



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

April 19, 2016

Mr. Bryan C. Hanson
President and Chief Nuclear Officer
Exelon Nuclear
Nine Mile Point Nuclear Station, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: NINE MILE POINT NUCLEAR STATION, UNIT 2 - ISSUANCE OF
AMENDMENT RE: LICENSE AMENDMENT REQUEST FOR RELOCATION OF
SECONDARY CONTAINMENT BYPASS LEAKAGE PATHS TABLE FROM
TECHNICAL SPECIFICATIONS TO THE TECHNICAL REQUIREMENTS
MANUAL (CAC NO. MF5900)

Dear Mr. Hanson:

The Commission has issued the enclosed Amendment No. 156 to Renewed Facility Operating License No. NPF-69 for the Nine Mile Point Nuclear Station, Unit No. 2 (NMP2). By application dated March 23, 2015, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15082A368), as supplemented by letters dated January 8, 2016, and March 21, 2016 (ADAMS Accession Nos. ML16008A171 and ML16081A371 respectively), Exelon Generation Company, LLC submitted a license amendment request to change the Nine Mile Point, Unit 2 (NMP2) Technical Specifications (TSs) to relocate the secondary containment bypass leakage paths table from the TS to the Technical Requirements Manual.

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

Sincerely,

A handwritten signature in cursive script, reading "Brenda Mozafari", is positioned above the typed name.

Brenda L. Mozafari, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-410

Enclosures:

1. Amendment No. 156 to NPF-69
2. Safety Evaluation

cc w/encls: Distribution via Listserv



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

NINE MILE POINT NUCLEAR STATION, LLC

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 156
Renewed License No. NPF-69

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (Exelon, the licensee) dated March 23, 2015, as supplemented by letters dated January 8, 2016, and March 21, 2016, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is 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. NPF-69 is hereby amended to read as follows:

Enclosure 1

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 156, are hereby incorporated into this license. Exelon Generation Company, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 120 days.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in black ink, appearing to read "Travis L. Tate".

Travis L. Tate, Chief
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the License and Technical
Specifications

Date of Issuance: April 19, 2016

ATTACHMENT TO LICENSE AMENDMENT NO. 156
TO RENEWED FACILITY OPERATING LICENSE NO. NPF-69
DOCKET NO. 50-410

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 Page

Page 4

Insert Page

Page 4

Replace the following pages of 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 Pages

3.6.1.3-1
3.6.1.3-12
3.6.1.3.14
3.6.1.3-15

Insert Pages

3.6.1.3-1
3.6.1.3-12
3.6.1.3.14
3.6.1.3-15

(1) Maximum Power Level

Exelon Generation is authorized to operate the facility at reactor core power levels not in excess of 3988 megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. are hereby incorporated into this license. Exelon Generation shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Fuel Storage and Handling (Section 9.1, SSER 4)*

- a. Fuel assemblies, when stored in their shipping containers, shall be stacked no more than three containers high.
- b. When not in the reactor vessel, no more than three fuel assemblies shall be allowed outside of their shipping containers or storage racks in the New Fuel Vault or Spent Fuel Storage Facility.
- c. The above three fuel assemblies shall maintain a minimum edge-to-edge spacing of twelve (12) inches from the shipping container array and approved storage rack locations.
- d. The New Fuel Storage Vault shall have no more than ten fresh fuel assemblies uncovered at any one time.

(4) Turbine System Maintenance Program (Section 3.5.1.3.10, SER)

The operating licensee shall submit for NRC approval by October 31, 1989, a turbine system maintenance program based on the manufacturer's calculations of missile generation probabilities. (Submitted by NMPC letter dated October 30, 1989 from C.D. Terry and approved by NRC letter dated March 15, 1990 from Robert Martin to Mr. Lawrence Burkhardt, III).

* The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report (SER) and/or its supplements wherein the license condition is discussed.

3.6 CONTAINMENT SYSTEMS

3.6.1.3 Primary Containment Isolation Valves (PCIVs)

LCO 3.6.1.3 Each PCIV and each Secondary Containment Bypass Leakage Valve shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3,
When associated instrumentation is required to be OPERABLE per LCO 3.3.6.1, "Primary Containment Isolation Instrumentation."

