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2CAN120401

December 20, 2004

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

SUBJECT: License Amendment Request
Proposed Technical Specification Changes Revising Containment Building
Structural Integrity Requirements
Arkansas Nuclear One, Unit 2
Docket No. 50-368
License No. NPF-6

REFERENCES: 1 Letter from NRC to Entergy dated September 9, 1999, Arkansas
Nuclear One, Unit No. 1, *Issuance Of Amendment Re: Reactor
Building Structural Integrity Surveillance Requirements (1CNA099901)*

Dear Sir or Madam:

Attached for your review and approval are proposed Technical Specification (TS) changes revising the requirements associated with Arkansas Nuclear One, Unit 2 (ANO-2) provisions for containment building testing and inspection. The proposed changes affect ANO-2 TS Limiting Conditions for Operation (LCO), Surveillance Requirements, and applicable Bases relevant to inservice inspection requirements for the containment structures and tendons. Specifically, ANO-2 has implemented a containment inspection program which is in compliance with the requirements of 10 CFR 50.55a. The program is based on the American Society of Mechanical Engineers (ASME) Section XI, Subsection IWL, as required by 10 CFR 50.55a(b)(2). Therefore, the proposed changes are being made to update the ANO-2 TSs to current requirements and format.

The proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1) using criteria in 10 CFR 50.92(c) and it has been determined that this change involves no significant hazards considerations. The bases for these determinations are included in Attachment 1. There are no commitments being made as a result of this request.

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The proposed change is neither exigent nor emergency however; your prompt review is requested. We request NRC approval by August 31, 2004. Once approved, the amendment shall be implemented within 90 days. If you have any questions or require additional information, please contact Steve A Bennett at 479-858-4626.

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 20, 2004.

Sincerely,



JSF/sab

Attachments:

1. Analysis of Proposed Technical Specification Change
2. Proposed Technical Specification Changes (mark-up)
3. Proposed Technical Specification Bases Changes (mark-up). For Information Only

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Attachment 1

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Analysis of Proposed Technical Specification Change

Analysis of Proposed Technical Specification Change

1.0 DESCRIPTION OF PROPOSED CHANGES

The proposed change revises the Technical Specifications (TS) for Arkansas Nuclear One, Unit 2 (ANO-2). The proposed changes modify the Containment Structural Integrity specification (TS 3.6.1.5) to delete the existing Surveillance Requirements (SR) and add a new SR to verify containment structural integrity in accordance with the Containment Tendon Surveillance Program. A new Containment Tendon Surveillance Program requirement is being added to TS 6.5.6 and a new reporting requirement is being added to TS 6.6.6. The proposed changes are generally consistent with NUREG 1432, *Standard Technical Specifications Combustion Engineering Plants*, Revision 3.

2.0 PROPOSED CHANGE

The proposed changes to the Arkansas Nuclear One, Unit 2 TS are as follows:

- The Surveillance Requirement for TS 3.6.1.5 has been modified to delete the previous structural integrity Limiting Condition for Operation (LCO) requirement and to add a new LCO to ensure the structural integrity of the containment shall be OPERABLE. The Action statement is modified to be consistent with the LCO. The existing SRs are being replaced with a single SR which states: *Verify containment structural integrity in accordance with the Containment Tendon Surveillance Program.*
- An administrative change is being made to TS page 3/4 6-9a to renumber it as page 3/4 6-9.
- A new *Containment Tendon Surveillance Program* is being added as TS 6.5.6 which states:
This program provides controls for monitoring any tendon degradation in prestressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The Containment Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with the ASME Code, Section XI, Subsection IWL and 10 CFR 50.55a. The provisions of SR 4.0.3 are applicable to the Containment Tendon Surveillance Program inspection frequencies.

This change meets the intent of TS 5.5.6 of NUREG-1432, Revision 3 but was modified as follows:

1. Regulatory Guide (RG) 1.35 is referenced in NUREG-1432, however, it has been superseded by 10 CFR 50.55a and ASME Code Section IWL for containment inspections. This is further discussed in Section 4.0 of this attachment.
2. The sentence regarding *the program shall include baseline measurements prior to initial operations* was deleted. This statement is no longer applicable to ANO-2 containment inspections.
3. *The provisions of SR 4.0.2* being applicable are not being included in TS 5.5.6. As discussed in the TS Bases of SR 3.0.2 of NUREG-1432, Revision 3, the requirements of regulations take precedence over the TSs. Therefore, SR 4.0.2 of the ANO-2 TSs is not applicable when referencing 10 CFR 50.55a as the inspection requirements.

