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

CNL-19-038

June 7, 2019

10 CFR 50.90

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

Watts Bar Nuclear Plant, Units 1 and 2
Facility Operating License Nos. NPF-90 and NPF-96
NRC Docket Nos. 50-390 and 50-391

Subject: **License Amendment Request to Make Miscellaneous Administrative Changes (WBN-TS-19-02)**

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 the Technical Specifications (TS) for the Watts Bar Nuclear Plant (WBN), Units 1 and 2.

The proposed amendment revises the WBN TS by making several administrative changes: 1) deletion of previous one-time historical changes, 2) replacing dated Figures 4.1-1 and 4.1-2 with analogous text, 3) revising WBN2 TS 3.7.7 and 3.9.6 for consistency with the WBN Unit 1 TS, and 4) making corrections to the Table of Contents based on previous License Amendments.

The Enclosure provides a description and technical evaluation of the proposed changes, a regulatory evaluation, and a discussion of environmental considerations. Attachments 1 and 2 to the Enclosure provides the existing respective WBN Unit 1 and Unit 2 TS pages, respectively, marked up to show the proposed changes. Attachments 3 and 4 to the Enclosure provides the revised (clean) respective WBN Unit 1 and Unit 2 TS pages respectively. Attachment 5 to the enclosure provides the marked up WBN Unit 1 and 2 TS Bases to show the proposed changes. The changes to the TS Bases are provided for information only.

TVA requests approval of the proposed license amendment by one year from the date of this letter, with the amendment being implemented within 30 days.

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). In accordance with 10 CFR 50.91, "Notice for Public Comment; State Consultation," a copy of this application, with the Enclosure is being provided to the designated Tennessee Official.

There are no new regulatory commitments contained in this submittal. Please address any questions regarding this submittal to Miss Kimberly Hulvey, Fleet Licensing Manager, at (423) 751-3275.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 7th day of June 2019.

Respectfully,

E. K. Henderson
Director, Nuclear Regulatory Affairs

Enclosure: Evaluation of the Proposed Change

cc (w/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

Evaluation of the Proposed Change

Subject: License Amendment Request to Make Miscellaneous Administrative Changes (WBN-TS-19-02)

Table of Contents

Attachments

1.0 SUMMARY DESCRIPTION

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 requesting a license amendment to the Watts Bar Nuclear Plant (WBN) Units 1 and 2 Technical Specifications (TS). The proposed amendment would modify the TS by making various administrative changes. This includes:

- Elimination of historical one-time License Amendments from the Unit 1 and Unit 2 TS.
- Replacing dated TS Figures 4.1-1 and 4.1-2 with analogous text for Units 1 and 2.
- Revising Unit 2 TS 3.7.7 and 3.9.6 for consistency with the WBN Unit 1 TS.
- Correcting the Table of Contents (TOC) based on previous License Amendments.

2.0 DETAILED DESCRIPTION

2.1 DESCRIPTION OF THE PROPOSED CHANGE

The following TS changes are being made by this License Amendment Request (LAR).

2.2.1 One-Time License Amendment Removal

The following table describes the one-time TS that are being removed and the originating License Amendments.

Unit	Technical Specification	Information Being Removed	Relevant Amendments
WBN1	TS 3.0	Delete Table SR 3.0.2-1 (and pages) and the text invoking it in SR 3.0.2.	114
WBN1	TS 3.5.2	Delete Note in Frequency column of SR 3.5.2.3.	43
WBN1	TS 3.6.6	Delete footnote for Completion Time of Condition A.	93
WBN1	TS 3.6.8	Delete footnote for LCO 3.6.8, Condition A and Condition B. Delete footnote for SR 3.6.8.1.	10
WBN1	TS 3.6.12	Delete Note in Frequency column of SR 3.6.12.3, SR 3.6.12.4, and SR 3.6.12.5.	3
WBN1	TS 3.6.15	Delete footnotes regarding Penetration 1-EQH-271-0010 and 11 in the Note to Condition B.	59
WBN1	TS 3.7.8	Delete Condition C and associated footnote.	69
WBN1	TS 5.7.2.19	Delete second paragraph regarding conducting the 10-year Type A test.	63
WBN2	TS 3.0	Delete Table SR 3.0.2-1 (and pages) and the text invoking it in SR 3.0.2.	3, 10, 12, 13, 14
WBN2	TS 5.7.2.19	Delete Table-5.7.2-1 (and page) and the text invoking it in TS 5.7.2.19.	11

2.2.2 Replacement of Figures 4.1-1 and 4.1-2 With Text

This license amendment request proposes to revise TS Section 4.0, Design Features, Page 4.0-1, by deleting the text in TS 4.1.1 and 4.1.2 (that refers to Figures 4.1-1 and 4.1-2), and adding a description of the site location in Section 4.1, “Site.” Figures 4.1-1 and 4.1-2 are removed from Pages 4.0-5 and 4.0-6, and “Page Intentionally Left Blank” text is inserted. This also results in a revision to the List of Figures in the TOC.

2.2.3 WBN Unit 1 and 2 Consistency Changes

- TS 3.7.7 – Insert “Unit 2” in Note to SR 3.7.7.4.
- TS 3.9.6 – Change “AND” to “OR” as connector between Required Action A.1 and A.2.
- Various – Miscellaneous footer consistency changes.

2.2.4 Table of Contents Corrections

The following table itemizes the changes to the TOC based on the License Amendments that caused the changes to the corresponding TS, but that did not recognize the associated TOC effects. The TOC page number changes were identified by comparison of the footers on the associated TS.

Unit	TOC Item	Information Being Changed	Relevant Amendments
WBN1	TS 3.6.7	Replaced “Hydrogen Recombiners” with “Deleted”	72
WBN1	TS 3.7.16	Added TS 3.7.16, “Component Cooling System (CCS) – Shutdown.”	104
WBN1	TS 3.7.17	Added TS 3.7.17, “Essential Raw Cooling Water (ERCW) System – Shutdown.”	104
WBN1	TS 3.9.4	Replaced “Containment Penetrations” with “Deleted.”	92
WBN1	TS 3.9.8	Replaced “Reactor Building Purge Air Cleanup Units” with “Deleted.”	92
WBN1	TS 3.9.10	Added TS 3.9.10, “Decay Time.”	92
WBN1	TS 4.2	Added TS 4.2, “Reactor Core.”	6[1]
WBN1	TS 4.3	Added TS 4.3, “Fuel Storage.”	6[1]
WBN1	TS 5.8	Revise Page number to “5.0-26.”	N/A
WBN1	TS 5.9	Revise Page number to “5.0-27.”	N/A
WBN1	TS 5.10	Revise Page number to “5.0-33.”	N/A
WBN1	TS 5.11	Revise Page number to “5.0-34.”	N/A
WBN1	Table 3.3.4-1	Delete table.	124
WBN1	Table 3.3.6-1	Revise Page number to “3.3-55.”	N/A
WBN1	Table 3.3.8-1	Revise Page number to “3.3-63.”	N/A
WBN1	Table 3.7.15-1	Delete table	40
WBN1	Table 5.7.2.12-1	Delete table.	65

[1] It appears that the entries for TS 4.2 and 4.3 scrolled on to page iv of the TOC, but this page was not included in the Amendment 6 LAR.

Unit	TOC Item	Information Being Changed	Relevant Amendments
WBN1	Table 5.7.2.12-2	Delete table.	65
WBN1	Figure 3.4.16-1	Replaced “Reactor Coolant DOSE EQUIVALEMT I-131 Specific Activity Limit Versus Percent of RATED THERMAL POWER” with “Deleted.”	41
WBN2	Table 3.3.4-1	Delete table.	25

2.2 REASON FOR THE PROPOSED CHANGE

This proposed change has been made to make minor administrative corrections and enhancements to the WBN TS to remove extraneous information, promote consistency between the WBN units, and promote better alignment with the Standard Technical Specifications (STS).

3.0 TECHNICAL EVALUATION

3.1 ONE-TIME LICENSE AMENDMENT REMOVAL

The time limits of each of the one-time license amendments have expired. Removing them from the TS will eliminate a potential source of confusion to plant operators. Removal of these one-time license amendments are administrative changes.

3.2 REPLACEMENT OF FIGURES 4.1-1 AND 4.1-2 WITH TEXT

The removal of the figures and adding a text description of the site location are administrative changes. The text is derived from Chapter 2 of the dual-unit WBN Updated Final Safety Analysis Report (UFSAR). Additionally, the information on these figures is depicted in UFSAR Figures 2.1-4B and 2.1-3. This change is made to promote consistency with the STS, and the TS of other TVA nuclear sites, which do not include these figures.

3.3 WBN UNIT 1 AND 2 CONSISTENCY CHANGES

SR 3.7.7.4 – The SR Note for WBN1 reads:

> *Verification of CCS pump 2B-B automatic start on Unit 1 SI is not required when CCS Pump 2B-B is supporting CCS Train B OPERABILITY.*

The change to analogous WBN2 SR 3.7.7.4 to insert “Unit 2” before “SI” is done for consistency with the Unit 1 TS, and was already reflected in the Bases. This is an administrative change.

TS 3.9.6 – This change corrects an obvious administrative error from original licensing. Both the WBN1 and STS have Required Actions A.1 and A.2 connected by an “OR” statement. This is also how the Unit 2 TS 3.9.6 Bases describe the connector for these Required Actions:

If less than the required number of RHR loops are OPERABLE, actions shall be immediately initiated and continued until the RHR loop is restored to OPERABLE status and to operation ***or*** *until ≥ 23 ft of water level is established above the reactor vessel flange. When the water level is ≥ 23 ft above the reactor vessel flange, the Applicability changes to that of LCO 3.9.5, and only one RHR loop is required to be OPERABLE and in operation. An immediate Completion Time is necessary for an operator to initiate corrective actions.*

Miscellaneous footer changes – Where a TS page is otherwise affected by this LAR, the footers have been revised to be the correct format. These are strictly administrative changes.

3.4 TABLE OF CONTENTS CORRECTIONS

The technical justifications for making the Table of Contents changes are provided in the table in Section 2.2.4 of this enclosure.

4.0 REGULATORY EVALUATION

4.1 PRECEDENT

A recent precedent for replacing the Section 4.0 figures with text is Cooper Nuclear Station, License Amendment 255, dated July 25, 2016 (ML16146A749), which deleted the TS figure for the site exclusion area boundary and the low population zone and replaced it with a text description. The other administrative changes are plant-unique.

4.2 SIGNIFICANT HAZARDS CONSIDERATION

The Tennessee Valley Authority (TVA) is requesting an amendment to Facility Operating Licenses NPF-90 and NPF-96 for Watts Bar Nuclear Plant (WBN), Units 1 and 2, respectively. The proposed amendment would modify Technical Specifications (TS) by making various administrative changes. This includes:

- Elimination of historical one-time License Amendments from the Unit 1 and Unit 2 TS.
- Replacing dated TS Figures 4.1-1 and 4.1-2 with analogous text for Units 1 and 2.
- Revising Unit 2 TS 3.7.7 and 3.9.6 for consistency with the WBN Unit 1 TS.
- Correcting the Table of Contents (TOC) based on previous License Amendments.

TVA has evaluated the proposed changes to the TS using the criteria in Section 50.92 to Title 10 of the *Code of Federal Regulations* and has determined that the proposed changes do not involve a significant hazards consideration. As required by 10 CFR 50.91(a), the TVA analysis of the issue of no significant hazards consideration is presented below:

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

Response: No.

The proposed changes are all administrative in nature. Administrative changes such as this are not initiators of any accident previously evaluated. As a result, the probability of an accident previously evaluated is not affected. The consequences of an accident with the incorporation of these administrative changes are not different than the consequences of the same accident without this change. As a result, the consequences of an accident previously evaluated are not affected by this change.

Based on the above, it is concluded that the proposed changes do 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 modify the plant design, nor do the proposed changes alter the operation of the plant or equipment involved in either routine plant operation or in the mitigation of design basis accidents. The proposed changes are administrative only.

   Based on the above, it is concluded that the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

   Response: No.

   The proposed changes are administrative in nature. The changes do not alter the manner in which safety limits, limiting safety system settings, or limiting conditions for operation are determined. The safety analysis acceptance criteria are not affected by this change. The proposed changes will not result in plant operation in a configuration outside of the design basis. Therefore, the proposed changes do 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.

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. 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.

