



1101 Market Street, Chattanooga, Tennessee 37402

CNL-22-037

January 31, 2023

10 CFR 50.90

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Browns Ferry Nuclear Power Plant Units 1, 2, and 3
Renewed Facility Operating License Nos. DPR-33, DPR-52, and DPR-68
NRC Dockets 50-259, 50-260, and 50-296

Sequoyah Nuclear Plant Units 1 and 2
Renewed Facility Operating License Nos. DPR-77 and DPR-79
NRC Docket Nos. 50-327 and 328

Subject: **Browns Ferry Nuclear Plant, Units 1, 2, and 3, and Sequoyah Nuclear Plant, Units 1 and 2, Application to Revise Technical Specifications to Adopt TSTF-541-A, "Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position" (BFN TS-533) (SQN-TS-20-07)**

Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.90, Tennessee Valley Authority (TVA) is submitting a request for an amendment to the Technical Specifications (TS) for the Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3, and Sequoyah Nuclear Plant (SQN), Units 1 and 2.

TVA requests adoption of Technical Specification Task Force (TSTF)-541-A Revision 2, "Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position," which is an approved change to the Standard Technical Specifications, into the BFN Units 1, 2, and 3, and SQN Units 1 and 2 TS. The proposed amendment modifies certain TS Surveillance Requirements (SRs) by adding exceptions to consider the SR met when automatic valves or dampers are locked, sealed, or otherwise secured in the actuated position. Securing the automatic valve or damper in the actuated position may affect the operability of the system or any supported systems. The associated Limiting Condition for Operation is met if the subject structure, system, or component remains operable (i.e., capable of performing its specified safety function).

The enclosure provides a description and assessment of the proposed changes. Attachment 1.1 provides the existing BFN TS pages marked up to show the proposed changes. Attachment 1.2 provides the existing SQN TS pages marked up to show the proposed changes. Attachment 2.1 provides the existing BFN TS pages retyped to show the proposed changes.

Attachment 2.2 provides the existing SQN TS pages retyped to show the proposed changes. Attachment 3.1 provides the BFN Unit 1 Bases markups to show the proposed changes (the BFN Unit 2 and 3 TS Bases are identical with respect to this change). Attachment 3.2 provides the SQN Unit 1 TS Bases markups to show the proposed changes (the SQN Unit 2 TS Bases are identical with respect to this change). The Bases pages are provided for information only.

TVA requests that the amendment be reviewed under the Consolidated Line Item Improvement Process. Approval of the proposed amendment is requested within six months of completion of the NRC's acceptance review. Once approved, the amendment shall be implemented within 60 days.

There are no new regulatory commitments made in this submittal.

In accordance with 10 CFR 50.91(b)(1), a copy of this application, with attachments, is being provided to the Alabama State Department of Public Health and the Tennessee Department of Environment and Conservation.

If you should have any questions regarding this submittal, please contact Stuart L. Rymer, Senior Manager, Fleet Licensing, at slymer@tva.gov.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 31st day of January 2023.

Respectfully,



Digitally signed by Rearden,
Pamela S
Date: 2023.01.31 14:41:38 -05'00'

James Barstow
Vice President, Nuclear Regulatory Affairs and Support Services

Enclosure:

Description and Assessment

cc: (with Enclosure):

NRC Regional Administrator - Region II
NRC Senior Resident Inspector - Browns Ferry Nuclear Plant
NRC Senior Resident Inspector - Sequoyah Nuclear Plant
NRC Project Manager - Browns Ferry Nuclear Plant
NRC Project Manager - Sequoyah Nuclear Plant
State Health Officer, Alabama State Department of Public Health
Director, Division of Radiological Health - Tennessee Department of Environment and Conservation

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Description and Assessment

Subject: Browns Ferry Nuclear Plant, Units 1, 2, and 3, and Sequoyah Nuclear Plant, Units 1 and 2, Application to Revise Technical Specifications to Adopt TSTF-541-A, "Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position" (BFN TS-533) (SQN-TS-20-07)

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- 2.2 Proposed TS Changes (Final Retyped) for SQN Units 1 and 2
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- 3.2 Proposed TS Bases Page Changes (Mark-Ups) for SQN Unit 1 (For Information Only)

1.0 DESCRIPTION

Tennessee Valley Authority (TVA) requests adoption of Technical Specification Task Force (TSTF)-541-A, "Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position," which is an approved change to the Standard Technical Specifications (STS), into the Browns Ferry Nuclear Plant (BFN), Units 1, 2, and 3, and Sequoyah Nuclear Plant (SQN) Units 1 and 2 Technical Specifications (TS). The proposed amendment modifies the TS Surveillance Requirements (SRs) by adding exceptions to consider the SR met when automatic valves or dampers are locked, sealed, or otherwise secured in the actuated position, in order to consider the SR met. Securing the automatic valve or damper in the actuated position may affect the operability of the system or of any supported systems. The associated Limiting Condition for Operation is met if the subject structure, system, or component (SSC) remains operable (i.e., capable of performing its specified safety function). The following SRs are affected by the proposed change.

