



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-390/84-59 and 50-391/84-45

Licensee: Tennessee Valley Authority
500A Chestnut Street
Chattanooga, TN 37401

Docket Nos.: 50-390 and 50-391

License Nos.: CPPR-91 and CPPR-92

Facility Name: Watts Bar 1 and 2

Inspection Conducted: July 21 - September 21, 1984

Inspectors:	<u>S. P. Weise for</u>	<u>11/7/84</u>
	M. B. Shymlock	Date Signed
	<u>S. P. Weise for</u>	<u>11/7/84</u>
	W. E. Holland	Date Signed
	<u>S. P. Weise for</u>	<u>11/7/84</u>
	C. W. Caldwell	Date Signed

Accompanying Personnel: George Maxwell

Approved by:	<u>S. P. Weise</u>	<u>11/7/84</u>
	S. P. Weise, Section Chief	Date Signed
	Division of Reactor Projects	

SUMMARY

Scope: This routine inspection involved 511 resident inspector-hours on site in the areas of followup on licensee identified items, TMI action items, independent inspection effort, hot functional testing, comparison of as-built plant to FSAR description, and IE Bulletin closeout.

Results: Of the six areas inspected, no violations or deviations were identified in five areas. Five violations were identified in one area. (Failure to prescribe and follow a system status procedure, paragraph 7.a; failure to prescribe an activity affecting quality in a maintenance request, paragraph 7.b; failure to follow cleanliness control procedures, paragraph 7.b; failure to include a specific criteria on test records, paragraph 7.b, failure to prescribe qualitative acceptance criteria for engineering reviews, paragraph 7.c).

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REPORT DETAILS

1. Licensee Employees Contacted

W. T. Cottle, Site Director
R. M. Pierce, OEDC Project Manager for Watts Bar
*E. R. Ennis, Plant Manager
C. Wadewitz, Construction Project Manager
*B. S. Willis, Operations and Engineering Superintendent
H. B. Bounds, Maintenance Superintendent
D. W. Wilson, Design Services Manager
R. Norman, Jr., Operations Supervisor
T. L. Howard, Quality Engineering Supervisor
M. A. Skarzinski, Modifications
C. E. Wood, Jr., Electrical Maintenance Supervisor
*M. K. Jones, Engineering Supervisor
R. A. Beck, Health Physics Supervisor
J. S. Woods, Instrument Maintenance Supervisor
*C. D. Nelson, Mechanical Maintenance Supervisor
*R. C. Sauer, Plant Compliance Supervisor
*W. L. Byrd, Preoperational Test Supervisor
H. J. Fischer, Construction Engineer
C. H. Jetton, General Construction Superintendent
S. Johnson, Jr., Quality Manager - Construction
T. W. Hayes, Nuclear Licensing Unit Supervisor
*L. C. Miller, Head, Plant Quality Engineering and Control Group
H. L. Pope, Supervisor, Plant Quality Control Section
*L. J. Smith, Supervisor, Quality Surveillance Section
S. M. Anthony, Nuclear Power Compliance Staff, Mechanical Engineer
J. E. Englehart, Nuclear Power Compliance Staff, Engineer
*R. T. McCollom, Nuclear Power Compliance Staff
*R. E. Yarbrough, Jr., Assistant Operations Supervisor
R. E. Bradley, Assistant Operations Supervisor

Other licensee employees contacted included engineers, technicians, nuclear power supervisors and construction supervisors. Licensee management acknowledged the potential violations.

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on September 25 and 28, 1984, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Followup on Licensee Identified Items

(Closed) CDR 391/84-09, Fire Damper Fusible Link Deficiencies. The subject item was discussed and inspected for closure on Unit 1 in Inspection Report No. 50-390/84-46. The inspector reviewed the item and the report with Region II staff and determined that the licensee action to correct the deficiency on Unit 2 is adequate.

6. TMI Task Action Items

- a. (Closed) IFI 390/84-13-05, Installation of Containment Pressure Monitors. The Safety Evaluation Report (NUREG-0847) stated that the licensee would provide redundant, continuous containment pressure indication with a range up to four times the design pressure of the containment. The inspector verified that redundant, continuous containment pressure indication (0-60 psig) is installed on control room panel 1-M-9.
- b. (Closed) IFI 390/84-20-02, Residual Heat Removal (RHR) System Discrepancies. The subject discrepancies were identified by the inspector during a walkdown of the RHR system as outlined in Inspection Report No. 390/84-20. The licensee corrected the discrepancies and the inspector verified the corrective action. The inspector also conducted a reinspection of selected portions of the RHR system. During this reinspection, no additional discrepancies were identified.

