

# **ENERGY NORTHWEST**

P.O. Box 968 ■ Richland, Washington 99352-0968

April 19, 2004  
GO2-04-074

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

**SUBJECT: COLUMBIA GENERATING STATION  
DOCKET NO. 50-397  
LICENSE AMENDMENT REQUEST  
ADOPTION OF TS TASK FORCE (TSTF) TRAVELER - 287,  
REVISION 5, VENTILATION SYSTEM ENVELOPE ALLOWED  
OUTAGE TIME**

REFERENCES: 1) Letter dated March 16, 2000, WD Beckner (NRC) to J Davis (NEI),  
"Approval of various TSTFs"  
2) Letter dated April 15, 2003, TE Abney (TVA) to USNRC, "Browns  
Ferry Nuclear Plant (BFN) - Units 1, 2, and 3 - Technical Specification  
(TS) Change 409 - Adoption of TS Task Force (TSTF) Traveler - 287,  
Revision 5 - Control Room Ventilation System Envelope - Allowed  
Outage Time"  
3) Letter Dated August 29, 2003, KN Jabbore (NRC) to JA Scalice (TVA),  
"Browns Ferry Nuclear Plant - Units 1, 2, and 3, Regarding Issuance of  
Amendments (TAC Nos. MB8468, MB8469, MB8470) (TS-409)"

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Energy Northwest hereby requests an amendment to the Columbia Generating Station (Columbia) Operating License (NFP-21). The proposed change revises Limiting Condition for Operation (LCO) 3.7.3, Control Room Emergency Filtration (CREF) System, and the associated Technical Specifications (TS) Bases to provide specific Conditions and Required Actions that address a degraded control room boundary. The proposed changes are consistent with the industry Standard TS change TSTF Traveler 287, Revision 5, which was approved by the NRC by letter dated March 16, 2000, (Reference 1).

Attachment 1 provides a description of the proposed change and the regulatory basis for the change. Attachment 2 provides the affected TS pages marked up to show the proposed change. Attachment 3 provides retyped TS pages, which incorporate the requested changes.

AP01

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Attachment 4 provides the proposed TS Bases changes for information only. Upon approval of the requested amendment, these TS Bases changes will be implemented concurrently with the TS change in accordance with the Columbia TS Bases Control Program.

Energy Northwest requests approval of the proposed license amendment by June 30, 2004, with an implementation period of 30 days. While this request does not qualify as an emergency or exigent change, a prompt review and approval is requested. This approval is needed to avoid potential LCO 3.0.3 entries that could arise due to unforeseen control room boundary integrity issues. To facilitate the review and approval, this request was closely modeled after the Tennessee Valley Authority's recent request (Reference 2) to adopt TSTF-287 for the Browns Ferry Nuclear Power Plant that the NRC approved on August 29, 2003, (Reference 3). The need for a prompt review of this request and the above requested approval date were discussed with the NRC's Project Manager for Columbia on April 15, 2004.

Energy Northwest has determined there are no significant hazards considerations associated with the proposed change and the TS change qualifies for a categorical exclusion from environmental review pursuant to the provision of 10 CFR 51.22(c)(9).

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated Washington State Official.

This communication contains one new commitment. This commitment is listed in attachment 5.

Should you have any questions or require additional information regarding this matter, please contact Ms. CL Perino, Licensing Manager, at (509) 377-2075.

Respectfully,



DK Atkinson  
Vice President, Technical Services  
Mail Drop PE08

- Attachments:
1. Description and Assessment
  2. Proposed Technical Specification Changes (marked up)
  3. Revised Technical Specification Pages (typed)
  4. Proposed Technical Specification Bases Changes
  5. List of Regulatory Commitments

cc: BS Mallett - NRC RIV  
BJ Benney - NRC NRR  
NRC Sr. Resident Inspector - 988C

RN Sherman - BPA/1399  
TC Poindexter - Winston & Strawn  
JO Luce - EFSEC

STATE OF WASHINGTON )  
 )  
COUNTY OF BENTON )

Subject: Revision To Technical  
Specification LCO 3.7.3  
Adoption of TSTF-287, R.5

I, DK Atkinson, being duly sworn, subscribe to and say that I am the Vice President, Technical Services for ENERGY NORTHWEST, the applicant herein; that I have the full authority to execute this oath; that I have reviewed the foregoing; and that to the best of my knowledge, information, and belief the statements made in it are true.

