AmerGen Energy Company, LLC
200 Exelon Way
Suite 345
Kennett Square, PA 19348

www.exeloncorp.com

An Exelon/British Energy Company

10 CFR 50.90

August 6, 2003
5928-03-20043

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

Subject: Technical Specification Change Request No. 319 – Reactor Building Tendon Surveillance Criteria & Miscellaneous Administrative Changes and Corrections

Three Mile Island, Unit 1 (TMI Unit 1)
Facility Operating License No. DPR-50
NRC Docket No. 50-289

In accordance with 10 CFR 50.4(b)(1), enclosed is Technical Specification Change Request No. 319.

The purpose of this Technical Specification Change Request is to revise TMI Unit 1 Technical Specifications to incorporate reference to the 10 CFR 50.55a, Codes and standards, criteria for the inservice reactor building tendon surveillance requirements, to incorporate an administrative change to Technical Specification Definition 1.22 to be consistent with 10 CFR 20.1003, as well as other minor administrative corrections from previously issued Technical Specification amendments.

Using the standards in 10 CFR 50.92, AmerGen Energy Company, LLC (AmerGen) has concluded that these proposed changes do not constitute a significant hazards consideration, as described in the enclosed analysis performed in accordance with 10 CFR 50.91(a)(1). Pursuant to 10 CFR 50.91(b)(1), a copy of this Technical Specification Change Request is provided to the designated official of the Commonwealth of Pennsylvania, Bureau of Radiation Protection, as well as the chief executives of the township and county in which the facility is located.

No new regulatory commitments are established by this submittal. NRC approval of this change is requested by August 6, 2004.

If any additional information is needed, please contact David J. Distel at (610) 765-5517.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

08-06-2003
Executed On

Michael P. Gallagher
Director, Licensing & Regulatory Affairs
AmerGen Energy Company, LLC

A001

Enclosures: (1) TMI Unit 1 Technical Specification Change Request No. 319 Evaluation of Proposed Changes
(2) TMI Unit 1 Technical Specification Change Request No. 319 Markup of Proposed Technical Specification Page Changes

cc: H. J. Miller, Administrator, USNRC Region I
D. Skay, USNRC Senior Project Manager, TMI Unit 1
C. W. Smith, USNRC Senior Resident Inspector, TMI Unit 1
D. Allard, Director, Bureau of Radiation Protection – PA Department of Environmental Resources
Chairman, Board of County Commissioners of Dauphin County
Chairman, Board of Supervisors of Londonderry Township
File No. 03031

ENCLOSURE 1

TMI Unit 1 Technical Specification Change Request No. 319

Evaluation of Proposed Changes

1.0 INTRODUCTION

This letter is a request to amend Operating License No. DPR-50.

The proposed changes would revise the Operating License to incorporate reference to the 10 CFR 50.55a, Codes and standards, criteria for reactor building tendon surveillance, to update Technical Specification Definition 1.22 to be consistent with 10 CFR 20.1003, and to incorporate minor administrative corrections from previously issued Technical Specification amendments. NRC approval of this change is requested by August 6, 2004.

AmerGen Energy Company, LLC (AmerGen) requests that the following changed replacement pages be inserted into the existing Technical Specifications:

Revised Technical Specification Pages: 1-7, 3-12, 3-14, 3-62c, 3-129, 4-35, and 4-37. The marked up pages showing the requested changes are provided in Enclosure 2.

2.0 DESCRIPTION OF PROPOSED AMENDMENT

TMI Unit 1 Technical Specification 4.4.2.1 currently specifies that the inservice tendon surveillance program for structural integrity and corrosion protection conform to the recommendations of NRC Regulatory Guide 1.35, "Inservice Surveillance of Ungrouted Tendons in Prestressed Concrete Containment Structures." The proposed Technical Specification change incorporates reference to the criteria of 10 CFR 50.55a, "Codes and standards," to Technical Specification 4.4.2.1 and the associated Bases Section, in addition to the existing criteria of Regulatory Guide 1.35. This change provides consistency between the Technical Specification tendon surveillance program criteria and the regulatory requirement specified in 10 CFR 50.55a(b)(2)(vi). This section of 10 CFR 50.55a invokes the effective addition and addenda of Subsection IWL of the ASME Section XI Code as modified and supplemented by the requirements in 10 CFR 50.55a(b)(2)(viii) for containment inservice inspection requirements.

