

Attachment I to JPN-93-028

PROPOSED TECHNICAL SPECIFICATION CHANGES  
REVISION OF TABLE 4.7-2

(JPTS-89-038)

(JPTS-92-009)

New York Power Authority

JAMES A. FITZPATRICK NUCLEAR POWER PLANT

Docket No. 50-333

DPR-59

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TABLE 4.7-2

## EXCEPTION TO TYPE C TESTS

CONTAINMENT PENETRATION	PENETRATION FUNCTION	VALVE NUMBER	LOCAL LEAK RATE TEST PERFORMED
35C	Traversing In-Core Probe "C"	07EV-104C	This valve is an explosive shear valve which cannot be Type C tested.
35D	Traversing In-Core Probe "B"	07EV-104B	This valve is an explosive shear valve which cannot be Type C tested.
37A 37B 37C 37D	Control Rod Drive (below piston)	03SOV-120 03SOV-123 03AOV-126 03CRD-138	Will not be tested as lines (there are 137 lines, with 31 to 38 lines per penetration, and each has the four indicated valves) are sealed by process fluid.
38A 38B 38C 38D	Control Rod Drive (above piston)	03SOV-121 03SOV-122 03AOV-127	Will not be tested as lines (there are 137 lines, with 31 to 38 lines per penetration, and each has the three indicated valves) are sealed by process fluid.
39A	RHR Cont. Spray	10MOV-31A	This valve will be tested in the reverse direction.
39B	RHR Cont. Spray	10MOV-31B	This valve will be tested in the reverse direction.
45	Drywell Pressure Sensing	16-1AOV-101A	This valve will be tested in the reverse direction.
50C	Instrumentation - Sensing DW Pressure	Various	These instrument root valves are tested during a Type A test.

TABLE 4.7-2

## EXCEPTION TO TYPE C TESTS

CONTAINMENT PENETRATION	PENETRATION FUNCTION	VALVE NUMBER	LOCAL LEAK RATE TEST PERFORMED
202B	Vacuum Breaker - Reactor Building to Suppression Chamber	27AOV-101A 27AOV-101B	These valves will be tested in the reverse direction.
205	Pressure Suppression Chamber Purge Exhaust (Air or Nitrogen)	27AOV-117 27MOV-117	These valves will be tested in the reverse direction.
210A	RHR to Suppression Pool, RCIC, Core Spray Test to Suppression Pool	10MOV-16A 10MOV-21A 10MOV-34A 10MOV-167A 13MOV-27 14MOV-5A 14MOV-26A 10RHR-95A 14CSP-62A	Will not be tested as lines are water sealed by suppression chamber water.
210B	RHR to Suppression Pool, HPCI, Core Spray Test to Suppression Pool	10MOV-16B 10MOV-21B 10MOV-34B 10MOV-167B 14MOV-5B 14MOV-26B 23MOV-25 10RHR-95B 14CSP-62B	Will not be tested as lines are water sealed by suppression chamber water.
211A	RHR to Suppression Spray Header	10MOV-38A	This valve will be tested in the reverse direction.

TABLE 4.7-2  
EXCEPTION TO TYPE C TESTS

CONTAINMENT PENETRATION	PENETRATION FUNCTION	VALVE NUMBER	LOCAL LEAK RATE TEST PERFORMED
211B	RHR to Suppression Spray Header	10MOV-38B	This valve will be tested in the reverse direction.
218	Torus Pressure Sensing	16-1AOV-102B	This valve will be tested in the reverse direction.
220	Torus Purge Inlet (Air and/or Nitrogen)	27AOV-116 27AOV-132A 27AOV-132B	These valves will be tested in the reverse direction.
221	RCIC - Vacuum Pump to Torus	13RCIC-07	Will not be tested as line is sealed by suppression chamber water.
222	HPCI - Turbine Drain Trap to Torus	23HPI-13	Will not be tested as line is water sealed by suppression chamber water.
224	RCIC - Pump Suction (Torus)	13MOV-39 13MOV-41	Will not be tested as lines are water sealed by suppression chamber water.
225A	RHR - Pump Suction, RHR to Radwaste	10MOV-13A 10MOV-13C 10RHR-729A	Will not be tested as lines are water sealed by suppression chamber water.
225B	RHR - Pump Suction	10MOV-13B 10MOV-13D 10RHR-729B	Will not be tested as lines are water sealed by suppression chamber water.

