



10 CFR 50.90

August 28, 2024

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

Limerick Generating Station, Units 1 and 2
Renewed Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352 and 50-353

Subject: License Amendment Request for Modification to Technical Specification 3.6.1.2 and Main Steam Isolation Valve Leakage Rate Requirements

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Constellation Energy Generation, LLC (CEG), proposes changes to the Technical Specifications (TS), Appendix A of Renewed Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station (Limerick), Units 1 and 2, respectively.

The proposed changes involve the Main Steam Isolation Valve (MSIV) system leakage rate requirements. The proposed changes modify TS Limiting Operating Condition (LCO) 3.6.1.2 "Primary Containment Leakage", Action 'c'. to modify the requirement of determining primary containment leakage. Currently, primary containment leakage is determined by verifying the allowable leak rate through each individual MSIV and the total leak rate through all four Main Steam Lines (MSL). Leakage is determined by Local Leak Rate Testing (LLRT) for each MSIV. Leakage results are required to be less than or equal to 100 standard cubic feet per hour (scfh). The proposed change would verify the allowable leak rate through each MSL and the total leak rate through all four MSL. Leakage results from each MSL would be required to be less than or equal to 100 scfh when calculated in accordance with 10 CFR Part 50, Appendix J methodology. Subsequently, LCO 3.6.1.2 ACTION (With:) 'c' and (restore:) 'c' is also modified to align with the proposed changes to LCO 3.6.1.2.c. Lastly, the double asterisk and associated footnote for the 2020 Limerick, Unit 1 refueling outage (Li1R19) is removed due to it no longer being applicable.

The proposed TS modifications are consistent with NUREG-1433, Revision 5, "Standard Technical Specifications – General Electric BWR/4 Plants."

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

The proposed changes have been reviewed by the Limerick Plant Operations Review Committee in accordance with the requirements of the CEG Quality Assurance Program.

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This amendment request contains no regulatory commitments.

Attachment 1 provides the evaluation of the proposed changes. Attachment 2 provides a copy of the marked-up TS pages that reflect the proposed changes.

CEG requests approval of the proposed amendments by April 18, 2025, or prior to the Limerick, Unit 2 Spring 2025 refueling outage (Li2R18). Upon NRC approval, the amendments shall be implemented within 60 days of issuance. Modifications to the respective TS Bases for the proposed TS changes will occur upon approval of this license amendment request (LAR).

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), CEG 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.

Should you have any questions concerning this submittal, please contact Steve Flickinger at 267-533-5302.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 28th day of August 2024.

Respectfully,



Wendi Para
Sr. Manager, Licensing
Constellation Energy Generation, LLC

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

cc: Regional Administrator - NRC Region I w/ attachments
NRC Senior Resident Inspector - Limerick Generating Station "
NRC Project Manager, NRR - Limerick Generating Station "
Director, Bureau of Radiation Protection - Pennsylvania Department of Environmental Protection "

ATTACHMENT 1

License Amendment Request

Limerick Generating Station, Units 1 and 2

Docket Nos. 50-352 and 50-353

EVALUATION OF PROPOSED CHANGES

Subject: License Amendment Request for Modification to Technical Specification 3.6.1.2 and Main Steam Isolation Valve Leakage Rate Requirements

- 1.0 SUMMARY DESCRIPTION**
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1.0 SUMMARY DESCRIPTION

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Constellation Energy Generation, LLC (CEG), proposes changes to the Technical Specifications (TS), Appendix A of Renewed Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station (Limerick), Units 1 and 2, respectively.

The proposed changes involve the Main Steam Isolation Valve (MSIV) system leakage rate requirements. The proposed changes modify TS Limiting Operating Condition (LCO) 3.6.1.2 "Primary Containment Leakage", Action 'c'. to modify the requirement of determining primary containment leakage. Currently, primary containment leakage is determined by verifying the allowable leak rate through each individual MSIV and the total leak rate through all four Main Steam Lines (MSL). Leakage is determined by Local Leak Rate Testing (LLRT) for each MSIV. Leakage results are required to be less than or equal to 100 standard cubic feet per hour (scfh). The proposed change would verify the allowable leak rate through each MSL and the total leak rate through all four MSL. Leakage results from each MSL would be required to be less than or equal to 100 scfh when calculated in accordance with 10 CFR Part 50, Appendix J methodology. Subsequently, LCO 3.6.1.2 ACTION (With:) 'c' and (restore:) 'c' is also modified to align with the proposed changes to LCO 3.6.1.2.c. Lastly, the double asterisk and associated footnote for the 2020 Limerick, Unit 1 refueling outage (Li1R19) is removed due to it no longer being applicable.