- An administrative change is being made to TS 6.5.7 to move it to page 6-7.
- A new *Containment Inspection Report* is being added as TS 6.6.6 which states:
Any degradation exceeding the acceptance criteria of the containment structure detected during the tests required by the Containment Tendon Surveillance Program shall undergo an engineering evaluation within 60 days of the completion of the inspection surveillance. The results of the engineering evaluation shall be reported to the NRC within an additional 30 days of the time the evaluation is completed. The report shall include the cause of the condition that does not meet the acceptance criteria, the applicability of the conditions to the other unit, the acceptability of the concrete containment without repair of the item, whether or not repair or replacement is required and, if required, the extent, method, and completion date of necessary repairs, and the extent, nature, and frequency of additional examinations.

These reporting requirements are identical to those previously approved by the NRC in the ANO-1 Technical Specifications TS 5.6.6, *Reactor Building Inspection Report*. The guidance in NUREG-1432, Revision 3, is enveloped in the ANO-1 TSs and the proposed ANO-2 TSs.

- The revised Bases to TS 4.6.1.5 are being modified to be consistent with NUREG-1432, Revision 3 except for the reference to RG 1.35. These Bases are being provided for information only.

3.0 BACKGROUND

10 CFR 50.55a(b)(2) requires licensees to implement the requirements of Subsection IWL of the ASME Code. The notice in the Federal Register (61 FR 413030) recognized that the final rule had satisfactorily considered the previous guidance provided in Regulatory Guide 1.35, *Inservice Inspection of UngROUTed Tendons in Prestressed Concrete Containments*, Revision 3. ANO has established a Containment Inspection Program which includes both the tendon surveillance inspection requirements and the containment surface inspection requirements as required by Subsection IWL and 10 CFR 50.55a.

The containment building structure is discussed in the ANO-2 Safety Analysis Report (SAR) Section 3.8.1.1. The containment consists of three basic parts: (1) a flat circular base slab, (2) a right circular cylinder, and (3) a sphere-torus dome. The containment is constructed of reinforced concrete prestressed by post-tensioned tendons in the cylinder and the dome. Special reinforcing details are provided at discontinuities. The design of the containment is described more specifically in SAR Section 3.8.1.4.

The cylinder wall is prestressed by a system of horizontal and vertical tendons. The horizontal tendons are anchored at three buttresses equally spaced around the outside of the containment. The vertical tendons are anchored to the base slab at bottom and the ring girder at top. The dome is prestressed by three systems of dome tendons spaced at 120 degrees apart. The three-way dome tendons are anchored at the side of the ring girder. The tendons are installed in sheaths which are filled with a corrosion inhibitor. An access gallery is provided beneath the base slab for installation of the vertical tendons and inspection of bottom anchorage.

The interior of the containment is lined with steel plates welded together to form a leak tight barrier. Since the base slab liner plate is covered with concrete, leak chase channels are provided at seam welds, to allow for leak testing during normal operation.

4.0 TECHNICAL ANALYSIS

4.1 Removal of Existing ANO-2 TS 4.6.1.5 Surveillance Requirements

The current Surveillance Requirement (SR) 4.6.1.5.1, *Containment Tendons* requires the visual examination of twenty-one tendons per specified interval. In addition, the SR requires the satisfactory completion of the examinations performed at the 1, 3, and 5 year interval and subsequent 5 year intervals. The requirements of Surveillance 4.6.1.5.1 have been superseded by the requirements contained in Subsection IWL and 10 CFR 50.55a and have therefore been deleted.

The requirements of Specification 4.6.1.5.2 have been superseded by the requirements contained in Subsection IWL of the ASME Code, 10 CFR 50.55a, and have therefore been deleted.

The requirements of Surveillance 4.6.1.5.3 are redundant to the requirements for a Containment Inspection as contained in 10 CFR 50, Appendix J. ANO-2 TS Section already requires compliance with the *Containment Leakage Rate Testing Program* contained in TS 6.15. Therefore, this SR is not required.

