ATTACHMENT A

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

PROPOSED CHANGES TO TECHNICAL SPECIFICATIONS

Replace existing pages 108, 110, 115, 143, 145 and 150 with the attached revised pages. These pages have been retyped in their entirety with marginal markings to indicate changes to the text. Remove pages 111 through 114 and 146 through 149.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT

3.2.7 REACTOR COOLANT SYSTEM ISOLATION VALVES

Applicability:

Applies to the operating status of the system of isolation valves on lines connected to the reactor coolant system.

Objective:

To assure the capability of the reactor coolant system isolation valves to minimize reactor coolant loss in the event of a rupture of a line connected to the nuclear steam supply system.

Specification:

a. During power operating conditions whenever the reactor head is on, all reactor coolant system isolation valves on lines connected to the reactor coolant system shall be operable except as specified in "b" below.

b. In the event any isolation valve becomes inoperable the system shall be considered operable provided at least one valve in each line having an inoperable valve is in the mode corresponding to the isolated condition, except as noted in Specification 3.1.1.e.

4.2.7 REACTOR COOLANT SYSTEM ISOLATION VALVES

Applicability:

Applies to the periodic testing requirement for the reactor coolant system isolation valves.

Objective:

To assure the capability of the reactor coolant system isolation valves to minimize reactor coolant loss in the event of a rupture of a line connected to the nuclear steam supply system.

Specification:

The reactor coolant system isolation valves surveillance shall be performed as indicated below.

a. At least once per operating cycle the operable automatically initiated power-operated isolation valves shall be tested for automatic initiation and closure times.

b. At least once per quarter all normally open power-operated isolation valves (except the feedwater and main-steam-line power-operated isolation valves) shall be fully closed and reopened.

PAGES 110 THROUGH 114 ARE NOT USED

BASES FOR 3.2.7 AND 4.2.7 REACTOR COOLANT SYSTEM ISOLATION VALVES

The list of reactor coolant isolation valves is contained in the procedure governing controlled lists and have been removed from the Technical Specifications per Generic Letter 91-08. Revisions will be processed in accordance with Section 6.0, "Administrative Controls."

Double isolation valves are provided in lines which connect to the reactor coolant system to assure isolation and minimize reactor coolant loss in the event of a line rupture. The specified valve requirements assure that isolation is already accomplished with one valve shut or provide redundancy in an open line with two operative valves. Except where check valves are used as one or both of a set of double isolation valves, the isolation valves shall be capable of automatic initiation. Valve closure times are selected to minimize coolant losses in the event of the specific line rupturing and are procedurally controlled. Using the longest closure time on the main-steam-line valves following a main-steam-line break (Section XV C.1.0)(1), the core is still covered by the time the valves close. Following a specific system line break, the cleanup and shutdown cooling closing times will upon initiation from a low-low level signal limit coolant loss such that the core is not uncovered. Feedwater flow would quickly restore coolant levels to prevent clad damage. Closure times are discussed in Section VI-D.1.0(1).

The valve operability test intervals are based on periods not likely to significantly affect operations, and are consistent with testing of other systems. Results obtained during closure testing are not expected to differ appreciably from closure times under accident conditions as in most cases, flow helps to seal the valve.

The test interval of once per operating cycle for automatic initiation results in a failure probability of 1.1×10^{-7} (Fifth Supplement, p. 115)(2) that a line will not isolate. More frequent testing for valve operability results in a more reliable system.

(1) UFSAR
(2) FSAR

LIMITING CONDITION FOR OPERATION

3.3.4 PRIMARY CONTAINMENT ISOLATION VALVES

Applicability:

Applies to the operating status of the system of isolation valves on lines open to the free space of the primary containment.

Objective:

To assure that potential leakage paths from the primary containment in the event of a loss-of-coolant accident are minimized.