- BFN SR 3.5.1.9, "Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal."
- BFN SR 3.5.3.5, "Verify the RCIC System actuates on an actual or simulated automatic initiation signal."
- BFN SR 3.6.4.3.3, "Verify each SGT subsystem actuates on an actual or simulated initiation signal."
- BFN SR 3.7.3.3, "Verify each CREV subsystem actuates on an actual or simulated initiation signal."
- SQN SR 3.6.10.3, "Verify each EGTS Air Cleanup Subsystem train actuates on an actual or simulated actuation signal."
- SQN SR 3.6.10.4, "Verify each EGTS Air Cleanup Subsystem filter cooling bypass valve can be operated."
- SQN SR 3.7.10.4, "Verify each CREVS train actuates on an actual or simulated actuation signal."
- SQN SR 3.7.12.3, "Verify each ABGTS train actuates on an actual or simulated actuation signal."

While the proposed exceptions permit automatic valves and dampers that are locked, sealed, or otherwise secured in the actuated position to be excluded from the SR in order to consider the SR met, the proposed changes will not permit a system that is made inoperable by locking, sealing, or otherwise securing an automatic valve or damper in the actuated position to be considered operable. As stated in the SR 3.0.1 Bases, "Nothing in this Specification, however, is to be construed as implying that systems or components are OPERABLE when: a. The systems or components are known to be inoperable, although still meeting the SRs."

2.0 ASSESSMENT

2.1 Applicability of Safety Evaluation

TVA has reviewed the safety evaluation for TSTF-541-A provided to the Technical Specification Task Force in a letter dated December 10, 2019. This review included a review of the Nuclear Regulatory Commission (NRC) staff's evaluation, as well as the information provided in TSTF-541. As described herein, TVA has concluded that the justifications presented in TSTF-541 and the safety evaluation prepared by the NRC staff are applicable to BFN Units 1, 2, and 3, and SQN Units 1 and 2 and justify this amendment for the incorporation of the changes to the BFN and SQN TS.

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TVA acknowledges that under the proposed change, the affected valves and dampers may be excluded from the SR when locked, sealed, or otherwise secured in the actuated position. However, if the safety analysis assumes movement from the actuated position following an event, or the system is rendered inoperable by locking, sealing, or otherwise securing the valve or damper in the actuated position, then the system cannot perform its specified safety function and is inoperable regardless of whether the SR is met.

TVA acknowledges for components for which the SR allowance can be utilized, the SR must be verified to have been met within its required Frequency after removing the valve or damper from the locked, sealed, or otherwise secured status. If the SR exception is utilized to not test the actuation of a valve or damper and the specified Frequency of the SR is exceeded without testing the component, the SR must be performed on the component when it is returned to service in order to meet the SR.

2.2 Variations

2.2.1 BFN Variations

TVA is proposing the following variations from the TS changes described in TSTF-541-A or the applicable parts of the NRC staff's safety evaluation:

The BFN TS utilize different numbering and titles from the STS on which TSTF-541-A was based. The following table lists the differences. These differences are administrative and do not affect the applicability of TSTF-541-A to the BFN TS.

TSTF-541-A SR	Title	BFN SR	Title
SR 3.5.1.10	Emergency Core Cooling System (ECCS) - Operating	SR 3.5.1.9	ECCS - Operating
SR 3.7.4.3	Main Control Room Environmental Control (MCREC) System	SR 3.7.3.3	Control Room Emergency Ventilation (CREV) System

The BFN TS contain requirements that differ from the STS on which TSTF-541-A was based, but these differences do not affect the applicability of the TSTF-541-A justification. Specifically, the BFN TS does not contain SRs equivalent to the following SRs affected by TSTF-541-A.

- SR 3.6.4.3.4, "[Verify each SGT filter bypass damper can be opened and the fan started.]"
- SR 3.7.2.6, "[Verify each [PSW] subsystem actuates on an actual or simulated initiation signal.]"

The BFN TS contain a Surveillance Frequency Control Program. Therefore, the Frequency for the affected SRs is "In accordance with the Surveillance Frequency Control Program." This has no effect on the applicability of the proposed change.