Attachment 1 to CNL-19-038

Proposed Technical Specification Changes (Unit 1 Markup)
(20 total pages)

(continued)

TABLE OF CONTENTS (continued)

3.7.16 Component Cooling System (CCS) - Shutdown 3.7.33
3.7.17 Essential Raw Cooling Water (ERCW) System - Shutdown . . . 3.7-36

Deleted

3.9.10 Decay Time 3.9-17

4.2 Reactor Core 4.0-1
4.3 Fuel Storage 4.0-2

tinued)

~~to be implemented no later than completion of the Reracking modification or prior to the movement of fuel assemblies into the spent fuel pool for the cycle 1 refueling outage~~

LIST OF TABLES

~~to be implemented no later than completion of the reracking modification or prior to the movement of fuel assemblies into the spent fuel pool for the cycle 1 refueling outage~~

LIST OF FIGURES

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

SR 3.0.1	SRs shall be met during the MODES or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.
SR 3.0.2	The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met. ~~In addition, for each of the SRs listed in Table SR 3.0.2-1 the specified Frequency is met if the Surveillance is performed on or before the date listed on Table SR 3.0.2-1. This extension of the test intervals for these SRs is permitted on a one-time basis to be completed no later than November 30, 2017.~~ For Frequencies specified as "once," the above interval extension does not apply. If a Completion Time requires periodic performance on a "once per . . ." basis, the above Frequency extension applies to each performance after the initial performance. Exceptions to this Specification are stated in the individual Specifications.
SR 3.0.3	If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed. If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

(continued)

Delete this page

Table SR 3.0.2-1

Surveillance Requirement (SR)	Description of SR Requirement	Frequency Extension Limit
3.8.1.9	Verify each DG rejects a load greater than or equal to its associated single largest post-accident load, and: a. Following load rejection, the frequency is ≤ 66.75 Hz; b. Within 3 seconds following load rejection, the voltage is ≥ 6555 V and ≤ 7260 V; and c. Within 4 seconds following load rejection, the frequency is ≥ 59.8 Hz and ≤ 60.1 Hz.	11/30/17
3.8.1.10	Verify each DG operating at a power factor ≥ 0.8 and ≤ 0.9 does not trip and voltage is maintained ≤ 8880 V during and following a load rejection of ≥ 3960 kW and ≤ 4400 kW and ≥ 2970 kVAR and ≤ 3300 kVAR	11/30/17
3.8.1.11	Verify on an actual or simulated loss of offsite power signal: a. De-energization of emergency buses; b. Load shedding from emergency buses; c. DG auto-starts from standby condition and: 1. energizes permanently connected loads in ≤ 10 seconds, 2. energizes auto-connected shutdown loads through automatic load sequencer, 3. maintains steady state voltage ≥ 6800 V and ≤ 7260 V, 4. maintains steady state frequency ≥ 59.8 Hz and ≤ 60.1 Hz, and 5. supplies permanently connected and auto-connected shutdown loads for ≥ 5 minutes	11/30/17
3.8.1.13	Verify each DG's automatic trips are bypassed on automatic or emergency start signal except: a. Engine overspeed; and b. Generator differential current	11/30/17
3.8.1.16	Verify each DG: a. Synchronizes with offsite power source while loaded with emergency loads upon a simulated restoration of offsite power; b. Transfers loads to offsite power source; and c. Returns to ready-to-load operation	11/30/17
3.8.1.18	Verify the time delay setting for each sequenced load block is within limits for each accident condition and non-accident condition load sequence.	11/30/17

Delete this page

Table SR 3.0.2-1		
Surveillance Requirement (SR)	Description of SR Requirement	Frequency Extension Limit
3.8.1.19	Verify on an actual or simulated loss of offsite power signal in conjunction with an actual or simulated ESF actuation signal: a. De-energization of emergency buses; b. Load shedding from emergency buses; and c. DG auto-starts from standby condition and: 1. energizes permanently connected loads in ≤ 10 seconds, 2. energizes auto-connected emergency loads through load sequencer, 3. achieves steady state voltage: ≥ 6800 V and ≤ 7260 V, 4. achieves steady state frequency ≥ 59.8 Hz and ≤ 60.1 Hz, and 5. supplies permanently connected and auto-connected emergency loads for ≥ 5 minutes.	11/30/17

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.5.2.1	Verify the following valves are in the listed position with power to the valve operator removed. <u>Number</u> / <u>Position</u> / <u>Function</u> FCV-63-1 / Open / RHR Supply FCV-63-22 / Open / SIS Discharge	12 hours
SR 3.5.2.2	Verify each ECCS manual, power operated, and automatic valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days
SR 3.5.2.3	Verify ECCS piping is full of water.	31 days ~~NOTE: Surveillance performance not required for safety injection hot leg injection lines until start up from the Fall 2003 refueling outage.~~
SR 3.5.2.4	Verify each ECCS pump's developed head at the test flow point is greater than or equal to the required developed head.	In accordance with the Inservice Testing Program
SR 3.5.2.5	Verify each ECCS automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	18 months
SR 3.5.2.6	Verify each ECCS pump starts automatically on an actual or simulated actuation signal.	18 months

(continued)

3.6 CONTAINMENT SYSTEMS

3.6.6 Containment Spray System

LCO 3.6.6 Two containment spray trains and two residual heat removal (RHR) spray trains shall be OPERABLE.

--NOTE--
The RHR spray train is not required in MODE 4.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One containment spray train inoperable.	A.1 Restore containment spray train to OPERABLE status.	72 hours ~~(*)~~
B. One RHR spray train inoperable.	B.1 Restore RHR spray train to OPERABLE status.	72 hours
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.	6 hours
	AND	
	C.2 Be in MODE 5.	84 hours

~~* For the week commencing June 24, 2013 (expiring on June 30, 2013), containment spray pump 1B-B may be inoperable for a period not to exceed 7 days for mechanical seal repair.~~

3.6 CONTAINMENT SYSTEMS

3.6.8 Hydrogen Mitigation System (HMS)

LCO 3.6.8 Two HMS trains shall be OPERABLE. ~~(* See Note below)~~

APPLICABILITY: MODES 1 and 2.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One HMS train inoperable. ~~* See Note below~~	A.1 Restore HMS train to OPERABLE status. OR A.2 Perform SR 3.6.8.1 on the OPERABLE train.	7 days Once per 7 days
B. One containment region with no OPERABLE hydrogen ignitor. ~~* See note below~~	B.1 Restore one hydrogen ignitor in the affected containment region to OPERABLE status.	7 days
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.	6 hours

~~* NOTE~~
~~For the time period between June 9, 1998, and the next WBN Unit 1 entry into MODE 3, HMS Train A is considered OPERABLE with 32 of 34 ignitors OPERABLE. The following additional CONDITION and REQUIRED ACTION applies:~~

~~CONDITION~~
~~Reactor Cavity Region (Hydrogen Ignitors 30A and 46B) and Steam Generator No. 4 Enclosure Lower Compartment Region (Hydrogen Ignitors 31A and 45B) with no OPERABLE hydrogen ignitor.~~

~~REQUIRED ACTION/COMPLETION TIME~~
~~Restore one hydrogen ignitor in each region to OPERABLE status within 72 hours.~~

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.8.1	Energize each HMS train power supply breaker and verify ≥ 33~~*~~ ignitors are energized in each train. ~~* See Note below~~	92 days~~*~~
SR 3.6.8.2	Verify at least one hydrogen ignitor is OPERABLE in each containment region.	92 days
SR 3.6.8.3	Energize each hydrogen ignitor and verify temperature is ≥ 1700°F.	18 months

~~* NOTE~~
~~For the time period between June 9, 1998, and the next WBN unit 1 entry into MODE 3, SR 3.6.8.1 shall verify ≥32 ignitors are OPERABLE on HMS Train A at a frequency of 46 days.~~

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.12.3	Verify, by visual inspection, each inlet door is not impaired by ice, frost, or debris.	~~-----NOTE------ The 3 month performance due September 9, 1996 (per SR 3.0.2) may be extended until October 21, 1996. --------------~~ 3 months during first year after receipt of license <u>AND</u> 18 months
SR 3.6.12.4	Verify torque required to cause each inlet door to begin to open is ≤ 675 in-lb.	~~-----NOTE------ The 3 month performance due September 9, 1996 (per SR 3.0.2) may be extended until October 21, 1996. --------------~~ 3 months during first year after receipt of license <u>AND</u> 18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.12.5	Perform a torque test on a sampling of $\geq$ 50% of the inlet doors.	~~-----NOTE----- The 3 month performance due September 9, 1996 (per SR 3.0.2) may be extended until October 21, 1996. --------------~~ 3 months during first year after receipt of license <u>AND</u> 18 months
SR 3.6.12.6	Verify for each intermediate deck door: a. No visual evidence of structural deterioration; b. Free movement of the vent assemblies; and c. Free movement of the door.	3 months during first year after receipt of license <u>AND</u> 18 months

(continued)

3.6 CONTAINMENT SYSTEMS

3.6.15 Shield Building

LCO 3.6.15 The Shield Building shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Shield building inoperable.	A.1 Restore shield building to OPERABLE status.	24 hours
B. ---------NOTE--------- Annulus pressure requirement is not applicable during venting operations, required annulus entries, or Auxiliary Building isolations not exceeding 1 hour in duration. ~~or while Penetration 1-EQH-271-0010 or 1-EQH-271-0011 in the Shield Building dome is open until annulus pressure is restored.*~~ ------------------------- Annulus pressure not within limits.	B.1 Restore annulus pressure within limits.	8 hours
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3. AND C.2 Be in MODE 5.	6 hours 36 hours

~~*1. The combined opening time of Penetrations 1-EQH-271-0010 or 1-EQH-271-0011 is limited to a total time of five hours a day, six days a week during Cycle 7 operation.~~

~~2. Penetrations 1-EQH-271-0010 or 1-EQH-271-0011 in the Shield Building Dome may not be opened if in Action Conditions LCO 3.6.9A or 3.8.1B.~~

~~3. Upon opening Penetration 1-EQH-271-0010 or 1-EQH-271-0011 in the Shield Building Dome, both EGTS control loops shall be placed in the A-Auto Stand-by position and returned to normal position following closure of penetration.~~

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time of Condition A not met.	B.1 Be in MODE 3.	6 hours
	AND	
	B.2 Be in MODE 5.	36 hours
~~C. Two Train A ERCW pumps (A-A and B-A) inoperable and two Train A ERCW pumps operable (C-A and D-A). *~~	~~C.1 Align the operable pumps (C-A and D-A) to concurrently autostart from the 2A-A 6.9 KV Shutdown Board.~~	~~72 hours~~
	~~AND~~	
	~~C.2 Restore at least one of the pumps (A-A or B-A) to OPERABLE status.~~	~~10 days~~

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.8.1	-----NOTE----- Isolation of ERCW flow to individual components does not render the ERCW inoperable. -----	
	Verify each ERCW manual, power operated, and automatic valve in the flow path servicing safety related equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days

(continued)

~~* This CONDITION will apply until the A-A or B-A pump is repaired and declared operable or until July 31, 2008, whichever occurs first.~~

The Watts Bar Nuclear Plant is located on a tract of approximately 1770 acres in Rhea County on the west bank of the Tennessee River at river mile 528. The site is approximately 1-1/4 miles south of the Watts Bar Dam. The 1770 acre reservation is owned by the United States and is in the custody of TVA. The exclusion area is determined by a circle of radius 1200 meters centered on a point 20 feet from the north wall of the turbine building along the building centerline. The distance to the low population zone is a radius of 3 miles.

4.0 DESIGN FEATURES

4.1 Site

~~4.1.1 Site and Exclusion Area Boundaries~~

~~The site and exclusion area boundaries shall be as shown in Figure 4.1-1.~~

~~4.1.2 Low Population Zone (LPZ)~~

~~The LPZ shall be as shown in Figure 4.1-2 (within the 3-mile circle)~~.

4.2 Reactor Core

4.2.1 Fuel Assemblies

The reactor shall contain 193 fuel assemblies. Each assembly shall consist of a matrix of Zircalloy or Zirlo fuel rods with an initial composition of natural or slightly enriched uranium dioxide (UO_2) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions. For Unit 1 Watts Bar is authorized to place a maximum of 1792 Tritium Producing Burnable Absorber Rods into the reactor in an operating cycle.