Specification:

a. Whenever the reactor coolant system temperature is greater than 215°F, all containment isolation valves on lines open to the free space of the primary containment shall be operable except as specified in 3.3.4b below.

b. In the event any isolation valve becomes inoperable the system shall be considered operable provided that within 4 hours at least one valve in each line having an inoperable valve is in the mode corresponding to the isolated condition.

SURVEILLANCE REQUIREMENT

4.3.4 PRIMARY CONTAINMENT ISOLATION VALVES

Applicability:

Applies to the periodic testing requirements of the primary containment isolation valve system.

Objective:

To assure the operability of the primary containment isolation valves to limit potential leakage paths from the containment in the event of a loss-of-coolant accident.

Specification:

The primary containment isolation valves surveillance shall be performed as indicated below.

a. At least once per operating cycle the operable isolation valves that are power operated and automatically initiated shall be tested for automatic initiation and closure times.

b. At least once per quarter all normally open power operated isolation valves shall be fully closed and reopened.

PAGES 145 THROUGH 149 ARE NOT USED

BASES FOR 3.3.4 AND 4.3.4 PRIMARY CONTAINMENT ISOLATION VALVES

The list of primary containment isolation valves is contained in the procedure governing controlled lists have been removed from the Technical Specifications per Generic Letter 91-08. Revisions will be processed in accordance with Section 6.0, "Administrative Controls."

Double isolation valves are provided on lines penetrating the primary containment and open to the free space of the containment. Closure of one of the valves in each line would be sufficient to maintain the integrity of the pressure suppression system. Except where check valves are used as one or both of a set of double isolation valves, the isolation valves shall be capable of automatic initiation. Automatic initiation is required to minimize the potential leakage paths from the containment in the event of a loss-of-coolant accident. Details of the isolation valves are discussed in Section VI-D.(1) For allowable leakage rate specification, see Section 3.3.3/4.3.3.

For the design basis loss-of-coolant accident fuel rod perforation would not occur until the fuel temperature reached 1700°F which occurs in approximately 100 seconds.(2) The required closing times for all primary containment isolation valves are established to prevent fission product release through lines connecting to the primary containment.

For reactor coolant system temperatures less than 215°F, the containment could not become pressurized due to a loss-of-coolant accident. The 215°F limit is based on preventing pressurization of the reactor building and rupture of the blowout panels.

The test interval of once per operating cycle for automatic initiation results in a failure probability of 1.1×10^{-7} that a line will not isolate (Fifth Supplement, p. 115).(3) More frequent testing for valve operability results in a more reliable system.

In addition to routine surveillance as outlined in Section VI-D.1.0(1) each instrument-line flow check valve will be tested for operability. All instruments on a given line will be isolated at each instrument. The line will be purged by isolating the flow check valve, opening the bypass valves, and opening the drain valve to the equipment drain tank. When purging is sufficient to clear the line of non-condensibles and crud the flow-check valve will be cut into service and the bypass valve closed. The main valve will again be opened and the flow-check valve allowed to close. The flow-check valve will be reset by closing the drain valve and opening the bypass valve depressurizing part of the system. Instruments will be cut into service after closing the bypass valve. Repressurizing of the individual instruments assures that flow-check valves have reset to the open position.

(1) UFSAR
(2) Nine Mile Point Nuclear Generation Station Unit 1 Safer/Corecool/GESTR-LOCA Loss of Coolant Accident Analysis, NEDC-31446P, Supplement 3, September, 1990.
(3) FSAR

ATTACHMENT B

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

SUPPORTING INFORMATION AND
NO SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS

INTRODUCTION

Generic Letter 91-08, "Removal of Component Lists from Technical Specifications," provides guidance for the preparation of a license amendment to relocate component lists from Technical Specifications (TS). The letter states that relocation of component lists is acceptable because it does not alter existing TS requirements on those components to which they apply. Any change to a component list contained in a procedure governing controlled lists relocated from the TS per Generic Letter 91-08 is subject to the requirements specified in Section 6.0, "Administrative Controls," of the TS. The relocation of the component list from TS permits administrative control of changes to the list without processing a license amendment. Based on the above, Niagara Mohawk proposes to relocate Tables 3.2.7, "Reactor Coolant System Isolation Valves," and 3.3.4, "Primary Containment Isolation Valves," and references thereto. Also, appropriate Bases changes have been included in this application.

