UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931

July 22, 2004

Tennessee Valley Authority
ATTN: Mr. K. W. Singer
Chief Nuclear Officer and
Executive Vice President
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: WATTS BAR NRC INTEGRATED INSPECTION REPORT 05000390/2004003 AND 05000391/2004003

Dear Mr. Singer:

On June 26, 2004, the US Nuclear Regulatory Commission (NRC) completed an inspection at your Watts Bar Nuclear Plant, Units 1 and 2. The enclosed integrated inspection report documents the inspection results which were discussed on July 2, 2004, with Mr. W. Lagergren and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. No findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

***/RA/***

Stephen J. Cahill, Chief
Reactor Projects Branch 6
Division of Reactor Projects

Docket Nos. 50-390, 50-391
License No. NPF-90 and Construction
Permit No. CPPR-92
Enclosure: NRC Inspection Report 05000390/2004003, 05000391/2004003
w/Attachment: Supplemental Information

cc w/encl: (See page 2)

cc w/encl:
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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

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|---|---|
| Docket Nos: | 50-390, 50-391 |
| License Nos: | NPF-90 and Construction Permit CPPR-92 |
| Report No: | 05000390/2004003, 05000391/2004003 |
| Licensee: | Tennessee Valley Authority (TVA) |
| Facility: | Watts Bar Nuclear Plant, Units 1 and 2 |
| Location: | 1260 Nuclear Plant Road<br>Spring City TN 37381 |
| Dates: | March 28 through June 26, 2004 |
| Inspectors: | J. Bartley, Senior Resident Inspector<br>J. Reece, Resident Inspector<br>R. Carrion, Project Engineer (Sections 1R05, 4OA1)<br>S. Shaeffer, Senior Project Engineer (Section 1R04) |
| Approved by: | Stephen J. Cahill, Chief<br>Reactor Projects Branch 6<br>Division of Reactor Projects |

Enclosure

# SUMMARY OF FINDINGS

IR 05000390/2004003, 05000391/2004003, 03/28/2004 - 06/26/2004, Watts Bar Nuclear Plant, Units 1 & 2, Routine Integrated Report.

The report covered approximately a three-month period of routine inspection by resident inspectors and announced inspections by regional project engineers. No findings of significance were identified. The significance of issues is indicated by their color (Green, White, Yellow, Red) using the Significance Determination Process in Inspection Manual Chapter 0609, Significance Determination Process (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, Reactor Oversight Process, Revision 3, dated July 2000.

A. NRC-Identified Findings and Self-Revealing Findings

None.

Licensee-Identified Violations

B. None.

Enclosure

## Report Details

Summary of Plant Status

Unit 1 operated at or near 100 percent power for the entire inspection period. Unit 2 remained in a deferred construction status.

## 1. REACTOR SAFETY

### Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection

a. Inspection Scope

The inspectors reviewed the licensee's procedure for hot weather operation, 1-PI-OPS-1-SO, Summer Operation, which is performed monthly, May through September. The inspectors walked down the two risk-significant areas/components listed below to verify compliance with the procedural requirements and to verify that the specified actions provided the necessary protection for the structures, systems, or components (SSCs).

- Essential Raw Cooling Water (ERCW) intake pumping station
- Component Cooling System (CCS) heat exchanger operation

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

a. Inspection Scope

Partial System Walkdown: The inspectors conducted four equipment alignment partial walkdowns to evaluate the operability of selected redundant trains or backup systems, listed below, with the other train or system inoperable or out of service. The inspectors reviewed the functional system descriptions, Updated Final Safety Analysis Report (UFSAR), system operating procedures, and Technical Specifications (TS) to determine correct system lineups for the current plant conditions. The inspectors performed walkdowns of the systems to verify that critical components were properly aligned and to identify any discrepancies which could affect operability of the redundant train or backup system. Documents reviewed are listed in attachment.

