

Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

CNL-16-031

June 7, 2016

10 CFR 50.90

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

> Watts Bar Nuclear Plant, Unit 1 Facility Operating License No. NPF-90 NRC Docket No. 50-390

> Watts Bar Nuclear Plant, Unit 2 Facility Operating License No. NPF-96 NRC Docket No. 50-391

Subject: Application to Modify Watts Bar Nuclear Plant Unit 1 and Unit 2 Technical Specifications Regarding Discrepancies in Control Room Ventilation and Other Administrative Changes to the Technical Specifications (WBN-TS-16-03)

In accordance with the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.90, "Application for amendment of license, construction permit, or early site permit," Tennessee Valley Authority (TVA) is submitting a request for an amendment to Facility Operating License Nos. NPF-90 and NPF-96 for Watts Bar Nuclear Plant (WBN) Unit 1 and Unit 2, respectively.

This license amendment proposes to amend the WBN Unit 2 Technical Specification (TS) 3.7.10 Actions to include a new Condition F with specific shutdown Required Actions and associated completion times when Condition E is not met (i.e., two control room emergency ventilation system trains are inoperable for longer than allowed due to actions taken because of a tornado warning). This proposed change also results in current Conditions F and G being renumbered as Conditions G and H, respectively. These proposed changes are consistent with the WBN Unit 1 TS 3.7.10.

Additional administrative changes are proposed to remove an expired footnote in WBN Unit 1 TS 3.7.11 and to correct inconsistencies in the Applicability statements for WBN Unit 1 TS 3.3.6, TS 3.3.7, TS 3.3.8, TS 3.4.17, TS 3.7.10, TS 3.7.11, and TS 3.7.12, and WBN Unit 2 TS 3.3.7.

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The enclosure to this letter provides a description of the proposed changes, technical evaluation of the proposed changes, regulatory evaluation, and a discussion of environmental considerations. Attachments 1 and 2 to the enclosure provide the existing TS pages marked-up to show the proposed changes. Attachments 3 and 4 provide the existing TS Bases pages marked-up to show the proposed changes. Attachments 5 and 6 to the enclosure provide the proposed TS pages retyped to show the changes incorporated. Attachments 7 and 8 to the enclosure provide the proposed TS Bases pages retyped to show the changes incorporated. Changes to the existing TS Bases are provided for information only and will be implemented under the Technical Specification Bases Control Program.

The WBN Plant Operations Review Committee and the TVA Nuclear Safety Review Board have reviewed this proposed change and determined that operation of WBN Units 1 and 2 in accordance with the proposed change will not endanger the health and safety of the public.

TVA has determined that there are no significant hazards considerations associated with the proposed change and that the TS change qualifies for a categorical exclusion from environmental review pursuant to the provisions of 10 CFR 51.22(c)(9). Additionally, in accordance with 10 CFR 50.91(b)(1), TVA is sending a copy of this letter and enclosure to the Division of Radiological Health - Tennessee State Department of Environment and Conservation.

TVA requests approval of this proposed license amendment by June 30 2017, with implementation within 60 days following the Nuclear Regulatory Commission approval.

There are no new regulatory commitments associated with this submittal. Please address any questions regarding this request to Gordon Arent at (423) 365-2004.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 7th day of June 2016.

Respectfully

J. W. Shea Vice President, Nuclear Licensing

Enclosure: Evaluation of Proposed Change

cc: See Page 3

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cc (Enclosure):

NRC Regional Administrator - Region II NRC Senior Resident Inspector - Watts Bar Nuclear Plant NRC Project Manager – Watts Bar Nuclear Plant Director, Division of Radiological Health - Tennessee State Department of Environment and Conservation

ENCLOSURE Tennessee Valley Authority Watts Bar Nuclear Plant, Units 1 and Unit 2

WBN-TS-16-03

EVALUATION OF PROPOSED CHANGE

Subject: Application to Modify Watts Bar Nuclear Plant Unit 1 and Unit 2 Technical Specifications Regarding Discrepancies in Control Room Ventilation and Other Administrative Changes to the Technical Specifications (WBN-TS-16-03)

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ATTACHMENTS

- 1. Proposed TS Changes (Mark-Ups) for WBN Unit 1
- 2. Proposed TS Changes (Mark-Ups) for WBN Unit 2
- 3. Proposed TS Bases Page Changes (Mark-Ups) for WBN Unit 1 (For Information Only)
- 4. Proposed TS Bases Page Changes (Mark-Ups) for WBN Unit 2 (For Information Only)
- 5. Proposed TS Changes (Final Typed) for WBN Unit 1
- 6. Proposed TS Changes (Final Typed) for WBN Unit 2
- 7. Proposed TS Bases Changes (Final Typed) for WBN Unit 1 (For Information Only)
- 8. Proposed TS Bases Changes (Final Typed) for WBN Unit 2 (For Information Only)

1.0 SUMMARY DESCRIPTION

Tennessee Valley Authority (TVA) is requesting a license amendment to amend the Watts Bar Nuclear Plant (WBN) Unit 1 and Unit 2 Technical Specifications (TS) by adding a new Condition F to the WBN Unit 2 TS 3.7.10 Actions with specific shutdown Required Actions and associated completion times when Condition E is not met [i.e., two control room emergency ventilation system (CREVS) trains are inoperable for longer than allowed due to actions taken because of a tornado warning]. The proposed change is consistent with the WBN Unit 1 TS 3.7.10.

In addition, various administrative changes are being made.

2.0 DETAILED DESCRIPTION

2.1 **PROPOSED CHANGES**

The proposed changes are described in Sections 2.1.1 through 2.1.3 of this enclosure. Attachments 1 and 2 to the enclosure provide the existing TS pages marked-up to show the proposed changes. Attachments 3 and 4 provide the existing TS Bases pages marked-up to show the proposed changes. Attachments 5 and 6 to the enclosure provide the TS retyped with the proposed changes incorporated. Attachments 7 and 8 to the enclosure provide the TS Bases retyped with the proposed changes incorporated.

The proposed Bases changes are provided to the Nuclear Regulatory Commission (NRC) for information only.

2.1.1 Addition of Specific Shutdown Required Actions

The proposed change revises WBN Unit 2 TS 3.7.10 to add the following new Condition F:

F. Required Action and associated Completion	F.1 Be in MODE 3.	6 hours
Time of Condition E not	AND	
met.	F.2 Be in MODE 5.	36 hours

Because of this proposed change, the following administrative changes to TS 3.7.10 are also being made:

- Current Condition F is changed to Condition G and current Required Action F.1 is changed to Required Action G.1.
- Current Condition G is changed to Condition H and current Required Action G.1 is changed to Required Action H.1

The proposed changes are consistent with the WBN Unit 1 TS 3.7.10. Conforming changes to the TS Bases have also been made.