4.2.2 Control Rod Assemblies

The reactor core shall contain 57 control rod assemblies. The control material shall be either silver-indium-cadmium or boron carbide with silver indium cadmium tips as approved by the NRC.

(continued)

Remove strikethrough

Page Intentionally Left Blank

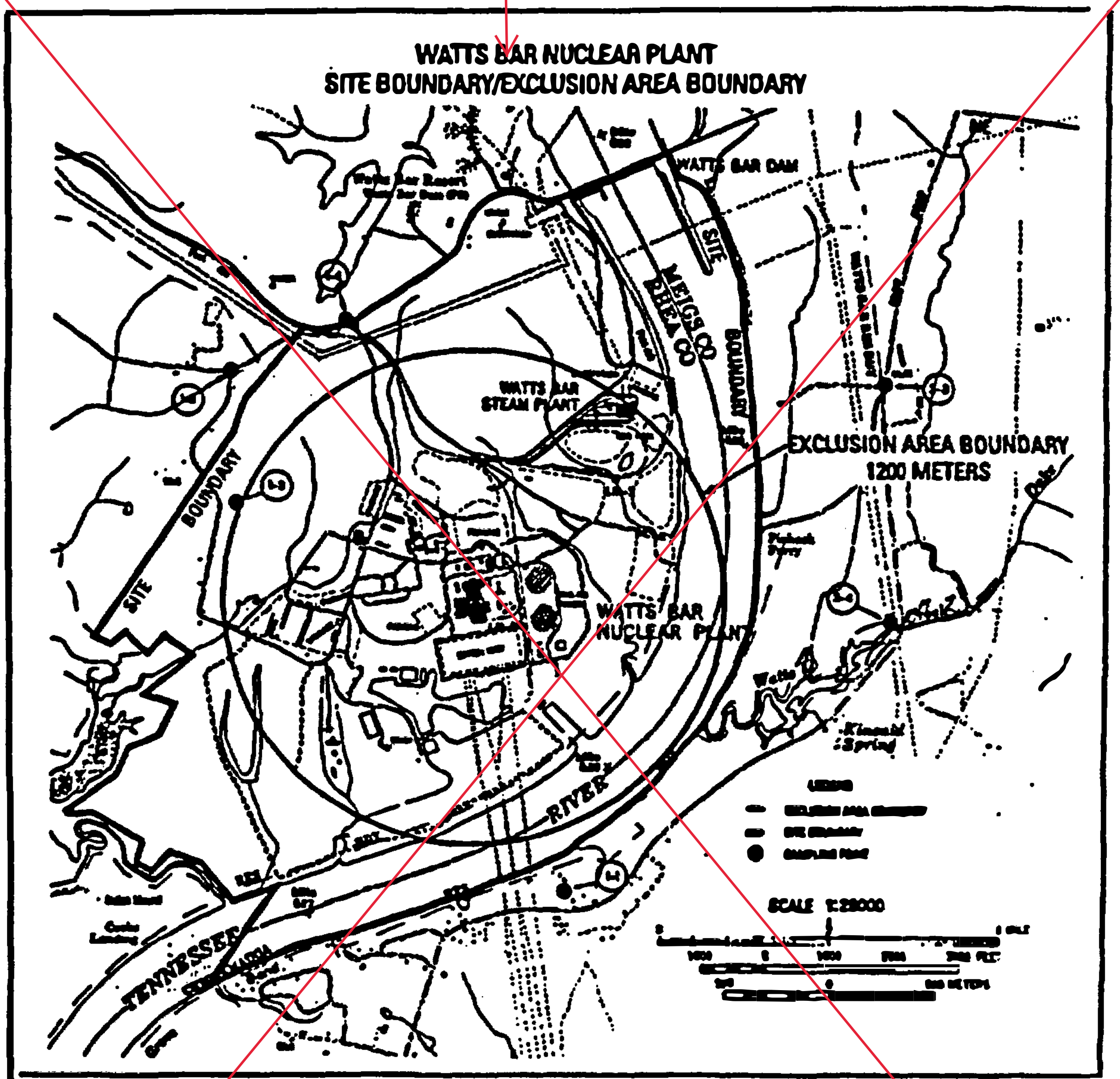

Figure 4.1-1 (page 1 of 1)
Site and Exclusion Area Boundaries

~~- to be implemented no later than completion of the reracking modification or prior to the movement of fuel assemblies into the spent fuel pool for the Cycle 1 Refueling Outage~~ JUL 28 1997

Page Intentionally Left Blank

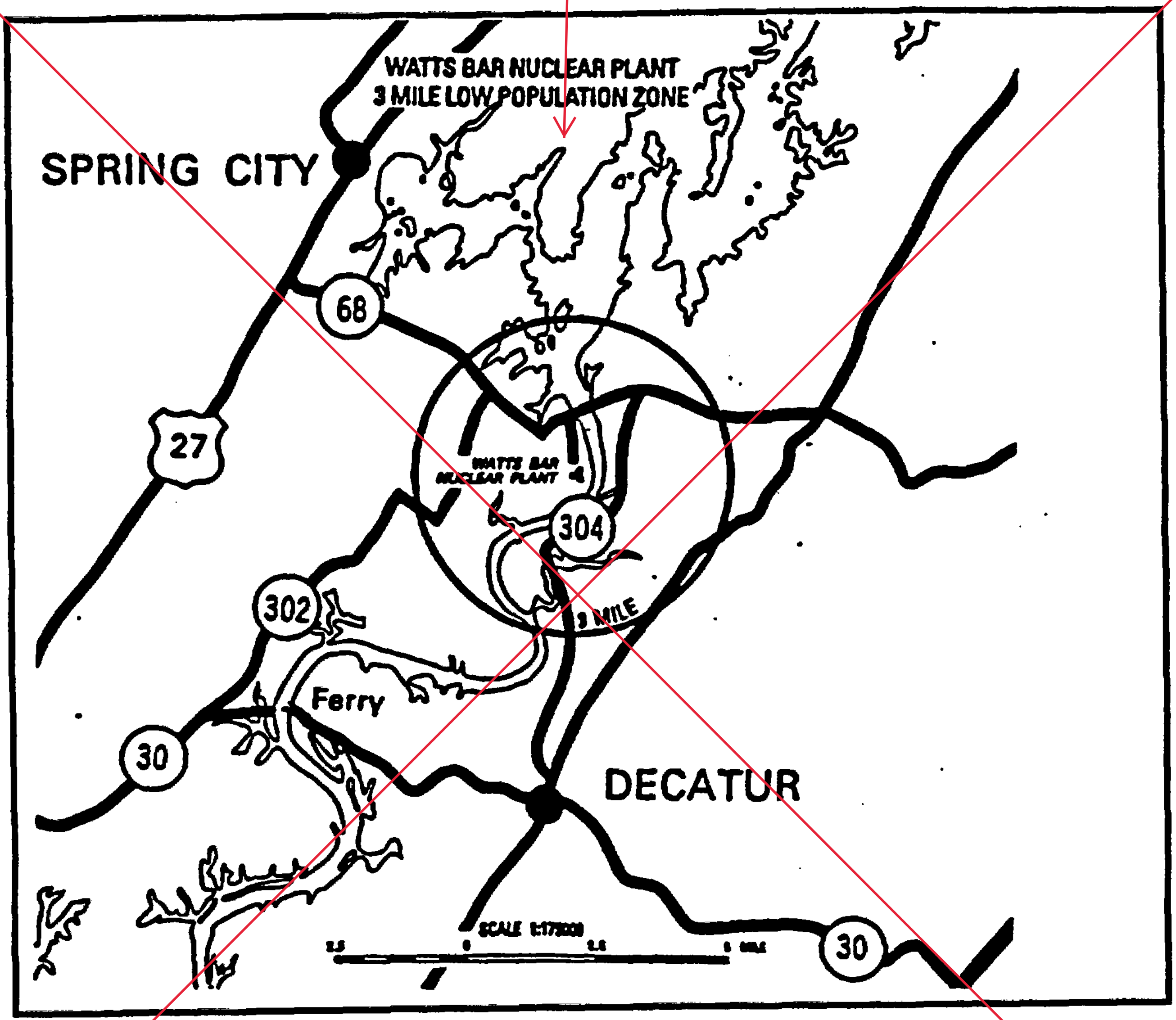

Figure 4.1-2 (page 1 of 1)
Low Population Zone

~~JUL 2 8 1997~~

~~to be implemented no later than completion of the reracking modification or prior to the movement of fuel assemblies into the spent fuel pool for the Cycle 1 refueling outage~~

5.7 Procedures, Programs, and Manuals

5.7.2.18 Safety Function Determination Program (SFDP) (continued)

A loss of safety function exists when, assuming no concurrent single failure, a safety function assumed in the accident analysis cannot be performed. For the purpose of this program, a loss of safety function may exist when a support system is inoperable, and:

a. A required system redundant to the system(s) supported by the inoperable support system is also inoperable; or

b. A required system redundant to the system(s) in turn supported by the inoperable supported system is also inoperable; or

c. A required system redundant to the support system(s) for the supported systems (a) and (b) above is also inoperable.

The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

5.7.2.19 Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50 Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide (RG) 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995.

~~The Fall 2007 end date for conducting the 10 year interval containment integrated leakage rate (Type A) test may be deferred up to 5 years but no later than Fall 2012.~~

The peak calculated containment internal pressure for the design basis loss of coolant accident, P_a, is 15.0 psig.

The maximum allowable containment leakage rate, L_a, at P_a, is 0.25% of the primary containment air weight per day.

(continued)

Attachment 2 to CNL-19-038

Proposed Technical Specification Changes (Unit 2 Markup)
(16 total pages)

<u>LIST OF TABLES</u>

Amendment ___

LIST OF FIGURES

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

SR 3.0.1

SRs shall be met during the MODES or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

SR 3.0.2

The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met. ~~In addition, for each of the SRs listed in Table SR 3.0.2-1 the specified Frequency is met if the Surveillance is performed on or before the date listed on Table SR 3.0.2-1. This extension of the test intervals for these SRs is permitted on a one-time basis to be completed no later than November 30, 2017.~~

For Frequencies specified as "once," the above interval extension does not apply.

If a Completion Time requires periodic performance on a "once per . . ." basis, the above Frequency extension applies to each performance after the initial performance.

Exceptions to this Specification are stated in the individual Specifications.

SR 3.0.3

If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed.

If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

(continued)

Delete this page

3.0 SR APPLICABILITY (continued)

Table SR 3.0.2-1

Surveillance Requirement (SR)	Description of SR Requirement	Frequency Extension Limit
3.3.1.13, Table 3.3.1-1, Function 15	Perform TADOT of the Safety Injection (SI) Input from Engineered Safety Feature Actuation System (ESFAS) to Reactor Trip Function	10/31/17
3.3.2.5, Table 3.3.2-1, Function 1.b	Perform SLAVE RELAY TEST of the Safety Injection Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.2.5, Table 3.3.2-1, Function 2.b	Perform SLAVE RELAY TEST of the Containment Spray Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.2.5, Table 3.3.2-1, Function 3.a(2)	Perform SLAVE RELAY TEST of the Containment Isolation Phase A Isolation Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.2.5, Table 3.3.2-1, Function 3.b(2)	Perform SLAVE RELAY TEST of the Containment Isolation Phase B Isolation Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.2.5, Table 3.3.2-1, Function 4.b	Perform SLAVE RELAY TEST of the Steam Line Isolation Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.2.5, Table 3.3.2-1, Function 5.a	Perform SLAVE RELAY TEST of the Turbine Trip and Feedwater Isolation Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.2.5, Table 3.3.2-1, Function 6.a	Perform SLAVE RELAY TEST of the Auxiliary Feedwater Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.2.5, Table 3.3.2-1, Function 7.a	Perform SLAVE RELAY TEST of the Automatic Switchover to Containment Sump Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.2.7, Table 3.3.2-1, Function 1.b	Perform SLAVE RELAY TEST of the Safety Injection Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.2.7, Table 3.3.2-1, Function 3.a(2)	Perform SLAVE RELAY TEST of the Containment Isolation Phase A Isolation Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.2.7, Table 3.3.2-1, Function 3.b(2)	Perform SLAVE RELAY TEST of the Containment Isolation Phase B Isolation Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.2.8, Table 3.3.2-1, Function 1.a	Perform TADOT of the Safety Injection Manual Initiation Function	10/31/17
3.3.2.8, Table 3.3.2-1, Function 2.a	Perform TADOT of the Containment Spray Manual Initiation Function	10/31/17
3.3.2.8, Table 3.3.2-1, Function 3.a(1)	Perform TADOT of the Containment Isolation Phase A Isolation Manual Initiation Function	10/31/17
3.3.2.8, Table 3.3.2-1, Function 3.b(1)	Perform TADOT of the Containment Isolation Phase B Isolation Manual Initiation Function	10/31/17
3.3.2.10, Table 3.3.2-1, Function 1.c	Verify ESFAS RESPONSE TIMES are within limit for the Safety Injection Containment Pressure – High Function	10/31/17
3.3.2.10, Table 3.3.2-1, Function 1.d	Verify ESFAS RESPONSE TIMES are within limit for the Safety Injection Pressurizer Pressure – Low Function	10/31/17
3.3.2.10, Table 3.3.2-1, Function 1.e	Verify ESFAS RESPONSE TIMES are within limit for the Safety Injection Steam Line Pressure - Low Function	10/31/17
3.3.2.10, Table 3.3.2-1, Function 2.c	Verify ESFAS RESPONSE TIMES are within limit for the Containment Pressure – High High Function	10/31/17
3.3.2.10, Table 3.3.2-1, Function 3.b(3)	Verify ESFAS RESPONSE TIMES are within limit for the Containment Isolation Phase B Isolation Containment Pressure – High High Function	10/31/17