- 1A-A and 1B-B CCS pumps with C-S CCS pump out of service
- A train emergency gas treatment system (EGTS) during B train EGTS component outage
- 1A-A, 2A-A, and 1B-B emergency diesel generators (EDGs) with 2B-B EDG out of service due to field excitation circuit wire failure

- 1A-A and 1B-B auxiliary feedwater (AFW) pumps while the turbine-driven AFW pump was inoperable due to not meeting acceptance criteria for flow

Complete System Walkdown: The inspectors performed a complete system walkdown of the residual heat removal system (RHR) to verify proper equipment alignment and identify any discrepancies that could impact the function of the system and increase risk.

The inspectors reviewed the UFSAR, system procedures, system drawings, and system design documents to determine the correct lineup and then examined system components and their configuration to identify any discrepancies between the existing lineup and the correct lineup. The inspectors reviewed the licensee's corrective action system documents and work orders (WOs) related to the RHR system to determine whether issues related to the system were being appropriately addressed. Discussions were held with system engineering personnel responsible for system health monitoring, and the inspectors reviewed how performance trending was being conducted to enhance early detection of adverse performance trends. In addition, portions of the containment spray and RHR spray heat exchanger piping were inspected to look for evidence of abnormal system operation including unrecognized water hammer events. The documents reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors conducted tours of nine areas important to reactor safety, listed below, to verify the licensee's implementation of fire protection requirements as described in the Fire Protection Program, Standard Programs and Processes (SPP)-10.0, Control of Fire Protection Impairments, SPP-10.10, Control of Transient Combustibles, SPP-10.11, Control of Ignition Sources (Hot Work). The inspectors evaluated, as appropriate, conditions related to: (1) licensee control of transient combustibles and ignition sources; (2) the material condition, operational status, and operational lineup of fire protection systems, equipment, and features; and (3) the fire barriers used to prevent fire damage or fire propagation.

- Turbine-driven AFW pump room
- 1A-A and 1B-B RHR pump rooms
- 1A-A and 1B-B containment spray pump rooms
- 1A-A and 1B-B centrifugal charging pump (CCP) rooms
- 1A-A and 1B-B safety injection pump rooms

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

a. Inspection Scope

The inspectors reviewed internal flood protection measures for the turbine building area. Flooding in the turbine building could impact risk-significant components in the control building if turbine building flood mitigation features were degraded. Turbine building flood protection features were observed to verify that they were installed and maintained consistent with the plant design basis. The inspectors reviewed the instrumentation and associated alarms for turbine building floods to verify that the instrumentation was periodically calibrated and that the respective alarms were appropriately integrated into plant procedures. The inspectors also reviewed licensee instructions for shutdown in the event of severe flooding and evaluated the availability of SSCs for safe shutdown under worst case water levels. Documents reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

a. Inspection Scope

On May 11, 2004, the inspectors observed operators in the plant's simulator during scenario 3-OT-SRT0052, Pressurizer safety valve fails open leading to ES-1.2. The inspectors verified operator performance was adequate, evaluators were identifying and documenting crew performance problems, and training was being conducted in accordance with procedures TRN-1, Administering Training, and TRN-11.4, Continuing Training for Licensed Personnel.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed two performance-based problems, listed below, relating to the failure of an auxiliary building ventilation isolation damper to close and degradation of the screen material on the ERCW traveling screens. The focus of the reviews was to assess the effectiveness of maintenance efforts that apply to scoped SSCs and to verify that the licensee was following the requirements of TI-119, Maintenance Rule Performance Indicator Monitoring, Trending, and Reporting 10 CFR 50.65, and SPP-6.6, Maintenance Rule Performance Indicator Monitoring, Trending, and Reporting 10 CFR 50.65. Reviews focused, as appropriate, on: (1) appropriate work practices; (2) identification and resolution of common cause failures; (3) scoping in accordance with

10 CFR 50.65; (4) characterization of reliability issues; (5) charging unavailability time; (6) trending key parameters; (7) 10 CFR 50.65(a)(1) or (a)(2) classification and reclassification; and (8) the appropriateness of performance criteria for SSCs classified as (a)(2) or goals and corrective actions for SSCs classified as (a)(1).