DATE April 19, 2004

DK Atkinson  
DK Atkinson  
Vice President, Technical Services

On this date personally appeared before me DK Atkinson, to me known to be the individual who executed the foregoing instrument, and acknowledged that he signed the same as his free act and deed for the uses and purposes herein mentioned.

GIVEN under my hand and seal this 19<sup>th</sup> day of April, 2004



Lori A. Walli  
Notary Public in and for the  
STATE OF WASHINGTON

Residing at West Richland

My Commission Expires 3-29-05

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**Attachment 1**

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**1.0 DESCRIPTION**

This letter is a request to amend Operating License NFP-21 for Columbia Generating Station (Columbia). The proposed change revises Limiting Condition for Operation (LCO) 3.7.3, Control Room Emergency Filtration (CREF) System, and the associated Technical Specifications (TS) Bases to provide specific Conditions and Required Actions that address a degraded control room boundary. The proposed changes are consistent with the Industry/Standard TS (STS) Technical Specification Task Force (TSTF) Traveler 287, Revision 5, "Ventilation System Envelope Allowed Outage Time," (Reference 1), which was approved by the NRC by letter dated March 16, 2000, (Reference 2).

**2.0 PROPOSED CHANGE**

The proposed TS changes are as follows: A Note is being added to LCO 3.7.3 that would allow the control room boundary to be opened intermittently under administrative controls. The associated TS Bases are revised by adding a paragraph to specify the necessary administrative controls to restore the control room boundary. A new Condition B is being added to LCO 3.7.3 to specify a Completion Time of 24 hours is allowed to restore an inoperable control room boundary to OPERABLE status. Corresponding TS Bases are also added to support this change, which discuss the use of compensatory measures during the time period the control room boundary is inoperable. The existing Conditions and Bases are renumbered accordingly. Condition D (new Condition E) of LCO 3.7.3 for two inoperable CREF subsystems in MODE 1, 2, or 3 is being modified to exclude entry into this Condition when the CREF subsystems are inoperable because of a degraded control room boundary. The associated TS Bases for this Condition are revised accordingly. Marked-up TS pages and TS Bases pages that show the specific changes are provided in Attachments 2 and 4, respectively. The TS changes provided in TSTF-287, Revision 5, are proposed for adoption with no variances. However, plant-specific terminology (e.g., system name - CREF) is substituted for the generic system name in the TSTF.

**3.0 BACKGROUND**

A description of the CREF System is provided in Section 6.4, "Habitability Systems" and 9.4, "Heating, Ventilating and Air Conditioning Systems," of Columbia's Final Safety Analysis Report (FSAR). The CREF System provides a radiologically controlled environment from which the unit can be safely operated following a Design Basis Accident. The safety related function of the CREF System includes two independent and redundant high efficiency air filtration subsystems for emergency treatment of outside supply air.

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During a loss-of-coolant accident (LOCA), the control room emergency pressurization mode through the emergency filter unit(s) maintains a minimum positive pressure of 0.125 in. w.g. in the control room with respect to its surroundings as measured relative to the cable spreading room. The ingress of smoke or products of combustion (due to a fire within the plant but external to the control room), or of airborne radioactive contaminants released due to the design basis accident, is minimized by pressurizing the control room.

Three air intakes are provided from which fresh air can be drawn. One local intake is provided for normal operation and two remote intakes are provided for normal and emergency operation.