2.2.2 SQN Variations

TVA is proposing the following variations from the TS changes described in TSTF-541-A or the applicable parts of the NRC staff's safety evaluation.

The SQN TS utilize different numbering and titles from the STS on which TSTF-541-A was based. The following table lists the differences. These differences are administrative and do not affect the applicability of TSTF-541-A to the SQN TS.

TSTF-541-A SR	Title	SQN SR	Title
SR 3.6.13.3	Shield Building Air Cleanup System (SBACS)	SR 3.6.10.3	Emergency Gas Treatment System (EGTS) Air Cleanup Subsystem
SR 3.6.13.4	SBACS	SR 3.6.10.4	EGTS Air Cleanup Subsystem
SR 3.7.10.3	Control Room Emergency Filtration System (CREFS)	SR 3.7.10.4	Control Room Emergency Ventilation System (CREVS)
SR 3.7.14.3	Penetration Room Exhaust Air Cleanup System (PREACS)	SR 3.7.12.3	Auxiliary Building Gas Treatment System (ABGTS)

The SQN TS contains an SR similar to those that are affected by TSTF-541-A, but that does not appear in the traveler. NUREG-1431 SR 3.6.13.4 states, "Verify each SBACS filter bypass damper can be opened." TSTF-541-A modified SR 3.6.13.4 by appending, "except for dampers that are locked, sealed, or otherwise secured in the open position." The equivalent SR in the SQN TS is SR 3.6.10.4, which states, "Verify each EGTS Air Cleanup Subsystem filter cooling bypass valve can be operated." SQN SR 3.6.10.4 is revised by appending, "except for valves that are locked, sealed, or otherwise secured in the actuated position." This distinction between a damper and valve is immaterial to the intent of TSTF-541-A. Therefore, this is considered to be an administrative variation from TSTF-541-A.

The SQN TS contain requirements that differ from the STS on which TSTF-541-A was based, but these differences do not affect the applicability of the TSTF-541-A justification. Specifically, the SQN TS does not contain SRs equivalent to the following SRs affected by TSTF-541-A.

- SR 3.6.11.3, "Verify each ICS train actuates on an actual or simulated signal."
- SR 3.6.11.4, "Verify each ICS filter bypass damper can be opened."
- SR 3.7.12.3, "Verify each ECCS PREACS train actuates on an actual or simulated signal."
- SR 3.7.12.5, "Verify each ECCS PREACS filter bypass damper can be closed."
- SR 3.7.13.3, "Verify each FBACS train actuates on an actual or simulated signal."
- SR 3.7.13.5, "Verify each FBACS filter bypass damper can be closed."
- SR 3.7.14.5, "Verify each PREACS filter bypass damper can be closed."

The SQN TS contain a Surveillance Frequency Control Program. Therefore, the Frequency for the affected SRs is "In accordance with the Surveillance Frequency Control Program." This has no effect on the applicability of the proposed change.

2.3 Licensee Verifications

TVA confirms that existing administrative processes, such as the Corrective Action Program, Operability Determination process, the maintenance, design control, configuration control, and operating procedures, etc., will be used to assess the operability of the system or of any supported systems when utilizing the SR allowances, which includes consideration of whether movement of the affected valves or dampers following an event is assumed in the safety analysis.

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Determination

TVA requests adoption of TSTF-541-A, "Add Exceptions to Surveillance Requirements for Valves and Dampers Locked in the Actuated Position," which is an approved change to the Standard Technical Specifications, into the BFN Unit 1, 2, and 3, and SQN Units 1 and 2 TS. The proposed amendment modifies the TS SRs by adding exceptions to consider the SR met when automatic valves or dampers are locked, sealed, or otherwise secured in the actuated position, in order to consider the SR met. Securing the automatic valve or damper in the actuated position may affect the operability of the system or of any supported systems. The associated Limiting Condition for Operation is met if the subject structure, system, or component remains operable (i.e., capable of performing its specified safety function).

TVA has evaluated whether or not a significant hazards consideration is involved with the proposed amendments by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. *Does the proposed amendment involve a significant increase in the probability or consequence of an accident previously evaluated?*

Response: No.

The proposed change revises SRs by adding exceptions excluding from actuation and isolation time testing those valves and dampers that are locked, sealed, or otherwise secured in the actuated position. The performance or lack of performance of SRs is not an initiator of any accident previously evaluated. As a result, the proposed change has no effect on the probability of any accident previously evaluated. The proposed change excludes performance of portions of certain SRs, but the SSC must still be capable of performing the safety functions assumed in the accident analysis. Otherwise, the SSC is inoperable, and the associated TS Actions are followed. As a result, the SSCs continue to perform their mitigating functions and the consequences of any accident previously evaluated are not affected.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. *Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?*

Response: No.