- Problem Evaluation Report (PER) 34172, Damper 0-FCO-30-137-A failed to close on receipt of an auxiliary building isolation signal
- PER 9413, 2A-A ERCW traveling screen had several large holes due to broken strands of wire

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors evaluated, as appropriate for the five work activities listed below: (1) the effectiveness of the risk assessments performed before maintenance activities were conducted; (2) the management of risk; (3) that, upon identification of an unforseen situation, necessary steps were taken to plan and control the resulting emergent work activities; and (4) that maintenance risk assessments and emergent work problems were adequately identified and resolved. The inspectors verified that the licensee was complying with the requirements of 10 CFR 50.65 (a)(4); SPP-7.0, Work Control and Outage Management; SPP-7.1, Work Control Process; and TI-124, Equipment to Plant Risk Matrix.

- B train shutdown boardroom chiller inoperable with 1B-B EDG inoperable
- Replace A train EGTS pressure control valve diaphragms coincident with A train ERCW traveling screen work
- Failure of 2B-B EDG generator field circuit
- Failure of 1A-A CCP room cooler with planned work on 1A-A EDG
- 1B-B CCP room cooler breaker maintenance with B train 6.9kv shutdown board room chiller outage

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

The inspectors reviewed personnel performance in response to a military aircraft crash on March 29, 2003, which caused a slight transient on the plant's internal electrical distribution system. The aircraft severed a 161-kV line several miles from the plant.

While protective relaying kept the lines energized, the plant's internal electrical distribution system experienced a transient which resulted in electrical trips of several support systems' components. The inspectors reviewed operator logs and plant computer data to determine if plant and operator responses were in accordance with plant design, procedures, and training. The inspectors concluded that the event did not significantly impact plant performance.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed five operability evaluations affecting risk-significant mitigating systems, listed below, to assess, as appropriate: (1) the technical adequacy of the evaluations; (2) whether continued system operability was warranted; (3) whether other existing degraded conditions were considered as compensating measures; (4) whether the compensatory measures, if involved, were in place, would work as intended, and were appropriately controlled; (5) where continued operability was considered unjustified, the impact on TS Limiting Conditions for Operation and the risk significance in accordance with the Significance Determination Process. The inspectors verified that the operability evaluations were performed in accordance with SPP-3.1, Corrective Action Program.

- PER 34009, Missing bolts in 125-V vital dc distribution panels 0-DPL-235-5A and -5B
- PER 04-810146-000, ERCW pump B-A high bearing temps
- PER 60525, ERCW traveling screen motor couplings degraded
- PER 61971, ERCW A train pumps K611 relay high resistance
- PER 62041, H-B ERCW pump exceeded the motor winding temperature high setpoint

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds

a. Inspection Scope

The inspectors reviewed the cumulative effects of operator workarounds to assess: (1) the effect on the reliability, availability, and potential for mis-operation of a system; (2) the potential for increasing an initiating event frequency or affecting multiple mitigating systems; and (3) the cumulative effects on the ability of the operators to respond in a correct and timely manner to plant transients and accidents. The inspectors reviewed

the current operator workarounds as defined by Operations Department Procedure (OPDP)-1, Conduct of Operations, and interviewed operators to determine if there were other conditions which would require actions to compensate for equipment problems or deficiencies. The operator workarounds reviewed for their cumulative effect were:

- "A" condensate storage tank level must be manually maintained
- EDG 1B1-B air receivers must be manually blown down once a day

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing

a. Inspection Scope

The inspectors reviewed seven post-maintenance test procedures and/or test activities, as appropriate, for selected risk-significant mitigating systems to assess whether: (1) the effect of testing on the plant had been adequately addressed by control room and/or engineering personnel; (2) testing was adequate for the maintenance performed; (3) acceptance criteria were clear and adequately demonstrated operational readiness consistent with design and licensing basis documents; (4) test instrumentation had current calibrations, range, and accuracy consistent with the application; (5) tests were performed as written with applicable prerequisites satisfied; (6) jumpers installed or leads lifted were properly controlled; (7) test equipment was removed following testing; and (8) equipment was returned to the status required to perform its safety function. The inspectors verified that these activities were performed in accordance with licensee procedures SPP-8.0, Testing Programs; SPP-6.3, Pre-/Post-Maintenance Testing; and SPP-7.1, Work Control Process.