**SAFETY EVALUATION FOR  
PROPOSED TECHNICAL SPECIFICATION CHANGES  
REVISION OF TABLE 4.7-2 (JPTS-89-038 AND JPTS-92-009)**

**I. DESCRIPTION OF THE PROPOSED CHANGES**

The proposed changes to the James A. FitzPatrick Technical Specifications are detailed below.

Minor changes in format, such as type font, margins or hyphenation, are not described in this submittal. This type of change is typographical in nature and does not affect the content of the Technical Specifications.

Page 212, Table 4.7-2, Correction of Valve Identification Numbers and Clarification of Penetration Arrangement

Revise the following valve identifiers by adding the system number as a prefix:

<u>Old Valve ID</u>	<u>New Valve ID</u>
SOV-120	03SOV-120
SOV-123	03SOV-123
AOV-126	03AOV-126
CRD-138	03CRD-138
SOV-121	03SOV-121
SOV-122	03SOV-122
AOV-127	03AOV-127

For penetration 37A-D:

- Change "(Inlet)" to "(below piston)."
- Replace the sentence "Will not be tested as lines are sealed by process fluid" with "Will not be tested as lines (there are 137 lines, with 31 to 38 lines per penetration, and each has the four indicated valves) are sealed by process fluid."

For penetration 38A-D:

- Change "(Outlet)" to "(above piston)."
- Replace the sentence "Will not be tested as lines are sealed by process fluid" with "Will not be tested as lines (there are 137 lines, with 31 to 38 lines per penetration, and each has the three indicated valves) are sealed by process fluid."

Page 213a, Table 4.7-2, Removal of Non-Containment Isolation Valves

Delete valves "10MOV-57" and "10MOV-67" for containment penetration X-225A.

**SAFETY EVALUATION**

Page 213a, Table 4.7-2, Addition of Containment Isolation Valves

Add valve "10RHR-729A" for containment penetration X-225A.

Add valve "10RHR-729B" for containment penetration X-225B.

Pages 213 and 213a, Table 4.7-2, Errors Introduced by Amendment 143

For containment penetration X-210A, page 213, in the "Local Leak Rate Test Performed" column, delete the phrase:

"Valve 10MOV-34A is tested during the Type C test of Penetration X-211A."

For containment penetration X-210B, page 213, in the "Local Leak Rate Test Performed" column, delete the phrase:

"Valve 10MOV-34B is tested during the Type C test of Penetration X-211B."

For containment penetration X-221, page 213a, replace the phrase:

"RCIC - Vacuum to Torus"

with

"RCIC - Vacuum Pump to Torus"

**II. PURPOSE OF THE PROPOSED CHANGES**

This proposed technical specification amendment makes four changes to Table 4.7-2, "Exception to Type C Tests." The first adds system numbers to the valve identification numbers for seven control rod drive containment isolation valves to be consistent with valve identifiers in the Technical Specifications, and clarifies the penetration arrangements. There is no change to the valves themselves or to the penetrations. The second change removes valves 10MOV-57 and 10MOV-67 from the table because they are not containment isolation valves as defined by the current FitzPatrick licensing basis. The third change adds valves 10RHR-729A and 10RHR-729B to the table to exempt them from Type C testing based on the current FitzPatrick licensing basis. Fourthly, three errors introduced in Amendment 143 (Reference 1) are corrected.

Page 212, Table 4.7-2, Correction of Valve Identification Numbers and Clarification of Penetration Arrangement

This change corrects the valve identifiers used on seven valves on Control Rod Drive (CRD) (insert and withdraw) lines which penetrate primary containment. The change

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makes the valve numbers consistent with the FitzPatrick equipment numbering system, plant drawings, and elsewhere in the Technical Specifications. The Authority uses a two digit system prefix in the equipment identification numbers. The prefix "03" is used for the control rod drive system.

The change also clarifies the fact that each penetration is actually a cluster of 31 to 38 lines for a total of 137 lines, one inlet and outlet pair for each CRD. Each inlet line below a CRD piston has the four specified containment isolation valves while each corresponding outlet line above the CRD piston has the three specified containment isolation valves.

