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FEB 17 1993

U.S. Nuclear Regulatory Commission
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Gentlemen:

In the Matter of the Application of) Docket No. 50-390
Tennessee Valley Authority)

WATTS BAR NUCLEAR PLANT (WBN) UNIT 1 - CORRECTIVE ACTION PROGRAM (CAP) PLAN
COMMITMENT REVISION MATRICES

Reference: Letter from TVA to NRC dated July 13, 1989, "Watts Bar Nuclear
Plant (WBN) Unit 1 - Corrective Action Program (CAP) Plan
Matrices"

By the above referenced letter, TVA provided NRC with commitment revision matrices that identified previous docketed commitments being changed as a result of each of the 18 established WBN CAPs. In that submittal, TVA committed to revise those previously docketed commitments through resubmittal of the 10 CFR 50.55(e) response, violation response, Final Safety Analysis Report (FSAR) amendment, etc. Based on a detailed comparison of the CAP and previous commitments, some source documents do not require revision. The attached enclosure provides the status of required source document revisions and justification for not revising the remaining source documents.

If you have any questions, please telephone P. L. Pace at (615) 365-1824.

Very truly yours,

W. J. Museler
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William J. Museler

Enclosure
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U.S. Nuclear Regulatory Commission
Page 2

FEB 17 1993

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ENCLOSURE
IDENTIFICATION OF CAP CHANGES TO NRC COMMITMENTS

CAP	CAP COMMITMENT	PREVIOUS COMMITMENT	STATUS
<p>Cable Issues</p>	<p>"To verify the adequacy of the CCRS data base, data from the WBN review of 4,256 EQ cables (10 CFR 50.49) and the review of the 339 Appendix R-related cables will be used." (See paragraph 4.2). Therefore, no further review of cables will be performed.</p> <p>WBN will replace all 10 CFR 50.49 harsh environment cable splices, and some mild environment cable splices will be reworked. In mild environmental areas, cable splices will also be reworked where the environmental conditions exceed the parameters of tape. (See paragraph 4.1.8).</p>	<p>Review all remaining Class 1E cables required for Unit 1 operation which are located in nonharsh environments. (Source: WBN EQP 8628 (10 CFR 50.55[e]))</p> <p>Perform Engineering Evaluation for all cables requiring the use of multiple computer records for storing cable data which were installed before April 30, 1987. (Source: WBN EQP 8628 (10 CFR 50.55[e]))</p> <p>TVA will review all Class 1E equipment requiring Raychem type N materials to determine which devices are improperly terminated. All improperly terminated slices will be reworked. (Source: NCR 6208 and 6224 (10 CFR 50.55[e]))</p>	<p>The CAP commitment and the 10 CFR 50.55(e) commitments were reconciled by a revised 10 CFR 50.55(e) final report dated 12/3/90 (L44901203801).</p> <p>A revised 10 CFR 50.55(e) final report dated 12/3/91 (T04911203876) was submitted to provide consistency with the methodology in resolution of the splice issue.</p>
<p>NOTE: The CAP commitment and previous commitment columns of this enclosure have been extracted verbatim from the July 13, 1989 letter from TVA to NRC, "Watts Bar Nuclear Plant (WBN) Unit 1 - Corrective Action Program (CAP) Plan Matrices."</p>			