4.2 Containment Tendon Surveillance Program

The portion of the ANO *Containment Inservice Inspection Program* which ensures the structural integrity of the containment through inspection of the tendon system is the ANO *Containment Tendon Surveillance Program*. Details of ANO *Containment Inservice Inspection Program* are provided in Entergy Procedure CEP-CII-007, *Arkansas Nuclear One Units 1 and 2 Containment Inservice Inspection (CII) Program Plan*. Compliance with TS 6.5.6 will be performed by application of this program.

The *Containment Tendon Surveillance Program*, inspection frequencies, and acceptance criteria are currently in accordance with the 1992 Edition, 1992 Addenda of ASME Code, Section XI, Subsection IWL and 10 CFR 50.55a. Entergy will update to later ASME Code Editions as required by 10 CFR 50.55a. However, Revision 3 of NUREG-1432 refers to a bracketed application of Regulatory Guide 1.35, Revision 1 for implementing a *Containment Tendon Surveillance Program*. Instead, Entergy is implementing the *Containment Tendon Surveillance Program* as an integral part of the Containment Inservice Inspection Program. This program is in compliance with the requirements of 10 CFR 50.55a(b)(2). The previous *Containment Tendon Surveillance Program* based on Regulatory Guide 1.35, Revision 1, has been superseded based on the issuance of Subsection IWL of the ASME Code.

Upon identification of any degradation reaching specific thresholds defined by Subsection IWL of the ASME Code, an Engineering Evaluation is required to determine the impact of the degradation on overall operability. If structural integrity cannot be established from the Engineering Evaluation, the Containment will be declared inoperable. By including

structural integrity in Specification 3.6.1.5, the unit would be required to restore structural integrity (Operability) within 1 hour or commence plant shutdown. Specification 3.6.1.5 currently allows a restoration period of 24 hours before unit shutdown must commence. The proposed change is, therefore, more restrictive and is generally consistent with that of NUREG-1432.

Containment Inspection Program Reporting

The reporting requirements under TS 6.6.6 will require an Engineering Evaluation be submitted to the NRC within 30 days of completion for any degradation exceeding the acceptance criteria of the containment structure detected during the tests required by the *Containment Tendon Surveillance Program*. The report shall include the cause of the condition that does not meet the acceptance criteria, the applicability of the conditions to the other unit, the acceptability of the concrete containment without repair of the item, whether or not repair or replacement is required and, if required, the extent, method, and completion date of necessary repairs, and the extent, nature, and frequency of additional examinations.

This reporting requirement establishes the timing for submittal of the information required by IWL-3310. This reporting requirement is also consistent with that contained in the ANO-1 Technical Specification 5.6.6 issued in ANO-1 License Amendment 199 (Ref. 1). Even though the wording is the same as the current ANO-1 TSs, it includes the considerations of NUREG 1432.

Based on the above, Subsection IWL of the ASME Code and 10 CFR 50.55a(b)(2) adequately address testing of the containment structure. Incorporating current requirements, the elimination of redundant regulations, and implementing administrative improvements provide technical specifications that are more appropriate. Because existing requirements are controlled by regulation, there is no reduction in safety and adequate control is maintained. ANO-2 has determined that the controls governing the concrete containment inspection provided by the ANO *Containment Inservice Inspection Program* are adequate and are in keeping with the philosophy associated with the NUREG-1432, Revision 3.

5.0 REGULATORY ANALYSIS

5.1 Safety Analysis Report (SAR) Review

ANO-2 SAR Section 3.8.1.7.3 *Inservice Tendon Surveillance* states:

The objective of the inservice tendon surveillance program during the lifetime of the plant is to provide a systematic means of assessing the continued quality of the post-tensioning system. The program is intended to furnish sufficient inservice historical evidence to provide a measure of confidence in the condition and the functional capability of the system, as well as an opportunity for timely corrective measures should adverse conditions, such as excessive corrosion, be detected. The inservice tendon surveillance program will be conducted in accordance with the requirements of ASME B&PV Code Section XI Subsection IWL as modified by 10 CFR 50.55a.