- WO 03-010058-000, C-A ERCW pump clutch replacement
- WO 04-815086-000, Repair post accident sampling system capillary tube
- WO 03-021413-000, Replace diaphragm on nitrogen to pressurized relief tank containment isolation valve 1-FCV-68-305
- WO 04-817748-000, Replace 2B-B EDG exciter breaker
- WO 03-011466-000, 1B-B safety injection pump lube oil heat exchanger cleaning
- WO 03-013561-000, Repair leak at compression fitting associated with 1-FIS-74-12, 1A-A RHR pump miniflow switch
- WO 03-012239-000, Replace valve operator diaphragm on 0-MVOP-032-0085-B auxiliary air compressor inlet isolation

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors witnessed seven surveillance tests and/or reviewed test data of selected risk-significant SSCs, listed below, to assess, as appropriate, whether the SSCs met the requirements of the TS; the UFSAR; SPP-8.0, Testing Programs; SPP-8.2, Surveillance Test Program; and SPP-9.1, ASME Section XI. The inspectors also determined whether the testing effectively demonstrated that the SSCs were operationally ready and capable of performing their intended safety functions.

- WO 03-020639-000, Perform 1-SI-68-33, Measurement of Controlled Leakage of the Reactor Coolant Pump Seals
- WO 03-022183-000, Perform 0-SI-236-1, 125 VDC Vital Battery Weekly Inspection
- WO 04-812161-000, Perform 1-SI-3-15, 92 Day Channel Operational Test and 18-Month Channel Calibration Steam Generator Level Trip Time Delay Channel IV, Loop 1-LPL-3-42T (L-517-547)
- WO 04-812904-000, Perform 1-SI-3-902 Turbine-Driven Auxiliary Feedwater Pump 1A-S Quarterly Performance Test *
- WO 04-813089-000, Perform 0-SI-82-11-A, Monthly Diesel Generator Start and Load Test DG 1A-A
- WO 04-813191-000, Perform 1-SI-74-901-A Residual Heat Removal Pump 1A-A Quarterly Performance Test *
- WO 04-813308-000, Perform 0-FOR-32-1-B, Quarterly Auxiliary Air Compressor Start/Load, Valve Exercising/Position Indication Verification and Check Valve Test Train B

*This procedure included inservice testing requirements

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed temporary plant modification Temporary Alteration 0-04-001-032, Install temporary service air compressor, against the requirements of SPP-9.5, Temporary Alterations, and SPP-9.4, 10 CFR 50.59 Evaluation of Changes, Test, and Experiments, and verified that the modifications did not affect system operability or availability as described by the TS and UFSAR. In addition, the inspectors verified that the installation of the temporary modification was in accordance with the work package, that adequate configuration control was in place, procedures and drawings were updated, and post-installation tests verified operability of the affected systems.

b. Findings

No findings of significance were identified.

## 4. OTHER ACTIVITIES

4OA1 Performance Indicator Verifications

Licensee records were reviewed to determine whether the submitted performance indicator (PI) statistics were calculated in accordance with the guidance contained in Nuclear Energy Institute 99-02, Regulatory Assessment Performance Indicator Guideline, Revision 2.

Mitigating System and Barrier Integrity Cornerstones

a. Inspection Scope

The inspectors verified the accuracy of the PI data (noted below) which was reported to the NRC. The inspectors reviewed data applicable to four quarters of operation beginning with April 2003 and ending March 2004. The inspectors reviewed licensee event reports and maintenance rule records to verify the accuracy of the safety system functional failures PI data. Additionally, portions of the operator and chemistry logs were reviewed to verify that the licensee had accurately determined the reactor coolant system (RCS) maximum dose equivalent iodine-131 activity and leakage during the previous four quarters. The inspectors also observed a chemistry technician obtain an RCS sample using Chemistry Manual Chapter 6.24, Sampling CVCS Mixed Bed Demineralizers, Section 6.1, Sampling Letdown in Sink A via CVCS Sample Valves.