The proposed change revises SRs by adding exceptions excluding from actuation and isolation time testing those valves and dampers that are locked, sealed, or otherwise secured in the actuated position. The proposed change will not change the design

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function or operability requirements of the affected SSCs. The SSC must still be capable of performing the safety functions assumed in the accident analysis, or the SSC is inoperable and the associated TS Actions are followed. The proposed change does not create any credible new failure mechanisms, malfunctions, or accident initiators not considered in the design and licensing bases.

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

3. *Does the proposed amendment involve a significant reduction in a margin of safety?*

Response: No.

The proposed change revises SRs by adding exceptions excluding from actuation and isolation time testing those valves and dampers that are locked, sealed, or otherwise secured in the actuated position. The proposed change does not alter the manner in which safety limits, limiting safety system settings or limiting conditions for operation are determined. The safety analysis assumptions and acceptance criteria are not affected by this change.

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

Based on the above, TVA concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

3.2 Conclusion

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

4.0 ENVIRONMENTAL CONSIDERATION

The proposed change would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that maybe released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9).

Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.

Attachment 1.1

Proposed TS Changes (Mark-Ups) for BFN Units 1, 2, and 3

(12 pages)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.7</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 1040 and ≥ 950 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.8</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 165 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.9</p> <p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

(continued)

, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position

SURVEILLANCE REQUIREMENTS (continued)


SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5</p> <p>-----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal. <div style="border: 1px solid red; padding: 2px; display: inline-block; margin-top: 5px;"> , except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position </div>	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.4	Verify the SGT decay heat discharge dampers are in the correct position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.3.1	Operate each CREV subsystem for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.2	Perform required CREV filter testing in accordance with the VFTP.	In accordance with the VFTP
SR 3.7.3.3	Verify each CREV subsystem actuates on an actual or simulated initiation signal. <div style="border: 1px solid red; padding: 2px; display: inline-block; color: red;">, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position</div> 	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.7</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 1040 and ≥ 950 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.8</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 165 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.9</p> <p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5</p> <p>-----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal. <div style="border: 1px solid red; padding: 2px; display: inline-block; margin-top: 5px;">, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position</div>	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.4	Verify the SGT decay heat discharge dampers are in the correct position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.3.1	Operate each CREV subsystem for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.2	Perform required CREV filter testing in accordance with the VFTP.	In accordance with the VFTP
SR 3.7.3.3	Verify each CREV subsystem actuates on an actual or simulated initiation signal. , except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.7</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 1040 and ≥ 950 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.8</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 165 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.9</p> <p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

(continued)


, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5</p> <p>-----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal. <div style="border: 1px solid red; padding: 2px; display: inline-block; color: red;">, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position</div> 	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.4	Verify the SGT decay heat discharge dampers are in the correct position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.3.1	Operate each CREV subsystem for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.2	Perform required CREV filter testing in accordance with the VFTP.	In accordance with the VFTP
SR 3.7.3.3	Verify each CREV subsystem actuates on an actual or simulated initiation signal. , except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

Attachment 1.2

Proposed TS Changes (Mark-Ups) for SQN Units 1 and 2

(6 pages)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.6.10.3 Verify each EGTS Air Cleanup Subsystem train actuates on an actual or simulated actuation signal.</p> <p>, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.6.10.4 Verify each EGTS Air Cleanup Subsystem filter cooling bypass valve can be operated.</p> <p>, except for valves that are locked, sealed, or otherwise secured in the actuated position</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.6.10.5 Verify each EGTS Air Cleanup Subsystem train flow rate is ≥ 3600 and ≤ 4400 cfm.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.6.10.6 Verify the shield building can be maintained at a negative pressure ≥ 0.5 inch water gauge in the annulus by one EGTS Air Cleanup Subsystem train within 60 seconds after a start signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. Two CREVS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B or C.	G.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.10.1 Verify each tornado damper that is not locked, sealed or otherwise secured in place, is in the correct position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.2 Operate each CREVS train for ≥ 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.3 Perform required CREVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.10.4 Verify each CREVS train actuates on an actual or simulated actuation signal. , except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.5 Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.12.1	Operate each ABGTS train for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.12.2	Perform required ABGTS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.12.3	<p>-----NOTES-----</p> <ol style="list-style-type: none"> Actual or simulated actuation on Containment Phase A isolation signal only required to be met in MODES 1, 2, 3 and 4. Actual or simulated actuation on fuel storage pool area high radiation signal only required to be met during movement of irradiated fuel assemblies or with fuel stored in the spent fuel pool. <p>-----</p> <p>Verify each ABGTS train actuates on an actual or simulated actuation signal.</p>	In accordance with the Surveillance Frequency Control Program
	<div style="border: 1px solid red; padding: 2px; display: inline-block;">, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position</div>	
SR 3.7.12.4	Verify each ABGTS train can maintain a pressure ≤ -0.25 inches water gauge with respect to atmospheric pressure during the post accident mode of operation at a flow rate $\geq 8,100$ and $\leq 9,900$ cfm.	In accordance with the Surveillance Frequency Control Program


SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.10.3	Verify each EGTS Air Cleanup Subsystem train actuates on an actual or simulated actuation signal. , except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position	In accordance with the Surveillance Frequency Control Program
SR 3.6.10.4	Verify each EGTS Air Cleanup Subsystem filter cooling bypass valve can be operated. , except for valves that are locked, sealed, or otherwise secured in the actuated position	In accordance with the Surveillance Frequency Control Program
SR 3.6.10.5	Verify each EGTS Air Cleanup Subsystem train flow rate is ≥ 3600 and ≤ 4400 cfm.	In accordance with the Surveillance Frequency Control Program
SR 3.6.10.6	Verify the shield building can be maintained at a negative pressure ≥ 0.5 inch water gauge in the annulus by one EGTS Air Cleanup Subsystem train within 60 seconds after a start signal.	In accordance with the Surveillance Frequency Control Program


ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. Two CREVS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B or C.	G.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.10.1 Verify each tornado damper that is not locked, sealed or otherwise secured in place, is in the correct position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.2 Operate each CREVS train for ≥ 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.3 Perform required CREVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.10.4 Verify each CREVS train actuates on an actual or simulated actuation signal. <div data-bbox="154 1591 604 1696" style="border: 1px solid red; padding: 2px; display: inline-block; color: red;">, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position</div> 	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.5 Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.12.1	Operate each ABGTS train for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.12.2	Perform required ABGTS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.12.3	<p>-----NOTES-----</p> <ol style="list-style-type: none"> Actual or simulated actuation on Containment Phase A isolation signal only required to be met in MODES 1, 2, 3 and 4. Actual or simulated actuation on fuel storage pool area high radiation signal only required to be met during movement of irradiated fuel assemblies or with fuel stored in the spent fuel pool. <p>-----</p> <p>Verify each ABGTS train actuates on an actual or simulated actuation signal.</p>	In accordance with the Surveillance Frequency Control Program
	<div style="border: 1px solid red; padding: 2px; display: inline-block;"> <p>, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position</p> </div> 	
SR 3.7.12.4	Verify each ABGTS train can maintain a pressure ≤ -0.25 inches water gauge with respect to atmospheric pressure during the post accident mode of operation at a flow rate $\geq 8,100$ and $\leq 9,900$ cfm.	In accordance with the Surveillance Frequency Control Program

Attachment 2.1

Proposed TS Changes (Final Retyped) for BFN Units 1, 2, and 3

(12 pages)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.7</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure \leq 1040 and \geq 950 psig, the HPCI pump can develop a flow rate \geq 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.8</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure \leq 165 psig, the HPCI pump can develop a flow rate \geq 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.9</p> <p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5</p> <p>-----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.4	Verify the SGT decay heat discharge dampers are in the correct position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.3.1	Operate each CREV subsystem for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.2	Perform required CREV filter testing in accordance with the VFTP.	In accordance with the VFTP
SR 3.7.3.3	Verify each CREV subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.7</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 1040 and ≥ 950 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.8</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 165 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.9</p> <p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5</p> <p>-----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.4	Verify the SGT decay heat discharge dampers are in the correct position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.3.1	Operate each CREV subsystem for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.2	Perform required CREV filter testing in accordance with the VFTP.	In accordance with the VFTP
SR 3.7.3.3	Verify each CREV subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.7</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 1040 and ≥ 950 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.8</p> <p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure ≤ 165 psig, the HPCI pump can develop a flow rate ≥ 5000 gpm against a system head corresponding to reactor pressure.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.5.1.9</p> <p>-----NOTE----- Vessel injection/spray may be excluded. -----</p> <p>Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.5.3.5</p> <p>-----NOTE----- Vessel injection may be excluded. -----</p> <p>Verify the RCIC System actuates on an actual or simulated automatic initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.4.3.1	Operate each SGT subsystem for ≥ 15 continuous minutes with heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.4	Verify the SGT decay heat discharge dampers are in the correct position.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.3.1	Operate each CREV subsystem for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.2	Perform required CREV filter testing in accordance with the VFTP.	In accordance with the VFTP
SR 3.7.3.3	Verify each CREV subsystem actuates on an actual or simulated initiation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.3.4	Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