This statement represents required compliance with ASME B&PV Code Section XI Subsection IWL and is consistent with the proposed changes in Attachment 2 to this submittal.

General Design Criterion 53, *Provisions for Containment Testing and Inspection*, requires that the reactor containment shall be designed to permit (1) appropriate periodic inspection of all important areas, such as penetrations, (2) an appropriate surveillance program, and (3) periodic testing at containment design pressure of the leak tightness of penetrations which have resilient seals and expansion bellows. Entergy assures that the ANO-2 containment retains its ability to retain design basis pressure by the application of the ANO Containment Tendon Surveillance Program being required by 10 CFR 50.55a and the proposed TS.

5.2 Determination of No Significant Hazards Consideration

Entergy Operations, Inc. is proposing that the Arkansas Nuclear One Unit 2 (ANO-2) Operating License be amended to revise the requirements for ensuring containment structural integrity. The proposed changes modify the Containment Structural Integrity Technical Specification (TS) 3.6.1.5 to delete the existing Surveillance Requirements (SR) and add a new SR to verify containment structural integrity in accordance with the Containment Tendon Surveillance Program. A new Containment Tendon Surveillance Program is added to TS 6.5.6 and a new reporting requirement is being added to TS 6.6.6. The proposed changes are generally consistent with NUREG 1432, *Standard Technical Specifications Combustion Engineering Plants*, Revision 3.

An evaluation of the proposed change has been performed in accordance with 10 CFR 50.91(a)(1) regarding no significant hazards considerations using the standards in 10 CFR 50.92(c). A discussion of these standards as they relate to this amendment request follows:

Criterion 1 - Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated.

The containment building is not considered to be the initiator of any accident previously evaluated, but serves to mitigate accidents that could allow a release to the environment. The proposed TS change will provide for containment tendon inspections as required by 10 CFR 50.55a and prevent or inhibit release from the containment building as designed. Through appropriate inspections and implementation of corrective actions for any degradation discovered during the inspections that might lead to containment structural failures, the probability or consequences of accidents will not be increased.

Therefore, the removal of inspection details from the TS does not involve a significant increase in the probability or consequences of any accident previously evaluated.

Criterion 2 - Does Not Create the Possibility of a New or Different Kind of Accident from any Previously Evaluated.

The proposed change does not change the design, configuration, or method of operation of the plant. By implementing corrective actions for any degradation discovered during the required inspections of the containment, the possibility of a new or different kind of accident will not be created. Implementation of the requirements of Subsection IWL of the ASME code and those of 10 CFR 50.55a(b)(2) provide an equally acceptable containment inspection program.

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

Criterion 3 - Does Not Involve a Significant Reduction in the Margin of Safety.

The proposed change to incorporate the applicable requirements of Subsection IWL of the ASME Code and of 10 CFR 50.55a(b)(2) into the ANO-2 containment inspection program has no impact on any safety analysis assumptions. The addition of structural integrity requirements to ANO-2 TS Specification 3.6.1.5 imposes consistent requirements with those previously specified in the ANO-2 TSs. The requirements of ASME IWL are more restrictive than those currently provided in the existing ANO-2 technical specifications. As a result, the margin of safety is not reduced by the proposed change.

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

Based upon the reasoning presented above and the previous discussion of the amendment request, Entergy Operations has determined that the requested change does not involve a significant hazards consideration.

5.3 Environmental Considerations

The proposed amendment is confined to (i) changes to surety, insurance, and/or indemnity requirements, or (ii) changes to record keeping, reporting, or administrative procedures or requirements. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6.0 PRECEDENCE

The above proposed change for the addition of the reporting requirement is similar to that issued for ANO-1 in Reference 1. The change to meet the current revised standard Technical Specifications is similar to that approved for South Texas Project in the NRC Safety Evaluation dated March 19, 2002 and for the Virgil C. Summer Nuclear Station in Safety Evaluation dated September 6, 2000.

