAR), and contains a description of measured values or characteristics and a comparison of values with design predictions and specifications. The report also contains corrective actions that are required to obtain satisfactory operation and the time limits for submitting reports following completion of the startup test program.

Exelon proposes a deletion of the Startup Report from its TSs and provides the following justification:

> In October of 1971, the NRC published RG 1.16 to provide an acceptable basis for meeting the reporting requirements listed in Appendix A, "Technical Specifications Related to Heath and Safety," of the facility operating license. This RG provided a description of each of the routine reports, including the plant Startup Report that the licensees are required to submit to demonstrate compliance with the TS reporting requirements. However, in August 2009, via the Federal Register, 74 FR 40244, the NRC withdrew RG 1.16 because it was no longer needed on the basis that TS reporting requirements are contained in 10 CFR 50 as well as other parts of 10 CFR Chapter 1.
>
> Current TMI, Unit 1 TS includes a requirement to submit, on a periodic basis, a plant Startup Report. Even though TMI, Unit 1 is not formally committed to RG 1.16, the intent of this LAR is to be consistent with the regulatory requirements as prescribed in 10 CFR as indicated in the Federal Register Notice which withdrew RG 1.16. Additionally, guidance on the content and frequency of required reports are contained in Chapter 5, "Administrative Controls," of the ISTS provided in

> NUREG - 1430, which does not include a requirement to submit a Startup Report. Further, information provided in the plant Startup Report is readily available to the NRC for inspection by the NRC Resident Inspectors. No information submitted in the Startup Report seeks NRC approval for plant operations. The proposed amendment would delete the requirement to provide, on a periodic basis, a plant Startup Report. This proposed change to delete TS 6.9.1.A does not alter or change any existing reporting obligations required by 10 CFR and maintains consistency with applicable regulatory requirements. As a result, the plant Startup Report is no longer warranted.

The startup report provides the NRC staff a mechanism to review the appropriateness of licensee activities after-the-fact, once the report is submitted (i.e., no requirement for NRC approval). The quality assurance requirements of 10 CFR Part 50, Appendix B, and the startup test program provisions contained in the UFSAR for TMI-1, provide assurance that the listed activities will be adequately performed and that appropriate corrective actions, if required, are taken. Given that the startup report was required to be provided to the Commission no sooner than 90 days following completion of the respective milestone, report completion and submittal is not necessary to ensure operation of the facility in a safe manner for the interval between completion of the startup testing and submittal of the report.

Furthermore, the NRC staff notes that the requested change to the administrative controls section of the TS is consistent with NUREG-1430, Revision 4. On the basis that the startup test report is not necessary to assure operation of the facility in a safe manner, deletion of the startup test report requirements is consistent with 10 CFR 50.36(c)(5); therefore, the NRC staff finds that the proposed TS change is acceptable.

4.4 TS 6.9.1.B.3 - Periodic Leak Reduction Program Tests

TS 6.9.1.B requires that Annual Reports covering the activities of the unit, as described below, during the previous calendar year shall be submitted prior to March 1 of each year.

TS 6.9.1.B.3 requires that the following information from the periodic Leak Reduction Program tests shall be reported:

a. Results of leakage measurements,
b. Results of visual inspections, and
c. Maintenance undertaken as a result of Leakage Reduction Program tests or inspections.

Exelon proposes a deletion of the subject Annual Report from its TSs, and provided the following justification:

> By letter dated April 28, 1982, the NRC issued Amendment No. 77 for TMI, Unit 1 [see Reference 5 of February 4, 2013, application]. This amendment added the requirement to report the results of the periodic leak reduction program testing on the basis that it satisfied the guidance provided in NUREG-0737, Item III.D.1.1 [see Reference 6 of the February 4, 2013, application]. Item III D.1.1 specifies that the results of the initial leak test performed under the leak reduction program

for systems outside containment be submitted to the NRC. Although Item III.D.1.1 does require on-going periodic leak tests, it does not indicate that the periodic test results be submitted to the NRC.