Page 213a, Table 4.7-2, Removal of Non-Containment Isolation Valves

10MOV-57 and 10MOV-67 receive the same Primary Containment Isolation Signals (PCIS) as shutdown cooling suction containment isolation valves (CIV) 10MOV-17 and 10MOV-18. These valves are on a line (Figure 1) that connects the Residual Heat Removal (RHR) system to the radwaste system to provide drain down capability and are normally closed. Additional isolation is provided by closed manual isolation valves, i.e., 10RHR-250A&C, 10RHR-251A&C, and 10RHR-729A, located upstream of 10MOV-57 and 10MOV-67. The presence of PCIS signals implied that valves 10MOV-57 and 10MOV-67 performed a safety related purpose.

A safety evaluation (Reference 2) was performed to determine if these valves were CIVs as defined by the FitzPatrick licensing basis. The safety evaluation concluded that 10MOV-57 and 10MOV-67 were incorrectly classified as CIVs. PCIS signals activate 10MOV-57 and 10MOV-67 to automatically isolate this line to prevent a loss of water from the lines between the RHR pumps and 10MOV-17 after 10MOV-17 has been closed and to prevent flow diversion on Emergency Core Cooling System (ECCS) actuation.

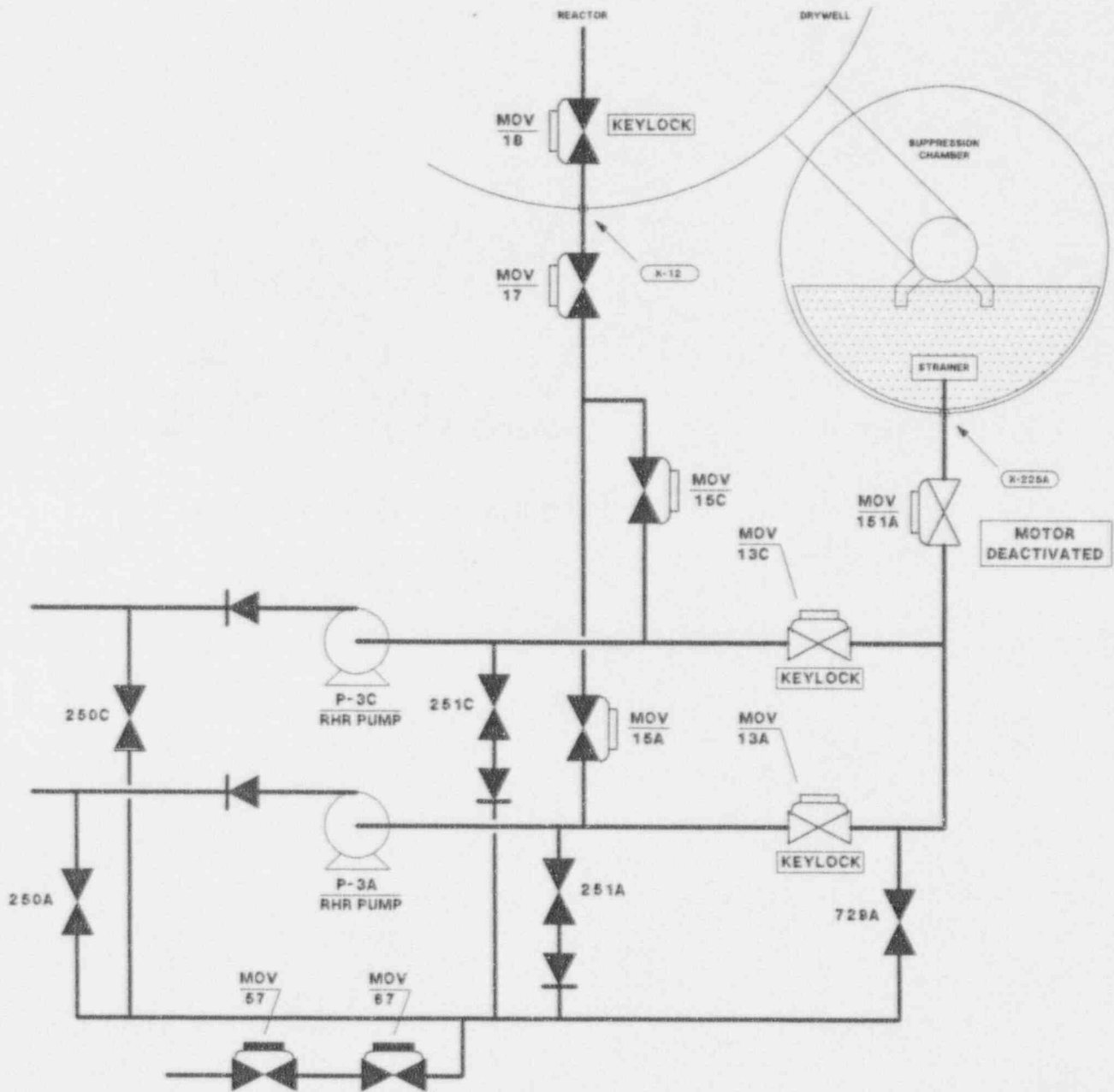
Page 213a, Table 4.7-2, Addition of Containment Isolation Valves