2.1.2 Deletion of Expired Footnote

The Completion Time for WBN Unit 1 TS 3.7.11, Condition A for one control room emergency air temperature control system (CREATCS) train inoperable contains the following footnote.

"An allowance is permitted for one CREATCS train to be inoperable for 60 days. This TS provision is only authorized for one entry per train during modification activities planned for the upgrade of the MCR [main control room] chillers beginning no earlier than March 1, 2011 and ending April 30, 2012 and provided compensatory measures are implemented."

Because the timeframe for the above footnote has expired, the proposed change deletes this footnote and the associated asterisk on the 30 day Completion Time. Conforming changes to the TS Bases have also been made. An additional administrative change to WBN Unit 1 TS 3.7.11 is described in Section 2.1.3 below.

2.1.3 Administrative Changes to TS Applicability Statements

WBN Unit 1 TSs 3.3.7, TS 3.7.10, and TS 3.7.11, and WBN Unit 2 TS 3.3.7 contain the following Applicability statement.

Applicability MODES 1, 2, 3, 4, 5, and 6 During movement of irradiated fuel assemblies.

Consistent with the Improved Standard Technical Specifications (ISTS) writer's guide (Reference 1) and NUREG-1431, "Standard Technical Specifications – Westinghouse Plants" (Reference 2), the proposed change adds a comma following "Mode 6" as shown below.

Applicability MODES 1, 2, 3, 4, 5, and 6, During movement of irradiated fuel assemblies.

Additionally, consistent with References 1 and 2, the proposed change adds a period to the end of the Applicability statements for WBN Unit 1 TS 3.3.6, TS 3.3.8, TS 3.4.17, and TS 3.7.12 as shown below.

- TS 3.3.6 Applicability: MODES 1, 2, 3, and 4.
- TS 3.3.8 Applicability: According to Table 3.3.8-1.
- TS 3.4.17 Applicability: MODES 1, 2, 3, and 4.
- TS 3.7.12 Applicability: MODES 1, 2, 3, and 4.

2.2 CONDITION INTENDED TO RESOLVE

2.2.1 Addition of Specific Shutdown Required Actions

WBN Unit 2 TS 3.7.10 Condition E applies if two CREVS trains are inoperable in Modes 1, 2, 3, or 4 due to actions taken because of a tornado warning. In this Condition, the unit is required to restore one CREVS train to operable status within eight hours. However, WBN Unit 2 TS 3.7.10 does not specify a Condition and

associated Required Actions if Condition E is not met. Therefore, if this Condition is not met, the unit currently would be required to enter Limiting Condition for Operation (LCO) 3.0.3. LCO 3.0.3 applies when an LCO is not met and an associated Action is not provided. However, current Action G states that if two CREVS trains are inoperable in Mode 1, 2, 3, or 4, for reasons other than Condition B or E, to enter LCO 3.0.3 immediately. With respect to current Condition E, the wording of Condition G could imply, in part, that LCO 3.0.3 entry is only for reasons other than current Condition E (i.e., LCO 3.0.3 is not required to be entered if the Required Action and associated Completion Time of Condition E is not met). Therefore, there is a potential conflict in applying the appropriate actions for not meeting the Required Action and associated Completion Time of Condition E.

To resolve this potential conflict, a change is proposed to TS 3.7.10 to add a new Condition F to require specific Required Actions and Completion Times when the Required Action and associated Completion Time of Condition E is not met. This would preclude any misunderstanding by operations personnel as to whether LCO 3.0.3 is required to be entered.

This change is consistent with the WBN Unit 1 TS 3.7.10, which was revised by the license amendment request (LAR) submitted by TVA in Reference 3 and approved by the NRC in Reference 4. At the time that the referenced LAR was submitted, the WBN Unit 2 Technical Specifications were being developed and TVA did not recognize that the revision to the WBN Unit 1 TS 3.7.10 required a similar change to the WBN Unit 2 TS 3.7.10. This error was entered into the TVA Corrective Action Program (CAP).

2.2.2 Deletion of Expired Footnote

This proposed change is administrative in nature as the footnote is no longer applicable. Deleting the footnote would remove distracting information. This TS provision was only authorized for one entry per train during modification activities planned for the upgrade of the main control room (MCR) chillers beginning no earlier than March 1, 2011, and ending April 30, 2012.

Because the period of authorization has expired, the footnote is no longer valid and can be removed.

2.2.3 Administrative Changes to TS Applicability Statements

Section 2.5.4.b.2 of Reference 1 states, "All Applicability statements are to end with a comma except the last one which ends with a period." Reference 1 was also used to develop the Standard Technical Specifications for Westinghouse Plants (Reference 2).

The Applicability statements for WBN Unit 1 TSs 3.3.7, TS 3.7.10, and TS 3.7.11, and WBN Unit 2 TS 3.3.7 currently state:

"MODES 1, 2, 3, 4, 5, and 6 During movement of irradiated fuel assemblies."

Because there is no comma after the number "6," the Applicability of these LCOs during movement of irradiated fuel assembles could be interpreted as being only during Mode 6 rather than anytime irradiated fuel assemblies were being moved.

To alleviate this potential misinterpretation, TVA is proposing to add a comma after the number "6" consistent with the guidance in References 1 and 2. This condition has been entered into the TVA CAP.

Additionally, TVA identified that a period needed to be added to the end of the Applicability statements for WBN Unit 1 TS 3.3.6, TS 3.3.8, TS 3.4.17, and TS 3.7.12 consistent with the guidance in References 1 and 2.

3.0 TECHNICAL EVALUATION

3.1 CONTROL ROOM EMERGENCY VENTILATION SYSTEM DESCRIPTION

The CREVS is described in Sections 6.4 and 9.4.1 of the WBN Unit 1 Updated Final Safety Analysis Report (UFSAR) and the WBN Unit 2 FSAR. The CREVS provides a protected environment from which occupants can control the unit following an uncontrolled release of radioactivity, hazardous chemicals, or smoke. The main control room habitability zone (MCRHZ) is designed to maintain a positive pressure relative to the outdoors and to the adjacent areas, except during a tornado warning, to minimize air inleakage.