Technical Specification Definition 1.22, MEMBER(S) OF THE PUBLIC, is revised to be consistent with the regulatory definition provided in 10 CFR 20.1003. The proposed change is administrative in nature and provides consistency between the TMI Unit 1 Technical Specification and the associated regulatory requirement.

TMI Unit 1 Technical Specification 3.1.6.6 and associated Bases, and Technical Specification 3.15.3 are revised to delete the incorrect references to Technical Specifications 3.22.2.1 and 3.22.2.4, respectively, and incorporate the correct references to the TMI Unit 1 Offsite Dose Calculation Manual (ODCM) or Technical Specification 6.8.4.b(7). Technical Specification 3.22.2.1 and 3.22.2.4 were previously eliminated in TMI Unit 1 Technical Specification Amendment No. 197, dated October 2, 1995, as requested by TMI Unit 1 Technical Specification Change Request (TSCR) No. 223, dated June 1, 1995. Deletion of the references to Technical Specifications 3.22.2.1 and 3.22.2.4 were inadvertently omitted from TSCR No. 223. TSCR No. 223 and associated Amendment No. 197 eliminated Technical Specification 3.22 in its

entirety and relocated the requirements of this portion of the Radiological Effluent Technical Specifications (RETS) to the TMI Unit 1 Offsite Dose Calculation Manual ODCM). The proposed change is administrative in nature and only corrects previous editorial omissions from a previously approved change.

Technical Specification 3.24 Bases, Reference (1) is revised to correct the title of the referenced Updated Final Safety Analysis Report (UFSAR) Section 7.3.2.2(c)10(d) from "Reactor Coolant Inventory Tracking System" to "Reactor Coolant Inventory Trending System", to be consistent with the TMI Unit 1 UFSAR. The proposed change is administrative in nature and only corrects a typographical error.

3.0 BACKGROUND

The TMI Unit 1 Reactor Building is a reinforced concrete structure with a cylindrical wall, a flat foundation mat, and a shallow dome roof. The cylindrical wall is prestressed with a post-tensioning system in the vertical and horizontal directions. The dome roof is prestressed using a three way post-tensioning system. The inside surface of the Reactor Building is lined with a carbon steel liner to ensure a high degree of leak tightness during operating and accident conditions. The prestressed concrete shell ensures that the structure has an elastic response to all loads and that the structure strains are limited such that the integrity of the liner is not compromised.

TMI Unit 1 Technical Specification 3.19.1 requires the periodic verification of containment structural integrity in accordance with the inservice tendon surveillance program for the reactor building prestressing system. Technical Specification 4.4.2.1 specifies the inservice tendon surveillance requirements to ensure the structural integrity of the reactor building in accordance with Technical Specification 3.19.1. The design of the TMI Unit 1 reactor building is described in UFSAR Section 5.2, and the reactor building prestressing system is described in UFSAR Section 5.2.2. The reactor building tendon stress surveillance program is described in detail in UFSAR Section 5.7.5. The TMI Unit 1 inservice tendon surveillance program conforms to the recommendations of NRC Regulatory Guide 1.35, "Inservice Surveillance of Ungrouted Tendons in Prestressed Concrete Containment Structures." The reference to NRC Regulatory Guide 1.35 was added to the TMI Unit Technical Specification in Amendment No. 187, dated July 14, 1994. The regulatory requirements of 10 CFR 50.55a(b)(2)(vi) were revised in 2000 to incorporate the 1995 Edition of the ASME Section XI Code with the 1996 Addenda of Subsection IWL as the optional codes and standards, and specifies the codes and standards for containment examinations as either the 1992 Edition with the 1992 Addenda or the 1995 Edition with the 1996 Addenda of Subsection IWL as modified and supplemented by the requirements in 10 CFR 50.55a(b)(2)(viii) when implementing the containment inservice inspection requirements of this section.