Attachment 2.2

Proposed TS Changes (Final Retyped) for SQN Units 1 and 2

(6 pages)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.10.3	Verify each EGTS Air Cleanup Subsystem train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.10.4	Verify each EGTS Air Cleanup Subsystem filter cooling bypass valve can be operated, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.10.5	Verify each EGTS Air Cleanup Subsystem train flow rate is ≥ 3600 and ≤ 4400 cfm.	In accordance with the Surveillance Frequency Control Program
SR 3.6.10.6	Verify the shield building can be maintained at a negative pressure ≥ 0.5 inch water gauge in the annulus by one EGTS Air Cleanup Subsystem train within 60 seconds after a start signal.	In accordance with the Surveillance Frequency Control Program

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. Two CREVS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B or C.	G.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.10.1 Verify each tornado damper that is not locked, sealed or otherwise secured in place, is in the correct position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.2 Operate each CREVS train for ≥ 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.3 Perform required CREVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.10.4 Verify each CREVS train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.5 Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.12.1	Operate each ABGTS train for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.12.2	Perform required ABGTS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.12.3	<p>-----NOTES-----</p> <ol style="list-style-type: none"> 1. Actual or simulated actuation on Containment Phase A isolation signal only required to be met in MODES 1, 2, 3 and 4. 2. Actual or simulated actuation on fuel storage pool area high radiation signal only required to be met during movement of irradiated fuel assemblies or with fuel stored in the spent fuel pool. <p>-----</p> <p>Verify each ABGTS train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	In accordance with the Surveillance Frequency Control Program
SR 3.7.12.4	Verify each ABGTS train can maintain a pressure ≤ -0.25 inches water gauge with respect to atmospheric pressure during the post accident mode of operation at a flow rate $\geq 8,100$ and $\leq 9,900$ cfm.	In accordance with the Surveillance Frequency Control Program

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.10.3	Verify each EGTS Air Cleanup Subsystem train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.10.4	Verify each EGTS Air Cleanup Subsystem filter cooling bypass valve can be operated, except for valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.6.10.5	Verify each EGTS Air Cleanup Subsystem train flow rate is ≥ 3600 and ≤ 4400 cfm.	In accordance with the Surveillance Frequency Control Program
SR 3.6.10.6	Verify the shield building can be maintained at a negative pressure ≥ 0.5 inch water gauge in the annulus by one EGTS Air Cleanup Subsystem train within 60 seconds after a start signal.	In accordance with the Surveillance Frequency Control Program

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. Two CREVS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B or C.	G.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.10.1 Verify each tornado damper that is not locked, sealed or otherwise secured in place, is in the correct position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.2 Operate each CREVS train for ≥ 15 minutes.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.3 Perform required CREVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.10.4 Verify each CREVS train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.	In accordance with the Surveillance Frequency Control Program
SR 3.7.10.5 Perform required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.12.1	Operate each ABGTS train for ≥ 15 continuous minutes with the heaters operating.	In accordance with the Surveillance Frequency Control Program
SR 3.7.12.2	Perform required ABGTS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.12.3	<p>-----NOTES-----</p> <ol style="list-style-type: none"> 1. Actual or simulated actuation on Containment Phase A isolation signal only required to be met in MODES 1, 2, 3 and 4. 2. Actual or simulated actuation on fuel storage pool area high radiation signal only required to be met during movement of irradiated fuel assemblies or with fuel stored in the spent fuel pool. <p>-----</p> <p>Verify each ABGTS train actuates on an actual or simulated actuation signal, except for dampers and valves that are locked, sealed, or otherwise secured in the actuated position.</p>	In accordance with the Surveillance Frequency Control Program
SR 3.7.12.4	Verify each ABGTS train can maintain a pressure ≤ -0.25 inches water gauge with respect to atmospheric pressure during the post accident mode of operation at a flow rate $\geq 8,100$ and $\leq 9,900$ cfm.	In accordance with the Surveillance Frequency Control Program

Attachment 3.1

Proposed TS Bases Page Changes (Mark-Ups) for BFN Unit 1 (For Information Only)

(4 pages)

BASES

SURVEILLANCE
REQUIREMENTS
(continued)

SR 3.5.1.9

The SR excludes automatic dampers and valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required Frequency.