- Safety system functional failures (mitigating system cornerstone)
- RCS identified leakage (barrier integrity cornerstone)
- RCS specific activity (barrier integrity cornerstone)

b. Findings

No findings of significance were identified.

4OA2 Identification & Resolution of Problems

.1 Daily Reviews

As required by Inspection Procedure 71152, Identification and Resolution of Problems, and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's corrective action program (CAP). This review was accomplished by reviewing daily PER summary reports and attending daily PER review meetings.

.2 Semi-Annual Review to Identify Trends

a. Inspection Scope

As required by Inspection Procedure 71152, Identification and Resolution of Problems, the inspectors performed a review of the licensee's CAP and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on repetitive equipment and corrective maintenance issues but also considered the results of daily inspector CAP item screening discussed in Section 4OA2.1 above, licensee trending efforts, and licensee human performance results. The review also included issues documented outside the normal CAP in system health reports, corrective maintenance WOs, component status reports, site monthly meeting reports and maintenance rule assessments. The inspectors' review nominally considered the six-month period of January through June 2004, although some examples expanded beyond those dates when the scope of the trend warranted. The inspectors compared and contrasted their results with the results contained in the licensee's latest integrated quarterly assessment report. Corrective actions associated with a sample of the issues identified in the licensee's trend report were reviewed for adequacy. The inspectors also evaluated the trend report against the requirements of the licensee's CAP as specified in SPP-3.1, Corrective Action Program, and 10 CFR 50, Appendix B. Specific documents reviewed are listed in the attachment.

b. Assessment and Observations

No findings of significance were identified. The licensee's trending methodology, scope, and implementation was, in general, broad-based and thorough. The licensee site support organization monitored for trends on a monthly and quarterly basis using PER reports sorted on standardized cause codes, systems, organizations, and key words. Site support also reviewed each PER generated during the quarter to identify potential trends that may not be identified using the reports. Potentially negative trends were brought to the attention of the responsible organization and site management. The engineering organization also trended repetitive equipment issues under the maintenance rule program. Equipment issue trends were monitored by trending component/system failures and unavailability time. The inspectors compared the licensee process results with the results of the inspectors' daily screening and did not identify any discrepancies or potential trends in the CAP data that the licensee had failed to identify.

However, the inspectors observed that the licensee did not fully follow their CAP for a previously identified trend. In January, 2004, prior to their routine quarterly trend review, the licensee determined that a negative trend existed. An increase in the number of fire doors found either closed but not latched or open had been identified by the inspectors since late in 2003. The licensee directed a complete walkdown of safety-related doors and initiated PER 9941 to document the deficiencies identified by the walkdown and perform an apparent cause analysis to identify corrective actions. Additionally, the Operations department identified control of safety related doors as an area needing attention in the Integrated Quarterly Assessment, a component of the trending program,

for the period ending December 2003, and as a negative trend for the period January - March 2004. The inspectors determined the licensee's overall response to this issue was initially effective and included the following:

- revising the preventative maintenance procedure to verify latches worked from both sides of the door;
- issuing a site bulletin in December 2003 to increase general employee awareness;
- increasing Fire Operations door inspection frequency to daily;
- increasing radiation protection technicians' and auxiliary unit operators' awareness of the importance of verifying doors are shut and latched.

However, the corrective actions taken, with the exception of the first two listed above, were not documented in any CAP document and were focused mainly on the Operations department. There were no documented long-term corrective actions to maintain or increase awareness of other site organizations on the importance of shutting safety-related doors. The licensee also did not issue a C level trend PER as directed by CAP procedure SPP -3.1. The licensee initiated PER 64532 to document failure to initiate a trend PER and PER 64533 to document the negative trend on safety-related doors. The inspectors determined that the failure to generate a trend PER was minor and not a finding of significance. The licensee is evaluating their corrective actions based on the number of PERs for open safety-related doors increasing to five in May.