Fire external to the plant and ingress of smoke or products of combustion are detected by smoke detectors in the control room fresh air intake ducting, which will automatically close the fire rated dampers downstream of the smoke detectors. Isolation of the control room fresh air intakes would place the control room HVAC in an unfiltered recirculation mode. In the event of a hazardous chemical release, the control room HVAC is manually isolated into the recirculation mode without filtration through the emergency filter units.

Surveillance Requirement (SR) 3.7.3.4 tests the integrity of the control room boundary and requires a positive pressure limit be satisfied with one CREF subsystem operating. Other SRs in LCO 3.7.3 test the Operability and function of the CREF ventilation subsystems. While there are currently TS Conditions and Required Actions for CREF subsystem inoperability due to ventilation train degradation, there are no corresponding Conditions, Required Actions, or Completion Times specified in LCO 3.7.3 associated with this control room boundary surveillance. Currently, if the control room boundary is breached, the CREF subsystems might not be able to maintain the positive pressure required by SR 3.7.3.4. For this situation, under the existing TS, LCO 3.0.3 must be entered for two-train inoperability (during operation in MODES 1, 2, or 3). Requiring the plant to immediately enter LCO 3.0.3 when the control room boundary is not intact is excessive and does not provide a suitable time allowance for preventive maintenance or unplanned corrective maintenance activities.

This TS change also proposes that an LCO Note be added to LCO 3.7.3 that would allow the control room boundary to be opened intermittently under administrative control without the need of declaring the control boundary inoperable. This provision acknowledges that for routine personnel entry and exit, administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls consist of stationing a dedicated individual at the opening who is in continuous communication with the control room. This proposed TS change addresses these issues by the adoption of TSTF-287, Revision 5. Similar TS changes have been approved by the NRC for a number of Pressurized Water Reactors and several BWRs, including Hatch, Fermi, Susquehanna and most recently, Browns

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Ferry. Additionally, following approval by the NRC, it is intended that the TSTFs be incorporated by individual licensees as changes to their respective TS. Thus, in proposing incorporation of this TSTF, Columbia is increasing consistency with the latest approved changes and improvements to STS.

#### 4.0 TECHNICAL ANALYSIS

If the control room boundary is inoperable in MODES 1, 2, or 3 such that the CREF trains cannot establish or maintain the required control room pressure, this TS change will require action be taken to restore an OPERABLE control room boundary within 24 hours. The 24-hour Completion Time is reasonable based on the low probability of a design basis accident occurring during this time period and compensatory measures available to the operator to minimize the consequences of potential hazards. Additionally, LCO 3.7.3 is modified by a Note that allows the control room boundary to be opened intermittently under administrative controls. For entry and exit through doors, the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, a dedicated individual, who is in continuous communication with the control room, is stationed at the opening. This individual will have a method to rapidly close the opening when a need for control room boundary integrity is required.

As indicated, the proposed TS changes allow 24 hours (during operation in MODES 1, 2, and 3) for an inoperable control room boundary to be restored before the initiation of an orderly shutdown is required. During the period that the control room boundary is inoperable, appropriate compensatory measures consistent with the intent of 10 CFR 50 Appendix A, General Design Criterion (GDC) 19 will be utilized to protect control room personnel from potential hazards such as radiation, radioactive contamination, toxic chemicals, smoke, temperature, relative humidity, and to ensure physical security. The preplanned measures will be available to address these concerns for intentional and unintentional entry into proposed new Condition B. Energy Northwest will have approved written procedures in place that describe the compensatory measures to be taken in the event of an intentional or unintentional entry into Condition B. A regulatory commitment to this effect is provided in Attachment 5.

In summary, the proposed change is considered acceptable due to the low probability of an event occurring during the allowed outage time that would require an intact control room boundary, and by the use of compensatory measures.

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**5.0 REGULATORY SAFETY ANALYSIS**

Energy Northwest is submitting an amendment request to Operating License NFP-21 – Columbia Generating Station Technical Specifications (TS). The proposed amendment revises Limiting Condition for Operation 3.7.3, Control Room Emergency Filtration (CREF) System and the associated Bases to provide specific Conditions and Required Actions that address a degraded control room boundary.

