

LIMITING CONDITION FOR OPERATION

SURVEILLANCE REQUIREMENT

(3) When adding the leakage rate measured during a Type C test to the results of a Type A test, the leakage rate shall be determined using minimum pathway analysis.

c. Frequency

(1) Three Type A tests shall be conducted during each ten year service interval at approximately equal intervals. The third test will be conducted when the plant is shutdown for the 10 year inservice inspections.*

(2) Retesting

(a) If a Type A test fails to meet the acceptance criteria of 4.3.3.b.(1), a Corrective Action Plan that focuses attention on the cause of the problem shall be developed and implemented. A Type A test that meets the requirements of 4.3.3.a.(3) and 4.3.3.b.(2) is required prior to plant start-up. A report of the Corrective Action following the failed Type A shall be submitted to the NRC for review and approval with the Containment Leak Test Report.

* The duration of the second ten year service interval will be extended to correspond with the end of the ISI interval.

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ATTACHMENT B

NIAGARA MOHAWK POWER CORPORATION
LICENSE NO. DPR-63
DOCKET NO. 50-220

Supporting Information and No Significant Hazards Considerations Analysis

Introduction

Niagara Mohawk Power Corporation (NMPC) proposes a one time only change to the Technical Specification surveillance 10 year service interval requirement for the Primary Containment Integrated Leakage Rate (Type A) Test, as specified in Surveillance Requirement 4.3.3.c.(1), extending the interval to correspond with the end of the current inservice inspection (ISI) interval. This interval extension will avoid a short period of approximately 22 months between successive tests by not performing a Type A test during the 1995 refueling outage (RFO13). If granted, this extension of the second interval from 10 years to approximately 14 years will result in a period of approximately 46 months between the second and third tests.

Description

This amendment proposes to extend the present Technical Specification Surveillance interval for the Type A test, as specified in Surveillance Requirement 4.3.3.c.(1), from 10 years to the end of the current ISI 10 year interval for performance of the third Type A test. This will recognize the extended outage that Nine Mile Point Unit 1 experienced during this interval and will bring the Type A testing interval in line with the 10 year plant inservice inspection interval.

Proposed Addition (Footnote) to 4.3.3.c.(1)

The duration of the second ten year service period will be extended to correspond with the end of the ISI interval.

Evaluation

The required interval and acceptance criteria for containment integrated leakage rate testing (ILRT) are specified in 10CFR50 Appendix J and also in Nine Mile Point Unit 1 Technical Specification Surveillance Requirement 4.3.3.c.(1), which states that:

"Three Type A tests shall be conducted during each ten year service interval at approximately equal intervals. The third test will be conducted when the plant is shutdown for the 10 year plant inservice inspections."

During the first 10 year Appendix J service interval (1974-1984), Type A tests were conducted as required by Appendix J. Due to the lengthy outage for the replacement of reactor recirculation piping, the first ISI 10 year interval was extended to June 1986. This action



decoupled the Type A test schedule from the ISI schedule. As a result of the extended refueling outage (December 1987 to July 1990) the second 10 year ISI interval was extended to December 1998. This extension of the ISI interval is permitted by ASME Section XI, IWA-2430:

"(c) Each inspection interval may be decreased or extended (but not cumulatively) by as much as 1 year. For power units that are out of service continuously for 6 months or more, the inspection interval during which the outage occurred may be extended for a period equivalent to the outage."

Unlike ASME Section XI, 10CFR50 Appendix J does not contain any provision for adjusting the 10 year service period for extended outages. During the current second 10 year Appendix J service interval, two Type A tests have already been performed (May 1990 and April 1993). The current 10 year service period ends in December 1994. The next refueling outage (RFO13) is scheduled for February 1995. Performing the Type A test at the end of the 1995 refueling outage would result in only 22 months of operation since the last Type A test. Appendix J could be interpreted to require another Type A test during the last outage in the ISI interval. Niagara Mohawk proposes to extend the second 10 year service period to correspond with the current ISI interval. Due to Nine Mile Point Unit 1's 24 month operating cycle, the final refueling outage of the current ISI interval is scheduled for 1997 (RFO14).

This Technical Specification amendment recognizes the lengthy outage that the plant experienced during the second 10 year service period and results in an interval of approximately 46 months between successive Type A tests. It also brings the Appendix J Type A test schedule back into alignment with the 10 year ISI interval.