The proposed changes to TS are consistent with NUREG-1433, Revision 5, "Standard Technical Specifications – General Electric BWR/4 Plants," (Reference 1).

2.0 DETAILED DESCRIPTION

The changes requested by this amendment application are described below:

1. TS LCO 3.6.1.2 "Primary Containment Leakage" on TS page 3/4 6-2 for Limerick, Unit 1, and page 3/4 6-2 for Limerick, Unit 2 will be revised to the following:

3.6.1.2 Primary containment leakage rates shall be limited to:

- c. *Less than or equal to 100**scf per hour through any one main steam ~~isolation valve line~~ not to exceed 200 scf per hour for all four main steam lines, when tested at P_t 22.0 psig.

2. TS LCO 3.6.1.2 Action 'c' on TS page 3/4 6-2 and 3/4 6-3 for Limerick, Unit 1, and page 3/4 6-2 and 3/4 6-3 for Limerick, Unit 2 will be revised to the following:

ACTION:

With:

- c. The measured leakage rate exceeding 100** scf per hour through any one main steam ~~isolation valve line~~, or exceeding 200 scf per hour for all four main steam lines, or

Restore:

- c. The leakage rate to $\leq 100^{**}$ scf per hour for any main steam ~~isolation valve line~~ that exceeds 100^{**} scf per hour, and restore the combined maximum pathway leakage to ≤ 200 scf per hour, and
3. The double asterisk “**” and associated footnote on TS page 3/4 6-2 and 3/4 6-3 for Limerick, Unit 1 only is being deleted. The double asterisk and footnote are not in Limerick, Unit 2 TS.

~~**During Unit 1 Cycle 19, one main steam isolation valve may exceed 100 scf per hour provided the leakage is less than or equal to 105 scf per hour.~~

The marked-up TS pages that reflect the proposed changes are provided in Attachment 2. Upon approval, the TS Bases will be revised in accordance with the TS Bases Control Program to reflect the proposed changes to the TS, including station procedures.

3.0 TECHNICAL EVALUATION

3.1 System Design:

The primary objective of the containment isolation system is to provide protection by limiting release of radioactive materials outside of the containment structure. Among numerous containment penetrations, both Units at Limerick each have four (4) 26-inch MSLs and a total of eight (8) MSIVs, with two MSIVs on each MSL. All four MSL have an inboard valve located inside of containment and an outboard valve located outside of containment. The MSLs extend from the Reactor Pressure Vessel (RPV) to the main turbine and condenser system and penetrate the primary containment. For these lines, isolation is provided by automatically actuated globe valves. The MSIVs are spring-loaded, pneumatic, piston-operated globe valves designed to fail closed on loss of pneumatic pressure or loss of power to the solenoid-operated pilot valves. Each valve has two independent pilot valves supplied from independent power sources. Each MSIV has an accumulator to assist in its closure upon loss of normal supply. The springs and accumulator provide a local stored energy source dedicated to closure of an MSIV under all conditions which requires MSIV closure (LGS UFSAR 6.2.4.3.1.2.2.1).

MSIVs are designed to close ≥ 3 seconds to prevent pressure transients and ≤ 5 seconds to contain fission products and ensure the core is not uncovered following a line break. MSIVs isolate on the following signals: low main steam line pressure, high main steam line flow, low reactor vessel water level, low condenser vacuum, and main steam line area high temperature.

The Primary Containment Leak Rate Test Program (PCLRTP) governs the testing requirements of all MSIVs. Local Leak Rate Tests (LLRT) are performed every refueling outage. MSIV tests are performed by local pressurization.

MSIV LLRTs currently use an acceptance criterion for operability of < 100 scfh for a single main steam isolation valve and < 200 scfh total for all four main steam lines. The result is that both the inboard and outboard MSIV are required to satisfy the < 100 scfh requirement. When a single MSIV in a line exceeds the < 100 scfh requirement, a condition report is generated, and remediation is controlled by the corrective action program.