During the evaluation process of determining if 10MOV-57 and 10MOV-67 were CIVs, it was noted that the drain down lines for both the "A" and "B" sides each included a manual isolation valve, i.e., 10RHR-729A upstream of 10MOV-67 on the "A" side and 10RHR-729B upstream of 10RHR-253 on the "B" side. The safety evaluation (Reference 2) which determined that 10MOV-57 and 10MOV-67 are not CIVs also concluded that isolation of the "A" side RHR drain down line branching out of penetration X-225A leading to the radwaste system is performed by 10RHR-729A (see Figure 1). Isolation of the RHR to radwaste system "B" side drain down line is similarly handled by 10RHR-729B for penetration X-225B.

These valves are normally closed forming part of the containment boundary. Valves 10RHR-729A and 10RHR-729B are on lines which terminate within the torus and are sealed by torus water. These valves are exempted from Type C testing as specified in Surveillance Requirement 4.7.A.2.c.(3.) and are added to Table 4.7-2 by this submittal.



FIGURE 1



Note: This figure is a simplified representation of the affected portion of the RHR system. It contains only the major components of the piping leading to valves 10MOV-57 and 10MOV-67. See FitzPatrick drawing 11825-FM-20A, Revision 29 or FSAR Figure 7.4-7, Revision 5.



**SAFETY EVALUATION**Pages 213 and 213a, Table 4.7-2, Errors Introduced by Amendment 143

The changes to page 213 clarifies that CIVs 10MOV-34A and 10MOV-34B are exempt from Type C (local leak rate) testing by deleting the references to their inclusion in the testing of penetrations X-211A&B, respectively. These valves are on lines which terminate inside the torus below the low torus water level (see Figure 2). Technical Specification 4.7.A.2.c.(3.) specifically exempts "Valves, which are sealed with fluid from a seal system, such as the liquid in the suppression chamber ..." from Type C testing.

Because of the configuration of penetrations X-210 and X-211, valve 10MOV-34 must be closed to test valves 10MOV-38 and 10MOV-39. In the test configuration, all three valves are closed to create a test volume. During the test, this volume is pressurized and the total leakage from the volume is measured as a function of time. Because 10MOV-34 is exempt from a Type C Test, the leakage from the test volume is attributed to valves 10MOV-38 and 10MOV-39. This is conservative because it over estimates the leakage through these two valves.

The change to page 213a corrects a typographical error introduced by Amendment 143. The description of the penetration X-221 function added in Amendment 143 inadvertently omitted the word "Pump" in the penetration function column. "RCIC - Vacuum Pump to Torus" accurately describes the penetration function.

