
Industry/TSTF Standard Technical Specification Change Traveler

Require only one [secondary] containment access door per access opening to be closed

Priority/Classification: 3) Improve Specifications

NUREGs Affected: 1430 1431 1432 1433 1434

Description:

Require only one [secondary] containment access door per access opening to be closed.

Justification:

NUREG-1433 SR 3.6.4.1.3 has been modified to only require one secondary containment access door per access opening to be closed. This is consistent with the intent of NUREG-1434 (BWR/6 STS) since the BWR/6 secondary containment design only includes one door per access opening. The BWR/2-5 designs normally include two doors per access opening. Verifying that one door in each access opening is closed ensures that the infiltration of outside air of such a magnitude as to prevent maintaining the desired negative pressure does not occur. The Bases is modified to include a bracketed insert to provide additional description for those plants, which have airlocks with multiple inner or outer doors. The Bases will also be modified to state that the normal condition of the plant is to keep both doors closed, except during entry and exit or when maintenance is being performed on the access. The Bases description is consistent with the BWR/2-5 practice.

NUREG-1434 SR 3.6.4.1.3 has also been modified to allow the one door option, similar to that described above for NUREG-1433.

In addition, NUREGs 1431, SR 3.6.19.2, and 1432, SR 3.6.11.2, have been modified to require only one containment access door per access opening to be closed. Verifying that one door in each access opening is closed ensures that the infiltration of outside air of such a magnitude as to prevent maintaining the desired negative pressure does not occur. The Bases is modified to include a bracketed insert to provide additional description for those plants, which have airlocks with multiple inner or outer doors. The Bases will also be modified to state that the normal condition of the plant is to keep both doors closed, except during entry and exit or when maintenance is being performed on the access.

Revision History

OG Revision 0

Revision Status: Closed

Revision Proposed by

Revision Description:

Original Issue

Owners Group Review Information

Date Originated by OG: 01-Nov-95

Owners Group Comments

Dates are assumed.

Owners Group Resolution: Approved Date: 01-Nov-95

9/25/98

OG Revision 0**Revision Status: Closed****TSTF Review Information**

TSTF Received Date: 02-Nov-95 Date Distributed for Review 02-Nov-95

OG Review Completed: BWOG WOG CEOG BWROG

TSTF Comments:

(No Comments)

TSTF Resolution: Approved Date: 14-Nov-95

NRC Review Information

NRC Received Date: 16-Nov-95 NRC Reviewer: R. Giardina

NRC Comments:

11/16/95 - pkg received and forwarded to Tech Branch to review.

11/28/95 - reviewers rejected package.

12/01/95 - pkg to C. Grimes to review.

6/11/96 - C. Grimes comment: TSB to meet with Jack Kudrick, SCSB, on airlock requirements for single and dual airlock plants.

D. Hoffman, Excel comment: TSTF-18, containment airlocks, will be an issue with Peach Bottom when they go into an outage. Peach Bottom to send a letter to DCS.

9/18/96 - NRC REJECTS: The attempt to clarify the "one door" air lock provision only serves to confuse the requirements for the optional configurations. NUREG-1434 appears to provide adequate guidance for the BWR-5 design differences and, if existing BWR-4 technical specifications have less restrictive requirements, they can request their existing license requirements be retained. If the TSTF wants to pursue this issue, then SCSB should be presented with complete sets of optional requirements for various airlock configurations.

9/18/96 - BWROG to pursue.

3/18/97 - TSTF confirmed that BWROG to pursue TSTF-18.

4/17/97 - TSTF to pursue revision. NRC suggested holding a meeting to discuss the proposed revision prior to submittal.

Final Resolution: Superseded by Revision

Final Resolution Date: 18-Sep-96

TSTF Revision 1**Revision Status: Active****Next Action: NRC**

Revision Proposed by BWROG

Revision Description:

The Industry and the NRC met to discuss the NRC's concern over the wording of the Bases insert. The NRC also believes that TSTF-18 applied to CE and Westinghouse type containments. CE & Westinghouse agree. This revision reflects the agreed to changes to the Bases insert and the applicability of TSTF-18 to CE and Westinghouse.

TSTF Review Information

TSTF Received Date: 21-Sep-98 Date Distributed for Review 21-Sep-98

OG Review Completed: BWOG WOG CEOG BWROG

TSTF Comments:

(No Comments)

TSTF Resolution: Approved Date: 24-Sep-98

9/25/98

TSTF Revision 1**Revision Status: Active****Next Action: NRC****NRC Review Information**

NRC Received Date: 25-Sep-98 NRC Reviewer:

NRC Comments:

(No Comments)

Final Resolution: NRC Action Pending

Final Resolution Date:

Incorporation Into the NUREGs

File to BBS/LAN Date:

TSTF Informed Date:

TSTF Approved Date:

NUREG Rev Incorporated:

Affected Technical Specifications

SR 3.6.19.2	Shield Building (Dual and Ice Condenser)	NUREG(s)- 1431 Only
SR 3.6.19.2 Bases	Shield Building (Dual and Ice Condenser)	NUREG(s)- 1431 Only
SR 3.6.11.2	Shield Building (Dual)	NUREG(s)- 1432 Only
SR 3.6.11.2 Bases	Shield Building (Dual)	NUREG(s)- 1432 Only
SR 3.6.4.1.3	[Secondary] Containment	NUREG(s)- 1433 1434 Only
SR 3.6.4.1.3 Bases	[Secondary] Containment	NUREG(s)- 1433 1434 Only

9/25/98

INSERT BASES - BWR

[An access opening contains one inner and one outer door. In some cases, [secondary] containment access openings are shared such that a [secondary] containment barrier may have multiple inner or multiple outer doors. The intent is to not breach the [secondary] containment at any time when [secondary] containment is required. This is achieved by maintaining the inner or outer portion of the barrier closed at all times.] However, all [secondary] containment access doors are normally kept closed, except when the access opening is being used for entry and exit or when maintenance is being performed on an access opening.

INSERT BASES - CE and W

[An access opening may contain one inner and one outer door, or in some cases, shield building access openings are shared such that a shield building barrier may have multiple inner or multiple outer doors. The intent is to not breach the shield building boundary at any time when the shield building boundary is required. This is achieved by maintaining the inner or outer portion of the barrier closed at all times.] However, all shield building access doors are normally kept closed, except when the access opening is being used for entry and exit or when maintenance is being performed on an access opening.

TSTF-18 r1

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. (continued)	C.2 Suspend CORE ALTERATIONS.	Immediately
	AND C.3 Initiate action to suspend OPDRVs.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.6.4.1.1 Verify [secondary] containment vacuum is \geq [0.25] inch of vacuum water gauge.	24 hours
SR 3.6.4.1.2 Verify all [secondary] containment equipment hatches are closed and sealed.	31 days
SR 3.6.4.1.3 Verify ^{one} each [secondary] containment access door is closed, except when the access opening is being used for entry and exit, then at least one door shall be closed.	31 days
SR 3.6.4.1.4 Verify each standby gas treatment (SGT) subsystem will draw down the [secondary] containment to \geq [0.25] inch of vacuum water gauge in \leq [120] seconds.	[18] months on a STAGGERED TEST BASIS

(continued)

BASES

TSTF-18 R1

ACTIONS

C.1, C.2, and C.3 (continued)

movement of irradiated fuel assemblies would not be a sufficient reason to require a reactor shutdown.

SURVEILLANCE REQUIREMENTS

SR 3.6.4.1.1

This SR ensures that the [secondary] containment boundary is sufficiently leak tight to preclude exfiltration under expected wind conditions. The 24 hour Frequency of this SR was developed based on operating experience related to [secondary] containment vacuum variations during the applicable MODES and the low probability of a DBA occurring between surveillances.

Furthermore, the 24 hour Frequency is considered adequate in view of other indications available in the control room, including alarms, to alert the operator to an abnormal [secondary] containment vacuum condition.

SR 3.6.4.1.2 and SR 3.6.4.1.3

in each access opening

one

Verifying that [secondary] containment equipment hatches and access doors are closed ensures that the infiltration of outside air of such a magnitude as to prevent maintaining the desired negative pressure does not occur. Verifying that all such openings are closed provides adequate assurance that exfiltration from the [secondary] containment will not occur. In this application, the term "sealed" has no connotation of leak tightness. Maintaining [secondary] containment OPERABILITY requires verifying ~~each~~ door in the access opening is closed, except when the access opening is being used for normal transient entry and exit (then at least one door must remain closed). The 31 day Frequency for these SRs has been shown to be adequate, based on operating experience, and is considered adequate in view of the other indications of door and hatch status that are available to the operator.

one

INSERT BASES

(continued)

TSTF-18 R1

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.6.4.1.3 Verify ^{one} each [secondary containment] access door is closed, except when the access opening is being used for entry and exit. then at least one door shall be closed.</p> <p><i>in each access opening</i></p>	<p>31 days</p>
<p>SR 3.6.4.1.4 Verify each standby gas treatment (SGT) subsystem will draw down the [secondary containment] to \geq [0.25] inch of vacuum water gauge in \leq [120] seconds.</p>	<p>[18] months on a STAGGERED TEST BASIS</p>
<p>SR 3.6.4.1.5 Verify each SGT subsystem can maintain \geq [0.266] inch of vacuum water gauge in the [secondary containment] for 1 hour at a flow rate \leq [4000] cfm.</p>	<p>[18] months on a STAGGERED TEST BASIS</p>

TSTF-18 R1

BASES

ACTIONS

C.1, C.2, and C.3 (continued)
movement of irradiated fuel assemblies would not be a sufficient reason to require a reactor shutdown.

SURVEILLANCE REQUIREMENTS

SR 3.6.4.1.1
This SR ensures that the [secondary containment] boundary is sufficiently leak tight to preclude exfiltration under expected wind conditions. The 24 hour Frequency of this SR was developed based on operating experience related to [secondary containment] vacuum variations during the applicable MODES and the low probability of a DBA occurring between surveillances.
Furthermore, the 24 hour Frequency is considered adequate in view of other indications available in the control room, including alarms, to alert the operator to an abnormal [secondary containment] vacuum condition.