3.2 Basis for Change:

The primary reason for main steam line isolation is to contain fission products from leaving the containment structure and entering non-isolated areas that could result in a release to the external environment. All eight (8) of Limerick Units 1 and 2 MSL have independent redundant MSIVs intended to isolate main steam and radioactive fission products inside containment. To meet 10 CFR 50 Appendix A, General Design Criterion (GDC) 16, all four main steam lines are required to isolate and satisfy the safety function requirement. The proposed change to the operability of a single MSIV in a line to the main steam line is consistent with GDC 16 requirements.

The change is also aligned with 10 CFR 50 Appendix J. Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program" (Reference 2) endorses the American National Standards Institute (ANSI/ANS) 56.8, "Containment System Leakage Testing Requirements" (Reference 3), which provides the methodology to determine penetration leakage. ANSI/ANS 56.8 Section 6.4.4 defines two methods, minimum pathway (MNPLR) and maximum pathway (MXPLR), to calculate the leakage rate for a penetration. The leakage rate is always evaluated on a MNPLR basis when containment operability is required (As Found). The proposed change from MSIV to MSL for the <100 scfh requirement is aligned with the ANSI/ANS 56.8 methodology for As Found leakage determination. Additionally, ANSI/ANS 56.8, Section 6.4.4 defines MXPLR criterion which is required to be met prior to entering a mode where containment integrity is required (As Left). MXPLR ensures that both MSIV's satisfy the <100 scfh requirement before entering a mode of plant operation where containment integrity is required.

TS 3.6.1.2.c action and restoration statements are revised to reflect the LCO change to determine acceptability based on single MSL leak rate and not a single MSIV leak rate.

The double asterisk "***" and subsequent footnote on Limerick, Unit 1 TS pages 3/4 6-2 and 3/4 6-3 is deleted because the footnote is no longer applicable as the Limerick, Unit 1 2020 refueling cycle (Li1R19) is now over. This footnote was inserted with an Emergency TS LAR (ML20092P478). This change does not apply to Limerick, Unit 2.

3.3 Offsite Dose Impacts

The MSIV leakage limits are established to limit the radiological consequences for the following:

1. Control Room Operators (10 CFR 50.67)
2. An individual at the Exclusion Area Boundary (EAB) (10 CFR 50.67)
3. An individual at the Low Population Zone (LPZ) (10 CFR 50.67)
4. Individuals occupying the Technical Support Center (TSC) and the Security Center
5. Environmental Qualification (EQ) of equipment in areas of the plant potentially affected by MSIV leakage (10 CFR 50.49)

Switching from considering leakage through individual MSIVs to leakage through individual MSLs will not impact the off-site dose calculation; LM-0646 Revision 6 (Reference 4). The current method for calculating off-site dose assumes all MSL leakage is directed through the two shortest main steam lines and each MSL has one valve fail to close. This scenario bounds any case where leakage through a single MSIV is >100 scfh if the paired MSIVs, upstream or

downstream, has leakage <100 scfh. The total allowable leak rate for all four MSL will still be less than 200 scfh.

3.4 Conclusion

The proposed TS changes do not reduce the capability to adequately implement the PCLRTP and required LLRTs for Limerick MSLs. Using the lowest LLRT result values on each MSL is the value that is credited to the main steam primary containment isolation system design. Therefore, primary containment leakage rate determination via SR 4.6.1.2 for the MSIVs for TS LCO 3.6.1.2 is satisfied. By keeping the wording in TS LCO 3.6.1.2.c “not to exceed 200scf per hour for all four main steam lines,” ensures the MSIVs remain within their design to limit the effect of radioisotopes exiting the primary containment.

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

10 CFR 50, Appendix A, General Design Criterion 16—Containment design. Reactor containment and associated systems shall be provided to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as postulated accident conditions require.