**5.1 No Significant Hazards Consideration**

Energy Northwest has evaluated whether or not a significant hazards consideration is involved with the proposed amendment 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 consequences of an accident previously evaluated?

Response: No

The proposed Technical Specifications (TS) change involves the Control Room Emergency Filtration (CREF) System and associated control room boundary, which provide a radiological controlled environment from which the plant can be operated following a design basis accident (DBA). The CREF system and the control room boundary are not assumed to be initiators of any analyzed accident and do not affect the probability of accidents. The proposed change adds a Note to LCO 3.7.3 that allows the control room boundary to be opened intermittently under administrative controls. A new Condition B is also added to LCO 3.7.3 to specify a Completion Time of 24 hours to restore an inoperable control room boundary to OPERABLE status before requiring the plant to perform an orderly shutdown. The 24-hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period and Energy Northwest's commitment to implement, via administrative controls, appropriate compensatory measures consistent with the intent of 10 CFR 50, Appendix A, General Design Criteria (GDC) 19. These compensatory measures will serve to minimize the consequences of an open control room boundary and ensure the CREF system can continue to perform its function. As such, these changes will not affect the function or operation of any other systems, structures, or components. Therefore, the proposed TS change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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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 adds a Note to LCO 3.7.3 that allows the control room boundary to be opened intermittently under administrative controls. A new Condition B is also added to LCO 3.7.3 to specify a Completion Time of 24 hours to restore an inoperable control room boundary to OPERABLE status before requiring the plant to perform an orderly shutdown. The CREF system and the control room boundary are designed to protect the habitability of the control room. The CREF system and the control room boundary are not accident initiators and do not affect the probability of accidents. This change is administrative in nature and does not involve any physical changes to the plant. Therefore, the proposed TS 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 adds a Note to LCO 3.7.3 that allows the control room boundary to be opened intermittently under administrative controls. A new Condition B is also added to LCO 3.7.3 to specify a Completion Time of 24 hours to restore an inoperable control room boundary to OPERABLE status before requiring the plant to perform an orderly shutdown. The 24-hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period and Energy Northwest's commitment to implement, via administrative controls, appropriate compensatory measures consistent with the intent of 10 CFR 50, Appendix A, GDC 19. These compensatory measures will serve to minimize the consequences of an open control room boundary and assure that the CREF system can continue to perform its function. Therefore, the proposed TS change does not involve a significant reduction in the margin of safety.

Based on the above, Energy Northwest concludes that the proposed amendment 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.

## 5.2 Applicable Regulatory Requirements/Criteria

The proposed changes would allow 24 hours (during MODES 1, 2, or 3) to restore the capability to maintain control room boundary differential pressure before requiring the unit to

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perform an orderly shutdown, and would also allow intermittent opening of the control room boundary under administrative controls. During the period that the control room boundary is inoperable, appropriate compensatory measures consistent with the intent of 10 CFR Part 50, Appendix A, GDC 19 will be utilized to protect the control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature, relative humidity, and to ensure physical security. These preplanned compensatory measures will be available to address these concerns for intentional and unintentional entry into the Condition. The proposed change is considered acceptable because of the low probability of an event requiring an intact control room boundary during the 24-hour Completion Time associated with the new Condition B. Based on the low probability of an event occurring in this time and the availability of compensatory measures consistent with GDC 19 to minimize the consequences during an event, the proposed change is considered acceptable and is in conformance with NRC-approved TSTF-287, Revision 5. 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 the health and safety of the public.

**6.0 ENVIRONMENTAL CONSIDERATION**

A review has determined that the proposed amendment 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 amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment 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 amendment.

**7.0 REFERENCES**

1. Technical Specifications Task Force (TSTF) Change Traveler 287, Revision 5, "Ventilation System Envelope Allowed Outage Time"
2. Letter dated March 16, 2000, WD Beckner (NRC) to J Davis (NEI), "Approval of several TSTFs including TSTF-287, Revision 5"

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Proposed Technical Specification Changes (marked up)

**NOTE**

The control room boundary may be opened intermittently under administrative control.

