

Enclosure 3

Edwin I. Hatch Nuclear Plant - Unit 2
Request to Revise Technical Specifications:
Increase in Allowable MSIV Leakage Rate and
Deletion of the MSIV Leakage Control System

Page Change Instructions

The proposed changes to the Plant Hatch Unit 2 Technical Specifications will be incorporated as follows:

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CONTAINMENT SYSTEMS

PRIMARY CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Primary containment leakage rates shall be limited to:

- a. An overall integrated leakage rate of:
 1. $\leq L_a$, 1.2 percent by weight of the containment air per 24 hours at P_a , 57.5 psig, or
 2. $\leq L_t$, 0.849 percent by weight of the containment air per 24 hours at a reduced pressure of P_t , 28.8 psig.
- b. A combined leakage rate of:
 1. $\leq 0.60 L_a$ for all penetrations and valves, except for main steam isolation valves, subject to Type B and C tests when pressurized to P_a , and
 2. $\leq 0.009 L_a$ for the following penetrations*:
 - (a) Main steam condensate drain, penetration 8;
 - (b) Deleted
 - (c) Reactor water cleanup, penetration 14;
 - (d) Equipment drain sump discharge, penetration 18;
 - (e) Floor drain sump discharge, penetration 19; and
 - (f) Chemical drain sump discharge, penetration 55;
 - (g) Deleted
- c. ¹⁰⁰~~11.5~~ scf per hour for any one main steam isolation valve when tested at 28.8 psig.**

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

* Potential bypass leakage paths.

** Exemption to Appendix J of 10 CFR 50.

CONTAINMENT SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION:

With:

- a. the measured overall integrated containment leakage rate exceeding $0.75 L_a$ or $0.75 L_t$, as applicable, or,
- b. the measured combined leakage rate for all penetrations and valves, except main steam isolation valves, subject to Type B and C tests exceeding $0.60 L_a$ or with the measured combined leakage rate for all specified potential bypass leakage path penetrations exceeding $0.009 L_a$, or
- c. the main steam isolation valve measured leak rate exceeding ~~11.5~~ ¹⁰⁰ scf per hour for any one MSIV,

Restore:

- a. the overall integrated leakage rate(s) to $< 0.75 L_a$ or $< 0.75 L_t$ as applicable, and
- b. the combined leakage rate for all penetrations and valves, except main steam isolation valves, subject to Type B and C tests to $\leq 0.60 L_a$ and the combined leakage rate for the specified potential bypass leakage path penetrations to $\leq 0.009 L_a$, and
- c. the leakage rate to ≤ 11.5 scf per hour for any ~~one~~ main steam isolation valve _{that exceeds 100 scf per hour,}

Prior to increasing the reactor coolant temperature above 212°F.

SURVEILLANCE REQUIREMENTS

4.6.1.2 The containment leakage rates shall be demonstrated at the following test schedule and shall be determined in conformance with the criteria specified in Appendix J of 10 CFR 30 using the methods and provisions of ANSI N45.4 - (1972):

- a. Three Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted at 40 ± 10 month intervals during shutdown at either P_a , 57.5 psig or at P_t , 28.8 psig during each 10-year service period. The third test of each set shall be conducted during the shutdown for the 10-year plant in-service inspection.

CONTAINMENT SYSTEMS

MSIV LEAKAGE CONTROL SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.4 Two MSIV Leakage Control System (LCS) subsystems shall be OPERABLE:

APPLICABILITY: CONDITIONS 1, 2 and 3.