Amendment No. 140, which revised the isolation valve tables, was issued by the Commission on April 12, 1993. This amendment updated the TS to conform to the requirements of 10 CFR 50 Appendix J. Niagara Mohawk's Appendix J testing program is based upon the Safety Evaluation Report (SER) attached to that amendment. Proposed changes to the Bases to reflect issuance of the amendment are also included in this application. In addition, the reference to 60 second closure time associated with all primary containment isolation valves has been removed since some are greater based on SERs previously issued by the NRC.

DESCRIPTION

This amendment relocates Tables 3.2.7 and 3.3.4, which are lists of reactor coolant and primary containment isolation valves, respectively, in accordance with Generic Letter 91-08, as described above. Also, the notes associated with the tables have been relocated since they do not alter the testing requirements of Appendix J, but clarify where the Commission has granted exemptions, except for the double asterisk (**) note associated with operability of the scram discharge vent and drain valves. This note is included in Specification 3.2.7.b.

Amendment No. 140 incorporates earlier safety evaluations associated with our 10 CFR 50 Appendix J leak testing program. References 4 and 5 of the Bases for Specification 3.3.4/4.3.4 have been deleted based upon this amendment.

The Bases for Specification 3.3.4/4.3.4 reference to 60 seconds for closure time associated with all primary containment isolation valves has been removed since closure times greater than 60 seconds are used in certain systems. These closure times are based on prior Commission SERs.

PROPOSED CHANGES TO TECHNICAL SPECIFICATIONS

Niagara Mohawk Power Corporation (NMPC) proposes the following changes. The proposed changes are noted by marginal markings.

(1) Technical Specification 3.2.7.b currently states:

"In the event any isolation valve becomes inoperable the system shall be considered operable provided at least one valve in each line having an inoperable valve is in the mode corresponding to the isolated condition."

NMPC proposes to modify the above Technical Specification to state:

"In the event any isolation valve becomes inoperable the system shall be considered operable provided at least one valve in each line having an inoperable valve is in the mode corresponding to the isolated condition, except as noted in Specification 3.1.1.e."

(2) Technical Specification 4.2.7 "Specification" currently states:

"The reactor coolant system isolation valves surveillance test shall be performed as indicated below (see Table 3.2.7)."

NMPC proposes to modify the above Technical Specification to state:

"The reactor coolant system isolation valves surveillance shall be performed as indicated below."

(3) Technical Specification 4.3.4, "Specification" currently states:

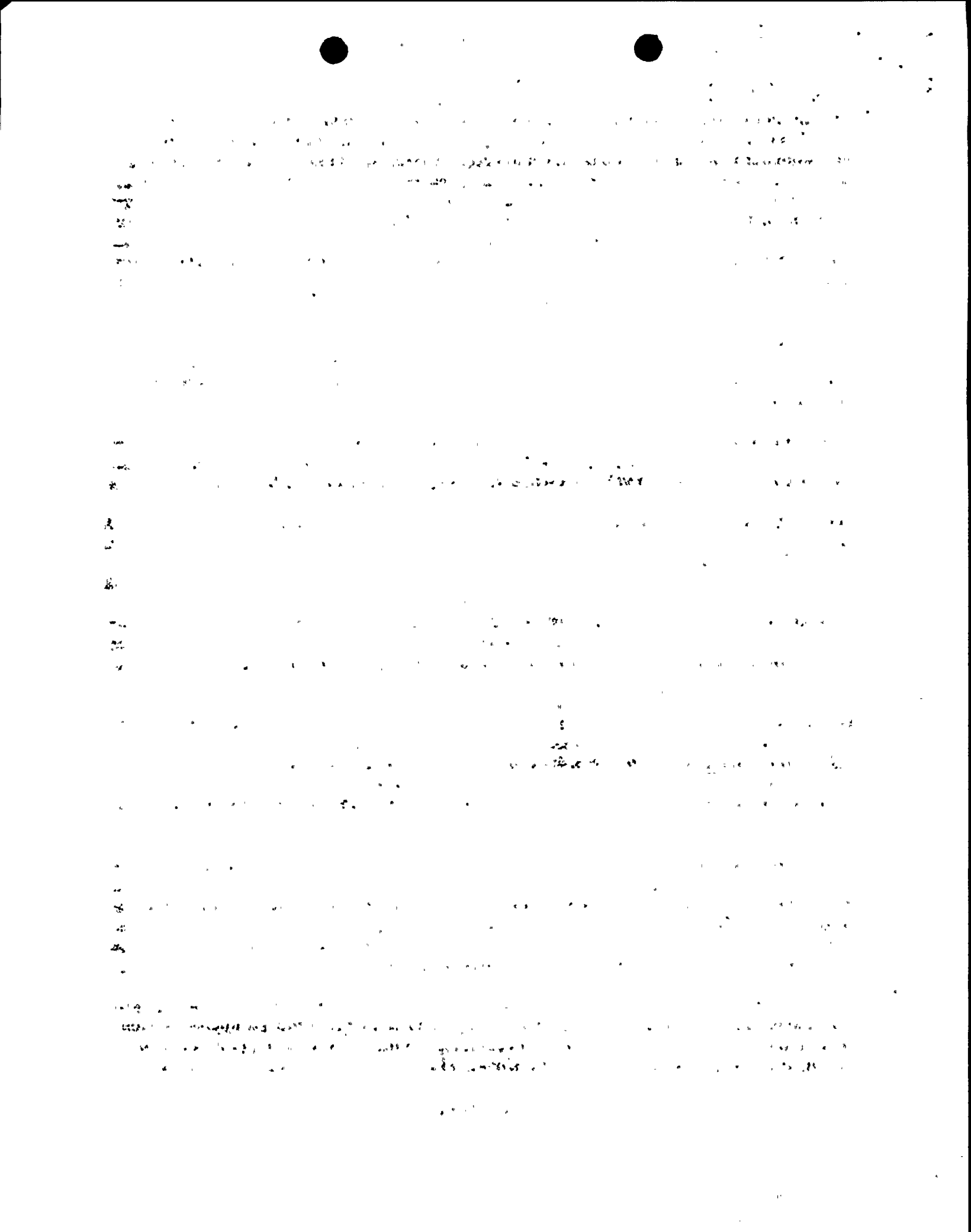
"The primary containment isolation valves surveillance shall be performed as indicated (see Table 3.3.4)."

NMPC proposes to modify the above Technical Specification to state:

"The primary containment isolation valves surveillance shall be performed as indicated below."

(4) Bases for 3.2.7 and 4.2.7, "Reactor Coolant System Isolation Valves," currently state:

"Double isolation valves are provided in lines which connect to the reactor coolant system to assure isolation and minimize reactor coolant loss in the event of a line rupture. The specified valve requirements assure that isolation is already accomplished with one valve



shut or provide redundancy in an open line with two operative valves. Except where check valves are used as one or both of a set of double isolation valves, the isolation valves shall be capable of automatic initiation and the closure times presented in Table 3.2.7. These closure times were selected to minimize coolant losses in the event of the specific line rupturing. Using the longest closure time on the main-steam-line valves following a main-steam-line break (Section XV C.1.0)(1), the core is still covered by the time the valves close. Following a specific system line break, the cleanup and shutdown cooling closing times will upon initiation from a low-low level signal limit coolant loss such that the core is not uncovered. Feedwater flow would quickly restore coolant levels to prevent clad damage. Closure times are discussed in Section VI-D.1.0(1).