CREF System  
3.7.3

3.7 PLANT SYSTEMS

3.7.3 Control Room Emergency Filtration (CREF) System

LCO 3.7.3 Two CREF subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3,  
During movement of irradiated fuel assemblies in the secondary containment,  
During CORE ALTERATIONS,  
During operations with a potential for draining the reactor vessel (OPDRVs).

**ACTIONS**

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CREF subsystem inoperable.	A.1 Restore CREF subsystem to OPERABLE status.	7 days
B. Required Action and Associated Completion Time of Condition A not met in MODE 1, 2, or 3.	B.1 Be in MODE 3.	12 hours
	B.2 Be in MODE 4.	36 hours

(continued)

B. Two CREF subsystems inoperable due to inoperable control room boundary in MODES 1, 2 and 3.	B.1 Restore control room boundary to OPERABLE status.	24 hours
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ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p><b>1</b> <b>D</b></p> <p>Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.</p>	<p>-----NOTE-----                      LCO 3.0.3 is not applicable.                      -----</p> <p><b>1</b> <b>D</b> 1 Place OPERABLE CREF subsystem in pressurization mode.</p> <p>OR</p> <p><b>1</b> <b>D</b> 2.1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p> <p>AND</p> <p><b>1</b> <b>D</b> 2.2 Suspend CORE ALTERATIONS.</p> <p>AND</p> <p><b>1</b> <b>D</b> 2.3 Initiate action to suspend OPDRVs.</p>	<p>Immediately</p> <p>Immediately</p> <p>Immediately</p> <p>Immediately</p>
<p><b>1</b> <b>E</b></p> <p>Two CREF subsystems inoperable in MODE 1, 2, or 3.</p>	<p><b>1</b> <b>E</b> 1 Enter LCO 3.0.3.</p>	<p>Immediately</p>

(continued)

for reasons other than Condition B

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p><b>F</b> Two CREF subsystems inoperable during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.</p>	<p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p> <p><b>F</b> 1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p> <p>AND</p> <p><b>F</b> 2 Suspend CORE ALTERATIONS.</p> <p>AND</p> <p><b>F</b> 3 Initiate action to suspend OPDRVs.</p>	<p>Immediately</p> <p>Immediately</p> <p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.3.1 Operate each CREF subsystem for <math>\geq 10</math> continuous hours with the heaters operating.</p>	<p>31 days</p>
<p>SR 3.7.3.2 Perform required CREF filter testing in accordance with the Ventilation Filter Testing Program (VFTP).</p>	<p>In accordance with the VFTP</p>

(continued)

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Proposed Technical Specification Pages (typed)

3.7 PLANT SYSTEMS

3.7.3 Control Room Emergency Filtration (CREF) System

LCO 3.7.3 Two CREF subsystems shall be OPERABLE.

-----NOTE-----  
The control room boundary may be opened intermittently under administrative control.  
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APPLICABILITY: MODES 1, 2, and 3,  
During movement of irradiated fuel assemblies in the secondary containment,  
During CORE ALTERATIONS,  
During operations with a potential for draining the reactor vessel (OPDRVs).

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One CREF subsystem inoperable.	A.1 Restore CREF subsystem to OPERABLE status.	7 days
B. Two CREF sybsystems inoperable due to inoperable control room boundary in MODES 1, 2, and 3.	B.1 Restore control room boundary to OPERABLE status.	24 hours
C. Required Action and Associated Completion Time of Condition A or B not met in MODE 1, 2, or 3.	C.1 Be in MODE 3. <u>AND</u> C.2 Be in MODE 4.	12 hours  36 hours