ACTION:

- a. With one MSIV leakage control system subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. The provisions of Specification 3.0.4 are not applicable.
- b. With both MSIV leakage control system subsystems inoperable, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

SURVEILLANCE REQUIREMENTS

DELETE

4.6.1.4 Each MSIV Leakage Control System subsystem shall be demonstrated OPERABLE:

- a. At least once per 31 days by starting the blower from the control room and operating the blower for at least 15 minutes.
- b. Each COLD SHUTDOWN, if not performed within the previous 92 days, by cycling each bleeder valve through at least one complete cycle of full travel.
- c. At least once per 18 months by performance of a functional test which includes simulated actuation of the subsystem throughout its operating sequence and verifying that each automatic valve actuates to its correct position and the blower starts and develops:
 1. For inboard MSIVs - 100 scfm at a vacuum of 60" H₂O, and
 2. For outboard MSIVs - 240 scfm at a vacuum of 50" H₂O.

TABLE 3.5.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVES

VALVE FUNCTION AND NUMBER

B. MANUAL ISOLATION VALVES(*)

1. Main steam isolation valves - DELETE
2E32-F001B, F, K, P
2. RHR return to recirculation loop isolation valves
2E11-F015A, B
3. LOCA H₂ recombiner isolation valves
2T49-F002 A, B
2T49-F004 A, B
4. Core spray isolation valves
2E21-F005A, B
5. Service air isolation valves
2P51-F651
2P51-F513
6. RBCCW supply and return isolation valves
2P42-F051
2P42-F052

(*) includes power operated valves which do not isolate automatically.

CONTAINMENT SYSTEMS

BASES

3/4.6.1.4 MSIV LEAKAGE CONTROL SYSTEM

DELETE

~~Calculated doses resulting from the maximum leakage allowance for the main steam line isolation valves in the postulated LOCA situations would be a small fraction of the 10 CFR Part 100 guidelines, provided the main steam line system from the isolation valves up to and including the turbine condenser remains intact. Operating experience has indicated that degradation has occasionally occurred in the leak tightness of the MSI's such that the specified leakage requirements have not always been maintained continuously. The requirement for the leakage control system will reduce the untreated leakage from the isolation valves when isolation of the primary system and containment is required.~~

3/4.6.1.5 PRIMARY CONTAINMENT STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the primary containment steel vessel will be maintained comparable to the original design standards for the life of the unit. Structural integrity is required to ensure that the vessel will withstand the maximum pressure of 57.5 psig in the event of a LOCA. A visual inspection in conjunction with Type A leakage tests is sufficient to demonstrate this capability.

3/4.6.1.6 PRIMARY CONTAINMENT INTERNAL PRESSURE

The limitations on primary containment internal pressure ensure that the containment peak pressure of 57.5 psig does not exceed the maximum allowable internal pressure of 62 psig during LOCA conditions or that the external pressure does not exceed the design maximum external pressure of 2 psig. The limit of 0.75 psig for initial positive containment pressure will limit the total pressure to 57.5 psig which is less than the maximum allowable internal pressure and is consistent with the accident analysis.

3/4.6.1.7 DRYWELL AVERAGE AIR TEMPERATURE

The limitation on drywell average air temperature ensures that the containment peak air temperature does not exceed the design temperature of 340°F during LOCA conditions and is consistent with the accident analysis.

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CONTAINMENT SYSTEMS

PRIMARY CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Primary containment leakage rates shall be limited to:

- a. An overall integrated leakage rate of:
 - 1. $\leq L_a$, 1.2 percent by weight of the containment air per 24 hours at P_a , 57.5 psig, or
 - 2. $\leq L_t$, 0.849 percent by weight of the containment air per 24 hours at a reduced pressure of P_t , 28.8 psig.
- b. A combined leakage rate of:
 - 1. $\leq 0.60 L_a$ for all penetrations and valves, except for main steam isolation valves, subject to Type B and C tests when pressurized to P_a , and
 - 2. $\leq 0.009 L_a$ for the following penetrations*:
 - (a) Main steam condensate drain, penetration 8;
 - (b) Deleted
 - (c) Reactor water cleanup, penetration 14;
 - (d) Equipment drain sump discharge, penetration 18;
 - (e) Floor drain sump discharge, penetration 19; and
 - (f) Chemical drain sump discharge, penetration 55;
 - (g) Deleted
- c. 100 scf per hour for any one main steam isolation valve when tested at 28.8 psig.**

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

*Potential bypass leakage paths.