ACTIONS

NOTES

1. Penetration flow paths may be unisolated intermittently under administrative controls.
2. Separate Condition entry is allowed for each penetration flow path.
3. Enter applicable Conditions and Required Actions for systems made inoperable by PCIVs.
4. Enter applicable Conditions and Required Actions of LCO 3.6.1.1, "Primary Containment," when PCIV leakage results in exceeding overall containment leakage rate acceptance criteria.

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. -----NOTE----- Only applicable to penetration flow paths with two or more PCIVs.</p> <p>-----</p> <p>One or more penetration flow paths with one PCIV inoperable except due to leakage not within limit.</p>	<p>A.1 Isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured.</p> <p><u>AND</u></p>	<p>4 hours except for main steam line</p> <p><u>AND</u></p> <p>8 hours for main steam line</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.1.3.6	Perform leakage rate testing for each primary containment purge valve with resilient seals.	In accordance with the Surveillance Frequency Control Program <u>AND</u> Once within 92 days after opening the valve
SR 3.6.1.3.7	Verify the isolation time of each MSIV is ≥ 3 seconds and ≤ 5 seconds.	In accordance with the Inservice Testing Program
SR 3.6.1.3.8	Verify each automatic PCIV actuates to the isolation position on an actual or simulated isolation signal.	In accordance with the Surveillance Frequency Control Program
SR 3.6.1.3.9	Verify a representative sample of reactor instrumentation line EFCVs actuates to the isolation position on an actual or simulated instrument line break signal.	In accordance with the Surveillance Frequency Control Program
SR 3.6.1.3.10	Remove and test the explosive squib from each shear isolation valve of the TIP System.	In accordance with the Surveillance Frequency Control Program
SR 3.6.1.3.11	Verify the leakage rate for the secondary containment bypass leakage when pressurized to ≥ 40 psig is: a. Bypass (Drywell): ≤ 8.74 SCFH; and b. Bypass (Suppression Chamber): ≤ 1.67 SCFH; and c. Bypass (Drywell with delays): ≤ 28.17 SCFH	In accordance with 10 CFR 50 Appendix J Testing Program Plan

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 156

TO RENEWED FACILITY OPERATING LICENSE NO. NPF-69

NINE MILE POINT NUCLEAR STATION, LLC

EXELON GENERATION COMPANY, LLC.

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

1.0 INTRODUCTION

By application dated March 23, 2015, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15082A368), as supplemented by letters dated January 8, 2016, and March 21, 2016 (ADAMS Accession Nos. ML16008A171 and ML16081A371 respectively), Exelon Generation Company, LLC submitted a license amendment request to change the Nine Mile Point, Unit 2 (NMP2) Technical Specifications (TS). The proposed amendment would modify the NMP2 TS by relocating the secondary containment bypass leakage paths table from the TS to the Technical Requirements Manual.

The supplements dated January 8, 2016, and March 21, 2016 (ADAMS Accession Nos. ML16008A171 and ML16081A371), provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the Nuclear Regulatory Commission (NRC) staff's initial proposed no significant hazards consideration determination noticed in the *Federal Register* (FR) on September 29, 2015 (80 FR 58517).

2.0 REGULATORY EVALUATION

The regulatory requirements and guidance, which the NRC staff considered in its review of the license amendment request, are as follows:

Section 10 CFR 50.67, "Accident source term," (b)(2) requires that:

- (i) An individual located at any point on the boundary of the exclusion area for any 2-hour period following the onset of the postulated fission product release, would not receive a radiation dose in excess of 0.25 Sv [Sievert] (25 rem) total effective dose equivalent (TEDE),
- (ii) An individual located at any point on the outer boundary of the low population zone, who is exposed to the radioactive

cloud resulting from the postulated fission product release (during the entire period of its passage), would not receive a radiation dose in excess of 0.25 Sv (25 rem) TEDE, and (iii) Adequate radiation protection is provided to permit access to and occupancy of the control room under accident conditions without personnel receiving radiation exposures in excess of 0.05 Sv (5 rem) TEDE for the duration of the accident.

Appendix A to 10 CFR Part 50, "General Design Criteria [GDC] for Nuclear Power Plants," Criterion 19, "Control room," states that:

A control room shall be provided from which actions can be taken to operate the nuclear power unit safely under normal conditions and to maintain it in a safe condition under accident conditions, including loss-of-coolant accidents. Adequate radiation protection shall be provided to permit access and occupancy of the control room under accident conditions without personnel receiving radiation exposures in excess of 5 rem [0.05 Sv] whole body, or its equivalent to any part of the body, for the duration of the accident.