In addition, the results of the tests performed on systems outside of primary containment are readily available to the NRC for inspection by the NRC Resident Inspectors. Significant leakage identified would be captured in the corrective action program which would drive a determination of cause and action to prevent reoccurrence; therefore, annual reporting is no longer warranted.

Regarding proposed deletion of TS 6.9.1.B.3, the NRC staff issued the following request for additional information (RAI), by letter dated September 4, 2014 (ADAMS Accession No. ML14240A412):

> The Periodic Leak Reduction Program is not currently specified in the TSs for TMI-1. Is the Periodic Leak Reduction Program described in the licensing basis? If so, please describe. If not, why not and describe where the Periodic Leak Reduction Program is maintained and controlled in TMI-1 documents? Please explain how the TMI-1 commitment for the Periodic Leak Reduction Program will continue to be met upon the proposed deletion of the subject TS reporting requirements.

Exelon's letter dated September 26, 2014, (ADAMS Accession No ML14269A351) responded to the NRC staff's RAIs as follows:

> The Periodic Leak Reduction Program is not specifically described in the TMI Updated Final Safety Analysis (UFSAR). However, in regards to the Engineered Safeguards Systems leakage and radiation consideration post-accident conditions, UFSAR Section 6.4.3, Bases of Leakage Estimates, states:
>
> > While the reactor auxiliary systems involved in the recirculation complex are closed to the Auxiliary Building atmosphere, leakage is possible through component flanges, seals, instrumentation, and valves.
> >
> > The leakage sources considered are:
> >
> > a. Valves
> >
> > 1) Disc leakage when valve is on recirculation system boundary
> > 2) Stem leakage
> > 3) Bonnet flange leakage
> >
> > b. Flanges
> >
> > c. Pump shaft seals

> While leakage rates have been assumed for these sources, maintenance and periodic testing of these systems will preclude all but a small percentage of the assumed amounts. With the exception of the boundary valve discs, all of the potential leakage paths may be examined during periodic tests or normal operation. These periodic tests are performed IAW [in accordance with] TS 4.5.4. The boundary valve disc leakage is retained in the other closed systems and, therefore, will not be released to the Auxiliary Building, or will be confirmed to be less than 3 GPM [gallons per minute] by periodic testing.
>
> The Periodic Leakage Reduction Program is currently controlled by the annual reporting requirement in TS 6.9.1.8.3, which drives the scheduling of the specific leakage surveillance tests or examinations. The station manages the scheduling of each of these surveillances as TS requirements to ensure that they are performed at the refueling interval. Each of these leakage surveillance procedures references NUREG-0737, "Clarification of TMI Action Plan Requirements," as a purpose for the test. Each completed surveillance procedure includes documentation of any identified leakage, which is then dispositioned through the Corrective Action Program (CAP) and later documented in the annual submittal.
>
> The proposed change does not alter the current Periodic Leak Reduction Program, only its reporting requirements. The TMI commitment for the Periodic Leak Reduction Program will continue to be met upon the proposed deletion of the subject TS reporting requirements. TMI will incorporate a description of the Periodic Leak Reduction Program into the licensing basis by revising UFSAR Section 6.4, "Engineered Safeguards Leakage and Radiation Considerations" [see Attachment 2 of the September 26, 2014, supplement].

On October 31, 1980, the NRC staff issued a letter (ADAMS Legacy Accession No. 8012160050) to all licensees of operating plants and applicants for operating licenses, regarding the Post-TMI requirements specified in NUREG-0737, per 10 CFR 50.54(f) regulations. The letter requested the licensees to furnish, within 45 days of the letter, confirmation that the implementation dates indicated in Enclosure 1 in NUREG-0737 will be met. Item III.D.1.1, "Primary Coolant outside containment," in the enclosure concerned the licensee's periodic leak reduction program. In response to the NRC staff's letter, the licensee's letter, dated January 23, 1981, (ADAMS Legacy Accession No. 8101290593) committed to a schedule for implementation of the NUREG-0737 requirements including those identified in Item III.D.1.1. The licensee's letter dated April 10, 1981 (ADAMS Legacy Accession No. 8104170565), requested the NRC staff's approval on its TS Amendment No. 77, regarding addition of subject reporting requirement in its TSs. The NRC staff's letter dated April 28, 1982, (ADAMS Accession No. ML003763983) approved the amendment with the following justification:

> Section 6.9 -Reporting Requirements -This section has been revised to include reporting of information related to the periodic Leak Reduction program and challenges and failures of the pressurizer power operated relief valve and safety valves. These changes relate to NUREG-0737, Items III.D.I.I and II.K.3.3. Since

these changes are consistent with the requirements of NUREG-0737, Item III.D.I.I and II.K.3.3, we find them to be acceptable.

Based on the NRC staff's review, the staff finds that the licensee's current proposed amendment only requests the deletion of the Annual Reporting requirement for the NUREG-0737-related Periodic Leak Reduction program and that the licensee's commitment to the program as was stated by the licensee in its January 23, 1981, response to the staff's 50.54(f) letter mentioned above, is not affected by the proposed change. Furthermore, according to the licensee's response to the RAI, the program will be reflected in its licensing basis by revising UFSAR Section 6.4, "Engineered Safeguards Leakage and Radiation Considerations." In addition, the licensee stated that the requirements for the program are currently addressed in its leakage surveillance procedures.

The licensee will incorporate a description of the Periodic Leak Reduction Program by revising UFSAR Section 6.4, "Engineered Safeguards Leakage and Radiation Considerations," in the next UFSAR update submitted to the NRC in accordance with 10 CFR 50.71(e). Therefore, the NRC staff finds the deletion of TS 6.9.1.B.3 acceptable.

4.5 TS 6.9.1.B.4-PORV and PZR Safety Valve Challenges

TS 6.9.1.B requires that Annual Reports covering the activities of the unit, as described below, during the previous calendar year shall be submitted prior to March 1 of each year.

TS 6.9.1.B.4 requires that the following information regarding the pressurizer (PZR) power operated relief valve (PORV) and PZR safety valve challenges shall be reported:

a. Date and time of incident,
b. Description of occurrence, and
c. Corrective measures taken if incident resulted from an equipment failure.

Exelon proposes a deletion of the subject annual reporting requirement from its TSs, and provides the following justification:

> The annual reporting of pressurizer safety and relief valve failures and challenges is based on the guidance provided in NUREG-0694, "TMI-Related Requirements for New Operating Licenses" [Reference 7 of the February 4, 2013, application]. In June 1980, the NRC published NUREG-0694, which states: "Assure that any failure of a PORV or safety valve to close will be reported to the NRC promptly. All challenges to the PORV or safety valves should be documented in the annual report." Current TMI, Unit 1 TS includes a requirement to provide, on an annual basis, any challenges to the PORV or PZR safety valves. However, GL 97-02 provided the results of the NRC's assessment of their information gathering needs, which determined that some reports could be reduced in scope or eliminated. The GL identifies what needs to be reported to support the NRC Performance Indicator (PI) Program, and availability and capacity statistics. GL 97-02 does not specifically identify the need to report challenges to PORV or PZR safety valves.

Further, any challenges to the PORV or PZR safety valves would be captured in the corrective action program, which would drive a determination of the cause and actions to prevent recurrence of the challenge. Therefore, the proposed amendment would delete the requirement to provide, on an annual basis, documentation of all challenges to the PORV or PZR safety valves. This proposed change to delete TS 6.9.1.B.4 does not alter or change any existing reporting obligations required by 10 CFR and maintains consistency with applicable regulatory requirements. As a result, annual reporting of PORV and PZR safety valve challenges is no longer warranted.