(continued)

Delete this page

3.0 SR APPLICABILITY (continued)

Table SR 3.0.2-1

Surveillance Requirement (SR)	Description of SR Requirement	Frequency Extension Limit
3.3.2.10, Table 3.3.2-1, Function 6.b	Verify ESFAS RESPONSE TIMES are within limit for the Auxiliary Feedwater SG Water Level – Low Low Coincident with: 1) Vessel ΔT Equivalent to power ≤ 50% RTP With a time delay (Ts) if one SG is affected or A time delay (Tm) if two or more SGs are affected OR 2) Vessel ΔT equivalent to power > 50% RTP with no time delay (Ts and Tm = 0) Function	10/31/17
3.3.2.10, Table 3.3.2-1, Function 6.e	Verify ESFAS RESPONSE TIMES are within limit for the Auxiliary Feedwater Trip of all Turbine Driven Main Feedwater Pumps Function	10/31/17
3.3.2.10, Table 3.3.2-1, Function 7.b	Verify ESFAS RESPONSE TIMES are within limit for the Automatic Switchover to Containment Sump Refueling Water Storage Tank (RWST) Level - Low Coincident with Safety Injection and Coincident with Containment Sump Level - High Function	10/31/17
3.3.3.2, Table 3.3.3-1, Function 5	Perform CHANNEL CALIBRATION of the RCS Pressure (Wide Range) Function	10/31/17
3.3.3.2, Table 3.3.3-1, Function 6	Perform CHANNEL CALIBRATION of the Reactor Vessel Water Level Function	10/31/17
3.3.3.3, Table 3.3.3-1, Function 11	Perform TADOT of the Containment Isolation Valve Position Function	10/31/17
3.3.4.2, Table 3.3.4-1, Function 2.b	Verify each required control circuit and transfer switch is capable of performing the intended function for the Reactor Coolant System (RCS) Pressure Control Pressurizer Power Operated Relief Valve (PORV) Control and Pressurizer Block Valve Control Function	10/31/17
3.3.4.2, Table 3.3.4-1, Function 2.c	Verify each required control circuit and transfer switch is capable of performing the intended function for the Reactor Coolant System (RCS) Pressure Control Pressurizer Heater Control Function	10/31/17
3.3.4.2, Table 3.3.4-1, Function 3.b	Verify each required control circuit and transfer switch is capable of performing the intended function for the Reactor Coolant System (RCS) Pressure Control Pressurizer Heater Control Function	10/31/17

Delete this page

3.0 SR APPLICABILITY (continued)

Table SR 3.0.2-1

Surveillance Requirement (SR)	Description of SR Requirement	Frequency Extension Limit
3.3.4.2, Table 3.3.4-1, Function 4.b	Verify each required control circuit and transfer switch is capable of performing the intended function for the Decay Heat Removal via Steam Generators (SGs) AFW Controls Function	10/31/17
3.3.4.2, Table 3.3.4-1, Function 4.c	Verify each required control circuit and transfer switch is capable of performing the intended function for the Decay Heat Removal via Steam Generators (SGs) SG Pressure Indication and Control Function	10/31/17
3.3.4.2, Table 3.3.4-1, Function 5.a	Verify each required control circuit and transfer switch is capable of performing the intended function for the Decay Heat Removal via RHR System RHR Flow Control Function	10/31/17
3.3.4.3, Table 3.3.4-1, Function 2.b	Perform CHANNEL CALIBRATION for each required instrumentation channel for the Reactor Coolant System (RCS) Pressure Control Pressurizer Power Operated Relief Valve (PORV) Control and Pressurizer Block Valve Control Function	10/31/17
3.3.4.3, Table 3.3.4-1, Function 2.c	Perform CHANNEL CALIBRATION for each required instrumentation channel for the Reactor Coolant System (RCS) Pressure Control Pressurizer Heater Control Function	10/31/17
3.3.4.3, Table 3.3.4-1, Function 4.c	Perform CHANNEL CALIBRATION for each required instrumentation channel for the Decay Heat Removal via Steam Generators (SGs) SG Pressure Indication and Control Function	10/31/17
3.3.4.3, Table 3.3.4-1, Function 4.e	Perform CHANNEL CALIBRATION for each required instrumentation channel for the Decay Heat Removal via Steam Generators (SGs) SG Tsat Indication Function	10/31/17
3.3.6.5, Table 3.3.6-1, Function 2	Perform SLAVE RELAY TEST of the Containment Vent Isolation Instrumentation Automatic Actuation Logic and Actuation Relays Function	10/31/17
3.3.6.6, Table 3.3.6-1, Function 1	Perform TADOT of the Containment Vent Isolation Instrumentation Manual Initiation Function	10/31/17
3.4.12.8	Perform CHANNEL CALIBRATION for each required PORV actuation channel	10/31/17
3.5.2.5	Verify each ECCS automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	10/31/17
3.5.2.6	Verify each ECCS pump starts automatically on an actual or simulated actuation signal.	10/31/17
3.6.3.6	Verify each automatic containment isolation valve that is not locked, sealed, or otherwise secured in position, actuates to the isolation position on an actual or simulated actuation signal	10/31/17
3.6.6.3	Verify each automatic containment spray valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal	10/31/17

(continued)

Delete this page

3.0 SR APPLICABILITY (continued)

Table SR 3.0.2-1		
Surveillance Requirement (SR)	Description of SR Requirement	Frequency Extension Limit
3.6.6.4	Verify each containment spray pump starts automatically on an actual or simulated actuation signal	10/31/17
3.6.9.3	Verify each Emergency Gas Treatment System (EGTS) train actuates on an actual or simulated actuation signal	10/31/17
3.6.11.2	Verify total weight of stored ice is greater than or equal to 2,404,500 lb by: a. Weighing a representative sample of ≥ 144 ice baskets and verifying each basket contains greater than or equal to 1237 lb of ice; and b. Calculating total weight of stored ice, at a 95 percent confidence level, using all ice basket weights determined in SR 3.6.11.2.a.	10/31/17
3.6.11.3	Verify azimuthal distribution of ice at a 95 percent confidence level by subdividing weights, as determined by SR 3.6.11.2.a, into the following groups: a. Group 1-bays 1 through 8; b. Group 2-bays 9 through 16; and c. Group 3-bays 17 through 24. The average ice weight of the sample baskets in each group from radial rows 1, 2, 4, 6, 8, and 9 shall be greater than or equal to 1237 lb.	10/31/17
3.6.13.5	Visually inspect ≥ 95% of the divider barrier seal length, and verify: a. Seal and seal mounting bolts are properly installed; and b. Seal material shows no evidence of deterioration due to holes, ruptures, chemical attack, abrasion, radiation damage, or changes in physical appearance	10/31/17
3.7.7.3	Verify each Component Cooling System (CCS) automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal	10/31/17
3.7.7.4	Verify each CCS pump starts automatically on an actual or simulated actuation signal	10/31/17
3.7.8.2	Verify each Essential Raw Cooling Water (ERCW) automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal	10/31/17
3.7.8.3	Verify each ERCW pump starts automatically on an actual or simulated actuation signal	10/31/17

Delete this page

3.0 SR APPLICABILITY (continued)

Table SR 3.0.2-1		
Surveillance Requirement (SR)	Description of SR Requirement	Frequency Extension Limit
3.8.1.9	Verify each DG rejects a load greater than or equal to its associated single largest post-accident load, and: a. Following load rejection, the frequency is ≤ 66.75 Hz; b. Within 3 seconds following load rejection, the voltage is ≥ 6555 V and ≤ 7260 V; and c. Within 4 seconds following load rejection, the frequency is ≥ 59.8 Hz and ≤ 60.1 Hz.	11/30/17
3.8.1.10	Verify each DG operating at a power factor ≥ 0.8 and ≤ 0.9 does not trip and voltage is maintained ≤ 8880 V during and following a load rejection of ≥ 3960 kW and ≤ 4400 kW and ≥ 2970 kVAR and ≤ 3300 kVAR	11/30/17
3.8.1.11	Verify on an actual or simulated loss of offsite power signal: a. De-energization of emergency buses; b. Load shedding from emergency buses; c. DG auto-starts from standby condition and: 1. energizes permanently connected loads in ≤ 10 seconds, 2. energizes auto-connected shutdown loads through automatic load sequencer, 3. maintains steady state voltage ≥ 6800 V and ≤ 7260 V, 4. maintains steady state frequency ≥ 59.8 Hz and ≤ 60.1 Hz, and 5. supplies permanently connected and auto connected shutdown loads for ≥ 5 minutes	11/30/17
3.8.1.12	Verify on an actual or simulated Engineered Safety Feature (ESF) actuation signal each Unit 2 DG auto-starts from standby condition and: a. In ≤ 10 seconds after auto-start and during tests, achieves voltage ≥ 6800 V and frequency ≥ 58.8 Hz; b. After DG fast start from standby conditions the DG achieves steady state voltage ≥ 6800 V and ≤ 7260 V, and frequency ≥ 59.8 Hz and ≤ 60.1 Hz. c. Operates for ≥ 5 minutes; d. Permanently connected loads remain energized from the offsite power system; and e. Emergency loads are energized from the offsite power system.	11/30/17
3.8.1.13	Verify each DG's automatic trips are bypassed on automatic or emergency start signal except: a. Engine overspeed; and b. Generator differential current	11/30/17

(continued)

Delete this page

3.0 SR APPLICABILITY (continued)

Table SR 3.0.2-1

Surveillance Requirement (SR)	Description of SR Requirement	Frequency Extension Limit
3.8.1.16	Verify each DG: a. Synchronizes with offsite power source while loaded with emergency loads upon a simulated restoration of offsite power; b. Transfers loads to offsite power source; and c. Returns to ready-to-load operation	11/30/17
3.8.1.17	Verify, DG 2A-A and 2B-B operating in test mode and connected to its bus, an actual or simulated ESF actuation signal overrides the test mode by: a. Returning DG to ready-to-load operation; and b. Automatically energizing the emergency load from offsite power.	11/30/17
3.8.1.18	Verify the time delay setting for each sequenced load block is within limits for each accident condition and non-accident condition load sequence.	11/30/17
3.8.1.19	Verify on an actual or simulated loss of offsite power signal in conjunction with an actual or simulated ESF actuation signal: a. De-energization of emergency buses; b. Load shedding from emergency buses; and c. DG auto-starts from standby condition and: 1. energizes permanently connected loads in $\leq$10 seconds, 2. energizes auto-connected emergency loads through load sequencer, 3. achieves steady state voltage: $\geq$ 6800 V and $\leq$ 7260 V, 4. achieves steady state frequency $\geq$ 59.8 Hz and $\leq$ 60.1 Hz, and 5. supplies permanently connected and auto-connected emergency loads for $\geq$ 5 minutes.	11/30/17
5.7.2.4b	Perform integrated leak test for each system at least once per 18 months. Specifically, only the centrifugal charging pump injection portion of the safety injection system.	10/31/17

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.7.1	Verify that the alternate feeder breaker to the C-S pump is open.	7 days
SR 3.7.7.2	-----------------------------NOTE----------------------------- Isolation of CCS flow to individual components does not render the CCS inoperable. --- Verify each CCS manual, power operated, and automatic valve in the flow path servicing safety related equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days
SR 3.7.7.3	Verify each CCS automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	18 months Unit 2
SR 3.7.7.4	-----------------------------NOTE----------------------------- Verification of CCS pump 1B-B automatic start on SI is not required when CCS pump 1B-B is supporting CCS Train B OPERABILITY. --- Verify each CCS pump starts automatically on an actual or simulated actuation signal.	18 months
SR 3.7.7.5	-----------------------------NOTE----------------------------- Only required to be met when CCS pump 1B-B is supporting CCS Train B OPERABILITY. --- Verify CCS pump 1B-B is aligned to CCS Train B and is in operation.	12 hours

3.9 REFUELING OPERATIONS

3.9.6 Residual Heat Removal (RHR) and Coolant Circulation - Low Water Level

LCO 3.9.6 Two RHR loops shall be OPERABLE, and one RHR loop shall be in operation.

