WBN2Public Resource

From: Boyd, Desiree L [dlboyd@tva.gov]
Sent: Thursday, October 28, 2010 12:43 PM
To: Wiebe, Joel; Poole, Justin; Raghavan, Rags; Milano, Patrick; Campbell, Stephen
Cc: Crouch, William D; Hamill, Carol L; Boyd, Desiree L; Elton, Thomas L
Subject: TVA letter to NRC_10-28-10_Regulatory Framework Rev 4
Attachments: 10-28-10_Regulatory Framework Rev 4_NRC Copy.pdf

Please see attached letter that was sent to NRC today.

~*~*~*

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From: Boyd, Desiree L

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October 28, 2010

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

Watts Bar Nuclear Plant, Unit 2
NRC Docket No. 50-391

Subject: **Watts Bar Nuclear Plant (WBN) Unit 2 – Status of Regulatory Framework for the Completion of Construction and Licensing for Unit 2 - Revision 4 (TAC No. MD6311), and Status of Generic Communications for Unit 2 - Revision 4 (TAC No. MD8314)**

Reference: 1. Letter from TVA to NRC dated July 30, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Status of Regulatory Framework for the Completion of Construction and Licensing for Unit 2 - Revision 3 (TAC No. MD6311), and Status of Generic Communications for Unit 2 - Revision 3 (TAC No. MD8314)

This letter provides an updated status of the Regulatory Framework for the completion of construction and licensing activities for WBN Unit 2 as well as an updated status of Generic Communications for WBN Unit 2. TVA's last revision to these two status updates, Revision 3, was submitted on July 30, 2010 (Reference 1).

For the Regulatory Framework, Enclosure 1 provides the revised Regulatory Framework Master, and Enclosure 2 provides a version of the table showing only those items revised in Revision 4.

For the Generic Communications, Enclosure 3 provides the revised Generic Communications Master, and Enclosure 4 provides a version of the table showing only those items revised in Revision 4.

The following is the status of the items which are applicable to Watts Bar Unit 2. The status codes are defined on the last page of each enclosure.

STATUS		SER / SSER	GENERIC COMM.	TOTAL
C	(CLOSED)	204	118	322
CI	(CLOSED / IMPLEMENTATION)	18	116	134
CT	(CLOSED / TECHNICAL SPECIFICATIONS)	0	0	0
O	(OPEN)	52	3	55
OT	(OPEN / TECHNICAL SPECIFICATIONS)	1	0	1
OV	(OPEN / VALIDATION)	7	8	15
S	(SUBMITTED)	63	20	83
TOTAL		**345**	**265**	**610**

There are no new regulatory commitments associated with this submittal.
If you have any questions, please contact William Crouch at (423) 365-2004.

Sincerely,

M. Bajestani

Masoud Bajestani
Watts Bar Unit 2 Vice President

Enclosures:

1. SER and Supplements Review Matrix - Master Table

2. SER and Supplements Review Matrix - Revision 4 Changes

3. Generic Communications - Master Table

4. Generic Communications - Revision 4 Changes

cc (Enclosures):

U. S. Nuclear Regulatory Commission
Region II
Marquis One Tower
245 Peachtree Center Ave., NE Suite 1200
Atlanta, Georgia 30303-1257

NRC Resident Inspector Unit 2
Watts Bar Nuclear Plant
1260 Nuclear Plant Road
Spring City, Tennessee 37381

Enclosure 1

SER and Supplements Review Matrix - Master Table

SAFETY EVALUATION REPORT AND SUPPLEMENTS (NUREG-0847) REVIEW MATRIX: MASTER TABLE

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
1.0.0		NA		Overview only
1.1.0		NA		Overview only
1.1.1		NA		Overview only
1.1.2		NA		Overview only
1.1.3		NA		Overview only
1.1.4		NA		Overview only
1.2.0		NA		Overview only
1.3.0		NA		Overview only
1.3.1		NA		Overview only
1.3.2		NA		Overview only
1.4.0		NA		Overview only
1.5.0		NA		Overview only
1.6.0		NA		Overview only
1.7.0		NA		Overview only
1.8.0		NA		Overview only
1.9.0		NA		Overview only
1.10.0		NA		Overview only
2.0.0	0	C		Approved for both units in SER.
2.1.0	0	C		Approved for both units in SER.
2.1.1	0	C		Approved for both units in SER.
2.1.2	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
2.1 .3	21	S	02	SRP requirement. Unit 2 Action: Update FSAR for present and projected population over the lifetime of the plant. ---------- ---------- REVISION 02 UPDATE: Status in SSER21 is Open (NRR). Amendment 94 to the Unit 2 FSAR was submitted on August 27, 2009. Part of this amendment revised population information in Section 2.1.3.
2.1 .4	21	S	02	"CONCLUSIONS" left open until all items in subsection are closed. ---------- ---------- REVISION 02 UPDATE: Status in SSER21 is Open (NRR). Amendment 94 to the Unit 2 FSAR was submitted on August 27, 2009. Part of this amendment revised population information in Unit 2 FSAR Section 2.1.3.
2.2 .0	0	C		Approved for both units in SER.
2.2 .1	21	S	02	SRP requirement. Unit 2 Action: Update FSAR for potential external hazards and hazardous materials. ---------- ---------- REVISION 02 UPDATE: Status in SSER21 is Open (NRR). Amendment 94 to the Unit 2 FSAR was submitted on August 27, 2009. Part of this amendment revised the description of hazardous material shipped past the plant in Section 2.2.2.2.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
2.2.2	21	S	02	SRP requirement. Unit 2 Action: Update FSAR for projected annual number of aircraft flights. REVISION 02 UPDATE: Status in SSER21 is Open (NRR). Amendment 94 to the Unit 2 FSAR was submitted on August 27, 2009. Part of this amendment revised information concerning airports and numbers of aircraft flights in 2.2.2.5.
2.2.3	21	S	02	"CONCLUSIONS" left open until all items in subsection are closed. REVISION 02 UPDATE: Status in SSER21 is Open (NRR). Amendment 94 to the Unit 2 FSAR was submitted on August 27, 2009. Part of this amendment revised the description of hazardous material shipped past the plant in Section 2.2.2.2.
2.3.0	0	C		Approved for both units in SER.
2.3.1	0	C		Approved for both units in SER.
2.3.2	0	C		Approved for both units in SER.
2.3.3	0	C		See 13.3.3 (Emergency Preparedness Evaluation Conclusions).
2.3.4	14	C	01	TVA updated information on portions of the metrology program in FSAR amendment 83. This was reviewed and found acceptable in SSER14.
2.3.5	14	C	01	TVA updated information on portions of the metrology program in FSAR amendment 83. This was reviewed and found acceptable in SSER14.
2.4.0	0	C		Approved for both units in SER.
2.4.1	0	C		Approved for both units in SER.
2.4.2	0	C		Approved for both units in SER.
2.4.3	0	O	02	REVISION 02 UPDATE: Approved for both units in SER.
2.4.4	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
2.4.5	0	C		GL 89-22, "Potential For Increased Roof Load Due to Changes in Maximum Precipitation" – Answer to informal question provided in TVA letter dated December 16, 1981, and subsequently included in FSAR. GL did not require a response. No further action required.
2.4.6	0	C		Approved for both units in SER.
2.4.7	0	C		Approved for both units in SER.
2.4.8	21	O	02	CONFIRMATORY ISSUE for design basis groundwater level for ERCW pipeline Amendment 50 to the FSAR (May 1, 1984) provided a description of the analysis used to determine the 25-year groundwater level for the ERCW pipeline. Staff closed issue in SSER3. REVISION 02 UPDATE: Status in SSER21 is Open (NRR).
2.4.9	21	O	02	SRP requirement. Unit 2 Action: Update FSAR for present and projected use of local and regional groundwater. REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
2.4.10	21	S	02	Staff found flood emergency plan and draft Technical Specifications acceptable in original 1982 SER. Unit 2 Action: Address in Technical Specifications as appropriate. REVISION 02 UPDATE: Status in SSER21 is Open (Inspection). Amendment B of the Technical Requirements Manual (TRM) was submitted on February 2, 2010. TRM TLCO 3.7.2 provides the Flood Protection Plan.
2.4.11		NA		Addressed in 2.4.6.
2.4.12		NA		Addressed in 2.4.7.
2.4.13		NA		Addressed in 2.4.9.
2.4.14		NA		Addressed in 2.4.10.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
2.5 .0	0	C		Approved for both units in SER.
2.5 .1	0	C		Approved for both units in SER.
2.5 .2	0	C		Approved for both units in SER.
2.5 .3	0	C		Approved for both units in SER.
2.5 .4	11	C	03	CONFIRMATORY ISSUE for design differential settlement of piping and electrical components Analysis was presented to staff in September 1983. Staff found analysis and results acceptable. Staff closed issue in SSER3. ---------- CONFIRMATORY ISSUE for analysis of sheetpile walls Staff performed audit in September 1982, and determined TVA had used reasonable assumptions. Staff closed issue in SSER3. ---------- CONFIRMATORY ISSUE for material and geometric damping in soil-structure interaction (SSI) analysis Staff performed audit in September 1982, and determined TVA had used reasonable assumptions. Staff closed issue in SSER3. ---------- OUTSTANDING ISSUE (1) on liquefaction beneath ERCW pipelines and Class 1E electrical conduit. Amendment 50 to the FSAR (May 1, 1984) provided a description of the underground barriers along the ERCW pipelines. Staff agreed the barriers provide sufficient confinement to any liquefied soil. Staff closed issue in SSER3. ---------- FSAR amendment 54-63 was reviewed in SSER9. NRC determined that the conclusions previously issued in the SER and SSER3 remained unchanged. ---------- The Special Program (SP) for Soil Liquefaction was reviewed in SSER11. NRC IR 50-390/92-45 and 50-391/92-45 concluded that TVA had correctly implemented the SP and that it was closed. SSER11 accepted the implementation for WBN Unit 1. Per TVA letter dated August 3, 2007, implementation of the Soil Liquefaction SP is complete for both units. ---------- ---------- REVISION 03 UPDATE: NRC IR 50-391/2009-605 noted that the Soil Liquefaction SP was closed for Unit 2.
2.5 .5	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
2.5 .6	0	C		Approved for both units in SER.
2.6 .0	0	C		Approved for both units in SER.
3.0 .0	0	C		Approved for both units in SER.
3.1 .0	0	C		Approved for both units in SER.
3.1 .1	0	C		Approved for both units in SER.
3.1 .2	0	C		Approved for both units in SER.
3.2 .0	14	C	01	In SSER14, the staff reviewed revisions to Table 3.2-2, "Summary of Criteria - Mechanical System Components", and found the table acceptable.
3.2 .1	8	C	01	CONFIRMATORY ISSUE for seismic classification of structures, systems, and components important to safety The staff reviewed Amendment 49 to FSAR and actions implemented by TVA to address ERCW seismic classification in SSER3 and found them acceptable, pending verification of actions. Staff closed issue on ERCW seismic category upgrade and seismic classification in SSER5. ---------- CONFIRMATORY ISSUE for ERCW upgrade to seismic category 1 Staff verified that required portion of ERCW had been upgraded or replaced satisfactorily in SSER5 and closed this issue. ---------- In SSER6, the staff addressed and resolved an issue on Category I boundary. ---------- OUTSTANDING ISSUE involving seismic classification of cable trays and conduits In SSER6, staff identified an issue on seismic classification of cable trays and conduits being categorized as I(L). In its May 8, 1991, letter, TVA proposed to analyze conduits as Seismic Category I subsystems. Additionally, in a September 18, 1991 letter, TVA agreed to perform cable tray qualification using conventional linear elastic analysis methods, considering nonlinear response behavior on a case-by-case basis and to submit these cases to the staff for approval. The staff resolved this issue in SSER8.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
3.2.2	21	CI	02	Section 3.2.2 of SSER3 discusses confirmatory issues for seismic classification and upgrade of ERCW that are already included in 3.2.1. ---------- Staff accepted implementation of Heat Code Traceability CAP for Unit 1 in SSER7. Unit 2 Action: Complete CAP using Unit 1 approach. ---------- Staff reviewed updated information in Amendment 68 on use of codes and standards in SSER9 and stated that prior conclusions were unchanged. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the Heat Code Traceability CAP. In SSER21, the Heat Code Traceability CAP was resolved. Completion of Heat Code Traceability CAP is tracked under 23.2.9.
3.3.0	0	C		Approved for both units in SER.
3.3.1	0	C		Approved for both units in SER.
3.3.2	0	C		Approved for both units in SER.
3.4.0	0	C		Approved for both units in SER.
3.4.1	0	C		Approved for both units in SER.
3.4.2		NA		Addressed in 3.4.1.
3.5.0	0	C		Approved for both units in SER.
3.5.1	14	C	01	In SSER9, the staff determined that a new spectrum used for the design of a new DG building and other Category I structures built after 1979 was acceptable. In SSER14, clarification in Amendment 79 on internal missile sources was reviewed and did not change prior conclusions. Staff also reviewed revised information on turbine missiles and concluded that impact of potential missiles was insignificant.
3.5.2	2	C		CONFIRMATORY ISSUE for modifications to protect Diesel Generators TVA submitted a proposed design modification for installation of a reinforced concrete curb around the diesel exhaust stacks to protect them from damage in a letter dated November 24, 1982. The staff found this acceptable and closed this issue in SSER2.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
3.5 .3	0	C	01	Approved for both units in SER.
3.6 .0	21	CI	02	In SSER6, the staff accepted TVA approaches involving arbitrary intermediate breaks, determination of intermediate break locations and analysis of jet impingement loads. In SSER11, the staff reviewed results of the MELB Special Program and determined that the conclusion in the SER finding plant design for protection against piping failures outside containment was still valid. Unit 2 Action: Complete Special Program using the Unit 1 approach. --- --- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the MELB SP. In SSER21, the MELB Special Program was resolved. Completion of MELB SP is tracked under 23.3.8.
3.6 .1	21	O	02	OUTSTANDING ISSUE involving main steam line break (MSLB) outside containment In a letter dated November 30, 1992, TVA submitted a new evaluation for both Units 1 and 2 accounting for increased environmental temperatures in the MSVV rooms due to release of superheated steam and later submitted, by letter dated March 28, 1994, additional information related to the assumptions made in this analysis for both units. The staff reviewed this information together with their detailed evaluation and acceptance of the same methodology applied at Sequoyah and concluded that the MSLB analysis for the WBN MSVV rooms, including the effects of superheated steam, was acceptable and identified this issue as resolved in SSER14. --- In SSER14, the staff reviewed the construction of response spectra for the steel containment vessel resulting from the compartment pressure transients caused by pipe break and TVA modeling of the SCV for both units (see TVA letter dated December 30, 1993) and concluded that the methodology for obtaining shell dynamic displacements and construction of spectra were acceptable. --- --- REVISION 02 UPDATE: Status in SSER21 is Open (NRR).
3.6 .2	14	C	01	The 3.6.2 discussion in SSER14 on response spectra for the SCV refers to the evaluation provided in 3.6.1.
3.6 .3	12	C	01	New section in SRP 1987. Approved for both units in Appendix J of SSER5. The staff concluded in SSER12 that TVA may eliminate pressurizer surge line rupture from the design basis for Units 1 and 2.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
3 . 7 . 0	21	C	03	The staff concluded in SSER6 that FSAR section 3.7 which was added to describe Set A, Set B and Set C seismic analysis was consistent with the Seismic Analysis CAP. Unit 2 Action: Complete CAP using the Unit 1 approach. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the Seismic Analysis CAP . In SSER21, the Seismic Analysis CAP was resolved. Completion of the Seismic Analysis CAP is tracked under 23.2.16. ---------- ---------- REVISION 03 UPDATE: NRC IR 50-391/2010-602 noted that the Seismic Analysis CAP was closed for Unit 2.
3 . 7 . 1	21	C	03	OUTSTANDING ISSUE involving update of FSAR for seismic design issues The staff reviewed FSAR Amendment 68 and found that required changes had been incorporated into the FSAR, as committed to in TVA letter dated December 18, 1990, for Units 1 and 2, and issue was deemed resolved in SSER6. SSER9 stated the Seismic Analysis CAP was acceptably implemented for Unit 1. SSER16 discusses use of a vertical PGA of .15g rather than .18g for Set B spectra and determined that it was acceptable. Unit 2 Action: Complete CAP using Unit 1 approach. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the Seismic Analysis CAP . In SSER21, the Seismic Analysis CAP was resolved. Completion of the Seismic Analysis CAP is tracked under 23.2.16. ---------- ---------- REVISION 03 UPDATE: NRC IR 50-391/2010-602 noted that the Seismic Analysis CAP was closed for Unit 2.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
3 . 7 . 2	21	C	03	3.7.2.1.2: OUTSTANDING ISSUE involving mass eccentricity In a letter dated May 8, 1991, for Units 1 and 2, TVA provided clarification that actual mass eccentricities from such items as equipment hatch and lock used in evaluating the steel containment vessel for an earthquake load were replaced by a 5% accidental eccentricity. This was demonstrated to be conservative. TVA also proposed a revision to the FSAR to document this change. The staff found this acceptable and resolved this issue in SSER8. ---------- 3.7.2.1.2: OUTSTANDING ISSUE involving comparison of Set A vs. Set B response The staff considered this item (opened in SSER6) resolved in SSER11 based on audits and inspections since SSER6. Unit 2 Action: Complete Seismic Analysis CAP using the Unit 1 approach. ---------- In SSER16, the staff discussed the review and acceptability of the NSSS-ICS modeling for seismic analysis. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the Seismic Analysis CAP . In SSER21, the Seismic Analysis CAP was resolved. Completion of the Seismic Analysis CAP is tracked under 23.2.16. ---------- ---------- REVISION 03 UPDATE: NRC IR 50-391/2010-602 noted that the Seismic Analysis CAP was closed for Unit 2.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
3 . 7 . 3	21	C	03	OUTSTANDING ISSUE involving number of peak cycles to be used for OBE In SSER6, the staff identified an issue involving the number of peak cycles to be used for OBE. In a letter dated May 8, 1991, for both units, TVA proposed to revise the FSAR for ASME Section III Class I piping analysis to include the assumption of 5 OBEs and 1 SSE and a minimum of 10 peak stress cycles per event. The staff accepted this in SSER8. ---------- OUTSTANDING ISSUE involving use of code cases, damping factors for conduit and use of worst case, critical case and bounding case In SSER6, the staff identified outstanding issues involving code case use, damping factors for conduit and use of worst case, critical case and bounding case. Deficiencies identified in the use of worst case, critical case and bounding calculations were resolved in IR 50-390/93-201, and this issue was considered resolved for Unit 1 in SSER12. Unit 2 Action: Addressed in CAP/SP. The Unit 1 approach will be used for Unit 2. ---------- OUTSTANDING ISSUE involving 1.2 multi mode factor In SSER6, the staff identified an issue involving a 1.2 multi-mode factor. In SSER8, the staff continued to review the use of a multi-mode factor of 1.2. The staff reviewed verification studies performed by TVA to justify the use of a 1.2 multi-mode factor in seismic evaluation of certain sub systems in SSER8 and SSER9 and, after TVA provided further confirmation of supporting calculations, the use of Complete Quadratic Combinations and validity of two degree of freedom predictions in a letter dated October 10, 1991, for both units, the staff considered this issue resolved in SSER9. ---------- Conduit Supports Corrective Action Program. Process was reviewed and determined to be acceptable for Unit 1 in SER dated September 1, 1989. Unit 2 Action: Addressed in CAP/SP. The Unit 1 approach will be used for Unit 2. ---------- In SSER6, the staff reviewed several other seismic analysis considerations including combination of components of earthquake motion, use of load factors in simplified analysis of equipment, consideration of torsional effects of eccentric masses in piping analysis; damping values for cable trays, HVAC and equipment and components; analysis of mounting for equipment and components; and loads and load combinations used in design of HVAC ducts and supports and found them acceptable. In SSER7, the staff reviewed the seismic design of the Refueling Water Storage Tank, the only safety related above ground vertical steel tank in the plant, and found it acceptable. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the Seismic Analysis CAP and the Conduit Supports CAP.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
				In SSER21, the Seismic Analysis CAP was resolved. Completion of the Seismic Analysis CAP is tracked under 23.2.16. In SSER21, the Conduit Supports CAP was resolved. Completion of the Electrical Conduit and Conduit Supports CAP is tracked under 23.2.16. ---------- ---------- REVISION 03 UPDATE: NRC IR 50-391/2010-602 noted that the Seismic Analysis CAP was closed for Unit 2.
3 . 7 . 4	0	**C**		Approved for both units in SER.
3 . 8 . 0	21	**O**	02	OUTSTANDING ISSUE involving load combinations and stress allowables In response to staff concerns regarding use of ductility ratio when considering thermally induced stresses, TVA stated in a letter dated April 6, 1992, for both units, that they would use a methodology consistent with SRP 3.8.4 for the design of steel members and use the linear elastic provision of DG-C 1.6.12, Rev. 1, “Evaluation of Steel Structures with Thermal Restraint,” except for the energy balance provision of Section C.2.3.1. The staff found this acceptable. TVA also agreed, in its May 8, 1991, letter for both units, that any further sampling of structural welds after the issuance of NCIG-2, Rev. 2 would be to that revision. This issue was resolved in SSER9. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
3 . 8 . 1	3	**C**	01	CONFIRMATORY ISSUE - verify buckling methodology In response to staff concern, TVA submitted a letter dated May 16, 1984, for both units, stating that TVA calculations already accounted for new information from NRC-sponsored research programs, particularly information concerning reinforcement around shell (vessel) opening. Based on their review of the response, the staff closed this issue in SSER3.
3 . 8 . 2	7	**C**	01	The staff accepted implementation of the Concrete Quality Special Program for Unit 1 in SSER7. This program is considered closed for Unit 2 based on the work performed for Unit 1. The was identified in a TVA letter dated August 3, 2007, WBN - Unit 2 - Reactivation of Construction Activities
3 . 8 . 3	21	**O**	02	The staff reviewed materials, allowable stresses and load cases for the watertight equipment hatch cover in an FSAR Table in Amendment and found them acceptable for both units in SSER14. The staff reviewed allowable stresses for Category I structural steel and found them acceptable for both units in SSER16. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).

*** = See last page for status code definition.**

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
3.8.4	0	C		Approved for both units in SER.
3.9.0	0	C		Approved for both units in SER.
3.9.1	13	OV	01	OUTSTANDING ISSUE involving assumption in piping analysis for water-hammer due to check valve slam In SSER6, the NRC expressed concern regarding TVA's piping analysis that postulated failure of certain supports, TVA submitted an August 4, 1992, letter stating that, where possible, supports were upgraded in the analysis to maintain structural integrity during the postulated loading scenario. The issue was resolved in SSER13. Unit 2 Action: Modify supports as needed.
3.9.2	14	C	01	The staff reviewed "Pre-operational Vibration and Dynamic Effects Testing on Piping", and found this area acceptable in SSER14.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
3 . 9 . 3	15	S	02	3.9.3.1: OUTSTANDING ISSUE involving use of experience data to qualify category I(L) piping The staff identified a concern regarding the use of experience data as a method of seismic qualification of Category I(L) piping in SSER6. TVA stated in a letter dated December 18, 1990 for both units, that it was performing a verification program to validate the original seismic design basis for Category I(L) piping, including a screening criteria based on earthquake experience data to identify items requiring further evaluation and bounding case analysis to demonstrate the conservatism of the screening criteria. In a September 20, 1991, for both units, letter, TVA provided revised criteria for the bounding case analysis. Based on the staff's evaluation, the issue was considered resolved in SSER8. ---------- 3.9.3.3: LICENSE CONDITION - Relief and safety valve testing (II.D.1) Staff found TVA approach in response to this issue, using information from EPRI valve test program and performing modifications to safety and relief discharge piping and supports, was acceptable. Issue was considered resolved in SSER3. ---------- 3.9.3.3: OUTSTANDING ISSUE involving operating characteristics of main steam safety valves The staff identified a concern with operating characteristics of main steam safety valves in SSER6. In a letter dated June 21, 1991, TVA responded to NRC concerns regarding the design and installation of MSSVs stated that all valves and piping components were analyzed for all MSSV discharge loads acting simultaneously, combined with other required loads and this was accepted by the staff. In the same letter, TVA also provided the method used to establish the MSSV adjustment ring settings for plant valves and this was acceptable to the staff. This resolved the issue in SSER7. Unit 2 Action: Provide basis of applicability of Unit 1 MSSV analysis to Unit 2. ---------- 3.9.3.4: CONFIRMATORY ISSUE involving baseplate flexibility and its effect on anchor bolt loads The staff continued to review baseplate flexibility and its effect on anchor bolt loads. The issue remained open in SSER6. The TVA response to this issue, in a letter dated July 26, 1991, for both units, described an update to the previous response for B 79-02 and its civil design standard for concrete anchorage, which incorporated an increase in anchor stiffness and consideration of prying forces for thin baseplates analyzed by hand. The staff determined that this adequately resolved the issue in SSER8. ---------- 3.9.3.4: OUTSTANDING ISSUE involving stiffness and deflection limits for seismic Category I pipe supports The staff questioned new support stiffness and deflection limits for seismic Category I pipe supports in SSER6. The TVA program to demonstrate that change in design criteria which uses stiffness and deflection limits for Category I pipe supports did not compromise the adequacy of pipe supports, was submitted in a TVA letter dated September 30, 1991, for both units, and was found to be acceptable by the staff and the issue was resolved in SSER8. ----------

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
				3.9.3.4: OUTSTANDING ISSUE, staff was awaiting TVA concurrence on their position with respect to margin for critical buckling of pipe supports In a letter dated May 14, 1984, TVA provided results of a sampling program and determined that compressive stresses for pipe supports did not exceed acceptance criteria established by NRC and staff considered this issue resolved in SSER4. ---------- The staff reviewed proposed new criteria for service load combinations and associated stress limits for ASME Code Class 1, 2, and 3 pipe supports in SSER6 and found them acceptable. In SSER15, the staff found the response to NUREG-0737, Item II.D.1, "Performance Testing of Relief and Safety Valves," acceptable. ---------- ---------- REVISION 02 UPDATE: TVA determined that the Unit 1 MSSV analysis was applicable to Unit 2. ---------- Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. Section 10.1 was amended to reference the Westinghouse safety evaluation that evaluated the effect of the MSSV blowdown on the LOCA related FSAR analysis results.
3.9.4	0	C		Approved for both units in SER.
3.9.5	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
3 . 9 . 6	20	S	02	LICENSE CONDITION on inservice testing of pumps and valves The staff stated that they were reviewing TVA's response to GL 89-04, addressing acceptable IST programs and the license condition on inservice testing of pumps and valves remained open in SSER5. TVA committed to submit a revised ASME Section XI Inservice Pump and Valve Test Program six months before the projected date of operating license issuance in an August 21, 1989, letter. On this basis, the staff considered that the proposed license condition was no longer required in SSER12. ---------- OUTSTANDING ISSUE required that Technical Specifications include limiting condition for operation that requires plant shutdown or system isolation when leak limits are not met. Staff had not reviewed Technical Specifications. The safety evaluation in SSER14 states that the staff did not find any IST issues that would prevent issuance of an operating license for Unit 1. The item was resolved in SSER14. Unit 2 Action: Submit Technical Specifications. ---------- In SSER18, the staff approved a proposed alternative for set pressure testing of the three pressurizer safety relief valves that provide overpressure protection for the reactor coolant system. In SSER20, the staff discussed 13 issues that remained to be resolved for the pump and valve inservice testing program and stated that they had been addressed in a manner that complies with the staff's position and they granted relief for an additional relief request. ---------- ---------- REVISION 02 UPDATE: Developmental Revision A of the Unit 2 Technical Specifications (TS) was submitted on March 04, 2009. TS LCO 3.4.13 provides the requirements for RCS Operational Leakage. Included in this is a requirement to shutdown the unit if leakage can not be reduced to within limits within the specified time frame. TS LCO 3.4.14 provides the requirements for RCS Pressure Isolation Valve Leakage. Included in this is a requirement to shutdown the unit if leakage can not be reduced to within limits within the specified time frame. TS 5.7.2.11 provides the Inservice Testing Program.
3 . 9 . 7		NA		Area not addressed in 1981 Standard Review Plan.
3 . 9 . 8		NA		Area not addressed in 1981 Standard Review Plan.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
3 . 10 . 0	21	CI	02	In SSER1 the staff discussed their evaluation of the TVA program for qualification of electrical and mechanical equipment for seismic and other loads, and opened the OUTSTANDING ISSUE involving adequacy of frequency test, peak broadening of response spectra, reconciling actual field mounting by welding vs. testing configuration mounted by bolting and need for surveillance and maintenance programs to address aging. The staff provided a status of these issues in SSER3 and closed peak broadening of response spectra, use of damping values, consideration of nozzle loads, and status of seismic qualification. Other specific issues were closed in this supplement as well. In SSER5, the staff stated that this issue remained open. In a letter dated December 1, 1982, TVA provided justification for single-frequency tests to seismically qualify the Reactor Protection System cabinet. This showed that test response spectra (TRS) were substantially higher than broadened required response spectra (RRS) throughout the required frequency range. The staff evaluated test results and building seismic behavior and considered this aspect of the testing issue closed in SSER6. Staff concerns on the impact of aging on seismic performance were resolved in SSER6 based on discussions with TVA technical personnel and review of maintenance and surveillance instruction manuals. There was a specific issue on installing spacers for the 125V DC vital batteries as was done during qualification testing and required by the manufacturer. The issue was closed in SSER6 when it was determined that spacers had been installed. With regard to the overall issue on adequacy of testing, the staff performed an audit as part of Appendix S of SSER9. This included a review of the TVA approach, criteria and action plan to address effect of directional coupling and verification that acceleration at each device location is less than .95g because relay chatter at higher acceleration levels is expected. TRS enveloped RRS for all directions. The staff found the above to be in accordance with SRP 3.10 and IEEE 344-1975 and closed the issue. For reconciling the impact for equipment actually mounted using welding but tested with mounting by bolting, in-situ test results were provided to NRC (in letters dated April 30, 1985, and January 30, 1986) along with Westinghouse report on seismic qualification by analysis and testing for the main control board. The staff reviewed these results and on the basis of the consistency of all results provided, concluded that the issue was resolved in SSER6. Unit 2 Action: Complete Equipment Seismic Qualification CAP using the Unit 1 approach. ---------- In SSER4, the staff reviewed an issue on the vibration of deep draft pumps and found it acceptable. In SSER8, the staff accepted a proposed revision to FSAR Section 3.7.3.16 to indicate that the alternative seismic qualification method is to follow the requirements of IEEE Standard 344-1971 and address the guidelines of SRP Section 3.10. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the Equipment Seismic Qualification CAP .

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
				In SSER21, the Equipment Seismic Qualification CAP was resolved. Completion of the Equipment Seismic Qualification CAP is tracked under 23.2.6.
3 . 11 . 0	21	**CI**	02	OUTSTANDING ISSUE - TVA program not submitted at time of SER The EQ program was submitted after issuance of the SER. It was reviewed and found acceptable in SSER15. Unit 2 Action: Complete EQ Special Program. REVISION 02 UPDATE: The status in SSER21 is Open (NRR). TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the EQ SP. In SSER21, the Environmental Qualification Special Program was resolved. The EQ program is tracked under 23.3.4.
3 . 12 . 0		**NA**		Addressed in 3.9.1 through 3.9.3.
3 . 12 . 1		**NA**		Addressed in 3.9.1 through 3.9.3.
3 . 12 . 2		**NA**		Addressed in 3.9.1 through 3.9.3.
3 . 12 . 3		**NA**		Addressed in 3.9.1 through 3.9.3.
3 . 12 . 4		**NA**		Addressed in 3.9.1 through 3.9.3.
3 . 12 . 5		**NA**		Addressed in 3.9.1 through 3.9.3.
3 . 12 . 6		**NA**		Addressed in 3.9.1 through 3.9.3.
3 . 13 . 0		**NA**		Area not addressed in 1981 Standard Review Plan.
4 . 0 . 0	0	**C**		Approved for both units in SER.
4 . 1 . 0	0	**C**		Approved for both units in SER.
4 . 2 . 0	0	**C**		Approved for both units in SER.