Though the current TS for TMI-1 requires Annual Reporting data for pressurizer relief valves and pressurizer safety valves, STS NUREG-1430, Revision 1 (dated April 7, 1995), Section 5.6.4 required Monthly Operating Reports (MOR) for such valves. The impetus for the MOR came from the 1973-1974 oil embargo. RG 1.16, Revision 4, "Reporting of Operating Information - Appendix A Technical Specifications," published for comment in August 1975, identifies operating statistics and shutdown experience information that was desired in the operating report at that time. In the mid-1990s, the NRC staff assessed the information that is submitted in the MOR and determined that, while some of the information was no longer used by the NRC staff, the MOR was the only source of some data used in the NRC PI Program of that time period (see NRC Generic Letter (GL) 97-02, "Revised Contents of the Monthly Operating Report"). Beginning in the late 1990s, the NRC developed and implemented a major revision to its assessment, inspection, and enforcement processes through its Reactor Oversight Process (ROP). The ROP uses both plant-level PIs and inspections performed by NRC personnel.

The reporting of challenges to PZR PORVs or PZR safety valves was included in the TSs based on the guidance in NUREG-0694, "TMI-Related Requirements for New Operating Licensees." The industry proposed and the NRC accepted the elimination of the reporting requirements in the TSs for challenges to pressurizer PORVs or pressurizer safety valves in Revision 4 to TS Task Force No. 258 (TSTF-258), "Changes to Section 5.0, Administrative Controls" (ADAMS Accession No. ML040620102). The NRC staff's acceptance of TSTF-258 and subsequent approval of plant-specific adoptions of TSTF-258 is based on the fact that the information on the challenges to relief and safety valves is not used in the evaluation of the MOR data, and that the information needed by the NRC is adequately addressed by the reporting requirements in 10 CFR 50.73, "Licensee event report system." Furthermore, the licensee states that any challenges to the PORV or PZR safety valves would be captured in the corrective action program, which would drive a determination of the cause and actions to prevent recurrence of the challenge. Additionally, the proposed change is consistent with the STS provided in Revision 4 of NUREG–1430.

Based on this information, the NRC staff finds it acceptable to delete the requirement to provide documentation of all challenges to the PZR PORVs or PZR safety valves.

4.6 TS 6.9.1.B.5-Specific Activity Analysis in which the Primary Coolant Exceeded Limits of TS 3.1.4.1

TS 6.9.1.B requires that Annual Reports covering the activities of the unit as described below during the previous calendar year shall be submitted prior to March 1 of each year.

TS 6.9.1.B.5 requires that the following information regarding the results of specific activity analysis in which the primary coolant exceeded limits of TSs 3.1.4.1 shall be reported:

a) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded;

b) Results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while limit was exceeded and results of one analysis after the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine concentrations;

c) Cleanup system flow history starting 48 hours prior to the first sample in which the limit was exceeded;

d) Graph of the I-131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above the steady-state level; and

e) The time duration when the specific activity of the primary coolant exceeded the radioiodine limit.

Exelon's proposed deletion of TS 6.9.1.B.5 and provided the following justification:

> TMI, Unit 1, TS 6.9.1.B.5 requires annual reporting of the results of specific activity analysis in which the primary coolant exceeds the limits of TS 3.1.4.1. However, specific activity analysis pertaining to primary coolant limits is reported to the NRC by means of the PI Program, under the Reactor Oversight Program (ROP). As part of the ROP PI Program, TMI, Unit 1 currently provides monthly reactor coolant specific activity data on a quarterly basis to the NRC in accordance with Regulatory Issue Summary (RIS) 2000-08, Revision 1, "Voluntary Submission of Performance Indicator Data" [Reference 8 of the February 4, 2013, application] following the guidelines provided in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline" [Reference 9 of the February 4, 2013, application].
>
> The reactor coolant specific activity concentration is provided more frequently than required by the TS, regardless of whether or not the TS limit is exceeded. Additionally, if the limit is exceeded, this would be evaluated within the corrective action program, which would drive a determination of the cause and identify appropriate corrective actions to prevent recurrence. Therefore, annual reporting of specific activity analysis in accordance with TS 6.9.1.B.5 is no longer warranted.