APPLICABILITY: MODE 6 with the water level < 23 ft above the top of reactor vessel flange.

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. Less than the required number of RHR loops OPERABLE.	A.1	Initiate action to restore required RHR loops to OPERABLE status.	Immediately
	~~AND~~ OR		
	A.2	Initiate action to establish ≥ 23 ft of water above the top of reactor vessel flange.	Immediately

(continued)

4.0 DESIGN FEATURES

4.1 Site

~~4.1.1 Site and Exclusion Area Boundaries~~

~~The site and exclusion area boundaries shall be as shown in Figure 4.1-1.~~

~~4.1.2 Low Population Zone (LPZ)~~

~~The LPZ shall be as shown in Figure 4.1-2 (within the 3-mile circle).~~

4.2 Reactor Core

4.2.1 Fuel Assemblies

The reactor shall contain 193 fuel assemblies. Each assembly shall consist of a matrix of Zirlo fuel rods with an initial composition of natural or slightly enriched uranium dioxide (UO_2) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions.

4.2.2 Control Rod Assemblies

The reactor core shall contain 57 control rod assemblies. The control material shall be silver indium cadmium as approved by the NRC.

The Watts Bar Nuclear Plant is located on a tract of approximately 1770 acres in Rhea County on the west bank of the Tennessee River at river mile 528. The site is approximately 1-1/4 miles south of the Watts Bar Dam. The 1770 acre reservation is owned by the United States and is in the custody of TVA. The exclusion area is determined by a circle of radius 1200 meters centered on a point 20 feet from the north wall of the turbine building along the building centerline. The distance to the low population zone is a radius of 3 miles.

(continued)

Page Intentionally Left Blank

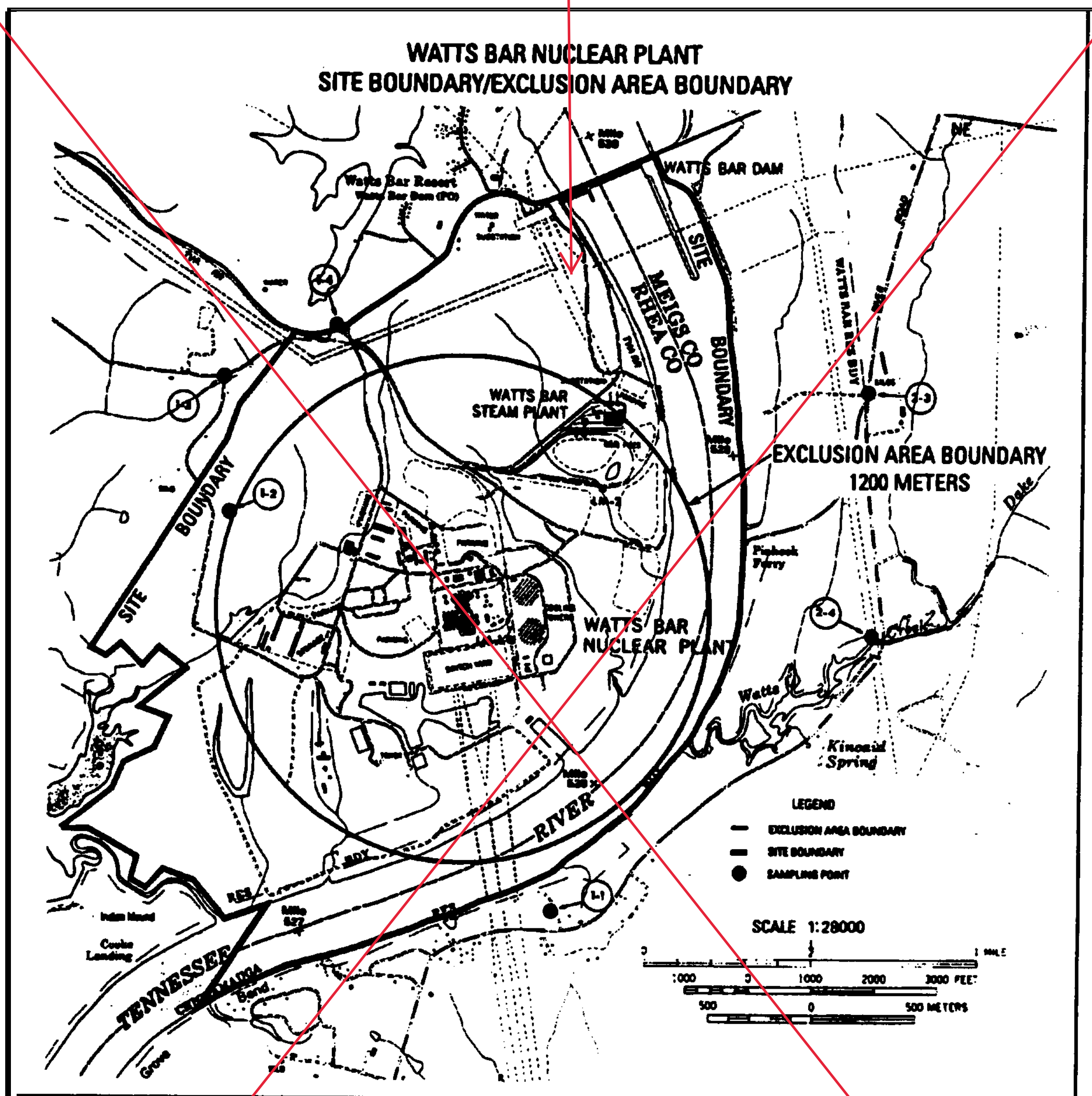

FIGURE 4.1-1 (PAGE 1 OF 1)
SITE AND EXCLUSION AREA BOUNDARIES

(continued)

Amendment

Page Intentionally Left Blank

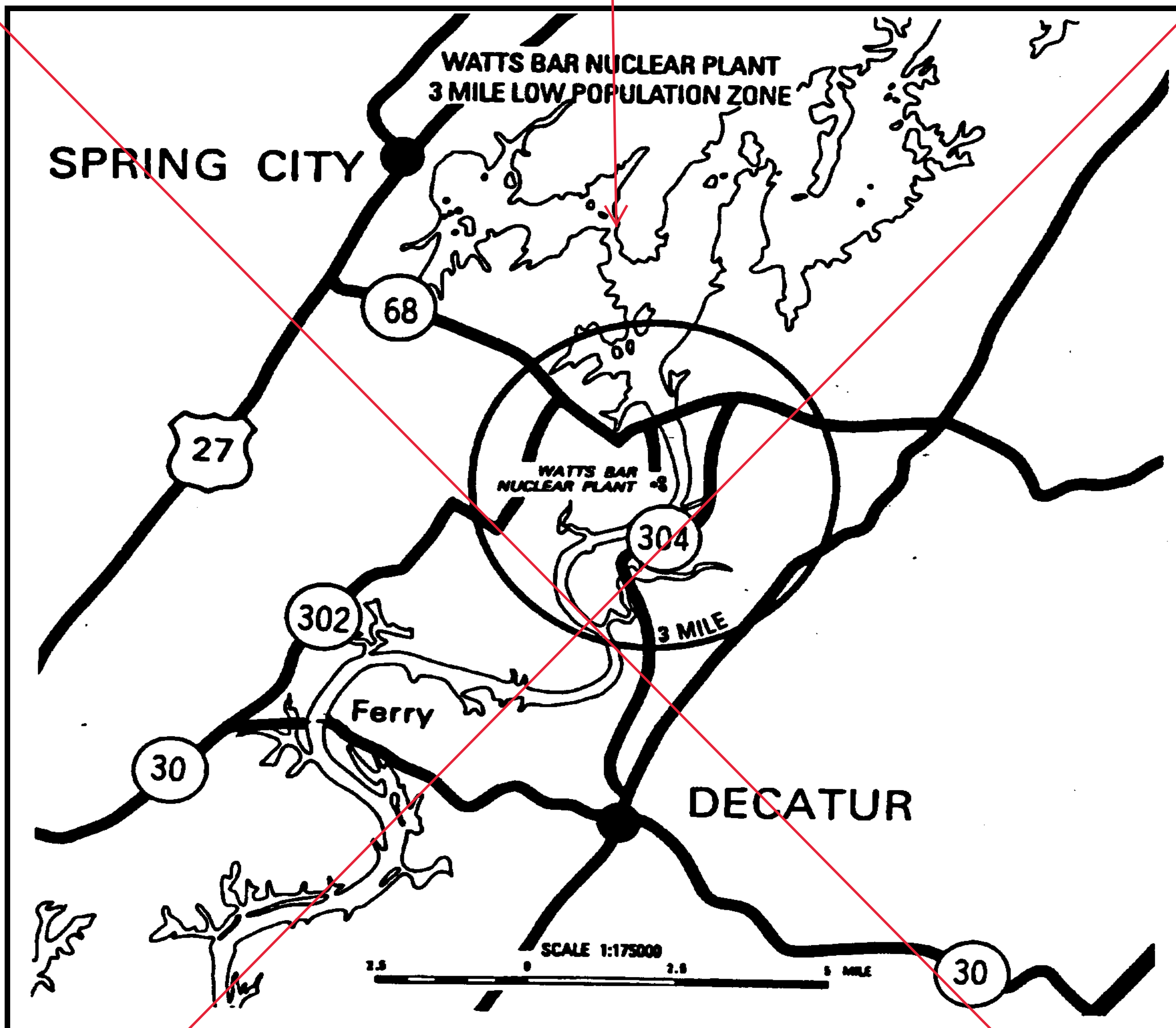

FIGURE 4.1-2 (PAGE 1 OF 1)
LOW POPULATION ZONE

(continued)

Amendment

5.7 Procedures, Programs, and Manuals

5.7.2.18 Safety Function Determination Program (SFDP) (continued)

A loss of safety function exists when, assuming no concurrent single failure, a safety function assumed in the accident analysis cannot be performed. For the purpose of this program, a loss of safety function may exist when a support system is inoperable, and:

a. A required system redundant to the system(s) supported by the inoperable support system is also inoperable; or

b. A required system redundant to the system(s) in turn supported by the inoperable supported system is also inoperable; or

c. A required system redundant to the support system(s) for the supported systems (a) and (b) above is also inoperable.

The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

5.7.2.19 Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50 Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide (RG) 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995~~, with the exception that for the containment isolation valves listed in Table 5.7.2-1, an extension of their Type C local leak rate test is permitted on a one-time basis and expires prior to WBN Unit 2 entering Mode 4, following the Cycle 1 refueling outage, but no later than December 31, 2017~~.

For containment leakage rate testing purposes, a value of 15.0 psig, which is equivalent to the maximum allowable internal containment pressure, is utilized for P_a to bound the peak calculated containment internal pressure for the design basis loss of coolant accident.

The maximum allowable containment leakage rate, L_a, at P_a, is 0.25% of the primary containment air weight per day.