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CAP	CAP COMMITMENT	PREVIOUS COMMITMENT	STATUS
<p>Cable Tray and Cable Supports</p>	<p>Perform overinspection (sample reinspection) of approximately 2700 supports originally reinspected under NCR 5737. Perform walkthrough of approximately 1000 supports not walked down under NCR 5737. Perform evaluations and document results. Modify supports as required. (See paragraph 4.1.5).</p> <p>Develop an acceptance criteria for fittings and configurations. Perform an engineering walkthrough to identify critical cases. Any installations which cannot be qualified will be modified. (See paragraph 4.1.4).</p> <p>Identify by engineering walkthrough all cable tray/fitting deficiencies such as: missing and loose bolts and loose tray covers. Qualify the tray system by evaluations of critical cases identified. Produce design output consistent with installations. Where necessary perform modifications. (See paragraph 4.1.4).</p>	<p>Perform a 100-percent walkdown on those affected supports not walked down under NCR 5737. Verify documentation exists for those supports previously walked down under NCR 5737. (Source: CATD 11103-WBN-08)</p> <p>Same although steps are in slightly different order (violation response refers to CAP). (Source: Response to Notice of Violation 390, 391/88-01-02)</p> <p>Same although steps are in slightly different order (violation response refers to CAP). (Source: 10 CFR 50.55(e) for CAQR 880167, Response to Notice of Violation, 10 CFR 50.55(e) for NCR WBN 6297)</p>	<p>A revised response to CATD 11103-WBN-08 dated 5/05/89 (L44 890505 808) changed the previous commitment to reflect the CAP commitment.</p> <p>The CAP and previous commitment are the same but worded differently. TVA's letter of 12/11/89 indicates the CAP actions would serve as an update to the NOV corrective actions (L44811211806). No revision to the NOV response is required.</p> <p>The CAP and previous commitment are the same but worded differently. The final report for CDR 89-06 dated 8/31/90 modified the CDR to be consistent with the CAP. No revision to the NOV response or 10 CFR 50.55(e) for CAQR 880167 is required. (Source reference to the 10 CFR 50.55(e) for NCR WBN 6297 was incorrect. This source is associated with the DBVP CAP).</p>

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CAP	CAP COMMITMENT	PREVIOUS COMMITMENT	STATUS
Conduit and Conduit Supports	Implement a critical case evaluation. (Walk-through and review installed conduit and conduit supports required for Unit 1 operation. Evaluate critical cases and implement modifications as required).	In lieu of a walkdown as specified in the sixth interim report dated September 30, 1987, TVA is developing a sample program covering all installed conduit and conduit supports required for Unit 1 operation. (Source: Letter to NRC (5/18/88), "Reassessment of Commitment Schedules," and 10 CFR 50.55[e] WBRD-50-390/86-14)	The previous commitment was revised via a 10 CFR 50.55(e) final report dated 8/31/90. (L44900831807).
Electrical Issues	<p>Nuclear Construction (NC) will initiate a workplan and walkdown all Class 1E flexible conduit and rework those flexible conduit found to be damaged or in noncompliance with the design output documents. Any flexible conduit that cannot be repaired or replaced to meet design requirements will be provided referred to NE for evaluation.</p> <p>Difference: CAP includes all Class 1E flexible conduit. Damaged flexible conduit or loose flexible conduit will be repaired or replaced.</p>	Each flexible conduit attached to a Class 1E pipe mounted device will be inspected to ensure the required thermal/seismic movement for each device can be obtained. Those found to be in noncompliance will be reworked or referred to NE for evaluation. (Source: 10 CFR 50.55[e] for SCR WBN 6529-S R1)	The scope of the CAP commitment is all Class 1E flexible conduit. The scope of the 10 CFR 50.55(e) commitment is a subset of the CAP commitment. This issue was discussed in the Construction Restart package for CDR 390/86-27 and 391/86-23 dated 10/11/91 and subsequently reviewed by NRC. Review results are documented in IR 390, 391/91-26. No revision to the final 10 CFR 50.55(e) report is required.