The limitation on the primary containment leakage rate ensures that the containment leakage will not exceed L_a , the value assumed in the accident analyses at the peak accident pressure. L_a for Nine Mile Point Unit 1 is defined as 1.5% of the containment dry air mass per 24 hours at a pressure of 35 psig. The Type A test is performed at 22 psig with a maximum allowable leakage, L_t , of 1.19 weight percent per day. The maximum allowable operational leakage rate, $0.75 L_t$, shall be met prior to power operation. Plant and industry experience has shown that the largest contribution to the overall leakage rate comes from the containment penetrations and not the containment barrier. Penetration and valve leakage rates are measured by the performance of Type B and C tests. The surveillance schedule for these tests would not be altered by this request. Furthermore, the two most recent Type A test data for 1990 and 1993 show that the "as left" leakage rates (0.4634 %wt/day and 0.4634 %wt/day, respectively) were well within the acceptance limit of $0.75 L_t$ (0.892 %wt/day).

There have been no permanent or temporary modifications to the containment structure, liner, or penetrations since the last Type A test that could adversely affect the Type A test results. No modifications that require a Type A test are planned prior to the 1997 refueling outage, when the next Type A test will be performed under this exemption. Any unplanned modifications to the containment prior to the next scheduled Type A test would be subject to the special testing requirements of Section IV.A of Appendix J. In addition, there have been no pressure or temperature excursions in the containment which could have adversely affected containment integrity.



Furthermore the technical specifications of several plants, including Nine Mile Point Unit 2, prescribe a test interval of 40 +/- 10 months. The proposed extension is consistent with these specifications.

Conclusion

NMPC proposes a one time only change to the 10 year service interval requirement for a Primary Containment Integrated Leakage Rate Test as specified in Surveillance Requirement 4.3.3.c.(1), from an interval of 10 years to an interval of 14 years. This interval extension will avoid the necessity of performing a Type A test only 22 months after the last Type A test. Actual results of the previous Type A tests for the current service period showed no degradation in the ability of the containment to maintain leakage at or below the required limits. Type B and C Local Leak Rate Tests will continue to be performed at the frequency required by Nine Mile Point Unit 1's Technical Specifications, with repairs being performed as necessary. The absence of containment degradation and the performance of Type B and C testing provides reasonable assurance that an extension for the 10 year service period by approximately 4 years will not jeopardize the ability of the containment to maintain leakage at or below the required Type A limits.

Therefore, there is reasonable assurance that the operation of Nine Mile Point Unit 1 in the proposed manner will not endanger the public health and safety.

10CRF50.91 requires that at the time a licensee requests an amendment, it must provide to the Commission its analysis using the standards in 10CFR50.92 concerning the issue of no significant hazards consideration. Therefore, in accordance with 10CFR50.91, the following analysis has been performed:

The operation of Nine Mile Point Unit 1, in accordance with the proposed amendment, will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed extension of the Type A test 10 year service interval does not increase the chances for a previously analyzed accident to occur. Containment integrity is required for the mitigation of accident consequences. Furthermore, containment leakage is not the precursor to any analyzed event. Extension of the Type A test surveillance interval will not affect the containment's ability to maintain leakage below that assumed in the safety analysis. The previous Type A test was completed successfully and no plant modifications have been made or are planned (other than those that require Type B or C testing) since the last test which could directly affect the test results. Type B and C testing of individual penetrations has been satisfactory and will continue to be performed in accordance with the Technical Specifications. There have been no pressure or temperature excursions in the containment which could have adversely affected containment integrity. Hence, the ability of containment to maintain leakage within the Type A test limits will be maintained.

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



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The operation of Nine Mile Point Unit 1, in accordance with the proposed amendment, will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed one time extension of the Type A test 10 year service interval will not affect the test methodology or acceptance criteria nor does it alter the physical containment structure or boundary in any way. There will be no addition or removal of plant hardware. No new plant operating modes are being introduced. Results of the previous Type A tests are well below allowable limits, and there have been no plant modifications (other than those that require Type B or C testing) since the last test nor are any planned, that could directly impact the previous Type A test results.

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

The operation of Nine Mile Point Unit 1, in accordance with the proposed amendment, will not involve a significant reduction in a margin of safety.

Safety margins are established through the Nine Mile Point Unit 1 safety analyses as reflected in the Technical Specification Limiting Conditions for Operation. Containment leak rates assumed in the safety analyses are not increased by the proposed change to the Type A test 10 year service interval. The acceptance criteria which must be met to verify that leak rates remain within assumed values will not be changed.

Although the test frequency will be relaxed for the one time extension, no plant modifications have been made nor are planned which would invalidate the last Type A leak test results which confirm acceptable containment integrity. Furthermore, Type B and C testing of individual penetrations has been satisfactory and will continue to be performed in accordance with the Technical Specifications to assure that containment integrity is maintained.

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



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