The ECCS subsystems are required to actuate automatically to perform their design functions. This Surveillance verifies that, with a required system initiation signal (actual or simulated), the automatic initiation logic of HPCI, CS, and LPCI will cause the systems or subsystems to operate as designed, including actuation of the system throughout its emergency operating sequence, automatic pump startup and actuation of all automatic valves to their required positions. This SR also ensures that the HPCI System will automatically restart on an RPV low-low water level (Level 2) signal received subsequent to an RPV high water level (Level 8) trip and that the suction is automatically transferred from the CST to the suppression pool.

→ The LOGIC SYSTEM FUNCTIONAL TEST performed in LCO 3.3.5.1 overlaps this Surveillance to provide complete testing of the assumed safety function.

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

This SR is modified by a Note that excludes vessel injection/spray during the Surveillance. Since all active components are testable and full flow can be demonstrated by recirculation through the test line, coolant injection into the RPV is not required during the Surveillance.

(continued)

BASES

SURVEILLANCE
REQUIREMENTS
(continued)

SR 3.5.3.5

The RCIC System is required to actuate automatically in order to perform its design function satisfactorily. This Surveillance verifies that, with a required system initiation signal (actual or simulated), the automatic initiation logic of the RCIC System will cause the system to operate as designed, including actuation of the system throughout its emergency operating sequence; that is, automatic pump startup and actuation of all automatic valves to their required positions. This test also ensures the RCIC System will automatically restart on an RPV low-low water level (Level 2) signal received subsequent to an RPV high water level (Level 8) trip. The LOGIC SYSTEM FUNCTIONAL TEST performed in LCO 3.3.5.3 overlaps this Surveillance to provide complete testing of the assumed safety function.

The SR excludes automatic dampers and valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required Frequency.

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

This SR is modified by a Note that excludes vessel injection during the Surveillance. Since all active components are testable and full flow can be demonstrated by recirculation through the test line, coolant injection into the RPV is not required during the Surveillance.

(continued)

BASES

SURVEILLANCE
REQUIREMENTS
(continued)

The SR excludes automatic dampers and valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required Frequency.

SR 3.6.4.3.3

This SR verifies that each SGT subsystem starts on receipt of an actual or simulated initiation signal. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.6.4.3.4

This SR verifies that the SGT decay heat discharge dampers are in the correct position. This ensures that the decay heat removal mode of SGT System operation is available. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

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1. 10 CFR 50, Appendix A, GDC 41.
 2. FSAR, Section 5.3.3.7.
 3. FSAR, Section 14.6.
 4. NRC No. 93-102, "Final Policy Statement on Technical Specification Improvements," July 23, 1993.
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BASES

SURVEILLANCE
REQUIREMENTS
(continued)

The SR excludes automatic dampers and valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required Frequency.

SR 3.7.3.3

This SR verifies that on an actual or simulated initiation signal, each CREV subsystem starts and operates. This SR includes verification that dampers necessary for proper CREV operation function as required. The LOGIC SYSTEM FUNCTIONAL TEST in SR 3.3.7.1.4 and SR 3.3.7.1.6 overlaps this SR to provide complete testing of the safety function. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.7.3.4

This SR verifies the OPERABILITY of the CRE boundary by testing for unfiltered air leakage past the CRE boundary and into the CRE. The details of the testing are specified in the Control Room Envelope Habitability Program.

The CRE is considered habitable when the radiological dose to CRE occupants calculated in the licensing basis analyses of DBA consequences is no more than 5 REM TEDE and the CRE occupants are protected from hazardous chemicals and smoke. There is no automatic CREV actuation for hazardous chemical releases or smoke and there are no Surveillance Requirements to verify the OPERABILITY in cases of hazardous chemicals or smoke. This SR verifies that the unfiltered air leakage into the CRE is no greater than the flow rate assumed in the licensing basis analysis of DBA consequences. When unfiltered air leakage is greater than the assumed flow rate, Condition B must be entered. Required Action B.3 allows time to restore the CRE boundary to OPERABLE status provided mitigating actions can ensure that the CRE remains within the licensing basis habitability limits for occupants following an accident. Compensatory measures are discussed in Regulatory Guide 1.196, Section C.2.7.3, (Ref. 6) which endorses, with exceptions, NEI 99-03, Section 8.4 and Appendix F (Ref. 7). These compensatory measures may also be used as mitigating actions as required by Required Action B.2. Temporary analytical methods may also be used as compensatory

Attachment 3.2

Proposed TS Bases Page Changes (Mark-Ups) for SQN Unit 1 (For Information Only)

(3 pages)

BASES

SURVEILLANCE REQUIREMENTS (continued)

The SR excludes automatic dampers and valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required Frequency.