10 CFR 50, Appendix A, General Design Criterion 56—Primary containment isolation. Each line that connects directly to the containment atmosphere and penetrates primary reactor containment shall be provided with containment isolation valves as follows, unless it can be demonstrated that the containment isolation provisions for a specific class of lines, such as instrument lines, are acceptable on some other defined basis:

- (1) One locked closed isolation valve inside and one locked closed isolation valve outside containment; or*
- (2) One automatic isolation valve inside and one locked closed isolation valve outside containment; or*
- (3) One locked closed isolation valve inside and one automatic isolation valve outside containment. A simple check valve may not be used as the automatic isolation valve outside containment; or*
- (4) One automatic isolation valve inside and one automatic isolation valve outside containment. A simple check valve may not be used as the automatic isolation valve outside containment.*

Isolation valves outside containment shall be located as close to the containment as practical and upon loss of actuating power, automatic isolation valves shall be designed to take the position that provides greater safety.

4.2 Precedent

The proposed TS modifications are consistent with NUREG-1433, Revision 5, "Standard Technical Specifications – General Electric BWR/4 Plants."

4.3 No Significant Hazards Consideration

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Constellation Energy Generation, LLC (CEG), proposes changes to the Technical Specifications (TS), Appendix A of Renewed Facility Operating License Nos. NPF-39 and NPF-85 for Limerick Generating Station (Limerick), Units 1 and 2, respectively.

The proposed changes involve the Main Steam Isolation Valve (MSIV) system leakage rate requirements. The proposed changes modify TS Limiting Operating Condition (LCO) 3.6.1.2 "Primary Containment Leakage", Action 'c'. to modify the requirement of determining primary containment leakage. Currently, primary containment leakage is determined by verifying the allowable leak rate through each individual MSIV and the total leak rate through all four Main Steam Lines (MSL). Leakage is determined by Local Leak Rate Testing (LLRT) for each MSIV. Leakage results are required to be less than or equal to 100 standard cubic feet per hour (scfh). The proposed change would verify the allowable leak rate through each MSL and the total leak rate through all four MSL. Leakage results from each MSL would be required to be less than or equal to 100 scfh when calculated in accordance with 10 CFR Part 50, Appendix J methodology. Subsequently, LCO 3.6.1.2 ACTION (With:) 'c' and (restore:) 'c' is also modified to align with the proposed changes to LCO 3.6.1.2.c. Lastly, the double asterisk and associated footnote for the 2020 Limerick, Unit 1 refueling outage (Li1R19) is removed due to it no longer being applicable.

The proposed TS modifications are consistent with NUREG-1433, Revision 5, "Standard Technical Specifications – General Electric BWR/4 Plants."

CEG has evaluated the proposed changes, using the criteria in 10 CFR 50.92, "Issuance of amendment," and has determined that the proposed changes do not involve a significant hazards consideration. The following information is provided to support a finding of no significant hazards consideration.

1. Do the proposed changes involve a significant increase in the probability, or consequences of an accident previously evaluated?

Response: No

The proposed changes modify TS LCO 3.6.1.2.c. "Primary Containment Leakage" to remove the requirement of determining primary containment leakage rate by counting leakage rates for individual MSIVs, to counting the minimum leakage rate from either MSIV for individual MSLs. Previously evaluated accident analyses bound any leakage through a single MSIV with >100 scfh when a paired MSIV, upstream or downstream, has leakage <100 scfh. By keeping the wording in TS LCO 3.6.1.2.c "not to exceed 200 scfh per hour for all four main

steam lines,” ensures the MSIVs remain within their design to limit the effect of radioisotopes exiting the primary containment.

Removing the double asterisk and subsequent footnote on Unit 1 TS pages does not impact any accident previously evaluated.

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

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

Response: No

There are no new or different accident results from implementing the proposed changes. The changes do not alter the design or function of primary containment isolation and main steam line isolation systems. When a single MSIV in a line exceeds Limerick’s action criteria for LLRT leakage results, a condition report is generated, and remediation is controlled by the system performance monitoring and analysis program.

Removing the double asterisk and subsequent footnote on Unit 1 TS pages does not create the possibility of any new or different accident previously evaluated.

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

3. Do the proposed changes involve a significant reduction in a margin of safety?

Response: No

The proposed changes will not cause a significant reduction in the margin of safety considering operability will be determined by the single main steam line in which there are two independent and redundant MSIVs in which only one is needed to maintain the safety function associated with main steam isolation. By keeping the wording in TS LCO 3.6.1.2.c “not to exceed 200 scf per hour for all four main steam lines,” ensures the MSIVs remain within their design to limit the effect of radioisotopes exiting the primary containment.