*** = See last page for status code definition.**

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
4.2 .1	13	S	02	In SSER13, NRC determined that internal fuel rod pressure was not key design information that needed to be included in the WBN Unit 1 Technical Specifications. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. FSAR Chapter 4 was updated to address the application of the second generation Robust Fuel Assembly design (RFA-2)
4.2 .2	2	S	02	CONFIRMATORY ISSUE on cladding collapse calculations The staff reviewed the calculation for the predicted cladding collapse for the most limiting Watts Bar fuel and found it acceptable. Staff closed issue in SSER2. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. FSAR Chapter 4 was updated to address the application of RFA-2 fuel.
4.2 .3	13	S	02	CONFIRMATORY ISSUE - identify margins and to offset reduction in DNBR due to fuel rod bowing and incorporating residual bow penalty into the Technical Specifications. In SSER2, the staff concluded TVA had an acceptable means of analyzing the effects of fuel rod bowing and determining any residual rod bowing penalties on the departure from nucleate boiling ratio and total peaking power. Staff closed the issue in SSER2. In SSER10, NRC reviewed design loading conditions for the reactor vessel internals and raised an issue on the seismic analysis of the control rod drive mechanisms (CRDMs). TVA's letter dated June 15, 1993, for both units discussed CRDM seismic operability. In SSER13, the NRC documented that concerns related to CRDM seismic qualification had been resolved. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. FSAR Chapter 4 was updated to address the application of RFA-2 fuel.
4.2 .4	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
4.2 .5	0	S	02	"FUEL DESIGN CONCLUSIONS" left open until all items in subsection are closed. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. FSAR Chapter 4 was updated to address the application of RFA-2 fuel.
4.3 .0	0	C		Approved for both units in SER.
4.3 .1	13	S	02	In SSER13, NRC reviewed the V5H fuel design and found use of V5H fuel acceptable. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. FSAR Chapter 4 was updated to address the application of RFA-2 fuel.
4.3 .2	15	S	02	In SSER13, NRC reviewed the V5H fuel design and found use of V5H fuel acceptable. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- In SSER15, NRC reviewed TVA's proposed changes to the FSAR from a reanalysis of Pressurized Thermal Shock. The analysis was subsequently incorporated into the FSAR. ---------- ---------- REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. FSAR Chapter 4 was updated to address the application of RFA-2 fuel.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
4.3 .3	13	S	02	In SSER13, NRC reviewed the V5H fuel design and found use of V5H fuel acceptable. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. FSAR Chapter 4 was updated to address the application of RFA-2 fuel.
4.3 .4	13	S	02	In SSER13, NRC reviewed the V5H fuel design and found use of V5H fuel acceptable. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. FSAR Chapter 4 was updated to address the application of RFA-2 fuel.
4.4 .0	0	C		Approved for both units in SER.
4.4 .1	0	C		Approved for both units in SER.
4.4 .2	12	S	02	In SSER12, NRC evaluated a change in reactor coolant flow (upflow) for both units. NRC concluded in a July 28, 1993 letter for both units that the proposed upflow modification was acceptable. ---------- Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. FSAR Chapter 4 was updated to address the application of RFA-2 fuel.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
4.4 .3	16	S	02	OUTSTANDING ISSUE concerning removal of RTD bypass system This outstanding issue was opened in SSER6. Staff issued an SER dated June 13, 1989, for Unit 1 only that approved replacement of the RTD bypass system with an Eagle-21 microprocessor system for monitoring reactor coolant temperature. NRC provided their initial assessment of the RTD bypass removal for WBN Unit 1 in SSER8. This SER was reproduced in SSER8, Appendix R. In SSER16, NRC reviewed the flow measurement uncertainty value for the reactor coolant system. TVA letter dated December 5, 2007, informs NRC of intent to use Eagle-21 for Unit 2. NRC requested additional information December 27, 2007. TVA provided the requested information by letter dated February 28, 2008. By letter dated May 7, 2008, NRC provided a list of specific issues to be addressed in a future amendment application for Eagle-21 for WBN Unit 2. Unit 2 Action: Provide the additional information for NRC review. ---------- In SSER12, NRC evaluated a change in reactor coolant flow (upflow) for both units. NRC concluded that the proposed upflow modification was acceptable. ---------- In SSER13, NRC reviewed thermal hydraulic methodologies and concluded that the V5H thermal-hydraulic design was acceptable for Watts Bar. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: TVA responded to the NRC request for additional information on Eagle-21 by letter dated August 25, 2008. ---------- Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. FSAR Chapter 4 was updated to address the application of RFA-2 fuel.
4.4 .4	13	S	02	In SSER13, NRC reviewed TVA's responses to a request for additional information concerning fuel rod bowing and crud buildup for WBN Unit 1. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. FSAR Chapter 4 was updated to address the application of RFA-2 fuel.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
4.4 .5	16	O	01	CONFIRMATORY ISSUE / LICENSE CONDITION on review of Loose Parts Monitoring System (LPMS) startup report and inclusion of limiting conditions for LPMS in Technical Specifications TVA letters dated February 25, 1982, and November 10, 1982, provided a description of operator training and an evaluation of conformance to RG 1.133. In SSER3, the staff closed the confirmatory issue and opened a license condition to track submittal of the startup test results and the alert level setting. In SSER5, the staff closed the LICENSE CONDITION to a TVA commitment to provide the startup test results and the alert level settings made in a letter dated September 19, 1990, for both units. In SSER16, NRC reviewed additional information and revised commitments associated with the LPMS. For Unit 2 due to obsolescence, TVA will replace the LPMS. Unit 2 Action: Provide the startup test results and the alert level settings.
4.4 .6	0	C		Approved for both units in SER.
4.4 .7	0	S	02	"Technical Resolution of Generic Issue B-59-(N-1) Loop Operation in BWRs and PWRs – N-1 Loop operation was addressed in original 1982 SER (4.4.7). Unit 2 Action: Confirm Technical Specifications prohibit (N-1) Loop Operation. --- --- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS LCO 3.4.4 requires that four Reactor Coolant System loops be operable and in operation during Modes 1 and 2.
4.4 .8	10	O	01	LICENSE CONDITION - Detectors for Inadequate core cooling (II.F.2) GL 82-28 / NUREG-0737, II.F.2, "Inadequate Core Cooling Instrumentation System" – In the original SER, the review of the ICC instrumentation was incomplete. The January 24, 1992, letter superseded the previous responses on this issue. TVA letter for Units 1 and 2 dated January 24, 1992, committed to install Westinghouse ICCM-86 and associated hardware. NRC completed the review for Units 1 and 2 in SSER10. For Unit 2 due to obsolescence of the ICCM-86 system, TVA intends to install the Westinghouse Common Q Post-Accident Monitoring System. Unit 2 Action: Install Westinghouse Common Q PAM system.
4.4 .9	0	O	01	"CONCLUSION" left open until all items in subsection are closed.
4.5 .0	0	C		Approved for both units in SER.
4.5 .1	0	C		Approved for both units in SER.
4.5 .2	0	C		Approved for both units in SER.
4.6 .0	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
5.0 .0	0	C		Approved for both units in SER.
5.1 .0	6	S	02	The staff stated that the Eagle 21 microprocessor system was an acceptable replacement of the resistance temperature detector (RTD) bypass system for monitoring reactor cooling temperature in SSER5. In SSER6, the staff noted that TVA had incorporated the information for this new design into the FSAR and said they would track results of the review of this design change as an outstanding issue - Removal of RTD Bypass System (See 4.4.3). Unit 2 Action: Provide additional information for NRC review per 7.2.1. ---------- ---------- REVISION 02 UPDATE: TVA responded to the NRC request for additional information on Eagle-21 by letter dated August 25, 2008.
5.2 .0	0	C		Approved for both units in SER.
5.2 .1	0	C		Approved for both units in SER.
5.2 .2	15	C	01	OUTSTANDING ISSUE on staff review of sensitivity study of required safety valve flow rate versus trip parameter TVA letter dated April 18, 1983, provided the safety valve sizing information and information on differences with the reference plant. Staff closed issue in SSER2. ---------- In SSER15, the staff stated that subject to resolution of NUREG-737 Items II.D.1 (performance testing of relief and safety valves) and II.D.3 (indication of relief and safety valve position), overpressure protection at hot operating conditions will comply with the guidelines of SRP 5.2.2 and requirements of GDC 15. They noted that these items were found to be acceptable.
5.2 .3	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
5.2 .4	16	O	03	LICENSE CONDITION – Inservice inspection (ISI) program The ISI program is required to be submitted within 6 months of the date of issuance of the operating license. The applicable ASME Code edition and addenda are determined by reference to 50.55a(b) 12 months preceding the date of issuance of the OL. The staff reiterated this in SSER10. In SSER12, the LICENSE CONDITION was resolved by a TVA commitment to submit the program within six months after receiving the operating license. Unit 2 action: Submit Unit 2 ISI program. ---------- OUTSTANDING ISSUE - Unit 2 PSI program submitted April 30, 1990, with a partial listing of relief requests. This item tracked the staff review. In the SER, the preservice inspection program was still under review. NRC reviewed the Unit 1 PSI program in SSERs 10, 12, and 16. Unit 2 Action: Submit Unit 2 PSI program. ---------- ---------- REVISION 03 UPDATE: Preservice Inspection Plan, Program No. WBN-2 PSI, Revision 3 was submitted to the NRC on June 17, 2010 (ADAMS Accession No. ML101680561).
5.2 .5	21	O	02	In SSER9, the staff stated that since the UHI system has been eliminated from the WB design , the previous discussion of this system in the SER no longer applies, but the conclusions reached in the SER were still valid. In SSER11, the staff reviewed valve stem leakage and stated that the staff's prior conclusions about valve stem leakage were not affected. In SSER12, the staff retracted the requirement identified in the SER that if leakage is alarmed and confirmed in a flow path with no indicators, then the Technical Specifications require a water inventory material balance be initiated within one hour. The staff also provided a clarification of SER wording related to detection of intersystem leakage through check valves and stated that this did not change prior staff conclusions and the reactor coolant pressure boundary system remains acceptable. ---------- ---------- REVISION 02 UPDATE: In SSER21 the status is Open (NRR).
5.2 .6	16	C	01	In SSER16, the staff reviewed the analysis of the RPV and internal components and found the use of the WECAN computer code acceptable.
5.3 .0	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
5.3 .1	21	O	02	The staff reviewed TVA's submittal on reactor vessel irradiation in SSER11 and stated that the WB reactor vessels acceptably satisfy the requirements of 10 CFR 50.61. In SSER14, the staff determined that TVA complied with all the requirements in the current Appendix G, 10 CFR Part 50 without exemptions and the previously approved exemptions were no longer needed. --- --- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
5.3 .2	16	S	02	OUTSTANDING ISSUE - P-T limits for Unit 2 not provided. Staff will review as part of Unit 2 Technical Specifications. In the original 1982 SER, NRC indicated that the review of the Unit 2 P-T limits would be completed as part of the review of the Unit 2 Technical Specifications. In SSER16, the staff found the pressure temperature limits methodology and the pressure temperature limits report for Unit 1 acceptable. Unit 2 action: Submit P-T limits. --- --- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. WCAP-17035-NP "Watts Bar Unit 2 Heatup and Cooldown Limit Curves for Normal Operation and PTLR Support Documentation" was submitted with the TS.
5.3 .3	0	S	02	OUTSTANDING ISSUE for staff to complete evaluation of Unit 2 after receipt of P-T limits In the original 1982 SER, NRC indicated that the review of the Unit 2 P-T limits would be completed as part of the review of the Unit 2 Technical Specifications. Unit 2 action: Submit P-T limits. --- --- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. WCAP-17035-NP "Watts Bar Unit 2 Heatup and Cooldown Limit Curves for Normal Operation and PTLR Support Documentation" was submitted with the TS.
5.4 .0	0	C		Approved for both units in SER.
5.4 .1	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
5.4 .2	4	C	01	5.4.2.2: OUTSTANDING ISSUE for staff to evaluate TVA's proposed resolution to concerns about flow induced vibrations in Model D-3 SGs pre-heat region In the original 1982 SER, the staff concluded that because of the generic problem of tube degradation caused by flow induced vibration in Westinghouse model D steam generators, operation would be limited to 50%. In SSER1, the staff continued to monitor activities associated with proposed modifications to the pre-heater region of the SGs to reduce impingement of water on tubes in this area and eliminate the vibration responsible for wear of the SG tubes. TVA's May 27, 1983, letter committed to implement the NUREG-0966 modifications to address this. In SSER4, the staff concluded the modification was acceptable to operate at 100%. In a letter dated December 17, 2008, TVA confirmed that these modifications were performed for WBN Unit 2.
5.4 .3	21	O	02	CONFIRMATORY ISSUE to verify installation of an RHR flow alarm and proper function of dump valves when actuated manually In the SER, staff accepted TVA's commitment to provide, before startup, an RHR flow alarm to alert the operator to initiate alternate cooling modes in the event of loss of RHR pump suction. SSER2 resolved testing of dump valves. The staff verified that the alarm had been installed in SSER5, resolving the confirmatory issue. Unit 2 action: Verify alarm installation. ---------- CONFIRMATORY ISSUE involving natural circulation test to demonstrate ability to cool down and depressurize the plant, and that boron mixing is sufficient under such circumstances; or, if necessary, other applicable tests before startup after first refueling Branch Technical Position requires a natural circulation test with supporting analysis to demonstrate the ability to cool down and depressurize the plant and that boron mixing is sufficient. Comparison with performance of previously tested plants of similar design is acceptable, if justified. July 11, 1991, TVA letter, for both units, provided an assessment of the acceptability of the Diablo Canyon natural circulation tests to WBN. In SSER10, the NRC found the methods and conclusions acceptable. The staff corrected the wording in SSER10 in SSER11 and stated that this did not alter the conclusion reached. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
5.4 .4	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
5.4.5	21	CI	02	LICENSE CONDITION - NUREG-0737, II.B.1, "Reactor Coolant System Vents" - In the original SER, the NRC found TVA's commitment to install reactor coolant vents acceptable pending verification. In SSER2, the staff found venting guidelines acceptable. Installation was completed for Unit 1 only in SSER5 (IR 390/84-37) and the staff stated that the LC was no longer necessary. In SSER12, the staff included the safety evaluation for the RCSV system. The staff concluded that the high point vent system was acceptable subject to satisfactory completion of seven items that were described as on-going or planned activities associated with completion of the WB licensing process. They stated that none required additional review with respect to the SER nor would they change the SER, provided they were satisfactorily completed. TVA was asked to submit a letter prior to receipt of an OL stating how and when these items were completed. The staff stated that when these items were satisfactorily implemented, the RCSV system would be acceptable. Unit 2 Action: Verify installation of reactor coolant vents. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (Inspection).
6.0.0	0	C		Approved for both units in SER.
6.1.0	0	C		Approved for both units in SER.
6.1.1	0	C		Approved for both units in SER.
6.1.2	0	C		Approved for both units in SER.
6.1.3	0	C		Approved for both units in SER.
6.2.0	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
6 . 2 . 1	21	S	02	6.2.1.1: CONFIRMATORY ISSUE involves reviewing analysis that ensures that containment external pressure will not exceed design value of 2.0 psi In the original 1982 SER, NRC indicated it would confirm the contention that containment external pressure transients could not exceed the design value of 2.0 psig. TVA submitted the information June 4, 1982. In SSER3, NRC concluded that the design provided adequate protection against damage from external pressure transients. ---------- In SSER5, the staff reviewed a revised long term containment analysis for the design basis LOCA in support of a proposed reduction in the limit for minimum allowable weight of ice in the condenser and found it acceptable. Additionally, the staff verified that containment pressure and water level monitors were installed in Unit 1. Thus, License Conditions 6d and 6e were resolved (these are discussed with the other NUREG-0737 issues). In SSER7, the staff resolved their concerns regarding local temperatures near MSLBs inside containment and their impact on equipment qualification. In SSER12, the staff reviewed TVA's basis for deleting requirements for a 20,000 ppm boron concentration in the boron injection tank and determined that this would not significantly affect the environmental response of the containment or the safe shutdown equipment therein. In SSER14, the staff reviewed revisions to a number of containment design parameters and concluded that none affect conclusions reached in the SER or supplements. In SSER15, the staff reviewed the containment barrier seals and associated surveillance requirements and concluded that a revised divider barrier seal surveillance program was appropriate for Unit 1. Unit 2 Action: Review Unit 2 Technical Specifications with respect to divider barrier seal surveillance program. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). ---------- Developmental Revision A of the Unit 2 Technical Specifications (TS) was submitted on March 04, 2009. TS 3.6.13 provides the Limiting Condition for Operation for Divider Barrier Integrity.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
6 . 2 . 2	21	**CI**	02	In SSER7, the staff determined that hot standby was an acceptable mode following a main steamline break and the containment cooling system modifications were acceptable. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). ---------- TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the Containment Cooling Special Program . In SSER21, the Containment Cooling SP was resolved. Completion of the Containment Cooling SP is tracked under 23.3.2.
6 . 2 . 3	16	**C**	01	In SSER16, the staff reviewed Amendment 89 to the FSAR and deletion of the high-radiation signal from the auxiliary building exhaust vent monitors and found it acceptable.

*** = See last page for status code definition.**

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
6 . 2 . 4	21	S	02	CONFIRMATORY ISSUE to install safety grade isolation valves on 1" chemical feed lines joining feedwater lines to main steam line. LICENSE CONDITION – Modification of chemical feedlines In the original 1982 SER, the containment isolation provisions for the main and auxiliary feedwater lines, feedwater bypass lines and the chemical feedlines to the steam generators did not meet GDC 57. This was resolved by FSAR Amendment 55. In SSER5, the NRC concluded that the containment isolation provisions for the main and auxiliary feedwater lines, feedwater bypass lines and the chemical feedlines were acceptable. ---------- OUTSTANDING ISSUE for NRC to complete review of information provided by TVA to address Containment Purging During Normal Plant Operation LICENSE CONDITION - Containment isolation dependability In the original 1982 SER, NRC concluded that WBN met all the requirements of NUREG-0737, item II.E.4.2 except subsection (6) concerning containment purging during normal operation. In SSER3, the outstanding issue was closed and the LICENSE CONDITION was left open. NRC completed the review and issued a TER for both units on July 12, 1990. NRC concluded that the isolation valves can close against the buildup of pressure in the event of a design basis accident if the lower containment isolation valves are physically blocked to an opening angle of 50 degrees or less. (SSER5) Unit 2 Action: Reflect valve opening restriction in the Technical Specifications. ---------- OUTSTANDING ISSUE involving containment isolation using closed systems This outstanding issue was opened in SSER7. In SSER12, the NRC concluded that the systems in question were "closed loops outside containment" and reaffirmed the previous conclusion of acceptability. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (Inspection). Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS Surveillance Requirement 3.6.3.7 requires verification that the valves are "blocked to restrict the valve from opening > 50 degrees."

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
6 . 2 . 5	21	S	04	OUTSTANDING ISSUE for review of TVA provided additional information relative to discussion added to FSAR to address analysis of the production and accumulation of hydrogen within containment following onset of a LOCA In the original 1982 SER, NRC indicated that additional information was required concerning the analysis of the production and accumulation of hydrogen within the containment during a design basis LOCA. This information was provided in FSAR amendments and evaluated by NRC in SSER4. In SSER4, the NRC concluded that the design of the combustible gas control system was acceptable and the outstanding issue closed. Unit 2 Action - The hydrogen recombiners will be removed from the Unit 2 design and licensing basis based on 10 CFR 50.44 (final rule September 16, 2003) and abandoned in place. This portion has a status of Open. ---------- LICENSE CONDITION – (6f) Accident monitoring instrumentation II.F.1 – containment hydrogen In SSER5, NRC closed the LICENSE CONDITION for Unit 1 only (IR 390/84-85). Unit 2 Action: Verify installation of containment hydrogen accident monitoring instrumentation. This portion has a status of Closed/Implementation only per NRC May 28, 2008, letter. ---------- LICENSE CONDITION – (9) Hydrogen control measures In the original 1982 SER, an LC was raised to track resolution of Unresolved Safety Issue A-48, “Hydrogen Control Measures and Effects of Hydrogen Burns on Safety Equipment.” In SSER8, the NRC reviewed the hydrogen mitigation system (igniters) and concluded it met the requirements of the final rule {10 CFR 50.44(c)(3)}. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. This amendment deleted the hydrogen recombiners from the Unit 2 FSAR. ---------- ---------- REVISION 04 UPDATE: EDCR 52329 was initiated to abandon in place Unit 2 hydrogen recombiners. Technical Specifications (TS) / TS BASES 3.6.7 (Hydrogen Recombiners) were deleted in Developmental Revision B which was submitted on February 2, 2010.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
6.2 .6	21	O	02	In SSER4, the staff approved exemption from certain requirements of Appendix J to 10 CFR 50 for both units. In SSER19, the staff found a revised schedule for the exemption approved in SSER4 acceptable. In SSER5, the staff found there was no radiological consequence to an increase in the bypass leakage rate for the emergency gas treatment system and found the increase acceptable. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
6.2 .7	4	C		CONFIRMATORY ISSUE for TVA to confirm that the lowest temperatures which will be experienced by the limiting materials of the reactor containment pressure boundary under the conditions cited by GDC 51 will be in compliance with the temperatures identified in the staff's analysis of fracture toughness requirements for load bearing component of the containment system In SSER4, NRC reviewed the confirmatory information submitted and concluded for both units that the reactor containment pressure boundary materials will behave in a non-brittle manner and the requirements of GDC 51 were satisfied. NRC provided the technical basis in Appendix H of SSER4.
6.3 .0	0	C	01	Approved for both units in SER.
6.3 .1	11	S	02	OUTSTANDING ISSUE - involving removal of upper head injection system The Upper Head Injection (UHI) system design was approved in the original 1982 SER. TVA letter dated September 19, 1985, informed NRC that UHI would not be installed on Unit 2. The staff stated in SSER6 that they were continuing to review TVA's submittal. In SSER7, NRC concluded it was acceptable to delete UHI from both units. In SSER11, the staff stated that the revision of the design code for ECCS piping from B31.1 to ASME Section III did not change the conclusions made in the SER and previous SSERs. ---------- Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. This amendment revised the FSAR to address the application of RFA-2 fuel.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
6.3 .2	5	S	02	In SSER5, the staff reviewed TVA's approach to maintaining ECCS effectiveness by ensuring that no single failure would be able to energize the coils of the valve operators and found it acceptable. The staff also reviewed TVA's response to Issue 4 of NUREG-0138, Resequencing of ECCS loads following SI signal reset followed by a loss of offsite power. ---------- Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. This amendment revised the FSAR to address the application of RFA-2 fuel.
6.3 .3	9	S	02	OUTSTANDING ISSUE - involving containment sump screen design In the original 1982 SER, the staff approved the proposed sump design in the FSAR. A deviation between the installed and proposed design was discovered during an NRC inspection. In SSER9, the staff concluded that the as-installed sump screen was acceptable. ---------- CONFIRMATORY ISSUE - provide a detailed survey of insulation material that could be debris post-LOCA In the original 1982 SER, NRC found the design of the containment sump against debris acceptable subject to the acceptability of a detailed survey of insulation materials. In SSER2, the NRC review of the survey confirmed the staff's initial conclusion that the design to provide protection against sump debris was acceptable. ---------- Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. This amendment revised the FSAR to address the application of RFA-2 fuel.
6.3 .4	0	C		Approved for both units in SER.
6.3 .5	0	O	01	Closure based on 6.3.1 to 6.3.3.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
6.4 .0	21	O	02	In SSER5, the staff concluded that removal of the main control room air intake chlorine detector was acceptable. In SSER11, they stated that FSAR Amendment 69 on control room isolation did not change previous conclusions. In SSER16, the staff concluded that the control room design satisfied the requirements of GDC 19 and the guidelines of NUREG-0737, Item III.D.3.4. In SSER18, the staff reviewed updated control room air flow rate data and dose analysis, as provided in Amendment 90, and determined that the changes did not affect conclusions reached in the SER or its supplements. See 18.1.0 also. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
6.5 .0	0	C		Approved for both units in SER.
6.5 .1	21	O	02	In SSER5, the staff found the Reactor Building Purge Ventilation System acceptable. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
6.5 .2	0	C		Approved for both units in SER.
6.5 .3	0	C		Approved for both units in SER.
6.5 .4	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
6.6 .0	15	O	03	OUTSTANDING ISSUE on additional information required on preservice inspection program and identification of plant specific areas where ASME Code Section XI requirements cannot be met and supporting technical justification NRC reviewed the preservice inspection program (PSI) for Unit 1 only in SSER10 and on the basis of a TVA commitment to submit an inservice inspection program within 6 months after receiving an operating license, considered a proposed LC for an ISI no longer required. In SSER15, the staff reviewed Revisions 24 and 25 to the preservice inspection program and concluded that the changes included therein were acceptable. Unit 2 action: Submit Unit 2 PSI program. ---------- ---------- REVISION 03 UPDATE: Preservice Inspection Plan, Program No. WBN-2 PSI, Revision 3 was submitted to the NRC on June 17, 2010 (ADAMS Accession No. ML101680561).
7.0 .0	0	C		Approved for both units in SER.
7.1 .0	0	C		Approved for both units in SER.
7.1 .1	16	S	02	In SSER13, NRC reviewed the Eagle-21 upgrade for WBN Unit 1 only. TVA letter dated December 5, 2007, informs NRC of intent to use Eagle-21 for Unit 2. NRC requested additional information December 27, 2007. TVA provided the requested information by letter dated February 28, 2008. By letter dated May 7, 2008, NRC provided a list of specific issues to be addressed in a future amendment application for Eagle-21 for WBN Unit 2. Unit 2 Action: Provide the additional information for NRC review. ---------- By letter dated August 21, 1995 for both units, TVA provided additional justification for a deviation from Position C.6(a) of RG 1.118 "Periodic Testing of Electrical Power and Protection Systems" Revision 2. In SSER16, the NRC found the deviation acceptable. ---------- ---------- REVISION 02 UPDATE: TVA responded to the NRC request for additional information on Eagle-21 by letter dated August 25, 2008.
7.1 .2	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
7 . 1 . 3	15	S	02	In the SER, NRC indicated that a review of the setpoint methodology would be performed with a review of the Technical Specifications. In SSER4, NRC reviewed the methodology used to determine setpoints for Watts Bar Units 1 and 2 and determined that it was acceptable. By letter dated July 29, 1994, for both units, TVA submitted a topical report titled "Westinghouse Setpoint Methodology for Protection Systems, Watts Bar Units 1 and 2, Eagle 21 Version" (WCAP-12096, Revision 6). In SSER15, the NRC concluded the setpoint methodology was acceptable based on (1) previous acceptance of Westinghouse setpoint methodology at other plants, (2) the similarity between the Watts Bar and previously approved designs such as Sequoyah, and (3) the Watts Bar setpoint methodology is in compliance with RG 1.105 and ISA S6704. Staff requested discussion of methodology for determining, setting, and evaluating as-found setpoints for drift susceptible instruments. Unit 2 action: Resolve this issue using the BFN TS-453 precedent (see NRC ML061680008). ---------- ---------- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) and TS Bases was submitted on February 2, 2010. As part of the submittal, TVA incorporated TSTF-493, Revision 4, "Clarify Application of Setpoint Methodology for LSSS Functions," into Section 3.3 of the TS and TS Bases. TVA submitted WCAP-17044, "Westinghouse Setpoint Methodology for Protection Systems" on February 5, 2010.
7 . 2 . 0	0	C		Approved for both units in SER.
7 . 2 . 1	15	S	02	In SSER13, NRC reviewed the Eagle-21 upgrade for WBN Unit 1 only. In SSER15, the NRC reviewed the WBN Unit 1 EMI/RFI report and concluded that the EMI/RFI issue was resolved for WBN Unit 1. TVA letter dated December 5, 2007, informs NRC of intent to use Eagle-21 for Unit 2. NRC requested additional information December 27, 2007. TVA provided the requested information by letter dated February 28, 2008. By letter dated May 7, 2008, NRC provided a list of specific issues to be addressed in a future amendment application for Eagle-21 for WBN Unit 2. Unit 2 Action: Provide the additional information for NRC review. ---------- ---------- REVISION 02 UPDATE: TVA responded to the NRC request for additional information on Eagle-21 by letter dated August 25, 2008.
7 . 2 . 2	0	C		Approved for both units in SER.
7 . 2 . 3	0	C		Approved for both units in SER.
7 . 2 . 4	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
7 . 2 . 5	21	O	02	CONFIRMATORY ISSUE - address IEB 79-21 to alleviate temperature dependence problem associated with measuring SG water level In SSER2, NRC accepted TVA's commitment to insulate the steam generator water level reference legs to alleviate the temperature dependence problem. By letter dated July 27, 1994, TVA submitted an evaluation for both units and determined that it was not necessary to insulate the SG reference legs at WBN. In SSER14, NRC concurred with TVA's assessment to not insulate the steam generator water level instrument reference leg. Unit 2 Action: Update accident calculation. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
7 . 2 . 6	13	S	02	In SSER13, NRC reviewed the Eagle-21 upgrade for WBN Unit 1 only. TVA letter dated December 5, 2007, informs NRC of intent to use Eagle-21 for Unit 2. NRC requested additional information December 27, 2007. TVA provided the requested information by letter dated February 28, 2008. By letter dated May 7, 2008, NRC provided a list of specific issues to be addressed in a future amendment application for Eagle-21 for WBN Unit 2. Unit 2 Action: Provide the additional information for NRC review. "CONCLUSIONS" left open until all actions in subsection are closed. ---------- ---------- REVISION 02 UPDATE: TVA responded to the NRC request for additional information on Eagle-21 by letter dated August 25, 2008.
7 . 3 . 0	13	S	02	In SSER13, NRC reviewed the Eagle-21 upgrade for WBN Unit 1 only. TVA letter dated December 5, 2007, informs NRC of intent to use Eagle-21 for Unit 2. NRC requested additional information December 27, 2007. TVA provided the requested information by letter dated February 28, 2008. By letter dated May 7, 2008, NRC provided a list of specific issues to be addressed in a future amendment application for Eagle-21 for WBN Unit 2. Unit 2 Action: Provide the additional information for NRC review. ---------- ---------- REVISION 02 UPDATE: TVA responded to the NRC request for additional information on Eagle-21 by letter dated August 25, 2008.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
7 . 3 . 1	14	S	02	In SSER13, NRC reviewed the Eagle-21 upgrade for WBN Unit 1 only. TVA letter dated December 5, 2007, informs NRC of intent to use Eagle-21 for Unit 2. NRC requested additional information December 27, 2007. TVA provided the requested information by letter dated February 28, 2008. By letter dated May 7, 2008, NRC provided a list of specific issues to be addressed in a future amendment application for Eagle-21 for WBN Unit 2. Unit 2 Action: Provide the additional information for NRC review. ---------- In SSER14, NRC reviewed TVA's FSAR amendment 81 section 7.3.2.2.6, with respect to a deviation from IEEE Standard 279-1971. Manual initiation of both steamline isolation and switchover from injection to recirculation following a loss-of-primary-coolant accident are performed at the component level only. In SSER14, NRC agreed with TVA's justification. ---------- ---------- REVISION 02 UPDATE: TVA responded to the NRC request for additional information on Eagle-21 by letter dated August 25, 2008.
7 . 3 . 2	2	C		CONFIRMATORY ISSUE is commitment to make a design change to provide protection that prevents debris from entering containment sump level sensors In the original SER, staff identified a concern that debris in the containment sump could block the inlets to the differential pressure transmitters and result in a loss of the permissive signal to the initiation logic for the automatic switchover from the injection to the recirculation mode of the emergency core cooling system. In a September 15, 1983, letter TVA notified NRC that the level sensors had been moved from inside the sump wall to outside the sump wall with the sense line opening protected by a cap with small holes. Staff closed the issue in SSER2.
7 . 3 . 3	0	C		Approved for both units in SER.
7 . 3 . 4	0	C		Approved for both units in SER.
7 . 3 . 5	21	CI	02	CONFIRMATORY ISSUE - perform confirmatory tests to satisfy IEB 80-06 (to ensure that no device will change position solely due to reset action) and staff review of electrical schematics for modifications that ensure that valves remain in emergency mode after ESF reset In the original SER, staff concluded that the design modifications for Bulletin 80-06 were acceptable subject to review of the electrical schematics that were not available at the time. In SSER3, the staff found the modifications acceptable and closed the confirmatory issue. Unit 2 Action: Perform verification during preoperational testing. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (Inspection).

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
7.3 .6	13	S	02	In SSER13, NRC reviewed the Eagle-21 upgrade for WBN Unit 1 only. TVA letter dated December 5, 2007, informs NRC of intent to use Eagle-21 for Unit 2. NRC requested additional information December 27, 2007. TVA provided the requested information by letter dated February 28, 2008. By letter dated May 7, 2008, NRC provided a list of specific issues to be addressed in a future amendment application for Eagle-21 for WBN Unit 2. Unit 2 Action: Provide the additional information for NRC review. "CONCLUSIONS" left open until all actions in subsection are closed. ---------- ---------- REVISION 02 UPDATE: TVA responded to the NRC request for additional information on Eagle-21 by letter dated August 25, 2008.
7.4 .0	0	C		Approved for both units in SER.
7.4 .1	0	C		Approved for both units in SER.
7.4 .2	21	O	02	By letter dated September 26, 1985, TVA requested a deviation from 10 CFR Part 50, Appendix R, Section III.L.2.d for use of the SG saturation temperatures to approximate reactor coolant system cold leg temperatures. This was approved for both units by SE dated May 17, 1991. The SE was discussed in SSER7. The staff concluded that this was an acceptable deviation. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
7.4 .3	0	C		Approved for both units in SER.
7.5 .0	0	C		Approved for both units in SER.
7.5 .1	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
7 . 5 . 2	21	**O**	02	OUTSTANDING ISSUE involving RG 1.97 instruments following course of an accident In the original 1982 SER, the staff stated that WBN did not use RG 1.97, “Instrumentation for Light Water Cooled Nuclear Power Plants to Assess Plants and Environs Conditions During and Following an Accident,” for the design because the design predated the RG. In SSER7, an outstanding issue was opened. TVA provided NRC information on exceptions to RG 1.97. A detailed review was performed for both units (Appendix V of SSER9). The staff concluded that WBN conforms to or has adequately justified deviations from the guidance of RG 1.97, Revision 2. TVA submitted additional deviations for both units in letters dated May 9, 1994, and April 21, 1995. In SSER14 and SSER15, the additional deviations to RG 1.97 were reviewed and accepted by NRC. NUREG-0737, II.F.1.2, ““Accident Monitoring Instrumentation” – Reviewed in SSER9. Unit 2 Actions: Install Noble gas, Iodine / particulate sampling, and Containment High Range Monitors. CI in NRC May 28, 2008, letter. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
7 . 5 . 3	21	**CI**	02	B 79-27, "Loss of Non-class 1E I&C Power System Bus During Operation” – TVA responded to the Bulletin on March 1, 1982. Reviewed in 7.5.3 of the original 1982 SER. Unit 2 Action: Issue appropriate emergency procedures. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (Inspection).
7 . 5 . 4	21	**CI**	02	"CONCLUSIONS" left CI until all items in subsection are closed. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (Inspection).
7 . 6 . 0	0	**C**		Approved for both units in SER.
7 . 6 . 1	0	**C**		Approved for both units in SER.
7 . 6 . 2	0	**C**		Approved for both units in SER.
7 . 6 . 3	0	**C**		Approved for both units in SER.

*** = See last page for status code definition.**

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
7.6.4	0	C		Approved for both units in SER.
7.6.5	4	C		CONFIRMATORY ISSUE - install switches on the main control board for the operator to manually arm this system (overpressure protection provided by pressurizer PORVs) In the original 1982 SER, the staff found the design of the overpressure protection during low temperature features acceptable pending review of the drawings and FSAR description. In SSER4, the staff documented completion of the review and closed the confirmatory issue.
7.6.6	0	C		Approved for both units in SER.
7.6.7	0	C		Approved for both units in SER.
7.6.8	0	C		Approved for both units in SER.
7.6.9	4	C		Approved for both units SER subject to completion of Confirmatory Issue in 7.6.5.
7.7.0	0	C		Approved for both units in SER.
7.7.1	0	C		Approved for both units in SER.
7.7.2	13	C	01	LICENSE CONDITION – Status monitoring system, Bypassed and Inoperable Status Indication (BISI) In the original 1982 SER, the staff requested TVA address RG 1.47, “Bypassed and Inoperable Status Indications for Nuclear Power Plant Safety Systems.” TVA addressed RG 1.47 by letters for both units dated January 29, 1987, and October 22, 1990. In SSER7, the staff documented completion of the review and closed the issue. By letter dated February 18, 1994, for both units, TVA submitted a re-evaluation of BISI that excluded components that would not be rendered inoperable more than once a year in accordance with RG 1.47 position C.3(b). In SSER13, NRC reviewed the revision and concluded that it was acceptable.
7.7.3	0	C		Approved for both units in SER.
7.7.4	0	C		Approved for both units in SER.
7.7.5	0	C		Approved for both units in SER.
7.7.6	0	C		Approved for both units in SER.
7.7.7	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
7 . 7 . 8	21	S	02	ATWS Mitigation design was reviewed and approved for both units by a Safety Evaluation Report issued December 28, 1989. This SER is also in Appendix W of SSER9. Outstanding Issue was Technical Specifications requirements. In SSER14, NRC reviewed the revision of FSAR Figure 7.3-3 for the AMSAC automatic initiation signal to start the turbine driven and motor driven auxiliary feedwater pumps and considered the issue resolved. Unit 2 Action: Address in Technical Specifications as appropriate. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. ATWS is not addressed in either the Unit 1 TS or the Unit 2 TS; nor is it addressed in the Standard TS (NUREG-1431).
7 . 8 . 0	0	C		Approved for both units in SER.
7 . 8 . 1	21	O	02	NUREG-0737, II.D.3, “Valve Position Indication” – The design was reviewed in the original 1982 SER and found acceptable pending confirmation of installation of the acoustic monitoring system. In SSER5 (IR 390/84-35), the staff closed the LICENSE CONDITION for Unit 1 only. By letter dated November 7, 1994, for both units, TVA provided a revised response for NUREG-0737 Item II.D.3. TVA revised the design by relocating the accelerometers for valve position indication to downstream of the relief valves. This change was reviewed in SSER14. The revision did not change the function of the position indication hardware and did not alter the previous review. Unit 2 Action: Verify installation of the acoustic monitoring system to PORV to indicate position. CI in NRC May 28, 2008, letter. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
7 . 8 . 2	21	CI	02	NUREG-0737, II.E.1.2, "Auxiliary Feedwater System Initiation and Flow Indication" Unit 2 Action: Complete procedures and qualification testing. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (Inspection).

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
7 . 8 . 3	21	O	02	NUREG-0737, II.K.3.9, “Proportional Integral Derivative Controller Modification” – Reviewed in original 1982 SER. Unit 2 Action: Set the derivative time constant to zero. REVISION 02 UPDATE: The status in SSER21 is Open (Inspection).
7 . 8 . 4	21	S	02	NUREG-0737, II.K.3.10, "Anticipatory Trip At High Power" In SSER4, NRC concluded that TVA had adequately addressed the requirements of NUREG-0737 Item II.K.3.10 for removal of the anticipatory reactor trip on turbine trip at or below 50% power. Unit 2 Action: Unit 2 Technical Specifications and surveillance procedures will address this issue. REVISION 02 UPDATE: The status in SSER21 is Open (Inspection). Developmental Revision A of the Unit 2 Technical Specifications (TS) was submitted on March 04, 2009. Items 14.a. (Turbine Trip - Low Fluid Oil Pressure) and 14.b. (Turbine Trip - Turbine Stop Valve Closure) of TS Table 3.3.1-1 are the trips of interest. The table and the Bases for these items state that below the P-9 setpoint, these trips do not actuate a reactor trip. Per item 16.d. (Power Range Neutron Flux, P-9) of TS Table 3.3.1-1, the Nominal Trip Setpoint for P-9 is “50% RTP” and the Allowable Value is “< 52.4% RTP.”
7 . 8 . 5	0	C	01	NUREG-0737, II.K.3.12, "Confirm Existence of Anticipatory Reactor Trip Upon Turbine Trip" Approved for both units in the SER
7 . 9 . 0		NA		Area not addressed in 1981 Standard Review Plan.
8 . 0 . 0	0	C		Approved for both units in SER.
8 . 1 . 0	0	C		Approved for both units in SER.
8 . 2 . 0	0	C		Approved for both units in SER.
8 . 2 . 1	13	C	01	Approved for both units in SER. In SSER13, NRC reviewed TVA's analysis of grid stability on loss of both units. The NRC conclusions in the SER remained valid.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
8 . 2 . 2	21	O	02	8.2.2.1 CONFIRMATORY ISSUE - document additional information in FSAR on control power supplies and distribution system for the Watts Bar Hydro Plant Switchyard In the original 1982 SER, NRC concluded that the offsite power system circuits at the Watts Bar Hydro Plant Switchyard met GDC 17 pending documentation in the FSAR. The information was added to the FSAR. In SSER2, NRC closed the issue. In SSER13, the staff reviewed revised information incorporated into FSAR amendment 71 for both units and concluded that it supported the original conclusion in SSER2. ---------- 8.2.2.2 OUTSTANDING ISSUE involving compliance of design changes to the offsite power system with GDC 17 and 18. In SSER2 and 3, NRC continued the review of the offsite electrical power system. By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, the NRC reviewed the design changes to minimize the probability of losing all AC power, compliance with GDC 17 and minimizing the probability of a two unit trip following a one unit trip. These issues were resolved in SSER13. Additional review was done in SSER14, but the conclusions remained valid. ---------- 8.2.2.3 Compliance with GDC 17 for the Duration of the Offsite System Contingencies By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, NRC reviewed the load shed scheme described in FSAR amendment 71 that reduces loads from common station service transformers A and B including contingency for both units trip and a 161-kV supply contingency. In SSER15, NRC determined that entering the LCO for one offsite circuit inoperable was appropriate. No open items were identified. ---------- 8.2.2.4 Minimizing the Probability of a Two-Unit Trip Following a One-Unit Trip By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In FSAR amendment 71, TVA described the transfer of power sources on trip of a unit's main generator. In SSER13, NRC evaluated the design and determined that the concern was resolved. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
8 . 2 . 3	0	C		Approved for both units in SER.
8 . 2 . 4	0	C		Approved for both units in SER.
8 . 3 . 0	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
8 . 3 . 1	20	S	02	8.3 Fifth Diesel Generator In SSER10, NRC reviewed the design of the fifth diesel generator. In SSER19, NRC accepted TVA's commitment to perform modifications and surveillances including preoperational testing before declaring the fifth diesel generator operable as a replacement for one of the four diesel generators. TVA stated in a submittal dated July 28, 1993, that they did not plan to place the additional diesel generator in service. ---------- 8.3.1.1: CONFIRMATORY ISSUE - incorporate new design that provides dedicated transformer for each preferred offsite circuit in FSAR In the original 1982 SER, NRC concluded that the offsite power system with a dedicated transformer for each preferred offsite circuit met GDC 17 pending documentation in the FSAR. The information was added to the FSAR. In SSER2, NRC closed the issue. In SSER13, NRC reviewed additional changes though FSAR amendment 75 and concluded that the design was acceptable. ---------- 8.3.1 DG Starting and Control Circuit Logic In SSER10, NRC reviewed the DG starting and control circuit logic. No open items were identified. ---------- 8.3.1.2 Low and Degraded Grid Voltage Condition In the SER, NRC stated they would verify the adequacy of TVA's analysis regarding Branch Technical Position PSB-1 once preoperational testing was completed. In SSER13, the NRC reviewed information on the load shed and diesel start relays. In SSER14 NRC clarified the requirements. In SSER20, NRC reviewed the preoperational test for Unit 1. Unit 2 Action: Include the setpoint in the Technical Specifications for the load shed relays and similar minimum limits for the diesel start relays. ---------- 8.3.1.6: CONFIRMATORY ISSUE - provide diesel generator reliability qualification test report In SSER2, NRC indicated that it would verify DG qualification testing. TVA provided a copy of the DG qualification test report. In SSER7, the NRC concluded that the DGs had been satisfactorily tested in accordance with IEEE 387-1977. ---------- 8.3.1.6: LICENSE CONDITION (12) - Diesel generator reliability qualification testing at normal operating temperature In the original 1982 SER, NRC required that the capability of the DGs to start at normal temperature be demonstrated. TVA’s August 31, 1983, letter confirmed tests had been performed on a DG identical to those at WBN. In SSER2, NRC closed the issue. ---------- 8.3.1.7 Possible Interconnection Between Redundant Divisions Through Normal and Alternate Power to the Battery Charger By letter dated June 20, 1991, for both units, NRC requested additional

information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, the NRC reviewed the use of alternate feeders to the battery chargers and inverters and concluded a Technical Specification surveillance for monitoring the position of these supply breakers resolved the item.

Unit 2 Action: Include the surveillance requirement in the Technical Specifications.

8.3.1.10 No-load Operation of the Diesel Generator

By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, the NRC reviewed the information provided and concluded the issue was resolved. In SSER14, NRC added additional clarification but did not change the conclusions.

8.3.1.11 Test and Inspection of the Vital Power System

By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, the NRC reviewed TVA's plan for test and inspection of the vital ac system and concluded the issue was resolved.

8.3.1.12 The Capability and Independence of Offsite and Onsite Sources When Paralleling During Testing

By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, the NRC reviewed the Emergency Diesel Generators response to a loss-of-offsite-power (LOOP). TVA submitted additional information for both units by letters dated February 7, 1994 and June 29, 1994. In SSER14, NRC concluded that the issue was resolved.

8.3.1.13 Use of an Idle Start Switch for Diesel Generators

By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, the NRC reviewed the information presented on the local idle start switch and concluded the issue was resolved.

8.3.1.14 Master Fuse List Program

In SSER9, NRC provided a safety evaluation of the Master Fuse List Special Program (SP) for Unit 1 (Appendix U). In SSER13, NRC referenced the evaluation.

Unit 2 Action: Resolve the SP for WBN Unit 2 with the Unit 1 approach.

REVISION 02 UPDATE:

The status in SSER21 is Open (NRR).

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION

				Revised "SSER18" to "SSER19" item 8.3 above to fix typographical error in Regulatory Framework.