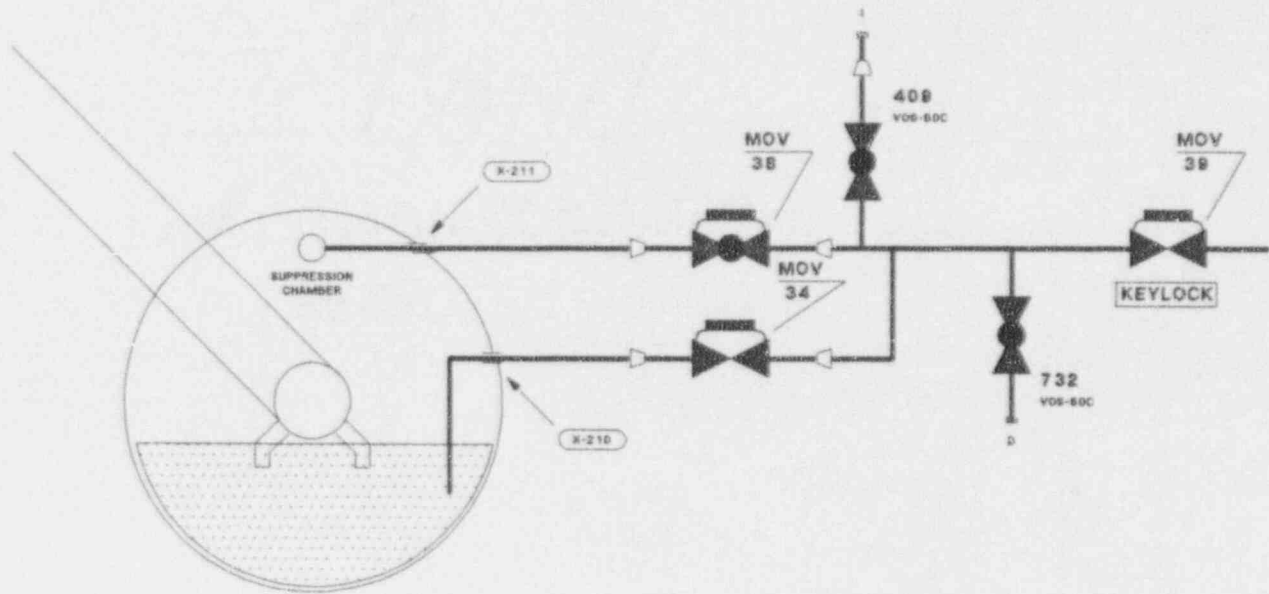
**III. SAFETY IMPLICATIONS OF THE PROPOSED CHANGES**

The proposed changes to the Technical Specifications have no adverse safety implications. These changes to Table 4.7-2 improve the clarity and consistency of the table without altering the conclusions of the plant accident analyses as documented in the FSAR or the NRC staff SER. The safety implications of each of the four sets of changes is addressed below:

Page 212, Table 4.7-2, Correction of Valve Identification Numbers and Clarification of Penetration Arrangement

There are no safety implications associated with the correction of these seven containment isolation valve identification numbers. The new numbers are consistent with plant documentation (e.g., procedures, drawings, etc.) and the numbering format used to identify valves in other systems at FitzPatrick. Changing the way a particular valve or set of valves is identified in the Technical Specifications will not alter their functionality or operability. The clarification of the penetration arrangements for the CRD hydraulic system does not alter the physical arrangement of the lines penetrating the containment nor does it alter the surveillance testing requirements for the associated containment isolation valves. This change, therefore, will not have any adverse safety implications.

FIGURE 2



Note: This figure is a simplified representation of the affected portion of the RHR system. It contains only the major components of the Type C Testing area. See FitzPatrick drawing 11825-FM-20A, Revision 29 or FSAR Figure 7.4-7, Revision 5.

**SAFETY EVALUATION**Page 213a, Table 4.7-2, Removal of Non-Containment Isolation Valves

Valves 10MOV-57 and 10MOV-67 are not CIVs. These valves isolate the drain line leading to the radwaste system from the "A" side of the RHR system and are normally closed. They are only opened during a RHR system flush, torus pumpdown, or when reactor coolant is transferred to the reactor building equipment drain discharge header. Isolation of the RHR/Radwaste drain down line is also provided by manual isolation valves 10RHR-250A&C, 10RHR-251A&C, and 10RHR-729A upstream of 10MOV-57 and 10MOV-67. Any valve lineup requiring the opening of 10MOV-57 or 10MOV-67 would also require an operator to enter the west crescent area to open these upstream manual valves. The removal of these valves from Table 4.7-2 will not alter their functionality or operability. They receive the same PCIS signals as 10MOV-18 to prevent a void from developing between 10MOV-18 and the RHR pumps resulting in water hammer induced transients. The closing of valves 10MOV-57 and 10MOV-67 also prevents the diversion of coolant inventory upon ECCS actuation. Since valves 10MOV-57 and 10MOV-67 are not CIVs, their removal from Table 4.7-2, a list of CIVs exempted from Type C testing, has no safety implication.

Page 213a, Table 4.7-2, Addition of Containment Isolation Valves

The conclusion (Reference 2) that valves 10MOV-57 and 10MOV-67 are not CIVs also concluded that valves 10RHR-729A, on the "A" side, and 10RHR-729B, on the "B" side, of the RHR to Radwaste drain down lines are containment isolation valves, as defined by the FitzPatrick licensing basis. Valves 10RHR-729A and 10RHR-729B form part of the containment isolation boundary by isolating the branch lines out of penetrations X-225A and X-225B, respectively, leading to the RHR/Radwaste drain down lines.