Removing the double asterisk and subsequent footnote on Unit 1 TS pages does not create significant reduction in a margin of safety.

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

Based on the above evaluation, CEG concludes that the proposed amendments present no significant hazards consideration under the standards set forth in 10 CFR 50.92, paragraph (c), and accordingly, a finding of "no significant hazards consideration" is justified.

4.4 Conclusions

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 amendments will not be inimical to the common defense and security or the health and safety of the public.

5.0 ENVIRONMENTAL CONSIDERATION

CEG has determined that the proposed changes would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed changes do not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed changes meet the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed changes.

6.0 REFERENCES

1. NUREG 1433, "Standard Technical Specifications," Revision 5, March 2021 (ADAMS Accession No. ML21272A357).
2. Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program" dated June 2023 (ADAMS Accession No. ML23073A154).
3. American National Standards Institute 56.8, "Containment System Leakage Testing Requirements" (ADAMS Accession No. ML11327A024).
4. LM-0646, "Re-analysis Of Loss of Coolant Accident (LOCA) Using Alternate Source Terms," Revision 6, dated September 2020.

ATTACHMENT 2

License Amendment Request

**Limerick Generating Station, Units 1 and 2
Docket Nos. 50-352 and 50-353**

**License Amendment Request for Modification to Technical Specification 3.6.1.2 and Main
Steam Isolation Valve Leakage Rate Requirements**

Markup of Proposed Technical Specification Pages

Unit 1 TS Page

3/4 6-2

3/4 6-3

Unit 2 TS Page

3/4 6-2

3/4 6-3

CONTAINMENT SYSTEMS

PRIMARY CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Primary containment leakage rates shall be limited to:

- a. An overall integrated leakage rate (Type A Test) in accordance with the Primary Containment Leakage Rate Testing Program.
- b. A combined leakage rate in accordance with the Primary Containment Leakage Rate Testing Program for all primary containment penetrations and all primary containment isolation valves that are subject to Type B and C tests, except for: main steam line isolation valves*, valves which are hydrostatically tested, and those valves where an exemption to Appendix J of 10 CFR 50 has been granted.
- c. ~~*Less than or equal to 100** scf per hour through any one main steam isolation valve not to exceed 200 scf per hour for all four main steam lines, when tested at P_t, 22.0 psig.~~
- d. A combined leakage rate of less than or equal to 1 gpm times the total number of containment isolation valves in hydrostatically tested lines which penetrate the primary containment, when tested at 1.10 P_a, 48.4 psig.

Insert: "line"

APPLICABILITY: When PRIMARY CONTAINMENT INTEGRITY is required per Specification 3.6.1.1.

ACTION:

With:

- a. The measured overall integrated primary containment leakage rate (Type A Test) exceeding the leakage rate specified in the Primary Containment Leakage Rate Testing Program, or
- b. The measured combined leakage rate exceeding the leakage rate specified in the Primary Containment Leakage Rate Testing Program for all primary containment penetrations and all primary containment isolation valves that are subject to Type B and C tests, except for: main steam line isolation valves*, valves which are hydrostatically tested, and those valves where an exemption to Appendix J of 10 CFR 50 has been granted, or
- c. The measured leakage rate exceeding 100** scf per hour through any one main steam ~~isolation valve~~, or exceeding 200 scf per hour for all four main steam lines, or
- d. The measured combined leakage rate for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment exceeding 1 gpm times the total number of such valves,

Insert: "line"

restore:

- a. The overall integrated leakage rate(s) (Type A Test) to be in accordance with the Primary Containment Leakage Rate Testing Program, and

*Exemption to Appendix J of 10 CFR Part 50.

~~**During Unit 1 Cycle 19, one main steam isolation valve may exceed 100 scf per hour provided the leakage is less than or equal to 105 scf per hour.~~

CONTAINMENT SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

- b. The combined leakage rate to be in accordance with the Primary Containment Leakage Rate Testing Program for all primary containment penetrations and all primary containment isolation valves that are subject to Type B and C tests, except for: main steam line isolation valves*, valves which are hydrostatically tested, and those valves where an exemption to Appendix J of 10 CFR 50 has been granted, and
- c. The leakage rate to $\leq 100^{**}$ scf per hour for any main steam ~~isolation valve~~ that exceeds 100~~**~~ scf per hour, and restore the combined maximum pathway leakage to ≤ 200 scf per hour, and
- d. The combined leakage rate for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment to less than or equal to 1 gpm times the total number of such valves,

Insert: "line"

prior to increasing the reactor coolant system temperature above 200°F.