The valve operability test intervals are based on periods not likely to significantly affect operations, and are consistent with testing of other systems. Results obtained during closure testing are not expected to differ appreciably from closure times under accident conditions as in most cases, flow helps to seal the valve.

The test interval of once per operating cycle for automatic initiation results in a failure probability of 1.1×10^{-7} (Fifth Supplement, p. 115)(2) that a line will not isolate. More frequent testing for valve operability results in a more reliable system."

(1) UFSAR
(2) FSAR

NMPC proposes to modify the above Bases to state:

"The list of reactor coolant isolation valves is contained in the procedure governing controlled lists and have been removed from the Technical Specifications per Generic Letter 91-08. Revisions will be processed in accordance with Section 6.0, "Administrative Controls."

Double isolation valves are provided in lines which connect to the reactor coolant system to assure isolation and minimize reactor coolant loss in the event of a line rupture. The specified valve requirements assure that isolation is already accomplished with one valve shut or provide redundancy in an open line with two operative valves. Except where check valves are used as one or both of a set of double isolation valves, the isolation valves shall be capable of automatic initiation. Valve closure times are selected to minimize coolant losses in the event of the specific line rupturing and are procedurally controlled. Using the longest closure time on the main-steam-line valves following a main-steam-line break (Section XV C.1.0)(1), the core is still covered by the time the valves close. Following a specific system line break, the cleanup and shutdown cooling closing times will upon initiation from a low-low level signal limit coolant loss such that the core is not uncovered. Feedwater flow would quickly restore coolant levels to prevent clad damage. Closure times are discussed in Section VI-D.1.0(1).

The valve operability test intervals are based on periods not likely to significantly affect operations, and are consistent with testing of other systems. Results obtained during closure testing are not expected to differ appreciably from closure times under accident conditions as in most cases, flow helps to seal the valve.

The test interval of once per operating cycle for automatic initiation results in a failure probability of 1.1×10^{-7} (Fifth Supplement, p. 115)[2] that a line will not isolate. More frequent testing for valve operability results in a more reliable system.

(1) UFSAR
(2) FSAR

(5) Bases for 3.3.4 and 4.3.4, "Primary Containment Isolation Valves," currently state:

"Double isolation valves are provided on lines penetrating the primary containment and open to the free space of the containment. Closure of one of the valves in each line would be sufficient to maintain the integrity of the pressure suppression system. Except where check valves are used as one or both of a set of double isolation valves, the isolation closure times are presented in Table 3.3.4. Automatic initiation is required to minimize the potential leakage paths from the containment in the event of a loss-of-coolant accident. Details of the isolation valves are discussed in Section VI-D.[1] For allowable leakage rate specification, see Section 3.3.3/4.3.3.

For the design basis loss-of-coolant accident fuel rod perforation would not occur until the fuel temperature reached 1700°F which occurs in approximately 100 seconds.[2] A required closing time of 60 seconds for all primary containment isolation valves will be adequate to prevent fission produce release through lines connecting to the primary containment.

For reactor coolant system temperatures less than 215°F, the containment could not become pressurized due to a loss-of-coolant accident. The 215°F limit is based on preventing pressurization of the reactor building and rupture of the blowout panels.

The test interval of once per operating cycle for automatic initiation results in a failure probability of 1.1×10^{-7} that a line will not isolate (Fifth Supplement, p. 115).[3] More frequent testing for valve operability results in a more reliable system.

In addition to routine surveillance as outlined in Section VI-D.1.0[1] each instrument-line flow check valve will be tested for operability. All instruments on a given line will be isolated at each instrument. The line will be purged by isolating the flow check valve, opening the bypass valves, and opening the drain valve to the equipment drain tank. When purging is sufficient to clear the line of non-condensibles and crud the flow-check valve will be cut into service and the bypass valve closed. The main valve will again be opened and the flow-check valve allowed to close. The flow-check valve will be reset by closing the drain valve and opening the bypass valve depressurizing part of the system. Instruments will be cut into service after closing the bypass valve. Repressurizing of the individual instruments assures that flow-check valves have reset to the open position.

