

TABLE 3.6.3-1 (Continued)  
PRIMARY CONTAINMENT ISOLATION VALVES

| <u>VALVE FUNCTION AND NUMBER</u>                 | <u>VALVE GROUP(a)</u> | <u>MAXIMUM<br/>ISOLATION TIME<br/>(Seconds)</u> |
|--|-----------------------|---|
| a. <u>Automatic Isolation Valves (Continued)</u> |                       |   |
| Reactor Core Isolation Cooling                   |                       |   |
| RCIC-V-8   | 8                     | 13(j)   |
| RCIC-V-63  | 8                     | 16(j)   |
| RCIC-V-76  | 8                     | 22  |
| Low Pressure Core Spray                          |                       |   |
| LPCS-V-12  | 10                    | 180   |
| High Pressure Core Spray                         |                       |   |
| HPCS-V-23  | 11                    | 180   |
| b. <u>Excess Flow Check Valves(e)</u>            |                       |   |
| Containment Atmosphere                           |                       |   |
| N.A.   |                       |   |
| <del>PI-EFC-X29d</del> PI-EFC-X29b               |                       |   |
| PI-EFC-X29f                                      |                       |   |
| PI-EFC-X30a                                      |                       |   |
| PI-EFC-X30f                                      |                       |   |
| PI-EFC-X42c                                      |                       |   |
| PI-EFC-X42f                                      |                       |   |
| PI-EFC-X61c                                      |                       |   |
| PI-EFC-X62b                                      |                       |   |
| PI-EFC-X69f                                      |                       |   |
| PI-EFC-X78a                                      |                       |   |

TABLE 3.6.3-1 (Continued)  
PRIMARY CONTAINMENT ISOLATION VALVES

| <u>VALVE FUNCTION AND NUMBER</u>                         | <u>VALVE GROUP(a)</u> | <u>MAXIMUM<br/>ISOLATION TIME<br/>(Seconds)</u> |
|--|-----------------------|---|
| d. <u>Other Containment Isolation Valves (Continued)</u> |                       |   |
| Radiation Monitoring                                     |                       | N.A.  |
| <del>PI-EFCX-72f</del> PI-V-X 72f/1                      |                       |   |
| <del>PI-EFCX-73e</del> PI-V-X 73e/1                      |                       |   |
| Transversing Incore Probe System                         |                       | N.A.  |
| TIP-V-6  |                       |   |
| TIP-V-7,8,9,10,11(e)                                     |                       |   |

TABLE NOTATIONS

\*But greater than 3 seconds.

#Provisions of Technical Specification 3.0.4 are not applicable.

- (a) See Technical Specification 3.3.2 for the isolation signal(s) which operate each group.
- (b) Valve leakage not included in sum of Type B and C tests.
- (c) May be opened on an intermittent basis under administrative control.
- (d) Not closed by SLC actuation signal.
- (e) Not subject to Type C Leak Rate Test.
- (f) Hydraulic leak test at 38.2 psig.
- (g) Not subject to Type C test. Test per Technical Specification 4.4.3.2.2
- (h) Tested as part of Type A test.
- (i) May be tested as part of Type A test. If so tested, Type C test results may be excluded from sum of other Type B and C tests.
- (j) Reflects closure times for containment isolation only.
- (k) During operational conditions 1, 2 & 3 the requirement for automatic isolation does not apply to RHR-V-8. Except that RHR-V-8 may be opened in operational conditions 2 & 3 provided control is returned to the control room, with the interlocks reestablished, and reactor pressure is less than 135 psig.

REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION 3/4.6.3,  
PRIMARY CONTAINMENT ISOLATION VALVES

**REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION 3/4.6.3,  
PRIMARY CONTAINMENT ISOLATION VALVES**

Attachment 2  
Page 1 of 5

**A. DESCRIPTION OF AMENDMENT REQUEST**

The proposed amendment would modify Technical Specification Table 3.6.3-1 to:

- Rename PI-EFC-X29d to PI-EFC-X29b to conform to plant documentation.
- Rename PI-EFCX-72f and PI-EFCX-73e to PI-V-X72f/1 and PI-V-X73e/1 to reflect the replacement of these excess flow check valves with swing check valves.

**B. DISCUSSION**

PI-EFC-X29d:

The containment atmosphere instrument lines use a dual tube method of draining condensate from the drywell pressure sensing lines (Figure 1). The bottom tube serves as a trap for condensate drainage to ensure that any condensate from the drywell atmosphere will not block the instrument line and prevent line instrumentation from performing the required sensing function. Standard nomenclature for dual tube configurations identifies excess flow check valves (EFCs or EFCXs) in Technical Specification Table 3.6.3-1 by the instrument line penetration number. However, PI-EFC-X29d is identified by the drain line penetration number rather than the instrument line penetration number. This issue has been previously addressed in Amendment 26 which changed the EPN designation for these excess flow check valves.

Renaming PI-EFC-X29d to PI-EFC-X29b will provide consistency between this excess flow check valve and five other excess flow check valves used on dual tube installations and identified in Technical Specification Table 3.6.3-1. Renaming PI-EFC-X29d to PI-EFC-X29b is an administrative change. This component is correctly identified as PI-EFC-X29b in all plant documentation including Master Equipment List, the process instrumentation drawing, and Technical Specification surveillance procedure. Therefore, the EPN change has no adverse safety impact.