The CREVS consists of two independent, redundant trains that circulate and filter air in the MCRHZ (also known as the control room envelope). Each CREVS train consists of a high efficiency particulate air (HEPA) filter, an activated charcoal adsorber section for removal of gaseous activity (principally iodines), and a fan. Two independent, redundant control building emergency pressurization fans, each with their own outside air intake, are also part of the CREVS trains and pressurize the MCRHZ and maintain a minimum 1/8-inch positive pressure relative to the outdoors and adjoining spaces. A cross-connection is provided just upstream of the control building emergency pressurization fans that allows either fan to draw air from either emergency air intake, if necessary.

Actuation of the CREVS occurs automatically upon receipt of a safety injection signal or a control room air intake radiation monitor signal, which provides indication of high radiation in the outside air supply. Actuation of the CREVS in the emergency mode of operation closes the unfiltered outside air intake and unfiltered exhaust dampers and aligns the system for recirculation of the air within the MCRHZ through the redundant trains of air handling units, with a portion of the stream of air directed through HEPA and charcoal filters. The emergency mode also initiates pressurization and filtered ventilation of the air supply to the MCRHZ. Pressurization of the MCRHZ prevents infiltration of unfiltered air from the surrounding areas of the building. A single CREVS train operating at a flow rate of 4000 cubic feet per minute (cfm) \pm 10% (that includes a pressurization flow of < 711 cfm) will pressurize the MCRHZ to a minimum of 0.125 inches water gauge relative to adjacent areas. However, during a tornado warning, the tornado dampers are closed, which isolates the MCRHZ from the outside air supply, thus precluding the pressurization function of the CREVS.

3.2 TECHNICAL ANALYSIS

3.2.1 Addition of Specific Shutdown Required Actions

WBN Unit 2 TS 3.7.10 Condition E describes the Required Action and Completion Time when two CREVS trains are inoperable in Mode 1, 2, 3, or 4 due to actions taken as a result of a tornado warning. Required Action E.1 requires restoration of one CREVS train to operable status with a Completion Time of eight hours. TVA is proposing to require a unit shutdown within the TS 3.7.10 Actions instead of entering the shutdown requirements of LCO 3.0.3 when Required Action E. 1 and the associated Completion Time are not met. This proposed change is consistent with WBN Unit 1 TS 3.7.10 as described in Section 4.2.

As described in Section 9.4.1.1 of the WBN Unit 1 UFSAR and the WBN Unit 2 FSAR, tornado dampers are closed manually from the MCR to protect the control building from tornado depressurization effects in the event of a tornado warning. Closing the tornado dampers results in inoperability of both CREVS trains, because the CREVS may not be capable of performing the intended function due to a loss of pressurizing air to the control room when these tornado dampers closed.

In the event of a tornado warning, and if one of the tornado dampers is not restored to an operable status within the eight hour Completion Time, WBN Unit 2 TS 3.7.10 does not provide any specific follow-up actions. Under this scenario, LCO 3.0.3 would be entered. LCO.3.0.3 requires action to be initiated within one hour to be in Mode 3 in seven hours, be in Mode 4 in 13 hours, and be in Mode 5 within 37 hours.

The proposed change adds a specific requirement for a unit shutdown within the TS 3.7.10 Conditions instead of entering LCO 3.0.3 when both CREVS trains are inoperable in Mode 1, 2, 3, or 4 due to actions taken as because of a tornado warning and the Completion Time of eight hours for restoration of at least one CREVS train to OPERABLE status is not met. The proposed new Condition F would apply in this situation, and proposed Required Actions F.1 and F.2 would require the unit to be in MODE 3 within a Completion Time of six hours, and in Mode 5 within a Completion Time of 36 hours, respectively. This proposed new Condition F provides a similar requirement as the current LCO 3.0.3 Action, in that the unit will be required to be placed in a subcritical condition (Mode 3) within a finite time and in cold shutdown (Mode 5) within a finite time. The proposed new Condition F does not include the additional time (one hour) allowed by LCO 3.0.3 to be in the respective Mode, thus decreasing the Completion Times to be in Mode 3 and Mode 5 by one hour. In addition, the proposed new Condition F does not include the intermediate action to be in Mode 4 (i.e., less than 350 degrees F). This allowance (i.e., to include a specific shutdown action within TS 3.7.10) is consistent with TS 3.7.10 Condition C that applies when the Required Actions of Condition B (that also could affect both CREVS trains) are not met within the associated Completion Time. The change is acceptable because the requirements to shutdown the unit to Mode 3 and Mode 5 are similar to the current requirements (with the exception of the intermediate Required Action and Completion Time to be in Mode 4), and the required Completion Times are 1 hour less than the existing LCO 3.0.3 Completion Times that currently apply. Deletion of the intermediate action is acceptable because placing the unit in Mode 3 ensures the reactor is subcritical, and the requirement to be in Mode 5 will ensure the unit is cooled down to 200 degrees F.

The proposed changes to WBN Unit 2 TS 3.7.10, resolves a potential conflict in applying the appropriate actions for not meeting the Required Action and associated Completion Time of Condition E. These proposed changes are acceptable because the requirements to shutdown the unit to Mode 3 and Mode 5 are similar to the current requirements. The proposed required Completion Times are 1 hour less than the existing LCO 3.0.3 Completion Times that currently apply, and do not impact the design and operation of the CREVS. As such, there is no effect on the safety analysis for the CREVS.

3.2.2 Deletion of Expired Footnote

In Reference 5, TVA submitted an LAR for a one-time change to WBN Unit 1 TS 3.7.11 that was approved by the NRC in Reference 6. This license amendment was applicable during plant modifications to upgrade the CREATCS chillers, to be implemented during Cycles 10 and 11 beginning December 1, 2010, and ending January 29, 2012. The plant modifications for the CREATCS chillers were necessary due to equipment reliability issues, obsolescence of spare parts, and to allow TVA to comply with future refrigerant availability as defined by 40 CFR 82, "Protection of Stratospheric Ozone."

TVA is proposing to revise WBN Unit 1 TS 3.7.11 to remove the footnote that is no longer valid. This TS provision was only authorized for one entry per train during modification activities planned for the upgrade of the MCR chillers beginning no earlier than March 1, 2011, and ending April 30, 2012.

Because the period of authorization has expired, the footnote is no longer valid and can be removed.