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CAP	CAP COMMITMENT	PREVIOUS COMMITMENT	STATUS
Electrical Issues (Continued)	<p>NE will provide a list of flexible conduit attached to Class 1E pipe mounted devices to identify those flexible conduits which will experience both seismic and thermal movement.</p> <p>Difference: Previous commitment noted that the list will be documented by a calculation and that the combined thermal/seismic movement for each device shown on the list will be provided. This issue will be resolved by revising design output documents and conforming the field installation to the revised output document.</p>	<p>NE has provided to TVA's Division of Nuclear Construction and WBN Operations, a list for Units 1 and 2 of the flexible conduits to Class 1E pipe-mounted devices which must be inspected to assure these installations adequately compensate for combined thermal/seismic movements. These lists will be documented by design calculations. The combined thermal/seismic movement for each device shown on the list will be provided. (Source: 10 CFR 50.55[e] for SCR WBN 6529-S R1)</p>	<p>NE provided a list of flexible conduits and clarified design output by issuance of Engineering Change Notice 6129. Nuclear Construction is performing walkdowns of all Class 1E conduits based upon clarified design output as discussed in the construction restart package for CDR 390/86-27 and 391/86-23 dated 10/11/91. This package was reviewed and the review results are documented in IR 390, 391/91-26. No revision to the 10 CFR 50.55(e) report is considered warranted.</p>
Equipment Seismic Qualification	CAP submittal to NRC replaces previous commitment	<p>TVA committed to define corrective actions and implementation plan by September 1, 1987. (Source: Response to Notice of Violation 390/86-21-02)</p> <p>TVA committed to provide an assessment and corrective action program, by SWEC, to replace the commitment item above. (Source: Response to Notice of Violation 390/86-18-01)</p>	<p>The previous commitments indicate that the CAP commitment will be forthcoming to address the Equipment Seismic Qualification issues. The CAP submittal itself is the implementation of the previous commitments. No revision to the NOV response is necessary.</p>

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<p>Hanger and Analysis Update Program</p>	<p>ASME Code Case N-411 meeting the requirements specified in Regulatory Guide 1.84 will be used for single zone.</p> <p>Regulatory Guide 1.61 will be used for multiple zones.</p> <p>As part of the Hanger and Analysis Update Program (HAAUP), the design criteria for piping analysis and support design were updated (see paragraphs 2.0 and 4.2.2) to incorporate the resolution of several technical and/or procedural issues. This revised design methodology will be used to evaluate the safety-related piping and associated support design. In several cases, the revised design methodology is different from FSAR.</p>	<p>N-411 with 2-D earthquake and multiple zones will be used. (Source: FSAR Table 3.7.2)</p> <p>Criteria A (.5%, 1%) or Criteria B (1%, 2%; 2%, 3%) will be used. (Source: FSAR Table 3.7.2)</p> <p>This updated design methodology is not reflected in the FSAR. (Source: FSAR)</p>	<p>The previous commitment column description is an incorrect interpretation of FSAR Table 3.7.2 (See FSAR page 3.7-26). The CAP commitment generally states that N-411, R.G. 1.84, and R.G. 1.61 will be properly used. No FSAR change is required.</p> <p>The previous and CAP commitments are the same. (See R.G. 1.61 and FSAR Table 3.7.2. No FSAR change is required.</p> <p>FSAR revised. See FSAR Section 3.9 (Amendment 64 - numerous subsections).</p>

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<p>Heating, Ventilating and Air Conditioning</p>	<p>Develop and implement a critical case evaluation of installed safety-related HVAC duct and duct supports (See paragraph 4.1.4). "Since there have been several CAQs identifying discrepancies between installed configurations and the SVS documentation, the accuracy of such documentation must be verified. Therefore, an engineering walkthrough to address those issues, as well as the other identified deficiencies will be implemented."</p>	<p>Review HVAC hanger location drawings for agreement with inspection documentation with regard to typical support numbers. Document and resolve discrepancies. Reinstall missing support 1030-DW920-02H-0109 (if required). (Source: CATD 11103-WBN-06)</p>	<p>The critical case evaluation described in the CAP commitment is the methodology by which the HVAC hangers are reviewed. CATD 11103-WBN-06 was written into CAQ NCR W-580-PS and was subsequently rolled into WBN 870316SCA. WBN 870316SCA is the basis for the HVAC CAP. The CAP and previous commitment are equivalent. No revision to the CATD is necessary.</p>
<p>Instrument Lines</p>	<p>Instrument lines designated as Seismic Category I or I(L) will be pressure tested in accordance with appropriate piping code requirements as specified in site-implementing procedures. Reference: NCO880294010</p>	<p>For Unit 1 safety-related instrument panels not having been pressure tested, TVA plans to inspect the panels for leaking compression fittings during initial heatup. Reference: NCO8504740078 (Source: TVA letter to NRC dated July 30, 1986, 10 CFR 50.55[e])</p>	<p>A revised final report for CDR 390/85-43 and 391/85-42 (L44900511802) was issued to NRC 5/11/90 to revise the previous commitment to agree with the CAP commitment.</p>