Attachment 2

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Proposed Technical Specification Changes (mark-up)

CONTAINMENT SYSTEMS

CONTAINMENT STRUCTURAL INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.5 The structural integrity of the containment shall be maintained at a level consistent with the acceptance criteria in Specification 4.6.1.5 OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

If the containment is not OPERABLE With the structural integrity of the containment not conforming to the above requirements, restore the structural integrity to within the limits within 24-1 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.5.4 Containment Tendons The containment tendons' structural integrity shall be demonstrated at the end of one, three and five years following the initial containment structural integrity test and at five-year intervals thereafter. The tendons' structural integrity shall be demonstrated by a visual examination (to the extent practical and without dismantling load bearing components of the anchorage) of a representative sample* of at least 21 tendons (6 dome, 5 vertical, and 10 hoop) and verifying no abnormal degradation. Unless there is evidence of abnormal degradation of the containment tendons during the first three tests of the tendons, the number of tendons examined during subsequent tests may be reduced to a representative sample of least 9 tendons (3 dome, 3 vertical and 3 hoop).

Verify containment structural integrity in accordance with the Containment Tendon Surveillance Program.

* For each inspection, the tendons shall be selected on a random but representative basis so that the sample group will change somewhat for each inspection; however, to develop a history of tendon performance and to correlate the observed data, one tendon from each group (dome, vertical, and hoop) may be kept unchanged after the initial selection.

CONTAINMENT SYSTEMS

LIMITING CONDITION FOR OPERATION

- ~~4.6.1.5.2 End Anchorages and Adjacent Concrete Surfaces—The structural integrity of the end anchorages of all tendons inspected pursuant to Specification 4.6.1.5.1 and the adjacent concrete surfaces shall be demonstrated by determining through inspection that no apparent changes have occurred in the visual appearance of the end anchorage or the concrete crack patterns adjacent to the end anchorages. Inspections of the concrete shall be performed during the Type A containment leakage rate tests (reference Specification 4.6.1.2) while the containment is at its maximum test pressure.~~
- ~~4.6.1.5.3 Containment Surfaces—The structural integrity of the exposed accessible interior and exterior surfaces of the containment, including the liner plate, shall be determined by a visual inspection of these surfaces and verifying no apparent changes in appearance or other abnormal degradation has occurred in accordance with the Containment Leakage Rate Testing Program.~~

CONTAINMENT SYSTEMS

CONTAINMENT VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.6 The containment purge supply and exhaust isolation valves shall be closed and handswitch keys removed.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With one or more containment purge supply and/or exhaust isolation valves not closed with the handswitch keys removed, place the valve(s) in the closed position with handswitch keys(s) removed within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.6 The containment purge supply and exhaust isolation valves shall be determined closed at least once per 31 days.

ADMINISTRATIVE CONTROLS

6.5.4 Radioactive Effluent Controls Program (continued)

- e. Determination of cumulative dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days. Determination of projected dose contributions from radioactive effluents in accordance with the methodology in the ODCM at least every 31 days.
- f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I;
- g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the site boundary conforming to the dose associated with 10 CFR 20, Appendix B, Table II, Column 1;
- h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;
- i. Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and
- j. Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC beyond the site boundary due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

The provisions of SR 4.0.2 and SR 4.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

6.5.5 Component Cyclic or Transient Limit Program

This program provides controls to track the SAR Section 5.2.1.5, cyclic and transient occurrences to ensure that components are maintained within the design limits.

6.5.6 ~~not-used~~ Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in prestressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The Containment Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with the ASME Code, Section XI, Subsection IWL and 10 CFR 50.55a.

The provisions of SR 4.0.3 are applicable to the Containment Tendon Surveillance Program inspection frequencies.

6.5.7 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel per the recommendation of Regulatory Position C.4.b of Regulatory Guide 1.14, Revision 1, August 1975. The volumetric examination per Regulatory Position C.4.b.1 will be performed on approximately 10-year intervals.

6.5.8 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components. The program shall include the following:

- a. Testing frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as follows:

ASME Code terminology for inservice testing activities		Required frequencies for performing inservice testing activities
Weekly		At least once per 7 days
Monthly		At least once per 31 days
Every 6 weeks		At least once per 42 days
Quarterly or every 3 months		At least once per 92 days
Semiannually or every 6 months		At least once per 184 days
Every 9 months		At least once per 276 days
Yearly or annually		At least once per 366 days
Biennially or every 2 years		At least once per 731 days

- b. The provisions of Specification 4.0.2 are applicable to the above required frequencies for performing inservice testing activities.
- c. The provisions of Specification 4.0.3 are applicable to inservice testing activities, and
- d. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any Technical Specification.