3.2.3 Administrative Changes to TS Applicability Statements

The proposed change to add a separating comma to WBN Unit 1 TS 3.3.7, TS 3.7.10, and TS 3.7.11, and WBN Unit 2 TS 3.3.7 is consistent with the guidance in References 1 and 2.

The proposed change to add an ending period to WBN Unit 1 TS 3.3.6, TS 3.3.8, TS 3.4.17, and TS 3.7.12 is also consistent with the guidance in References 1 and 2.

Section 2.5.4.b.2 of Reference 1 states, "All Applicability statements are to end with a comma except the last one which ends with a period." The proposed changes are consistent with this guidance and minimize the potential for misunderstanding and operator error in implementation of the requirements. Because there is no change in the actual Modes in which the LCOs apply, this is an administrative change.

Revising the Applicability statements for these TSs does not change the manner in which the plant is operated and conforms to the guidance in References 1 and 2. No technical change is being proposed.

4.0 REGULATORY EVALUATION

4.1 APPLICABLE REGULATORY REQUIREMENTS/CRITERIA

10 CFR 50, Appendix A, General Design Criteria (GDC) 19, "Control Room," requires that a control room be provided from which actions can be taken to operate the nuclear power unit safely under normal conditions and to maintain it in a safe condition under accident conditions, including loss-of-coolant accidents. Adequate radiation protection shall be provided to permit access and occupancy of the control room under accident conditions without personnel receiving radiation exposures in excess of five rem whole body, or its equivalent to any part of the body, for the duration of the accident.

The requirements of the proposed changes conform to the above regulatory requirement.

4.2 PRECEDENT

WBN Unit 1 TS 3.7.10 has the same TS Condition, Required Actions, and Completion Times related to both CREVS trains being inoperable due to actions taken because of a tornado warning. These requirements were approved by the NRC in Reference 4.

Sequoyah Nuclear Plant (SQN) Units 1 and 2 have similar TS Actions related to both CREVS trains being inoperable due to actions taken because of a tornado warning. Specifically, SQN Units 1 and 2 TS 3.7.10, Condition C allows eight hours to restore one CREVS train to an operable status when two CREVs trains are inoperable due to tornado dampers not in correct position (i.e., open and de-activated) as a result of tornado warning. TS 3.7.10 Condition D applies when the Required Actions and associated Completion Times of Conditions A, B, or C are not met in Modes 1, 2, 3, or 4. The Required Actions for Condition D require the unit be placed in Mode 3 within six hours and Mode 5 within 36 hours. This allowance was approved by the NRC in SQN License Amendments 187 and 179 (Reference 7) and reflected in the SQN Improved TS (Reference 8).

4.3 SIGNIFICANT HAZARDS CONSIDERATION

TVA requests a license amendment to revise the technical specifications (TS) for Watts Bar Nuclear Plant (WBN) Units 1 and 2. The requested changes would revise the WBN Unit 2 Technical Specification (TS) 3.7.10 to address inoperability of the control room emergency ventilation system (CREVS) due to the actions taken when a tornado warning is declared. The new action statement would require that with both CREVS inoperable due to actions taken as a result of a tornado warning and one train not restore within eight hours to be in at least hot standby within the next six hours and in cold shutdown within the following 30 hours instead of entering LCO 3.0.3.

Additional administrative changes are proposed to remove an expired footnote in WBN Unit 1 TS 3.7.11 and to correct inconsistencies in the Applicability statements for WBN Unit 1 TS 3.3.6, TS 3.3.7, TS 3.3.8, TS 3.4.17, TS 3.7.10, TS 3.7.11, and TS 3.7.12, and WBN Unit 2 TS 3.3.7.

TVA has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) 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 changes modify WBN Unit 1 TS 3.7.10 to resolve a potential conflict in applying the appropriate actions for not meeting the Required Action and associated Completion Time of Condition E and request administrative changes to correct inconsistencies in TS Applicability statements.

The proposed changes do not affect the structures, systems, or components (SSCs) of the plant, affect plant operations, or any design function or an analysis that verifies the capability of an SSC to perform a design function. No change is being made to any of the previously evaluated accidents in the WBN Unit 1 Updated Final Safety Analysis Report (UFSAR) and the WBN Unit 2 FSAR. These proposed changes are administrative or provide specific shutdown actions instead of using default shutdown actions.

The proposed changes do not 1) require physical changes to plant systems, structures, or components; 2) prevent the safety function of any safety-related system, structure, or component during a design basis event; 3) alter, degrade, or prevent action described or assumed in any accident described in the WBN Unit 1 UFSAR and the WBN Unit 2 FSAR from being perform because the safety-related systems, structures, or components are not modified; 4) alter any assumptions previously made in evaluating radiological consequences; or 5) affect the integrity of any fission product barrier.

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 changes do not introduce any new accident causal mechanisms, since no physical changes are being made to the plant, nor do they impact any plant systems that are potential accident initiators.

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 margin of safety associated with the acceptance criteria of any accident is unchanged. The proposed changes will have no effect on the availability, operability, or performance of safety-related systems and components. The proposed change will not adversely affect the operation of plant equipment or the function of equipment assumed in the accident analysis.

The proposed amendment does not involve changes to any safety analyses assumptions, safety limits, or limiting safety system settings. The changes do not adversely affect plant-operating margins or the reliability of equipment credited in the safety analyses.

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

Based on the above, TVA concludes that the proposed amendment does not involve a 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.

4.4 CONCLUSIONS

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.

5.0 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 effluents 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.

6.0 REFERENCES

1. Technical Specification Task Force (TSTF) letter to NRC, "Transmittal of Report TSTF-GG-05-01, Revision 1, 'Writer's Guide for Plant-Specific Improved Technical Specifications'," dated February 14, 2012 (ML12046A089)

- 2. NUREG-1431, "Standard Technical Specifications Westinghouse Plants," Volume 1, Revision 4," issued April 2012 (ML12100A222)
- TVA letter to NRC, "Watts Bar Nuclear Plant (WBN) Unit 1 Application to Modify Technical Specification 3.7.10, 'Control Room Emergency Ventilation System (CREVS)' (WBN-TS-12-01)," dated November 19, 2012 (ML12333A240)
- 4. NRC letter to TVA, "Watts Bar Nuclear Plant, Unit 1 -Issuance of Amendment to Technical Specification 3.7.10 for Control Room Emergency Ventilation Systems (TAC No. MF0312)," dated January 14, 2014 (ML13338A295)
- TVA letter to NRC, "Watts Bar Nuclear Plant Unit 1 Technical Specifications Change -Main Control Room Chiller Completion Time Extension," dated February 24, 2010 (ML100570414)
- 6. NRC letter to TVA, "Watts Bar Nuclear Plant, Unit 1 -Issuance of Amendment Regarding the Main Control Room Chiller Completion Time Extension (TAC No. ME3429)," dated February 8, 2011 (ML110190280)
- 7. NRC Letter to TVA, "Issuance of Amendments (TAC Nos. M89495 and M89496) (TS 94-05)," dated October 17, 1994 (ML013310385)
- NRC Letter to TVA, "Sequoyah Nuclear Plant, Units 1 and 2 Issuance of Amendments for the Conversion to the Improved Technical Specifications with Beyond Scope Issues (TAC Nos. MF3128 and MF3129)," dated September 30, 2015 (ML15238B460)