Regarding the proposed deletion, the NRC staff issued the following RAI, by letter dated February 27, 2014, (ADAMS Accession No. ML14052A259):

The NRC staff concurs that the reactor coolant specific activity data is reported to the NRC via the PI program under the ROP. While the PI program reports reactor coolant specific activity, it does not report all of the information contained in TS 6.9.1.B.5, under the circumstances where activity exceeds the limits of TS 3.1.4.1. Therefore, please provide justification for all of the proposed deletions under this TS section.

Exelon's letter, dated March 24, 2014, (ADAMS Accession No. ML14084A270) responded to the NRC staff's RAIs as follows:

Nuclear power plants such as Virgil C. Summer, added this reporting requirement in response to Generic Letter 85-19, "Reporting Requirements on Primary Coolant Iodine Spikes." However, as stated in the Commission's Safety Evaluation for Virgil C. Summer Nuclear Station, Unit No. 1, Issuance of Amendment Regarding Elimination of Monthly Operating Reports and Certain Annual Reports (TAC No. MC9155) dated May 19, 2006, which approved the deletion of the reporting requirement pertaining to specific activity; it is no longer common within Technical Specifications (TSs) for nuclear power plants and is not within Standard Technical Specifications (STS) outlined in NUREG-1430. Additionally, the NRC would expect to obtain information about such events or conditions through reports submitted in accordance with 10 CFR 50.72, "Immediate notification requirements for operating nuclear reactors," and 10 CFR 50.73, "Licensee event report system." For example, similar to V.C. Summer's TS, it is noted that exceeding TMI TS 3.1.4.1 limits requires a plant shutdown if the activity is not restored to within limits within the specified time period, and such a plant shutdown is required to be reported by 10 CFR 50.72. The NRC also obtains information about plant events and adverse conditions through its inspection program.

The specific activity analysis reported annually does not report any information different from the Performance Indicator (PI) Program unless the activity exceeds the TS 3.1.4.1 limit. The removal of the report is intended to eliminate unnecessary use of NRC and plant resources to review redundant data. At TMI, the TS limit has not been exceeded for more than 18 years (> 9 full cycles) of operation. The limit is not expected to be exceeded unless a significant plant (fuel) issue occurs, which would result in the application of significant plant resources and determine the need for communication with the NRC. For example, in the event that a fuel defect occurs, which would affect the specific activity limits as required by Exelon's Failed Fuel Action Plan procedure (NF-AA-430), the defect would be captured in the Corrective Action Program (CAP), which requires a Root Cause Analysis (RCA) to be performed and an immediate evaluation for reportability to the NRC under the 10 CFR 50.72(b)(3)(ii) reporting criteria. Through the above procedure, all of the additional specific activity analysis is required to be examined in order to evaluate the event. Thus, the information stated in items 6.9.1.B.5.a through e is included as part of the RCA, and would be available for NRC review through its inspection program. Note also that the PI Program would continue to provide all of the other typical radioisotope data.

The NRC would expect to obtain information about such events or conditions through reports submitted in accordance with 10 CFR 50.72, "Immediate notification requirements for operating nuclear reactors," and 10 CFR 50.73, "Licensee event report system." The NRC also obtains information about plant events and adverse conditions from its inspection program.

Additionally, the NRC staff agrees that the TMI TS 3.1.4.1 limits requires a plant shutdown if the activity is not restored to limits within the specified time period, and such a plant shutdown would be required to be reported by 10 CFR 50.72. There is no need to repeat the same requirement in the licensee's TS; therefore, the NRC staff finds it acceptable to delete the TMI-1 TS 6.9.1.B.5 reporting requirement.