The TMI Unit 1 surveillance program for structural integrity and corrosion protection of the prestressing tendons also conforms to the requirements of ASME XI 1992 Edition with the 1992 Addenda of Subsection IWL, as invoked by 10 CFR 50.55a.

The additional proposed Technical Specification changes consist of an administrative change to provide consistency between Technical Specification Definition 1.22 and the definition contained in 10 CFR 20.1003, and administrative changes to delete an incorrect reference omitted from a previously approved Technical Specification amendment and to correct a typographical error.

4.0 TECHNICAL ANALYSIS

TMI Unit 1 Technical Specification 4.4.2.1 currently specifies that the inservice tendon surveillance program for containment structural integrity and corrosion protection conforms to the recommendations of NRC Regulatory Guide 1.35, "Inservice Surveillance of Ungrouted Tendons in Prestressed Concrete Containment Structures."

The TMI Unit 1 surveillance program for structural integrity and corrosion protection of the prestressing tendons also conforms to the requirements of ASME XI 1992 Edition with the 1992 Addenda of Subsection IWL, as invoked by 10 CFR 50.55a. The regulatory requirements of 10 CFR 50.55a(b)(2)(vi) were revised in 2000 to incorporate the 1995 Edition of the ASME Section XI Code with the 1996 Addenda of Subsection IWL as the optional codes and standards, and specifies the codes and standards for containment examinations as either the 1992 Edition with the 1992 Addenda or the 1995 Edition with the 1996 Addenda of Subsection IWL as modified and supplemented by the requirements in 10 CFR 50.55a(b)(2)(viii) when implementing the containment inservice inspection requirements of this section. The proposed Technical Specification change incorporates reference to the criteria of 10 CFR 50.55a, "Codes and standards," to Technical Specification 4.4.2.1 and the associated Bases Section, in addition to the existing criteria of Regulatory Guide 1.35. The containment examination and inspection requirements specified in 10 CFR 50.55a(b)(2)(vi) meet the same standards as the criteria specified in Regulatory Guide 1.35. This change provides consistency between the Technical Specification tendon surveillance program criteria and the regulatory requirement specified in 10 CFR 50.55a(b)(2)(vi) by invoking the applicable ASME XI Code Subsection IWL for TMI Unit 1 containment examinations and inspections.

The proposed Technical Specification change to Definition 1.22, MEMBER(S) OF THE PUBLIC, revises the existing Technical Specification definition to be consistent with the definition contained in 10 CFR 20.1003. This Technical Specification definition term is used in TMI Unit 1 Technical Specification 6.8.4.b, Radioactive Effluent Controls Program, which specifies the requirements and criteria for maintaining dose limits within regulatory requirements. This change is administrative and has no impact on the methodology or criteria incorporated in the TMI Unit 1 Radiological Effluent Controls Program or Offsite Dose Calculation Manual (ODCM). Therefore, this change has no impact on plant operations.

The additional proposed Technical Specification changes to delete an incorrect reference omitted from a previously approved Technical Specification amendment and to correct a typographical error are administrative changes only, and have no impact on plant operations.

Conclusion

The proposed changes to TMI Unit 1 Technical Specification 4.4.2.1 provide consistency between the Technical Specification tendon surveillance criteria and the regulatory requirements of 10 CFR 50.55a. This proposed change does not reduce the level of commitment or the effectiveness of the tendon surveillance program. The remaining proposed Technical Specification changes are only administrative in nature.

Consequently, the proposed Technical Specification changes will not adversely affect nuclear safety or safe plant operations.

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Consideration

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

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

Response: No.