These normally closed manual isolation valves are on lines which terminate within the torus and are sealed by suppression chamber fluid. These valves are exempted from Type C testing as specified in Surveillance Requirement 4.7.A.2.c.(3.) and are added to Table 4.7-2 by this submittal. Since these CIVs fulfill the design basis criteria necessary to include them in Table 4.7-2, there are no adverse safety implications associated with these changes.

Pages 213 and 213a, Table 4.7-2, Errors Introduced by Amendment 143

There is no safety implication associated with correcting the two statements concerning valves 10MOV-34A&B. These valves are exempt from Type C testing because the discharge lines terminate below the low torus water level. Because of the valve lineup required to test valves 10MOV-38A&B and 10MOV-39A&B, not considering 10MOV-34 as a CIV conservatively overestimates the leakage through CIVs 10MOV-38A&B and 10MOV-39A&B.

There are also no safety implications associated with the correction of a typographical error.

**SAFETY EVALUATION**

**IV. EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATION**

Operation of the FitzPatrick plant in accordance with the proposed Amendment would not involve a significant hazards consideration as defined in 10 CFR 50.92, since it would not:

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

The proposed changes involves no hardware modifications, no changes to the operation of any system or component, no changes to structures, and alters procedures only to the extent necessary to clarify surveillance requirements. These changes will not alter the accident analyses as documented in the FSAR or the NRC staff SER.

Page 212, Table 4.7-2, Correction of Valve Identification Numbers and Clarification of Penetration Arrangement

Renaming valves will not alter their ability to function or require revision of surveillance requirements. The use of a different identifier for a valve or set of valves will not alter previously analyzed conditions or scenarios.

An editorial change to clarify the arrangement of lines penetrating the containment will not alter the physical arrangement of the penetrating lines nor will it require any change to the relevant surveillance tests and procedures. There is therefore no change to previously analyzed conditions or scenarios.

Page 213a, Table 4.7-2, Removal of Non-Containment Isolation Valves

Removing valves 10MOV-57 and 10MOV-67 from a table listing containment isolation valves will not alter their intended function. These valves are not containment isolation valves and were erroneously included in Table 4.7-2. These valves receive a PCIS signal to prevent diversion of reactor/torus water. Removal of these valves from this table will remove their exemption status to Type C testing but since they do not form part of the containment boundary their revised status has no affect on previously analyzed conditions or scenarios and will not require local leak rate testing.

Page 213a, Table 4.7-2, Addition of Containment Isolation Valves

The addition of valves 10RHR-729A and B to Table 4.7-2 does not alter or affect previously analyzed conditions or scenarios. The operation and testing of these valves have not been changed by this submittal. Valves 10RHR-729A&B remain normally closed isolating the RHR to radwaste drain down lines from penetrations X-225A and X-225B, respectively.

**SAFETY EVALUATION**

Pages 213 and 213a, Table 4.7-2, Errors Introduced by Amendment 143

The deletion of two erroneous surveillance requirements, for valves 10MOV-34 (A and B), and the correction of the functional identifier for containment penetration X-221, will not alter the ability of these systems/components in performing their intended functions. These errors were inadvertently introduced by a previous amendment. Editorial corrections of this nature improves the consistency of the Technical Specifications without reducing the associated systems (i.e., CRD, RHR, or RCIC) ability in performing their intended functions.

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

The changes do not alter the operation of any of the affected systems (i.e., CRD, RHR, or RCIC). The changes are administrative in nature and do not alter the accident analyses in the FSAR or the NRC staff SER.

Page 212, Table 4.7-2, Correction of Valve Identification Numbers and Clarification of Penetration Arrangement

Changing the identifier for a component will not alter the operability or manner in which the component functions. An editorial clarification which does not require changes to existing operating limitations or surveillance requirements will not result in a new or different kind of accident.

Page 213a, Table 4.7-2, Removal of Non-Containment Isolation Valves

The removal of valves from a listing will not alter their ability to perform intended functions. Therefore, this change will not result in a new or different kind of accident.

Page 213a, Table 4.7-2, Addition of Containment Isolation Valves

The inclusion of two existing valves in Table 4.7-2, which will remain normally closed, will not result in any changes to cause a new or different accident scenario.