4.7 TS 6.17-Major Changes to Radioactive Waste Treatment Systems

TS 6.17 requires the licensee to report to the Commission in the Annual Report the licensee's initiated safety related changes to the radioactive waste system (liquid, gaseous and solid). The licensee proposed to delete the requirement based on its justification as follows:

> The radioactive waste treatment systems (gaseous, liquid and solid) are described in chapter 11 of the TMI, Unit 1 Updated Final Safety Analysis Report (USFAR). Major changes to the radioactive waste treatment systems would require an evaluation in accordance with 10 CFR 50.59, "Changes, tests, and experiments". If the changes are significant enough to be evaluated against the eight criteria specified in 50.59(c)(2), but do not require prior NRC approval, then a summary of the changes must be provided to the NRC in accordance with 50.59(d)(2), which states that "the licensee shall submit.a report containing a brief description of any changes, tests, and experiments, including a summary of the evaluation of each. A report must be submitted at intervals not to exceed 24 months." Major changes to radioactive waste treatment systems will be reported to the NRC via compliance with 10 CFR 50.59, and therefore, annual reporting is no longer warranted. Accordingly, this proposed change to delete TS 6.17 does not alter or change any existing reporting obligations required by 10 CFR and maintains consistency with applicable regulatory requirements.

Regarding the proposed deletion, the NRC staff issued the following RAI, by letter dated February 27, 2014, (ADAMS Accession No. ML14052A259):

The NRC staff's letter stated, in part, that:

> Are significant changes to the radioactive waste treatment systems reported in the TMI annual effluent report? If not, please supplement the LAR with a statement that the TMI Updated Final Safety Analysis Report will be revised to include these changes in the annual effluent report.

Exelon's letter, dated March 24, 2014, (ADAMS Accession No ML14084A270) responded to the NRC staff's RAI as follows:

> TMI does not currently report significant changes to the radioactive waste treatment systems in the TMI annual effluent report. The TMI Updated Final Safety Analysis Report will be revised to include these changes in the annual effluent report.

The licensee shall include the revised information in the next UFSAR update submitted to the NRC in accordance with 10 CFR 50.71(e); therefore, the NRC staff finds it acceptable to delete TMI-1 TS 6.17.

5.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendment. The State official had no comments.

6.0 ENVIRONMENTAL CONSIDERATION

The amendment changes requirements with respect to changes to recordkeeping, reporting, or administrative procedures or requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register*, on March 19, 2013 (78 FR 16682). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

7.0 CONCLUSION

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

Principal Contributors: R. Grover

Date: December 30, 2014.

December 30, 2014

Mr. Michael J. Pacilio
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: THREE MILE ISLAND NUCLEAR STATION, UNIT 1 - ISSUANCE OF AMENDMENT TO ELIMINATE CERTAIN TECHNICAL SPECIFICATIONS REPORTING REQUIREMENTS (TAC NO. MF0628)

Dear Mr. Pacilio:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 284 to Renewed Facility Operating License No. DPR-50 for the Three Mile Island Nuclear Station, Unit 1 (TMI-1), in response to your application dated February 4, 2013, as supplemented by letters dated March 24, 2014, and September 26, 2014.

The amendment deletes various TMI-1 reporting requirements contained in the Technical Specifications.

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

Sincerely,

/RA/
John G. Lamb, Senior Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-289

Enclosures:
1. Amendment No. 284 to Renewed DPR-50
2. Safety Evaluation

cc w/encls: Distribution via Listserv

DISTRIBUTION
PUBLIC
RidsAcrsAcnw_MailCTR Resource
RidsNrrDorlDpr Resource
RidsNrrPMThreeMileIsland Resource
RidsNrrLAABaxter Resource
RidsNrrDirsItsb Resource
RidsNrrDorlLpl1-2 Resource
LPLI-2 R/F
RGrover, NRR
RidsRgn1MailCenter Resource

ADAMS Accession No.: ML14330A300 ***via memo** ****via e-mail**

OFFICE	LPL1-2/PM	LPLI-2/LA**	ITSB/BC*	OGC (NLO w/comments)	LPL1-2/BC	LPL1-2/PM
NAME	JLamb	ABaxter	RElliott	AGhosh	MKhanna	JLamb
DATE	12/03/14	12/02/14	11/25/14	12/12/14	12/19/14	12/30/14

OFFICIAL RECORD COPY