				Developmental Revision A of the Unit 2 Technical Specifications (TS) was submitted on March 04, 2009.
				8.3.1.2: TS Table 3.3.5-1 provides Diesel Generator start and load shed relay trip setpoints and allowable values.
				8.3.1.7: TS surveillance requirements SR 3.8.4.3 and SR 3.8.7.1 provide surveillances to check the alignment of battery charger alternate feeder breakers and inverters.

				8.3.1.14: TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the Master Fuse List Special Program.
				In SSER21 the Containment Cooling SP was resolved. Completion of the Master Fuse List SP is tracked under 23.3.5.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
8 . 3 . 2	14	C	01	8.3.2.2: LICENSE CONDITION – DC monitoring and annunciation system In SSER3, the staff determined that some items were omitted from the design of the DG DC monitoring and annunciation system. By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, NRC closed the issue. ---------- 8.3.2.4: CONFIRMATORY ISSUE - include diesel generator design analysis in FSAR In the original 1982 SER, staff indicated the design analysis for demonstrating compliance of the DGs with regulatory requirements and guidelines was acceptable pending incorporation of the analysis in the FSAR. The analysis was incorporated in the FSAR, and the issue closed in SSER2. By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, NRC indicated that the issue was resolved. ---------- 8.3.2.5 Non-safety Loads Powered from the DC Distribution System and Vital Inverters By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, NRC indicated that the issue was resolved. ---------- 8.3.2.5.1 Transfer of Loads Between Power Supplies Associated with the Same Load Group but Different Units By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, NRC reviewed the information provided. Additional information was requested for both units by letter dated March 28, 1994. TVA responded for both units by letter dated June 29, 1994. In SSER14, NRC indicated that the issue was resolved. ---------- 8.3.2.7 The Fifth Vital Battery System By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, NRC indicated that the issue was resolved. ---------- 8.3.2.8 Reenergizing the Battery Charger from the Onsite Power Sources Versus Automatically Immediately Following a Loss of Offsite Power By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, NRC indicated that the issue was resolved.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
8 . 3 . 3	21	S	02	8.3.3.1.1: CONFIRMATORY ISSUE involving submergence of electrical equipment as result of a LOCA In the original 1982 SER and SSER3, staff stated that the design for the automatic deenergizing of loads as a result of a LOCA would be verified as part of the site visit. During the August 1991, visit and in a letter for both units dated September 13, 1991, TVA committed to revise the FSAR. The information was added to the FSAR in amendment 71. In SSER13, NRC closed the issue. ---------- 8.3.3.1.3 Failure Analysis of Circuits Associated with Cables and Cable Splices Unqualified for Submergence By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, NRC reviewed the submergence calculation and closed the issue. Unit 2 Action: Revise calculation for WBN Unit 2. ---------- 8.3.3.1.2: CONFIRMATORY ISSUE - verify design for bypass of thermal overload protective device In the original 1982 SER, NRC indicated that the design for bypass of thermal overload protective devices on safety-related motor operated valves would be verified during the electrical drawing review. The staff subsequently reviewed the drawings and closed the issue in SSER2. ---------- 8.3.3.1.4 Use of Waterproof Splices in Potentially Submersible Sections of Underground Duct Runs By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13 and 14, NRC raised a concern on splice usage in raceways. TVA submitted additional information for both units by letters dated November 18, 1994, and January 5, 1995. In SSER15, NRC found that TVA had adequately justified the acceptability of the installed splices at Watts Bar. ---------- 8.3.3.1.5 Dow Corning RTV-3140 Used to Repair Damaged Kapton Insulated Conductors In SSER15, NRC reviewed the use of RTV-3140. TVA submitted the technical basis for use in a December 6, 1994, letter for both units. TVA completed additional testing and told the NRC of the limited use of this repair method for both units by letter dated February 10, 1995. In SSER15, NRC found the use of RTV-3140 acceptable for the limited use described. ---------- 8.3.3.1.6 Cable Damage Near Splices and Terminations In SSER16, NRC reviewed TVA's corrective action plan for Construction Deficiency Report 390/95-02 and found the limited inspections for damaged Class 1E cables to 10 CFR 50.49 installations acceptable. This was a WBN Unit 1 only CDR. ----------

8.3.3.2: CONFIRMATORY ISSUE - revise FSAR to reflect requirements of shared safety systems

In the original 1982 SER, the staff stated that the description and analysis of shared onsite AC and DC systems was under review but was acceptable pending revision of the FSAR. In SSER3, the confirmatory issue was left open to track additional information to be incorporated in the FSAR. In a letter dated September 13, 1991, TVA provided the additional information. In SSER13, NRC closed the issue. In SSER14, NRC added additional clarification.

8.3.3.2.2 Sharing of AC Distribution Systems and Standby Power Supplies Between Units 1 and 2

In the SER and SSER3, NRC reviewed the design to the guidelines of RG 1.81 and determined it was acceptable pending revision to the FSAR. NRC noted discrepancies in the FSAR. By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. In SSER13, NRC closed the issue.

8.3.3.2.3: CONFIRMATORY ISSUE for design of sharing raceway systems between units

In the original SER, NRC indicated that the design for sharing of raceway systems between units would be verified during the electrical drawing review. The staff confirmed that cable routing was in accordance with accepted separation criteria and closed the issue in SSER2.

8.3.3.2.4: LICENSE CONDITION – Possible sharing of DC control power to AC switchgear

In the original 1982 SER, staff required that all possible interconnections between redundant divisions through normal and alternate power sources to various loads be identified in the FSAR. TVA letter dated January 17, 1984, provided the information. NRC closed the issue in SSER3.

8.3.3.3: LICENSE CONDITION – Testing of associated circuits

In the original 1982 SER, staff required that protective devices used to isolate non-Class 1E from Class 1E circuits be of high quality commensurate with their importance to safety and be periodically tested. TVA letter dated January 17, 1984, provided the information. NRC closed the issue in SSER3.

8.3.3.3: LICENSE CONDITION – Testing of non-class 1E cables

In the original 1982 SER, staff required that protective devices used to isolate non-Class 1E from Class 1E circuits be of high quality commensurate with their importance to safety and be periodically tested. TVA letter dated January 17, 1984, provided additional information. NRC closed the issue in SSER3.

8.3.3.3 Physical Independence (Compliance with GDC 17)

By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. The information was incorporated into the FSAR by amendment 71. Surveillance requirements for the testing of protective devices used to protect Class 1E circuits from failure of non-Class 1E circuits were incorporated into the Technical Requirements Manual (TRM). This issue was closed based on review of the TRM in SSER13.

Unit 2 Action: Incorporate testing requirements into the Unit 2 TRM.

8.3.3.3 Physical Independence (Compliance with GDC 17)

In SSER13, NRC cited differences between RG 1.75 and the WBN design criteria (WB-DC-30-4). In SSER14, NRC continued the review. NRC requested additional information for both WBN units by letter dated March 28, 1994. TVA responded for both WBN units by letters dated July 29, 1994, January 11, 1995, and June 5, 1995. In SSER16, NRC found separation between open cable trays (including cables in free air) adequate.

8.3.3.5.1 Compliance with Regulatory Guides 1.108 and 1.118

In SSERs 13, 14 and 15, NRC reviewed WBN compliance with RGs 1.108 and 1.118. In SSER13, NRC reviewed WBN's use of temporary jumper wires when portable test equipment is used during testing. The justification was documented in the FSAR. In SSER14 and 15, NRC reviewed Class 1E standby power system testing, testing DG full load rejection capability and non-class 1E circuitry for transmitting signals needed for starting DGs. NRC concluded that the features were appropriately tested.

8.3.3.5.2: CONFIRMATORY ISSUE - incorporate commitment to test only one of four diesel generators at one time

In the original 1982 SER, the NRC found the commitment to test DGs one at a time acceptable pending its incorporation into the FSAR. In SSER2, NRC reviewed the documentation and closed the issue.

8.3.3.5.3 Time Constraints for Stability of EDG During No-Load Startup Testing

In SSER16, NRC reviewed and approved changes to the no load emergency diesel generator testing surveillance requirements.

Unit 2 Action: Incorporate into WBN Unit 2 TS surveillances.

8.3.3.6: CONFIRMATORY ISSUE involving evaluation of penetrations' ability to withstand failure of overcurrent protection device

In the original 1982 SER, staff required a reevaluation of the penetrations' capability to withstand, without seal failure, the total range of available time-current characteristics assuming a single failure of any overcurrent protective device. In SSER3, staff found the results of the evaluation acceptable pending the information being incorporated in the FSAR. The staff reviewed the FSAR and closed the issue for both units in SSER7.

8.3.3.6: LICENSE CONDITION – Testing of reactor coolant pump breakers

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
				In the original 1982 SER, staff required that the redundant fault current protective devices for the reactor coolant pump circuits meet RG 1.63. In SSER2, staff reviewed the design and concluded it met RG 1.63. ---------- 8.3.3.6 Compliance with GDC 50 By letter dated June 20, 1991, for both units, NRC requested additional information on Section 8 of the FSAR. TVA responded for both units by letter dated September 13, 1991. The information was incorporated into the FSAR in amendment 70. In SSER13, NRC indicated that the issue was resolved. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). ---------- Developmental Revision B of the Unit 2 Technical Specifications (TS) and Technical Requirements Manual (TRM) was submitted on February 2, 2010. 8.3.3.3: TRM TR 3.8.1 specifies testing of circuit breakers that are used as isolation devices protecting 1E busses from non-qualified loads. 8.3.3.5.3: TS Sections 3.8.1.7, 3.8.1.12, 3.8.1.15 and 3.8.1.21 require that voltage and frequency remain within specified limits following a fast start.
8 . 4 . 0		**CI**		Station Blackout (SBO) - SE for both units – March 18, 1993; SSE for both units – September 9, 1993. Unit 2 Action: Implement SBO requirements.
8 . 5 . 0		**NA**		Area not addressed in 1981 Standard Review Plan.
8 . 5 . 1		**NA**		Area not addressed in 1981 Standard Review Plan.
9 . 0 . 0	10	**C**	01	In SSER10, the staff completed its review of the additional DG building and that review is documented in Sections 9.2.1, 9.4.5, 9.5, 9.5.1, 9.5.4, 9.5.6, 9.5.7 and 9.5.8 of SSER10.
9 . 1 . 0	5	**C**	01	In response to TVA letters requesting relief from the requirement of 10 CFR 70.24 to have a criticality monitor installed in the fuel storage area until irradiated fuel is placed in the area, the staff granted an exemption from the requirement in SSER5.
9 . 1 . 1	0	**C**		Approved for both units in SER.

*** = See last page for status code definition.**

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
9 . 1 . 2	21	**O**	02	In SSER5, the staff acknowledged notification by TVA of a contract with DOE for DOE to accept spent fuel from WB and stated that they had no more concerns about this issue. In SSER15, the staff reviewed TVA's proposed resolution of the Boraflex degradation issue and found it acceptable. In SSER16, the staff reviewed changes in design basis with respect to placement of fuel assembly, and structural aspects of rack fabrication deficiencies, considering that TVA planned to replace the racks by the first scheduled refueling outage. The staff noted that the replacement racks have approximately the same capacity as the original WB racks. The staff concluded that the proposed changes were acceptable provided that no single rack load exceeded 80% of its original capacity. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
9 . 1 . 3	21	**O**	02	In SSER11, the staff reviewed TVA's revised commitment regarding testing of spent fuel pool cooling pumps and found it acceptable. As a result of a submittal filed as a petition pursuant to 10 CFR 2.206 regarding spent fuel storage safety issues, the staff reevaluated the spent fuel cooling capability at WB considering the identified issues and concluded that the spent fuel cooling system satisfied the requirements of GDC 44 with regard to transferring heat from the spent fuel to an ultimate heat sink under normal operating and accident conditions in SSER15. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
9 . 1 . 4	13	**OV**	01	LICENSE CONDITION – Control of heavy loads (NUREG-0612) The staff noted in SSER3 that they were reviewing TVA's submittals regarding NUREG-0612 and concluded in SSER13 that the license condition was no longer necessary based on their review of TVA's response to NUREG-0612 guidelines for Phase I in TVA letter dated July 28, 1993. Unit 2 Action: Implement NEI guidance on heavy loads.
9 . 1 . 5		**NA**		Addressed in 9.1.4.
9 . 2 . 0	0	**C**		Approved for both units in SER.

*** = See last page for status code definition.**

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
9.2 .1	18	O	01	In SSER9, the staff noted that Amendment 65 indicated that ERCW provided cooling to the instrument room chillers, instead of room coolers and stated that conclusions in the SER and supplements were still valid. In SSER10, the staff reviewed discrepancies between FSAR figures pertaining to the raw cooling water system and its valving and TVA's clarification of these discrepancies, and considered them resolved. In SSER18, the staff concluded that ERCW does not conform to GDC 5 for two-unit operation. Unit 2 Action: Appropriate measures will be taken to ensure that the ERCW system is fully capable of meeting design requirements for two unit operation.
9.2 .2	5	CI	01	CONFIRMATORY ISSUE - relocate component cooling thermal barrier booster pumps above probable maximum flood (PMF) level before receipt of an OL TVA committed to relocate the pumps above PMF level and the staff found this acceptable. Implementation for this issue was resolved for Unit 1 in SSER5 when the staff verified in IR 390/84-20 that the pumps had been relocated. Additionally, IR 390/83-06 and 391/83-05 verified that the 4 booster pumps had been relocated and the construction deficiency reports identifying this issue for both units were closed. Unit 2 Action: Verify relocation of pumps for Unit 2.
9.2 .3	0	C		Approved for both units in SER.
9.2 .4	9	C	01	In SSER9, the staff noted that potable water requirements were incorrectly stated in the SER, but this change did not affect the conclusions reached in the SER.
9.2 .5	0	C		Approved for both units in SER.
9.2 .6	12	C	01	In SSER12, the staff noted that FSAR Amendment 72 revised the reserved amount of condensate for each units auxiliary feedwater system from 2000,000 gallons to 210,000 gallons and that this did not change the conclusions reached in the SER or supplements.
9.3 .0	0	C		Approved for both units in SER.
9.3 .1	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
9.3 .2	21	S	02	LICENSE CONDITION – Post-Accident Sampling System In SSER3, the staff identified the criteria from Item II.B.3 in NUREG-0737 that were unresolved in the SER and reviewed TVA responses for these items. The staff stated that the post-accident sampling system met all of the criteria and was acceptable. They also stated that the proposed procedure for estimating the degree of reactor core damage was acceptable on an interim basis and that TVA would be required to provide a final procedure for estimating the degree of core damage before start-up following the first refueling outage. In SSER5, the staff stated that due to the 5 year delay in WB licensing, TVA should commit to submitting the procedure at an earlier date. TVA submitted a final procedure for estimating degree of core damage by letter dated June 10, 1994, and the license condition was deleted in SSER14. In SSER16, the staff reviewed TVA's revised emergency plan implementing procedure governing the use of the methodology provided in the June 10, 1994, submittal, and other plant data, for addressing degree of reactor core damage and found the methodology and implementing procedure acceptable. Unit 2 Action: Eliminate requirement for Post-Accident Sampling System in Technical Specifications (Identified as CT in NRC letter dated May 28, 2008). ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). ---------- Developmental Revision A of the Unit 2 Technical Specifications (TS) was submitted on March 04, 2009. Rev. 0 of the Unit 1 TS contained 5.7.2.6, "Post Accident Sampling." Amendment 34 to the Unit 1 TS (approved by the NRC on January 14, 2002) deleted 5.7.2.6, "Post Accident Sampling." The markup for Unit 2 Developmental Revision A noted that Unit 2 had deleted 5.7.2.6, "Post Accident Sampling" also.
9.3 .3	0	C		Approved for both units in SER.
9.3 .4	0	C		Approved for both units in SER.
9.4 .0	0	C		Approved for both units in SER.
9.4 .1	9	C	01	In SSER9, the staff clarified control room isolation after activation of SI signal from either unit, or upon detection of high radiation or smoke concentration in outside air supply stream and stated that conclusions reached in SER and supplements were still valid.
9.4 .2	0	C		Approved for both units in SER.
9.4 .3	0	C		Approved for both units in SER.
9.4 .4	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
9.4 .5	21	O	02	In SSER9, the staff reviewed the design of the additional DG building ventilation system (FSAR Amendment 66 submittal dated May 20, 1991, for both units) and determined that conclusion reached in SER was still valid and design was acceptable. In SSER10, the staff had concerns regarding periodic testing of the ventilation system for the additional DG building; muffler room exhaust fan failure or exhaust blockage; missile protection for the muffler fan exhaust structure; and potential for blockage and turbine missile damage of air intake structures. These were all resolved in SSER10, with the exception of the potential for external blockage of the air intake structure by missile impact. In SSER11 the staff found TVA's response and procedural change to address potential blockage of the air intake structure by missile impact acceptable. TVA stated in a submittal dated July 28, 1993, that they did not plan to place the additional diesel generator in service. In SSER14, the staff clarified statements made in the SER by stating that none of the ventilation systems for the ERCW pumping station was safety related, but the failure of both mechanical equipment room ventilation fans would not prevent operation of any safety related equipment. Thus, the conclusions reached in the SER were still valid, and the systems were still acceptable. In SSER16, the staff reviewed design changes to the DG building ventilation system, since the original design was reviewed, and concluded that the judgments made in the SER and supplements did not change and the system was still acceptable. In SSER19, the staff clarified their statements about the diesel engine room exhaust fans, stating that since the fans automatically start when the DG starts, DG testing results in operation of the diesel engine room exhaust fans. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
9.5 .0	10	C	01	In SSER10, the staff reviewed 55 questions previously asked concerning the 4 original DGs for applicability to the additional DG and additional responses from TVA and had no concerns.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
9.5 .1	19	C	01	9.5.1.2: OUTSTANDING ISSUE for Fire Protection Program 9.5.1.3: CONFIRMATORY ISSUE – Electrical penetrations documentation 9.5.1.3: LICENSE CONDITION – Fire protection program In SSER10, the staff noted that the fire hazard analysis for the additional DG building would be included in the WB Fire Protection report. The staff reviewed the building design for compliance with BTP 9.5-1, Appendix A and found it in conformance with the BTP. They also asked TVA to verify that the fire fighting systems installed in the DG building meet GDC 3 and stated that TVA's response satisfied their concerns. In SSER18, the staff concluded that the Fire Protection program for Watts Bar conformed to the requirements of 10 CFR 50.48 and was acceptable except for the fire barrier seal program and emergency lighting inside the Reactor Building. Additionally, the staff considered the confirmatory issue involving electrical penetration documentation resolved in SSER18 on the basis of the safety evaluation of the revised Fire Protection program included in Appendix FF of SSER18. In Appendix FF of SSER19, a safety evaluation of the Fire Protection program contains a detailed evaluation of fire barrier penetration seals. The staff concluded that TVA's penetration seal program adequately demonstrates the fire resistive rating of the penetrations, and that they conform to the guidelines of Positions D.1.j and D.3.d of Appendix A to BTP 9.5.1 and were acceptable. The safety evaluation also includes TVA's revised position on emergency lighting, which was found to be acceptable.
9.5 .2	21	O	02	LICENSE CONDITION – Performance testing of communications system The staff resolved this license condition in SSER5 based on TVA's letter of March 18, 1985 for both units, which described its testing of communications systems. Unit 2 Action: Perform testing of communication systems on Unit 2. --- --- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
9.5 .3	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
9 . 5 . 4	12	C	01	9.5.4.1: CONFIRMATORY ISSUE - include required language in operating instruction to ensure no-load and low-load operation is minimized and revise operating procedures to address increased diesel generator load after it has run for an extended period of time at low or no load In SSER5, the staff verified that plant operating procedures had been revised to incorporate requirements that ensure that operational no-load and low-load conditions will not harm the diesel generators. ---------- 9.5.4.1: LICENSE CONDITION – Diesel Generator reliability The staff verified that the modifications necessary to comply with NUREG/CR-0660 had been completed and, as stated above, requirements had been incorporated into operating procedures. Thus, this license condition was resolved in SSER5. ---------- 9.5.4.1: OUTSTANDING ISSUE for staff to complete review to determine if diesel generator auxiliary support systems can perform their design safety functions under all conditions, after receipt of all requested information. In SSER5, the staff resolved the issue of the completeness of its review of the emergency diesel engine lubrication oil system. ---------- 9.5.4.1: OUTSTANDING ISSUE to design skid-mounted piping and components from the day tank to the diesel engine as seismic Category I and to ASME Section III, Class 3 The staff reviewed standards to which emergency diesel engine skid mounted auxiliary system piping and associated components were designed, as well as the testing and inspections to be performed on these systems, as provided in TVA letters dated February 15, 1985, March 18, 1985, and August 30, 1985, and concluded that they were acceptable in SSER5. The staff considered this issue resolved. They stated that this resolution applied to the fuel oil, cooling water, air starting, lubrication, and combustion air intake and exhaust systems (9.5.4.2, 9.5.5, 9.5.6, 9.5.7 and 9.5.8). ---------- 9.5.4.2: CONFIRMATORY ISSUE - provide missile protection for fuel oil storage tank vent lines The staff found TVA's commitment to provide missile protection for the fuel oil storage tank vent lines acceptable and verified that the protection had been installed and considered this issue resolved in SSER5. ---------- In SSER9, the staff stated that the conclusions reached in the SER, SSER3 and SSER5 regarding the EDG auxiliary supports systems applied to the additional EDG. This conclusion applied to sections 9.5.5, 9.5.6, 9.5.7 and 9.5.8, as well. In SSER10, the staff questioned tornado missile protection and seismic requirements for the additional DG fuel oil storage tank fill lines and found TVA's response acceptable. The staff questioned the difference between the design of the fuel oil transfer pump for the additional DG and the design of the DG building storage pumps, and found TVA's explanation and proposed clarification to the FSAR acceptable. TVA stated in a submittal dated July 28, 1993, that they did not plan to place the additional diesel generator in service. In SSER11, the staff noted the revised capacity of the 7-day fuel oil storage

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
				tank identified in FSAR Amendment 69 and stated that it still exceeded the amount needed for a 7-day supply and, therefore, did not affect the staff's conclusions reached in the SER or supplements. In SSER12, the staff determined that the fire watch required when routing a hose from a fuel oil delivery vehicle to the DG tank manway openings in the DG building was no longer required based on TVA actions in response to other fire protection requirements. ---------- ---------- The status in SSER21 is Open (NRR).
9.5 .5	11	C	01	OUTSTANDING ISSUE to design engine cooling water system piping and components for all engines up to the engine interface, including auxiliary skid mounted piping, to ASME Section III, Class 3 The staff reviewed standards to which emergency diesel engine skid mounted auxiliary system piping and associated components were designed, as well as the testing and inspections to be performed on these systems, and concluded that they were acceptable in SSER5. The staff considered this issue resolved. This resolution applies to the fuel oil, cooling water, air starting, lubrication, and combustion air intake and exhaust systems. ---------- In SSER5, the staff also resolved concerns regarding ambient DG room temperature and its impact on pre-heating DG units, the time period the DG is capable of operating fully loaded without secondary cooling, and the possibility of the cooling water system becoming air bound due to the expansion tank location. In SSER11, the staff noted that FSAR Amendment 70 stated that coolant temperature would be maintained between 125 and 155 degrees F, not the 115 and 125 stated in the SER. They stated that this clarification did not alter the staff's conclusions previously reached in the SER or its supplements.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
9 . 5 . 6	21	O	02	OUTSTANDING ISSUE to design engine air-starting system piping components for all engines up to the engine interface, including auxiliary skid mounted piping, to ASME Section III, Class 3 The staff reviewed standards to which emergency diesel engine skid mounted auxiliary system piping and associated components were designed, as well as the testing and inspections to be performed on these systems, and concluded that they were acceptable in SSER5. The staff considered this issue resolved. This resolution applies to the fuel oil, cooling water, air starting, lubrication, and combustion air intake and exhaust systems. ---------- In SSER10, the staff questioned protection of the additional DG electrical starting system components from water spray, and whether diesel engine control functions supplied by the air starting system could interfere with the engines' ability to perform its safety function once it has started. TVA stated in a submittal dated July 28, 1993, that they did not plan to place the additional diesel generator in service. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
9 . 5 . 7	21	O	02	OUTSTANDING ISSUE to perform additional modification, or provide justification for acceptability of proposed modification, to ensure lubrication of all wearing parts of the diesel engine either on an interim or continuous basis and to provide a more detailed description of the lubricating oil system and a description of the diesel engine crankcase explosion protection features In response to a staff concern regarding dry diesel engine starting, TVA proposed using the manufacturers' modification and provided justification for its ability to ensure lubrication of all parts of the diesel engine. The staff found this acceptable in SSER3. TVA submittal of March 18, 1985, responded to a staff request to describe the features that protect the diesel engine crankcase from exploding. In SSER5, on the basis of this submittal, the staff concluded that the emergency diesel engine lubrication oil system can perform its safety function and is acceptable. This issue was resolved. ---------- OUTSTANDING ISSUE to design standby diesel engine lube oil system piping and components up to the engine interface, including skid mounted piping, to ASME Section III, Class 3 The staff reviewed standards to which emergency diesel engine skid mounted auxiliary system piping and associated components were designed, as well as the testing and inspections to be performed on these systems, and concluded that they were acceptable in SSER5. The staff considered this issue resolved. This resolution applies to the fuel oil, cooling water, air starting, lubrication, and combustion air intake and exhaust systems. ---------- In SSER10, the staff questioned the ability to replenish the additional DG lube oil system without interrupting operation of the DG and found TVA's provision to replenish lube oil acceptable. TVA stated in a submittal dated July 28, 1993, that they did not plan to place the additional diesel generator in service. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
9 . 5 . 8	21	O	02	OUTSTANDING ISSUE to design standby diesel engine combustion air intake and exhaust system piping and components up to the engine interface to ASME Section III, Class 3 and recommendations of RG 1.26 The staff reviewed standards to which emergency diesel engine skid mounted auxiliary system piping and associated components were designed, as well as the testing and inspections to be performed on these systems, and concluded that they were acceptable in SSER5. The staff considered this issue resolved. This resolution applies to the fuel oil, cooling water, air starting, lubrication, and combustion air intake and exhaust systems. ---------- In SSER10, the staff expressed a concern regarding products of combustion from a fire in the air intake/muffler room, or from the DG exhaust gases, impacting the additional DG or the other DGs. TVA's response addressed the concern. The staff also questioned inspection, surveillance and testing of the DG exhaust system and found the system design adequate to address their concern. In addition, the staff questioned pressure losses through the DG air intake and exhaust systems and determined that their designs were acceptable. TVA stated in a submittal dated July 28, 1993, that they did not plan to place the additional diesel generator in service. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
10 . 0 . 0	0	C		Approved for both units in SER.
10 . 1 . 0	0	C		Approved for both units in SER.
10 . 2 . 0	21	O	02	In SSER5, the staff agreed that the interval between periodic turbine valve testing could be increased for WB from weekly to monthly. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
10 . 2 . 1	12	C	01	In SSER12, the staff reviewed the revised description of the 3 independent overspeed turbine trip systems, consistent with FSAR Amendment 77, and stated that this review did not alter the conclusions reached in the SER and the system remained acceptable.
10 . 2 . 2	0	C		Approved for both units in SER.
10 . 3 . 0	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
10 . 3 . 1	21	O	02	In SSER12, the staff described changes to the MSIV closing signals as a result of changes to the Eagle-21 process protection system. They stated that the conclusions reached in the SER were still valid and the main steam system remained acceptable. In SSER19, the staff evaluated a revision in FSAR Amendment 91 to the closure time of the MSIVs from 5 seconds after receiving a closure signal to 6 seconds and concluded it was acceptable. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
10 . 3 . 2	0	C		Approved for both units in SER.
10 . 3 . 3	0	C		Approved for both units in SER.
10 . 3 . 4	5	S	02	LICENSE CONDITION – Secondary water chemistry monitoring and control program The staff determined that the secondary water chemistry monitoring and control program was being included in the administrative section of the Technical Specifications and resolved this for Unit 1 in SSER5. Unit 2 Action: Take same action for Unit 2. ---------- ---------- REVISION 02 UPDATE: Developmental Revision A of the Unit 2 Technical Specifications (TS) was submitted on March 04, 2009. Section 5.7.2.13 provides information about the Secondary Water Chemistry Program.
10 . 4 . 0	0	C		Approved for both units in SER.
10 . 4 . 1	9	C	01	In SSER9, the staff clarified the description of the main condenser and stated that this clarification did not affect the conclusion reached in the SER.
10 . 4 . 2	0	C		Approved for both units in SER.
10 . 4 . 3	0	C		Approved for both units in SER.
10 . 4 . 4	21	O	02	In SSER5, the staff concluded that periodic stroking of the turbine bypass system valves may be performed according to plant operating procedures and no Technical Specification was necessary to ensure this testing. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
10 . 4 . 5	0	C		Approved for both units in SER.
10 . 4 . 6	0	C		Approved for both units in SER.
10 . 4 . 7	14	C	01	In SSER14, the staff evaluated changes that TVA made in Amendment 82 to the FSAR adding a new feedwater isolation signal and clarifying the isolation signal generated by a reactor trip, and stated that the revisions did not affect the conclusions reached in the SER. The staff also corrected an unrelated error they made in the SER regarding the time for the main feedwater regulation valves to close after receipt of a feedwater isolation signal and stated that the conclusions reached in the SER remained valid.
10 . 4 . 8	0	C		Approved for both units in SER.
10 . 4 . 9	14	C	01	In SSER14, the staff discussed reductions in auxiliary feedwater pump design-basis flow rates and new minimum flow requirements. They reviewed TVA's reanalysis of design-basis events and concluded that the revised flow rates were acceptable and the conclusions reached in the SER remained valid.
11 . 0 . 0	0	C		Approved for both units in SER.
11 . 1 . 0	16	OV	01	This item remains open pending closure of 11.4.0 and 11.5.0
11 . 2 . 0	16	C	01	In SSER4, the staff evaluated the revised description contained in FSAR Revision 49 and 54 and determined that the conclusions reached in the original SER were not affected by the revisions. In SSER16, the staff superseded its previous review of the liquid waste management system. The staff concluded that TVA had submitted sufficient design information for both Units 1 and 2 liquid waste management system in accordance with 10 CFR 50.34a requirements and that the LWMS for Watts Bar Units 1 and 2 met the acceptance criteria of SRP Section 11.2 and was, therefore, acceptable.
11 . 3 . 0	16	C	01	In the SER, the staff identified that the hydrogen and oxygen monitoring system did not meet the acceptance criteria because redundant monitors had not been provided and because the system was not designed to automatically initiate action to mitigate the potential for explosion in the event of high oxygen content. This issue was addressed by Technical Specifications discussed in the original SER and in SSER8 but was later resolved in SSER16. Based upon NRC review of TVA's February 17, 1995, letter (submitted on both dockets), the staff accepted the WBN's system approach of preclusive of gas buildup, as allowed by SRP Section 11.3 guidelines, if TVA submitted an administrative program to satisfy administrative controls for TS 5.7.2.15, "Explosive Gas and Storage Tank Radioactivity Monitoring Program." As stated in TVA's letter dated July 21, 1995, the program would provide for monitoring and control of potential explosive mixtures, limit the concentration of oxygen, and surveillance to ensure that the limits are not exceeded. As a result of an SSER16 review, the staff concluded that the GWMS for Watts Bar Units 1 and 2 met the acceptance criteria of SRP Section 11.3 and was acceptable.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
11 . 4 . 0	16	**OV**	01	On the basis of its review in SSER16, the staff found the process control program for Watts Bar acceptable and concluded that the solid waste management system for Watts Bar Unit 1 conformed to the acceptance criteria of SRP Section 11.4 and was, therefore, acceptable. Unit 2 Action: Provide system description and information on QA provisions for Unit 2 Solid Waste Management System and information on the Process Control Program.
11 . 5 . 0	20	**OV**	01	In SSER16, the staff updated its review to Amendment 89, and TVA's submittal dated February 17, 1995. The staff concluded that the process and effluent radiological monitoring and sampling system for Watts Bar Unit 1 complied with 10 CFR 20.1302 and GDCs 60, 63, and 64. The staff also concluded that the system design conformed to the guidelines of NUREG-0737, RGs 1.21 and 4.15, and applicable guidelines of RG 1.97 (Rev. 2). Thus, the system met the acceptance criteria of SRP Section 11.5 and was, therefore, acceptable. In SSER20, the staff agreed that TVA did not commit to RG-4.15, Revision 1 as reflected in TVA's July 21, 1995 letter. In that letter, TVA had stated that the radiation monitoring system generally agrees with and satisfies the intent of the RG 4.15 except for specific calibration techniques and frequencies. The staff then reiterated its earlier finding stated in SSER16, Section 11.5.1, that the radiation monitoring system for Watts Bar Unit 1 meets the intent and purpose of RG 4.15, with respect to quality assurance provisions for the system. The staff modified one sentence from SSER16 and then concluded by stating that the other conclusions given in SSER16 continued to be valid. Unit 2 Action: Provide system description and information on QA provisions for the Unit 2 Radiation Monitoring System
11 . 6 . 0	21	**O**	02	In SSER8, the staff reviewed the preoperational REMP program provided by letter dated June 14, 1991 (submitted for both dockets) The staff concluded in SSER Section 1.6.1, "Offsite Radiological Monitoring Program," that the Watts Bar preoperational REMP as proposed was adequate to provide baseline data which will assist in verifying radioactivity concentrations and related public exposures during plant operation, and was therefore acceptable. The staff provided a safety evaluation for both units via a September 10, 1991 letter. In SSER16, the staff superseded previous evaluations provided in this section by Sections 11.1 through 11.5 of this supplement, except for the material in Section 11.6.1 of SSER8, which was unaffected by supplement 16. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
11 . 7 . 0	0	**OT**	01	This item will remain open pending resolution of Item 11.7.2.

*** = See last page for status code definition.**

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
11 . 7 . 1	21	CI	02	LICENSE CONDITION (6a) - Accident monitoring instrumentation II.F.1 – Noble Gas monitor In SSER5, TVA submitted letter dated April 26, 1985, on the Unit 1 docket which stated that the Unit 2 shield building vent monitor could not be installed by the time Unit 1 fuel load was scheduled in 1985 because of procurement problems. Since the 1985 fuel load was delayed, TVA subsequently committed in letter dated October 11, 1990, that this monitor and its sampler would be operational before fuel was loaded in Unit 1. This commitment eliminated the staff's concern and resolved the proposed License Condition 6a. Also, in SSER5, TVA letter dated November 8, 1983 (submitted on both Unit 1 and Unit 2 dockets) requested an exception to the requirement to monitor pressurized-water reactor steam safety valve discharge and atmospheric steam dump valve discharge to be monitored by high-range noble gas effluent monitors by stating that adequate instrumentation was provided to detect a steam generator tube rupture. The staff disagreed with this approach which resulted in TVA subsequently committing in a letter dated October 11, 1990 (submitted on both dockets) that the required high range noble gas effluent monitor would be operational before fuel load. This commitment resolved the staff's concern and eliminated the need for License Condition 6a. ---------- LICENSE CONDITION (6b) - Accident monitoring instrumentation II.F.1 – Iodine particulate sampling See 7.5.2. In addition, in SSER5, by letter dated April 26, 1985, submitted on the Unit 1 docket, TVA committed to have the capability for continuous collection in place (i.e., procedures and any minor system modifications necessary) before exceeding 5-percent power. The staff evaluated this commitment and found it acceptable. Since 1985 licensing of Watts Bar was delayed, TVA subsequently committed via letter dated January 3, 1991, as discussed in SSER6 that the procedural revision and upgrade of the radiation monitors would be done by Unit 1 fuel load. Thus License Condition 6b was resolved in SSER6. In SSER6, TVA via letter dated January 3, 1991, committed to have the procedural revision and upgrade of the radiation monitors by fuel load. This commitment ensured the plant would have the capability for continuous collection of post accident gaseous effluents by fuel load. ---------- In SSER5, the staff noted that the WBN design did not include a high-range noble gas effluent monitor as described in NUREG-0737, Item II.F.1, Attachment 1, for the auxiliary building vent because the release is diverted to the shield building vent for design-basis accidents. A low-range to high-range radiation monitor is provided in the shield building ventilation stack. By letter dated November 22, 1983, TVA requested an exception to NUREG-0737, Item II.F.1, concerning the installation of high-range noble gas monitors on the auxiliary building vent at Watts Bar. TVA provided the staff additional information at a meeting on December 20, 1983, and subsequently in a submittal dated January 24, 1984. The staff concluded that the auxiliary building vent was not considered to be a potential accident release pathway and, therefore, the Watts Bar Nuclear Plant design, as described above, does not need to be changed to provide for the addition of a high-range noble gas effluent monitor, as described in NUREG-0737, Item II.F.1, Attachment 1, for the auxiliary building vent. The above items were identified as CI by NRC in May 28, 2008, letter. ---------- ----------

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
				REVISION 02 UPDATE: The status in SSER21 is Open (Inspection).
11 . 7 . 2	16	**S**	02	NUREG-0737, III.D.1.1, “Primary Coolant Outside Containment” - Resolved for Unit 1 only in SSER10; reviewed in Appendix EE of SSER16. Unit 2 Actions: Include the waste gas disposal system in the leakage reduction program and incorporate in Unit 2 Technical Specifications. ---------- In SSER5, TVA by letter dated October 4, 1984, submitted a justification for excluding the waste gas system from the leak reduction program under NUREG-0737, Item III.D.1.1. The staff has evaluated the TVA's submittal and found that sufficient information had not been submitted to provide assurance that significant quantities of radioactive materials would not enter the waste gas system in the event of an accident. On this basis, the staff concluded that the leakage reduction program was acceptable if the following systems were to be included leakage reduction program: (1) residual heat removal, (2) containment spray, (3) safety injection, (4) chemical and volume control, (5) sampling, and (6) waste gas. The staff proposed License Condition 24 and would be resolved if TVA accepted the change as stated above. In SSER6, the staff reviewed TVA’s letter dated March 27, 1986, and agreed that TVA had justified excluding the WGDS from the program. In SSER10, the staff resolved Condition 24, when upon review of TVA letter dated August 27, 1992, they noted that WGDS specification was included in the draft TS Section 5.7.2. ---------- ---------- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS 5.7.2.4 is the Primary Coolant Sources Outside Containment program. This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. This program includes the "Waste Gas" system.
12 . 0 . 0	14	**C**		Approved for both units in SER.
12 . 1 . 0	21	**O**	02	In SSER10, the staff updated its evaluation based upon review of FSAR Amendments 65 through 71 and TVA letter dated January 3, 1991 submitted on U1 docket only. The staff acknowledged that TVA would soon revise FSAR again due to reflect recent changes to 10 CFR Part 20. In SSER14, the staff reviewed the revised FSAR to reflect the 10 CFR Part 20 changes. Details of the staff's review are delineated in the sections that follow. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).