SURVEILLANCE REQUIREMENTS

- 4.6.1.2 The primary containment leakage rates shall be demonstrated to be in accordance with the Primary Containment Leakage Rate Testing Program, or approved exemptions, for the following:
 - a. Type A Test
 - b. Type B and C Tests (including air locks)
 - c. Main Steam Line Isolation Valves
 - d. Hydrostatically tested Containment Isolation Valves

* Exemption to Appendix "J" to 10 CFR Part 50.

~~**During Unit 1 Cycle 19, one main steam isolation valve may exceed 100 scf per hour provided the leakage is less than or equal to 105 scf per hour.~~

CONTAINMENT SYSTEMS

PRIMARY CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Primary containment leakage rates shall be limited to:

- a. An overall integrated leakage rate (Type A Test) in accordance with the Primary Containment Leakage Rate Testing Program.
- b. A combined leakage rate in accordance with the Primary Containment Leakage Rate Testing Program for all primary containment penetrations and all primary containment isolation valves that are subject to Type B and C tests, except for: main steam line isolation valves*, valves which are hydrostatically tested, and those valves where an exemption to Appendix J of 10 CFR 50 has been granted.
- c. ~~*Less than or equal to 100 scf per hour through any one main steam isolation valve~~ not to exceed 200 scf per hour for all four main steam lines, when tested at P_t , 22.0 psig.
- d. A combined leakage rate of less than or equal to 1 gpm times the total number of containment isolation valves in hydrostatically tested lines which penetrate the primary containment, when tested at $1.10 P_a$, 48.4 psig.

Insert: "line"



APPLICABILITY: When PRIMARY CONTAINMENT INTEGRITY is required per Specification 3.6.1.1.

ACTION:

With:

- a. The measured overall integrated primary containment leakage rate (Type A Test) exceeding the leakage rate specified in the Primary Containment Leakage Rate Testing Program, or
- b. The measured combined leakage rate exceeding the leakage rate specified in the Primary Containment Leakage Rate Testing Program for all primary containment penetrations and all primary containment isolation valves that are subject to Type B and C tests, except for: main steam line isolation valves*, valves which are hydrostatically tested, and those valves where an exemption to Appendix J of 10 CFR 50 has been granted, or
- c. ~~The measured leakage rate exceeding 100 scf per hour through any one main steam isolation valve~~, or exceeding 200 scf per hour for all four main steam lines, or
- d. The measured combined leakage rate for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment exceeding 1 gpm times the total number of such valves,

Insert: "line"



restore:

- a. The overall integrated leakage rate(s) (Type A Test) to be in accordance with the Primary Containment Leakage Rate Testing Program, and

*Exemption to Appendix J of 10 CFR Part 50.

CONTAINMENT SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

- b. The combined leakage rate to be in accordance with the Primary Containment Leakage Rate Testing Program for all primary containment penetrations and all primary containment isolation valves that are subject to Type B and C tests, except for: main steam line isolation valves*, valves which are hydrostatically tested, and those valves where an exemption to Appendix J of 10 CFR 50 has been granted, and
- c. The leakage rate to ≤ 100 scf per hour for any main steam ~~isolation valve~~ that exceeds 100 scf per hour, and restore the combined maximum pathway leakage to ≤ 200 scf per hour, and
- d. The combined leakage rate for all containment isolation valves in hydrostatically tested lines which penetrate the primary containment to less than or equal to 1 gpm times the total number of such valves,

Insert: "line"

prior to increasing reactor coolant system temperature above 200°F.

SURVEILLANCE REQUIREMENTS

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- 4.6.1.2 The primary containment leakage rates shall be demonstrated to be in accordance with the Primary Containment Leakage Rate Testing Program, or approved exemptions, for the following:
 - a. Type A Test
 - b. Type B and C Tests (including air locks)
 - c. Main Steam Line Isolation Valves
 - d. Hydrostatically tested Containment Isolation Valves

*Exemption to Appendix "J" to 10 CFR Part 50.