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>D. Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.</p>	<p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p> <p>D.1 Place OPERABLE CREF subsystem in pressurization mode.</p> <p><u>OR</u></p> <p>D.2.1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p> <p><u>AND</u></p> <p>D.2.2 Suspend CORE ALTERATIONS.</p> <p><u>AND</u></p> <p>D.2.3 Initiate action to suspend OPDRVs.</p>	<p>Immediately</p> <p>Immediately</p> <p>Immediately</p> <p>Immediately</p>
<p>E. Two CREF subsystems inoperable in MODE 1, 2, or 3 for reasons other than Condition B.</p>	<p>E.1 Enter LCO 3.0.3.</p>	<p>Immediately</p>

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
F. Two CREF subsystems inoperable during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.	-----NOTE----- LCO 3.0.3 is not applicable. -----	
	F.1 Suspend movement of irradiated fuel assemblies in the secondary containment.	Immediately
	<u>AND</u>	
	F.2 Suspend CORE ALTERATIONS.	Immediately
<u>AND</u>		
F.3 Initiate action to suspend OPDRVs.	Immediately	

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.3.1 Operate each CREF subsystem for $\geq 10$ continuous hours with the heaters operating.	31 days
SR 3.7.3.2 Perform required CREF filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP

(continued)

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE	FREQUENCY
SR 3.7.3.3    Verify each CREF subsystem actuates on an actual or simulated initiation signal.	24 months
SR 3.7.3.4    Verify each CREF subsystem can maintain a positive pressure of $\geq 1/8$ inches water gauge relative to the radwaste and turbine buildings during the pressurization mode of operation at an outside air flow rate of $\leq 1000$ cfm.	24 months on a STAGGERED TEST BASIS

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**Proposed Technical Specification Bases Changes**

BASES (continued)

APPLICABLE  
SAFETY ANALYSES

The ability of the CREF System to maintain the habitability of the control room is an explicit assumption for the safety analyses presented in the FSAR, Chapters 6, 15 and 15.F (Refs. 3 and 4, respectively). The pressurization mode of the CREF System is assumed to operate following a loss of coolant accident, main steam line break, fuel handling accident, and control rod drop accident. The radiological doses to control room personnel as a result of the various DBAs are summarized in Reference 4. No single active failure will cause the loss of outside or recirculated air from the control room.

The CREF System satisfies Criterion 3 of Reference 5.

LCO

The LCO is modified by a Note allowing the control room boundary to be opened intermittently under administrative controls. For entry and exit through doors the administrative control of the opening is performed by the person(s) entering and exiting the area. For other openings, these controls consist of stationing a dedicated individual at the opening who is in continuous communication with the control room. This individual will have a method to rapidly close the opening when a need for control room boundary integrity is required.

Two redundant subsystems of the CREF System are required to be OPERABLE to ensure that at least one is available, assuming a single failure disables the other subsystem. Total system failure could result in exceeding a dose of 5 rem to the control room operators in the event of a DBA.

The CREF System is considered OPERABLE when the individual components necessary to control operator exposure are OPERABLE in both subsystems. A subsystem is considered OPERABLE when its associated:

- a. Filter unit fan is OPERABLE;
- b. HEPA filter and charcoal adsorber are not excessively restricting flow and are capable of performing their filtration functions;
- c. Heater, ductwork, valves, and dampers are OPERABLE, and air circulation can be maintained; and
- d. Control room recirculation fan is OPERABLE.

In addition, the control room boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors, such that the pressurization of SR 3.7.3.4 can be met. However, it is acceptable for access doors to be opened for normal control room entry and exit and not consider it to be a failure to meet the LCO.

(continued)

BASES (continued)

APPLICABILITY

-----NOTE-----  
Handling a cask/canister loaded with spent fuel, after the canister is seal welded and leak tested, is not considered to be movement of irradiated fuel.  
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In MODES 1, 2, and 3, the CREF System must be OPERABLE to control operator exposure during and following a DBA, since the DBA could lead to a fission product release.