The proposed revision to Technical Specification 4.4.2.1 and associated Bases Section incorporates reference to the criteria of 10 CFR 50.55a, "Codes and standards," in addition to the existing criteria of Regulatory Guide 1.35. This change provides consistency between the Technical Specification tendon surveillance program criteria and the regulatory requirement specified in 10 CFR 50.55a(b)(2)(vi). These regulatory requirements and the associated surveillance program ensure that the reactor building tendon prestressing system is capable of maintaining the structural integrity of the containment during operating and accident conditions. The reactor building prestressing system is not an initiator of any accident. Therefore, this change is not related to the probability of any accident previously evaluated. This change ensures that the containment tendon surveillance program addresses the appropriate regulatory criteria. This change does not result in any reduction in the effectiveness of the existing surveillance program. The tendon surveillance program will continue to ensure that the containment structure is capable of performing its intended safety function in the event of a design basis accident. Therefore, this change has no affect on the consequences of an accident previously evaluated.

The proposed changes to Technical Specification Definition 1.22, Technical Specification 3.1.6.6 and associated Bases, and Technical Specification 3.24 Bases are only administrative changes or corrections and have no affect on plant design or operations.

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

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

Response: No.

The proposed revision to Technical Specification 4.4.2.1 and associated Bases Section incorporates reference to the criteria of 10 CFR 50.55a, "Codes and

standards," in addition to the existing criteria of Regulatory Guide 1.35. This change provides consistency between the Technical Specification tendon surveillance program criteria and the regulatory requirement specified in 10 CFR 50.55a(b)(2)(vi). The proposed Technical Specification change does not result in any reduction in effectiveness of the existing tendon surveillance program. The tendon surveillance program will continue to satisfy the applicable Technical Specification and regulatory required criteria, thus ensuring that the containment structure will perform its design safety function. This change has no affect on the design and operation of plant structures, systems, and components. This change does not introduce any new accident precursors and does not involve any alterations to plant configurations, which could initiate a new or different kind of accident.

The proposed changes to Technical Specification Definition 1.22, Technical Specification 3.1.6.6 and associated Bases, and Technical Specification 3.24 Bases are only administrative changes or corrections and have no affect on plant design or operations.

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

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

Response: No.

The proposed revision to Technical Specification 4.4.2.1 and associated Bases Section incorporates reference to the criteria of 10 CFR 50.55a, "Codes and standards," in addition to the existing criteria of Regulatory Guide 1.35. This change provides consistency between the Technical Specification tendon surveillance program criteria and the regulatory requirement specified in 10 CFR 50.55a(b)(2)(vi). The containment examination and inspection requirements specified in 10 CFR 50.55a(b)(2)(vi) meet the same standards as the criteria specified in Regulatory Guide 1.35. The proposed Technical Specification change does not result in any reduction in effectiveness of the existing tendon surveillance program. The tendon surveillance program will continue to satisfy the applicable Technical Specification and regulatory required criteria, thus ensuring that the containment structure will perform its design safety function in accordance with existing margins of safety for containment integrity.

The proposed changes to Technical Specification Definition 1.22, Technical Specification 3.1.6.6 and associated Bases, and Technical Specification 3.24 Bases are only administrative changes or corrections and have no affect on plant design or operations.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, AmerGen Energy Company, LLC (AmerGen) concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

10 CFR 50, Appendix A, General Design Criteria (GDC) 53, "Provisions for Containment Testing and Inspection," requires, in part, that the reactor containment be designed to permit (1) periodic inspection of all important areas and (2) an appropriate surveillance program. Regulatory Guide 1.35, "Inservice Inspection of Ungrouted Tendons in Prestressed Concrete Containments," describes a basis acceptable to the NRC for developing an appropriate inservice inspection and surveillance program for ungrouted tendons in prestressed concrete containment structures of light-water-cooled reactors.

10 CFR 50.55a, "Codes and standards," requires, in part, that structures be tested and inspected to quality standards commensurate with the importance of the safety function to be performed. 10 CFR 50.55a(b)(2)(vi) invokes the effective addition and addenda of Subsection IWL of the ASME Section XI Code as modified and supplemented by the requirements in 10 CFR 50.55a(b)(2)(viii) for containment inservice inspection requirements.