The SR excludes automatic valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to valves that are locked, sealed, or otherwise secured in the actuated position since the affected valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve to the non-actuated position requires verification that the SR has been met within its required Frequency.

SR 3.6.10.2

This SR verifies that the required EGTS Air Cleanup Subsystem filter testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

SR 3.6.10.3

The automatic startup ensures that each EGTS Air Cleanup Subsystem train responds properly.

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.6.10.4

The EGTS Air Cleanup Subsystem filter cooling bypass valves are tested to verify OPERABILITY. The ability to cool the filters and adsorbers in an inactive air cleanup unit is accomplished with two crossover flow ducts that draw a small stream of air from the active air cleanup unit through the inactive air cleanup unit. The valves in the inactive train automatically receive a signal to open. The capability to manually open the suction valve for the inactive train and align to the affected unit is provided in the main control room to complete the flow path through the inactive unit.

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.6.10.5

The proper functioning of the fans, dampers, filters, adsorbers, etc., as a system is verified by the ability of each train to produce the required system flow rate.

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

BASES

SURVEILLANCE REQUIREMENTS (continued)

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.7.10.3

This SR verifies that the required CREVS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The VFTP includes testing the performance of the HEPA filter, charcoal adsorber efficiency, minimum flow rate, and the physical properties of the activated charcoal. Specific test Frequencies and additional information are discussed in detail in the VFTP.

The SR excludes automatic dampers and valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required Frequency.

SR 3.7.10.4

This SR verifies that each CREVS train starts automatically, diverts its inlet flow through the HEPA filters and charcoal adsorbers, and operates on an actual or simulated (i.e., safety injection signal or a high radiation signal from the air intake stream) actuation signal →

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.7.10.5

This SR verifies the OPERABILITY of the CRE boundary by testing for unfiltered air inleakage past the CRE boundary and into the CRE. The details of the testing are specified in the Control Room Envelope Habitability Program.

The CRE is considered habitable when the radiological dose to CRE occupants calculated in the licensing basis analyses of DBA consequences is no more than 5 rem whole body or its equivalent to any part of the body and the CRE occupants are protected from hazardous chemicals and smoke. This SR verifies that the unfiltered air inleakage into the CRE is no greater than the flow rate assumed in the licensing basis analyses of DBA consequences. When unfiltered air inleakage is greater than the assumed flow rate, Condition B must be entered. Required Action B.3 allows time to restore the CRE boundary to OPERABLE status provided mitigating actions can ensure that the CRE remains within the licensing basis habitability limits for the occupants following an accident. Compensatory measures are discussed in Regulatory Guide 1.196, Section C.2.7.3, (Ref. 6) which endorses, with exceptions, NEI 99-03, Section 8.4 and Appendix F (Ref. 7). These

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.7.12.2

This SR verifies that the required ABGTS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test frequencies and additional information are discussed in detail in the VFTP.

SR 3.7.12.3

This SR verifies that each ABGTS train starts and operates on an actual or simulated actuation signal. The SR is modified by two Notes that specify when verification of ABGTS actuation for each actuation signal is required to be met. ABGTS actuation on a Containment Phase A isolation signal is required to be met in MODES 1, 2, 3 and 4. ABGTS actuation on fuel storage pool area high radiation signal is required to be met during movement of irradiated fuel assemblies and with fuel stored in the spent fuel pool.

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.7.12.4

This SR verifies the integrity of the auxiliary building enclosure (i.e., spent fuel storage area and the ESF pump rooms). The ability of the auxiliary building to maintain negative pressure with respect to potentially uncontaminated adjacent areas is periodically tested to verify proper function of the ABGTS. During the post accident mode of operation, the ABGTS is designed to maintain a slight negative pressure in the auxiliary building, to prevent unfiltered LEAKAGE. The ABGTS is designed to maintain a pressure ≤ -0.25 inches water gauge with respect to atmospheric pressure at a flow rate $\geq 8,100$ and $\leq 9,900$ cfm to the auxiliary building.

The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

The SR excludes automatic dampers and valves that are locked, sealed, or otherwise secured in the actuated position. The SR does not apply to dampers or valves that are locked, sealed, or otherwise secured in the actuated position since the affected dampers or valves were verified to be in the actuated position prior to being locked, sealed, or otherwise secured. Placing an automatic valve or damper in a locked, sealed, or otherwise secured position requires an assessment of the operability of the system or any supported systems, including whether it is necessary for the valve or damper to be repositioned to the non-actuated position to support the accident analysis. Restoration of an automatic valve or damper to the non-actuated position requires verification that the SR has been met within its required Frequency.