Pages 213 and 213a, Table 4.7-2, Errors Introduced by Amendment 143

Correcting errors will not affect the functionality of systems or components. There is no requirement for performing Type C tests on valves 10MOV-34A&B and the correction to penetration X-221 clarifies the purpose of that penetration. These changes will not result in a new or different accident scenario.

**SAFETY EVALUATION**

3. involve a significant reduction in a margin of safety.

Page 212, Table 4.7-2, Correction of Valve Identification Numbers and Clarification of Penetration Arrangement

The changing of valve labeling format will not affect the margin of safety nor will an editorial clarification to a penetration arrangement. There is no effect on valve operation or function and no effect on existing CRD penetration surveillance requirements.

Page 213a, Table 4.7-2, Removal of Non-Containment Isolation Valves

The deletion of two valves erroneously included in a table listing containment isolation valves will not affect the margin of safety. Operation of these valves and their associated systems will not be affected by the inclusion or removal from a table since they do not perform a containment isolation function. Since these valves are not CIVs the fact that they are no longer exempted from local leak rate testing is irrelevant.

Page 213a, Table 4.7-2, Addition of Containment Isolation Valves

The addition of 10RHR-729A&B to Table 4.7-2 will not involve a significant reduction in the margin of safety. Because they meet the design basis criteria of Specification 4.7.A.2.c.(3.), these valves are exempted from Type C testing. Though they are not currently listed in this table, the correction of this omission will not cause any significant negative change in the margin of safety.

Pages 213 and 213a, Table 4.7-2, Errors Introduced by Amendment 143

The deletion of an unnecessary testing requirement, and the correction of an error, both of which were inadvertently introduced by a prior amendment, will not affect the margin of safety. Operation of these systems (i.e., CRD, RHR, or RCIC) and the associated valves will not be altered by these changes.

**V. IMPLEMENTATION OF THE PROPOSED CHANGES**

These changes will improve consistency in the Technical Specifications, correct errors, and improve the clarity of the Technical Specifications. Implementation of these changes will require revision of the surveillance test procedures but will not affect the ALARA or Fire Protection Programs at the FitzPatrick plant, nor will they impact the environment.



**SAFETY EVALUATION**

**VI. CONCLUSION**

The changes, as proposed, do not constitute an unreviewed safety question as defined in 10 CFR 50.59. That is, they:

1. will not change the probability nor the consequences of an accident or malfunction of equipment important to safety as previously evaluated in the Safety Analysis Report;
2. will not increase the possibility of an accident or malfunction of a type different from any previously evaluated in the Safety Analysis Report;
3. will not reduce the margin of safety as defined in the basis for any technical specification; and

The changes involve no significant hazards consideration, as defined in 10 CFR 50.92.

**VII. REFERENCES**

1. NRC letter, D. LaBarge to J. C. Brons, dated November 14, 1989, (JAF-89-379) transmits Amendment 143.
2. James A. FitzPatrick Nuclear Power Plant Nuclear Safety Evaluation JAF-SE-92-033, "Evaluation of 10MOV-57 and 10MOV-67 as Containment Isolation Valves," Revision 0, dated February 4, 1992.
3. James A. FitzPatrick Nuclear Power Plant Operating Procedure, OP-13, "Residual Heat Removal System," Revision 65, dated June 18, 1992.
4. James A. FitzPatrick Nuclear Power Plant Updated Final Safety Analysis Report, Sections 5.2.3.4 "Penetrations" and 5.2.3.5 "Primary Containment Isolation Valves," through Revision 5, dated January 1992.
5. James A. FitzPatrick Nuclear Power Plant Safety Evaluation Report (SER), dated November 20, 1972, and Supplements.



Attachment III to JPN-93-028

PROPOSED TECHNICAL SPECIFICATION CHANGES  
REVISION OF TABLE 4.7-2  
MARKUP OF TECHNICAL SPECIFICATION PAGES

(JPTS-89-038)  
(JPTS-92-009)