ATTACHMENT 1

Proposed TS Changes (Mark-Ups) for WBN Unit 1

- 3.3.6 Containment Vent Isolation Instrumentation
- LCO 3.3.6 The Containment Vent Isolation instrumentation for each Function in Table 3.3.6-1 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

	CONDITION		REQUIRED ACTION	COMPLETION TIME
A.	One radiation monitoring channel inoperable.	A.1	Restore the affected channel to OPERABLE status.	4 hours
				(continued)

3.3.7	Control Ro	Room Emergency Ventilation System (CREVS) Actuation entation					
LCO 3.3.7	7	The CREVS actuation instrumentation for each Function in Table 3.3.7-1 shall be OPERABLE.					
APPLICAE	BILITY:	MODES 1, 2, 3, 4, 5, and 6 <u>.</u> During movement of irradiated fuel assemblies.					
ACTIONS							

	CONDITION		REQUIRED ACTION	COMPLETION TIME
A.	One or more Functions with one channel or train inoperable.	A.1	Place one CREVS train in emergency radiation protection mode.	7 days
				(continued)

(continued)

1

3.3.8 Auxiliary Building Gas Treatment System (ABGTS) Actuation Instrumentation

LCO 3.3.8 The ABGTS actuation instrumentation for each Function in Table 3.3.8-1 shall be OPERABLE.

APPLICABILITY: According to Table 3.3.8-1.

ACTIONS

-----NOTE-----NOTE------Separate Condition entry is allowed for each Function. _____

	CONDITION		REQUIRED ACTION	COMPLETION TIME
A.	One or more Functions with one channel or train inoperable.	A.1	Place one ABGTS train in operation.	7 days
В.	One or more Functions with two channels or two trains inoperable.	B.1.1 <u>ANI</u>	Place one ABGTS train in operation.	Immediately
		B.1.2	Enter applicable Conditions and Required Actions of LCO 3.7.12, "Auxiliary Building Gas Treatment System (ABGTS)," for one train made inoperable by inoperable actuation instrumentation.	Immediately
		<u>OR</u>		
				(continued)

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.17 STEAM GENERATOR (SG) TUBE INTEGRITY

LCO 3.4.17 SG tube integrity shall be maintained

<u>AND</u>

All SG tubes satisfying the tube repair criteria shall be plugged in accordance with the Steam Generator Program.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

	CONDITION		REQUIRED ACTION	COMPLETION TIME
A.	One or more SG tubes satisfying the tube repair criteria and not plugged in accordance with the Steam Generator Program	A.1 <u>AND</u>	Verify tube integrity of the affected tube(s) is maintained until the next refueling outage or SG tube inspection.	7 days
		A.2	Plug the affected tube(s) in accordance with the Steam Generator Program.	Prior to entering MODE 4 following the next refueling outage or SG tube inspection
В.	Required Action and associated Completion Time of Condition A not met.	B.1 <u>AND</u>	Be in MODE 3.	6 hours
	<u>OR</u>	B.2	Be in MODE 5.	36 hours
	SG tube integrity not maintained			

3.7 PLANT SYSTEMS

3.7.10 Control Room Emergency Ventilation System (CREVS)

LCO 3.7.10 Two CREVS trains shall be OPERABLE.

------NOTE------NOTE opened intermittently under administrative control.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6. During movement of irradiated fuel assemblies.

ACTIONS

	CONDITION		REQUIRED ACTION	COMPLETION TIME
A.	One CREVS train inoperable for reasons other than Condition B.	A.1	Restore CREVS train to OPERABLE status.	7 days
В.	One or more CREVS trains inoperable due to inoperable CRE boundary in Mode 1, 2, 3, or 4.	B.1 <u>AND</u>	Initiate action to implement mitigating actions.	Immediately
		B.2	Verify mitigating actions ensure CRE occupant exposures to radiological and chemical hazards will not exceed limits and CRE occupants are protected from smoke hazards.	24 hours
		AND		
		B.3	Restore CRE boundary to OPERABLE status.	90 days
				(continued)

(continued)

3.7 PLANT SYSTEMS

3.7.11 Control Room Emergency Air Temperature Control System (CREATCS)

- LCO 3.7.11 Two CREATCS trains shall be OPERABLE.
- APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6. During movement of irradiated fuel assemblies.

ACTIONS

	CONDITION		REQUIRED ACTION	COMPLETION TIME
A.	One CREATCS train inoperable.	A.1	Restore CREATCS train to OPERABLE status.	30 days≛
B.	Required Action and associated Completion Time of Condition A not met in MODE 1, 2, 3, or 4.	B.1 <u>AND</u>	Be in MODE 3.	6 hours
		B.2	Be in MODE 5.	36 hours
C.	Required Action and associated Completion Time of Condition A not met in MODE 5 or 6, or during movement of irradiated fuel assemblies.	C.1 <u>OR</u>	Place OPERABLE CREATCS train in operation.	Immediately
		C.2	Suspend movement of irradiated fuel assemblies.	Immediately

(continued)

* An allowance is permitted for one CREATCS train to be inoperable for 60 days. This TS provision is only authorized for one entry per train during modification activities planned for the upgrade of the MCR chillers-beginning no earlier than March 1, 2011 and ending April 30, 2012 and provided compensatory measures-are implemented.

ABGTS 3.7.12

3.7 PLANT SYSTEMS

3.7.12 Auxiliary Building Gas Treatment System (ABGTS)

LCO 3.7.12 Two ABGTS trains shall be OPERABLE.