An in-depth review of the NMP1 design and operation relative to Appendix J requirements has evaluated the various system/valving configurations.[4] The results of the evaluation and subsequent clarifications[5] are reflected in this specification and its bases.

(1) UFSAR
(2) Nine Mile Point Nuclear Generation Station Unit 1 Safer/Corecool/GESTR-LOCA Loss of Coolant Accident Analysis, NEDC-31446P, Supplement 3, September, 1990.
(3) FSAR
(4) NRC Safety Evaluation Report, dated May 6, 1988, "Regarding Proposed Technical Specifications and Exemption Requests Related to Appendix J."
(5) Niagara Mohawk Letter dated July 28, 1988, "Clarifications, Justifications & Conformance with 10CFR50 Appendix J SER."

NMPC proposes to modify the above Bases to state:

"The list of primary containment isolation valves is contained in the procedure governing controlled lists have been removed from the Technical Specifications per Generic Letter 91-08. Revisions will be processed in accordance with Section 6.0, "Administrative Controls."

Double isolation valves are provided on lines penetrating the primary containment and open to the free space of the containment. Closure of one of the valves in each line would be sufficient to maintain the integrity of the pressure suppression system. Except where check valves are used as one or both of a set of double isolation valves, the isolation valves shall be capable of automatic initiation. Automatic initiation is required to minimize the potential leakage paths from the containment in the event of a loss-of-coolant accident. Details of the isolation valves are discussed in Section VI-D.(1) For allowable leakage rate specification, see Section 3.3.3/4.3.3.

For the design basis loss-of-coolant accident fuel rod perforation would not occur until the fuel temperature reached 1700°F which occurs in approximately 100 seconds.(2) The required closing times for all primary containment isolation valves are established to prevent fission product release through lines connecting to the primary containment.

For reactor coolant system temperatures less than 215°F, the containment could not become pressurized due to a loss-of-coolant accident. The 215°F limit is based on preventing pressurization of the reactor building and rupture of the blowout panels.

The test interval of once per operating cycle for automatic initiation results in a failure probability of 1.1×10^{-7} that a line will not isolate (Fifth Supplement, p. 115).(3) More frequent testing for valve operability results in a more reliable system.

In addition to routine surveillance as outlined in Section VI-D.1.0(1) each instrument-line flow check valve will be tested for operability. All instruments on a given line will be isolated at each instrument. The line will be purged by isolating the flow check valve, opening the bypass valves, and opening the drain valve to the equipment drain tank. When purging is sufficient to clear the line of non-condensibles and crud the flow-check valve will be cut into service and the bypass valve closed. The main valve will again be opened and the flow-check valve allowed to close. The flow-check valve will be reset by closing the drain valve and opening the bypass valve depressurizing part of the system.

Instruments will be cut into service after closing the bypass valve. Repressurizing of the individual instruments assures that flow-check valves have reset to the open position.

(1) UFSAR
(2) Nine Mile Point Nuclear Generation Station Unit 1 Safer/Corecool/GESTR-LOCA Loss of Coolant Accident Analysis, NEDC-31446P, Supplement 3, September, 1990.
(3) FSAR

EVALUATION

Tables 3.2.7 and 3.3.4, which are part of TS Section 3.2.7 and 3.3.4, contain a list of reactor coolant and primary containment isolation valves respectively. These have been relocated into a procedure governing controlled lists removed from TS per Generic Letter 91-08. This procedure is subject to the requirements of Section 6.0, "Administrative Controls," of the TS. Therefore, since this is consistent with the guidance contained in Generic Letter 91-08, adequate means exist to control changes to these lists. This proposed change does not alter the testing to be performed on these valves in any form. Since stroke times were included in the tables, they have also been relocated. Additionally, all references to these tables have been deleted and the Bases revised to reflect this. The proposed Bases changes associated with the above-mentioned sections of the TS have also been revised to reference the issuance of license Amendment No. 140 and are administrative in nature. Reference to the 60 second closure time associated with all primary containment isolation valves has been removed since previously approved license amendments have authorized times greater than 60 seconds.