**Exemption to Appendix J of 10 CFR 50.

CONTAINMENT SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION:

With:

- a. the measured overall integrated containment leakage rate exceeding $0.75 L_a$ or $0.75 L_t$, as applicable, or,
- b. the measured combined leakage rate for all penetrations and valves, except main steam isolation valves, subject to Type B and C tests exceeding $0.60 L_a$ or with the measured combined leakage rate for all specified potential bypass leakage path penetrations exceeding $0.009 L_a$, or
- c. the main steam isolation valve measured leak rate exceeding 100 scf per hour for any one MSIV,

Restore:

- a. the overall integrated leakage rate(s) to $< 0.75 L_a$ or $< 0.75 L_t$ as applicable, and
- b. the combined leakage rate for all penetrations and valves, except main steam isolation valves, subject to Type B and C tests to $\leq 0.60 L_a$ and the combined leakage rate for the specified potential bypass leakage path penetrations to $\leq 0.009 L_a$, and
- c. the leakage rate to ≤ 11.5 scf per hour for any main steam isolation valve that exceeds 100 scf per hour,

Prior to increasing the reactor coolant temperature above 212°F.

SURVEILLANCE REQUIREMENTS

4.6.1.2 The containment leakage rates shall be demonstrated at the following test schedule and shall be determined in conformance with the criteria specified in Appendix J of 10 CFR 50 using the methods and provisions of ANSI N45.4 - (1972):

- a. Three Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted at 40 ± 10 month intervals during shutdown at either P_a , 57.5 psig or at P_t , 28.8 psig during each 10-year service period. The third test of each set shall be conducted during the shutdown for the 10-year plant inservice inspection.

CONTAINMENT SYSTEMS

MSIV LEAKAGE CONTROL SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.4 Deleted

TABLE 3.6.3-1 (Continued)

PRIMARY CONTAINMENT ISOLATION VALVESVALVE FUNCTION AND NUMBERB. MANUAL ISOLATION VALVES^(a)

1. Deleted
2. RHR return to recirculation loop isolation valves
2E11-FO15A, B
3. LOCA H₂ recombiner isolation valves
2T49-FO02 A, B
2T49-FO04 A, B
4. Core spray isolation valves
2E21-FO05A, B
5. Service air isolation valves
2P51-F651
2P51-F513
6. RBCCW supply and return isolation valves
2P42-F051
2P42-F052

^(a)Includes power operated valves which do not isolate automatically.

CONTAINMENT SYSTEMS

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3/4.6.1.4 MSIV LEAKAGE CONTROL SYSTEM

Deleted

3/4.6.1.5 PRIMARY CONTAINMENT STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the primary containment steel vessel will be maintained comparable to the original design standards for the life of the unit. Structural integrity is required to ensure that the vessel will withstand the maximum pressure of 57.5 psig in the event of a LOCA. A visual inspection in conjunction with Type A leakage tests is sufficient to demonstrate this capability.

3/4.6.1.6 PRIMARY CONTAINMENT INTERNAL PRESSURE

The limitations on primary containment internal pressure ensure that the containment peak pressure of 57.5 psig does not exceed the maximum allowable internal pressure of 62 psig during LOCA conditions or that the external pressure does not exceed the design maximum external pressure of 2 psig. The limit of 0.75 psig for initial positive containment pressure will limit the total pressure to 57.5 psig which is less than the maximum allowable internal pressure and is consistent with the accident analysis.

3/4.6.1.7 DRYWELL AVERAGE AIR TEMPERATURE

The limitation on drywell average air temperature ensures that the containment peak air temperature does not exceed the design temperature of 340°F during LOCA conditions and is consistent with the accident analysis.