Regulatory Guide (RG) 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," Revision 0, July 2000 provides the methodology for analyzing the radiological consequences of several design basis accidents to show compliance with 10 CFR 50.67. It also provides guidance to licensees on acceptable application of alternative source term (AST, also known as accident source term) submittals, including acceptable radiological analysis assumptions for use in conjunction with the accepted AST.

NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR [Light-Water Reactor] Edition," (SRP) Section 15.0.1, "Radiological Consequence Analyses Using Alternative Source Terms," Revision 0, July 2000 provides guidance to the NRC staff for the review of AST amendment requests. Standard Review Plan (SRP) 15.0.1 states that the NRC reviewer should evaluate the proposed change against the guidance in RG 1.183. The dose acceptance criteria for the loss of coolant accident (LOCA) is a TEDE of 25 rem at the exclusion area boundary for the maximum 2 hour period and at the outer boundary of the low population zone during the entire period of the postulated radioactive cloud passage. The NRC staff also considered relevant information in the NMP2 Updated Safety Analysis Report.

License Amendment 125, dated May 29, 2008 (ADAMS Accession No. ML081230439), "Nine Mile Point Nuclear Station, Unit 2 - Issuance of Amendment Re: Implementation of Alternative Radiological Source Term (TAC No. MD5758)," used an AST methodology for analyzing the radiological consequences of four design-basis accidents in accordance with RG 1.183. LOCA was one of the design-basis accidents analyzed.

The regulatory requirements from which the NRC staff based its acceptance are the reference values in 10 CFR 50.67, the accident specific guideline values in Regulatory Position 4.4 of RG 1.183, and Table 1 of SRP Section 15.0.1.

Section 182a of the Atomic Energy Act, as amended (the "Act"), requires applicants for nuclear power plant operating licenses to incorporate TSs as part of the license. The Commission's regulatory requirements related to the content of the TSs are set forth in Section 50.36 of Title 10 of the *Code of Federal Regulations* (10 CFR) (Section 50.36). The regulation requires that the TSs include items in five categories, including: (1) safety limits, limiting safety system settings, and limiting control settings, (2) limiting conditions for operation (LCOs), (3) surveillance requirements (SRs), (4) design features, and (5) administrative controls. It also states that the Commission may include such additional TSs as it finds to be appropriate.

The regulations in 10 CFR 50.36 (c)(2) require that TSs include LCOs. LCOs are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When LCOs are not met, the licensee shall shutdown the facility or follow the remedial action permitted by the TSs. The regulations within 10 CFR 50.36(c)(2)(ii) state that LCO's must be established for each item meeting one of four criteria:

- Criterion 1.* Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
- Criterion 2.* A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to fission product barrier integrity.
- Criterion 3.* A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- Criterion 4.* A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

Existing LCO requirements which fall within or satisfy any of the criteria in 10 CFR 50.36(c)(2)(ii) must be retained in the TSs, while those LCO requirements which do not fall within or satisfy these criteria may be deleted from the TSs.

Based on the above criteria, the NRC issued Generic Letter (GL) 91-08, "Removal of Component Lists from Technical Specifications," on May 6, 1991 (ADAMS Accession No. ML031140516). In this GL, the staff noted that its intent was to provide guidance for the removal of component lists from the TSs.

The requirements of Appendix J to Part 50 "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors" also applies to the licensee's proposed amendment.

The NRC staff's guidance for review of TSs is in Chapter 16, *Technical Specifications*, of NUREG-0800, Revision 3, *Standard Review Plan* (March 2010) (ADAMS Accession No. ML100351425). As described therein, as part of the regulatory standardization effort, the

NRC staff has prepared Standard Technical Specifications (STS) for each of the light-water reactor nuclear designs. NUREG-1431 contains the STS for Westinghouse Plants.

3.0 TECHNICAL EVALUATION

3.1 Description of Proposed TS Changes

The licensee proposes the following changes to the TS:

1. Limiting Condition for Operation (LCO) 3.6.1.3 currently states:

Each PCIV [Primary Containment Isolation Valve] and each non-PCIV listed in Table 3.6.1.3-1 shall be OPERABLE.

The proposed LCO 3.6.1.3 would state:

Each PCIV and each Secondary Containment Bypass Leakage Valve shall be OPERABLE.