7. Independent Inspection Effort (92706)

a. Use of Configuration Control Logs

On September 13, 1984, the inspector reviewed valve checklist No. 3.2-1 (part of System Operating Instruction 3.2) and the configuration control log for the Auxiliary Feedwater System (System 3). This system was placed under configuration control per Operations Section Letter (OSL)-A2 in May 1984. The system has undergone extensive preoperational testing since being placed under configuration control. The inspector conducted an independent verification of approximately 50 valves (25%) required to be aligned by valve checklist 3.2-1 and determined that all valves were in the correct position required; however, three valves (3-809, 3-826, and 3-834) which were required to be locked in position had the locking devices disconnected.

On September 19, 1984, the inspector reviewed valve checklist No. 74.1-1 (part of system operating instruction 74.1) and the configuration control log for the residual heat removal system (system 74). This system was placed under configuration control in May 1984. The inspector conducted an independent verification of

approximately 25 valves (30%) required to be aligned by checklist 74.1-1 and determined that all valves were in the correct position required; however, four valves (74-512, 74-513, 74-515, and 74-520) which were required to be locked in position either had ineffective locking devices or the locking devices were disconnected.

The inspector also reviewed the control room copy of system operating instruction 74.1 and determined that the valve and power checklist had been revised since the system had been aligned in May 1984. An additional review of the status file on September 19, 1984, showed that the current revision in the system status file for valve and power checklists 74.1-1 was Revision 5 while the current revision for the checklists was Revision 6. Also, power checklist 68.2-1 for the reactor coolant system in the system status file was Revision 2, while the current revision for the checklist is Revision 4. OSL-A2 requires the SRO to place a statement at the bottom of each newly revised page of a valve or power checklist to read "valves (power) verified per existing checklist" and initial, then attach the new revision to the existing checklist and return them to the status file. At the time of the inspection this had not been done. The inspectors also reviewed the status file to determine if all systems required to be configured were in the file. OSL-A2 requires that specific critical systems checklists which are identified in Appendix A of the OSL shall have a checklist maintained in the system status file during hot functional testing. The inspectors determined that valve/power checklists for SOI's 30.3 (containment cooling), 68.1 (reactor coolant), and 68.3 (reactor coolant) were not in the system status file. The preceding examples of failure to follow procedure for maintaining systems status as required by OSL-A2 is identified as violation 390/84-59-05.

The inspectors also reviewed the configuration control log that was in use during hot functional testing; however, OSL-A2 only addresses use of a configuration control log when in modes 1-6. AI-2.1, Revision 10 requires that system alignment be maintained on CSSC systems as specified in OSL-A2. Since Watts Bar does not have a license and does not fall under mode control, the inspector determined that, with the requirements in AI-2.1, OSL-A2 is inadequate in providing for proper control of system status prior to fuel load. The review of the log in use did conclude that independent verification of components being returned to operational status was an area that needed to be addressed (i.e., double signoffs were evident; however, the signoffs were inconsistent throughout the log). Failure of OSL-A2 to describe maintenance of system status with regards to configuration control logs and independent verification is a further example of violation 390/84-59-05.

No other violations or deviations were identified during this inspection.

b. Component Cooling Water Heat Exchanger (CCWHX) Modification

On August 13, 1984, while touring the Auxiliary Building the inspector observed work being performed on the CCWHX No. 0-HXT-70-1C. The "C" CCWHX was being retubed with AL-6X stainless steel tubes per workplan 4459. Problems had been encountered on alignment of the tubes and six cut-outs were made in the carbon steel shell of the CCWHX at the tube baffle plate area. These cut-outs were made per Maintenance Request (MR) A-408901.