In MODES 4 and 5, the probability and consequences of a DBA are reduced due to the pressure and temperature limitations in these MODES. Therefore, maintaining the CREF System OPERABLE is not required in MODE 4 or 5, except for the following situations under which significant radioactive releases can be postulated:

- a. During movement of irradiated fuel assemblies in the secondary containment;
- b. During CORE ALTERATIONS; and
- c. During operations with a potential for draining the reactor vessel (OPDRVs).

ACTIONS

A.1

With one CREF subsystem inoperable, the inoperable CREF subsystem must be restored to OPERABLE status within 7 days. With the unit in this condition, the remaining OPERABLE CREF subsystem is adequate to perform control room radiation protection. However, the overall reliability is reduced because a single failure in the OPERABLE subsystem could result in loss of CREF System function. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and that the remaining subsystem can provide the required capabilities.

Action Event Attached

B1 and B2

or control room boundary

In MODE 1, 2, or 3, if the inoperable CREF subsystem cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE that

(continued)

**ACTION INSERT**

**B.1**

If the control room boundary is inoperable in MODES 1, 2, and 3, the CREF trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity and physical security. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24-hour Completion Time is reasonable based on the low probability of a DBA occurring during the time period, and the use of supplemental mitigating actions. The 24-hour Completion Time is typically a reasonable time to diagnose, plan and possibly repair, and test most problems with the control room boundary.

BASES

ACTIONS

C B 1 and B 2 (continued)

minimizes risk. To achieve this status, the unit must be placed in at least MODE 3 within 12 hours and in MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

D D D D  
C.1.2.1, C.2.2, and C.2.3

LCO 3.0.3 is not applicable while in MODE 4 or 5. However, since irradiated fuel assembly movement can occur in MODE 1, 2, or 3, the Required Actions of Condition 2 are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, inability to suspend movement of irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs, if the inoperable CREF subsystem cannot be restored to OPERABLE status within the required Completion Time, the OPERABLE CREF subsystem may be placed in the pressurization mode. This action ensures that the remaining subsystem is OPERABLE, that no failures that would prevent automatic actuation will occur, and that any active failure will be readily detected.

An alternative to Required Action 1 is to immediately suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk.

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe

(continued)

BASES

ACTIONS

D D D D  
C.1, C.2.1, C.2.2, and C.2.3 (continued)

position. Also, if applicable, action must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

E

for reasons other than an inoperable control room boundary (i.e., Condition B)

If both CREF subsystems are inoperable in MODE 1, 2, or 3, the CREF System may not be capable of performing the intended function and the unit is in a condition outside of the accident analyses. Therefore, LCO 3.0.3 must be entered immediately.

F F F  
F.1, F.2, and F.3

F

LCO 3.0.3 is not applicable while in MODE 4 or 5. However, since irradiated fuel assembly movement can occur in MODE 1, 2, or 3, the Required Actions of Condition 2 are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, inability to suspend movement of irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs, with two CREF subsystems inoperable, action must be taken immediately to suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk.

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. If applicable, action must be initiated

(continued)

**LICENSE AMENDMENT REQUEST, ADOPTION OF TS TASK FORCE (TSTF)  
TRAVELER - 287, REVISION 5 - CONTROL ROOM VENTILATION SYSTEM  
ENVELOPE - ALLOWED OUTAGE TIME  
Attachment 5**

**List of Regulatory Commitments**

The following table identifies those actions committed to by Energy Northwest in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

REGULATORY COMMITMENT	DUE DATE
During the period that the control room boundary is inoperable, appropriate compensatory measures consistent with the intent of 10 CFR 50 Appendix A, General Design Criterion (GDC) 19 will be utilized to protect control room personnel from potential hazards such as radiation, radioactive contamination, toxic chemicals, smoke, temperature, relative humidity, and to ensure physical security. The preplanned measures will be available to address these concerns for intentional and unintentional entry into proposed new Condition B. Energy Northwest will have approved written procedures in place that describe the compensatory measures to be taken in the event of an intentional or unintentional entry into Condition B.	Upon implementation of the associated License Amendment.