10 CFR 20, Standards for Radiation Protection, specifies the regulatory standards for protection against ionizing radiation resulting from activities conducted under licenses issued by the NRC. 10 CFR 20.1003 specifies the regulatory definition of "Member of the public" for determination of acceptable radiological dose limits.

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

6.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment 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 amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9).

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

7.0 REFERENCES

1. USNRC Regulatory Guide 1.35, Rev. 3, "Inservice Inspection of Ungrouted Tendons in Prestressed Concrete Containments."

2. TMI Unit 1 Technical Specification Amendment No. 187, dated July 14, 1994.

ENCLOSURE 2

TMI Unit 1 Technical Specification Change Request No. 319

Markup of Proposed Technical Specification Page Changes

Revised TS Pages

1-7
3-12
3-14
3-62c
3-129
4-35
4-37

1.18 VENTILATION EXHAUST TREATMENT SYSTEM

A VENTILATION EXHAUST TREATMENT SYSTEM is any system designed and installed to reduce gaseous radioiodine or radioactive material in particulate form in effluent by passing ventilation or vent exhaust gases through charcoal absorbers and/or HEPA filters for the purpose of removing iodine or particulates from the gaseous exhaust system prior to the release to the environment. Engineered Safety Feature (ESF) atmospheric cleanup systems are not considered to be VENTILATION EXHAUST TREATMENT SYSTEMS.

1.19 PURGE - PURGING

PURGE or PURGING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating conditions in such a manner that replacement air or gas is required to purify the confinement.

1.20 VENTING

VENTING is the controlled process of discharging air as gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating conditions in such a manner that replacement air or gas is not provided. Vent used in system name does not imply a VENTING process.

1.21 REPORTABLE EVENT

A REPORTABLE EVENT shall be any of those conditions specified in 10 CFR 50.73.

1.22 MEMBER(S) OF THE PUBLIC

any individual except when that individual is receiving an occupational dose.

MEMBER(S) OF THE PUBLIC shall include ~~all persons who are not occupationally associated with the plant. This category does not include employees of the AmerGen Energy Company, LLC, AmerGen Energy Company, LLC contractors or vendors. Also excluded from this category are persons who enter the site to service equipment or to make deliveries.~~

1.23 SUBSTANTIVE CHANGES

SUBSTANTIVE CHANGES are those which affect the activities associated with a document or the document's meaning or intent. Examples of non-substantive changes are: (1) correcting spelling; (2) adding (but not deleting) sign-off spaces; (3) blocking in notes, cautions, etc.; (4) changes in corporate and personnel titles which do not reassign responsibilities and which are not referenced in the Appendix A Technical Specifications; and (5) changes in nomenclature or editorial changes which clearly do not change function, meaning or intent.

3.1.6 LEAKAGE

Applicability

Applies to reactor coolant leakage from the reactor coolant system and the makeup and purification system.

Objective

To assure that any reactor coolant leakage does not compromise the safe operation of the facility.

Specification

3.1.6.1 If the total reactor coolant leakage rate exceeds 10 gpm, the reactor shall be placed in hot shutdown within 24 hours of detection.

3.1.6.2 If unidentified reactor coolant leakage (excluding normal evaporative losses) exceeds one gpm or if any reactor coolant leakage is evaluated as unsafe, the reactor shall be placed in hot shutdown within 24 hours of detection.

3.1.6.3 If primary-to-secondary leakage through the steam generator tubes exceeds 1 gpm total for both steam generators, the reactor shall be placed in cold shutdown within 36 hours of detection.

3.1.6.4 If any reactor coolant leakage exists through a nonisolable fault in an RCS strength boundary (such as the reactor vessel, piping, valve body, etc., except the steam generator tubes), the reactor shall be shutdown, and cool-down to the cold shutdown condition shall be initiated within 24 hours of detection.