*** = See last page for status code definition.**

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
12 . 2 . 0	21	O	02	In SSER14, the staff reviewed the revised FSAR discussion of ALARA design and operational considerations in this section that were made to clarify that the total effective dose equivalent for each individual would be maintained ALARA. As revised, FSAR Section 12.1 was consistent with the requirements in 10 CFR 20.1101 and 20.1702 and was, therefore, acceptable to the staff. REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
12 . 3 . 0	21	O	02	In SSER14, the staff reviewed the revised FSAR descriptions of the radioactive sources expected to result from normal plant operations, anticipated operational occurrences, and accident conditions. The staff concluded that the descriptions of plant radioactive sources, as revised, conformed to the acceptance criteria in SRP Section 12.2 and were, therefore, acceptable to the staff. REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
12 . 4 . 0	21	O	02	In SSER10, the staff reviewed revised operational test frequency of area radiation monitors from monthly to quarterly and found that TVA's program met the provisions of 10 CFR 20.1601(c) and the acceptance criteria in SRP Section 12.3 and was, therefore, acceptable. In SSER14, the staff reviewed FSAR Amendment 84 in light of the revised requirements of 10 CFR Part 20. The staff found these sections, as amended, complied with the acceptance criteria in the SRP and was acceptable to the staff. In addition, the staff reviewed revised FSAR Section which specified the radiation dose rate design criteria for the placement and configuration of plant system valves This section as amended was consistent with the staff's conclusion that Watts Bar can be operated within the dose limits and that radiation doses can be maintained ALARA. Therefore, these changes were acceptable to the staff. In SSER18, the staff reviewed FSAR Amendments 89 and 90 in which TVA had revised the discussions of the installed area radiation monitoring and the fixed airborne radiation monitoring systems. In addition, Amendment 90 revised the estimated maximum radiation dose rates depicted on the radiation zone maps for several areas in the plant. The staff also reviewed FSAR text changes that clarified the distinctions between a monitor calibration, a monitor channel operational test, and a check source functional test and deleted discussions of fixed airborne radiation monitors in the Unit 2 hot sample room and the Unit 1 control room and were replaced with portable continuous air monitors (CAMs). The staff found this acceptable since it did not change the staff's conclusion documented in SSER14. REVISION 02 UPDATE: The status in SSER21 is Open (NRR).

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
12 . 5 . 0	21	O	02	In SSER14, the staff reviewed FSAR Amendment 88 which revised the discussion of the estimate of personnel internal exposures to address the new 10 CFR Part 20 requirements. The staff concluded that this section as amended provided reasonable assurance that the requirements of 10 CFR 20.1502 and 20.1703 would be met. In addition, the staff reviewed FSAR Amendment 84 which updated the predicted maximum annual doses resulting from plan operation and determined that this section as amended provides reasonable assurance that the radiation doses resulting from plant operations would not exceed the limits in 10 CFR 20.1301. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
12 . 6 . 0	21	O	02	OUTSTANDING ISSUE involving Health Physics Program The staff reviewed TVA's RADCON program (formerly the HP program) and found that the WBN organizational structure can provide adequate support for the RADCON program and that organizational changes described in the FSAR amendments met the staff's acceptance criteria. They considered this issue resolved in SSER10. In SSER14, the staff reviewed the revised FSAR sections (through Amendment 88), and found them acceptable. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
12 . 7 . 0	0	C		Approved for both units in SER.
12 . 7 . 1	21	O	02	NUREG-0737, II.B.2, "Plant Shielding" - NRC reviewed in Appendix EE of SSER16. In SSER14, the staff reviewed FSAR Amendment 88 which revised the discussion of shielding for accident conditions. The staff stated that this change did not affect the staff's previous conclusion that Watts Bar conformed to the positions in NUREG-0737 Item II.B.2, and was therefore, acceptable to the staff. Identified as CI in NRC letter dated May 28, 2008. Unit 2 Action: Complete Design Review of EQ of equipment for spaces/systems which may be used in post accident operations. CI in NRC May 28, 2008, letter. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
12 . 7 . 2	21	O	02	NUREG-0737, II.F.1.2.C., "Accident Monitoring Instrumentation" - In SSER5, the staff resolved this license condition for Unit 1 (IR 390/84-09 & IR 390/84-28) due to verification that TVA's commitments regarding the high range in-containment monitor were satisfactory and that it was installed. Identified as CI in NRC letter dated May 28, 2008. Unit 2 Action: Install high range in-containment monitor for Unit 2. CI in NRC May 28, 2008, letter. REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
12 . 7 . 3	21	O	02	NUREG-0737, III.D.3.3, "In-plant Monitoring of I2 radiation monitoring" - NRC reviewed in Appendix EE of SSER16. Identified as CI in NRC letter dated May 28, 2008. Unit 2 Action: Complete modifications for Unit 2. CI in NRC May 28, 2008, letter. REVISION 02 UPDATE: The status in SSER21 is Open (NRR).
13 . 0 . 0	0	C		Approved for both units in SER.
13 . 1 . 0	16	C	01	In SSER16, NRC reviewed the organizational information presented in TVA Topical Report TVA-NPOD89. NRC approval of the topical report and its revisions superseded the staff review in the SER.
13 . 1 . 1	0	C		Approved for both units in SER.
13 . 1 . 2	0	C		Approved for both units in SER.
13 . 1 . 3	8	O	01	LICENSE CONDITION – Use of experienced personnel during startup In the original 1982 SER, NRC provided a LICENSE CONDITION to ensure TVA augmented the shift staff with individuals that had prior experience with large pressurized water reactor operations. In SSER8, NRC reviewed TVA's commitment in the FSAR and the Nuclear Quality Assurance Plan to comply with RG 1.8, "Personnel Selection and Training,". NRC staff considered that this provided adequate assurance, and eliminated the LICENSE CONDITION. Unit 2 Action: Submit staffing and NQAP for two unit operation.
13 . 2 . 0	0	C		Approved for both units in SER.
13 . 2 . 1	10	C	01	In SSER9, NRC reviewed TVA's certification for licensed operator training programs and FSAR Chapter 13 revision to reflect the training program . NRC determined that these were acceptable. In SSER10, NRC reviewed changes to the initial test program for TMI Item I.G.1, "Training During Low Power Testing." NRC found the training requirement satisfied.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
13 . 2 . 2	0	C		Approved for both units in SER.
13 . 3 . 0	13	O	01	In SSER13, NRC reviewed the Watts Bar Nuclear Plant Radiological Emergency Plan submitted February 12, 1993. This review superseded the review in the SER. Unit 2 Action: Submit WBN REP for two unit operation.
13 . 3 . 1	20	O	01	In SSER13, NRC reviewed the Watts Bar Nuclear Plant Radiological Emergency Plan submitted February 12, 1993. This review superseded the review in the SER. In SSER20, NRC completed the review including the findings of the Federal Emergency Management Agency. Unit 2 Action: Submit WBN REP for two unit operation.
13 . 3 . 2	20	O	01	In SSER13, NRC reviewed the Watts Bar Nuclear Plant Radiological Emergency Plan submitted February 12, 1993. This review superseded the review in the SER. In SSER13, the staff concluded that the WBN Radiological Emergency Plan (REP) provided an adequate planning basis for an acceptable state of onsite emergency preparedness. In SSER20, NRC completed the review and found that the REP complied with NRC requirements and was acceptable for the full-power license of WBN Unit 1. Unit 2 Action: Submit WBN REP for two unit operation.
13 . 3 . 3	20	O	01	LICENSE CONDITION – Emergency Preparedness (NUREG-0737, III.A.1, III.A.2, III.A.2) The NRC review of Emergency Preparedness in SSER13 superseded the review in the original 1982 SER. In SSER13, the staff concluded that the WBN Radiological Emergency Plan (REP) provided an adequate planning basis for an acceptable state of onsite emergency preparedness, and the LICENSE CONDITION was deleted. In SSER20, NRC completed the review and found that the REP complied with NRC requirements and was acceptable for the full-power license of WBN Unit 1. Unit 2 Action: Submit WBN REP for two unit operation.
13 . 4 . 0	8	OV	01	LICENSE CONDITION - Independent Safety Engineering Group (ISEG) (NUREG-0737, I.B.1.2) In SSER8, NRC indicated that the ISEG would be established as part of the Technical Specifications. Resolved for Unit 1 only in SSER8. Unit 2 action: Implement the alternate ISEG that was approved for the rest of the TVA units including WBN Unit 1 by NRC on August 26, 1999. The function will be performed by the site engineering organizations.
13 . 5 . 0	0	C		Approved for both units in SER.
13 . 5 . 1	21	O	02	Approved for both units in SER. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
13 . 5 . 2	21	CI	02	OUTSTANDING ISSUE involving operating, maintenance and emergency procedures In the original 1982 SER, this issue was used to track the staff's review of the emergency operating procedures generation package. In SSER9, the staff concluded that the outstanding issue was no longer needed as the staff no longer performed such reviews. The emergency operating procedure development program review is performed under IP 42000, "Emergency Operating Procedures." This inspection will be performed before issuance of an operating license. In SSER10, NRC reviewed TVA's plan for vendor review of the power ascension test procedures and the Emergency Operating Instructions (EOIs). Based on the Watts Bar plant specific simulator, NRC determined that a License Condition to ensure consistency with the Sequoyah EOIs was no longer necessary. Unit 2 Action: Issue operating, maintenance and emergency procedures. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (Inspection).

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
13 . 5 . 3	21	S	02	LICENSE CONDITION – Report on outage of emergency core cooling system (NUREG-0737, II.K.3.17) In the original 1982 SER, the NRC accepted TVA's commitment to develop and implement a plan to collect emergency core cooling system outage information. In SSER3, the staff accepted a revised commitment from an October 28, 1983, letter to participate in the nuclear power reliability data system and comply with the requirements of 10 CFR 50.73. ---------- Reporting of Safety Valve and Relief Valve Failures and Challenges (II.K.3.3) In SSER16, NRC reviewed TVA revised commitment to report failures and challenges to PORVs and safety valves in accordance with the Technical Specifications. Unit 2 Action: Include, as necessary, in the Technical Specifications. CT in NRC May 28, 2008, letter. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (Inspection). ---------- Developmental Revision A of the Unit 2 Technical Specifications (TS) was submitted on March 04, 2009. Rev. 0 of the Unit 1 TS contained 5.9.4 (Monthly Operating Reports) which implemented the above commitment for Unit 1. Amendment 57 to the Unit 1 TS (approved by the NRC on March 21, 2005) deleted this section of the TS. The markup for Unit 2 Developmental Revision A noted that Unit 2 will apply this change, and the Unit 2 TS will contain no requirement for Monthly Operating Reports.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
13 . 6 . 0	21	O	02	OUTSTANDING ISSUE to file appropriate revision to the Physical Security Plan In the original 1982 SER, the staff identified certain outstanding issues with TVA's Physical Security Plan. In SSER1 NRC evaluated revisions to the plan submitted July 29, 1982. In SSER15, NRC provided a safety evaluation that concluded that WBN conforms to the requirements of 10 CFR 50.73. ---------- LICENSE CONDITION – Physical security of fuel in containment In SSER1, part of the Physical Security Plan (PSP) was not in accordance with the regulation. TVA submitted a new PSP on June 17, 1992. In SSER10, the staff concluded that the provisions for protection of the containment during major refueling and maintenance met the intent of the regulation. ---------- LICENSE CONDITION - Land Vehicle Bomb Control Program In SSER20, NRC added a license condition for WBN Unit 1 to fully implement the Surface Vehicle Bomb Rule by February 17, 1996. TVA letter to NRC dated February 15, 1996, (submitted for both units) notified NRC that Watts Bar had fully implemented the program. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR).

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
14 . 0 . 0	21	S	02	LICENSE CONDITION – Report changes to Initial Test Program In the original 1982 SER, this LICENSE CONDITION was intended to require TVA report to NRC within 30 days of modifying an approved initial test. In SSER7, the NRC accepted a commitment in TVA's July 1, 1991, letter to notify NRC within 30 days of any changes to the Startup Test Program made under 10 CFR 50.59. Unit 2 action: Notify NRC within 30 days of any changes to the Startup Test Program made under 10 CFR 50.59. ---------- In SSER3, the staff reviewed additional information and FSAR amendments through 46 addressing concerns identified by the staff in the FSAR. They concluded in SSER3 that the Initial Test Program (ITP), with the exception of open items as a result of modifications made to the program in subsequent amendments (through 53) for which the staff requested additional information, would meet the acceptance criteria of SRP section 14.2 and successful completion of the program would demonstrate functional adequacy of structures, systems and components. In SSER5, the staff reviewed TVA submittals to address the open items from SSER3 and FSAR amendments through 55, and concluded that the program met the acceptance criteria of the SRP and was acceptable. In SSER9, the staff stated that TVA commitments to reinstate the loss-of-offsite-power test for Unit 2 and revise the acceptance criteria for the reactor building purge system air flow rate (TVA letter dated July 10, 1991, for both units) were found acceptable to address two issues identified by the staff during their review of the FSAR through Amendment 67. In SSER10, the staff agreed with TVA that there was no need to perform any natural recirculation test for Units 1 and 2 (See subsection 5.4.3.) In SSER12, the staff evaluated the ITP based on Amendment 74 to the FSAR, which addressed most of the staff's concerns raised during review of Amendment 69, in which the ITP was completely revised. The staff found that Chapter 14, as revised by Amendment 74, was generally adequate and in accordance with review criteria with the exception of 7 items, which would be evaluated in later supplements. In SSER14, the staff evaluated changes made by TVA in Amendments 84 and 86, as well as 5 TVA letters submitted during 1994 to resolve the issues identified by the staff in SSER12, and changes made in FSAR Amendment 88 to address concerns still open prior to that amendment. The staff found that, with the exception of open items that remained open pending receipt and review of TVA's responses, the WB Units 1 and 2 ITP description contained in FSAR Chapter 14, updated through Amendment 88, was generally comprehensive and encompassed the major phases of the program requirements. In SSER16, SSER18 and SSER19, the staff evaluated the ITP through amendments 89, 90 and 91 respectively and stated each time that it found the program to be comprehensive and encompassing the major phases of the testing program guidance presented in the SRP. ---------- A Unit 2 issue to verify capability of each common station service transformer to carry load required to supply ESF loads of 1 unit under LOCA condition in addition to power required for shutdown of non-accident unit was raised in SSER14, and the NRC stated that before an OL can be issued for Unit 2, TVA would have to demonstrate the capability of each CSST to carry the loads of one unit under LOCA conditions in addition to power required for shutting down the non-accident unit. TVA agreed with the NRC position in a January 5, 1995, letter and the issue was resolved in SSER16.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
				Unit 2 action: Amend FSAR Chapter 14 to reflect the capability of each CSST to carry the loads of one unit under LOCA conditions in addition to power required for shutting down the non-accident unit. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (Inspection). ---------- Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Table 14.2-1 was revised to clarify the testing requirement.
15 . 0 . 0	0	**C**		Approved for both units in SER.
15 . 0 . 1		**NA**		Area not addressed in 1981 Standard Review Plan.
15 . 0 . 2		**NA**		Area not addressed in 1981 Standard Review Plan.
15 . 1 . 0	0	**C**		Approved for both units in SER.
15 . 1 . 1		**NA**		Addressed in 15.2.1
15 . 1 . 2		**NA**		Addressed in 15.2.1
15 . 1 . 3		**NA**		Addressed in 15.2.1
15 . 1 . 4		**NA**		Addressed in 15.2.1
15 . 1 . 5		**NA**		Addressed in 15.2.1 and 15.4.2.
15 . 2 . 0	0	**S**	02	Approved for both units in SER. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.

*** = See last page for status code definition.**

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
15 . 2 . 1	14	S	02	In SSER13, NRC reviewed TVA's use of the FACTRAN computer code for LOCA temperature distribution. NRC concluded that the transient analysis was acceptable. In SSER14, NRC approved the trip time delay functional upgrade as part of the Eagle 21 process protection system for low-low steam generator reactor trip. TVA letter dated December 5, 2007, informs NRC of intent to use Eagle-21 for Unit 2. NRC requested additional information December 27, 2007. TVA provided the requested information by letter dated February 28, 2008. By letter dated May 7, 2008, NRC provided a list of specific issues to be addressed in a future amendment application for Eagle-21 for WBN Unit 2. Unit 2 Action: Provide the additional information for NRC review. ---------- ---------- REVISION 02 UPDATE: TVA responded to the NRC request for additional information on Eagle-21 by letter dated August 25, 2008.
15 . 2 . 2	0	C		Approved for both units in SER.
15 . 2 . 3	18	S	02	In SSER18, NRC reviewed FSAR amendment 90. In FSAR amendment 90, TVA revised for the transient event of inadvertent ECCS actuation for both Units. TVA provided additional information for both units by letter dated October 12, 1995. In SSER18, NRC found the reanalysis acceptable. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
15 . 2 . 4	14	S	02	15.2.4.1 Uncontrolled Rod Cluster Assembly Bank Withdrawal from Zero-Power Condition In SSER7, NRC reviewed additional analysis submitted for both units for a two pump, zero power, rod withdrawal. The NRC concluded the revision was acceptable. In SSER13, NRC accepted a change to a limiting condition for operation and bases changes to include a requirement that two reactor coolant pumps should be running whenever rods are capable of withdrawal in Mode 4. Unit 2 Action: Submit Technical Specifications. ---------- 15.2.4.4: OUTSTANDING ISSUE for evaluation of Boron dilution and single failure criteria In a letter dated November 2, 1984, TVA stated that the boron dilution alarm system receives signals from two independent channels which are independently powered. Additionally, testing of these circuits was described. The staff concluded in SSER4 that the system is adequately protected from single failure and closed this item. In SSER14, NRC reviewed a reanalysis of the accident associated with uncontrolled boron dilution and accepted the analysis. ---------- 15.2.4.6 Rod Cluster Control Assembly Ejection In SSER14, NRC accepted a change to the maximum cladding temperature for the rod ejection accident made in FSAR amendment 80. ---------- Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS Limiting Condition for Operation 3.4.6 requires two RCS loops with both loops in operation when the rod control system is capable of rod withdrawal. ---------- Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.
15 . 2 . 5	4	C		Approved for both units in SER subject to completion of Outstanding Issue in 15.2.4.4.
15 . 2 . 6		NA		Addressed in 15.2.1.
15 . 2 . 7		NA		Addressed in 15.2.1.
15 . 3 . 0	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
15 . 3 . 1	15	S	02	In SSER12, NRC reviewed the reanalysis of small break loss of coolant analysis (SBLOCA) for Units 1 and 2. NRC found the analysis acceptable. In SSER15, NRC reviewed additional changes to the SBLOCA for Units 1 and 2. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.
15 . 3 . 2	14	S	02	In SSER3, NRC reviewed proposed changes to the boron concentration requirement in the Boron Injection Tank and found them acceptable. In SSER14, NRC reviewed TVA application of the new steamline protection feature associated with the Eagle 21 upgrade for WBN Unit 1. The model resulted in the reanalysis of two ruptures: the main feedline and a steamline break outside of containment. Unit 2 Action: Perform analysis. ---------- Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: WCAP-13462, "Summary Report Process Protection System Eagle 21 Upgrade, NSLB, MSS and TTD Implementation Watts Bar Units 1 and 2" Revision 2 is applicable to WBN Unit 2. The main feedline and steam line break outside of containment are analyzed in WCAP-13462. NRC has previously reviewed and accepted this analysis for Unit 1 in SSER14. ---------- Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel..

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
15 . 3 . 3	14	S	02	In SSER14, NRC reviewed TVA application of the new steamline protection feature associated with the Eagle 21 upgrade for WBN Unit 1. The model resulted in the reanalysis of two ruptures: the main feedline and a steamline break outside of containment. Unit 2 Action: Perform analysis. ---------- Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: WCAP-13462, "Summary Report Process Protection System Eagle 21 Upgrade, NSLB, MSS and TTD Implementation Watts Bar Units 1 and 2" Revision 2 is applicable to WBN Unit 2. The main feedline and steam line break outside of containment are analyzed in WCAP-13462. NRC has previously reviewed and accepted this analysis for Unit 1 in SSER14. ---------- Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.
15 . 3 . 4	14	S	02	In SSER14, NRC reviewed this section based on VANTAGE 5H fuel and found it acceptable. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.
15 . 3 . 5	14	S	02	In SSER14, NRC reviewed this section based on VANTAGE 5H fuel and found it acceptable. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
15 . 3 . 6	21	CI	02	LICENSE CONDITION - Anticipated Transients Without Scram (Generic Letter 83-28 Item 4.3) In SSER3, NRC performed an initial review of Generic Letter 83-28 for the Salem anticipated transients without scram events. A new license condition was established for GL 83-28 Item 4.3. In SSER5, the staff found TVA's response to a number of items in GL 83-28 acceptable, including Item 4.3, and thus eliminated this license condition. In a letter dated June 18, 1990, for both units, NRC confirmed that all issues under Item 4.3 were fully resolved. In SSER6, NRC continued the review. In SSER10, NRC completed the review of TVA's submittals for GL 83-28 and found them acceptable. In SSER11, a reference to Item 4.3 that was omitted in SSER10 was added. In SSER12, NRC provided additional information on Items 3.1.3 and 3.2.3. NRC noted that TVA reported that there would be no post maintenance test requirements in the Technical Specifications for either the reactor trip system or other safety related components which could degrade safety. The NRC had no further concerns. CI in May 28, 2008, NRC letter. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (Inspection).
15 . 3 . 7	0	C		Approved for both units in SER.
15 . 4 . 0	0	C		Approved for both units in SER.
15 . 4 . 1	18	S	02	In SSER5, NRC reviewed a change to the estimated fractions in leakage pathways for the release of radioactive material following a LOCA. In SSER9, NRC corrected the filter efficiency for organic iodine. The conclusions reached in the SER and supplements remained unchanged. In SSER15, NRC reviewed revised short term atmospheric relative concentration factors. The conclusions reached in the SER and supplements remained unchanged. In FSAR amendment 90, TVA increased the amount of leakage that enters the auxiliary building following a LOCA. In SSER18, NRC confirmed this was within the guidelines of 10 CFR Part 100. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
15 . 4 . 2	15	S	02	In SSER15, NRC reviewed revised short term atmospheric relative concentration factors. The conclusions reached in the SER and supplements remained unchanged. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.
15 . 4 . 3	15	S	02	LICENSE CONDITION – Steam Generator tube rupture In SSER2, NRC performed an initial evaluation of an actual Steam Generator Tube Rupture (SGTR) that occurred at Ginna. As part of the Westinghouse Owners Group (WOG), WBN committed to implement all corrective actions recommended by the WOG. In SSER5, NRC reviewed the WOG SGTR analysis and determined that plant specific information was required. In SSER12, the staff identified 5 items that required resolution involving 1) operator action times; 2) radiation offsite consequence analysis; 3) systems, 4) associated components credited for accident mitigation in SG tube rupture emergency operating procedures; and 5) system compatibility with bounding analysis. Items 2-5 were resolved in SSER12. In SSER14, the staff stated that a revised SG tube rupture analysis was more conservative and did not alter the conclusions of their Original safety evaluation. With regard to operator response times, TVA letters dated April 21, 1994, and August 15, 1994, and NRC letter dated June 28, 1994, dealt with simulator runs to address response times and operator performance during simulated SG tube ruptures. The staff concluded, after review of the TVA letters, that the times assumed in the tube rupture analysis were satisfactorily verified and deleted this condition. In SSER15, NRC reviewed revised short term atmospheric relative concentration factors. The conclusions reached in the SER and supplements remained unchanged. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. ---------- ---------- REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
15 . 4 . 4	15	S	02	In SSER15, NRC reviewed revised short term atmospheric relative concentration factors. The conclusions reached in the SER and supplements remained unchanged. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.
15 . 4 . 5	15	S	02	In SSER4, NRC reevaluated the consequences of a fuel handling accident inside primary containment. NRC concluded WBN met the relevant requirements of GDC 61. In SSER15, NRC reviewed revised short term atmospheric relative concentration factors. The conclusions reached in the SER and supplements remained unchanged. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.
15 . 4 . 6	0	S	02	Approved for both units in SER. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.
15 . 4 . 7	0	S	02	Approved for both units in SER. Unit 2 action: Use Westinghouse RFA-2 fuel as currently installed in Unit 1 for the initial cycle. REVISION 02 UPDATE: Amendment 97 to the Unit 2 FSAR was submitted on January 21, 2010. Chapter 15 was updated to address the application of RFA-2 fuel.
15 . 5 . 0	0	C		Approved for both units in SER.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
15 . 5 . 1	4	C		LICENSE CONDITION – Effect of high pressure injection for small beak LOCA with no auxiliary feedwater (NUREG-0737, II.K.2.13) In SSER4, the staff concluded that there was reasonable assurance that vessel integrity would be maintained for small breaks with an extended loss of all feedwater and that the USI A-49, "Pressurized Thermal Shock," review did not have to be completed to support the full-power license. NRC considered this condition resolved. C in NRC May 28, 2008 letter.
15 . 5 . 2	4	C		LICENSE CONDITION – Voiding in the reactor coolant system (NUREG-0737, II.K.2.17) The staff reviewed the generic resolution of this license condition in SSER4 and approved the study in question, thereby resolving this license condition.
15 . 5 . 3	5	C		LICENSE CONDITION – PORV isolation system (NUREG-0737, II.K.3.1, II.K.3.2) NUREG-0737, II.K.3.1, II.K.3.2, "Auto PORV isolation/Report on PORV Failures" - Reviewed in SSER5 and resolved based on NRC conclusion that there is no need for an automatic PORV isolation system (NRC letter dated June 29, 1990). C in NRC May 28, 2008 letter.
15 . 5 . 4	21	CI	02	"Implementation of TMI Item II.K.3.5 (Automatic Trip of Reactor Coolant Pumps" – Reviewed in 15.5.4 of original 1982 SER; became License Condition 35. The staff determined that their review of Item II.K.3.5 did not have to be completed to support the full power license and considered this license condition resolved in SSER4. The item was further reviewed in Appendix EE of SSER16. CI in NRC May 28, 2008, letter. Unit 2 Action: Implement modifications as required. REVISION 02 UPDATE: Status in SSER21 is Open (Inspection).

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
15 . 5 . 5	21	**S**	02	NUREG-0737, II.K.3.30, “Small Break LOCA Methods" and NUREG-0737, II.K.3.31, "Plant Specific Analysis” – The staff determined that their review of Items II.K.3.30 and II.K.3.31 did not have to be completed to support the full-power license and considered this LICENSE CONDITION resolved in SSER4. In SSER5, the staff further reviewed responses to these items, and concluded that the Units 1 and 2 FSAR methods and analysis met the requirements of II.K.3.30 and II.K.3.31. This item was further reviewed in Appendix EE of SSER16. Both of these items were CI in NRC May 28, 2008, letter. Unit 2 Action: Complete analysis for Unit 2. ---------- ---------- REVISION 02 UPDATE: Status in SSER21 is Open (Inspection). ---------- Unit 2 FSAR Amendment 97 was submitted on January 11, 2010. It documents SBLOCA analysis being performed using the NOTRUMP computer code. Use of the NOTRUMP evaluation model meets the requirements of II.K.3.31.
15 . 6 . 0	0	**C**		Approved for both units in SER.
15 . 6 . 1	0	**C**		Approved for both units in SER.
16 . 0 . 0		**S**	02	Unit 2 Action: Submit Technical Specifications. ---------- ---------- REVISION 02 UPDATE: Developmental Revision A of the Unit 2 Technical Specifications was submitted on March 4, 2009. Developmental Revision B of the Unit 2 Technical Specifications was submitted on February 2, 2010.
16 . 1 . 0		**NA**		Area not addressed in 1981 Standard Review Plan.
17 . 0 . 0	0	**C**		Approved for both units in SER.
17 . 1 . 0	0	**C**	01	Approved for both units in SER. See 17.3.
17 . 2 . 0	0	**C**	01	Approved for both units in SER. See 17.3.

*** = See last page for status code definition.**

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
17 . 3 . 0	15	C	01	OUTSTANDING ISSUE - QA program The staff reviewed the description of the QA program in SSER2 and stated that they had resolved the list of open items for which the QA program for the operations phase applies with TVA and concluded that the description was in compliance with NRC regulations. The staff reviewed the organization for the QA program and the NQA Plan, and presented their conclusions in SSER5. They concluded that the program was acceptable for the operations phase of Watts Bar. It was noted, however, that Amendment 63 stated that identification of safety related features would be addressed later and the staff left the outstanding issue unresolved. In SSER10, the staff reviewed additional revisions to the QA program and stated that they did not change the staff's conclusions reached in SSER5. In SSER13, the staff concluded that TVA had established appropriate programmatic controls for identification of safety related features and considered this issue resolved. In SSER15, the staff listed additional revisions to the QA program without comment.
17 . 4 . 0	0	C	01	Approved for both units in SER. See 17.3.
17 . 5 . 0		NA		Area not addressed in 1981 Standard Review Plan.
17 . 6 . 0		OV		10 CFR 50.65– Maintenance Rule Unit 2 Action: Implement Maintenance Rule for Unit 2 systems 1 month prior to fuel load
18 . 0 . 0	0	NA		See 18.1.
18 . 1 . 0	21	CI	02	NUREG-0737, I.D.1, “Control Room Design Review” - NRC reviewed in SSER5, SSER6, SSER15, and Appendix EE of SSER16. In SSER6, the staff concluded that the DCRCR program implemented for Unit 1 satisfied the programmatic requirements of Supplement 1, NUREG-0737. In SSER15, the staff conducted a final onsite audit of the Unit 1 DCRDR and concluded that the product implemented conformed to the DCRDR requirements of Supplement 1, NUREG-0737 and that the DCRDR special program had been effectively implemented. In SSER16, the staff reviewed a TVA reclassification of a human engineering deficiency and concluded that it was satisfactory. Unit 2 Actions: Complete the CRDR process. Perform rewiring in accordance with ECN 5982. Take advantage of the completed Human Engineering reviews to ensure appropriate configuration for Unit 2 control panels. See CRDR Special Program. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). ---------- TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the CRDR SP. ---------- In SSER21, the Detailed Control Room Design Review (CRDR) Special Program was resolved. Completion of CRDR is tracked under 23.3.3.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
18 . 2 . 0	21	CI	02	"CONCLUSIONS" left open until all items in subsection are closed. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). ---------- TVA's September 26, 2008, letter proposed the use of the Unit 1 approach to resolve the CRDR SP. ---------- In SSER21, the Detailed Control Room Design Review (CRDR) Special Program was resolved.

STATUS CODE DEFINITIONS

C: CLOSED: Previous staff review of NUREG-0847 and/or supplements has closed the item either for both units at WBN or explicitly for WBN Unit 2.

CI: CLOSED/IMPLEMENTATION: Staff has approved either for both units at WBN or explicitly for WBN Unit 2; there is no change to the approved design; and implementation is recommended through Regional Inspection.

CT: CLOSED/TECHNICAL SPECIFICATIONS: Item has been approved either for both units at WBN or explicitly for WBN Unit 2; however, a change to the original approval requires submittal of the Technical Specifications and staff review.

NA: NOT APPLICABLE: Justification as to why a section / subsection is not applicalbe is provided in the ADDITIONAL INFORMATION column.

O: OPEN: No action or documentation is provided that shows the staff has reviewed the item for WBN Unit 2.

OT: OPEN/TECHNICAL SPECIFICATIONS: No action or documentation is provided that shows the staff has reviewed the item for WBN Unit 2, and the resolution is through submittal of a Technical Specification.

OV: OPEN/VALIDATION: The proposed approach has been approved for Watts Bar Unit 1; the same approach is proposed for use on WBN Unit 2 without change.

S: SUBMITTED: Information has been submitted, and is under review by NRC staff.

*** = See last page for status code definition.**

Enclosure 2

SER and Supplements Review Matrix - Revision 4 Changes

SAFETY EVALUATION REPORT AND SUPPLEMENTS (NUREG-0847) REVIEW MATRIX: REVISION 4 CHANGES

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION
6 . 2 . 5	21	S	04	OUTSTANDING ISSUE for review of TVA provided additional information relative to discussion added to FSAR to address analysis of the production and accumulation of hydrogen within containment following onset of a LOCA In the original 1982 SER, NRC indicated that additional information was required concerning the analysis of the production and accumulation of hydrogen within the containment during a design basis LOCA. This information was provided in FSAR amendments and evaluated by NRC in SSER4. In SSER4, the NRC concluded that the design of the combustible gas control system was acceptable and the outstanding issue closed. Unit 2 Action - The hydrogen recombiners will be removed from the Unit 2 design and licensing basis based on 10 CFR 50.44 (final rule September 16, 2003) and abandoned in place. This portion has a status of Open. ---------- LICENSE CONDITION – (6f) Accident monitoring instrumentation II.F.1 – containment hydrogen In SSER5, NRC closed the LICENSE CONDITION for Unit 1 only (IR 390/84-85). Unit 2 Action: Verify installation of containment hydrogen accident monitoring instrumentation. This portion has a status of Closed/Implementation only per NRC May 28, 2008, letter. ---------- LICENSE CONDITION – (9) Hydrogen control measures In the original 1982 SER, an LC was raised to track resolution of Unresolved Safety Issue A-48, “Hydrogen Control Measures and Effects of Hydrogen Burns on Safety Equipment.” In SSER8, the NRC reviewed the hydrogen mitigation system (igniters) and concluded it met the requirements of the final rule {10 CFR 50.44(c)(3)}. ---------- ---------- REVISION 02 UPDATE: The status in SSER21 is Open (NRR). Amendment 95 to the Unit 2 FSAR was submitted on November 24, 2009. This amendment deleted the hydrogen recombiners from the Unit 2 FSAR. ---------- ---------- REVISION 04 UPDATE: EDCR 52329 was initiated to abandon in place Unit 2 hydrogen recombiners. Technical Specifications (TS) / TS BASES 3.6.7 (Hydrogen Recombiners) were deleted in Developmental Revision B which was submitted on February 2, 2010.

* = See last page for status code definition.

SER SECTION	SSER #	*	REV.	ADDITIONAL INFORMATION

STATUS CODE DEFINITIONS

C: CLOSED: Previous staff review of NUREG-0847 and/or supplements has closed the item either for both units at WBN or explicitly for WBN Unit 2.

CI: CLOSED/IMPLEMENTATION: Staff has approved either for both units at WBN or explicitly for WBN Unit 2; there is no change to the approved design; and implementation is recommended through Regional Inspection.

CT: CLOSED/TECHNICAL SPECIFICATIONS: Item has been approved either for both units at WBN or explicitly for WBN Unit 2; however, a change to the original approval requires submittal of the Technical Specifications and staff review.

NA: NOT APPLICABLE: Justification as to why a section / subsection is not applicalbe is provided in the ADDITIONAL INFORMATION column.

O: OPEN: No action or documentation is provided that shows the staff has reviewed the item for WBN Unit 2.

OT: OPEN/TECHNICAL SPECIFICATIONS: No action or documentation is provided that shows the staff has reviewed the item for WBN Unit 2, and the resolution is through submittal of a Technical Specification.

OV: OPEN/VALIDATION: The proposed approach has been approved for Watts Bar Unit 1; the same approach is proposed for use on WBN Unit 2 without change.

S: SUBMITTED: Information has been submitted, and is under review by NRC staff.

*** = See last page for status code definition.**

Enclosure 3

Generic Communications - Master Table

GENERIC COMMUNICATIONS: MASTER TABLE

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 71-002	PWR Reactor Trip Circuit Breakers	NA	Addressed to specific plant(s).
B 71-003	Catastrophic Failure of Main Steam Line Relief Valve Headers	NA	Addressed to specific plant(s).
B 72-001	Failed Hangers for Emergency Core Cooling System Suction Header	NA	Addressed to specific plant(s).
B 72-002	Simultaneous Actuation of a Safety Injection Signal on Both Units of a Dual Unit Facility	NA	Addressed to specific plant(s).
B 72-003	Limitorque Valve Operator Failures	NA	Addressed to specific plant(s).
B 73-001	Faulty Overcurrent Trip Delay Device in Circuit Breakers for Engineered Safety Systems	C	TVA: letter dated April 4, 1973 NRC: IR 390/391 75-5
B 73-002	Malfunction of Containment Purge Supply Valve Switch	C	TVA: letter dated August 22, 1973 NRC: IR 390/391 75-5
B 73-003	Defective Hydraulic Snubbers and Restraints	C	TVA: letter dated February 7, 1985 NRC: IR 390/391 85-08
B 73-004	Defective Bergen-Patterson Hydraulic Shock Absorbers	C	TVA: memo dated February 7, 1985 NRC: IR 390/391 85-08
B 73-005	Manufacturing Defect in BWR Control Rods	NA	Boiling Water Reactor
B 73-006	Inadvertent Criticality in a BWR	NA	Boiling Water Reactor
B 74-001	Valve Deficiencies	C	TVA: letter dated April 15, 1974 NRC: IR 390/391 75-5
B 74-002	Truck Strike Possibility	NA	Info

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 74-003	Failure of Structural or Seismic Support Bolts on Class I Components	CI	TVA: memo dated January 22, 1985 NRC: IR 390/391 85-08 ---------- Approach accepted in IR 50-390/85-08 and 50-391/85-08 (March 29, 1985). Unit 2 Action: Implement per NUREG-0577 as was done for Unit 1.
B 74-004	Malfunction of Target Rock Safety Relief Valves	NA	Boiling Water Reactor
B 74-005	Shipment of an Improperly Shielded Source	NA	Does not apply to power reactor.
B 74-006	Defective Westinghouse Type W-2 Control Switch Component	C	TVA: letter dated October 18, 1974 NRC: IR 390/391 75-6
B 74-007	Personnel Exposure – Irradiation Facility	NA	Does not apply to power reactor.
B 74-008	Deficiency in the ITE Molded Case Circuit Breakers, Type HE-3	C	TVA: letter dated August 21, 1974 NRC: IR 390/391 75-5
B 74-009	Deficiency in GE Model 4KV Magne-Blast Circuit Breakers	C	TVA: letter dated September 20, 1974 NRC: IR 390/391 76-6
B 74-010	Failures in 4-Inch Bypass Pipe at Dresden 2	NA	Boiling Water Reactor
B 74-011	Improper Wiring of Safety Injection Logic at Zion 1 & 2	C	NRC: IR 390/391 75-6
B 74-012	Incorrect Coils in Westinghouse Type SG Relays at Trojan	C	NRC: IR 390/391 75-5
B 74-013	Improper Factory Wiring on GE Motor Control Centers at Fort Calhoun	C	TVA: letter dated December 24, 1974 NRC: IR 390/391 75-5
B 74-014	BWR Relief Valve Discharge to Suppression Pool	NA	Boiling Water Reactor

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 74-015	Misapplication of Cutler-Hammer Three Position Maintained Switch Model No. 10250T	CI	TVA: letter dated May 5, 1975 NRC: IR 390/391 75-5 ---------- Unit 2 Action: Install modified A3 Cutler-Hammer 10250T switches.
B 74-016	Improper Machining of Pistons in Colt Industries (Fairbanks-Morse) Diesel-Generators	C	TVA: letter dated January 2, 1975 NRC: IR 390/391 75-3
B 75-001	Through-Wall Cracks in Core Spray Piping at Dresden-2	NA	Boiling Water Reactor
B 75-002	Defective Radionics Radiograph Exposure Devices and Source Changers	NA	Does not apply to power reactor.
B 75-003	Incorrect Lower Disc Spring and Clearance Dimension in Series 8300 and 8302 ASCO Solenoid Valves	CI	TVA: letter dated May 16, 1975 NRC: IR 390/391 75-6 ---------- NRC accepted in IR 50-390/75-6 and 50-391/75-6 (August 21, 1975). Unit 2 Action: Modify valves not modified at factory.
B 75-004	Cable Fire at BFNPP	CI	NRC: IR 390/391 85-08 Closed to Fire Protection CAP ---------- Part of Fire Protection CAP
B 75-005	Operability of Category I Hydraulic Shock and Sway Suppressors	CI	TVA: letter dated June 16, 1975 NRC: IR 390/391 75-6 ---------- NRC accepted in IR 50-390/75-6 and 50-391/75-6 (August 21, 1975). Unit 2 Action: Install proper suppressors.
B 75-006	Defective Westinghouse Type OT-2 Control Switches	CI	TVA: letter dated July 31, 1975 NRC: IR 390/85-25 and 391/85-20 ---------- Unit 2 Action: Inspect Westinghouse Type OT-2 control switches. [WAS "NOTE 3."]