(continued)

Delete this page

5.7 Procedures, Programs, and Manuals

Table-5.7.2-1

Containment Penetration	Description	Valve number
X-29	RCP oil cooler CCS Return Outboard	FCV-70-92
X-44	RCP Seal Water Return Outboard	FCV-62-63
X-47A	Glycol Supply Inboard	FCV-61-192
		CKV-61-533
	Glycol Supply Outboard	FCV-61-191
X-47B	Glycol Return Inboard	FCV-61-194
		CKV-61-680
	Glycol Return Outboard	FCV-61-193
X-56A	Lower Containment ERCW Supply	FCV-67-113
		CKV-67-1054D
	Lower Containment ERCW Supply	FCV-67-107
X-57A	Lower Containment ERCW Return	FCV-67-111
		CKV-67-575D
		FCV-67-112
X-58A	Lower Containment ERCW Supply	FCV-67-89
		CKV-67-1054A
		FCV-67-83
X-59A	Lower Containment ERCW Return	FCV-67-87
		CKV-67-575A
		FCV-67-88
X-60A	Lower Containment ERCW Supply	FCV-67-105
		CKV-67-1054B
		FCV-67-99
X-61A	Lower Containment ERCW Return	FCV-67-103
		CKV-67-575B
		FCV-67-104
X-62A	Lower Containment ERCW Supply	FCV-67-97
		CKV-67-1054C
		FCV-67-91
X-63A	Lower Containment ERCW Return	FCV-67-95
		CKV-67-575C
		FCV-67-96

(continued)

Attachment 3 to CNL-19-038

Proposed Technical Specification Pages (Unit 1 Re-Typed)
(19 total pages)

(continued)

(continued)

LIST OF TABLES

LIST OF FIGURES

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

SR 3.0.1	SRs shall be met during the MODES or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.
SR 3.0.2	The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met. For Frequencies specified as "once," the above interval extension does not apply. If a Completion Time requires periodic performance on a "once per . . ." basis, the above Frequency extension applies to each performance after the initial performance. Exceptions to this Specification are stated in the individual Specifications.
SR 3.0.3	If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed. If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

(continued)

3.0 SR APPLICABILITY

SR 3.0.3 (continued)	When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.
SR 3.0.4	Entry into a MODE or other specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillances have been met within their specified Frequency, except as provided by SR 3.0.3. When an LCO is not met due to Surveillances not having been met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with LCO 3.0.4. This provision shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.5.2.1	Verify the following valves are in the listed position with power to the valve operator removed. <u>Number</u><u>Position</u><u>Function</u> FCV-63-1 Open RHR Supply FCV-63-22 Open SIS Discharge	12 hours
SR 3.5.2.2	Verify each ECCS manual, power operated, and automatic valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days
SR 3.5.2.3	Verify ECCS piping is full of water.	31 days
SR 3.5.2.4	Verify each ECCS pump's developed head at the test flow point is greater than or equal to the required developed head.	In accordance with the Inservice Testing Program
SR 3.5.2.5	Verify each ECCS automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	18 months
SR 3.5.2.6	Verify each ECCS pump starts automatically on an actual or simulated actuation signal.	18 months

(continued)

3.6 CONTAINMENT SYSTEMS

3.6.6 Containment Spray System

LCO 3.6.6 Two containment spray trains and two residual heat removal (RHR) spray trains shall be OPERABLE.

---NOTE---
The RHR spray train is not required in MODE 4.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One containment spray train inoperable.	A.1 Restore containment spray train to OPERABLE status.	72 hours
B. One RHR spray train inoperable.	B.1 Restore RHR spray train to OPERABLE status.	72 hours
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3. <u>AND</u> C.2 Be in MODE 5.	6 hours 84 hours

3.6 CONTAINMENT SYSTEMS

3.6.8 Hydrogen Mitigation System (HMS)

LCO 3.6.8 Two HMS trains shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One HMS train inoperable.	A.1 Restore HMS train to OPERABLE status. OR A.2 Perform SR 3.6.8.1 on the OPERABLE train.	7 days Once per 7 days
B. One containment region with no OPERABLE hydrogen ignitor.	B.1 Restore one hydrogen ignitor in the affected containment region to OPERABLE status.	7 days
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.	6 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.8.1	Energize each HMS train power supply breaker and verify ≥33 ignitors are energized in each train.	92 days
SR 3.6.8.2	Verify at least one hydrogen ignitor is OPERABLE in each containment region.	92 days
SR 3.6.8.3	Energize each hydrogen ignitor and verify temperature is ≥1700°F.	18 months

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.6.12.3	Verify, by visual inspection, each inlet door is not impaired by ice, frost, or debris.	3 months during first year after receipt of license <u>AND</u> 18 months
SR 3.6.12.4	Verify torque required to cause each inlet door to begin to open is ≤ 675 in-lb.	3 months during first year after receipt of license <u>AND</u> 18 months

(continued)

SURVEILLANCE REQUIREMENTS (Continued)

SURVEILLANCE		FREQUENCY
SR 3.6.12.5	Perform a torque test on a sampling of ≥ 50% of the inlet doors.	3 months during first year after receipt of license AND 18 months
SR 3.6.12.6	Verify for each intermediate deck door: a. No visual evidence of structural deterioration; b. Free movement of the vent assemblies; and c. Free movement of the door.	3 months during first year after receipt of license AND 18 months

(continued)

3.6 CONTAINMENT SYSTEMS

3.6.15 Shield Building

LCO 3.6.15 The Shield Building shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Shield Building inoperable.	A.1 Restore Shield Building to OPERABLE status.	24 hours
B. ------------NOTE------------------ Annulus pressure requirement is not applicable during ventilating operations, required annulus entries, or Auxiliary Building isolations not exceeding 1 hour in duration. ------------------------------------- Annulus pressure not within limits.	B.1 Restore annulus pressure within limits.	8 hours
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3. <u>AND</u> C.2 Be in MODE 5.	6 hours 36 hours

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Required Action and associated Completion Time of Condition A not met.	B.1 Be in MODE 3. AND B.2 Be in MODE 5.	6 hours 36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.8.1	-----------------------------NOTE----------------------------- Isolation of ERCW flow to individual components does not render the ERCW inoperable. --- Verify each ERCW manual, power operated, and automatic valve in the flow path servicing safety related equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.	 31 days

(continued)

4.0 DESIGN FEATURES

4.1 Site

The Watts Bar Nuclear Plant is located on a tract of approximately 1770 acres in Rhea County on the west bank of the Tennessee River at river mile 528. The site is approximately 1-1/4 miles south of the Watts Bar Dam. The 1770 acre reservation is owned by the United States and is in the custody of TVA. The exclusion area is determined by a circle of radius 1200 meters centered on a point 20 feet from the north wall of the turbine building along the building centerline. The distance to the low population zone is a radius of 3 miles.

4.2 Reactor Core

4.2.1 Fuel Assemblies

The reactor shall contain 193 fuel assemblies. Each assembly shall consist of a matrix of Zircalloy or Zirlo fuel rods with an initial composition of natural or slightly enriched uranium dioxide (UO_2) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions. For Unit 1, Watts Bar is authorized to place a maximum of 1792 Tritium Producing Burnable Absorber Rods into the reactor in an operating cycle.

4.2.2 Control Rod Assemblies

The reactor core shall contain 57 control rod assemblies. The control material shall be either silver-indium-cadmium or boron carbide with silver indium cadmium tips as approved by the NRC.

(continued)

Page Intentionally Left Blank

(continued)

Page Intentionally Left Blank

(continued)

5.7 Procedures, Programs, and Manuals

5.7.2.18 Safety Function Determination Program (SFDP) (continued)

A loss of safety function exists when, assuming no concurrent single failure, a safety function assumed in the accident analysis cannot be performed. For the purpose of this program, a loss of safety function may exist when a support system is inoperable, and:

a. A required system redundant to the system(s) supported by the inoperable support system is also inoperable; or

b. A required system redundant to the system(s) in turn supported by the inoperable supported system is also inoperable; or

c. A required system redundant to the support system(s) for the supported systems (a) and (b) above is also inoperable.

The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

5.7.2.19 Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50 Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide (RG) 1.163, “Performance-Based Containment Leak-Test Program,” dated September 1995.

The peak calculated containment internal pressure for the design basis loss of coolant accident, P_a, is 15.0 psig.

The maximum allowable containment leakage rate, L_a, at P_a, is 0.25% of the primary containment air weight per day.

(continued)

Attachment 4 to CNL-19-038

Proposed Technical Specification Pages (Unit 2 Re-Typed)
(10 total pages)

LIST OF TABLES

LIST OF FIGURES

3.0 SR APPLICABILITY (continued)

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

SR 3.0.1	SRs shall be met during the MODES or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.
SR 3.0.2	The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met. For Frequencies specified as "once," the above interval extension does not apply. If a Completion Time requires periodic performance on a "once per . . ." basis, the above Frequency extension applies to each performance after the initial performance. Exceptions to this Specification are stated in the individual Specifications.
SR 3.0.3	If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed. If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

(continued)

3.0 SR APPLICABILITY (continued)

SR 3.0.3 (continued)	When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.
SR 3.0.4	Entry into a MODE or other specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillances have been met within their specified Frequency, except as provided by SR 3.0.3. When an LCO is not met due to Surveillances not having been met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with LCO 3.0.4. This provision shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.7.7.1	Verify that the alternate feeder breaker to the C-S pump is open.	7 days
SR 3.7.7.2	-----------------------------NOTE----------------------------- Isolation of CCS flow to individual components does not render the CCS inoperable. -- Verify each CCS manual, power operated, and automatic valve in the flow path servicing safety related equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days
SR 3.7.7.3	Verify each CCS automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	18 months
SR 3.7.7.4	-----------------------------NOTE----------------------------- Verification of CCS pump 1B-B automatic start on Unit 2 SI is not required when CCS pump 1B-B is supporting CCS Train B OPERABILITY. -- Verify each CCS pump starts automatically on an actual or simulated actuation signal.	18 months
SR 3.7.7.5	-----------------------------NOTE----------------------------- Only required to be met when CCS pump 1B-B is supporting CCS Train B OPERABILITY. -- Verify CCS pump 1B-B is aligned to CCS Train B and is in operation.	12 hours

3.9 REFUELING OPERATIONS

3.9.6 Residual Heat Removal (RHR) and Coolant Circulation - Low Water Level

LCO 3.9.6 Two RHR loops shall be OPERABLE, and one RHR loop shall be in operation.

APPLICABILITY: MODE 6 with the water level < 23 ft above the top of reactor vessel flange.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Less than the required number of RHR loops OPERABLE.	A.1 Initiate action to restore required RHR loops to OPERABLE status. <u>OR</u> A.2 Initiate action to establish $\geq$ 23 ft of water above the top of reactor vessel flange.	Immediately Immediately

(continued)

4.0 DESIGN FEATURES

4.1 Site

The Watts Bar Nuclear Plant is located on a tract of approximately 1770 acres in Rhea County on the west bank of the Tennessee River at river mile 528. The site is approximately 1-1/4 miles south of the Watts Bar Dam. The 1770 acre reservation is owned by the United States and is in the custody of TVA. The exclusion area is determined by a circle of radius 1200 meters centered on a point 20 feet from the north wall of the turbine building along the building centerline. The distance to the low population zone is a radius of 3 miles.

4.2 Reactor Core

4.2.1 Fuel Assemblies

The reactor shall contain 193 fuel assemblies. Each assembly shall consist of a matrix of Zirlo fuel rods with an initial composition of natural or slightly enriched uranium dioxide (UO_2) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions.

4.2.2 Control Rod Assemblies

The reactor core shall contain 57 control rod assemblies. The control material shall be silver indium cadmium as approved by the NRC.

(continued)

Page Intentionally Left Blank

(continued)

Page Intentionally Left Blank

(continued)

5.7 Procedures, Programs, and Manuals

5.7.2.18 Safety Function Determination Program (SFDP) (continued)

A loss of safety function exists when, assuming no concurrent single failure, a safety function assumed in the accident analysis cannot be performed. For the purpose of this program, a loss of safety function may exist when a support system is inoperable, and:

a. A required system redundant to the system(s) supported by the inoperable support system is also inoperable; or

b. A required system redundant to the system(s) in turn supported by the inoperable supported system is also inoperable; or

c. A required system redundant to the support system(s) for the supported systems (a) and (b) above is also inoperable.

The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

5.7.2.19 Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the containment as required by 10 CFR 50.54(o) and 10 CFR 50 Appendix J, Option B, as modified by approved exemptions. This program shall be in accordance with the guidelines contained in Regulatory Guide (RG) 1.163, “Performance-Based Containment Leak-Test Program,” dated September 1995.

For containment leakage rate testing purposes, a value of 15.0 psig, which is equivalent to the maximum allowable internal containment pressure, is utilized for P_a to bound the peak calculated containment internal pressure for the design basis loss of coolant accident.

The maximum allowable containment leakage rate, L_a, at P_a, is 0.25% of the primary containment air weight per day.