2. Surveillance Requirement 3.6.1.3.11 currently states:

Verify the leakage rate for the secondary containment bypass leakage paths is within the limits of Table 3.6.1.3-1 when pressurized to ≥ 40 psig [pounds per square inch gauge].

The proposed Surveillance Requirement 3.6.1.3.11 would state:

Verify the leakage rate for the secondary containment bypass leakage when pressurized to ≥ 40 psig is:

- a. Bypass (Drywell): ≤ 8.74 SCFH [standard cubic feet per hour]; and
- b. Bypass (Suppression Chamber): ≤ 1.67 SCFH; and
- c. Bypass (Drywell with delays): ≤ 28.17 SCFH

3. Table 3.6.1.3-1, Secondary containment Bypass Leakage Paths Leakage Rate Limits, would be deleted and replaced by a statement that reads:

The information from the Technical Specification section has been relocated to the TRM [Technical Requirements Manual] and maintained in accordance with the 10 CFR 50 Appendix J Testing Program Plan.

3.2 Description of Other Changes

The licensee also stated that one of the secondary containment bypass leakage pathways is being eliminated. Therefore, the licensee proposed to delete the secondary containment bypass

leakage pathway, which contains the valves numbered 2CPS*SOV133 and 2CPS*V51 from TS Table 3.6.1.3-1.

3.3 Staff Evaluation

The NRC staff reviewed the technical discussion of the proposed changes provided in the LAR to ensure the reasoning was logical, complete and clearly written as described in Chapter 16 of NUREG-0800. The staff reviewed the proposed changes for continued compliance with the regulations in 10 CFR 50.36 and for consistency with conventional terminology and with the format and usage rules embodied in the TS.

Paragraph 10 CFR 50.36(c)(2)(i) requires that the TSs will include LCOs, which are the lowest functional capability or performance levels of equipment required for safe operation of the facility. The proposed change to LCO 3.6.1.3 reflects the deletion of the component listing in Table 3.6.1.3-1 and replaces it with a requirement that each secondary containment bypass leakage valve be OPERABLE.

The NRC staff has reviewed the licensee's proposed deletion of TS Table 3.6.3-1, references to it, and associated TS changes and determined that they are in accordance with the guidance of GL 91-08. The licensee proposed to relocate the information to its TRM. The licensee indicated that deletion of TS Table 3.6.3-1 and references to it from the TSs; and the relocation of the information in TS Table 3.6.3-1 to the TRM does not alter the existing requirements or the components they apply to, thus ensuring that components will continue to be capable of performing their intended safety function. Proposed changes to the TRM are reviewed in accordance with 10 CFR 50.59. This evaluation would determine whether NRC approval of a proposed change is required prior to implementation.

The NRC staff has determined that the requirement to maintain each secondary containment bypass leakage valve OPERABLE is an equivalent requirement to the current TS requirement to maintain each non-PCIV listed in Table 3.6.1.3-1 OPERABLE. Therefore, LCO 3.6.1.3 continues to specify the lowest functional capability and performance capability of the primary containment isolation valves, and the LCO, as revised continues to satisfy the requirements of 10 CFR 50.36(c)(2)(i).

Paragraph 10 CFR 50.36(c)(2)(i) additionally requires that when an LCO is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the TSs until the condition can be met. No changes are being proposed to the remedial actions.

Paragraph 10 CFR 50.36(c)(3) requires TSs to include items in the category of SRs, which are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the LCOs will be met. The staff reviewed the proposed changes to the surveillance testing requirements to determine if the SRs continue to comply with 10 CFR 50.36(c) requirements.

The initial LAR proposed that SR 3.6.1.3.11 be revised to require that the surveillance test verify that the leakage rate for the secondary containment bypass leakage paths is within the limits. On December 17, 2015, the NRC staff requested that the licensee provide a technical

justification for not retaining a numerical limit on allowable leakage on the secondary containment bypass pathways or propose a change to SR 3.6.1.3.11 to reflect the appropriate limit. In a letter dated January 8, 2016, the licensee responded to the NRC staff's request stating that:

The secondary bypass leakage paths and limits specified in the current TS Table 3.6.1.3-1 are incorporated into the approved Alternative Source Term (AST) licensing basis for Nine Mile Point Unit 2 (NMP2) for the Loss of Coolant Accident (LOCA) evaluation as submitted in Attachment 7 to License Amendment Request dated May 31, 2007 (Reference 1 [ADAMS Accession No. ML071580314]) and approved by Amendment 125 (Reference 2 – [ADAMS Accession No. ML081230439]). These pathways release activity across four different release points; each release point having unique atmospheric dispersion coefficients. Additionally, each pathway has unique flow and fission product removal characteristics. As a result of these varying release pathway characteristics, the current approved LOCA AST licensing basis is not configured to transform the multiple leakage limits into a single value for use in the proposed Surveillance Requirement (SR) 3.6.1.3.11.