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 75-007	Exothermic Reaction in Radwaste Shipment	NA	Does not apply to power reactor.
B 75-008	PWR Pressure Instrumentation	S 02	NRC: IR 390/391 85-08 ---------- Unit 2 Action: Ensure that Technical Specifications and Site Operating Instructions address importance of maintaining temperature and pressure within prescribed limits. ---------- ---------- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. Adherence to Pressure and Temperature limits is required by the following portions of the Unit 2 TS: 1.1 [definition of “PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)”]; 3.4.3 [“RCS Pressure and Temperature (P/T) Limits”]; 3.4.12 [“Cold Overpressure Mitigation System (COMS)”]; and 5.9.6 [“Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)”].
B 76-001	BWR Isolation Condenser Tube Failure	NA	Boiling Water Reactor
B 76-002	Relay Coil Failures – GE Types HFA, HGA, HKA, HMA Relays	CI	Unit 2 Action: Repair or replace relays before preoperational tests.
B 76-003	Relay Malfunctions – GE Type STD Relays	C	TVA: letter dated May 17, 1976 NRC: IR 390/391 76-6
B 76-004	Cracks in Cold Worked Piping at BWRs	NA	Boiling Water Reactor
B 76-005	Relay Failures – Westinghouse BFD Relays	C	TVA: letter dated June 7, 1976 NRC: IR 390/391 85-08
B 76-006	Diaphragm Failures in Air Operated Auxiliary Actuators for Safety/Relief Valves	C	TVA: memo dated January 25, 1985 NRC: IR 390/391 85-08
B 76-007	Crane Hoist Control Circuit Modifications	C	TVA: letter dated October 29, 1976 NRC: IR 390/391 85-08
B 76-008	Teletherapy Units	NA	Does not apply to power reactor.

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 77-001	Pneumatic Time Delay Relay Setpoint Drift	C	TVA: letter dated July 1, 1977 NRC: IR 390/391 85-08
B 77-002	Potential Failure Mechanism in Certain Westinghouse AR Relays with Latch Attachments	C	TVA: letter dated November 11, 1977 NRC: IR 390/391 85-08
B 77-003	On-Line Testing of the Westinghouse Solid State Protection System	CI	Unit 2 Action: Include necessary periodic testing in test procedures.
B 77-004	Calculation Error Affecting The Design Performance of a System for Controlling pH of Containment Sump Water Following a LOCA	S 02	TVA: letter dated January 23, 1978 NRC: IR 390/78-11 and 391/78-09 ---------- Unit 2 Action: Ensure Technical Specifications includes limit on Boron concentration. ---------- ---------- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS Surveillance Requirement 3.6.11.5 requires verification that the boron concentration is within a specified range.
B 77-005 and B 77-005 A	Electrical Connector Assemblies	C	TVA: letter dated January 17, 1978 NRC: IR 390/78-11 and 391/78-09
B 77-006	Potential Problems with Containment Electrical Penetration Assemblies	C	Item was applicable only to units with operating license at the time the item was issued. ---------- NRC: IR 390/391 85-08
B 77-007	Containment Electrical Penetration Assemblies at Nuclear Power Plants Under Construction	C	TVA: letter dated January 20, 1978 NRC: IR 390/78-11 and 391/78-09
B 77-008	Assurance of Safety and Safeguards During an Emergency – Locking Systems	C	Item concerns a multi-unit issue that was completed for both units. ---------- TVA: letter dated March 1, 1978 NRC: IR 390/78-11 and 391/78-09
B 78-001	Flammable Contact – Arm Retainers in GE CR120A Relays	C	TVA: letter dated March 20, 1978 NRC: IR 390/78-11 and 391/78-09

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 78-002	Terminal Block Qualification	C	TVA: letter dated March 1, 1978 NRC: IR 390/78-11 and 391/78-09
B 78-003	Potential Explosive Gas Mixture Accumulations Associated with BWR Offgas System Operations	NA	Boiling Water Reactor
B 78-004	Environmental Qualification of Certain Stem Mounted Limit Switches Inside Reactor Containment	CI	TVA: letter dated December 19, 1978 NRC: IR 390/82-13 and 391/82-10 Closed to EQ Program ---------- IR 50-390/82-13 and 50-391/82-10 (April 22, 1982) accepted approach. Unit 2 Action: Ensure NAMCO switches have been replaced.
B 78-005	Malfunctioning of Circuit Breaker Auxiliary Contact Mechanism – GE Model CR105X	C	TVA: letter dated June 12, 1978 NRC: IR 390/78-17 and 391/78-15
B 78-006	Defective Cutler-Hammer Type M Relays With DC Coils	C	NRC: IR 390/78-22 and 391/78-19
B 78-007	Protection Afforded by Air-Line Respirators and Supplied-Air Hoods	NA	Item was applicable only to units with operating license at the time the item was issued.
B 78-008	Radiation Levels from Fuel Element Transfer Tubes	NA	Item was applicable only to units with operating license at the time the item was issued. ---------- NRC: IR 390/391 85-08
B 78-009	BWR Drywell Leakage Paths Associated with Inadequate Drywell Closures	NA	Boiling Water Reactor
B 78-010	Bergen-Patterson Hydraulic Shock Suppressor Accumulator Spring Coils	C	TVA: letter dated August 14, 1978 NRC: IR 390/78-22 and 391/78-19
B 78-011	Examination of Mark I Containment Torus Welds	NA	Boiling Water Reactor
B 78-012	Atypical Weld Material in Reactor Pressure Vessel Welds	C	TVA: Westinghouse letter dated October 29, 1979 NRC: IR 390/391 81-04

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 78-013	Failures in Source Heads Kay Ray, Inc. Gauges Models 7050, 7050B, 7051, 7051B, 7060, 7060B, 7061 and 7061B	NA	Does not apply to power reactor.
B 78-014	Deterioration of Buna-N Components in ASCO Solenoids	NA	Boiling Water Reactor
B 79-001	Environmental Qualification of Class 1E Equipment	C	NRC: IR 390/80-06 and 391/80-05
B 79-002	Pipe Support Base Plate Designs Using Concrete Expansion Anchor Bolts	CI	NRC review of HAAUP Program in NUREG-1232, SSER6, and SSER8. Unit 2 Actions: Addressed in CAP/SP. Conduct a complete review of affected support calculations, and perform the necessary revisions to design documents and field modifications to achieve compliance.
B 79-003	Longitudinal Weld Defects in ASME SA-312 Type 304 SS Pipe Spools Manufactured by Youngstown Welding & Engineering	C	TVA: letter dated July 16, 1981 NRC: IRs 390/82-21 and 391/82-17; 390/84-35 and 391/84-33
B 79-004	Incorrect Weights for Swing Check Valves Manufactured by Velan Engineering Corporation	C	TVA: letter dated October 20, 1980 NRC: IR 390/83-15 and 391/83-11
B 79-005	Nuclear Incident at TMI	NA	Applies only to Babcock and Wilcox designed plants
B 79-006	Review of Operational Errors and System Misalignments Identified During the Three Mile Island Incident	C	NRC: IR 390/80-06 and 391/80-05
B 79-007	Seismic Stress Analysis of Safety-Related Piping	C	TVA: letter dated May 31, 1979 NRC: IR 390/79-30 and 391/79-25
B 79-008	Events Relevant to BWRs Identified During TMI Incident	NA	Boiling Water Reactor
B 79-009	Failure of GE Type AK-2 Circuit Breaker in Safety Related Systems	CI	TVA: letter dated June 20, 1979 ---------- Unit 2 Action: Complete preservice preventive maintenance on AK-2 Circuit Breakers. [WAS "NOTE 3."]
B 79-010	Requalification Training Program Statistics	NA	Item was applicable only to units with operating license at the time the item was issued.

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 79-011	Faulty Overcurrent Trip Device in Circuit Breakers for Engineering Safety Systems	C	TVA: letter dated July 20, 1979 NRC: IR 390/79-30 and 391/79-25
B 79-012	Short Period Scrams at BWR Facilities	NA	Boiling Water Reactor
B 79-013	Cracking in Feedwater Piping	C	Item was applicable only to units with operating license at the time the item was issued. ---------- TVA: letter dated December 1, 1983 NRC: IR 390/391 85-08
B 79-014	Seismic Analysis for As-Built Safety-Related Piping Systems	CI	NRC review of HAAUP Program in NUREG-1232, SSER6, and SSER8. Unit 2 Actions: Addressed in CAP/SP. Initiate a Unit 2 hanger walkdown and hanger analysis program similar to the program for Unit 1. Complete re-analysis of piping and associated supports as necessary. Perform modifications as required by re-analysis.
B 79-015	Deep Draft Pump Deficiencies	C	TVA: letter dated January 24, 1992 NRC: IR 390/391 95-70
B 79-016	Vital Area Access Controls	NA	Item was applicable only to units with operating license at the time the item was issued. ---------- NRC: IR 390/80-06 and 391/80-05
B 79-017	Pipe Cracks in Stagnant Borated Water Systems at PWR Plants	NA	Item was applicable only to units with operating license at the time the item was issued. NRC: IR 390/80-06 and 391/80-05; NUREG/ CR 5286
B 79-018	Audibility Problems Encountered on Evacuation of Personnel from High-Noise Areas	NA	Item was applicable only to units with operating license at the time the item was issued. ---------- NRC: IR 390/80-06 and 391/80-05
B 79-019	Packaging of Low-Level Radioactive Waste for Transport and Burial	NA	Item was applicable only to units with operating license at the time the item was issued. ---------- NRC: IR 390/80-06 and 391/80-05

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 79-020	Packaging, Transport and Burial of Low-Level Radioactive Waste	NA	Item was applicable only to units with operating license at the time the item was issued. ---------- NRC: IR 390/80-06 and 391/80-05
B 79-021	Temperature Effects on Level Measurements	CI	Reviewed in 7.2.5 of both the original 1982 SER and SSER14. Unit 2 Action: Update accident calculation. ---------- CONFIRMATORY ISSUE - address IEB 79-21 to alleviate temperature dependence problem associated with measuring SG water level In SSER14, NRC concurred with TVA's assessment to not insulate the steam generator water level instrument reference leg. Unit 2 Action: Update accident calculation.
B 79-022	Possible Leakage of Tubes of Tritium Gas Used in Time Pieces for Luminosity	NA	Does not apply to power reactor. ---------- NRC: IR 390/80-06 and 391/80-05
B 79-023	Potential Failure of Emergency Diesel Generator Field Exciter Transformer	C	TVA: letter dated October 29, 1979 NRC: IR 390/80-06 and 391/80-05
B 79-024	Frozen Lines	CI	Unit 2 Actions: Insulate the section of piping in the containment spray full-flow test line that is exposed to outside air. Confirm installation of heat tracing on the sensing lines off the feedwater flow elements.
B 79-025	Failures of Westinghouse BFD Relays in Safety-Related Systems	C	TVA: letter dated January 4, 1980 NRC: IR 390/80-03 and 391/80-02
B 79-026	Boron Loss from BWR Control Blades	NA	Boiling Water Reactor
B 79-027	Loss of Non-Class 1E I & C Power System Bus During Operation	CI	TVA responded to the Bulletin on March 1, 1982. Reviewed in 7.5.3 of the original 1982 SER. Unit 2 Action: Issue appropriate emergency procedures.
B 79-028	Possible Malfunction of NAMCO Model EA180 Limit Switches at Elevated Temperatures	C	TVA: letter dated April 1, 1993 NRC: IR 390/391 93-32
B 80-001	Operability of ADS Valve Pneumatic Supply	NA	Boiling Water Reactor

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 80-002	Inadequate QA for Nuclear Supplied Equipment	NA	Boiling Water Reactor
B 80-003	Loss of Charcoal from Standard Type II, 2 Inch, Tray Adsorber Cells	C	TVA: letter dated March 21, 1980 NRC: IR 390/80-15 and 391/80-12
B 80-004	Analysis of a PWR Main Steam Line Break with Continued Feedwater Addition	CI	IR 50-390/85-60 and 50-391/85-49 (December 6, 1985) required completion of actions that included determination of temperature profiles inside and outside of containment following a MSLB for Unit 1. Unit 2 Action: Complete analysis for Unit 2.
B 80-005	Vacuum Condition Resulting in Damage to Chemical Volume Control System Holdup Tanks	CI	Closed in IR 50-390/84-59 and 50-391/84-45. Unit 2 Action: Complete surveillance procedures for Unit 2.
B 80-006	Engineered Safety Feature Reset Control	CI	TVA response dated March 11, 1982. Reviewed in 7.3.5 of the original 1982 SER. Unit 2 Action: Perform verification during the preoperational testing.
B 80-007	BWR Jet Pump Assembly Failure	NA	Boiling Water Reactor
B 80-008	Examination of Containment Liner Penetration Welds	C	TVA: letter dated July 8, 1980 NRC: IR 390/391 81-19
B 80-009	Hydramotor Actuator Deficiencies	C	TVA: letter dated January 15, 1981 NRC: NUREG/ CR 5291; IR 390/391 85-08; IR 390/85-60 and 391/85-49
B 80-010	Contamination of Nonradioactive System and Resulting Potential for Unmonitored, Uncontrolled Release of Radioactivity to Environment	CI	Unit 2 Actions: 2) Include proper monitoring of non-radioactive systems in procedures.
B 80-010	Contamination of Nonradioactive System and Resulting Potential for Unmonitored, Uncontrolled Release of Radioactivity to Environment	CI	Unit 2 Actions: 1) Correct deficiencies involving monitoring of systems.
B 80-011	Masonry Wall Design	CI	NRC accepted all but completion of corrective actions in IR 50-390/93-01 and 50-391/93-01(February 25, 1993) and closed for Unit 1 in IR 50-390/95-46 (August 1, 1995). Unit 2 Action: Complete implementation for Unit 2.

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 80-012	Decay Heat Removal System Operability	CI	NRC: IR 390/391 85-08; NUREG/CR 4005 ---------- Unit 2 Action: Implement operating instructions and abnormal operating instructions (AOIs) for RHR. [WAS "NOTE 3."]
B 80-013	Cracking in Core Spray Spargers	NA	Boiling Water Reactor
B 80-014	Degradation of Scram Discharge Volume Capability	NA	Boiling Water Reactor
B 80-015	Possible Loss of Emergency Notification System with Loss of Offsite Power	C	Item concerns a multi-unit issue that was completed for both units. ---------- NRC: IR 390/391 85-08
B 80-016	Potential Misapplication of Rosemount, Inc. Models 1151 and 1152 Pressure Transmitters With Either “A” or “D” Output Codes	C	TVA: letter dated August 29, 1980 NRC: IR 390/391 81-17
B 80-017	Failure of 76 of 185 Control Rods to Fully Insert During a Scram at a BWR	NA	Boiling Water Reactor
B 80-018	Maintenance of Adequate Minimum Flow Thru Centrifugal Charging Pumps Following Secondary Side High Energy Rupture	CI	IR 50-390/85-60 and 50-391/85-49 (Unit 1) Unit 2 Action: Implement design and procedure changes.
B 80-019	Mercury-Wetted Matrix Relay in Reactor Protective Systems of Operating Nuclear Power Plants Designed by CE	C	TVA: letter dated September 4, 1980 NRC: NUREG/CR 4933; IR 390/391 81-17
B 80-020	Failure of Westinghouse Type W-2 Spring Return to Neutral Control Switches	CI	Unit 2 Action: Modify switches.
B 80-021	Valve Yokes Supplied by Malcolm Foundry Co., Inc.	C	TVA: letter dated May 6, 1981 NRC: 390/391 85-08
B 80-022	Automation Industries, Model 200-520-008 Sealed-Source Connectors	NA	Does not apply to power reactor.
B 80-023	Failures of Solenoid Valves Manufactured by Valcor Engineering Corporation	C	TVA: letter dated March 31, 1981 NRC: IR 390/391 81-17; NUREG/CR 5292

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 80-024	Prevention of Damage Due to Water Leakage Inside Containment (10/17/80 Indian Point 2 Event)	CI	Unit 2 Action: Confirm that the reactor cavity can not be flooded, resulting in the partial or total submergence of the reactor vessel unnoticed by the reactor operators.
B 80-025	Operating Problems with Target Rock Safety-Relief Valves at BWRs	NA	Boiling Water Reactor
B 81-001	Surveillance of Mechanical Snubbers	NA	NRC: IR 390/391 81-17
B 81-002	Failure of Gate Type Valves to Close Against Differential Pressure	C	TVA: letter dated September 30, 1983 NRC: IR 390/391 84-03
B 81-003	Flow Blockage of Cooling Water to Safety System Components by Asiatic Clams and Mussels	C	TVA: letters dated July 21, 1981 and March 21, 1983 NRC: IR 390/391 81-17
B 82-001	Alteration of Radiographs of Welds in Piping Subassemblies	C	NRC: IR 390/391 85-08
B 82-002	Degradation of Threaded Fasteners in the Reactor Coolant Pressure Boundary of PWR Plants	CI	TVA: memo dated February 6, 1985 NRC: IR 390/391 85-08 ---------- Approach accepted in IR 50-390/85-08 and 50-391/85-08 (March 29, 1985). Unit 2 Action: Implement same approach as Unit 1.
B 82-003	Stress Corrosion Cracking in Thick-Wall, Large Diameter, Stainless Steel, Recirculation System Piping at BWR Plants	NA	Boiling Water Reactor
B 82-004	Deficiencies in Primary Containment Electrical Penetration Assemblies	C	TVA: letter dated January 24, 1983 NRC: IR 390/83-10 and 391/83-08
B 83-001	Failure of Trip Breakers (Westinghouse DB-50) to Open on Automatic Trip Signal	C	NRC: IRs 390/391 85-08 and 390/391 92-13
B 83-002	Stress Corrosion Cracking in Large-Diameter Stainless Steel Recirculation System Piping at BWR Plants	NA	Boiling Water Reactor
B 83-003	Check Valve Failures in Raw Water Cooling Systems of Diesel Generators	NA	Addressed by Inservice Testing for Construction Permit holders

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 83-004	Failure of the Undervoltage Trip Function of Reactor Trip Breakers	CI	NRC: IR 390/391 85-08 ---------- Unit 2 Action: Install new undervoltage attachment with wider grooves on the reactor trip breakers.
B 83-005	ASME Nuclear Code Pumps and Spare Parts Manufactured by the Hayward Tyler Pump Company	C	TVA: letter dated September 7, 1983 NRC: IR 390/85-03 and 391/85-04; NUREG/CR 5297
B 83-006	Nonconforming Material Supplied by Tube-Line Facilities	CI 04	TVA: letter dated February 2, 1984 NRC: IR 390/391 84-03; NUREG/CR 4934 ---------- NRC SER for both units dated September 23, 1991, provided an alternate acceptance for fittings supplied by Tube-Line. Unit 2 Action: Implement as necessary. ---------- ---------- REVISION 04 UPDATE: NRC Inspection Report Nos. 50-390/90-02 and 50-391/90-02 found the proposed alternative to ASME code paragraph NA-3451 (a) to be acceptable. It noted that TVA must revise the FSAR to document this deviation from ASME Section III requirements. TVA letter to NRC dated October 11, 2007, stated the Unit 1 exemption is applicable to Unit 2 and was submitted to the NRC as being required for Unit 2 construction. Final action was to incorporate the exemption in the Unit 2 FSAR. This exemption is documented in Unit 2 FSAR Section 3.2 in paragraph 3.2.3.2 and Table 3.2-2a as explained in Note 4. of the table.
B 83-007	Apparently Fraudulent Products Sold by Ray Miller, Inc.	C	TVA: letter dated March 22, 1984 NRC: IR 390/85-03 and 391/85-04
B 83-008	Electrical Circuit Breakers With an Undervoltage Trip Feature in Safety-Related Applications Other Than the Reactor Trip System	C	TVA: letter dated March 29, 1984 NRC: IR 390/84-35 and 391/84-33
B 84-001	Cracks in BWR Mark 1 Containment Vent Headers	NA	Boiling Water Reactor
B 84-002	Failure of GE Type HFA Relays In Use In Class 1E Safety Systems	C	TVA: letter dated July 10, 1984 NRC: IR 390/391 84-42 and IR 390/84-77 and 391/84-54

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 84-003	Refueling Cavity Water Seal	CI	Reviewed in IR 390/93-11. Unit 2 Action: Ensure appropriate abnormal operating instructions (AOIs) are used for Unit 2.
B 85-001	Steam Binding of Auxiliary Feedwater Pumps	CI	TVA: letter dated January 27, 1986 NRC: IR 390/391 90-20 ---------- NRC accepted approach in letter dated July 20, 1988, and reviewed response in Appendix EE of SSER16. Unit 2 Action: Procedures and hardware will be in place to ensure recognition of indications of steam binding and maintenance of system operability until check valves are repaired and back leakage stopped.
B 85-002	Undervoltage Trip Attachment of Westinghouse DB-50 Type Reactor Trip Breakers	CI	Unit 2 Action: Install automatic shunt trip on the Westinghouse DS-416 reactor trip breakers on Unit 2.
B 85-003	Motor-Operated Valve Common Mode Failures During Plant Transients Due to Improper Switch Settings	C	Superseded by GL 89-10
B 86-001	Minimum Flow Logic Problems That Could Disable RHR Pumps	NA	Boiling Water Reactor
B 86-002	Static "O" Ring Differential Pressure Switches	C	TVA: letter dated November 20, 1986 NRC: IR 390/391/90-24
B 86-003	Potential Failure of Multiple ECCS Pumps Due to Single Failure of Air-Operated Valve in Minimum Flow Recirculation Line	C	TVA: letter dated November 14, 1986 NRC: IR 390/391/87-03
B 86-004	Defective Teletherapy Timer That May Not Terminate Treatment Dose	NA	Does not apply to power reactor.
B 87-001	Thinning of Pipe Walls in Nuclear Power Plants	C	TVA: letter dated September 18, 1987 NRC: NUREG/CR 5287 ---------- Closed to GL 89-08

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 87-002	Fastener Testing to Determine Conformance with Applicable Material Specifications	CI 03	TVA: letters dated April 15, 1988, July 6, 1988, September 12, 1988, and January 27, 1989 NRC: letter dated August 18, 1989 ---------- NRC closed in letter dated August 18, 1989. Unit 2 Action: Complete for Unit 2, using information used for Unit 1, as applicable. ---------- ---------- REVISION 03 UPDATE: Unit 2 has completed fastener testing as required by this Bulletin.
B 88-001	Defects in Westinghouse Circuit Breakers	C	TVA: letter dated November 15, 1991 NRC: IR 390/391 93-01
B 88-002	Rapidly Propagating Fatigue Cracks in Steam Generator Tubes	CI	NRC acceptance letter dated June 7, 1990, for both units. Unit 2 Actions: Evaluate E/C data to determine anti-vibration bar penetration depth; perform T/H analysis to identify susceptible tubes; modify, if necessary.
B 88-003	Inadequate Latch Engagement in HFA Type Latching Relays Manufactured by General Electric (GE) Company	C	TVA: letter dated April 13, 1992 NRC: IR 390/391 92-13
B 88-004	Potential Safety-Related Pump Loss	CI	NRC acceptance letter dated May 24, 1990, for both units. Unit 2 Action: Perform calculations and install check valves to prevent pump to pump interaction.
B 88-005	Nonconforming Materials Supplied by Piping Supplies, Inc. and West Jersey Manufacturing Company	CI	NRC reviewed in Appendix EE of SSER16. Unit 2 Action: Complete review to locate installed WJM material and perform in-situ hardness testing for Unit 2.
B 88-006	Actions to be Taken for the Transfer of Model No. SPEC 2-T Radiographic Exposure Device	NA	Does not apply to power reactor.
B 88-007	Power Oscillations in BWRs	NA	Boiling Water Reactor
B 88-008	Thermal Stresses in Piping Connected to Reactor Cooling Systems	CI	NRC acceptance letter dated September 19, 1991, for both units. Unit 2 Action: Implement program to prevent thermal stratification.

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 88-009	Thimble Tube Thinning in Westinghouse Reactors	CI	Reviewed in Appendix EE of SSER16. Unit 2 Action: TVA letter dated March 11, 1994, for both units committed to establish a program and inspect the thimble tubes during the first refueling outage.
B 88-010	Nonconforming Molded-Case Circuit Breakers	CI	Unit 2 Action: Replace those circuits not traceable to a circuit breaker manufacturer.
B 88-011	Pressurizer Surge Line Thermal Stratification	CI	NRC SER on “Leak-Before-Break” (April 28, 1993) and reviewed in Appendix EE of SSER16. Unit 2 Action: Complete modifications to accommodate Surge Line thermal movements and incorporate a temperature limitation during heatup and cooldown operations into Unit 2 procedures.
B 89-001	Failure of Westinghouse Steam Generator Tube Mechanical Plugs	CI	NRC acceptance letter dated September 26, 1991 for both units. Unit 2 Action: Remove SG tube plugs.
B 89-002	Stress Corrosion Cracking of High-Hardness Type 410 Stainless Steel Internal Preloaded Bolting in Anchor Darling Model S350W Swing Check Valves or Valves of Similar Nature	CI	NRC reviewed in Appendix EE of SSER16. Unit 2 Actions: Replace the flapper assembly hold-down bolts fabricated on the 14 (12 valves are installed) Atwood and Morrell Mark No. 47W450-53 check valves. Replacement bolts are to be fabricated from ASTM F593 Alloy 630. A review of the remaining Unit 2 safety related swing check valves will be performed.
B 89-003	Potential Loss of Required Shutdown Margin During Refueling Operations	CI	TVA: letter dated June 19, 1990 NRC: IR 390/391 94-04 and letter dated June 22, 1990 ---------- NRC acceptance letter dated June 22, 1990. Unit 2 Action: Ensure that requirements for fuel assembly configuration, fuel loading and training are included in Unit 2.
B 90-001	Loss of Fill-Oil in Transmitters Manufactured by Rosemount	CI	Unit 2 Action: Implement applicable recommendations from this Bulletin including identification of potentially defective transmitters and an enhanced surveillance program which monitors transmitters for loss of fill oil.
B 90-002	Loss of Thermal Margin Caused by Channel Box Bow	NA	Boiling Water Reactor
B 91-001	Reporting Loss of Criticality Safety Controls	NA	Does not apply to power reactor.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 92-001	Failure of Thermo-Lag 330 Fire Barrier System to Maintain Cabling in Wide Cable Trays and Small Conduits Free From Fire Damage	NA 02	REVISION 02 UPDATE: This bulletin was provided for information only to plants with construction permits. See Generic Letter 92-08 for Thermo-lag related actions.
B 92-002	Safety Concerns Related to “End of Life” of Aging Theratronics Teletherapy Units	NA	Does not apply to power reactor.
B 92-003	Release of Patients After Brachytherapy	NA	Does not apply to power reactor.
B 93-001	Release of Patients After Brachytherapy Treatment with Remote Afterloading Devices	NA	Does not apply to power reactor.
B 93-002	Debris Plugging of Emergency Core Cooling Suction Strainers	C 02	Boiling Water Reactor REVISION 02 UPDATE: In Rev. 01, this was characterized as “NA - BWR only”. This Bulletin was provided for Information to holders of construction permits. No WBN response was found. B-93-02 was closed in IR 50-390/94-04 and 50-391/94-04.
B 93-003	Resolution of Issues Related to Reactor Vessel Water Level Instrumentation in BWRs	NA	Boiling Water Reactor
B 94-001	Potential Fuel Pool Draindown Caused by Inadequate Maintenance Practices at Dresden Unit 1	NA	Addressed to holders of licenses for nuclear power reactors that are permanently shut down with spent fuel in the spent fuel pool
B 94-002	Corrosion Problems in Certain Stainless Steel Packagings Used to Transport Uranium Hexafluoride	NA	Does not apply to power reactor.
B 95-001	Quality Assurance Program for Transportation of Radioactive Material	NA	Does not apply to power reactor.
B 95-002	Unexpected Clogging of a Residual Heat Removal Pump Strainer While Operating in Suppression Pool Cooling Mode	NA	Boiling Water Reactor

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 96-001, first part	Control Rod Insertion Problems (PWR)	CI 04	NRC acceptance letter for Unit 1 dated July 22, 1996 – Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Issue Emergency Operating Procedure. REVISION 02 UPDATE: Unit 2 will load all new RFA-2 fuel for the initial fuel load. REVISION 03 UPDATE: NRC issued the Safety Evaluation (corrected) for Bulletin 1996-001 on May 3, 2010. REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.
B 96-001, last part	Control Rod Insertion Problems (PWR)	CI 04	NRC acceptance letter for Unit 1 dated July 22, 1996 – Initial response for Unit 2 on September 7, 2007. Unit 2 Action: and provide core map. REVISION 03 UPDATE: NRC issued the Safety Evaluation (corrected) for Bulletin 1996-001 on May 3, 2010. REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.
B 96-002	Movement of Heavy Loads over Spent Fuel, Over Fuel in the Reactor, or Over Safety-Related Equipment	CI 02	NRC closure letter dated May 20, 1998. Unit 2 Action: Unit 2 Heavy Loads Program will be in compliance with NUREG-0612. REVISION 02 UPDATE: NRC issued the Safety Evaluation for Bulletin 1996-002 on March 4, 2010.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 96-003	Potential Plugging of ECCS Suction Strainers by Debris in BWRs	NA	Boiling Water Reactor
B 96-004	Chemical, Galvanic, or Other Reactions in Spent Fuel Storage and Transportation Casks	NA	Info
B 97-001	Potential for Erroneous Calibration, Dose Rate, or Radiation Exposure Measurements with Certain Victoreen Model 530 and 531SI Electrometer/Dosemeters	NA	Does not apply to power reactor.
B 97-002	Puncture Testing of Shipping Packages Under 10 CFR Part 71	NA	Does not apply to power reactor.
B 01-001	Circumferential Cracking of Reactor Pressure Vessel (RPV) Head Penetration Nozzles	CI 04	NRC acceptance letter dated November 20, 2001 (Unit 1) – Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Perform baseline inspection. REVISION 02 UPDATE: Unit 2 Action: Perform baseline inspection. Evaluate or repair as necessary. REVISION 03 UPDATE: NRC issued the Safety Evaluation for Bulletin 2001-001 on June 30, 2010. REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 02-001	RPV Head Degradation and Reactor Coolant Pressure Boundary Integrity	CI 04	NRC review of Unit 1's 15 day response in letter dated May 20, 2002 – Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Perform baseline inspection. REVISION 02 UPDATE: Unit 2 Action: Perform baseline inspection. Evaluate or repair as necessary. REVISION 03 UPDATE: NRC issued the Safety Evaluation for Bulletin 2002-001 on June 30, 2010. REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.
B 02-002	RPV Head and Vessel Head Penetration Nozzle Inspection Programs	CI 04	NRC acceptance letter dated December 20, 2002 (Unit 1) – Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Perform baseline inspection. REVISION 02 UPDATE: Unit 2 Action: Perform baseline inspection. Evaluate or repair as necessary. REVISION 03 UPDATE: NRC issued the Safety Evaluation for Bulletin 2002-002 on June 30, 2010. REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.
B 03-001	Potential Impact of Debris Blockage on Emergency Sump Recirculation at PWRs	NA	TVA: letter dated September 7, 2007

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 03-002	Leakage from RPV Lower Head Penetrations and Reactor Coolant Pressure Boundary Integrity (PWRs)	CI 02	NRC acceptance letter dated October 6, 2004 (Unit 1) – Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Perform baseline inspection. REVISION 02 UPDATE: NRC issued the Safety Evaluation for Bulletin 2003-002 on January 21, 2010. Unit 2 Action: Perform baseline inspection. Evaluate or repair as necessary.
B 03-003	Potentially Deficient 1-inch Valves for Uranium Hexaflouride Cylinders	NA	Does not apply to power reactor.
B 03-004	Rebaselining of Data in the Nuclear Management and Safeguards System	C	TVA: letter dated December 18, 2003 Item concerns a multi-unit issue that was completed for both units.

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 04-001	Inspection of Alloy 82/182/600 Materials Used in the Fabrication of Pressurizer Penetrations and Steam Space Piping Connections at PWRs	CI 04	Initial response for Unit 2 on September 7, 2007. Unit 2 Actions: Provide details of pressurizer and penetrations and apply Material Stress Improvement Process. ---------- ---------- REVISION 02 UPDATE: TVA provided details of the pressurizer and penetrations on September 29, 2008. This letter committed to: Prior to placing the pressurizer in service, TVA will apply the Material Stress Improvement Process (MSIP) to the Pressurizer Power Operated Relief Valve connections, the safety relief valve connections, the spray line nozzle and surge line nozzle connections. TVA will perform a bare metal visual (BMV) inspection of the upper pressurizer Alloy 600 locations at the first refueling outage. ---------- ---------- REVISION 03 UPDATE: April 1, 2010, letter committed to: TVA will perform NDE prior to and after performance of the MSIP. If circumferential cracking is observed in either pressure boundary or non-pressure boundary portions of any locations covered under the scope of the bulletin, TVA will develop plans to perform an adequate extent-of-condition evaluation, and TVA will discuss those plans with cognizant NRC technical staff prior to starting Unit 2. After performing the BMV inspection during the first refueling outage, if any evidence of apparent reactor coolant pressure boundary leakage is discovered, then NDE capable of determining crack orientation will be performed in order to accurately characterize the flaw, the orientation, and extent. TVA will develop plans to perform an adequate extent of condition evaluation, and plans to possibly expand the scope of NDE to other components in the pressurizer will be discussed with NRC technical staff prior to restarting of Unit 2. ---------- ---------- REVISION 04 UPDATE: NRC issued the Safety Evaluation for Bulletin 2004-001 on August 4, 2010.
B 05-001	Material Control and Accounting at Reactors and Wet Spent Fuel Storage Facilities	C	TVA: letters dated March 21, 2005 and May 11, 2005 ---------- Item concerns a multi-unit issue that was completed for both units.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 05-002	Emergency Preparedness and Response Actions for Security-Based Events	C	TVA: letters dated January 20, 2006 and August 16, 2006. ---------- Item concerns a multi-unit issue that was completed for both units.
B 07-001	Security Officer Attentiveness	OV	Item concerns a multi-unit issue that was completed for both units.
C 76-001	Crane Hoist Control Circuit Modifications	C	See B 76-007 for additional information.
C 76-002	Relay Failures - Westinghouse BF (AC) and BFD (DC) Relays	C	TVA: letter dated November 22, 1976 informed NRC that these relay types are not used in Class 1E circuits. NRC: IR 50/390/76-11 and 50/391/76-11
C 76-003	Radiation Exposures in Reactor Cavities	NA	Info
C 76-004	Neutron Monitor and Flow Bypass Switch Malfunctions	NA	Boiling Water Reactor
C 76-005	Hydraulic Shock And Sway Suppressors - Maintenance of Bleed and Lock-Up Velocities on ITT Grinnell's Model Nos. - Fig. 200 And Fig. 201, Catalog Ph-74-R	C	TVA: letter dated January 7, 1977 informed NRC that no Grinnell shock suppressors or sway braces have been or will be installed at WBN.
C 76-006	Stress Corrosion Cracks in Stagnant, Low Pressure Stainless Piping Containing Boric Acid Solution at PWRs	NA	Item was applicable only to units with operating license at the time the item was issued.
C 76-007	Inadequate Performance by Reactor Operating and Support Staff Members	NA	Item was applicable only to units with operating license at the time the item was issued.
C 77-001	Malfunctions of Limitorque Valve Operators	NA	Info
C 77-002a	Potential Heavy Spring Flooding (CP)	NA	Item was applicable only to units with operating license at the time the item was issued.
C 77-003	Fire Inside a Motor Control Center	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
C 77-004	Inadequate Lock Assemblies	NA	Info
C 77-005	Fluid Entrapment in Valve Bonnets	NA	Info
C 77-006	Effects of Hydraulic Fluid on Electrical Cables	NA	Info
C 77-007	Short Period During Reactor Startup	NA	Boiling Water Reactor
C 77-008	Failure of Feedwater Sample Probe	NA	Item was applicable only to units with operating license at the time the item was issued.
C 77-009	Improper Fuse Coordination in BWR Standby Liquid Control System Control Circuits	NA	Boiling Water Reactor
C 77-010	Vacuum Conditions Resulting in Damage to Liquid Process Tanks	NA	Item was applicable only to units with operating license at the time the item was issued.
C 77-011	Leakage of Containment Isolation Valves with Resilient Seats	NA	Info
C 77-012	Dropped Fuel Assemblies at BWR Facilities	NA	Boiling Water Reactor
C 77-013	Reactor Safety Signals Negated During Testing	NA	Info
C 77-014	Separation of Contaminated Water Systems from Noncontaminated Plant Systems	NA	Info
C 77-015	Degradation of Fuel Oil Flow to the Emergency Diesel Generator	NA	Info
C 77-016	Emergency Diesel Generator Electrical Trip Lock-Out Features	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
C 78-001	Loss of Well Logging Source	NA	Does not apply to power reactor.
C 78-002	Proper Lubricating Oil for Terry Turbines	NA	Info
C 78-003	Packaging Greater Than Type A Quantities of Low Specific Activity Radioactive Material for Transport	NA	Info
C 78-004	Installation Errors That Could Prevent Closing of Fire Doors	NA	Info
C 78-005	Inadvertent Safety Injection During Cooldown	NA	Info
C 78-006	Potential Common Mode Flooding of ECCS Equipment Rooms at BWR Facilities	NA	Info
C 78-007	Damaged Components of a Bergen-Paterson Series 25000 Hydraulic Test Stand	NA	Info
C 78-008	Environmental Qualification of Safety-Related Electrical Equipment at Nuclear Power Plants	NA	Info
C 78-009	Arcing of General Electric Company Size 2 Contactors	NA	Info
C 78-010	Control of Sealed Sources in Radiation Therapy	NA	Does not apply to power reactor.
C 78-011	Recirculation MG Set Overspeed Stops	NA	Boiling Water Reactor
C 78-012	HPCI Turbine Control Valve Lift Rod Bending	NA	Boiling Water Reactor
C 78-013	Inoperability of Service Water Pumps	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
C 78-014	HPCI Turbine Reversing Chamber Hold Down Bolting	NA	Boiling Water Reactor
C 78-015	Tilting Disc Check Valves Fail to Close with Gravity in Vertical Position	NA	Info
C 78-016	Limitorque Valve Actuators	NA	Info
C 78-017	Inadequate Guard Training/Qualification and Falsified Training Records	NA	Info
C 78-018	UL Fire Test	NA	Info
C 78-019	Manual Override (Bypass) of Safety System Actuation Signals	NA	Info
C 79-001	Administration of Unauthorized Byproduct Material to Humans	NA	Does not apply to power reactor.
C 79-002	Failure of 120 Volt Vital AC Power Supplies	NA	Info
C 79-003	Inadequate Guard Training - Qualification and Falsified Training Records	NA	Info
C 79-004	Loose Locking Nut on Limitorque Valve Operators	NA	Info
C 79-005	Moisture Leakage in Stranded Wire Conductors	NA	Info
C 79-006	Failure to Use Syringe and Bottle Shields in Nuclear Medicine	NA	Does not apply to power reactor.
C 79-007	Unexpected Speed Increase of Reactor Recirculation MG Set Resulted in Reactor Power Increase	NA	Boiling Water Reactor