These cut-outs had been replaced on the Nos. 4, 5, and 6 openings. The replacement of the cut-out portions for openings Nos. 1, 2, and 3 were in progress, including weld preparation of the openings. The inspector observed grinding marks at openings Nos. 1 and 3 on several new stainless steel tubes that had been replaced in the CCWHX. One tube was also dented, and there was weld splatter on two tubes. There was only 0.5 to 1.0 inch clearance between the heat exchanger shell and the stainless steel tubes. During the grinding of the weld preparations on the shell, the craftsman had apparently contacted some of the tubes with the grinding wheel. The most noticeable grinding marks were visible in the No. 1 cut-out opening. The inspector noted that the sheet metal shields provided for protection of the tubes were not in place at the time grinding operations were observed. It was also noted that grinding dust from the weld preparation was covering the stainless steel tubes at the window openings.

The inspector reviewed MR A-408902, which was written to replace the cut-outs on the CCWHX. It was noted that no changes had been made to the work instructions to require the use of the sheet metal shields nor were precautionary statements added to prevent damage to the tubes. As a result of the damage to the new tubes, 13 tubes were plugged per MR A-408991. Failure to provide adequate controls in work instructions for safety-related equipment is a violation (390/84-59-04).

During the above observations, a Quality Control (QC) inspector at the work site was asked by the inspector if he was reviewing the work activities. He stated that he was only there for a magnetic particle hold point inspection. The work activities noted above were not being monitored by any QC inspector.

The inspector also reviewed MR A-408902 to determine the type of cleanliness controls identified for the retubing activities. The Work Instruction required that QC verify class "C" cleanliness per Technical Instruction (TI) 27, Part III. QC completed these inspections for all six cut-outs, per attachment C of TI-27, Part III. However, these cleanliness inspections only involved the carbon steel shell of the CCWHX. There were no controls noted in the MR to prevent entry of foreign materials into the heat exchanger or onto the new stainless steel tubes.

Due to concerns for cleanliness controls noted above, a review of Workplan 4459 for cleanliness controls was performed. The workplan required that the craftsman verify class D cleanliness per TI-27, Part III for the Emergency Raw Cooling Water (ERCW) side of the heat exchanger. This was accomplished by the craftsman. There was also a note that the Component Cooling Water System cleanliness would be accomplished during system start-up, per the Chemical Engineering Section (CES). However, interviews with CES personnel revealed that the CES cleaning only involved chemical cleanup of the system (i.e., chloride, etc.). There were no cleanliness controls, other than those previously discussed, stipulated during retubing operations or prior to returning the CCWHX to service. The workplan was reviewed, approved, and performed without the required cleanliness criteria inspections being stipulated or performed per TI-27 part III, Cleanliness Criteria Class B Primary Systems and Class C Stainless Steel and High Nickel/Corrosion Resistant Alloy Systems (Attachment B). Review of MR A-408902 also indicated that the cut-outs were replaced on the CCWHX without conducting inspection of the stainless steel tubes per the TI-27 criteria. Failure to perform the required cleanliness inspections of TI-27 for both MR A-408902 and workplan 4459 constitutes a violation (390/84-59-01).

Administrative Instruction (AI) 9.2, Revision 11, Maintenance Program, Attachment 7, "Standardized Guidelines for the Preparation/Review of MRs", is used during the preparation and initial review of MRs. Step A.6 of Attachment 7 of AI-9.2 require that the preparer specify necessary housekeeping/cleanliness requirements and acceptance criteria in the MR. Failure to have appropriate controls to prevent entry of foreign materials into the heat exchanger and on the stainless steel tubes and to identify cleanliness acceptance criteria and controls in MR A-408902 and Workplan 4459 constitutes another example of failure to implement procedures (390/84-59-01).

The licensee's review of Workplan 4459 and MR A-408902 was reviewed by the inspector. AI-8.5, Control of Modification Work on Transferred Systems Before Unit Licensing, revision 10 and QA Section Instruction Letter 5.4, MR Review, revision 2 were reviewed by the inspector. These procedures require reviews of MRs and workplans to verify appropriate housekeeping/cleanliness requirements and acceptance criteria. Neither workplan 4459 nor MR-A-408902 contained adequate cleanliness controls for the activities conducted. Failure to adequately implement the review requirements of AI-8.5 for workplan 4459 and MR A-408902 is identified as an additional example of failure to implement procedures (390/84-59-01).