PI-EFCX-72f and PI-EFCX-73e:

Investigation into Notice of Violation (NOV) 94-02 (Reference 2) identified an old (i.e., initial) design error in the use of excess flow check valves PI-EFCX-72f and PI-EFCX-73e as primary containment integrity valves. On April 20, 1994, it was established that 10CFR50 Appendix A, General Design Criterion (GDC) 56 was not met for penetrations 72f and 73e. These penetrations currently use reverse-oriented excess flow check valves as the inboard isolation valve on the return line from radiation monitors used for drywell and suppression chamber air sampling during normal operation. The excess flow check valves are spring loaded in the open position. A minimum differential pressure of 15 psid is required to seat these excess flow check valves. For the design basis loss of coolant accident (LOCA), containment pressure post LOCA



1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

1 2 3 4 5 6 7 8 9 10 11 12

# REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION 3/4.6.3, PRIMARY CONTAINMENT ISOLATION VALVES

Attachment 2  
Page 2 of 5

would seat these valves and provide containment isolation; however, a decrease in containment pressure would permit the spring force to reopen these valves thereby degrading containment isolation capability. These valves are in series with a solenoid isolation valve outside containment.

PI-EFCX-72f and PI-EFCX-73e were declared inoperable and the lines isolated by closing the outboard isolation valves at penetrations 72f and 73e on April 20, 1994 per Technical Specification requirements. This condition will be discussed in a future Licensee Event Report.

The plant design basis provided in FSAR Section 6.2.4.3.2.2.3.3 for drywell and suppression chamber air sampling lines states that "... The return lines are equipped with ...a reverse-oriented excess flow check valve used as a simple check valve inside of containment." Following the in-depth review conducted for the NOV investigation, and based on new information provided by the valve vendor, Engineering determined that the excess flow check valves do not function as simple check valves, and cannot be modified to function as simple check valves for this specific application. This error in initial design is isolated to the misapplication of these two excess flow check valves for primary containment integrity requirements.

These two excess flow check valves will be replaced with swing check valves. Valve replacement requires that the EPNs be changed to conform to standard nomenclature for identification of penetration isolation valves. The design change will conform the plant to the analyzed design basis and meet the intent of Supply System's original commitment to GDC 56 design criterion for these penetrations by using a check valve for inboard isolation and an automatic solenoid valve for outboard isolation. GDC 56 criterion requires that lines that penetrate containment and communicate with the containment interior have two isolation valves. Therefore, the valve change and associated EPN changes have no adverse safety impact.

The Supply System concludes that granting these requested changes will not represent a significant safety issue.

## D. NO SIGNIFICANT HAZARDS CONSIDERATION

The Supply System has evaluated the proposed changes against the above standards as required by 10CFR50.91(a) and concluded that the change does not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated:

Revising the EPN for PI-EFC-X29d to PI-EFC-X29b in Technical Specification Table 3.6.3-1 is an administrative change and provides consistency between the Technical Specifications and approved design bases. PI-EFC-X29d provides instrument line break (ILB) mitigation as analyzed in FSAR Section 15.6.2. Renaming PI-EFC-X29d has no impact on FSAR accident analyses.



# REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION 3/4.6.3, PRIMARY CONTAINMENT ISOLATION VALVES

Attachment 2  
Page 3 of 5

Replacing existing excess flow check valves PI-EFCX-72f and PI-EFCX-73e with swing check valves and changing the EPNs has no impact on the containment isolation design basis described in FSAR Section 6.2.4.3.2.2.3.3. This plant modification will conform the plant to the FSAR design basis. The FSAR describes the drywell and suppression chamber air sampling lines and indicates that "the return lines are equipped with ... a reverse-oriented excess flow check valve used as a simple check valve inside of containment. Replacement of the spring loaded excess flow check valve with a simple check valve (without a spring) meets plant design bases and 10CFR50 Appendix A, General Design Criterion (GDC) 56 criteria for containment isolation. The valve change and resulting EPN change do not impact the FSAR design analyses.

Therefore, this change does not increase the probability or consequences of an accident previously evaluated.

- 2) Create the possibility of a new or different kind of accident from any accident previously evaluated:

No new mode of operation of any equipment results from the valve design change or EPN change for the three excess flow check valves. Renaming valve PI-EFC-X29d is an administrative change.

The replacement, and subsequent EPN change, of inboard containment isolation excess flow check valves PI-EFCX-72f and PI-EFCX-73e with swing check valves brings the plant into conformance with the analyzed design bases. Operation and maintenance of these valves in accordance with design and Technical Specification requirements provide assurance that primary containment will be maintained for the design basis LOCA event. The EPN change is required to conform to standard nomenclature for identification of penetration isolation valves.

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

- 3) Involve a significant reduction in a margin of safety:

The administrative name change for PI-EFC-X29d is made to ensure consistency between Technical Specification Table 3.6.3-1 and existing plant design documentation. Renaming this excess flow check valve provides consistency to the nomenclature of other excess flow check valves which use a dual tube method of draining condensate.





**REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION 3/4.6.3,  
PRIMARY CONTAINMENT ISOLATION VALVES**

Attachment 2  
Page 4 of 5

The replacement and subsequent EPN change of inboard containment isolation valves PI-EFCX-72f and PI-EFCX-73e brings the plant into conformance with the analyzed design bases. Maintenance and operation requirements are not modified in any manner. Adherence to the analyzed design bases will not affect the margin of safety for the design bases analysis.

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

In preparing this request the Technical Specification Bases were reviewed for impact. No changes are necessary to address the EPN changes or the replacement of two excess flow check valves with swing check valves.

Based on this review, the Supply System has determined that the three standards of 50.92(c) are satisfied. Accordingly, the Supply System has determined that this amendment request involves no significant hazards consideration.

**D. ENVIRONMENTAL CONSIDERATIONS**

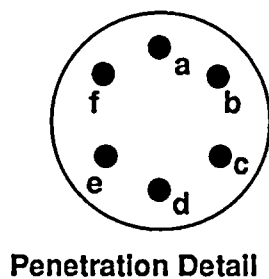
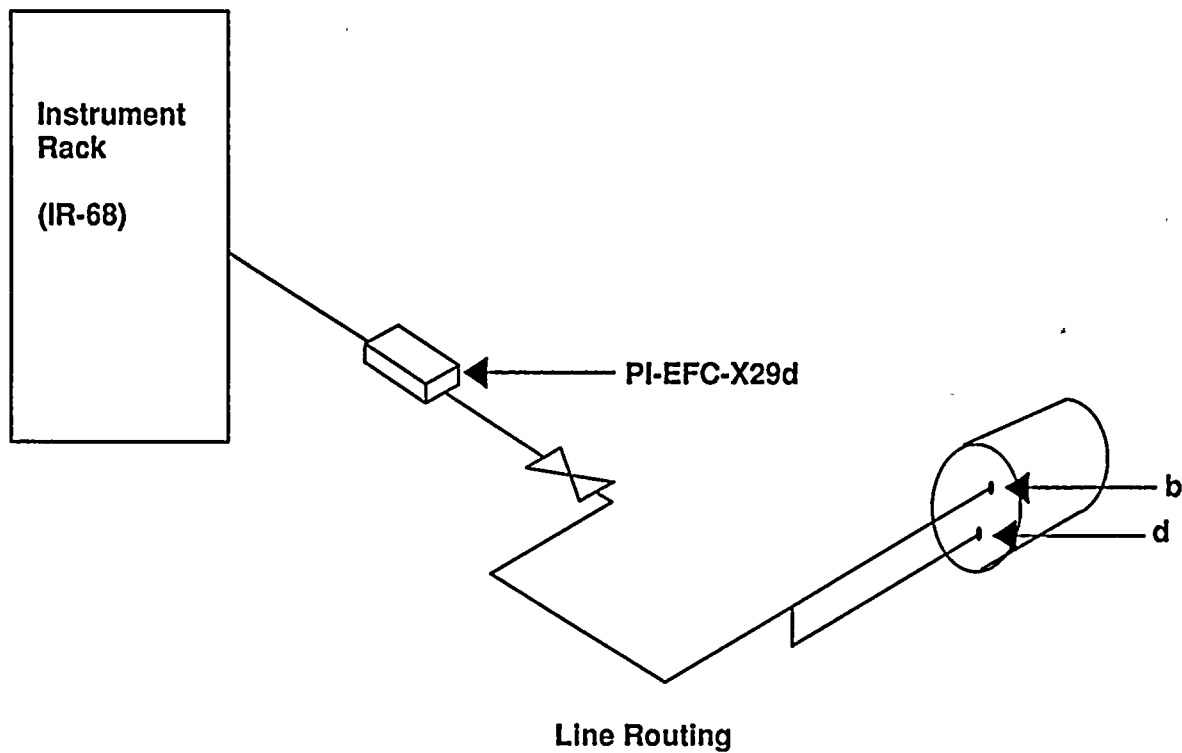
As discussed above, this change to Technical Specification Table 3.6.3-1 will not involve adverse consequences to the environment. Accordingly, the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(C)(9) and, therefore, per 10 CFR 51.22(b), an environmental assessment of this change is not required.

**E. SUMMARY**

The Supply System concludes that renaming these three valves in Table 3.6.3-1 of the Technical Specifications and replacing two existing excess flow check valves with swing check valves provide consistency in nomenclature and conform the plant to the design basis. Granting this request therefore involves no adverse safety impact and represents a reduced risk to public health and safety. This request for Technical Specification change was approved by the Plant Operating Committee and the Supply System Corporate Nuclear Safety Review Board. In accordance with 10CFR50.91, the State of Washington has been provided a copy of this letter.

REQUEST FOR AMENDMENT TO TECHNICAL SPECIFICATION 3/4.6.3,  
PRIMARY CONTAINMENT ISOLATION VALVES

Attachment 2  
Page 5 of 5



94-2046

FIGURE 1