ADMINISTRATIVE CONTROLS

6.6.6 not-used Containment Inspection Report

Any degradation exceeding the acceptance criteria of the containment structure detected during the tests required by the Containment Tendon Surveillance Program shall undergo an engineering evaluation within 60 days of the completion of the inspection surveillance. The results of the engineering evaluation shall be reported to the NRC within an additional 30 days of the time the evaluation is completed. The report shall include the cause of the condition that does not meet the acceptance criteria, the applicability of the conditions to the other unit, the acceptability of the concrete containment without repair of the item, whether or not repair or replacement is required and, if required, the extent, method, and completion date of necessary repairs, and the extent, nature, and frequency of additional examinations.

6.6.7 Steam Generator Tube Surveillance Reports

- a. Following each inservice inspection of steam generator tubes the number of tubes plugged in each steam generator shall be reported to the Commission within 15 days.
- b. The complete results of the steam generator tube inservice inspection shall be reported within 12 months following the completion of the inservice inspection. This report shall include:
 1. Number and extent of tubes inspected.
 2. Location and percent of wall-thickness penetration for each indication of an imperfection.
 3. Identification of tubes plugged.
- c. Results of steam generator tube inspections which fall into Category C-3 shall be reported to the Commission as denoted by Table 6.5.9-2. Notification of the Commission will be made prior to resumption of plant operation (i.e., prior to entering Mode 4). The written report shall provide a description of investigations conducted to determine cause of the tube degradation and corrective measures taken to prevent recurrence.

6.6.8. Specific Activity

The results of specific activity analysis in which the primary coolant exceeded the limits of Specification 3.4.8. The following information shall be included: (1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded; (2) Results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while limit was exceeded the results of one analysis after the radioiodine activity was reduced to less than limit. Each result should include date and time of sampling and the radioiodine concentrations; (3) Clean-up system flow history starting 48 hours prior to the first sample in which the limit was exceeded; (4) Graph of the I-131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above the steady-state level; and (5) The time duration when the specific activity of the primary coolant exceeded the radioiodine limit.

Attachment 3

2CAN120401

Proposed Technical Specification Bases Changes (mark-up)

CONTAINMENT SYSTEMS

BASES

3/4.6.1.4 INTERNAL PRESSURE AND AIR TEMPERATURE

The limitations on containment internal pressure and average air temperature, assuming a worst case relative humidity value of 0 %, ensure that 1) the containment structure is prevented from exceeding its design negative pressure differential with respect to the outside atmosphere of 5.0 psi, 2) the containment peak pressure does not exceed the design pressure of 59 psig during design basis conditions, 3) the ECCS analysis assumptions are maintained, and 4) the containment cooling fan motor qualifications are maintained.

The limitation on containment average air temperature ensures that the containment liner plate temperature does not exceed the design temperature of 300°F during LOCA conditions. The containment temperature limit is consistent with the accident analyses. Figure 3.6-1 represents analysis limits and does not account for instrument error.

3/4.6.1.5 CONTAINMENT STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that the containment will withstand the maximum design pressure of 59 psig. ~~The visual examination of tendons, anchorages and containment surfaces and the Type A leakage tests of the Unit 2 containment in conjunction with the required surveillance activities of the Unit 1 containment are sufficient to demonstrate this capability.~~

For ungrouted, post tensioned tendons, the SR ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the Containment Tendon Surveillance Program. Testing and frequency are consistent with 10 CFR 50.55a(b)(2), and Subsection IWL of the ASME Code.

~~The surveillance requirements for demonstrating the containment's structural integrity are in compliance with the recommendations of Regulatory Guide 1.35 "Inservice Surveillance of Ungouted Tendons in Prestressed Concrete Containment Structures", January 1976.~~

3/4.6.1.6 CONTAINMENT VENTILATION SYSTEM

The containment purge supply and exhaust isolation valves are required to be closed during plant operation since these valves have not been demonstrated capable of closing during a LOCA. Maintaining these valves closed during plant operations ensures that excessive quantities of radioactive materials will not be released via the containment purge system.