The revision to SR 3.6.1.3.11 as shown in Attachment 2 reflects that the AST analyzed bypass leakage paths limits are within 10 CFR 50 Appendix J Testing Program Plan leakage criteria. Reference to the TS Section 5.5.12 10 CFR 50 Appendix J Testing Program Plan refers directly to the NMP2 AST calculation, which demonstrates that the allowable leak rates found in the current TS Table 3.6.1.3-1 are acceptable. The TS Table 3.6.1.3-1 will be relocated to the Technical Requirements Manual (TRM) and acceptable leakage values will be maintained by the 10 CFR 50 Appendix J Testing Program Plan. Changes to the allowed leak rates and TAM are performed under the 10 CFR 50.59 process.

The revision proposed to SR 3.6.1.3.11 replaces the reference to TS Table 3.6.1.3-1 with a reference to the 10 CFR 50 Appendix J testing program plan, such that SR 3.6.1.3.11 will state:

Verify the leakage rate for the secondary containment bypass leakage paths is within the limits of the 10 CFR 50 Appendix J Testing Program Plan when pressurized to ≥ 40 psig.

Subsequent to the licensee's response the NRC staff requested further clarification regarding leakage limits. A clarification teleconference was held between the NRC staff and the licensee on March 1, 2016, during which the licensee stated that they would supplement the license amendment request by superseding their previous response to the NRC staff's request for additional information.

In a letter dated March 21, 2016, the licensee provided the supplemental information which stated that SR 3.6.1.3.11 would be revised to include three numerical values for the limiting secondary containment leakage rates based on the NRC approved AST licensing basis for NMP2. In their supplement, the licensee stated that the secondary containment bypass leakage paths and limits specified in the current TS Table 3.6.1.3-1 are direct inputs to the LOCA

evaluation in the approved AST licensing basis for NMP2 and proposed to revise SR 3.6.1.3.11 to state:

Verify the leakage rate for the secondary containment bypass leakage when pressurized to ≥ 40 psig is:

- a. Bypass (Drywell): ≤ 8.74 SCFH; and
- b. Bypass (Suppression Chamber): ≤ 1.67 SCFH; and
- c. Bypass (Drywell with delays): ≤ 28.17 SCFH

Based on NMP2's AST analysis methodology, the secondary containment bypass leakage pathways are divided into the following three groups: group 1 bypass from the drywell delays neglected; group 2 bypass from the suppression chamber; and group 3 bypass from the drywell that considers delays. These three groups are identified as the secondary containment bypass leakage associated with SR 3.6.1.3.11. The current approved AST LOCA analysis documents the procedure the licensee used to convert volumetric flow rate under test conditions to volumetric flow rate under accident conditions. Calculation H21C-106, "Unit 2 LOCA w/LOOP [loss of offsite power], AST Methodology," was used to establish volumetric flow rates under test conditions for the three groups of secondary bypass leakage for TS SR 3.6.1.3.11.

The NRC staff reviewed the staff's previous safety evaluation that approves the NMP2 AST and its associated AST documents along with NMP2's current licensing basis. The NRC staff has determined that the above leakage rates and methodology used to calculate them are consistent with those previously approved by the staff for NMP2's AST and that no changes were made that affect the previous evaluation. Therefore, the NRC staff finds the proposed leakage rates to be acceptable.

The proposed change to SR 3.6.1.3.11 would replace the current surveillance testing acceptance criteria on a per valve basis with new acceptance criteria. The new acceptance criteria are based on an aggregated leakage limit based on groupings of release pathways. The staff notes that Section III.B "Type B and C Tests" of 10 CFR 50 Appendix J Option B concludes with the words "*The tests must demonstrate that the sum of the leakage rates at accident pressure of Type B tests, and pathway leakage rates from Type C tests, is less than the performance criterion (L_a) with margin, as specified in the Technical Specification.*" Moreover, the guidance of Section 3 "Secondary Containment Bypass Leakage Paths" of GL 91-08 provides TS example verbiage which reads "*A combined leakage rate of less than or equal to $[0.10] L_a$ for all penetrations that are secondary containment bypass leakage paths when pressurized to P_a .*" The staff finds that the licensee's wording for SR 3.6.1.3.11, as proposed on March 21, 2016, satisfies the guidance of GL 91-08 and the requirements of 10 CFR 50 Appendix J. As discussed above, the categories and leakage limits are consistent with the licensee's licensing basis dose analysis. The NRC staff finds this an acceptable change to the SRs, and the SRs, as modified, continue to be appropriate to assure the necessary quality of systems and components is maintained, and thus meets the requirements of 10 CFR 50.36 and of 10 CFR 50 Appendix J.