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
C 79-008	Attempted Extortion - Low Enriched Uranium	NA	Fuel facilities and operating reactors at the time the item was issued
C 79-009	Occurrences of Split or Punctured Regulator Diaphragms in Certain Self Contained Breathing Apparatus	NA	Info
C 79-010	Pipefittings Manufactured from Unacceptable Material	NA	Info
C 79-011	Design/Construction Interface Problem	NA	Info
C 79-012	Potential Diesel Generator Turbocharger Problem	NA	Info
C 79-013	Replacement of Diesel Fire Pump Starting Contactors	NA	Info
C 79-014	Unauthorized Procurement and Distribution of XE-133	NA	Does not apply to power reactor.
C 79-015	Bursting of High Pressure Hose and Malfunction of Relief Valve O-Ring in Certain Self-Contained Breathing Apparatus	NA	Item was applicable only to units with operating license at the time the item was issued.
C 79-016	Excessive Radiation Exposures to Members of the General Public and a Radiographer	NA	Does not apply to power reactor.
C 79-017	Contact Problem in SB-12 Switches on General Electric Company Metalclad Circuit Breakers	NA	Info
C 79-018	Proper Installation of Target Rock Safety-Relief Valves	NA	Boiling Water Reactor
C 79-019	Loose Locking Devices on Ingersoll-Rand Pumps	NA	Info
C 79-020	Failure of GTE Sylvania Relay Type PM Bulletin 7305 Catalog 5U12-11-AC with a 120V AC Coil	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
C 79-021	Prevention of Unplanned Releases of Radioactivity	NA	Info
C 79-022	Stroke Times for Power Operated Relief Valves	NA	Info
C 79-023	Motor Starters and Contactors Failed to Operate	C 01	The Circular did not require a response. TVA reported a nonconformance under 10 CFR 50.55e on January 17, 1980, that four motor starters of this type had been located in the 480V control and auxiliary vent boards at WBN. Gould factory representatives supervised the replacement of the carrier assemblies in accordance with the Gould instructions. The starters with replaced carriers were acceptable. NRC IR 50-390/80-03 and 50-391/80-02 reviewed and closed the associated nonconformance reports.
C 79-024	Proper Installation and Calibration of Core Spray Pipe Break Detection Equipment on BWRs	NA	Boiling Water Reactor
C 79-025	Shock Arrestor Strut Assembly Interference	C 01	The Circular did not require a response. TVA reported a nonconformance under 10 CFR 50.55e on March 6, 1980, that a review had determined that nine installed supports had brackets with the potential of hindering full function of the support. Additional supports that were not installed had the same potential problem. TVA initially determined that the supports would be modified in accordance with a vendor approved drawing. TVA subsequently determined that no actual problem existed and no field work was required. NRC IR 50-390/83-15 and 50-391/83-11 reviewed and closed the associated nonconformance reports.
C 80-001	Service Advice for GE Induction Disc Relays	NA	Info
C 80-002	Nuclear Power Plant Staff Work Hours	NA	Info
C 80-003	Protection from Toxic Gas Hazards	NA	Info
C 80-004	Securing of Threaded Locking Devices on Safety-Related Equipment	NA	Info
C 80-005	Emergency Diesel-Generator Lubricating Oil Addition and Onsite Supply	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
C 80-006	Control and Accountability Systems for Implant Therapy Sources	NA	Does not apply to power reactor.
C 80-007	Problems with HPCI Turbine Oil System	NA	Boiling Water Reactor
C 80-008	BWR Technical Specification Inconsistency - RPS Response Time	NA	Boiling Water Reactor
C 80-009	Problems with Plant Internal Communications Systems	NA	Info
C 80-010	Failure to Maintain Environmental Qualification of Equipment	NA	Info
C 80-011	Emergency Diesel Generator Lube Oil Cooler Failures	NA	Info
C 80-012	Valve-Shaft-to-Actuator Key May Fall Out of Place when Mounted Below Horizontal Axis	NA	Info
C 80-013	Grid Strap Damage in Westinghouse Fuel Assemblies	NA	Info
C 80-014	Radioactive Contamination of Plant Demineralized Water System and Resultant Internal Contamination of Personnel	NA	Info
C 80-015	Loss of Reactor Coolant Pump Cooling and Natural Circulation Cooldown	NA	Info
C 80-016	Operational Deficiencies in Rosemount Model 510DU Trip Units and Model 1152 Pressure Transmitters	NA	Info
C 80-017	Fuel Pin Damage Due to Water Jet from Baffle Plate Corner	NA	Info
C 80-018	10 CFR 50.59 Safety Evaluations for Changes to Radioactive Waste Treatment Systems	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
C 80-019	Noncompliance with License Requirements for Medical Licensees	NA	Does not apply to power reactor.
C 80-020	Changes in Safe-Slab Tank Dimensions	NA	Info
C 80-021	Regulation of Refueling Crews	NA	Item was applicable only to units with operating license at the time the item was issued.
C 80-022	Confirmation of Employee Qualifications	NA	Info
C 80-023	Potential Defects in Beloit Power Systems Emergency Generators	NA	Info
C 80-024	AECL Teletherapy Unit Malfunction	NA	Does not apply to power reactor.
C 80-025	Case Histories of Radiography Events	NA	Does not apply to power reactor.
C 81-001	Design Problems Involving Indicating Pushbutton Switches Manufactured by Honeywell Incorporated	NA	Info
C 81-002	Performance of NRC-Licensed Individuals while on Duty	NA	Item was applicable only to units with operating license at the time the item was issued.
C 81-003	Inoperable Seismic Monitoring Instrumentation	NA	Info
C 81-004	The Role of Shift Technical Advisors and Importance of Reporting Operational Events	NA	Info
C 81-005	Self-Aligning Rod End Bushings for Pipe Supports	NA	Info
C 81-006	Potential Deficiency Affecting Certain Foxboro 10 to 50 Milliampere Transmitters	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
C 81-007	Control of Radioactively Contaminated Material	NA	Info
C 81-008	Foundation Materials	NA	Info
C 81-009	Containment Effluent Water that Bypasses Radioactivity Monitor	NA	Info
C 81-010	Steam Voiding in the Reactor Coolant System During Decay Heat Removal Cooldown	NA	Item was applicable only to units with operating license at the time the item was issued.
C 81-011	Inadequate Decay Heat Removal During Reactor Shutdown	NA	Boiling Water Reactor
C 81-012	Inadequate Periodic Test Procedure of PWR Reactor Protection System	NA	Info
C 81-013	Torque Switch Electrical Bypass Circuit for Safeguard Service Valve Motors	C 01	The Circular did not require a response. TVA reported a nonconformance under 10 CFR 50.55e on April 4, 1986 (NCR W367-P), that required closing torque switches were found improperly wired. This issue (Torque switch and overload relay bypass capability for active safety related valves) is part of the Electrical Issues Corrective Action Program for WBN Unit 2.
C 81-014	Main Steam Isolation Valve Failures to Close	NA	Info
C 81-015	Unnecessary Radiation Exposures to the Public and Workers During Events Involving Thickness and Level Measuring Devices	NA	Info
GL 77-001	Intrusion Detection Systems Handbook	NA	Info
GL 77-002	Fire Protection Functional Responsibilities	NA	Info
GL 77-003	Transmittal of NUREG-0321, “A Study of the Nuclear Regulatory Commission Quality Assurance Program”	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 77-004	Shipments of Contaminated Components From NRC Licensed Power Facilities to Vendors & Service Companies	NA	Info
GL 77-005	Nonconformity of Addressees of Items Directed to the Office of Nuclear Reactor Regulation	NA	Info
GL 77-006	Enclosing Questionnaire Related to Steam Generators	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 77-007	Reliability of Standby Diesel Generator Units	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 77-008	Revised Intrusion Detection Handbook and Entry Control Systems Handbook	NA	Info
GL 78-001	Correction to Letter of 12/15/77 [GL 77-07]	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 78-002	Asymmetric Loads Background and Revised Request for Additional Information	C	NRC: Reviewed in SSER15 – Appendix C (June 1995). Resolved by approval of leak-before-break analysis.
GL 78-003	Request For Information on Cavity Annulus Seal Ring	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 78-004	GAO Blanket Clearance for Letter Dated 12/09/77 [GL 77-06]	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 78-005	Internal Distribution of Correspondence – Asking for Comments on Mass Mailing System	NA	Info
GL 78-006	This GL was never issued.	NA	
GL 78-007	This GL was never issued.	NA	
GL 78-008	Enclosing NUREG-0408 Re Mark I Containments, and Granting Exemption from GDC 50 and Enclosing Sample Notice	NA	Boiling Water Reactor

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 78-009	Multiple-Subsequent Actuations of Safety/Relief Valves Following an Isolation Event	NA	Boiling Water Reactor
GL 78-010	Guidance on Radiological Environmental Monitoring	NA	Info
GL 78-011	Guidance on Spent Fuel Pool Modifications	NA	Info
GL 78-012	Notice of Meeting Regarding "Implementation of 10 CFR 73.55 Requirements and Status of Research …"	NA	Info
GL 78-013	Forwarding of NUREG-0219	NA	Info
GL 78-014	Transmittal of Draft NUREG-0219 for Comment	NA	Info
GL 78-015	Request for Information on Control of Heavy Loads Near Spent Fuel	NA	See GL 81-007.
GL 78-016	Request for Information on Control of Heavy Loads Near Spent Fuel Pools	NA	Info
GL 78-017	Corrected Letter on Heavy Loads Over Spent Fuel	NA	Info
GL 78-018	Corrected Letter on Heavy Loads Over Spent Fuel	NA	Duplicate of GL 81-007
GL 78-019	Enclosing Sandia Report SAND 77-0777, "Barrier Technology Handbook"	NA	Info
GL 78-020	Enclosing – "A Systematic Approach to the Conceptual Design of Physical Protection Systems for Nuclear Facilities	NA	Info
GL 78-021	Transmitting NUREG/CR-0181, "Concerning Barrier and Penetration Data Needed for Physical Security System Assessment"	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 78-022	Revision to Intrusion Detection Systems and Entry Control Systems Handbooks and Nuclear Safeguards Technology Handbook	NA	Info
GL 78-023	Manpower Requirements for Operating Reactors	NA	Info
GL 78-024	Model Appendix I Technical Specifications and Submittal Schedule For BWRs	NA	Boiling Water Reactor
GL 78-025	This GL was never issued.	NA	
GL 78-026	Excessive Control Rod Guide Tube Wear	NA	Applies only to Babcock and Wilcox designed plants
GL 78-027	Forwarding of NUREG-0181	NA	Info
GL 78-028	Forwarding pages omitted from 07/11/78 letter [GL 78-24]	NA	Boiling Water Reactor
GL 78-029	Notice of PWR Steam Generator Conference	NA	Info
GL 78-030	Forwarding of NUREG-0219	NA	Info
GL 78-031	Notice of Steam Generator Conference Agenda	NA	Info
GL 78-032	Reactor Protection System Power Supplies	NA	Boiling Water Reactor
GL 78-033	Meeting Schedule and Locations For Upgraded Guard Qualification	NA	Info
GL 78-034	Reactor Vessel Atypical Weld Material	C	See B 78-12.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 78-035	Regional Meetings to Discuss Upgraded Guard Qualifications	NA	Info
GL 78-036	Cessation of Plutonium Shipments by Air Except In NRC Approved Containers	NA	Does not apply to power reactor.
GL 78-037	Revised Meeting Schedule & Locations For Upgraded Guard Qualifications	NA	Info
GL 78-038	Forwarding of 2 Tables of Appendix I, Draft Radiological Effluent Technical Specifications, PWR, and NUREG-0133	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 78-039	Forwarding of 2 Tables of Appendix I, Draft Radiological Effluent Technical Specifications, BWR, and NUREG-0133	NA	Boiling Water Reactor
GL 78-040	Training & Qualification Program Workshops	NA	Info
GL 78-041	Mark II Generic Acceptance Criteria For Lead Plants	NA	Boiling Water Reactor
GL 78-042	Training and Qualification Program Workshops	NA	Info
GL 79-001	Interservice Procedures for Instructional Systems Development - TRADOC	NA	Info
GL 79-002	Transmitting Rev. to Entry Control Systems Handbook (SAND 77-1033), Intrusion Detection Handbook (SAND 76-0554), and Barrier Penetration Database	NA	Info
GL 79-003	Offsite Dose Calculation Manual	NA	Info
GL 79-004	Referencing 4/14/78 Letter - Modifications to NRC Guidance "Review and Acceptance of Spent Fuel Pool Storage and Handling"	NA	Info
GL 79-005	Information Relating to Categorization of Recent Regulatory Guides by the Regulatory Requirements Review Committee	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 79-006	Contents of the Offsite Dose Calculation Manual	NA	Info
GL 79-007	Seismic (SSE) and LOCA Responses (NUREG-0484)	NA	Info
GL 79-008	Amendment to 10 CFR 73.55	NA	Info
GL 79-009	Staff Evaluation of Interim Multiple-Consecutive Safety-Relief Valve Actuations	NA	Boiling Water Reactor
GL 79-010	Transmitting Regulatory Guide 2.6 for Comment	NA	Does not apply to power reactor.
GL 79-011	Transmitting "Summary of Operating Experience with Recalculating Steam Generators, January 1979," NUREG-0523	NA	Info
GL 79-012	ATWS - Enclosing Letter to GE, with NUREG-0460, Vol. 3	NA	Info
GL 79-013	Schedule for Implementation and Resolution of Mark I Containment Long Term Program	NA	Info
GL 79-014	Pipe Crack Study Group - Enclosing NUREG-0531 and Notice	NA	Info
GL 79-015	Steam Generators - Enclosing Summary of Operating Experience with Recirculating Steam Generators, NUREG-0523	NA	Info
GL 79-016	Meeting Re Implementation of Physical Security Requirements	NA	Info
GL 79-017	Reliability of Onsite Diesel Generators at Light Water Reactors	NA	Info
GL 79-018	Westinghouse Two-Loop NSSS	NA	Addressed to specific plant(s).

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 79-019	NRC Staff Review of Responses to Bs 79-06 and 79-06a	NA	Addressed to specific plant(s).
GL 79-020	Cracking in Feedwater Lines	C	See B 79-13.
GL 79-021	Enclosing NUREG/CR-0660, Enhancement of on Site Emergency Diesel Generator Reliability"	NA	Info
GL 79-022	Enclosing NUREG-0560, "Staff Report on the Generic Assessment of Feedwater Transients in PWRs Designed by B&W"	NA	Applies only to Babcock and Wilcox designed plants
GL 79-023	NRC Staff Review of Responses to B 79-08	NA	Boiling Water Reactor
GL 79-024	Multiple Equipment Failures in Safety-Related Systems	NA 01	GL 79-24 provided a discussion of an inadvertent reactor scram and safety injection during monthly surveillance tests of the safeguards system at a PWR facility. The GL requested a review to determine if similar errors had or could have occurred at other PWRs. The GL further requested a review of management policies and procedures to assure that multiple equipment failures in safety-related systems will be vigorously pursued and analyzed to identify significant reduction in the ability of safety systems to function as required. A response was requested within 30 days of receipt of the GL with the results of these reviews. TVA does not have a record of receiving or responding to this GL. Thus, TVA concluded that this item was applicable only to PWRs with an operating license at the time the GL was issued.
GL 79-025	Information Required to Review Corporate Capabilities	NA	Info
GL 79-026	Upgraded Standard Technical Specification Bases Program	NA	Info
GL 79-027	Operability Testing of Relief and Safety Relief Valves	NA	Boiling Water Reactor
GL 79-028	Evaluation of Semi-Scale Small Break Experiment	NA	Info
GL 79-029	Transmitting NUREG-0473, Revision 2, Draft Radiological Effluent Technical Specifications	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 79-030	Transmitting NUREG-0472, Revision 2, Draft Radiological Technical Specifications	NA	Info
GL 79-031	Submittal of Copies of Response to 6/29/79 NRC Request [79-25]	NA	Info
GL 79-032	Transmitting NUREG-0578, "TMI-2 Lessons Learned"	NA	Info
GL 79-033	Transmitting NUREG-0576, “Security Training and Qualification Plans”	NA	Info
GL 79-034	New Physical Security Plans (FR 43280-285)	NA	Does not apply to power reactor.
GL 79-035	Regional Meetings to Discuss Impacts on Emergency Planning	NA	Info
GL 79-036	Adequacy of Station Electric Distribution Systems Voltages	CI	This GL tracked compliance with BTP PSB-1, “Adequacy of Station Electric Distribution System Voltages.” Unit 2 Action: Perform verification during the preoperational testing.
GL 79-037	Amendment to 10 CFR 73.55 Deferral from 8/1/79 to 11/1/79	NA	Info
GL 79-038	BWR Off-Gas Systems - Enclosing NUREG/CR-0727	NA	Boiling Water Reactor
GL 79-039	Transmitting Division 5 Draft Regulatory Guide and Value Impact Statement	NA	Does not apply to power reactor.
GL 79-040	Follow-up Actions Resulting from the NRC Staff Reviews Regarding the TMI-2 Accident	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 79-041	Compliance with 40 CFR 190, EPA Uranium Fuel Cycle Standard	NA	Info
GL 79-042	Potentially Unreviewed Safety Question on Interaction Between Non-Safety Grade Systems and Safety Grade Systems	NA	Item was applicable only to units with operating license at the time the item was issued.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 79-043	Reactor Cavity Seal Ring Generic Issue	NA	Addressed to specific plant(s).
GL 79-044	Referencing 6/29/79 Letter Re Multiple Equipment Failures	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 79-045	Transmittal of Reports Regarding Foreign Reactor Operating Experiences	NA	Info
GL 79-046	Containment Purge and Venting During Normal Operation – Guidelines for Valve Operability	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 79-047	Radiation Training	NA	Info
GL 79-048	Confirmatory Requirements Relating to Condensation Oscillation Loads for the Mark I Containment Long Term Program	NA	Boiling Water Reactor
GL 79-049	Summary of Meetings Held on 9/18-20/79 to Discuss Potential Unreviewed Safety Question on Systems Interaction for B&W PI	NA	Info
GL 79-050	Emergency Plans Submittal Dates	NA	Info
GL 79-051	Follow-up Actions Resulting from the NRC Staff Reviews Regarding the TMI-2 Accident	NA 01	GL 79-51 provided follow-up actions resulting from the Three Mile Island Unit 2 accident. GL 79-51 was provided for planning and guidance purposes. Its principal element was a report titled "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations" (NUREG-0573). This GL and the NUREG were superseded by GL 80-90 and NUREG-0737. See GL 80-90 for further information.
GL 79-052	Radioactive Release at North Anna Unit 1 and Lessons Learned	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 79-053	ATWS	NA	Info
GL 79-054	Containment Purging and Venting During Normal Operation	NA	Addressed to specific plant(s).

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 79-055	Summary of Meeting Held on October 12, 1979 to Discuss Responses to Bulletins 79-05C and 79-06C and HPI Termination Criteria	NA	Info
GL 79-056	Discussion of Lessons Learned Short Term Requirements	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 79-057	Acceptance Criteria for Mark I Long Term Program	NA	Boiling Water Reactor
GL 79-058	ECCS Calculations on Fuel Cladding	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 79-059	This GL was never issued.	NA	
GL 79-060	Discussion of Lessons Learned Short Term Requirements	NA	Info
GL 79-061	Discussion of Lessons Learned Short Term Requirements	NA	Info
GL 79-062	ECCS Calculations on Fuel Cladding	NA	Item was applicable only to units with operating license at the time the item was issued. Duplicate of GL 79-058
GL 79-063	Upgraded Emergency Plans	C 01	GL 79-63 advised applicants for licenses of proposed rulemaking that NRC concurrence in State and local emergency plans would be a condition for issuing an operating license. TVA responded to GL 79-63 on January 3, 1980, and confirmed the intent to revise the Emergency Plan to address the NRC requirements.
GL 79-064	Suspension of All Operating Licenses (PWRs)	NA	Info
GL 79-065	Radiological Environmental Monitoring Program Requirements - Enclosing Branch Technical Position, Revision 1	NA	Info
GL 79-066	Additional Information Re 11/09/79 Letter on ECCS Calculations [GL 79-62]	NA	Info
GL 79-067	Estimates for Evacuation of Various Areas Around Nuclear Power Reactors	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 79-068	Audit of Small Break LOCA Guidelines	NA	Info
GL 79-069	Cladding Rupture, Swelling, and Coolant Blockage as a Result of a Reactor Accident	NA	Info
GL 79-070	Environmental Monitoring for Direct Radiation	NA	Info
GL 80-001	NUREG-0630, "Cladding, Swelling and Rupture - Models For LOCA Analysis"	NA	Info
GL 80-002	QA Requirements Regarding Diesel Generator Fuel Oil	C	TVA: FSAR 9.5.4.2
GL 80-003	BWR Control Rod Failures	NA	Boiling Water Reactor
GL 80-004	B 80-01, “Operability of ADS Valve Pneumatic Supply”	NA	Boiling Water Reactor
GL 80-005	B 79-01b, “Environmental Qualification of Class 1E Equipment”	NA	Info
GL 80-006	Issuance of NUREG-0313, Rev 1, "Technical Report on Material Selection and Processing Guidelines for BWR Coolant Pressure Boundary Piping”	NA	Boiling Water Reactor
GL 80-007	This GL was never issued.	NA	
GL 80-008	B 80-02. "Inadequate Quality Assurance for Nuclear Supplied Equipment"	NA	Boiling Water Reactor
GL 80-009	Low Level Radioactive Waste Disposal	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-010	Issuance of NUREG-0588, "Interim Staff Position On Equipment Qualifications of Safety-Related Electrical Equipment”	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 80-011	B 80-03, “Loss of Charcoal From Standard Type II, 2 Inch, Tray Absorber Cells”	C 01	GL 80-11 transmitted Bulletin 80-03. TVA responded to B 80-03 on March 21, 1980. See B 80-03 for further information.
GL 80-012	B 80-04, “Analysis of a PWR Main Steam Line Break With Continued Feedwater Addition”	NA	Info
GL 80-013	Qualification of Safety Related Electrical Equipment	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-014	LWR Primary Coolant System Pressure Isolation Valves	S 02	TVA: FSAR 5.2.7.4 NRC: 1.14.2 of SSER 6 ---------- NRC reviewed in 1.14.2 of SSER6. Unit 2 Action: Incorporate guidance into Technical Specifications. ---------- ---------- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS Surveillance Requirement 3.4.13.1 verifies RCS operational leakage by performance of an RCS water inventory balance.
GL 80-015	Request for Additional Management and Technical Resources Information	NA	Info
GL 80-016	B 79-01b, “Environmental Qualification of Class 1E Equipment”	NA	Info
GL 80-017	Modifications to BWR Control Rod Drive Systems	NA	Boiling Water Reactor
GL 80-018	Crystal River 3 Reactor Trip From Approximately 100% Full Power	NA	Applies only to Babcock and Wilcox designed plants
GL 80-019	Resolution of Enhanced Fission Gas Release Concern	NA	Info
GL 80-020	Actions Required From OL Applicants of NSSS Designs by W and CE Resulting From NRC B&O Task Force Review of TMI2 Accident	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 80-021	B 80-05, “Vacuum Condition Resulting in Damage to Chemical Volume Control System Holdup Tanks”	CI	Closed in IR 50-390/84-59 and 50-391/84-45. Unit 2 Action: Complete surveillance procedures for Unit 2.
GL 80-022	Transmittal of NUREG-0654, "Criteria For Preparation and Evaluation of Radiological Emergency Response Plan”	NA	Info
GL 80-023	Change of Submittal Date For Evaluation Time Estimates	NA	Info
GL 80-024	Transmittal of Information on NRC "Nuclear Data Link Specifications"	NA	Info
GL 80-025	B 80-06, “Engineering Safety Feature (ESF) Reset Controls”	NA	Info
GL 80-026	Qualifications of Reactor Operators	NA	Info
GL 80-027	B 80-07, “BWR Jet Pump Assembly Failure”	NA	Boiling Water Reactor
GL 80-028	B 80-08, “Examination of Containment Liner Penetration Welds”	C 01	GL 80-28 transmitted Bulletin 80-08. TVA responded to B 80-08 on July 8, 1980. See B 80-08 for further information.
GL 80-029	Modifications to Boiling Water Reactor Control Rod Drive Systems	NA	Boiling Water Reactor
GL 80-030	Clarification of The Term "Operable" As It Applies to Single Failure Criterion For Safety Systems Required by TS	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-031	B 80-09, “Hydramotor Actuator Deficiencies”	NA	Info
GL 80-032	Information Request on Category I Masonry Walls Employed by Plants Under CP and OL Review	C 01	GL 80-32 transmitted NRC questions on masonry walls. TVA provided the information requested by letters dated February 12, 1981, for reinforced walls and August 20, 1981, for nonreinforced walls. TVA provided a final response on January 22, 1982. See B 80-11 for further information.
GL 80-033	Actions Required From OL Applicants of B&W Designed NSSS Resulting From NRC B&O Task Force Review of TMI2 Accident	NA	Applies only to Babcock and Wilcox designed plants

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 80-034	Clarification of NRC Requirements for Emergency Response Facilities at Each Site	NA	Info
GL 80-035	Effect of a DC Power Supply Failure on ECCS Performances	NA	Boiling Water Reactor
GL 80-036	B 80-10, “Contamination of Non-Radioactive System and Resulting Potential For Unmonitored, Uncontrolled Release to Environment”	NA	Info
GL 80-037	Five Additional TMI-2 Related Requirements to Operating Reactors	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-038	Summary of Certain Non-Power Reactor Physical Protection Requirements	NA	Does not apply to power reactor.
GL 80-039	B 80-11, “Masonry Wall Design”	NA	Info
GL 80-040	Transmittal of NUREG-0654, "Report of the B&O Task Force” and Appropriate NUREG-0626, "Generic Evaluation of FW Transient and Small Break LOCA”	NA	Info
GL 80-041	Summary of Meetings Held on April 22 &23, 1980 With Representatives of the Mark I Owners Group	NA	Info
GL 80-042	B 80-12, ”Decay Heat Removal System Operability”	NA	Info
GL 80-043	B 80-13, “Cracking In Core Spray Spargers”	NA	Boiling Water Reactor
GL 80-044	Reorganization of Functions and Assignments Within ONRR/SSPB	NA	Info
GL 80-045	Fire Protection Rule	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-046 and GL 80-047	Generic Technical Activity A-12, "Fracture Toughness and Additional Guidance on Potential for Low Fracture toughness and Laminar Tearing on PWR Steam Generator Coolant Pump Supports"	C	No response was required for this GL, and NUREG-0577 states that the lamellar tearing aspect of this issue was resolved by the NUREG. Further, the NUREG states that for plants under review, the fracture toughness issue was resolved.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 80-048	Revision to 5/19/80 Letter On Fire Protection [GL 80-45]	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-049	Nuclear Safeguards Problems	NA	Info
GL 80-050	Generic Activity A-10, "BWR Cracks"	NA	Boiling Water Reactor
GL 80-051	On-Site Storage of Low-Level Waste	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-052	Five Additional TMI-2 Related Requirements - Erata Sheets to 5/7/80 Letter [GL 80-37]	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-053	Decay Heat Removal Capability	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-054	B 80-14, “Degradation of Scram Discharge Volume Capability”	NA	Boiling Water Reactor
GL 80-055	B 80-15, “Possible Loss of Hotline With Loss of off-Site Power”	NA	Info
GL 80-056	Commission Memorandum and Order on Equipment Qualification	NA	Info
GL 80-057	Further Commission Guidance For Power Reactor Operating Licenses NUREG-0660 and NUREG-0694	NA	Info
GL 80-058	B 80-16, “Potential Misapplication of Rosemount Inc. Models 1151/1152 Pressure Transmitters With "A" Or "D" Output Codes”	NA	Info
GL 80-059	Transmittal of Federal Register Notice RE Regional Meetings to Discuss Environmental Qualification of Electrical Equipment	NA	Info
GL 80-060	Request for Information Regarding Evacuation Times	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 80-061	TMI-2 Lessons Learned	NA	Info
GL 80-062	TMI-2 Lessons Learned	NA	Boiling Water Reactor
GL 80-063	B 80-17, “Failure of Control Rods to Insert During a Scram at a BWR”	NA	Boiling Water Reactor
GL 80-064	Scram Discharge Volume Designs	NA	Boiling Water Reactor
GL 80-065	Request for Estimated Construction Completion and Fuel Load Schedules	NA	Info
GL 80-066	B 80-17, Supplement 1, “Failure of Control Rods to Insert During a Scram at a BWR”	NA	Boiling Water Reactor
GL 80-067	Scram Discharge Volume	NA	Boiling Water Reactor
GL 80-068	B 80-17, Supplement 2, “Failures Revealed by Testing Subsequent to Failure of Control Rods to Insert During a Scram at a BWR”	NA	Boiling Water Reactor
GL 80-069	B 80-18, “Maintenance of Adequate Minimum Flow Through Centrifugal Charging Pumps Following Secondary Side HELB”	NA	Info
GL 80-070	B 80-19, “Failures of Mercury-Wetted Matrix Relays in RPS of Operating Nuclear Power Plants Designed by GE”	NA	Info
GL 80-071	B 80-20, “Failures of Westinghouse Type W-2 Spring Return to Neutral Control Switches”	NA	Info
GL 80-072	Interim Criteria For Shift Staffing	NA	Info
GL 80-073	"Functional Criteria For Emergency Response Facilities,” NUREG-0696	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 80-074	Notice of Forthcoming Meeting With Representatives of EPRI to Discuss Program For Resolution of USI A-12, “Fracture Toughness Issue”	NA	Info
GL 80-075	Lessons Learned Tech. Specs.	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-076	Notice of Forthcoming Meeting With GE to Discussed Proposed BWR Feedwater Nozzle Leakage Detection System	NA	Info
GL 80-077	Refueling Water Level – Technical Specifications Changes	S 02	Unit 2 Action: Address in Technical Specifications, as appropriate. --- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS LCO 3.9.7 requires the refueling cavity water level to be maintained greater than or equal to 23 feet above the top of the reactor vessel flange during movement of irradiated fuel assemblies within containment.
GL 80-078	Mark I Containment Long-Term Program	NA	Boiling Water Reactor
GL 80-079	B 80-17, Supplement 3, “Failures Revealed by Testing Subsequent to Failure of Control Rods to Insert During a Scram At a BWR”	NA	Boiling Water Reactor
GL 80-080	Preliminary Clarification of TMI Action Plan Requirements	NA	Info
GL 80-081	Preliminary Clarification of TMI Action Plan Requirements - Addendum to 9/5/80 Letter [GL 80-80]	NA	Info
GL 80-082	B 79-01b, Supplement 2, “Environmental Qualification of Class 1E Equipment”	NA	Info
GL 80-083	Environmental Qualification of Safety-Related Equipment	NA	Info
GL 80-084	BWR Scram System	NA	Boiling Water Reactor

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 80-085	Implementation of Guidance From USI A-12, “Potential For LOW Fracture Toughness and Lamellar Tearing On Component Support”	NA	Info
GL 80-086	Notice of Meeting to Discuss Final Resolution of USI A-12	NA	Info
GL 80-087	Notice of Meeting to Discuss Status of EPRI-Proposed Resolution of the USI A-12 Fracture Toughness Issue	NA	Info
GL 80-088	Seismic Qualification of Auxiliary Feedwater Systems	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-089	B 79-01b, Supplement 3, “Environmental Qualification of Class 1E Equipment”	NA	Info
GL 80-090	NUREG-0737, TMI (Prior and future GLs, with the exception of certain discrete scopes, have been screened into NUREG list for those applicable to Watts Bar 2)	CI	See NUREG items in this list.
GL 80-091	ODYN Code Calculation	NA	Boiling Water Reactor
GL 80-092	B 80-21, “Valve Yokes Supplied by Malcolm Foundry Company, Inc.”	C 01	GL 80-92 transmitted Bulletin 80-21. TVA responded to B 80-21 on May 6, 1981. See B 80-21 for further information.
GL 80-093	Emergency Preparedness	NA	Does not apply to power reactor.
GL 80-094	Emergency Plan	NA	Info
GL 80-095	Generic Technical Activity A-10, NUREG-0619, “BWR Feedwater Nozzle and Control Rod Drive Return Line Nozzle Cracking”	NA	Boiling Water Reactor
GL 80-096	Fire Protection	NA	Addressed to specific plant(s).
GL 80-097	B 80-23, “Failures of Solenoid Valves Manufactured by Valcor Engineering Corporation”	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 80-098	B 80-24, “Prevention of Damage Due to Water Leakage Inside Containment”	NA	Info
GL 80-099	Technical Specifications Revisions For Snubber Surveillance	NA	Info
GL 80-100	Appendix R to 10 CFR 50 Regarding Fire Protection - Federal Register Notice	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 80-101	Inservice Inspection Programs	NA	Addressed to specific plant(s).
GL 80-102	Commission Memorandum and Order of May 23, 1980 (Referencing B 79-01b, Supplement 2 - q.2 & 3 - Sept 30, 1980)	NA	Info
GL 80-103	Fire Protection - Revised Federal Register Notice	NA	Info
GL 80-104	Orders On Environmental Qualification of Safety Related Electrical Equipment	NA	Info
GL 80-105	Implementation of Guidance For USI A-12, “Potential For Low Fracture toughness and Lamellar Tearing On Component Supports”	NA	Info
GL 80-106	Report On ECCS Cladding Models, NUREG-0630	NA	Info
GL 80-107	BWR Scram Discharge System	NA	Boiling Water Reactor
GL 80-108	Emergency Planning	NA	Info
GL 80-109	Guidelines For SEP Soil Structure Interaction Reviews	NA	Info
GL 80-110	Periodic Updating of FSARS	NA	Item was applicable only to units with operating license at the time the item was issued.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 80-111	B 80-17, Supplement 4, “Failure of Control Rods to Insert During a Scram at a BWR”	NA	Boiling Water Reactor
GL 80-112	B 80-25, “Operating Problems With Target Rock Safety Relief Valves”	NA	Info
GL 80-113	Control of Heavy Loads	C	Superseded by GL 81-007.
GL 81-001	Qualification of Inspection, Examination, Testing and Audit Personnel	NA	Info
GL 81-002	Analysis, Conclusions and Recommendations Concerning Operator Licensing	NA	Info
GL 81-003	Implementation of NUREG-0313, “Technical Report on Material Selection and Processing Guidelines for BWR Coolant Pressure Boundary Piping”	NA	Boiling Water Reactor
GL 81-004	Emergency Procedures and Training for Station Blackout Events	C	Superseded by Station Blackout Rule.
GL 81-005	Information Regarding The Program For Environmental Qualification of Safety-Related Electrical Equipment	NA	Info
GL 81-006	Periodic Updating of Final Safety Analysis Reports (FSARS)	NA	Info
GL 81-007	Control of Heavy Loads	CI	“Movement of Heavy Loads Over Spent Fuel, Over Fuel in the Reactor, or Over Safety-Related Equipment” – NRC closure letter dated May 20, 1998. LICENSE CONDITION – Control of heavy loads (NUREG-0612) The staff concluded in SSER13 that the license condition was no longer necessary based on their review of TVA’s response to NUREG-0612 guidelines for Phase I in TVA letter dated July 28, 1993. Unit 2 Action: Unit 2 Heavy Loads Program will be in compliance with NUREG-0612.
GL 81-008	ODYN Code	NA	Boiling Water Reactor

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 81-009	BWR Scram Discharge System	NA	Boiling Water Reactor
GL 81-010	Post-TMI Requirements For The Emergency Operations Facility	NA	Info
GL 81-011	BWR Feedwater Nozzle and Control Rod Drive Return Line Nozzle Cracking (NUREG-0619)	NA	Boiling Water Reactor
GL 81-012	Fire Protection Rule	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 81-013	SER For GEXL Correlation For 8X8R Fuel Reload Applications For Appendix D Submittals of The GE topical Report	NA	Boiling Water Reactor
GL 81-014	Seismic Qualification of Auxiliary Feedwater Systems	CI	TVA: FSAR 10.4.9 ---------- Unit 2 Action: Additional Unit 2 implementing procedures or other activity is required for completion. [WAS "OL."]
GL 81-015	Environmental Qualification of Class 1E Electrical Equipment - Clarification of Staff's Handling of Proprietary Information	NA	Info
GL 81-016	NUREG-0737, Item I.C.1 SER on Abnormal Transient Operating Guidelines (ATOG)	NA	Applies only to Babcock and Wilcox designed plants
GL 81-017	Functional Criteria for Emergency Response Facilities	NA	Info
GL 81-018	BWR Scram Discharge System - Clarification of Diverse Instrumentation Requirements	NA	Boiling Water Reactor
GL 81-019	Thermal Shock to Reactor Pressure Vessels	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 81-020	Safety Concerns Associated With Pipe Breaks in the BWR Scram System	NA	Boiling Water Reactor

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 81-021	Natural Circulation Cooldown	CI	TVA responded December 3, 1981. Unit 2 Action: Issue operating procedures.
GL 81-022	Engineering Evaluation of the H. B. Robinson Reactor Coolant System Leak on 1/29/81	NA	Info
GL 81-023	INPO Plant Specific Evaluation Reports	NA	Info
GL 81-024	Multi-Plant Issue B-56, “Control Rods Fail to Fully Insert”	NA	Boiling Water Reactor
GL 81-025	Change in Implementing Schedule For Submission and Evaluation of Upgraded Emergency Plans	NA	Info
GL 81-026	Licensing Requirements for Pending Construction Permit and Manufacturing License Applications	NA	Applicants with pending Construction Permits
GL 81-027	Privacy and Proprietary Material in Emergency Plans	NA	Info
GL 81-028	Steam Generator Overfill	NA	Info
GL 81-029	Simulator Examinations	NA	Info
GL 81-030	Safety Concerns Associated With Pipe Breaks in the BWR Scram System	NA	Boiling Water Reactor
GL 81-031	This GL was never issued.	NA	
GL 81-032	NUREG-0737, Item II.K.3.44, “Evaluation of Anticipated Transients Combined With Single Failure”	NA	Boiling Water Reactor
GL 81-033	This GL was never issued.	NA	

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 81-034	Safety Concerns Associated With Pipe Breaks in the BWR Scram System	NA	Boiling Water Reactor
GL 81-035	Safety Concerns Associated With Pipe Breaks in the BWR Scram System	NA	Boiling Water Reactor
GL 81-036	Revised Schedule for Completion of TMI Action Plan Item II.D.1, “Relief and Safety Valve Testing”	NA	Info
GL 81-037	ODYN Code Reanalysis Requirements	NA	Boiling Water Reactor
GL 81-038	Storage of Low Level Radioactive Wastes at Power Reactor Sites	NA	Info
GL 81-039	NRC Volume Reduction Policy	NA	Info
GL 81-040	Qualifications of Reactor Operators	NA	Info
GL 82-001	New Applications Survey	NA	Info
GL 82-002	Commission Policy on Overtime	NA	Info
GL 82-003	High Burnup MAPLHGR Limits	NA	Boiling Water Reactor
GL 82-004	Use of INPO See-in Program	NA	Info
GL 82-005	Post-TMI Requirements	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 82-006	This GL was never issued.	NA	