ACTIONS

	CONDITION		REQUIRED ACTION	COMPLETION TIME
А.	One ABGTS train inoperable.	A.1	Restore ABGTS train to OPERABLE status.	7 days
B.	Required Action and associated Completion Time of Condition A not met. <u>OR</u> Two ABGTS trains inoperable.	B.1 <u>AND</u> B.2	Be in MODE 3. Be in MODE 5.	6 hours 36 hours

ATTACHMENT 2

Proposed TS Changes (Mark-Ups) for WBN Unit 2

- 3.3.7 Control Room Emergency Ventilation System (CREVS) Actuation Instrumentation
- LCO 3.3.7 The CREVS actuation instrumentation for each Function in Table 3.3.7-1 shall be OPERABLE.
- APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6. During movement of irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Functions with one channel or train inoperable.	A.1 Place one CREVS train in emergency radiation protection mode.	7 days

(continued)

ACTIONS (continued)

CONDITION		REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time of Condition A or B	C.1 AND	Be in MODE 3.	6 hours
not met in MODE 1, 2, 3, or 4.	C.2	Be in MODE 5.	36 hours
D. Required Action and associated Completion Time of Condition A not met	D.1	Place OPERABLE CREVS train in emergency mode.	Immediately
in MODE 5 or 6, or during movement of irradiated fuel	<u>OR</u>		
assemblies.	D.2	Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREVS trains inoperable in MODE 1, 2, 3, or 4 due to actions taken as a result of a tornado warning.	E.1	Restore one CREVS train to OPERABLE status.	8 hours
F. Required Action and associated Completion	<u>F.1</u>	Be in MODE 3.	<u>6 hours</u>
Time of Condition E not met.		AND	
	<u>F.2</u>	Be in MODE 5.	<u>36 hours</u>
	1		(continued)

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
F. <u>G.</u> Two CREVS trains inoperable in MODE 5 or 6, or during movement of irradiated fuel assemblies.	<mark>₽<u>G</u>.1</mark>	Suspend movement of irradiated fuel assemblies	Immediately
<u>OR</u>			
One or more CREVS trains inoperable due to inoperable CRE boundary in MODE 5 or 6, or during movement of irradiated fuel assemblies.			
G.H. Two CREVS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B or E.	G <u>H</u> .1	Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.7.10.1	Operate each CREVS train for \geq 15 minutes.	31 days
SR 3.7.10.2	Perform required CREVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.10.3	Verify each CREVS train actuates on an actual or simulated actuation signal.	18 months
SR 3.7.10.4	Perform required CRE unfiltered air inleakge testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

ATTACHMENT 3

Proposed TS Bases Changes (Mark-Ups) for WBN Unit 1

APPLICABLE SAFETY ANALYSES (continued)	heat loads from the control room, which include consideration of equipment heat loads and personnel occupancy requirements, to ensure equipment OPERABILITY (Ref. 3). The CREATCS satisfies Criterion 3 of the NRC Policy Statement.
LCO	Two independent and redundant trains of the CREATCS are required to be OPERABLE to ensure that at least one is available, assuming a single failure disabling the other train. Total system failure could result in the equipment operating temperature exceeding limits in the event of an accident. The CREATCS is considered to be OPERABLE when the individual components necessary to maintain the control room temperature are OPERABLE in both trains. These components include the chillers, AHUs, and associated temperature control instrumentation. In addition, the CREATCS must be operable to the extent that air circulation can be maintained.
APPLICABILITY	In MODES 1, 2, 3, 4, 5, and 6, and during movement of irradiated fuel assemblies, the CREATCS must be OPERABLE to ensure that the control room temperature will not exceed equipment operational requirements following isolation of the control room. In MODE 5 or 6, CREATCS is required during a control room isolation following a waste gas decay tank rupture.
ACTIONS	<u>A.1</u> With one CREATCS train inoperable, action must be taken to restore OPERABLE status within 30 days. In this Condition, the remaining OPERABLE CREATCS train is adequate to maintain the control room temperature within limits. However, the overall reliability is reduced because a single failure in the OPERABLE CREATCS train could result in loss of CREATCS function. The 30 day Completion Time is based on the low probability of an event requiring control room isolation, the consideration that the remaining train can provide the required protection, and that alternate safety or nonsafety related cooling means are available.

(continued)

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	— <u>— A.1</u>
(continued)	
(During modification activities to replace the CREATCS chillers, an allowance is
	permitted for one CREATCS train to be inoperable for 60 days provided the
	following compensatory measures are in place:
	Tonowing compendatory medication are in place.
	A temporary chilled water package will be installed and maintained in a "standb
	condition. During the initial installation, the chiller skids and chilled water pump
	will be stationed in the yard with the chilled water lines filled and vented at the
	manifolds in the Control Building Mechanical Equipment Room located on-
	Elevation 755.0 and the Shutdown Board Room Mechanical Equipment Rooms
	located on Elevation 757.0. Final connection of the chilled water hoses to the
	SDBR or MCR AHUS will not occur until that particular HVAC train is taken out
	service for chiller replacement. All necessary hardware, hoses, and fittings will
	be stationed at the AHUs for rapid deployment in order to connect, fill and vent
	the temporary chilled water hoses to the AHUs. Procedures will be provided as
	part of Work Order documents to include instructions for startup, operation,
	preventative maintenance, and shutdown of the temporary cooling equipment.
	Qualified personnel will be provided training on these procedures. Furthermore
	to provide additional defense-in-depth, the following requirements would also be implemented:
	implemented:
	1. If a temporary chilled water system hose breaks in the Control Building-
	during the timeframe that the temporary equipment is installed, the two-
	manual isolation ball valves located at the MCRHZ boundary will be closed
	immediately. Qualified personnel will be capable of closing the valves and
	will be stationed in the area whenever the valves are in the "Open" position
	and the temporary cooling system is in service.
	2. If a temporary chilled water system hose breaks in the Auxiliary Building or
	Shutdown Board Room during the timeframe that the temporary equipment
	installed, the manual isolation valves will be closed immediately. Qualified
	personnel will be capable of closing the valves and will be stationed in the
	area whenever the valves are in the "Open" position and the temporary-
	cooling system is in service.
	2. Due to look of energting date, the evolution in reliability of the new MCD
	3. Due to lack of operating data, the availability or reliability of the new MCR
	chiller packages are unknown. To compensate for this uncertainty the new train-B chiller packages will be operated for a minimum of 2 weeks prior to
	removing the train A MCR chillers from service for replacement.
	ternoving the train remore chillers non-service for replacement.
	4. During replacement of the MCR chillers, no planned maintenance activity,
	except for SRs 3.8.1.2, 3.8.1.3, and 3.8.1.7 that could impact the
	OPERABILITY of the DG's that provide emergency power to the OPERABL
	MCR chiller train will be performed.
	This TS provision is only authorized for one entry per train during modification-
	activities planned for the upgrade of the MCR chillers beginning no earlier than
	March 1, 2011 and ending April 30, 2012.