(continued)

Attachment 5 to CNL-19-038

Proposed Technical Specification Bases Changes
(WBN Unit 1 and 2 - Information Only)
(12 total pages)

SR 3.0.2

SR 3.0.2 establishes the requirements for meeting the specified Frequency for Surveillances and any Required Action with a Completion Time that requires the periodic performance of the Required Action on a "once per . . ." interval.

SR 3.0.2 permits a 25% extension of the interval specified in the Frequency. This extension facilitates Surveillance scheduling and considers plant operating conditions that may not be suitable for conducting the Surveillance (e.g., transient conditions or other ongoing Surveillance or maintenance activities). ~~For each of the SRs listed in Table SR 3.0.2-1 the specified Frequency is met if the Surveillance is performed on or before the date listed on Table SR 3.0.2-1. The Surveillance Frequency extension limits expire on the dates listed in Table SR 3.0.2-1 or when the unit enters MODE 5, whichever occurs first.~~

The 25% extension does not significantly degrade the reliability that results from performing the Surveillance at its specified Frequency. This is based on the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the SRs. The exceptions to SR 3.0.2 are those Surveillances for which the 25% extension of the interval specified in the Frequency does not apply. These exceptions are stated in the individual Specifications. The requirements of regulations take precedence over the TS. Therefore, when a test interval is specified in the regulations, the test interval cannot be extended by the TS, and the surveillance requirement will include a note in the frequency stating, "SR 3.0.2 does not apply." An example of an exception when the test interval is not specified in the regulations, is the discussion in the Containment Leakage Rate Testing Program, that SR 3.0.2 does not apply. This exception is provided because the program already includes extension of test intervals.

As stated in SR 3.0.2, the 25% extension also does not apply to the initial portion of a periodic Completion Time that requires performance on a "once per . . ." basis. The 25% extension applies to each performance after the initial performance. The initial performance of the Required Action, whether it is a particular Surveillance or some other remedial action, is considered a single action with a single Completion Time. One reason for not allowing the 25% extension to this Completion Time is that such an action usually verifies that no loss of function has occurred by checking the status of redundant or diverse components or accomplishes the function of the inoperable equipment in an alternative manner.

The provisions of SR 3.0.2 are not intended to be used repeatedly merely as an operational convenience to extend Surveillance intervals (other than those consistent with refueling intervals) or periodic Completion Time intervals beyond those specified, with the exception of surveillances required to be performed on a 31-day frequency. For surveillances performed on a 31-day frequency, the normal surveillance interval may be extended in accordance with Specification 3.0.2 cyclically as required to remain synchronized to the 13-week maintenance work schedules. This practice is acceptable based on the results of an evaluation of 31-day frequency surveillance test histories that demonstrate that no adverse failure rate changes have occurred nor would be expected to develop as a result of cyclical use of surveillance interval extensions and the fact that the total number of 31-day frequency surveillances performed in any one-year period remains unchanged.

(continued)

BASES (continued)

SURVEILLANCE REQUIREMENTS

SR 3.5.2.1

Verification of proper valve position ensures that the flow path from the ECCS pumps to the RCS is maintained. Misalignment of these valves could render both ECCS trains inoperable. Securing these valves in position by removal of power or by key locking the control in the correct position ensures that they cannot change position as a result of an active failure or be inadvertently misaligned. These valves are of the type, described in Reference 6, that can disable the function of both ECCS trains and invalidate the accident analyses. A 12-hour Frequency is considered reasonable in view of other administrative controls that will ensure a mispositioned valve is unlikely.

SR 3.5.2.2

Verifying the correct alignment for manual, power operated, and automatic valves in the ECCS flow paths provides assurance that the proper flow paths exist for ECCS operation. This SR does not apply to valves that are locked, sealed, or otherwise secured in position, since these were verified to be in the correct position prior to locking, sealing, or securing. A valve that receives an actuation signal is allowed to be in a nonaccident position provided the valve will automatically reposition within the proper stroke time. This Surveillance does not require any testing or valve manipulation. Rather, it involves verification that those valves capable of being mispositioned are in the correct position. The 31 day Frequency is appropriate because the valves are operated under administrative control, and an improper valve position would only affect a single train. This Frequency has been shown to be acceptable through operating experience.

SR 3.5.2.3

With the exception of the operating centrifugal charging pump, the ECCS pumps are normally in a standby, nonoperating mode. As such, flow path piping has the potential to develop voids and pockets of entrained gases. Maintaining the piping from the ECCS pumps to the RCS full of water by venting the ECCS pump casings and accessible suction and discharge piping high points ensures that the system will perform properly, injecting its full capacity into the RCS upon demand.* This will also prevent water hammer, pump cavitation, and pumping of noncondensible gas (e.g., air, nitrogen, or hydrogen) into the reactor vessel following an SI signal or during shutdown cooling.** The 31 day Frequency takes into consideration the gradual nature of gas accumulation in the ECCS piping and the procedural controls governing system operation. ~~A note is added to the FREQUENCY that surveillance performance is not required for safety injection hot leg injection lines until startup from the Fall 2003 Refueling Outage. (Ref. 7)~~

(continued)

BASES (continued)

ESF Actuation System testing, and equipment performance is monitored as part of the Inservice Testing Program.

SURVEILLANCE REQUIREMENTS (continued)

SR 3.5.2.7

Realignment of valves in the flow path on an SI signal is necessary for proper ECCS performance. These valves are secured in a throttled position for restricted flow to a ruptured cold leg, ensuring that the other cold legs receive at least the required minimum flow. The 18 month Frequency is based on the same reasons as those stated in SR 3.5.2.5 and SR 3.5.2.6.

SR 3.5.2.8

Periodic inspections of the containment sump suction inlet ensure that it is unrestricted and stays in proper operating condition. The advanced sump strainer design installed at WBN incorporates both the trash rack function and the screen function. Inspection of the advanced strainer constitutes fulfillment of the trash rack/screen inspection. The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage, on the need to have access to the location, and because of the potential for an unplanned transient if the Surveillance were performed with the reactor at power. This Frequency has been found to be sufficient to detect abnormal degradation and is confirmed by operating experience.

REFERENCES

1. Title 10, Code of Federal Regulations, Part 50, Appendix A, General Design Criterion 35, "Emergency Core Cooling System."

2. Title 10, Code of Federal Regulations, Part 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light Water Nuclear Power Plant."

3. Watts Bar FSAR, Section 6.3, "Emergency Core Cooling System."

4. FSAR Bar FSAR, Section 15.0, "Accident Analysis."

5. NRC Memorandum to V. Stello, Jr., from R.L. Baer, "Recommended Interim Revisions to LCOs for ECCS Components," December 1, 1975.

6. IE Information Notice No. 87-01, "RHR Valve Misalignment Causes Degradation of ECCS in PWRs," January 6, 1987.

7. ~~WBN License Amendment Request WBN-TS-03-11 dated April 8, 2003~~Deleted.

8. NEI 09-10, Revision 1a-A " Guidelines for Effective Prevention and Management of System Gas Accumulation," dated April, 2013.

BASES (continued)

SURVEILLANCE REQUIREMENTS

SR 3.5.2.1

Verification of proper valve position ensures that the flow path from the ECCS pumps to the RCS is maintained. Misalignment of these valves could render both ECCS trains inoperable. Securing these valves in position by removal of power or by key locking the control in the correct position ensures that they cannot change position as a result of an active failure or be inadvertently misaligned. These valves are of the type, described in Reference 6, that can disable the function of both ECCS trains and invalidate the accident analyses. A 12-hour Frequency is considered reasonable in view of other administrative controls that will ensure a mispositioned valve is unlikely.

SR 3.5.2.2

Verifying the correct alignment for manual, power operated, and automatic valves in the ECCS flow paths provides assurance that the proper flow paths exist for ECCS operation. This SR does not apply to valves that are locked, sealed, or otherwise secured in position, since these were verified to be in the correct position prior to locking, sealing, or securing. A valve that receives an actuation signal is allowed to be in a nonaccident position provided the valve will automatically reposition within the proper stroke time. This Surveillance does not require any testing or valve manipulation. Rather, it involves verification that those valves capable of being mispositioned are in the correct position. The 31 day Frequency is appropriate because the valves are operated under administrative control, and an improper valve position would only affect a single train. This Frequency has been shown to be acceptable through operating experience.

SR 3.5.2.3

With the exception of the operating centrifugal charging pump, the ECCS pumps are normally in a standby, nonoperating mode. As such, flow path piping has the potential to develop voids and pockets of entrained gases. Maintaining the piping from the ECCS pumps to the RCS full of water by venting the ECCS pump casings and accessible suction and discharge piping high points ensures that the system will perform properly, injecting its full capacity into the RCS upon demand.* This will also prevent water hammer, pump cavitation, and pumping of noncondensible gas (e.g., air, nitrogen, or hydrogen) into the reactor vessel following an SI signal or during shutdown cooling.** The 31 day Frequency takes into consideration the gradual nature of gas accumulation in the ECCS piping and the procedural controls governing system operation. ~~A note is added to the FREQUENCY that surveillance performance is not required for safety injection hot leg injection lines until startup from the Fall 2003 Refueling Outage. (Ref. 7)~~

(continued)

BASES (continued)

ESF Actuation System testing, and equipment performance is monitored as part of the Inservice Testing Program.

SURVEILLANCE REQUIREMENTS (continued)

SR 3.5.2.7

Realignment of valves in the flow path on an SI signal is necessary for proper ECCS performance. These valves are secured in a throttled position for restricted flow to a ruptured cold leg, ensuring that the other cold legs receive at least the required minimum flow. The 18 month Frequency is based on the same reasons as those stated in SR 3.5.2.5 and SR 3.5.2.6.

SR 3.5.2.8

Periodic inspections of the containment sump suction inlet ensure that it is unrestricted and stays in proper operating condition. The advanced sump strainer design installed at WBN incorporates both the trash rack function and the screen function. Inspection of the advanced strainer constitutes fulfillment of the trash rack/screen inspection. The 18 month Frequency is based on the need to perform this Surveillance under the conditions that apply during a plant outage, on the need to have access to the location, and because of the potential for an unplanned transient if the Surveillance were performed with the reactor at power. This Frequency has been found to be sufficient to detect abnormal degradation and is confirmed by operating experience.

REFERENCES

1. Title 10, Code of Federal Regulations, Part 50, Appendix A, General Design Criterion 35, "Emergency Core Cooling System."
2. Title 10, Code of Federal Regulations, Part 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light Water Nuclear Power Plant."
3. Watts Bar FSAR, Section 6.3, "Emergency Core Cooling System."
4. FSAR Bar FSAR, Section 15.0, "Accident Analysis."
5. NRC Memorandum to V. Stello, Jr., from R.L. Baer, "Recommended Interim Revisions to LCOs for ECCS Components," December 1, 1975.
6. IE Information Notice No. 87-01, "RHR Valve Misalignment Causes Degradation of ECCS in PWRs," January 6, 1987.
7. ~~WBN License Amendment Request WBN-TS-03-11 dated April 8, 2003~~Deleted.
8. NEI 09-10, Revision 1a-A " Guidelines for Effective Prevention and Management of System Gas Accumulation," dated April, 2013.

BASES

~~TEMPORARY CONDITION~~

~~LCO 3.6.8 is modified by Notes that provide temporary requirements for the HMS due to a condition discovered on April 3, 1998, wherein two Train A ignitors (30A and 31A) were found inoperable during surveillance testing. The ignitors are located in high radiation and temperature areas of Unit 1 containment and should be repaired with the reactor offline to avoid personnel safety hazards associated with making repairs online. The Notes are justified in Reference 4 on the basis the HMS will still be capable of performing its intended function. The Notes establish the following for the temporary period.~~

~~(1) This temporary specification will expire at WBN's next entry into MODE 3.~~

~~(2) The BASES of LCO 3.6.8 on page B3.6-51 is modified by defining that HMS Train A is considered OPERABLE with 32 of 34 ignitors OPERABLE. This allowance is only permitted for the condition where ignitors 30A and 31A are the only inoperable A-train ignitors.~~

~~(3) CONDITION B of LCO 3.6l8 is modified to allow two specific containment regions (Reactor Cavity Region and Steam Generator No. 4 Enclosure Lower Compartment Region) to have no OPERABLE ignitors for a period of up to 72 hours.~~

~~(4) SR 3.6.8.1 is modified to permit ≥ 32 ignitors energized for HMS Train A to demonstrate operability. The testing must be performed at an increased frequency of 46 days.~~

REFERENCES

1. Title 10, Code of Federal Regulations, Part 50.44, "Standards for Combustible Gas Control Systems in Light Water-Cooled Power Reactors."