The inspector reviewed completed cleanliness criteria inspection sheets (Attachments C and D to TI-27, Part III) for MR A-408902 and workplan 4459. It was noted that specific inspection activities performed by the licensee inspector (i.e., type of observation, results, acceptability) could not be determined by reviewing the completed inspection

sheets. Failure of inspection records to identify the type of observation, the results and acceptability of specific criteria inspected is a violation (390/84-59-02).

c. Engineering Evaluations

Due to the problems noted above, the inspector conducted additional reviews of completed cleanliness inspections for other work activities. The inspector determined that if an inspection is found unsatisfactory, then an engineering evaluation, performed per TI-27, is required to determine if the condition is detrimental to the system. The following maintenance documents contained completed inspection sheets which documented unsatisfactory inspections and indicated an engineering evaluation was completed:

- ° MR A-226219, Removal and Replacement of Reactor Vessel Head and Attachments
- ° WP-3816, Move Isolation Valves and Add Union in Cooler Lines on system 62 Centrifugal Charging Pumps Units 1 and 2.
- ° MR A-189149, Install Spool Pieces in accordance with MI-17.18.

The engineering evaluations were documented by signature only, and thus no documentation of any evaluation acceptance criteria or technical areas reviewed could be identified.

Failure to provide qualitative acceptance criteria for the engineering evaluation is a violation (390/84-59-03).

d. Review of TI-27, Part III

The following concerns were identified after review of TI-27, Part III:

- ° TI addresses mechanical and metallurgical concerns, but the purpose section only addresses chemical parameters.
- ° Responsibility section needs to identify supervisor responsible for the overall program.
- ° Table I should be reviewed to assure it agrees with all CSSC system and components.
- ° Controls for prevention of chemical contamination of parts/components is not addressed.
- ° Contamination, as it relates to TI-27, Part III, is not defined.

These concerns are identified as inspector followup item (390/84-59-06).

- e. On August 24, 1984, the inspector was informed of a problem in which one of the Essential Raw Cooling Water (ERCW) pump shafts was discovered to be broken. The licensee had written a nonconforming condition report (NCR W-195-P) on the problem on August 23, 1984. A brief summary of the problem follows:

During the middle of August 1984, excessive vibration was observed when ERCW pump G-B was being operated. Pump disassembly was initiated as part of the troubleshooting of the vibration problem. During disassembly of the pump, the top section of the pump shaft was discovered to be broken. Laboratory analysis of the broken shaft section indicated inter-granular cracking due to improper heat treatment as a possible cause of the shaft failure. All eight (8) of the ERCW pumps installed at Watts Bar are potentially affected. The pumps are Byron Jackson Model #32RXL 2 Stage Type VCT and were installed in 1977. This problem has been identified by the licensee as CDR WBRD-50-390/84-44.

No violations or deviations were identified during this inspection.

- f. On September 12, 1984, the inspector reviewed IE Information Notice 84-66, Undetected Unavailability of the Turbine Driven Auxiliary Feedwater Train, for applicability at Watts Bar. The review by the inspector led to the following conclusions:

- (1) Precautions are listed throughout System Operating Instruction (SOI) 3.2 to alert the operator to verify locally that the trip and throttle (T&T) valve (FCV-1-51) is latched.
- (2) Administrative Instruction (AI) 2.10 requires that the T&T valve (FCV-1-51) be verified latched to its motor operator by local observation each shift.
- (3) Discussion with the licensee indicated that additional revisions are being made to SOI 3-2 to further insure that valve FCV-1-51 is relatched following a turbine trip.

No violations or deviations were identified during this inspection.

- g. On September 17, 1984, the inspector reviewed the potentially generic problem regarding expansion of Westinghouse steam generator (S/G) tubes (PGI-84-013). A similar problem was identified in the S/Gs provided to Watts Bar. Repairs to the improperly rolled S/G tubes were accomplished by Westinghouse in 1978. The inspector reviewed the work packages which accomplished the repairs on the Unit 1 steam generators at Watts Bar and the work appeared to be adequate.

No violations or deviations were identified during this inspection.

8. Integrated Hot Functional Test Witnessing (70314)

The second integrated hot functional preoperational testing for Unit 1 at Watts Bar commenced on August 3, 1984. The major purposes of this testing evolution are to clear exceptions and deficiencies remaining from the first hot functional test and to conduct additional testing on systems/components installed since the first hot functional.