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Q-List	<p>The scope of the Q-List includes quality-related plant civil/structural, mechanical and electrical systems required for Unit 1 operations. The Q-List will include those Class 1E motors necessary to support the needs of WBN Q-List User Organizations.</p> <p>The review as specified in the 50.55(e) report is being implemented by the development of a new Q-List. This approach was taken to alleviate difficulties in interpreting the data fields. ("SPEC REQ" data field to be eliminated).</p>	<p>Revise the Q-List to identify <u>all</u> motors (except valve operators) and their functional requirements. (Source: Revised final report for NCR-W-269-P R1, WBRD-50-390/85-56, WBRD-50-391/85-32)</p> <p>In the long term, revise the Q-List to consistently identify Class 1E valves (i.e., enter a 4 under "SPEC REQ"...do a complete review of the Q-List). (Source: Revised final report for NCR-W-269-P R1, WBRD-50-390/85-56, WBRD-50-391/85-32)</p>	<p>The CAP statement in the matrix, "those Class 1E motors necessary to support the needs of the WBN User Organizations" is a paraphrased conclusion of the CAP language and cannot be found as a direct quote. However, it is the intent of the new Q-List to list only Class 1E motors as identified by the Class 1E calculation (another Q-List CAP commitment). The CAP and previous commitment are considered by TVA to be the same. No revision to the 10 CFR 50.55(e) final report is required.</p> <p>A supplemental 10 CFR 50.55(e) report (T04930121837) was submitted to NRC on January 21, 1993 to clarify the commitment made in TVA's revised final report as being consistent with actions taken by the Q-List CAP.</p>

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Welding	R.T. of ASME Welds ---- two welds do not meet ASME Section III.	FSAR Section 3.8.2.2.1 ---- Containment Penetrations ...providing pressure boundary... ASME Section III class 2. (Source: FSAR)	FSAR revised. See FSAR Section 3.8.2.2.1.
	Piping shear lugs for ASME Class 2 and 3 will be reanalyzed using code case N-318.	FSAR did not allow use of this code case. (Source: FSAR)	FSAR revised. See FSAR Section 3.9.3.1.2.A.1.k.
	HVAC duct work discussion refers to 10 CFR 50.55(e) reports which commit to revise FSAR to clarify commitment to ANSI-N509.	FSAR originally referenced SMACNA as modified by ORNL-NSIC-65. It also referenced ANSI-N509 but was not specific for welding requirements. (Source: FSAR)	FSAR revised. See FSAR Table 3.2-6.
	Wall mounted panels - As a result of the disposition of SCR W-559-PS, a revision to FSAR was necessary to allow qualification by testing.	FSAR paragraph 3.10.1 stated . . . "This panel is qualified to the same criteria as the local panels by analysis." (Source: FSAR)	FSAR revised. See FSAR Section 3.10.1.
	Classification of containment liner welds. In the process of dispositioning CAQRs 870561, 870562, and 870563, it was noted that code case 1768 needed to be added to FSAR paragraph 3.8.2.2.1.	FSAR did not reference the code case. (Source: FSAR)	FSAR revised. See FSAR Section 3.8.2.2.1.