The regulation at 10 CFR 50.36(a)(1) states, in part: "A summary statement of the bases or reasons for such specifications....shall also be included in the application, but shall not become part of the technical specifications ." Accordingly along with the proposed TS changes, the

licensee also submitted TS Bases changes corresponding to the proposed TS changes.

In addition, the licensee proposes to delete the secondary containment bypass leakage pathway which contains the valves numbered 2CPS*SOV133 and 2CPS*V51 from TS Table 3.6.1.3-1. The licensee states that the plant modification to address the hardened vent as specified in NRC Order EA-13-109 will relocate valve 2CPS*AOV109 from inside the primary containment to outside the primary containment. Because 2CPS*AOV109 will no longer be located inside primary containment the motive air lines and valves inside containment associated with this valve will be removed in their entirety and the lines will be cut and isolated by a welded cap on both the inside and outside of primary containment penetration path. The licensee states that removal of valves 2CPS*SOV133 and 2CPS*V51 from primary containment eliminates the secondary containment bypass leakage path such that the two valves can be deleted from TS Table 3.6.1.3-1 and removal of this pathway is conservative with respect to dose consequences following a LOCA; therefore, the LOCA dose consequence analysis was not modified as a result of this change.

The NRC staff reviewed the licensee's assessment and proposal to delete the secondary containment bypass leakage pathway which contains the valves numbered 2CPS*SOV133 and 2CPS*V51 and agrees with the licensee that with the penetration pathway capped and welded on both sides of the primary containment it no longer needs to be considered in the radiological consequence analysis for the LOCA. Furthermore, because the current licensing basis radiological dose is calculated with this leakage pathway, and since the radiological dose is not being updated to reflect removal of this pathway, the current licensing basis LOCA radiological dose calculation is conservative. Therefore, the NRC staff finds this proposed change to be acceptable.

4.0 STATE CONSULTATION

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

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes SRs. The NRC staff has determined that the amendments involve no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (80 FR 58517 on September 29, 2015). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The NRC staff reviewed the license amendment request and based on the above has determined that the proposed revision to the NMP2 TSs are acceptable since the current radiological consequence associated with the LOCA remains conservative and is not changing.

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 the operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Margaret Chernoff, NRR
David Nold, NRR
Kristy Bucholtz, NRR

Date: April 19, 2016

April 19, 2016

Mr. Bryan C. Hanson
President and Chief Nuclear Officer
Exelon Nuclear
Nine Mile Point Nuclear Station, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: NINE MILE POINT NUCLEAR STATION, UNIT 2 - ISSUANCE OF
AMENDMENT RE: LICENSE AMENDMENT REQUEST FOR RELOCATION OF
SECONDARY CONTAINMENT BYPASS LEAKAGE PATHS TABLE FROM
TECHNICAL SPECIFICATIONS TO THE TECHNICAL REQUIREMENTS
MANUAL (CAC NO. MF5900)

Dear Mr. Hanson:

The Commission has issued the enclosed Amendment No. 156 to Renewed Facility Operating License No. NPF-69 for the Nine Mile Point Nuclear Station, Unit No. 2 (NMP2). By application dated March 23, 2015, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15082A368), as supplemented by letters dated January 8, 2016, and March 21, 2016 (ADAMS Accession Nos. ML16008A171 and ML16081A371 respectively), Exelon Generation Company, LLC submitted a license amendment request to change the Nine Mile Point, Unit 2 (NMP2) Technical Specifications (TSs) to relocate the secondary containment bypass leakage paths table from the TS to the Technical Requirements Manual.

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

Sincerely,

/RA/

Brenda L. Mozafari, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-410

Enclosures:

1. Amendment No. 156 to NPF-69
2. Safety Evaluation

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ADAMS Accession No.: ML16088A053

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