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 82-007	Transmittal of NUREG-0909 Relative to the Ginna Tube Rupture	NA	Boiling Water Reactor
GL 82-008	Transmittal of NUREG-0909 Relative to the Ginna Tube Rupture	NA	Info
GL 82-009	Environmental Qualification of Safety Related Electrical Equipment	NA	Info
GL 82-010	Post-TMI Requirements	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 82-011	Transmittal of NUREG-0916 Relative to the Restart of R. E. Ginna Nuclear Power Plant	NA	Info
GL 82-012	Nuclear Power Plant Staff Working Hours	NA	Info
GL 82-013	Reactor Operator and Senior Reactor Operator Examinations	NA	Info
GL 82-014	Submittal of Documents to the NRC	NA	Info
GL 82-015	This GL was never issued.	NA	
GL 82-016	NUREG-0737 Technical Specifications	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 82-017	Inconsistency of Requirements Between 50.54(T) and 50.15	NA	Info
GL 82-018	Reactor Operator and Senior Reactor Operator Requalification Examinations	NA	Info
GL 82-019	Submittal of Copies of Documentation to NRC - Copy Requirements for Emergency Plans and Physical Security Plans	NA	Info

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 82-020	Guidance for Implementing the Standard Review Plan Rule	NA	Info
GL 82-021	Fire Protection Audits	NA	Info
GL 82-022	Congressional Request for Information Concerning Steam Generator Tube Integrity	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 82-023	Inconsistency Between Requirements of 10CFR 73.40(d) and Standard Technical Specifications For Performing Audits of Safeguards Contingency Plans	NA	Info
GL 82-024	Safety Relief Valve Quencher Loads: BWR MARK II and III Containments	NA	Boiling Water Reactor
GL 82-025	Integrated IAEA Exercise for Physical Inventory at LWRS	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 82-026	NUREG-0744, REV. 1, “Pressure Vessel Material Fracture Toughness”	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 82-027	Transmittal of NUREG-0763, “Guidelines For Confirmatory In-Plant Tests of Safety-Relief Valve Discharge for BWR Plants”	NA	Boiling Water Reactor
GL 82-028	Inadequate Core Cooling Instrumentation System	O	LICENSE CONDITION - Detectors for Inadequate core cooling (II.F.2) In the original SER, the review of the ICC instrumentation was incomplete. The January 24, 1992, letter superseded the previous responses on this issue. TVA letter for Units 1 and 2 dated January 24, 1992, committed to install Westinghouse ICCM-86 and associated hardware. NRC completed the review for Units 1 and 2 in SSER10. For Unit 2 due to obsolescence of the ICCM-86 system, TVA intends to install the Westinghouse Common Q Post-Accident Monitoring System. Unit 2 Action: Install Westinghouse Common Q PAM system.
GL 82-029	This GL was never issued.	NA	
GL 82-030	Filings Related to 10 CFR 50 Production and Utilization Facilities	NA	Info

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 82-031	This GL was never issued.	NA	
GL 82-032	Draft Steam Generator Report (SAI)	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 82-033	Supplement to NUREG-0737, “Requirements for Emergency Response Capability”	CI	“Safety Parameter Display System” (SPDS) / ”Requirements for Emergency Response Capability” - NRC reviewed in SSER5, SSER6, and 18.2.2 of SSER15. Unit 2 Action: Install SPDS and have it operational prior to start-up after the first refueling outage.
GL 82-034	This GL was never issued.	NA	
GL 82-035	This GL was never issued.	NA	
GL 82-036	This GL was never issued.	NA	
GL 82-037	This GL was never issued.	NA	
GL 82-038	Meeting to Discuss Developments for Operator Licensing Examinations	NA	Info
GL 82-039	Problems With Submittals of Subsequent Information of CURT 73.21 For Licensing Reviews	NA	Info
GL 83-001	Operator Licensing Examination Site Visit	NA	Info
GL 83-002	NUREG-0737 Technical Specifications	NA	Boiling Water Reactor
GL 83-003	This GL was never issued.	NA	
GL 83-004	Regional Workshops Regarding Supplement 1 to NUREG-0737, “Requirements For Emergency Response Capability”	NA	Info

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 83-005	Safety Evaluation of "Emergency Procedure Guidelines, Revision 2," June 1982	NA	Boiling Water Reactor
GL 83-006	Certificates and Revised Format For Reactor Operator and Senior Reactor Operator Licenses	NA	Info
GL 83-007	The Nuclear Waste Policy Act of 1982	NA	Info
GL 83-008	Modification of Vacuum Breakers on Mark I Containments	NA	Boiling Water Reactor
GL 83-009	Review of Combustion Engineering Owners' Group Emergency Procedures Guideline Program	NA	Applies only to Combustion Engineering designed plants
GL 83-010a	Resolution of TMI Action Item II.K.3.5., "Automatic Trip of Reactor Coolant Pumps"	NA	Applies only to Combustion Engineering designed plants
GL 83-010b	Resolution of TMI Action Item II.K.3.5., "Automatic Trip of Reactor Coolant Pumps"	NA	Applies only to Combustion Engineering designed plants
GL 83-010c	Resolution of TMI Action Item II.K.3.5., "Automatic Trip of Reactor Coolant Pumps"	CI	TVA: letters dated January 5, 1984 and June 25, 1984 NRC: letter dated June 8, 1990. ---------- Unit 2 Action: Incorporate emergency response guidelines into applicable procedures. [WAS "NOTE 3."]
GL 83-010d	Resolution of TMI Action Item II.K.3.5., "Automatic Trip of Reactor Coolant Pumps"	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 83-010e	Resolution of TMI Action Item II.K.3.5., "Automatic Trip of Reactor Coolant Pumps"	NA	Applies only to Babcock and Wilcox designed plants
GL 83-010f	Resolution of TMI Action Item II.K.3.5., "Automatic Trip of Reactor Coolant Pumps"	NA	Applies only to Babcock and Wilcox designed plants
GL 83-011	Licensee Qualification for Performing Safety Analyses in Support of Licensing Actions	NA	Item was applicable only to units with operating license at the time the item was issued.

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 83-012	Issuance of NRC FORM 398 - Personal Qualifications Statement - Licensee	NA	Info
GL 83-013	Clarification of Surveillance Requirements for HEPA Filters and Charcoal Absorber Units In Standard Technical Specifications on ESF Cleanup Systems	NA	Info
GL 83-014	Definition of "Key Maintenance Personnel," (Clarification of Generic Letter 82-12)	NA	Info
GL 83-015	Implementation of Regulatory Guide 1.150, "Ultrasonic Testing of Reactor Vessel Welds During Preservice & Inservice Examinations, Revision 1"	NA	Info
GL 83-016	Transmittal of NUREG-0977 Relative to the ATWS Events at Salem Generating Station, Unit No.1	NA	Info
GL 83-016a	Transmittal of NUREG-0977 Relative to the ATWS Events at Salem Generating Station, Unit No.1	NA	Info
GL 83-017	Integrity of Requalification Examinations for Renewal of Reactor Operator and Senior Reactor Operator Licenses	NA	Info
GL 83-018	NRC Staff Review of the BWR Owners' Group (BWROG) Control Room Survey Program	NA	Boiling Water Reactor
GL 83-019	New Procedures for Providing Public Notice Concerning Issuance of Amendments to Operating Licenses	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 83-020	Integrated Scheduling for Implementation of Plant Modifications	NA	Info
GL 83-021	Clarification of Access Control Procedures for Law Enforcement Visits	NA	Info
GL 83-022	Safety Evaluation of "Emergency Response Guidelines"	NA	Info
GL 83-023	Safety Evaluation of "Emergency Procedure Guidelines"	NA	Applies only to Combustion Engineering designed plants

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 83-024	TMI Task Action Plan Item I.G.1, "Special Low Power Testing and Training," Recommendations for BWRs	NA	Boiling Water Reactor
GL 83-025	This GL was never issued.	NA	
GL 83-026	Clarification Of Surveillance Requirements For Diesel Fuel Impurity Level Tests	NA	Info
GL 83-027	Surveillance Intervals in Standard Technical Specifications	NA	Info
GL 83-028	"Required Actions Based on Generic Implications of Salem ATWS Events: 1.2 – Post Trip Review Data and Information Capability	C	TVA: letters dated November 7, 1983 and December 4, 1987 NRC: IR 50-390, 391/86-04
GL 83-028	"Required Actions Based on Generic Implications of Salem ATWS Events: 2.1 – Equipment Classification and Vendor Interface (Reactor Trip System Components)	CI	TVA: letters dated November 7, 1983 and August 24, 1990 NRC: letters dated October 20, 1986 and June 18, 1990 ---------- Unit 2 Action: Ensure that required information on Critical Structures and Components is properly incorporated into procedures. [WAS "NOTE 3."]
GL 83-028	"Required Actions Based on Generic Implications of Salem ATWS Events: 2.2 – Equipment Classification and Vendor Interface (All SR Components)"	CI	Unit 2 Action: Enter engineering component background data in INPO's Equipment Performance and Information Exchange System (EPIX) for Unit 2.

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 83-028	"Required Actions Based on Generic Implications of Salem ATWS Events: 3.1 – Post-Maintenance Testing (Reactor Trip System Components)	S 02	TVA: letters dated November 7, 1983, January 17, 1986 and November 1, 1993 NRC: letters dated December 10, 1985, October 27, 1986, and July 2, 1990; IR 390, 391/86-04 ---------- Unit 2 Action: Test and maintenance procedures and Technical Specifications will include post-maintenance operability testing of safety-related components of the reactor trip system. ---------- ---------- REVISION 02 UPDATE: Developmental Revision A of the Unit 2 TS (including the TS Bases) was submitted on March 4, 2009. The Bases for TS Surveillance Requirement 3.0.1 states, in part, “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.”
GL 83-028	"Required Actions Based on Generic Implications of Salem ATWS Events: 3.2 – Post-Maintenance Testing (All SR Components)	S 02	TVA: letters dated November 7, 1983, January 17, 1986 and November 1, 1993 NRC: letters dated December 10, 1985, October 27, 1986, and July 2, 1990; IR 390, 391/86-04 ---------- Unit 2 Action: Test and maintenance procedures and Technical Specifications will include post-maintenance operability testing of other (than reactor trip system) safety-related components. ---------- ---------- REVISION 02 UPDATE: Developmental Revision A of the Unit 2 TS (including the TS Bases) was submitted on March 4, 2009. The Bases for TS Surveillance Requirement 3.0.1 states, in part, “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.”
GL 83-028	"Required Actions Based on Generic Implications of Salem ATWS Events: 4.1 – Reactor Trip System Reliability (Vendor Related Modifications)	CI	TVA: letter dated May 19, 1986 ---------- Unit 2 Action: Confirm vendor-recommended DS416 breaker modifications are implemented.

* = See last page for status code definition.

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 83-028	"Required Actions Based on Generic Implications of Salem ATWS Events: 4.2 – Reactor Trip System Reliability (Preventive Maintenance and Surveillance Program for Reactor Trip Breakers)	S 02	TVA: letters dated November 7, 1983, February 10, 1986, and May 19, 1986 NRC: letters dated July 26, 1985 and June 18, 1992; SSER 16 ---------- Unit 2 Action: Ensure maintenance instruction procedure and Technical Specifications support reliable reactor trip breaker operation. ---------- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 TS was submitted on February 2, 2010. Item 17. (Reactor Trip Breakers) of TS Table 3.3.1-1 states the requirement for the reactor trip breakers.
GL 83-028	"Required Actions Based on Generic Implications of Salem ATWS Events: 4.3 – Reactor Trip System Reliability (Automatic Actuation of Shunt Trip Attachment)	C	TVA: letters dated November 7, 1983, March 22, 1985 NRC: IR 50-390/86-04 and 50-391/86-04; letter dated June 18, 1990
GL 83-028	"Required Actions Based on Generic Implications of Salem ATWS Events: 4.5 – Reactor Trip System Reliability (Automatic Actuation of Shunt Trip Attachment)	S 02	TVA: letters dated November 7, 1983 and July 26, 1985 NRC: letters dated June 28, 1990 and October 9, 1990; SSERs 5 and 16 ---------- Unit 2 Action: Address in Technical Specifications, as appropriate. ---------- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. Item 18. (Reactor Trip Breaker Undervoltage and Shunt Trip Mechanisms) of TS Table 3.3.1-1 states the requirement for the shunt trip attachment.
GL 83-029	This GL was never issued.	NA	
GL 83-030	Deletion of Standard Technical Specifications Surveillance Requirement 4.8.1.1.2.d.6 For Diesel Generator Testing	NA	Info

* = See last page for status code definition.

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 83-031	Safety Evaluation of "Abnormal Transient Operating Guidelines"	NA	Applies only to Babcock and Wilcox designed plants
GL 83-032	NRC Staff Recommendations Regarding Operator Action for Reactor Trip and ATWS	NA	Info
GL 83-033	NRC Positions on Certain Requirements of Appendix R to 10 CFR 50	NA	Info
GL 83-034	This GL was never issued.	NA	
GL 83-035	Clarification of TMI Action Plan Item II.K.3.31	NA	Info
GL 83-036	NUREG-0737 Technical Specifications	NA	Boiling Water Reactor
GL 83-037	NUREG-0737 Technical Specifications	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 83-038	NUREG-0965, "NRC Inventory of Dams"	NA	Info
GL 83-039	Voluntary Survey of Licensed Operators	NA	Info
GL 83-040	Operator Licensing Examination	NA	Info
GL 83-041	Fast Cold Starts of Diesel Generators	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 83-042	Clarification to GL 81-07 Regarding Response to NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants"	NA	Info
GL 83-043	Reporting Requirements of 10 CFR 50, Sections 50.72 and 50.73, and Standard Technical Specifications	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 83-044	Availability of NUREG-1021, "Operator Licensing Examiner Standards”	NA	Info
GL 84-001	NRC Use Of The Terms "Important To Safety" and "Safety Related"	NA	Info
GL 84-002	Notice of Meeting Regarding Facility Staffing	NA	Info
GL 84-003	Availability of NUREG-0933, "A Prioritization of Generic Safety Issues"	NA	Info
GL 84-004	Safety Evaluation of Westinghouse Topical Reports Dealing with Elimination of Postulated Pipe Breaks in PWR Primary Main Loops	NA	Info
GL 84-005	Change to NUREG-1021, "Operator Licensing Examiner Standards"	NA	Info
GL 84-006	Operator and Senior Operator License Examination Criteria For Passing Grade	NA	Does not apply to power reactor.
GL 84-007	Procedural Guidance for Pipe Replacement at BWRs	NA	Boiling Water Reactor
GL 84-008	Interim Procedures for NRC Management of Plant-Specific Backfitting	NA	Info
GL 84-009	Recombiner Capability Requirements of 10 CFR 50.44(c)(3)(ii)	NA	Boiling Water Reactor
GL 84-010	Administration of Operating Tests Prior to Initial Criticality	NA	Info
GL 84-011	Inspection of BWR Stainless Steel Piping	NA	Boiling Water Reactor
GL 84-012	Compliance With 10 CFR Part 61 and Implementation of Radiological Effluent Technical Specifications (RETs) and Attendant Process Control Program (PCP)	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 84-013	Technical Specification for Snubbers	NA	Info
GL 84-014	Replacement and Requalification Training Program	NA	Info
GL 84-015	Proposed Staff Actions to Improve and Maintain Diesel Generator Reliability	NA	Info
GL 84-016	Adequacy of On-Shift Operating Experience for Near Term Operating License Applicants	NA	Info
GL 84-017	Annual Meeting to Discuss Recent Developments Regarding Operator Training, Qualifications, and Examinations	NA	Info
GL 84-018	Filing of Applications for Licenses and Amendments	NA	Does not apply to power reactor.
GL 84-019	Availability of Supplement 1 to NUREG-0933, "A Prioritization of Generic Safety Issues"	NA	Info
GL 84-020	Scheduling Guidance for Licensee Submittals of Reloads That Involve Unreviewed Safety Questions	NA	Info
GL 84-021	Long Term Low Power Operation in Pressurized Water Reactors	NA	Info
GL 84-022	This GL was never issued.	NA	
GL 84-023	Reactor Vessel Water Level Instrumentation in BWRs	NA	Boiling Water Reactor
GL 84-024	Certification of Compliance to 10 CFR 50.49, Environmental Qualification of Electric Equipment Important To Safety For Nuclear Power Plants	CI	See Special Program for Environmental Qualification.
GL 85-001	Fire Protection Policy Steering Committee Report	NA	Only issued as draft

*** = See last page for status code definition.**

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 85-002	Recommended Actions Stemming From NRC Integrated Program for the Resolution of Unresolved Safety Issues Regarding Steam Generator Tube Integrity	CI	TVA responded to the GL on June 17, 1985. Unit 2 Action: Perform SG inspection.
GL 85-003	Clarification of Equivalent Control Capacity for Standby Liquid Control Systems	NA	Boiling Water Reactor
GL 85-004	Operating Licensing Examinations	NA	Info
GL 85-005	Inadvertent Boron Dilution Events	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 85-006	Quality Assurance Guidance for ATWS Equipment That Is Not Safety-Related	NA	Info
GL 85-007	Implementation of Integrated Schedules for Plant Modifications	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 85-008	10 CFR 20.408 Termination Reports - Format	NA	Info
GL 85-009	Technical Specifications For Generic Letter 83-28, Item 4.3	NA	Info
GL 85-010	Technical Specification For Generic Letter 83-28, Items 4.3 and 4.4	NA	Applies only to Babcock and Wilcox designed plants
GL 85-011	Completion of Phase II of “Control of Heavy Loads at Nuclear Power Plants,” NUREG-0612	C	See GL 81-07.
GL 85-012	Implementation Of TMI Action Item II.K.3.5, "Automatic Trip Of Reactor Coolant Pumps”	CI	“Implementation of TMI Item II.K.3.5” – Reviewed in 15.5.4 of original 1982 SER; became License Condition 35. The staff determined that their review of Item II.K.3.5 did not have to be completed to support the full power license and considered this license condition resolved in SSER4. The item was further reviewed in Appendix EE of SSER16. Unit 2 Action: Implement modifications as required.
GL 85-013	Transmittal Of NUREG-1154 Regarding The Davis-Besse Loss Of Main And Auxiliary Feedwater Event	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 85-014	Commercial Storage At Power Reactor Sites Of Low Level Radioactive Waste Not Generated By The Utility	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 85-015	Information On Deadlines For 10 CFR 50.49, "Environmental Qualification Of Electric Equipment Important To Safety At Nuclear Power Plants"	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 85-016	High Boron Concentrations	NA	Info
GL 85-017	Availability Of Supplements 2 and 3 To NUREG-0933, "A Prioritization Of Generic Safety Issues"	NA	Info
GL 85-018	Operator Licensing Examinations	NA	Info
GL 85-019	Reporting Requirements On Primary Coolant Iodine Spikes	NA	Info
GL 85-020	Resolution Of Generic Issue 69: High Pressure Injection/Make-up Nozzle Cracking In Babcock And Wilcox Plants	NA	Applies only to Babcock and Wilcox designed plants
GL 85-021	This GL was never issued.	NA	
GL 85-022	Potential For Loss Of Post-LOCA Recirculation Capability Due To Insulation Debris Blockage	NA	Info
GL 86-001	Safety Concerns Associated With Pipe Breaks In The BWR Scram System	NA	Boiling Water Reactor
GL 86-002	Technical Resolution of Generic Issue B-19 - Thermal Hydraulic Stability	NA	Boiling Water Reactor
GL 86-003	Applications For License Amendments	NA	Info
GL 86-004	Policy Statement On Engineering Expertise On Shift	C 01	TVA responded to GL 86-04 on May 29, 1986. TVA provides engineering expertise on shift in the form of a dedicated Shift Technical Advisor (STA) or an STA qualified Senior Reactor Operator.

* = See last page for status code definition.

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 86-005	Implementation Of TMI Action Item II.K.3.5, "Automatic Trip Of Reactor Coolant Pumps"	NA	Applies only to Babcock and Wilcox designed plants
GL 86-006	Implementation Of TMI Action Item II.K.3.5, "Automatic Trip of Reactor Coolant Pumps"	NA	Applies only to Combustion Engineering designed plants
GL 86-007	Transmittal of NUREG-1190 Regarding The San Onofre Unit 1 Loss of Power and Water Hammer Event	NA	Info
GL 86-008	Availability of Supplement 4 to NUREG-0933, "A Prioritization of Generic Safety Issues"	NA	Info
GL 86-009	Technical Resolution of Generic Issue B-59, (N-1) Loop Operation in BWRs and PWRs	S 02	N-1 Loop operation was addressed in original 1982 SER (4.4.7). Unit 2 Action: Confirm Technical Specifications prohibit (N-1) Loop Operation. REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS LCO 3.4.4 requires that four Reactor Coolant System loops be operable and in operation during Modes 1 and 2.
GL 86-010	Implementation of Fire Protection Requirements	NA	Info
GL 86-010, S1	Fire Endurance Test Acceptance Criteria for Fire Barrier Systems Used to Separate Redundant Safe Shutdown Trains Within the Same Fire Area	NA	Info
GL 86-011	Distribution of Products Irradiated in Research	NA	Does not apply to power reactor.
GL 86-012	Criteria for Unique Purpose Exemption From Conversion From The Use of Heu Fuel	NA	Does not apply to power reactor.
GL 86-013	Potential Inconsistency Between Plant Safety Analyses and Technical Specifications	NA	Applies only to Babcock and Wilcox and Combustion Engineering designed plants
GL 86-014	Operator Licensing Examinations	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 86-015	Information Relating To Compliance With 10 CFR 50.49, "Environmental Qualification of Electric Equipment Important To Safety For Nuclear Power Plants"	NA	Info
GL 86-016	Westinghouse ECCS Evaluation Models	NA	Info
GL 86-017	Availability of NUREG-1169, "Technical Findings Related to Generic Issue C-8, BWR MSIC Leakage And Treatment Methods"	NA	Boiling Water Reactor
GL 87-001	Public Availability Of The NRC Operator Licensing Examination Question Bank	NA	Info
GL 87-002 and GL 87-003	Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, USI A-46	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 87-004	Temporary Exemption From Provisions Of The FBI Criminal History Rule For Temporary Workers	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 87-005	Request for Additional Information on Assessment of License Measures to Mitigate and/or Identify Potential Degradation of Mark I Drywells	NA	Boiling Water Reactor
GL 87-006	Periodic Verification of Leak Tight Integrity of Pressure Isolation Valves	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 87-007	Information Transmittal of Final Rulemaking For Revisions To Operator Licensing - 10 CFR 55 And Confirming Amendments	NA	Info
GL 87-008	Implementation of 10 CFR 73.55 Miscellaneous Amendments and Search Requirements	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 87-009	Sections 3.0 And 4.0 of Standard Tech Specs on Limiting Conditions For Operation And Surveillance Requirements	NA	Info
GL 87-010	Implementation of 10 CFR 73.57, Requirements For FBI Criminal History Checks	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 87-011	Relaxation in Arbitrary Intermediate Pipe Rupture Requirements	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 87-012	Loss of Residual Heat Removal While The Reactor Coolant System is Partially Filled	C	This GL was superseded by GL 88-17.
GL 87-013	Integrity of Requalification Examinations At Non-Power Reactors	NA	Does not apply to power reactor.
GL 87-014	Operator Licensing Examinations	NA	Info
GL 87-015	Policy Statement On Deferred Plants	NA	Info
GL 87-016	Transmittal of NUREG-1262, "Answers To Questions On Implementation of 10 CFR 55 On Operators' Licenses"	NA	Info
GL 88-001	NRC Position on IGSCC in BWR Austenitic Stainless Steel Piping	NA	Boiling Water Reactor
GL 88-002	Integrated Safety Assessment Program II	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 88-003	Resolution of GSI 93, “Steam Binding of Auxiliary Feedwater Pumps”	CI	TVA: letter June 3, 1988. NRC letters dated February 17, 1988 and July 20, 1988 NRC: SSER 16 ---------- NRC accepted approach in letter dated July 20, 1988, and reviewed response in Appendix EE of SSER16. Unit 2 Action: Procedures and hardware will be in place to ensure recognition of indications of steam binding and maintenance of system operability until check valves are repaired and back leakage stopped.
GL 88-004	Distribution of Gems Irradiated in Research Reactors	NA	Does not apply to power reactor.
GL 88-005	Boric Acid Corrosion of Carbon Steel Reactor Pressure Boundary Components in PWR plants	CI	NRC acceptance letter dated August 8, 1990 for both units. Unit 2 Action: Implement program.
GL 88-006	Removal of Organization Charts from Technical Specification Administrative Control Requirements	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 88-007	Modified Enforcement Policy Relating to 10 CFR 50.49, “Environmental Qualification of Electrical Equipment Important to Safety for Nuclear Power Plants”	CI	See Special Program for Environmental Qualification.
GL 88-008	Mail Sent or Delivered to the Office of Nuclear Reactor Regulation	NA	Info
GL 88-009	Pilot Testing of Fundamentals Examination	NA	Boiling Water Reactor
GL 88-010	Purchase of GSA Approved Security Containers	NA	Info
GL 88-011	NRC Position on Radiation Embrittlement of Reactor Vessel Material and its Impact on Plant Operations	S 02	NRC acceptance letter dated June 29, 1989, for both units. Unit 2 Action: Submit Pressure Temperature curves. REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. WCAP-17035-NP "Watts Bar Unit 2 Heatup and Cooldown Limit Curves for Normal Operation and PTLR Support Documentation" was submitted with the TS.
GL 88-012	Removal of Fire Protection Requirements from Technical Specification	NA	Info
GL 88-013	Operator Licensing Examinations	NA	Info
GL 88-014	Instrument Air Supply System Problems Affecting Safety-Related Equipment	CI 04	NRC letter dated July 26, 1990, closing the issue. Unit 2 Action: Complete Unit 2 implementation. REVISION 04 UPDATE: The compressed air system is a common system at Watts Bar; therefore, the requirements for this GL have been satisfied for Unit 2. Watts Bar revised the response in a letter dated July 14, 1995. NRC letter dated July 27, 1995, stated that their conclusion as stated on July 26,1990, had not changed and that their effort was complete.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 88-015	Electric Power Systems - Inadequate Control Over Design Process	NA	Info
GL 88-016	Removal of Cycle-Specific Parameter Limits from Technical Specifications	NA	Info
GL 88-017	Loss of Decay Heat Removal	CI	NRC acceptance letter dated March 8, 1995 (Unit 1). Unit 2 Action: Implement modifications to provide RCS temperature, RV level and RHR system performance.
GL 88-018	Plant Record Storage on Optical Disks	NA	Info
GL 88-019	Use of Deadly Force by Licensee Guards to Prevent Theft of Special Nuclear Material	NA	Does not apply to power reactor.
GL 88-020	Individual Plant Examination for Severe Accident Vulnerabilities	S 04	Unit 2 Action: Complete evaluation for Unit 2. REVISION 02 UPDATE: The Probabilistic Risk Assessment Individual Plant Examination Summary Report was submitted on February 9, 2010. REVISION 04 UPDATE: The Individual Plant Examination of External Events Design Report was submitted on April 30, 2010.
GL 89-001	Implementation of Programmatic and Procedural Controls for Radiological Effluent Technical Specifications	NA	Info
GL 89-002	Actions to Improve the Detection of Counterfeit and Fraudulently Marketed Products	C 01	GL 89-02 did not require a response. WBN Unit 2 program for procurement and dedication of materials is based in part on and complies with the guidance of GL 89-02. The program is implemented through project procedures.
GL 89-003	Operator Licensing Examination Schedule	NA	Info
GL 89-004	Guidelines on Developing Acceptable Inservice Testing Programs	OV	NRC reviewed in 3.9.6 of SSER14 (Unit 1). Unit 2 Action: Submit an ASME Section XI Inservice Test Program for the first ten year interval six months before receiving an Operating License.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 89-005	Pilot Testing of the Fundamentals Examination	NA	Info
GL 89-006	Task Action Plan Item I.D.2 – Safety Parameter Display System – 10 CFR 50.54(f)	CI	“Safety Parameter Display System” (SPDS) / ”Requirements for Emergency Response Capability” - NRC reviewed in SSER5, SSER6, and 18.2.2 of SSER15. Unit 2 Action: Install SPDS and have it operational prior to start-up after the first refueling outage.
GL 89-007	Power Reactor Safeguards Contingency Planning for Surface Vehicle Bombs	C	TVA: letter dated October 31, 1989 NRC: memo dated June 26, 1990
GL 89-008	Erosion/Corrosion-Induced Pipe Wall Thinning	CI	Unit 1 Flow Accelerated Corrosion Program reviewed in IR 390/94-89 (February 1995). Unit 2 Actions: Prepare procedure and perform baseline inspections.
GL 89-009	ASME Section III Component Replacements	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 89-010	Safety-Related Motor-Operated Valve Testing and Surveillance	CI	NRC accepted approach in September 14, 1990, letter and reviewed in Appendix EE of SSER16. Unit 2 Action: Implement pressure testing and surveillance program for safety-related MOVs, satisfying the intent of GL 89-10.
GL 89-010 or GL 96-005	Involves Main Steam Isolation Valves	NA	Boiling Water Reactor
GL 89-011	Resolution of Generic Issue 101, "Boiling Water Reactor Water Level Redundancy"	NA	Boiling Water Reactor
GL 89-012	Operator Licensing Examination	NA	Info
GL 89-013	Service Water System Problems Affecting Safety-Related Equipment	CI	NRC letters dated July 9, 1990 and June 13, 1997, accepting approach. Unit 2 Actions: 1) Implement initial performance testing of the heat exchangers; and 2) Establish eddy current baseline data for the Containment Spray heat exchangers.
GL 89-014	Line-Item Improvements in Technical Specifications - Removal of 3.25 Limit on Extending Surveillance Intervals	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 89-015	Emergency Response Data System	NA	Info
GL 89-016	Installation of a Hardened Wetwell Vent	NA	Boiling Water Reactor
GL 89-017	Planned Administrative Changes to the NRC Operator Licensing Written Examination Process	NA	Info
GL 89-018	Resolution of Unresolved Safety Issues A-17, "Systems Interactions in Nuclear Power Plants"	NA	Info
GL 89-019	Request for Actions Related to Resolution of Unresolved Safety Issue A-47, "Safety Implication of Control Systems in LWR Nuclear Power Plants" Pursuant to 10 CFR 50.54(f)	CI	TVA responded by letter dated March 22, 1990. NRC acceptance letter dated October 24, 1990, for both units. Unit 2 Action: Perform evaluation of common mode failures due to fire.
GL 89-020	Protected Area Long-Term Housekeeping	NA	Does not apply to power reactor.
GL 89-021	Request for Information Concerning Status of Implementation of Unresolved Safety Issue (USI) Requirements	S 02	TVA responded to GL 89-21 with the status of USIs for both units on November 29, 1989. NRC provided an assessment of WBN USI status on May 1, 1990. The NRC assessment included a list of incomplete USIs for WBN. USIs were initially reviewed for WBN in the SER Appendix C. USIs were subsequently reviewed in SSER 15 Appendix C (June 1995) and SSER 16 (September 1995). Unit 2 actions: Provide a status of WBN Unit 2 USIs. Complete implementation of USIs. ---------- REVISION 02 UPDATE: Status of USIs was provided by Enclosure 2 of TVA letter dated September 26, 2008. The applicable USIs are either closed, deleted, or captured in either the SER Framework or the Generic Communications Framework, or they are part of the CAPs and SPs.
GL 89-022	Potential For Increased Roof Loads and Plant Area Flood Runoff Depth At Licensed Nuclear Power Plants Due To Recent Change In Probable Maximum Precipitation Criteria Developed by the National Weather Service	C	TVA: letter dated December 16, 1981 ---------- Answer to informal question provided in TVA letter dated December 16, 1981, and subsequently included in FSAR. GL did not require a response. No further action required.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 89-023	NRC Staff Responses to Questions Pertaining to Implementation of 10 CFR Part 26	NA	Info
GL 90-001	Request for Voluntary Participation in NRC Regulatory Impact Survey	NA	Info
GL 90-002	Alternative Requirements for Fuel Assemblies in the Design Features Section of Technical Specifications	NA	Info
GL 90-003	Relaxation of Staff Position in Generic Letter 83-28, Item 2.2 Part 2 "Vendor Interface for Safety-Related Components"	NA	Info
GL 90-004	Request for Information on the Status of Licensee Implementation of GSIs Resolved with Imposition of Requirements or CAs	C	TVA responded on June 23, 1990
GL 90-005	Guidance for Performing Temporary Non-Code Repair of ASME Code Class 1, 2, and 3 Piping	NA	Info
GL 90-006	Resolution of Generic Issues 70, "PORV and Block Valve Reliability," and 94, "Additional LTOP Protection for PWRs"	S 02	NRC letter dated January 9, 1991, accepted TVA's response for both units. Unit 2 Actions: 1) Revise operating instruction and surveillance procedure; and 2) Incorporate testing requirements in the Technical Specifications. REVISION 02 UPDATE: Developmental Revision A of the Unit 2 Technical Specifications (TS) was submitted on March 04, 2009. TS Surveillance Requirement 3.4.11.2 specifies the required testing of each PORV.
GL 90-007	Operator Licensing National Examination Schedule	NA	Info
GL 90-008	Simulation Facility Exemptions	NA	Info
GL 90-009	Alternative Requirements for Snubber Visual Inspection Intervals and Corrective Actions	NA	Info

* = See last page for status code definition.

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 91-001	Removal of the Schedule for the Withdrawal of Reactor Vessel Material Specimens from Technical Specifications	NA	Info
GL 91-002	Reporting Mishaps Involving LLW Forms Prepared for Disposal	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 91-003	Reporting of Safeguards Events	NA	Info
GL 91-004	Changes in Technical Specification Surveillance Intervals to Accommodate a 24-Month Fuel Cycle	NA	Info
GL 91-005	Licensee Commercial-Grade Procurement and Dedication Programs	NA	Info
GL 91-006	Resolution of Generic Issue A-30, “Adequacy of Safety-Related DC Power Supplies," Pursuant to 10 CFR 50.54(f)	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 91-007	GI-23, "Reactor Coolant Pump Seal Failures" and Its Possible Effect on Station Blackout	NA	Info
GL 91-008	Removal of Component Lists from Technical Specifications	NA	Info
GL 91-009	Modification of Surveillance Interval for the Electrical Protective Assemblies in Power Supplies for the Reactor Protection System	NA	Boiling Water Reactor
GL 91-010	Explosives Searches at Protected Area Portals	NA	Does not apply to power reactor.
GL 91-011	Resolution of Generic Issues A-48, “LCOs for Class 1E Vital Instrument Buses”, and 49, “Interlocks and LCOs for Class 1E Tie Breakers," Pursuant to 10 CFR 50.54	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 91-012	Operator Licensing National Examination Schedule	NA	Info
GL 91-013	Request for Information Related to Resolution of Generic Issue 130, “Essential Service Water System Failures @ Multi-Unit Sites”	NA	Addressed to specific (non-TVA) plants.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 91-014	Emergency Telecommunications	NA	Info
GL 91-015	Operating Experience Feedback Report, Solenoid-Operated Valve Problems at U.S. Reactors	NA	Info
GL 91-016	Licensed Operators' and Other Nuclear Facility Personnel Fitness for Duty	NA	Info
GL 91-017	Generic Safety Issue 29, "Bolting Degradation or Failure in Nuclear Power Plants"	NA	Info
GL 91-018	Information to Licensees Regarding Two NRC Inspection Manual Sections on Resolution of Degraded and Nonconforming Conditions and on Operability	NA	GL 91-18 has been superseded by RIS 2005-20.
GL 91-019	Information to Addressees Regarding New Telephone Numbers for NRC Offices Located in One White Flint North	NA	Info
GL 92-001	Reactor Vessel Structural Integrity	C	By letter dated May 11, 1994, for both units NRC confirmed TVA had provided the information requested in GL 92-01. NRC issued GL 92-01 revision 1, supplement 1 on May 19, 1995. By letter dated July 26, 1996, NRC closed GL 92-01, Revision 1, Supplement 1 for both Watts Bar units.
GL 92-002	Resolution of Generic Issue 79, "Unanalyzed Reactor Vessel (PWR) Thermal Stress During Natural Convection Cooldown"	NA	Info
GL 92-003	Compilation of the Current Licensing Basis: Request for Voluntary Participation in Pilot Program	NA	Info
GL 92-004	Resolution of the Issues Related to Reactor Vessel Water Level Instrumentation in BWRs Pursuant to 10 CFR 50.54(f)	NA	Boiling Water Reactor
GL 92-005	NRC Workshop on the Systematic Assessment of Licensee Performance (SALP) Program	NA	Info
GL 92-006	Operator Licensing National Examination Schedule	NA	Info
GL 92-007	Office of Nuclear Reactor Regulation Reorganization	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 92-008	Thermo-Lag 330-1 Fire Barriers	OV	TVA configurations for Thermo-Lag 330-1 were reviewed in SSER18 and accepted in NRC letter dated January 6, 1998 (includes a supplemental SE). Unit 2 Actions: 1) Review Watts Bar design and installation requirements for Thermolag 330-1 fire barrier system and evaluate the Thermolag currently installed in Unit 2. 2) Remove and replace, as required, or prepare an approved deviation.
GL 92-009	Limited Participation by NRC in the IAEA International Nuclear Event Scale	NA	Info
GL 93-001	Emergency Response Data System Test Program	NA	Addressed to specific plant(s).
GL 93-002	NRC Public Workshop on Commercial Grade Procurement and Dedication	NA	Info
GL 93-003	Verification of Plant Records	NA	Info
GL 93-004	Rod Control System Failure and Withdrawal of Rod Control Cluster Assemblies, 10 CFR 50.54(f)	CI	NRC letter dated December 9, 1994, accepted TVA commitments for both units. Unit 2 Action: Implement modifications and testing.
GL 93-005	Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation	NA	Info
GL 93-006	Research Results on Generic Safety Issue 106, "Piping and the Use of Highly Combustible Gases in Vital Areas"	NA	Info
GL 93-007	Modification of the Technical Specification Administrative Control Requirements for Emergency and Security Plans	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 93-008	Relocation of Technical Specification Tables of Instrument Response Time Limits	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 94-001	Removal of Accelerated Testing and Special Reporting Requirements for Emergency Diesel Generators	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 94-002	Long-Term Solutions and Upgrade of Interim Operating Recommendations for Thermal-Hydraulic Instabilities in BWRs	NA	Boiling Water Reactor