SR 3.6.4.1.2 and SR 3.6.4.1.3

in each access opening
one

Verifying that [secondary containment] equipment hatches and access doors are closed ensures that the infiltration of outside air of such a magnitude as to prevent maintaining the desired negative pressure does not occur. Verifying that all such openings are closed provides adequate assurance that exfiltration from the [secondary containment] will not occur. In this application, the term "sealed" has no connotation of leak tightness. Maintaining [secondary containment] OPERABILITY requires verifying each door in the access opening is closed, ~~except when the access opening is being used for entry and exit; then, at least one door must remain closed.~~ The 31 day Frequency for these SRs has been shown to be adequate based on operating experience, and is considered adequate in view of the other indications of door and hatch status that are available to the operator.

INSERT BASES

(continued)

TSTF 18
Rev 1

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p style="text-align: center;"><i>one shield building access</i></p> <p>SR 3.6.11.2 Verify each door in each access opening is closed, except when the access opening is being used for normal transient entry and exit, then, at least one door shall be closed.</p>	31 hours
<p>SR 3.6.11.3 Verify shield building structural integrity by performing a visual inspection of the exposed interior and exterior surfaces of the shield building.</p>	During shutdown for SR 3.6.1.1 Type A tests
<p>SR 3.6.11.4 Verify each Shield Building Exhaust Air Cleanup System train with a final flow rate $\leq []$ cfm produces a pressure equal to or more negative than $[-0.25]$ inch water gauge in the annulus within $[1]$ minute after a start signal.</p>	[18] months

BASES

SURVEILLANCE
REQUIREMENTSSR 3.6.11.1 (continued)

assumed in the containment analysis. The 12 hour Frequency of this SR was developed considering operating experience related to shield building annulus pressure variations and pressure instrument drift during the applicable MODES.

SR 3.6.11.2

one Maintaining shield building OPERABILITY requires *Verifying* ~~maintaining~~ ~~each door in the access opening closed, except when the~~ ~~access opening is being used for normal transient entry and~~ ~~exit; then, at least one door must remain closed.~~ The Frequency of 31 days is based on engineering judgment and is considered adequate in view of other indications of door status available to the operator.

INSERT
BASES

SR 3.6.11.3

This Surveillance would give advance indication of gross deterioration of the concrete structural integrity of the shield building. The Frequency of this SR is the same as that of SR 3.6.1.1. The verification is done during shutdown and as part of Type A leakage tests associated with SR 3.6.1.1.

SR 3.6.11.4

The SBEACS is required to produce the required negative pressure of $\geq [0.25]$ inch water gauge during test operation within 1 minute after a start signal. The negative pressure ensures that the building is adequately sealed and that leakage from the building will be prevented, since outside air will be drawn in by the low pressure. The negative pressure must be established within the time limit to ensure that no significant quantity of radioactive material leaks from the shield building prior to developing the negative pressure.

The [18] month Frequency to verify the required negative pressure in the shield building is consistent with Regulatory Guide 1.52 (Ref. 1) guidance for functional

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.6.19.2 Verify each ^{enc shield building access} door in each access opening is closed, except when the access opening is being used for normal transient entry and exit; then, at least one door shall be closed.</p>	31 days
<p>SR 3.6.19.3 Verify shield building structural integrity by performing a visual inspection of the exposed interior and exterior surfaces of the shield building.</p>	During shutdown for SR 3.6.1.1 Type A tests
<p>SR 3.6.19.4 Verify each Shield Building Air Cleanup System train with final flow \leq [] cfm produces a pressure equal to or more negative than [-0.5] inch water gauge in the annulus within [22] seconds after a start signal.</p>	[18] months on a STAGGERED TEST BASIS

BASES

SURVEILLANCE
REQUIREMENTS

(continued)

SR 3.6.19.2

Maintaining shield building OPERABILITY requires maintaining each door in the access opening closed, except when the access opening is being used for normal transient entry and exit (then at least one door must remain closed). The 31 day Frequency of this SR is based on engineering judgment and is considered adequate in view of the other indications of door status that are available to the operator.

SR 3.6.19.3

This SR would give advance indication of gross deterioration of the concrete structural integrity of the shield building. The Frequency of this SR is the same as that of SR 3.6.1.1. The verification is done during shutdown.

SR 3.6.19.4

The ability of a SBACS train with final flow $\leq []$ cfm to produce the required negative pressure ≥ 0.5 inch water gauge during the test operation within [22] seconds provides assurance that the building is adequately sealed. The negative pressure prevents leakage from the building, since outside air will be drawn in by the low pressure. The negative pressure must be established within the time limit to ensure that no significant quantity of radioactive material leaks from the shield building prior to developing the negative pressure.

The SBACS trains are tested every 18 months on a STAGGERED TEST BASIS to ensure that in addition to the requirements of LCO 3.6.13, "Shield Building Air Cleanup System," either SBACS train will perform this test. The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage.

REFERENCES

None.