New York Power Authority

JAMES A. FITZPATRICK NUCLEAR POWER PLANT  
Docket No. 50-333  
DPR-59

TABLE 4.7-2  
EXCEPTION TO TYPE C TESTS

CONTAINMENT PENETRATION	PENETRATION FUNCTION	VALVE NUMBER	LOCAL LEAK RATE TEST PERFORMED
35C	Traversing In-Core Probe "C"	07EV-104C	This valve is an explosive shear valve which cannot be Type C tested.
35D	Traversing In-Core Probe "B"	07EV-104B	This valve is an explosive shear valve which cannot be Type C tested.
37A 37B 37C 37D	Control Rod Drive (Hydro) below piston	03SOV-120 03SOV-123 03AOV-126 03CRD-138	Will not be tested as lines are sealed by process fluid. <i>(there are 137 lines, with 31 to 38 lines per penetration, and each has the four indicated valves)</i>
38A 38B 38C 38D	Control Rod Drive (Quartz) above piston	03SOV-121 03SOV-122 03AOV-127	Will not be tested as lines are sealed by process fluid. <i>(there are 137 lines, with 31 to 38 lines per penetration, and each has the three indicated valves)</i>
39A	RHR Cont. Spray	10MOV-31A	This valve will be tested in the reverse direction.
39B	FHR Cont. Spray	10MOV-31B	This valve will be tested in the reverse direction.
45	Drywell Pressure Sensing	16-1AOV-101A	This valve will be tested in the reverse direction.
50C	Instrumentation - Sensing DW Pressure	Various	These instrument root valves are tested during a Type A test.

Amendment No. 46, 17A, 17B, 17C, 17D, 17E, 17F, 17G, 17H, 17I, 17J, 17K, 17L, 17M, 17N, 17O, 17P, 17Q, 17R, 17S, 17T, 17U, 17V, 17W, 17X, 17Y, 17Z

TABLE 4.7-2  
EXCEPTION TO TYPE C TESTS

CONTAINMENT PENETRATION	PENETRATION FUNCTION	VALVE NUMBER	LOCAL LEAK RATE TEST PERFORMED
202B	Vacuum Breaker - Reactor Building to Suppression Chamber	27AOV-101A 27AOV-101B	These valves will be tested in the reverse direction.
205	Pressure Suppression Chamber Purge Exhaust (Air or Nitrogen)	27AOV-117 27MOV-117	These valves will be tested in the reverse direction.
210A	RHR to Suppression Pool, RCIC, Core Spray Test to Suppression Pool	10MOV-16A 10MOV-21A 10MOV-34A 10MOV-167A 13MOV-27 14MOV-5A 14MOV-26A 10RHR-95A 14CSP-62A	Will not be tested as lines are water sealed by suppression chamber water Valve 10MOV-34A is tested during the Type C test of Penetration X-211A
210B	RHR to Suppression Pool, HPCI, Core Spray Test to Suppression Pool	10MOV-16B 10MOV-21B 10MOV-34B 10MOV-167B 14MOV-5B 14MOV-26B 23MOV-25 10RHR-95B 14CSP-62B	Will not be tested as lines are water sealed by suppression chamber water Valve 10MOV-34B is tested during the Type C test of Penetration X-211B
211A	RHR to Suppression Spray Header	10MOV-38A	This valve will be tested in the reverse direction.

Amendment No. ~~107, 120, 134, 145~~ 166

TABLE 4.7-2  
EXCEPTION TO TYPE C TESTS

CONTAINMENT PENETRATION	PENETRATION FUNCTION	VALVE NUMBER	LOCAL LEAK RATE TEST PERFORMED
211B	RHR to Suppression Spray Header	10MOV-38B	This valve will be tested in the reverse direction.
218	Torus Pressure Sensing	16-1AOV-102B	This valve will be tested in the reverse direction.
220	Torus Purge Inlet (Air and/or Nitrogen)	27AOV-116 27AOV-132A 27AOV-132B	These valves will be tested in the reverse direction.
221	RCIC - Vacuum to Torus <i>← Pump</i>	13RCIC-07	Will not be tested as line is sealed by suppression chamber water.
222	HPCI - Turbine Drain Trap to Torus	23HPI-13	Will not be tested as line is water sealed by suppression chamber water.
224	RCIC - Pump Suction (Torus)	13MOV-39 13MOV-41	Will not be tested as lines are water sealed by suppression chamber water.
225A	RHR - Pump Suction, RHR to Radwaste	10MOV-13A 10MOV-13C 10MOV-57 10MOV-67	Will not be tested as lines are water sealed by suppression chamber water.
225B	RHR - Pump Suction	10MOV-13B 10MOV-13D	Will not be tested as lines are water sealed by suppression chamber water.

*10RHR-729A*

*← 10RHR-729B*