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 94-003	IGSCC of Core Shrouds in BWRs	NA	Boiling Water Reactor
GL 94-004	Voluntary Reporting of Additional Occupational Radiation Exposure Data	NA	Info
GL 95-001	NRC Staff Technical Position on Fire Protection for Fuel Cycle Facilities	NA	Does not apply to power reactor.
GL 95-002	Use of NUMARC/EPRI Report TR-102348, "Guideline on Licensing Digital Upgrades," in Determining the Acceptability of Performing Analog-to-Digital Replacements under 10 CFR 50.59	NA	Info
GL 95-003	Circumferential Cracking of Steam Generator Tubes	CI 02	NRC acceptance letter dated May 16, 1997 (Unit 1) – Initial response for Unit 2 on September 7, 2007. TVA responded to a request for additional information on December 17, 2007. Unit 2 Action: Perform baseline inspection. REVISION 02 UPDATE: Unit 2 Action: Perform baseline inspection. Evaluate or repair as necessary. On January 21, 2010, NRC issued the Safety Evaluation for the following Generic Letters: 1995-03, 1995-05, 1997-05, 1997-06, 2004-01, and 2006-01.
GL 95-004	Final Disposition of the Systematic Evaluation Program Lessons-Learned Issues	NA	Info
GL 95-005	Voltage-Based Repair Criteria for Westinghouse Steam Generator Tubes Affected by Outside Diameter Stress Corrosion Cracking	C 02	No specific action or response required by the GL; TVA responded on September 7, 2007. REVISION 02 UPDATE: On January 21, 2010, NRC issued the Safety Evaluation for the following Generic Letters: 1995-03, 1995-05, 1997-05, 1997-06, 2004-01, and 2006-01.
GL 95-006	Changes in the Operator Licensing Program	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 95-007	Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves	CI 04	Unit 1 SER for GL 95-07 dated Sept 15, 1999 Unit 2 Action: Perform evaluation for pressure locking and thermal binding of safety related power-operated gate valves and take corrective actions for those valves identified as being susceptible. ---------- ---------- REVISION 03 UPDATE: April 1, 2010, letter committed to evaluate missing GL 89-10 motor-operated valves for susceptibility to pressure locking and thermal binding. ---------- ---------- REVISION 04 UPDATE: NRC letter dated July 29, 2010, provided RAIs on the GL. TVA letter dated July 30, 2010, answered the RAIs and provided the following commitments: EDCRs 53292 and 53287 shall be implemented to eliminate the potential for pressure locking prior to startup. Valves 2-FCV-63-25 and -26 will be evaluated for impact due to new parameters from the JOG Topical Report MPR 2524A prior to startup. ---------- NRC issued the Safety Evaluation for GL 1995-007 on August 12, 2010.
GL 95-008	10 CFR 50.54(p) Process for Changes to Security Plans Without Prior NRC Approval	NA	Info
GL 95-009	Monitoring and Training of Shippers and Carriers of Radioactive Materials	NA	Info
GL 95-010	Relocation of Selected Technical Specifications Requirements Related to Instrumentation	NA	Info
GL 96-001	Testing of Safety-Related Circuits	CI	TVA responded for both units on April 18, 1996. Unit 2 Action: Implement Recommendations.
GL 96-002	Reconsideration of Nuclear Power Plant Security Requirements Associated with an Internal Threat	NA	Info

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 96-003	Relocation of the Pressure Temperature Limit Curves and Low Temperature Overpressure Protection System Limits	CI	No response required Unit 2 Action: Submit Pressure Temperature limits and similar to Unit 1, upon approval, incorporate into licensee-controlled document.
GL 96-004	Boraflex Degradation in Spent Fuel Pool Storage Racks	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 96-005	Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves	CI	SE of TVA response to GL 96-05 dated July 21, 1999. Unit 2 Action: Implement the Joint Owner's Group recommended GL 96-05 MOV PV program, as described in Topical Report No. OG-97-018, and begin testing during the first refueling outage after startup.
GL 96-006	Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions	CI 02	NRC letter dated April 6, 1999, accepting TVA response for Unit 1. Unit 2 Action: Implement modification to provide containment penetration relief. REVISION 02 UPDATE: NRC issued the Safety Evaluation for Generic Letter 1996-006 on January 21, 2010.
GL 96-007	Interim Guidance on Transportation of Steam Generators	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 97-001	Degradation of Control Rod Drive Mechanism Nozzle and Other Vessel Closure Head Penetrations	CI 04	NRC acceptance letter dated November 4, 1999 (Unit 1). Unit 2 Action: Provide a report to address the inspection program. REVISION 03 UPDATE: NRC issued the Safety Evaluation for Generic Letter 97-001 on June 30, 2010. REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.
GL 97-002	Revised Contents of the Monthly Operating Report	NA	Item was applicable only to units with operating license at the time the item was issued.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 97-003	Annual Financial Update of Surety Requirements for Uranium Recovery Licensees	NA	Does not apply to power reactor.
GL 97-004	Assurance of Sufficient Net Positive Suction Head for Emergency Core Cooling and Containment Heat Removal Pumps	CI 02	NRC acceptance letter dated June 17, 1998 (Unit 1) – Initial response for Unit 2 on September 7, 2007. Unit 2 Actions: Install new sump strainers, and perform other modification-related activities identical to Unit 1. REVISION 02 UPDATE: NRC issued the Safety Evaluation for Generic Letter 1997-004 on February 18, 2010.
GL 97-005	Steam Generator Tube Inspection Techniques	CI 02	NRC acceptance letter dated September 22, 1998 (Unit 1) - Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Employ the same approach used on the original Unit 1 SGs. TVA responded to a request for additional information on December 17, 2007. REVISION 02 UPDATE: On January 21, 2010, NRC issued the Safety Evaluation for the following Generic Letters: 1995-03, 1995-05, 1997-05, 1997-06, 2004-01, and 2006-01.
GL 97-006	Degradation of Steam Generator Internals	CI 02	NRC acceptance letter dated October 19, 1999 (Unit 1) – Initial response for Unit 2 on September 7, 2007. TVA responded to a request for additional information on December 17, 2007. Unit 2 Action: Perform SG inspections during each refueling outage. REVISION 02 UPDATE: On January 21, 2010, NRC issued the Safety Evaluation for the following Generic Letters: 1995-03, 1995-05, 1997-05, 1997-06, 2004-01, and 2006-01.
GL 98-001	Year 2000 Readiness of Computer Systems at Nuclear Power Plants	NA	Item was applicable only to units with operating license at the time the item was issued.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 98-002	Loss of Reactor Coolant Inventory and Associated Potential for Loss of Emergency Mitigation Functions While in a Shutdown Condition	CI 03	Initial response for Unit 2 on September 7, 2007. Unit 2 Actions: 1) Review the ECCS designs to ensure they do not contain design features which can render them susceptible to common-cause failures; and 2) document the results. ---------- ---------- REVISION 02 UPDATE: NRC issued the Safety Evaluation for Generic Letter 1998-002 on March 3, 2010. ---------- ---------- REVISION 03 UPDATE: NRC issued the Safety Evaluation for Generic Letter 98-002 on May 11, 2010. This letter noted that it superseded the SE issued by NRC on March 3, 2010. ---------- April 1, 2010, letter committed to ensure that the guidance added to the Unit 1 procedure as a result of the review of NRC GL 98-02 is incorporated into the Unit 2 procedures. Specifically, when decreasing power, valve HCV-74-34, Refueling Water Return (normally locked closed valve) has a hold order placed with specific release criteria before entry into Mode 4 and to remove the hold order before entry into Mode 3 when returning to power.
GL 98-003	NMSS Licensees' and Certificate Holders' Year 2000 Readiness Programs	NA	Does not apply to power reactor.
GL 98-004	Potential for Degradation of the ECCS and the Containment Spray System After a LOCA Because of Construction and Protective Coating Deficiencies and Foreign Material in Containment	OV 02	NRC closure letter dated November 24, 1999 (Unit 1). – Initial response for Unit 2 on September 7, 2007. Unit 2 Actions: Install new sump strainers, and perform other modification-related activities identical to Unit 1. ---------- ---------- REVISION 02 UPDATE: NRC issued the Safety Evaluation for Generic Letter 1998-004 on February 1, 2010.
GL 98-005	Boiling Water Reactor Licensees Use of the BWRVIP-05 Report to Request Relief from Augmented Examination Requirements on Reactor Pressure Vessel Circumferential Shell Welds	NA	Boiling Water Reactor
GL 99-001	Recent Nuclear Material Safety and Safeguards Decision on Bundling Exempt Quantities	NA	Info

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 99-002	Laboratory Testing of Nuclear Grade Activated Charcoal	NA	Item was applicable only to units with operating license at the time the item was issued.
GL 03-001	Control Room Habitability	S 02	Initial response for Unit 2 on September 7, 2007 Unit 2 Action: Incorporate TSTF-448 into Technical Specifications. ---------- ---------- REVISION 02 UPDATE: NRC issued the Safety Evaluation for Generic Letter 2003-01 on February 1, 2010. ---------- Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS Surveillance Requirement 3.7.10.4 requires performance of a Control Room Envelope (CRE) unfiltered air inleakage test in accordance with the CRE Habitability Program. TS 5.7.2.20 provides for the CRE Habitability Program. These portions of the Unit 2 TS were based on the Unit 1 TS which incorporated TSTF-448 per Amendment 70 (NRC approved A70 on 10/08/2008).
GL 04-001	Requirements for Steam Generator Tube Inspection	CI 02	NRC acceptance letter dated April 8, 2005 (Unit 1) - Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Perform baseline inspection. ---------- ---------- REVISION 02 UPDATE: On January 21, 2010, NRC issued the Safety Evaluation for the following Generic Letters: 1995-03, 1995-05, 1997-05, 1997-06, 2004-01, and 2006-01.
GL 04-002	Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at PWRs	OV	NRC Audit Report dated February 7, 2007 (Unit 1) - Initial response for Unit 2 on September 7, 2007. Unit 2 Actions: Install new sump strainers, and perform other modification-related activities identical to Unit 1.

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 06-001	Steam Generator Tube Integrity and Associated Technical Specifications	S 02	Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Incorporate TSTF-449 into Technical Specifications. ---------- ---------- REVISION 02 UPDATE: On January 21, 2010, NRC issued the Safety Evaluation for the following Generic Letters: 1995-03, 1995-05, 1997-05, 1997-06, 2004-01, and 2006-01. ---------- Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS 5.7.2.12 is the Steam Generator (SG) Program. This program is implemented to ensure that SG tube integrity is maintained. Unit 2 TS 5.7.2.12 was based on Unit 1 TS 5.7.2.12. Unit 1 TS 5.7.2.1.12 was based on TSTF-449 (NRC approved Unit 1 TS A65 on 1/03/2006).
GL 06-002	Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power	CI 02	Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Complete the two unit baseline electrical calculations and implementing procedures. ---------- ---------- REVISION 02 UPDATE: NRC issued the Safety Evaluation for Generic Letter 2006-002 on January 20, 2010.
GL 06-003	Potentially Nonconforming Hemyc and MT Fire Barrier Configurations	CI 02	TVA does not rely on Hemyc or MT materials to protect electrical and instrumentation cables or equipment that provide safe shutdown capability during a postulated fire. Unit 2 Action: Addressed in CAP/SP. The Fire Protection Corrective Action Program will ensure Unit 2 conforms with NRC requirements and applicable guidelines. ---------- ---------- REVISION 02 UPDATE: NRC issued the Safety Evaluation for Generic Letter 2006-003 on February 25, 2010.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 07-001	Inaccessible or Underground Power Cable Failures That Disable Accident Mitigation Systems or Cause Plant Transients	CI 02	Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Complete testing of four additional cables. REVISION 02 UPDATE: NRC issued the Safety Evaluation for Generic Letter 2007-001 on January 26, 2010. REVISION 04 UPDATE: NRC Inspection Report 391/2010-603 closed GL 2007-001.
GL 08-001	Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems	O 02	Initial response for Unit 2 on October 1, 2008. REVISION 02 UPDATE: Unit 2 Actions: - TVA will provide a submittal within 45 days of completion of the engineering for the ECCS, RHR, and CSS systems. - WBN Unit 2 will complete the required modifications and provide a submittal consistent with the information requested in the GL 90 days prior to fuel load.
NUREG-0737, I.A.1.1	Shift Technical Advisor	NA	Not applicable to WBN per SSER16.
NUREG-0737, I.A.1.2	Shift Supervisor Responsibilities	NA	Not applicable to WBN per SSER16.
NUREG-0737, I.A.1.3	Shift Manning	C	Closed in SSER16.
NUREG-0737, I.A.2.1	Immediate Upgrade of RO and SRO Training and Qualifications	C	Closed in SSER16.
NUREG-0737, I.A.2.3	Administration of Training Programs	C	Closed in SSER16.
NUREG-0737, I.A.3.1	Revise Scope and Criteria for Licensing Exams	C	Closed in SSER16.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
NUREG-0737, I.B.1.2	Independent Safety Engineering Group	OV	LICENSE CONDITION - Independent Safety Engineering Group (ISEG) (NUREG-0737, I.B.1.2) Resolved for Unit 1 only in SSER8. Unit 2 action: Implement the alternate ISEG that was approved for the rest of the TVA units including WBN Unit 1 by NRC on August 26, 1999. The function will be performed by the site engineering organizations.
NUREG-0737, I.C.1	Short Term Accident and Procedure Review	CI	NRC reviewed in Appendix EE of SSER16. Unit 2 Action: Implement upgraded Emergency Operating Procedures, including validation and training.
NUREG-0737, I.C.2	Shift and Relief Turnover Procedures	C	Closed in SSER16.
NUREG-0737, I.C.3	Shift Supervisor Responsibility	C	Closed in SSER16.
NUREG-0737, I.C.4	Control Room Access	C	Closed in SSER16.
NUREG-0737, I.C.5	Feedback of Operating Experience	C	Closed in SSER16.
NUREG-0737, I.C.6	Verify Correct Performance of Operating Activities	C	Closed in SSER16.
NUREG-0737, I.C.7	NSSS Vendor Revision of Procedures	CI	IR 50-390/391 85-08 closed this item for Unit 1, and NRC also reviewed in Appendix EE of SSER16. Unit 2 Action: Revise power ascension and emergency procedures which were reviewed by Westinghouse.
NUREG-0737, I.C.8	Pilot Monitoring of Selected Emergency Procedures For Near Term Operating Licenses	CI	IR 50-390/391 85-08 closed this item for Unit 1, and NRC also reviewed in Appendix EE of SSER16. Unit 2 Action: Pilot monitor selected emergency procedures for NTOL.
NUREG-0737, I.D.1	Control Room Design Review	OV	NRC reviewed in SSER5, SSER6, SSER15, and Appendix EE of SSER16. Unit 2 Actions: Complete the CRDR process. Perform rewiring in accordance with ECN 5982. Take advantage of the completed Human Engineering reviews to ensure appropriate configuration for Unit 2 control panels. See CRDR Special Program.
NUREG-0737, I.D.2	Plant-Safety-Parameter-Display Console	CI	NRC reviewed in SSER5, SSER6, and 18.2.2 of SSER15. Unit 2 Action: Install SPDS and have it operational prior to start-up after the first refueling outage.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
NUREG-0737, I.G.1	Training During Low-Power Testing	C	Closed in SSER16.
NUREG-0737, II.B.1	Reactor Coolant Vent System	CI	LICENSE CONDITION - NUREG-0737, II.B.1, "Reactor Coolant System Vents" - In the original SER, the NRC found TVA's commitment to install reactor coolant vents acceptable pending verification. This was completed for Unit 1 only in SSER5 (IR 390/84-37). Unit 2 Action: Verify installation of reactor coolant vents.
NUREG-0737, II.B.2	Plant Shielding	CI	NRC reviewed in Appendix EE of SSER16. Unit 2 Action: Complete Design Review of EQ of equipment for spaces/systems which may be used in post accident operations.
NUREG-0737, II.B.3	Post-Accident Sampling	S 02	NRC reviewed in 9.3.2 of SSER16. TVA submitted a TS improvement to eliminate requirements for the Post Accident Sampling System using the Consolidated Line Item Improvement Process in a letter dated October 31, 2001. Unit 2 Actions: Unit 2 Technical Specifications will eliminate requirements for the Post-Accident Sampling System. REVISION 02 UPDATE: Developmental Revision A of the Unit 2 Technical Specifications (TS) was submitted on March 04, 2009. Rev. 0 of the Unit 1 TS contained 5.7.2.6, "Post Accident Sampling." Amendment 34 to the Unit 1 TS (approved by the NRC on January 14, 2002) deleted 5.7.2.6, "Post Accident Sampling." The markup for Unit 2 Developmental Revision A noted that Unit 2 had deleted 5.7.2.6, "Post Accident Sampling" also.
NUREG-0737, II.B.4	Training for Mitigating Core Damage	C	Closed in SSER16.
NUREG-0737, II.D.1	Relief and Safety Valve Test Requirements	CI	NRC reviewed in Technical Evaluation Report attached to Appendix EE of SSER15. Unit 2 Actions: 1) Testing of relief and safety valves; 2) Reanalysis of fluid transient loads for pressurizer relief and safety valve supports and any required modifications; 3) Modifications to pressurizer safety valves, PORVs, PORV block valves and associated piping; and 4) Change motor operated block valves.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
NUREG-0737, II.D.3	Valve Position Indication	CI	The design was reviewed in the original 1982 SER and found acceptable pending confirmation of installation of the acoustic monitoring system. In SSER5 (IR 390/84-35), the staff closed the LICENSE CONDITION for Unit 1 only. Unit 2 Action: Verify installation of the acoustic monitoring system to PORV to indicate position.
NUREG-0737, II.E.1.1	Auxiliary Feedwater System Evaluation, Modifications	CI	Reviewed in Appendix EE of SSER16. Unit 2 Action: Perform Auxiliary Feedwater System analysis as it pertains to system failure and flow rate.
NUREG-0737, II.E.1.2	Auxiliary Feedwater System Initiation and Flow	CI	NRC: IR 50-390/84-20 and 50-391/84-16; letters dated March 29, 1985, and October 31, 1995; SSER 16 ---------- Unit 2 Action: Complete procedures and qualification testing.
NUREG-0737, II.E.3.1	Emergency Power For Pressurizer Heaters	CI	NRC: letters dated March 29, 1985, and October 31, 1995; SSER 16 ---------- Reviewed in original 1982 SER. Unit 2 Action: Implement procedures and testing.
NUREG-0737, II.E.4.1	Dedicated Hydrogen Penetrations	C	NRC: IR 50-390/83-27 and 50-391/83-19; SER (NUREG-0847)

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
NUREG-0737, II.E.4.2	Containment Isolation Dependability	S 02	TVA: letters dated October 29, 1981, and February 25, 1985 NRC: letters dated March 29, 1985, July 12, 1990 and October 31, 1995; SSER 16. ---------- OUTSTANDING ISSUE for NRC to complete review of information provided by TVA to address Containment Purging During Normal Plant Operation LICENSE CONDITION - Containment isolation dependability In the original 1982 SER, NRC concluded that WBN met all the requirements of NUREG-0737, item II.E.4.2 except subsection (6) concerning containment purging during normal operation. In SSER3, the outstanding issue was closed and the LICENSE CONDITION was left open. NRC completed the review and issued a Technical Evaluation Report for both units on July 12, 1990. NRC concluded that the isolation valves can close against the buildup of pressure in the event of a design basis accident if the lower containment isolation valves are physically blocked to an opening angle of 50 degrees or less. (SSER5) Unit 2 Action: Reflect valve opening restriction in the Technical Specifications. ---------- ---------- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS Surveillance Requirement 3.6.3.7 requires verification that the valves are "blocked to restrict the valve from opening > 50 degrees."
NUREG-0737, II.F.1.2.A.	Accident-Monitoring Instrumentation - Noble Gas	CI	Reviewed in SSER9. Unit 2 Actions: Install Noble gas, Iodine / particulate sampling, and Containment High Range Monitors.
NUREG-0737, II.F.1.2.B.	Accident-Monitoring Instrumentation - Iodine/Particulate Sampling	CI	Reviewed in SSER9. Unit 2 Actions: Install Noble gas, Iodine / particulate sampling, and Containment High Range Monitors.
NUREG-0737, II.F.1.2.C.	Accident-Monitoring Instrumentation - Containment High Range Monitoring	CI	Reviewed in SSER9. Unit 2 Actions: Install Noble gas, Iodine / particulate sampling, and Containment High Range Monitors. ---------- Unit 2 Action: Install high range in-containment monitor for Unit 2.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
NUREG-0737, II.F.1.2.D.	Accident-Monitoring Instrumentation - Containment Pressure	CI	Reviewed in SSER9. Unit 2 Action: Verify installation of containment pressure indication.
NUREG-0737, II.F.1.2.E.	Accident-Monitoring Instrumentation - Containment Water Level	CI	Reviewed in SSER9. Unit 2 Action: Verify installation of containment water level monitors.
NUREG-0737, II.F.1.2.F.	Accident-Monitoring Instrumentation - Containment Hydrogen	CI	Reviewed in SSER9. Unit 2 Action: Verify installation of containment hydrogen accident monitoring instrumentation.
NUREG-0737, II.F.2	Instrumentation For Detection of Inadequate Core-Cooling	O	LICENSE CONDITION - Detectors for Inadequate core cooling (II.F.2) In the original SER, the review of the ICC instrumentation was incomplete. The January 24, 1992, letter superseded the previous responses on this issue. TVA letter for Units 1 and 2 dated January 24, 1992, committed to install Westinghouse ICCM-86 and associated hardware. NRC completed the review for Units 1 and 2 in SSER10. For Unit 2 due to obsolescence of the ICCM-86 system, TVA intends to install the Westinghouse Common Q Post-Accident Monitoring System. Unit 2 Action: Install Westinghouse Common Q PAM system.
NUREG-0737, II.G.1	Power Supplies For Pressurizer Relief Valves, Block Valves and Level Indicators	CI	Reviewed in original 1982 SER and 8.3.3 of SSER7. Unit 2 Action: Implement modifications such that PORVS and associated Block Valves are powered from same train but different buses.
NUREG-0737, II.K.1.5	Review ESF Valves	C	NRC: letter dated March 29, 1985; SSER 16
NUREG-0737, II.K.1.10	Operability Status	CI	Unit 2 Action: Confirm multi-unit operation will have no impact on administrative procedures with respect to operability status.
NUREG-0737, II.K.1.17	Trip Per Low-Level B/S	C	NRC: letter dated March 29, 1985; SSER 16
NUREG-0737, II.K.2.13	Effect of High Pressure Injection for Small Break LOCA With No Auxiliary Feedwater	C	LICENSE CONDITION – Effect of high pressure injection for small break LOCA with no auxiliary feedwater (NUREG-0737, II.K.2.13) In SSER4, the staff concluded that there was reasonable assurance that vessel integrity would be maintained for small breaks with an extended loss of all feedwater and that the USI A-49, “Pressurized Thermal Shock,” review did not have to be completed to support the full-power license. They considered this condition resolved.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
NUREG-0737, II.K.2.17	Voiding in the Reactor Coolant System	C	LICENSE CONDITION – Voiding in the reactor coolant system (NUREG-0737, II.K.2.17) The staff reviewed the generic resolution of this license condition in SSER4 and approved the study in question, thereby resolving this license condition.
NUREG-0737, II.K.3.1	Auto PORV Isolation	C	Reviewed in SSER5 and resolved based on NRC conclusion that there is no need for an automatic PORV isolation system (NRC letter dated June 29, 1990).
NUREG-0737, II.K.3.2	Report on PORV Failures	C	Reviewed in SSER5 and resolved based on NRC conclusion that there is no need for an automatic PORV isolation system (NRC letter dated June 29, 1990).
NUREG-0737, II.K.3.3	Reporting SV/RV Failures/Challenges	S 02	(Action from GL 82-16) – NRC reviewed in Appendix EE of SSER16. Unit 2 Action: Include, as necessary, in Technical Specifications submittal. REVISION 02 UPDATE: Developmental Revision A of the Unit 2 Technical Specifications (TS) was submitted on March 04, 2009. Rev. 0 of the Unit 1 TS contained 5.9.4 (Monthly Operating Reports) which implemented the above commitment for Unit 1. Amendment 57 to the Unit 1 TS (approved by the NRC on March 21, 2005) deleted this section of the TS. The markup for Unit 2 Developmental Revision A noted that Unit 2 will apply this change, and the Unit 2 TS will contain no requirement for Monthly Operating Reports.
NUREG-0737, II.K.3.5	Auto Trip of RCPS	CI	Reviewed in 15.5.4 of original 1982 SER; became License Condition 35. The staff determined that their review of Item II.K.3.5 did not have to be completed to support the full power license and considered this license condition resolved in SSER4. The item was further reviewed in Appendix EE of SSER16. Unit 2 Action: Implement modifications as required.
NUREG-0737, II.K.3.9	PID Controller	CI	Reviewed in original 1982 SER. Unit 2 Action: Set the derivative time constant to zero.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
NUREG-0737, II.K.3.10	Anticipatory Trip at High Power	S 02	NRC: letter dated October 31, 1995; SSER 16 ---------- Unit 2 Action: Unit 2 Technical Specifications and surveillance procedures will address this issue. ---------- REVISION 02 UPDATE: Developmental Revision A of the Unit 2 Technical Specifications (TS) was submitted on March 04, 2009. Items 14.a. (Turbine Trip - Low Fluid Oil Pressure) and 14.b. (Turbine Trip - Turbine Stop Valve Closure) of TS Table 3.3.1-1 are the trips of interest. The table and the Bases for these items state that below the P-9 setpoint, these trips do not actuate a reactor trip. Per item 16.d. (Power Range Neutron Flux, P-9) of TS Table 3.3.1-1, the Nominal Trip Setpoint for P-9 is “50% RTP” and the Allowable Value is “< 52.4% RTP.”
NUREG-0737, II.K.3.12	Confirm Existence of Anticipatory Reactor Trip Upon Turbine Trip	C	Closed in SSER16.
NUREG-0737, II.K.3.17	Report On Outage of Emergency Core Cooling System	C	LICENSE CONDITION – Report on outage of emergency core cooling system (NUREG-0737, II.K.3.17) In the original 1982 SER, the NRC accepted TVA’s commitment to develop and implement a plan to collect emergency core cooling system outage information. In SSER3, the staff accepted a revised commitment from an October 28, 1983, letter to participate in the nuclear power reliability data system and comply with the requirements of 10 CFR 50.73
NUREG-0737, II.K.3.25	Power On Pump Seals	CI	NRC reviewed and closed in IR 390/84-35 based on Diesel Generator (DG) power to pump sealing cooling system. Unit 2 Action: Ensure DG power is provided to pump sealing cooling system.
NUREG-0737, II.K.3.30	Small Break LOCA Methods	CI	TVA: letter dated October 29, 1981 NRC: letters dated March 29, 1985, and July 24, 1986; SSER 16 ---------- The staff determined in SSER4 that their review of Items II.K.3.30 and II.K.3.31 did not have to be completed to support the full-power license and considered this LICENSE CONDITION resolved in SSER4. In SSER5, the staff further reviewed responses to these items, and concluded that the Units 1 and 2 FSAR methods and analysis met the requirements of II.K.3.30 and II.K.3.31. This item was further reviewed in Appendix EE of SSER16. Unit 2 Action: Complete analysis for Unit 2.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
NUREG-0737, II.K.3.31	Plant Specific Analysis	CI	The staff determined in SSER4 that their review of Items II.K.3.30 and II.K.3.31 did not have to be completed to support the full-power license and considered this LICENSE CONDITION resolved in SSER4. In SSER5, the staff further reviewed responses to these items, and concluded that the Units 1 and 2 FSAR methods and analysis met the requirements of II.K.3.30 and II.K.3.31. This item was further reviewed in Appendix EE of SSER16. Unit 2 Action: Complete analysis for Unit 2.
NUREG-0737, III.A.1.1	Emergency Preparedness, Short Term	C	LICENSE CONDITION – Emergency Preparedness (NUREG-0737, III.A.1, III.A.2) The NRC review of Emergency Preparedness in SSER13 superseded the review in the original 1982 SER. In SSER13, the staff concluded that the WBN Radiological Emergency Plan (REP) provided an adequate planning basis for an acceptable state of onsite emergency preparedness, and the LICENSE CONDITION was deleted. The NRC completed the review of the REP in SSER20.
NUREG-0737, III.A.1.2	Upgrade Emergency Support Facilities	C	LICENSE CONDITION – Emergency Preparedness (NUREG-0737, III.A.1, III.A.2) The NRC review of Emergency Preparedness in SSER13 superseded the review in the original 1982 SER. In SSER13, the staff concluded that the WBN Radiological Emergency Plan (REP) provided an adequate planning basis for an acceptable state of onsite emergency preparedness, and the LICENSE CONDITION was deleted. The NRC completed the review of the REP in SSER20.
NUREG-0737, III.A.2	Emergency Preparedness	C	LICENSE CONDITION – Emergency Preparedness (NUREG-0737, III.A.1, III.A.2) The NRC review of Emergency Preparedness in SSER13 superseded the review in the original 1982 SER. In SSER13, the staff concluded that the WBN Radiological Emergency Plan (REP) provided an adequate planning basis for an acceptable state of onsite emergency preparedness, and the LICENSE CONDITION was deleted. The NRC completed the review of the REP in SSER20.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
NUREG-0737, III.D.1.1	Primary Coolant Outside Containment	S 02	Resolved for Unit 1 only in SSER10; reviewed in Appendix EE of SSER16. Unit 2 Actions: Include the waste gas disposal system in the leakage reduction program and incorporate in Unit 2 Technical Specifications. ---------- ---------- REVISION 02 UPDATE: Developmental Revision B of the Unit 2 Technical Specifications (TS) was submitted on February 2, 2010. TS 5.7.2.4 is the Primary Coolant Sources Outside Containment program. This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. This program includes the "Waste Gas" system.
NUREG-0737, III.D.3.3	In-Plant Iodine Radiation Monitoring	CI	NRC reviewed in Appendix EE of SSER16. Unit 2 Action: Complete modifications for Unit 2.
NUREG-0737, III.D.3.4	Control-Room Habitability	OV	TVA: letter dated October 29, 1981 NRC: SSER 16 ---------- NRC reviewed in SER and in Appendix EE of SSER16. Unit 2 Action: Complete with CRDR completion.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION

STATUS CODE DEFINITIONS

C: CLOSED: Previous staff review of NUREG-0847 and/or supplements has closed the item either for both units at WBN or explicitly for WBN Unit 2.

CI: CLOSED/IMPLEMENTATION: Staff has approved either for both units at WBN or explicitly for WBN Unit 2; there is no change to the approved design; and implementation is recommended through Regional Inspection.

CT: CLOSED/TECHNICAL SPECIFICATIONS: Item has been approved either for both units at WBN or explicitly for WBN Unit 2; however, a change to the original approval requires submittal of the Technical Specifications and staff review.

NA: NOT APPLICABLE: Justification as to why a section / subsection is not applicable is provided in the ADDITIONAL INFORMATION column.

O: OPEN: No action or documentation is provided that shows the staff has reviewed the item for WBN Unit 2.

OT: OPEN/TECHNICAL SPECIFICATIONS: No action or documentation is provided that shows the staff has reviewed the item for WBN Unit 2, and the resolution is through submittal of a Technical Specification.

OV: OPEN/VALIDATION: The proposed approach has been approved for Watts Bar Unit 1; the same approach is proposed for use on WBN Unit 2 without change.

S: SUBMITTED: Information has been submitted, and is under review by NRC staff.

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Enclosure 4

Generic Communications - Revision 4 Changes

GENERIC COMMUNICATIONS: REVISION 4 CHANGES

ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 83-006	Nonconforming Material Supplied by Tube-Line Facilities	CI 04	TVA: letter dated February 2, 1984 NRC: IR 390/391 84-03; NUREG/CR 4934 ---------- NRC SER for both units dated September 23, 1991, provided an alternate acceptance for fittings supplied by Tube-Line. Unit 2 Action: Implement as necessary. ---------- ---------- REVISION 04 UPDATE: NRC Inspection Report Nos. 50-390/90-02 and 50-391/90-02 found the proposed alternative to ASME code paragraph NA-3451 (a) to be acceptable. It noted that TVA must revise the FSAR to document this deviation from ASME Section III requirements. TVA letter to NRC dated October 11, 2007, stated the Unit 1 exemption is applicable to Unit 2 and was submitted to the NRC as being required for Unit 2 construction. Final action was to incorporate the exemption in the Unit 2 FSAR. This exemption is documented in Unit 2 FSAR Section 3.2 in paragraph 3.2.3.2 and Table 3.2-2a as explained in Note 4. of the table.
B 96-001, first part	Control Rod Insertion Problems (PWR)	CI 04	NRC acceptance letter for Unit 1 dated July 22, 1996 – Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Issue Emergency Operating Procedure. ---------- ---------- REVISION 02 UPDATE: Unit 2 will load all new RFA-2 fuel for the initial fuel load. ---------- ---------- REVISION 03 UPDATE: NRC issued the Safety Evaluation (corrected) for Bulletin 1996-001 on May 3, 2010. ---------- ---------- REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 96-001, last part	Control Rod Insertion Problems (PWR)	CI 04	NRC acceptance letter for Unit 1 dated July 22, 1996 – Initial response for Unit 2 on September 7, 2007. Unit 2 Action: and provide core map. REVISION 03 UPDATE: NRC issued the Safety Evaluation (corrected) for Bulletin 1996-001 on May 3, 2010. REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.
B 01-001	Circumferential Cracking of Reactor Pressure Vessel (RPV) Head Penetration Nozzles	CI 04	NRC acceptance letter dated November 20, 2001 (Unit 1) – Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Perform baseline inspection. REVISION 02 UPDATE: Unit 2 Action: Perform baseline inspection. Evaluate or repair as necessary. REVISION 03 UPDATE: NRC issued the Safety Evaluation for Bulletin 2001-001 on June 30, 2010. REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 02-001	RPV Head Degradation and Reactor Coolant Pressure Boundary Integrity	CI 04	NRC review of Unit 1's 15 day response in letter dated May 20, 2002 – Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Perform baseline inspection. REVISION 02 UPDATE: Unit 2 Action: Perform baseline inspection. Evaluate or repair as necessary. REVISION 03 UPDATE: NRC issued the Safety Evaluation for Bulletin 2002-001 on June 30, 2010. REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.
B 02-002	RPV Head and Vessel Head Penetration Nozzle Inspection Programs	CI 04	NRC acceptance letter dated December 20, 2002 (Unit 1) – Initial response for Unit 2 on September 7, 2007. Unit 2 Action: Perform baseline inspection. REVISION 02 UPDATE: Unit 2 Action: Perform baseline inspection. Evaluate or repair as necessary. REVISION 03 UPDATE: NRC issued the Safety Evaluation for Bulletin 2002-002 on June 30, 2010. REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
B 04-001	Inspection of Alloy 82/182/600 Materials Used in the Fabrication of Pressurizer Penetrations and Steam Space Piping Connections at PWRs	CI 04	Initial response for Unit 2 on September 7, 2007. Unit 2 Actions: Provide details of pressurizer and penetrations and apply Material Stress Improvement Process. ---------- ---------- REVISION 02 UPDATE: TVA provided details of the pressurizer and penetrations on September 29, 2008. This letter committed to: Prior to placing the pressurizer in service, TVA will apply the Material Stress Improvement Process (MSIP) to the Pressurizer Power Operated Relief Valve connections, the safety relief valve connections, the spray line nozzle and surge line nozzle connections. TVA will perform a bare metal visual (BMV) inspection of the upper pressurizer Alloy 600 locations at the first refueling outage. ---------- ---------- REVISION 03 UPDATE: April 1, 2010, letter committed to: TVA will perform NDE prior to and after performance of the MSIP. If circumferential cracking is observed in either pressure boundary or non-pressure boundary portions of any locations covered under the scope of the bulletin, TVA will develop plans to perform an adequate extent-of-condition evaluation, and TVA will discuss those plans with cognizant NRC technical staff prior to starting Unit 2. After performing the BMV inspection during the first refueling outage, if any evidence of apparent reactor coolant pressure boundary leakage is discovered, then NDE capable of determining crack orientation will be performed in order to accurately characterize the flaw, the orientation, and extent. TVA will develop plans to perform an adequate extent of condition evaluation, and plans to possibly expand the scope of NDE to other components in the pressurizer will be discussed with NRC technical staff prior to restarting of Unit 2. ---------- ---------- REVISION 04 UPDATE: NRC issued the Safety Evaluation for Bulletin 2004-001 on August 4, 2010.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 88-014	Instrument Air Supply System Problems Affecting Safety-Related Equipment	CI 04	NRC letter dated July 26, 1990, closing the issue. Unit 2 Action: Complete Unit 2 implementation. REVISION 04 UPDATE: The compressed air system is a common system at Watts Bar; therefore, the requirements for this GL have been satisfied for Unit 2. Watts Bar revised the response in a letter dated July 14, 1995. NRC letter dated July 27, 1995, stated that their conclusion as stated on July 26,1990, had not changed and that their effort was complete.
GL 88-020	Individual Plant Examination for Severe Accident Vulnerabilities	S 04	Unit 2 Action: Complete evaluation for Unit 2. REVISION 02 UPDATE: The Probabilistic Risk Assessment Individual Plant Examination Summary Report was submitted on February 9, 2010. REVISION 04 UPDATE: The Individual Plant Examination of External Events Design Report was submitted on April 30, 2010.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION
GL 95-007	Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves	CI 04	Unit 1 SER for GL 95-07 dated Sept 15, 1999 Unit 2 Action: Perform evaluation for pressure locking and thermal binding of safety related power-operated gate valves and take corrective actions for those valves identified as being susceptible. ---------- ---------- REVISION 03 UPDATE: April 1, 2010, letter committed to evaluate missing GL 89-10 motor-operated valves for susceptibility to pressure locking and thermal binding. ---------- ---------- REVISION 04 UPDATE: NRC letter dated July 29, 2010, provided RAIs on the GL. TVA letter dated July 30, 2010, answered the RAIs and provided the following commitments: EDCRs 53292 and 53287 shall be implemented to eliminate the potential for pressure locking prior to startup. Valves 2-FCV-63-25 and -26 will be evaluated for impact due to new parameters from the JOG Topical Report MPR 2524A prior to startup. ---------- NRC issued the Safety Evaluation for GL 1995-007 on August 12, 2010.
GL 97-001	Degradation of Control Rod Drive Mechanism Nozzle and Other Vessel Closure Head Penetrations	CI 04	NRC acceptance letter dated November 4, 1999 (Unit 1). Unit 2 Action: Provide a report to address the inspection program. ---------- ---------- REVISION 03 UPDATE: NRC issued the Safety Evaluation for Generic Letter 97-001 on June 30, 2010. ---------- ---------- REVISION 04 UPDATE: Corrected status from "OV" to "CI" due to NRC issuance of Safety Evaluation as noted in Revision 03 update.

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ITEM	TITLE	* REV	ADDITIONAL INFORMATION

STATUS CODE DEFINITIONS

C: CLOSED: Previous staff review of NUREG-0847 and/or supplements has closed the item either for both units at WBN or explicitly for WBN Unit 2.

CI: CLOSED/IMPLEMENTATION: Staff has approved either for both units at WBN or explicitly for WBN Unit 2; there is no change to the approved design; and implementation is recommended through Regional Inspection.

CT: CLOSED/TECHNICAL SPECIFICATIONS: Item has been approved either for both units at WBN or explicitly for WBN Unit 2; however, a change to the original approval requires submittal of the Technical Specifications and staff review.

NA: NOT APPLICABLE: Justification as to why a section / subsection is not applicable is provided in the ADDITIONAL INFORMATION column.

O: OPEN: No action or documentation is provided that shows the staff has reviewed the item for WBN Unit 2.

OT: OPEN/TECHNICAL SPECIFICATIONS: No action or documentation is provided that shows the staff has reviewed the item for WBN Unit 2, and the resolution is through submittal of a Technical Specification.

OV: OPEN/VALIDATION: The proposed approach has been approved for Watts Bar Unit 1; the same approach is proposed for use on WBN Unit 2 without change.

S: SUBMITTED: Information has been submitted, and is under review by NRC staff.

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