CONCLUSION

Relocation of Tables 3.2.7 and 3.3.4 does not involve any change to the testing requirements associated with these valves. Additionally, closure times that were also listed have been relocated. Therefore, this relocation has no effect on either the Limiting Conditions for Operation or the Surveillance Requirements associated with them. The proposed deletion of 60 second closure time associated with all primary containment isolation valves are purely administrative in nature since it reflects changes authorized by previously approved license amendments.

Relocation of the tables along with any associated references thereto and including them in a procedure provides flexibility in that a license amendment would not need to be processed to effect a change. Incorporating these lists into a procedure governing controlled lists relocated from TS per Generic Letter 91-08 under the change control provision in Section 6.0, "Administrative Controls," of the Technical Specifications provides adequate control. Additionally, since these tables are also included in the Updated Final Safety Analysis Report (UFSAR), they will also be controlled under 10 CFR 50.59. The proposed changes have no impact on the operation or design of any plant structures, systems, or components.

For these reasons, there is reasonable assurance that the changes that would be authorized by the proposed amendment can be implemented without endangering the health and safety of the public and is consistent with common defense and security.

NO SIGNIFICANT HAZARDS CONSIDERATION

10 CFR 50.91 requires that at the time a licensee requests an amendment, it must provide to the Commission its analysis using the standards in 10 CFR 50.92 concerning the issue of no significant hazards consideration. Therefore, in accordance with 10 CFR 50.91, 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 amendment does not involve a physical change to any system, structure, or component that affects the probability or consequences of any accident or malfunction of equipment important to safety.

Relocation of the component lists to plant procedures and the Updated FSAR is in accordance with Generic Letter 91-08. This change does not alter the existing operability or surveillance requirements for the components to which they apply. The proposed changes are under the change control provisions in Section 6.0, "Administrative Controls," of the Technical Specifications. The changes associated with the Bases for Specification 3.2.7/4.2.7 and 3.3.4/4.3.4 are consistent with the issuance of a prior license amendments. Since the proposed amendment does not affect the operation or testing of any plant systems or components, it will have no impact on the probability or consequences of accidents or malfunctions previously evaluated.

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 changes to Technical Specification 3.2.7/4.2.7, 3.3.4/4.3.4 and Bases do not introduce any new modes of plant operation or new accident precursors, involve any physical alterations to plant configurations, or make changes to system setpoints which could initiate a new or different kind of accident. The proposed changes relocate Reactor Coolant Primary Containment Isolation Valve Tables 3.2.7 and 3.3.4 into a procedure governing controlled lists removed from TS per Generic Letter 91-08 under the change control provisions in Section 6.0, "Administrative Controls," of the Technical Specifications. The testing associated with these valves remains unchanged, therefore, it will not affect system or component operability. In addition, the removal of generic reference to the 60 second closure time is consistent with previously issued license amendments and has no impact on either the Limiting Condition for Operation or Surveillance Requirement. Therefore, the proposed changes do not create the possibility of a new or different kind of 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.

The Technical Specification Limiting Conditions for Operation and Surveillance Requirements for the valves listed in Tables 3.2.7 and 3.3.4 are not being altered. The valve lists will be incorporated into a procedure governing controlled lists removed from TS per Generic Letter 91-08. This is controlled by Section 6.0, "Administrative Procedures."

In addition, removal of generic reference to the 60 second closure time is consistent with previously issued license amendments and has no impact on either the Limiting Conditions for Operation or Surveillance Requirements. Therefore, the proposed changes will not involve a significant reduction in a margin of safety.