2. Title 10, Code of Federal Regulations, Part 50, Appendix A, General Design Criterion 41, "Containment Atmosphere Cleanup."

3. Watts Bar FSAR, Section 6.2.5A, "Hydrogen Mitigation System Description."

4. TVA letter to NRC from P. L. Pace, "WBN Unit 1 - Request for TS Amendment for TS 3.6.8 - Hydrogen Mitigation System (HMS) (TS-98-011)," April 29, 1998.

SURVEILLANCE REQUIREMENTS (continued)

SR 3.6.12.3

Verifying, by visual inspection, that the ice condenser inlet doors are not impaired by ice, frost, or debris provides assurance that the doors are free to open in the event of a DBA. For this unit, the Frequency of 18 months (3 months during the first year after receipt of license - the 3 month performances during the first year after receipt of license may be extended to coincide with plant outages) is based on door design, which does not allow water condensation to freeze, and operating experience, which indicates that the inlet doors very rarely fail to meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown~~. The surveillance frequency is modified by a Note that permits a one time extension until October 21, 1996 for performance of the three month surveillance whose due date (with 25 percent extension) falls on September 9, 1996. This provision allows performance of the surveillance to coincide with the plant mid-cycle outage and is justified by Reference 3.~~

SR 3.6.12.4

Verifying the opening torque of the inlet doors provides assurance that no doors have become stuck in the closed position. The value of 675 in-lb is based on the design opening pressure on the doors of 1.0 lb/ft^2. For this unit, the Frequency of 18 months (3 months during the first year after receipt of license - the 3 month performances during the first year after receipt of license may be extended to coincide with plant outages) is based on the passive nature of the closing mechanism (i.e., once adjusted, there are no known factors that would change the setting, except possibly a buildup of ice; ice buildup is not likely, however, because of the door design, which does not allow water condensation to freeze). Operating experience indicates that the inlet doors usually meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown. ~~The surveillance frequency is modified by a Note that permits a one time extension until October 21, 1996, for performance of the three month surveillance whose due date (with 25 percent extension) falls on September 9, 1996. This provision allows performance of the surveillance to coincide with the plant mid-cycle outage and is justified by Reference 3.~~

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SR 3.6.12.5

The torque test Surveillance ensures that the inlet doors have not developed excessive friction and that the return springs are producing a door return torque within limits. The torque test consists of the following:

1. Verify that the torque, T(OPEN), required to cause opening motion at the 40° open position is ≤ 195 in-lb;

2. Verify that the torque, T(CLOSE), required to hold the door stationary (i.e., keep it from closing) at the 40° open position is ≥ 78 in-lb; and

3. Calculate the frictional torque, T(FRICT) = 0.5 {T(OPEN) - T(CLOSE)}, and verify that the T(FRICT) is ≤ 40 in-lb.

The purpose of the friction and return torque Specifications is to ensure that, in the event of a small break LOCA or SLB, all of the 24 door pairs open uniformly. This assures that, during the initial blowdown phase, the steam and water mixture entering the lower compartment does not pass through part of the ice condenser, depleting the ice there, while bypassing the ice in other bays. The Frequency of 18 months (3 months during the first year after receipt of license - the 3 month performances during the first year after receipt of license may be extended to concide with plant outages) is based on the passive nature of the closing mechanism (i.e., once adjusted, there are no known factors that would change the setting, except possibly a buildup of ice; ice buildup is not likely, however, because of the door design, which does not allow water condensation to freeze). Operating experience indicates that the inlet doors very rarely fail to meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown. ~~The surveillance frequency is modified by a Note that permits a one-time extension until October 21, 1996, for performance of the three month surveillance whose due date (with 25 percent extension) falls on September 9, 1996. This provision allows performance of the surveillance to coincide with the plant mid-cycle outage and is justified by Reference 3.~~

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SR 3.6.12.7

Verifying, by visual inspection, that the top deck doors are in place, not obstructed, and verifying free movement of the vent assembly provides assurance that the doors are performing their function of keeping warm air out of the ice condenser during normal operation, and would not be obstructed if called upon to open in response to a DBA. The Frequency of 92 days is based on engineering judgment, which considered such factors as the following:

a. The relative inaccessibility and lack of traffic in the vicinity of the doors make it unlikely that a door would be inadvertently left open;

b. Excessive air leakage would be detected by temperature monitoring in the ice condenser; and

c. The light construction of the doors would ensure that, in the event of a DBA, air and gases passing through the ice condenser would find a flow path, even if a door were obstructed.

REFERENCES

1. Watts Bar FSAR, Section 15.0, "Accident Analysis."

2. Title 10, Code of Federal Regulations, Part 50, Appendix K, "ECCS Evaluation Models."

~~3. TVA Letter to NRC dated July 31, 1996 - Proposed License Amendment - Containment Systems.~~

ACTIONS

A.1

In the event shield building OPERABILITY is not maintained, shield building OPERABILITY must be restored within 24 hours. Twenty-four hours is a reasonable Completion Time considering the limited leakage design of containment and the low probability of a Design Basis Accident occurring during this time period.

B.1

The Completion Time of 8 hours is based on engineering judgment. The normal alignment for both EGTS control loops is the A-Auto position. With both EGTS control loops in A-Auto, both trains will function upon initiation of a Containment Isolation Phase A (CIA) signal. In the event of a LOCA, the annulus vacuum control system isolates and both trains of the EGTS pressure control loops will be placed in service to maintain the required negative pressure. If annulus vacuum is lost during normal operations, the A-Auto position is unaffected by the loss of vacuum. This operational configuration is acceptable because the accident dose analysis conservatively assumes the annulus is at atmospheric pressure at event initiation. (Ref. 3)

~~Note: The highlighted text on this page and the following page was incorporated as part of Amendment 59. This amendment also added a series of notes to Technical Specification 3.6.15. As stated in NRC's Safety Evaluation for Amendment 59 (NRC's letter dated January 6, 2006), these controls were only applicable until WBN Unit 1 entered Mode 5 at the start of the Cycle 7 refueling outage. The highlighted text in this Bases section and the notes in Technical Specification 3.6.15 will be deleted via a future amendment to the Technical Specifications.~~

A Note has been provided which makes the requirement to maintain the annulus pressure within limits not applicable for a maximum of 1 hour during: Ventilating operations, Required annulus entries, or Auxiliary Building isolations. Ventilating operations include containment venting, the Reactor Building Purge Ventilating ystem alternate containment pressure relief function, and testing of the Emergency Gas Treatment system. ~~In addition to Note makes the requirement to maintain the annulus pressure within limits not applicable while Penetration 1-EQH-271-0010 or 1-EQH-271-0011 in the Shield Building dome is open until annulus pressure is restored. Allowing one of the Shield Building dome penetrations to be open is based on provisions being in place to close it within fifteen minutes of LOCA initiation. Limiting the time for opening either of the penetrations to a combined total of five hours a day, six days a week keeps the amount of time the Shield Building is inoperable to approximately 60 percent of the eight hour completion time for LCO B.~~

~~During normal plant operation, the Annulus is maintained at a negative pressure equal to or more negative than -5 inches water gauge (wg) by the Annulus Vacuum Control subsystem (non-safety related) of the Emergency Gas Treatment System (EGTS). One train (loop) of the Annulus Vacuum Control subsystem is operating (controls in A-Auto) and one train is in standby (controls in A-Auto Stand-by).~~

~~Opening Shield Building dome Penetration 1-EQH-271-0010 or 1-EQH-271-0011 during Modes 1-4 will result in the Annulus pressure becoming more positive than the -5 inches wg required by Technical Specification 3.6.15. When the Annulus pressure becomes more positive than -0.812 inches wg, the EGTS control system perceives that the loop in A-Auto (i.e., the operating train) has failed. Control of Annulus pressure is then transferred to the loop in A-Auto Stand-by (i.e., the train in standby). Since the loop originally controlling Annulus pressure is~~

(continued)

ACTIONS

B.1 (continued)

~~perceived to have failed, only one control loop (the controller originally in A-Auto Stand-by) remains functional. If a single failure of the remaining control loop were to occur, this would result in both control loops failing and would render the safety-related portion of EGTS inoperable. To prevent this situation, operator action will be taken to place both EGTS control loops in the A-Auto Stand-by position when the annulus differential pressure is more positive than a -5 inches wg. If EGTS is subsequently initiated in this configuration, both trains of EGTS will start. Absent a single failure, one EGTS control loop train will manually be returned to the A-Auto position when the Annulus differential pressure becomes more negative than -0.812 inches wg. In addition, the remaining EGTS control loop train will be turned off, then immediately placed in the A-Auto Stand-by position (i.e., the associated isolation valves shall be closed by means of the MCR hand switch). This action is in the design and is necessary to restore the EGTS to the normal operational configuration and to prevent excess EGTS exhaust and Annulus in-leakage.~~

~~Additional assurance is administratively provided of support system operability by restricting the opening of Penetration 1-EQH-271-0010 or 1-EQH-271-0011 if in Actions for LCO 3.6.9.A *EGTS*, or 3.8.1.B, *AC Sources – Operating*. If a hatch is opened and one of the above systems becomes inoperable, the hatch will be closed.~~

C.1 and C.2

If the shield building cannot be restored to OPERABLE status within the required Completion Time, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 6 hours and to 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.

SURVEILLANCE REQUIREMENTS

SR 3.6.15.1

Verifying that shield building annulus negative pressure is within limit (equal to or more negative than - 5 inches water gauge, value does not account for instrument error, Ref. 2) ensures that operation remains within the limit assumed in the containment analysis. The 12 hour Frequency of this SR was developed considering operating experience related to shield building annulus pressure variations and pressure instrument drift during the applicable MODES.

SR 3.6.15.2

Maintaining shield building OPERABILITY requires maintaining each door in the access opening closed, except when the access opening is being used for normal transient entry and exit. The 31 day Frequency of this SR is based on engineering judgment and is considered adequate in view of the other indications

SR 3.0.1 (continued)

Upon completion of maintenance, appropriate post maintenance testing is required to declare equipment OPERABLE. This includes ensuring applicable Surveillances are not failed and their most recent performance is in accordance with SR 3.0.2. Post maintenance testing may not be possible in the current MODE or other specified conditions in the Applicability due to the necessary unit parameters not having been established. In these situations, the equipment may be considered OPERABLE provided testing has been satisfactorily completed to the extent possible and the equipment is not otherwise believed to be incapable of performing its function. This will allow operation to proceed to a MODE or other specified condition where other necessary post maintenance tests can be completed.

SR 3.0.2

SR 3.0.2 establishes the requirements for meeting the specified Frequency for Surveillances and any Required Action with a Completion Time that requires the periodic performance of the Required Action on a "once per . . ." interval.

SR 3.0.2 permits a 25% extension of the interval specified in the Frequency. This extension facilitates Surveillance scheduling and considers plant operating conditions that may not be suitable for conducting the Surveillance (e.g., transient conditions or other ongoing Surveillance or maintenance activities). ~~On a one-time basis the surveillance interval for the surveillances listed in TS Table 3.0.2-1 are allowed to be extended as identified on Table SR 3.0.2-1. The one-time surveillance interval extension expires on November 30, 2017.~~

The 25% extension does not significantly degrade the reliability that results from performing the Surveillance at its specified Frequency. This is based on the recognition that the most probable result of any particular Surveillance being performed is the verification of conformance with the SRs. The exceptions to SR 3.0.2 are those Surveillances for which the 25% extension of the interval specified in the Frequency does not apply. These exceptions are stated in the individual Specifications. The requirements of regulations take precedence over the TS. Therefore, when a test interval is specified in the regulations, the test interval cannot be extended by the TS, and the surveillance requirement will include a note in the frequency stating, "SR 3.0.2 does not apply." An example of an exception when the test interval is not specified in the regulations, is the discussion in the Containment Leakage Rate Testing Program, that SR 3.0.2 does not apply. This exception is provided because the program already includes extension of test intervals.

As stated in SR 3.0.2, the 25% extension also does not apply to the initial portion of a periodic Completion Time that requires performance on a "once per . . ." basis. The 25% extension applies to each

(continued)