3.1.6.5 If reactor shutdown is required by Specification 3.1.6.1, 3.1.6.2, 3.1.6.3, or 3.1.6.4, the rate of shutdown and the conditions of shutdown shall be determined by the safety evaluation for each case.

3.1.6.6 Action to evaluate the safety implication of reactor coolant leakage shall be initiated within four hours of detection. The nature, as well as the magnitude, of the leak shall be considered in this evaluation. The safety evaluation shall assure that the exposure of offsite personnel to radiation is within the limits of ~~Specification 3.22.2.1.~~ the ODCM.

3.1.6.7 If reactor shutdown is required per Specification 3.1.6.1, 3.1.6.2, 3.1.6.3 or 3.1.6.4, the reactor shall not be restarted until the leak is repaired or until the problem is otherwise corrected.

3.1.6.8 When the reactor is critical and above 2 percent power, two reactor coolant leak detection systems of different operating principles shall be in operation for the Reactor Building with one of the two systems sensitive to radioactivity. The systems sensitive to radioactivity may be out-of-service for no more than 72 hours provided a sample is taken of the Reactor Building atmosphere every eight hours and analyzed for radioactivity and two other means are available to detect leakage.

Bases (Continued)

When reactor coolant leakage occurs to the intermediate cooling closed cooling water system, the leakage is indicated by both the intermediate cooling water monitor (RM-L9) and the intermediate cooling closed cooling water surge tank liquid level indicator, both of which alarm in the control room. Reactor coolant leakage to this receptor ultimately could result in radioactive gas leaking to the environment via the unit's auxiliary and fuel handling building vent by way of the atmospheric vent on the surge tank.

When reactor coolant leakage occurs to either of the decay heat closed cooling water systems, the leakage is indicated by the affected system's radiation monitor (RM-L2 or RM-L3 for system A and B, respectively) and surge tank liquid level indicator, all four of which alarm in the control room. Reactor coolant leakage to this receptor ultimately could result in radioactive gas leaking to the environment via the unit's auxiliary and fuel handling building vent by way of the atmospheric vent on the surge tank of the affected system.

Assuming the existence of the maximum allowable activity in the reactor coolant, a reactor coolant leakage rate of less than one gpm unidentified leakage within the reactor or auxiliary building or any of the closed cooling water systems indicated above, is a conservative limit on what is allowable before the limits of ~~Specification 3.22.2.1~~ the ODCM would be exceeded. This is shown as follows: if the specific activity of the reactor coolant is 130/E uCi/ml and the gaseous portion of it (as identified by UFSAR Table 11.1-2) is discharged to the environment via the unit's auxiliary and fuel handling building vent, the whole body dose rate resulting from this activity at the site boundary, using an annual average $X/Q = 4.5 \times 10^{-6}$ sec/m^3, is 0.34 rem/year. This may be compared with the gaseous effluent dose rate specified in Specification ~~3.22.2.1~~ 6.8.4.6(7) of 0.5 rem/year.

When the reactor coolant leaks to the secondary sides of either steam generator, all the gaseous components and a very small fraction of the ionic components are carried by the steam to the main condenser. The gaseous components exit the main condenser via the unit's vacuum pump which discharges to the condenser vent past the condenser off-gas monitor. The condenser off-gas monitor will detect any radiation, above background, within the condenser vent.

However, buildup of radioactive solids in the secondary side of a steam generator and the presence of radioactive ions in the condensate can be tolerated to only a small degree. Therefore, the appearance of activity in the condenser off-gas, or any other possible indications of primary to secondary leakage such as water inventories, condensate demineralizer activity, etc., shall be considered positive indication of primary to secondary leakage and steps shall be taken to determine the source and quantity of the leakage.

3.15.3 AUXILIARY AND FUEL HANDLING BUILDING AIR TREATMENT SYSTEM

Applicability

Applies to the Auxiliary and Fuel Handling Building Air Treatment System.

Objective

To specify the minimum availability and efficiency for the Auxiliary and Fuel Handling Building Air Treatment System.