(continued)

BASES

ATTACHMENT 4

Proposed TS Bases Changes (Mark-Ups) for WBN Unit 2 (For Information Only)

ACTIONS <u>D.1 and D.2 (continued)</u>

An alternative to Required Action D.1 is to immediately suspend activities that could result in a release of radioactivity that might require isolation of the CRE. This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

<u>E.1</u>

If both CREVS trains are inoperable in MODE 1, 2, 3, or 4, due to actions taken as a result of a tornado, the CREVS may not be capable of performing the intended function because of loss of pressurizing air to the control room. At least one train must be restored to OPERABLE status within 8 hours or the unit must be placed in a MODE that minimizes accident risk. To achieve this status, the plant must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The 8 hour restoration time is considered reasonable considering the low probability of occurrence of a design basis accident concurrent with a tornado warning.

The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

F.1 and F.2

If one CREVS train cannot be restored to OPERABLE status within the associated Completion Time of Condition E, the plant must be placed in a MODE that minimizes accident risk. To achieve this status, the plant must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

F<u>G.1</u>

In MODE 5 or 6, or during movement of irradiated fuel assemblies with two CREVS trains inoperable or with one or more CREVS trains inoperable due to an inoperable CRE boundary, action must be taken immediately to suspend activities that could result in a release of radioactivity that might require isolation of the CRE. This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

(continued)

ACTIONS

(continued) If both CREVS trains are inoperable in MODE 1, 2, 3, or 4, for reasons other than Condition B or Condition E the CREVS may not be capable of performing the intended function and the plant is in a condition outside the accident analyses. Therefore, LCO 3.0.3 must be entered immediately. SURVEILLANCE SR 3.7.10.1 REQUIREMENTS Standby systems should be checked periodically to ensure that they function properly. As the environment and normal operating conditions on this system are not too severe, testing each train once every month provides an adequate check of this system. The systems need only be operated for \geq 15 minutes to demonstrate the function of the system. The 31-day Frequency is based on the reliability of the equipment and the two train redundancy.

<u>SR 3.7.10.2</u>

GH.1

This SR verifies that the required CREVS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The CREVS filter tests are in accordance with Regulatory Guide 1.52 (Ref. 6). 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.

SR 3.7.10.3

This SR verifies that each CREVS train starts and operates on an actual or simulated actuation signal. The Frequency of 18 months is based on industry operating experience and is consistent with the typical refueling cycle.

(continued)

ATTACHMENT 5

Proposed TS Changes (Final Typed) for WBN Unit 1

- 3.3.6 Containment Vent Isolation Instrumentation
- LCO 3.3.6 The Containment Vent Isolation instrumentation for each Function in Table 3.3.6-1 shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

	CONDITION		REQUIRED ACTION	COMPLETION TIME
A.	One radiation monitoring channel inoperable.	A.1	Restore the affected channel to OPERABLE status.	4 hours
				(continued)

3.3.7	7 Control Room Emergency Ventilation System (CREVS) Actuation Instrumentation					
LCO 3.3.7	7	The CREVS actuation instrumentation for each Function in Table 3.3.7-1 shall be OPERABLE.				
APPLICABILITY:		MODES 1, 2, 3, 4, 5, and 6, During movement of irradiated fuel assemblies.				
ACTIONS						

CONDITION		REQUIRED ACTION		COMPLETION TIME
A.	One or more Functions with one channel or train inoperable.	A.1	Place one CREVS train in emergency radiation protection mode.	7 days
				(continued)

(continued)

1

3.3 INSTRUMENTATION

3.3.8 Auxiliary Building Gas Treatment System (ABGTS) Actuation Instrumentation

LCO 3.3.8 The ABGTS actuation instrumentation for each Function in Table 3.3.8-1 shall be OPERABLE.

APPLICABILITY: According to Table 3.3.8-1.

ACTIONS

-----NOTE-----NOTE------Separate Condition entry is allowed for each Function. _____

	CONDITION		REQUIRED ACTION	COMPLETION TIME
A.	One or more Functions with one channel or train inoperable.	A.1	Place one ABGTS train in operation.	7 days
В.	One or more Functions with two channels or two trains inoperable.	B.1.1 <u>ANI</u>	Place one ABGTS train in operation.	Immediately
		B.1.2	Enter applicable Conditions and Required Actions of LCO 3.7.12, "Auxiliary Building Gas Treatment System (ABGTS)," for one train made inoperable by inoperable actuation instrumentation.	Immediately
		<u>OR</u>		
				(continued)

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.17 STEAM GENERATOR (SG) TUBE INTEGRITY

LCO 3.4.17 SG tube integrity shall be maintained

<u>AND</u>

All SG tubes satisfying the tube repair criteria shall be plugged in accordance with the Steam Generator Program.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

	CONDITION		REQUIRED ACTION	COMPLETION TIME
A.	One or more SG tubes satisfying the tube repair criteria and not plugged in accordance with the Steam Generator Program	A.1 <u>AND</u>	Verify tube integrity of the affected tube(s) is maintained until the next refueling outage or SG tube inspection.	7 days
		A.2	Plug the affected tube(s) in accordance with the Steam Generator Program.	Prior to entering MODE 4 following the next refueling outage or SG tube inspection
В.	Required Action and associated Completion Time of Condition A not met.	B.1 <u>AND</u>	Be in MODE 3.	6 hours
	OR	B.2	Be in MODE 5.	36 hours
	SG tube integrity not maintained			

3.7 PLANT SYSTEMS

3.7.10 Control Room Emergency Ventilation System (CREVS)

LCO 3.7.10 Two CREVS trains shall be OPERABLE.

-----NOTE-----NOTE------NOTE opened intermittently under administrative control.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6, During movement of irradiated fuel assemblies.