Unit 1 heatup from ambient to hot standby and control of testing during this timeframe were accomplished by test instruction No. W-1.1 (Reactor Coolant System Heatup). W-1.1 established plateaus at 150°F, 250°F, 350°F, 450°F, and 557°F (NOT) and listed tests that were required to be performed at each plateau. The inspectors witnessed operations personnel completing prerequisites in preparation for plant heatup. Operations personnel were using proper procedures in addition to the test instructions for plant heatup. Of those test procedure steps witnessed, each step appeared to be accomplished in a professional manner and any deficiency encountered was either properly documented or resolved.

Testing accomplished at the 250°F plateau involved several activities. Reactor coolant system data was recorded including RCS pressure, temperature, flow, reactor coolant pump data, and reactor vessel flange leakoff temperature, and reactor coolant system thermal expansion measurements were taken as required by test procedure W-1.7. An attempt was made to perform test procedure TVA-29 (Steam Generator Blowdown); however, system deficiencies prevented testing and an exception was noted. Also, test procedure W-9.2 (Incore Thermocouple and RTD Cross-Calibration) was deleted from hot functional testing due to a requirement to modify the system after testing. The modification (changing the length of the thermocouple cables) could make data recorded now incorrect. TVA has indicated that they will propose conducting this test after fuel load.

At the 350°F plateau testing was also conducted. Reactor coolant system instrumentation data was again recorded, reactor coolant system thermal expansion data was taken as required by W-1.7, and reactor coolant system leakage was verified as being within proposed Technical Specification limits. Steam was lined up from the steam generators to the steam dumps and test procedure TVA-23A (Thermal Expansion of Piping Systems) data was taken.

The following testing was accomplished at the 450°F plateau. Reactor coolant system instrumentation data was again recorded. Reactor coolant system thermal expansion data was taken as required by W-1.7. Thermal expansion of piping systems data was taken as required by TVA-23A, and test procedure TVA-22 (Auxiliary Feedwater System (AFW) pump response time test) was conducted. TVA-22 will be discussed more fully at the next plateau. Reactor coolant system leakage was again verified as being within proposed Technical Specifications limits.

The operators then commenced heatup to 557°F (NOT) and increased pressure to 2235 psig (NOP). When steam generator pressure reached approximately 565 psig (482°F), TVA-22 was conducted and problems were experienced with AFW system stability. A deficiency was written and is in the process of being properly dispositioned. When reactor coolant system pressure reached approximately 1800 psig, test procedure W-10.8 (Upper Head Injection System) was conducted to verify UHI check valve integrity. The test results were unsatisfactory based on draft Technical Specification requirements. A test deficiency was written. Other UHI system testing was completed satisfactory.

Testing was also accomplished at the 557°F (NOT) plateau. Pressurizer pressure and level controls were tested. Reactor coolant system leakage was again verified as being within proposed Technical Specification limits. Unit 1 testing at NOT and NOP was then continued in accordance with W-1.2 (Reactor Coolant System Hot Functional Test). Testing accomplished by W-1.2 included the following: operation of containment ventilation systems, reactor coolant system thermal expansion data as required by W-1.7, thermal expansion of piping systems as required by TVA-23A, and reactor protection system time response testing as required by test procedure W-7.1A.

Testing of the pressurizer pressure setpoints was also accomplished and the following event occurred. During performance of hot functional testing with Unit 1 at NOT (557°F) and plant pressure being slowly raised from NOP (2235 psig) to 2385 psig in order to verify the high pressurizer pressure reactor trip setpoint, two of the three code safety valves lifted at 2372 psig. The required setpoint of the code safety valves is 2485 psig \pm 1% when the valves are subjected to ambient conditions at normal operating temperature and pressure.

Investigation by the inspector revealed that the installed code safety valves had been set by the vendor (Crosby Valve and Gage Company) using nitrogen as the gas instead of steam, which resulted in a lower actual setpoint than required when the valves are subjected to ambient conditions at normal operating temperature. The inspector discussed the condition with plant engineering personnel and was told that the installed code safety valves would be removed after completion of hot functional testing. Spare code safety valves would then be installed after they had been properly set to the ASME Code using steam and establishing proper ambient conditions for normal operating temperature.

TVA-22, Revision 1 was also conducted at NOT to verify proper system operation of the auxiliary feedwater system. Several problems were encountered with regards to valve operations and control of the system from the auxiliary control room. All deficiencies were documented and the test procedure package will be reviewed after completion of testing.