Specification

3.15.3.1 The Auxiliary and Fuel Handling Building Air Treatment System including two pairs of exhaust fans (AH-E-14 A & B and AH-E-14 C & D) and four banks of exhaust filters (AH-F2A, B, C and D) shall be operable at all times during power operation, except as provided in 3.15.3.3 and specified in ~~3.22.2.4.~~ the ODCM.

3.15.3.2 The Auxiliary and Fuel Handling Building Air Treatment System is operable when its surveillance requirements are met and:

a. The results of the in-place DOP and halogenated hydrocarbon tests at design flows on HEPA filters and charcoal adsorber banks shall show <0.05% DOP penetration and <0.05% halogenated hydrocarbon penetration, except that the DOP test will be conducted with prefilters installed.

b. The results of laboratory carbon sample analysis shall show ≥90% radioactive methyl iodide decontamination efficiency when tested at 30°C, 95% R.H.

c. Each set of fans (AH-E-14 A & C and AH-E-14 B & D) shall be shown to operate within the range 100,580 CFM to 130,691 CFM (design flow is specified as 118,810 CFM).

3.15.3.3 a. With one pair of Auxiliary and Fuel Handling Building Air Treatment System exhaust fans (AH-E14A and C or AH-E14B and D) inoperable, verify that the redundant pair of exhaust fans is in operation and discharging through its HEPA filters and charcoal adsorbers within 8 hours, except as provided in 3.15.3.3.b.

b. From the date that the Auxiliary and Fuel Handling Building Air Treatment System becomes inoperable for any reason during power operation, the system (at least one pair of exhaust fans discharging through its HEPA filters and charcoal adsorbers) must be restored to operable condition within 7 days. If the system is not restored to operable within 7 days, prepare and submit a special report to the NRC within the next 30 days outlining the actions taken to restore operability and the plans and schedules for restoring the system to operable status.

The system is not a required system to mitigate evaluated accidents. It may be useful to have the system operable but there will be no adverse impact if it is not operable.

The LCO action statement provides the level of emphasis required for an information system.

The Reactor Vessel Water Level is a Regulatory Guide 1.97 Category 1 variable.

Reference

(1) UFSAR, Update Section 7.3.2.2(c)10(d) - "Reactor Coolant Inventory Trending ~~Tracking~~ System".

(2) USNRC Regulatory Guide 1.97.

4.4.2 Structural Integrity

Specification

4.4.2.1 Inservice Tendon Surveillance Requirements

The surveillance program for structural integrity and corrosion protection conforms to the recommendations of the U.S. NRC Regulatory Guide 1.35, "Inservice Surveillance of Ungrouted Tendons in Prestressed Concrete Containment Structures," and 10 CFR 50.55a, "Codes and standards." The detailed surveillance program for the prestressing system tendons shall be based on periodic inspection and mechanical tests to be performed on selected tendons.

4.4.2.1.1 DELETED

4.4.2.1.6 Reports

a. Within 3 months after the completion of each tendon surveillance a special report shall be submitted to the NRC Region I Administrator. This Report will include a section dealing with trends for the rate of prestress loss as compared to the predicted rate for the duration of the plant life (after an adequate number of surveillances have been completed).

b. Reports submitted in accordance with 10 CFR 50.73 shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, and any corrective actions taken.

4.4.3 DELETED

BASES

and 10 CFR 50.55a,

For ungrouted, post-tensioned tendons, this surveillance requirement ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the TMI-1 Reactor Building Structural Integrity Tendon Surveillance Program. Testing and frequency are consistent with the recommendations of Regulatory Guide 1.35, as described in the FSAR.

The modified visual inspection requirements pertaining to the dome tendons in the ring girder were implemented as a result of: 1) discovery of ring girder voids in 1977 and the potential that more undetected voids in the ring girder could exist, and 2) the number of dome tendon bearing areas having cracks appeared to be growing with time (Reference Amendment No. 59).

REFERENCES

(1) UFSAR, Section 5.7.5 - Tendon Stress Surveillances