ACTIONS

	CONDITION		REQUIRED ACTION	COMPLETION TIME
A.	One CREVS train inoperable for reasons other than Condition B.	A.1	Restore CREVS train to OPERABLE status.	7 days
В.	One or more CREVS trains inoperable due to inoperable CRE boundary in Mode 1, 2, 3, or 4.	B.1 <u>AND</u>	Initiate action to implement mitigating actions.	Immediately
		B.2	Verify mitigating actions ensure CRE occupant exposures to radiological and chemical hazards will not exceed limits and CRE occupants are protected from smoke hazards.	24 hours
		AND		
		B.3	Restore CRE boundary to OPERABLE status.	90 days
				(continued)

3.7 PLANT SYSTEMS

3.7.11 Control Room Emergency Air Temperature Control System (CREATCS)

- LCO 3.7.11 Two CREATCS trains shall be OPERABLE.
- APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6, During movement of irradiated fuel assemblies.

ACTIONS

A.One CREATCS train inoperable.A.1Restore CREATCS train to OPERABLE status.30 daysB.Required Action and associated Completion Time of Condition AB.1Be in MODE 3.6 hours	
not met in MODE 1, 2, 3, or 4. <u>AND</u>	
B.2 Be in MODE 5. 36 hours	
C. Required Action and associated Completion Time of Condition A not met in MODE 5 or 6, or during movement of irradiated fuel assemblies.	ly
C.2 Suspend movement of irradiated fuel assemblies. Immediatel	ly

(continued)

ABGTS 3.7.12

3.7 PLANT SYSTEMS

3.7.12 Auxiliary Building Gas Treatment System (ABGTS)

LCO 3.7.12 Two ABGTS trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

	CONDITION		REQUIRED ACTION	COMPLETION TIME
А.	One ABGTS train inoperable.	A.1	Restore ABGTS train to OPERABLE status.	7 days
B.	Required Action and associated Completion Time of Condition A not met. <u>OR</u> Two ABGTS trains inoperable.	B.1 <u>AND</u> B.2	Be in MODE 3. Be in MODE 5.	6 hours 36 hours

ENCLOSURE

ATTACHMENT 6

Proposed TS Changes (Final Typed) for WBN Unit 2

3.3 INSTRUMENTATION

- 3.3.7 Control Room Emergency Ventilation System (CREVS) Actuation Instrumentation
- LCO 3.3.7 The CREVS actuation instrumentation for each Function in Table 3.3.7-1 shall be OPERABLE.
- APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6, During movement of irradiated fuel assemblies.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Functions with one channel or train inoperable.	A.1 Place one CREVS train in emergency radiation protection mode.	7 days

ACTIONS (continued)

CONDITION		REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time of Condition A or B	C.1	Be in MODE 3.	6 hours
not met in MODE 1, 2, 3, or 4.	C.2	Be in MODE 5.	36 hours
 D. Required Action and associated Completion Time of Condition A not met in MODE 5 or 6, or during 	D.1	Place OPERABLE CREVS train in emergency mode.	Immediately
movement of irradiated fuel	<u>OR</u>		
assemblies.	D.2	Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREVS trains inoperable in MODE 1, 2, 3, or 4 due to actions taken as a result of a tornado warning.	E.1	Restore one CREVS train to OPERABLE status.	8 hours
F. Required Action and associated Completion	F.1	Be in MODE 3.	6 hours
Time of Condition E not met.		AND	
	F.2	Be in MODE 5.	36 hours
	1		(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
G. Two CREVS trains inoperable in MODE 5 or 6, or during movement of irradiated fuel assemblies.	G.1 Suspend movement of irradiated fuel assemblies	Immediately
OR		
One or more CREVS trains inoperable due to inoperable CRE boundary in MODE 5 or 6, or during movement of irradiated fuel assemblies.		
H. Two CREVS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B or E.	H.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.7.10.1	Operate each CREVS train for \geq 15 minutes.	31 days
SR 3.7.10.2	Perform required CREVS filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.7.10.3	Verify each CREVS train actuates on an actual or simulated actuation signal.	18 months
SR 3.7.10.4	Perform required CRE unfiltered air inleakge testing in accordance with the Control Room Envelope Habitability Program.	In accordance with the Control Room Envelope Habitability Program

ENCLOSURE

ATTACHMENT 7

Proposed TS Bases Changes (Final Typed) for WBN Unit 1 (For Information Only)

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ENCLOSURE

ATTACHMENT 8

Proposed TS Bases Changes (Final Typed) for WBN Unit 2 (For Information Only)

ACTIONS <u>D.1 and D.2 (continued)</u>

An alternative to Required Action D.1 is to immediately suspend activities that could result in a release of radioactivity that might require isolation of the CRE. This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

<u>E.1</u>

If both CREVS trains are inoperable in MODE 1, 2, 3, or 4, due to actions taken as a result of a tornado, the CREVS may not be capable of performing the intended function because of loss of pressurizing air to the control room. At least one train must be restored to OPERABLE status within 8 hours or the unit must be placed in a MODE that minimizes accident risk. To achieve this status, the plant must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The 8 hour restoration time is considered reasonable considering the low probability of occurrence of a design basis accident concurrent with a tornado warning.

The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

F.1 and F.2

If one CREVS train cannot be restored to OPERABLE status within the associated Completion Time of Condition E, the plant must be placed in a MODE that minimizes accident risk. To achieve this status, the plant must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

<u>G.1</u>

In MODE 5 or 6, or during movement of irradiated fuel assemblies with two CREVS trains inoperable or with one or more CREVS trains inoperable due to an inoperable CRE boundary, action must be taken immediately to suspend activities that could result in a release of radioactivity that might require isolation of the CRE. This places the unit in a condition that minimizes the accident risk. This does not preclude the movement of fuel to a safe position.

ACTIONS H.1 (continued) If both CREVS trains are inoperable in MODE 1, 2, 3, or 4, for reasons other than Condition B or Condition E the CREVS may not be capable of performing the intended function and the plant is in a condition outside the accident analyses. Therefore, LCO 3.0.3 must be entered immediately. SURVEILLANCE SR 3.7.10.1 REQUIREMENTS Standby systems should be checked periodically to ensure that they function properly. As the environment and normal operating conditions on this system are not too severe, testing each train once every month provides an adequate check of this system. The systems need only be operated for \geq 15 minutes to demonstrate the function of the system. The 31-day Frequency is based on the reliability of the equipment and the two train redundancy.

<u>SR 3.7.10.2</u>

This SR verifies that the required CREVS testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The CREVS filter tests are in accordance with Regulatory Guide 1.52 (Ref. 6). 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.

SR 3.7.10.3

This SR verifies that each CREVS train starts and operates on an actual or simulated actuation signal. The Frequency of 18 months is based on industry operating experience and is consistent with the typical refueling cycle.