The inspectors witnessed portions of all of the previous evolutions listed and concluded that the hot functional testing was being conducted in a satisfactory manner. The testing will continue into October 1984.

No violations or deviations were identified during this inspection.

9. Comparison of As-Built Plant to FSAR Description (37301)

The inspectors completed a walkdown of the accessible portions of the CCW system required for Unit 1 operation. The CCW system was inspected for conformance with TVA drawings 47W859-1, Revision 20; 47W859-2, Revision 18; 47W859-3, Revision 17; and 47W859-4, Revision 9 (Mechanical Flow Diagram - Component Cooling System). During the inspection, the following discrepancies were noted.

- a. Valves 1-70-503B, 509, 511B, 153, 558A, 731C, 732; 0-70-22, and 505 did not have identification tags.
- b. The power cables for 1LCV-70-63, OFCV-70-22, 1FCV-70-9, and 1FCV-70-156 were improperly installed.
- c. Switch 0-LS-70-80B had a broken tag.
- d. The following temperature indicators were not installed in the system: 1-TW-70-148A, 148B, 152A, 152B, 149A, 149B, 154A, 157A, 146A, 146B, 147A, 147B, 151A, 151B, 150A, 150B, 145A, and 145B.

The preceding deficiencies were discussed with the licensee and are identified as an inspector followup item (390/84-59-07).

No violations or deviations were identified in this area.

10. IE Bulletin Closeout (92703)

- a. (Closed) IE Bulletin 79-BU-24 Frozen Lines

This bulletin dated September 27, 1979, reported an incident on January 3, 1979, at Davis-Besse, Unit 1 involving the freezing of the water in a portion of the high pressure coolant injection pumps. In addition over the five year period prior to this event, there had been several events involving frozen instrument lines.

All licensees and construction permit holders were requested to review their plants to determine that adequate protective measures had been taken to assure that safety-related processes, instrument, and sampling lines do not freeze during extremely cold weather.

By memorandum dated July 18, 1984, the Watts Bar Design Project Manager certified to the Chief, Nuclear Engineering Support Branch that the Watts Bar Project Design Sections (Mechanical Sections 1, 2, 3, and 4 and Electrical Section No. 1) had completed a review of their respective systems and that the electrical heat-trace systems at WBN were compatible with the requirements of NRC IE Bulletin 79-24. The review was to ensure that the temperature sensor for a heat trace circuit was located in the coldest portion of the piping served by the circuit.

Under CDR 390/82-37, the licensee reported that Nutherm International's shop testing of electrical components was inadequate. The procedures were improved and the matter was closed in NRC report 390/83-19 dated January 29, 1983.

Inspector followup item 390/83-14-07, closed in Report 390/83-29 confirmed that the thermal well at node point 18C in the feedwater piping had been correctly installed in the downward vertical direction.

The senior construction resident reviewed the licensee's construction deficiency reports and other open items issued since publishing of this bulletin. No other pertinent items had been reported by the licensee or NRC inspectors. Insulation on the piping in Unit 1 prevents repeat detailed visual inspection of the heat trace elements. The heat trace elements, except thermal wells, have not been installed for Unit 2 but are designed to be similar to Unit 1.

This bulletin is closed for Watts Bar.

- b. (Closed) IE Bulletin 78-BU-07 Protection Afforded by Air-Line Respirators and Supplied Air Hoods.

This bulletin requested licensees with operating plants to report within 60 days on their facilities and procedures for the subject respiratory protection, with the purpose of simplifying the regulations and guidance for respiratory protection (10 CFR Part 20, 20.103(c) and Regulatory Guide 8.15). TVA supplied the requested information, satisfying this bulletin.

This bulletin is closed for Watts Bar.

- c. (Closed) IE Bulletin 80-BU-05 Vacuum Condition Resulting in Damage to Chemical Volume Control System (CVCS) Holdup Tanks (sometimes called "Clean Waste Receiver Tanks")

This bulletin required that licensees with a construction permit submit the design information requested within 90 days of the date of the letter. The licensee responded on June 9, 1980, and for Watts Bar provided the design, surveillance procedures, detailed provisions taken to avoid damage from freezing or vacuum pressures, and listing the systems and tasks involved.

The inspector has reviewed the licensee's response and it appears adequate.

This bulletin is closed for Watts Bar 1 and 2.