4OA5 Other

.1 Institute of Nuclear Power Operations (INPO) Plant Assessment Report Review

a. Inspection Scope

The inspectors reviewed the final report for the INPO plant assessment report of Watts Bar conducted in September 2003. The inspectors reviewed the report to ensure that issues identified were consistent with the NRC perspectives of licensee performance and if any significant safety issues were identified that required further NRC follow-up.

a. Findings

No findings of significance were identified.

.2 TI 2515/156, Offsite Power System Operational Readiness

a. Inspection Scope

The inspectors collected data from licensee maintenance records, event reports, corrective action documents and procedures, and through interviews of station engineering, maintenance, and operations staff, as required by the Temporary Instruction (TI ) 2515/156. The data was gathered to assess the operational readiness of the offsite power systems in accordance with NRC requirements such as Appendix A

to 10 CFR Part 50, General Design Criterion (GDC) 17; Criterion XVI of Appendix B to10 CFR Part 50, Plant Technical Specifications (TS) for offsite power systems; 10 CFR 50.63; 10 CFR 50.65 (a)(4), and licensee procedures. Documents reviewed for this TI are listed in the attachment.

b. Findings

No findings of significance were identified. Based on the inspection, no immediate operability issues were identified. In accordance with TI 2515/156 reporting requirements, the inspectors provided the required data to the headquarters staff for further analysis.

4OA6 Meetings, including Exit

The inspectors presented the inspection results to Mr. W. Lagergren and other members of licensee management at the conclusion of the inspection on July 2, 2004. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## SUPPLEMENTAL INFORMATION
## PARTIAL LIST OF PERSONS CONTACTED

Licensee

L. Bryant, Plant Manager
R. Crews, Acting Site Nuclear Assurance Manager
A. Hinson, Maintenance and Modifications Manager
J. Kammeyer, Engineering Manager
W. Lagergren, Site Vice President
J. McCollum, Security Manager
N. Moon, Engineering and Site Support Manager
D. Nelson, Business and Work Performance Manager
P. Pace, Licensing and Industry Affairs Manager
J. Roden, Training Manager
G. Wallace, Chemistry Superintendent
T. Wallace, Operations Manager

## LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

| | | |
|---|---|---|
| 05000390/2515/156 | TI | Offsite Power System Operational Readiness (Section 4OA5.2) |

Attachment

## LIST OF DOCUMENTS REVIEWED

Section 1R01

- System Operating Instruction (SOI) -70.01, Component Cooling Water (CCS)
- PER 63712, NRC-identified issue of no preventative maintenance program for cleanliness of ERCW motor windings contrary to vendor requirements; respective screens found partially clogged with insect nests in G-B motor ventilation housing.

Section 1R04

- SOI-70.01, Component Cooling Water
- SOI-65.02, Emergency Gas Treatment System
- SOI-82.01, Diesel Generator 1A-A
- SOI-82.02, Diesel Generator 1B-B
- SOI-82.03, Diesel Generator 2A-A
- SOI-3.02, Auxiliary Feedwater System
- SOI-74.01, Residual Heat Removal System, Revision 42
- 1-SI-63-10-A, Starting of RHR
- 1-SI-72-70-1, DI Water addition to RHR/Containment Spray Header
- 1-SI-74-62-A, 18-month calibration of 1A-A RHR miniflow valve
- TI-124, Equipment to Plant Risk Matrix
- 1-47W432-200,200A, Mechanical Flow Diagram - Residual Heat Removal System

Section 1R06

- UFSAR Section 10.4.5.3, Safety Evaluation
- UFSAR Section 3.8.4.1, Description of Structures
- Watts Bar Unit 1 Individual Plant Examination, Appendix E, Section 1.4.3, Turbine Building (flood analysis)
- WO 01-006604-000, Functional check of turbine building flood mode level switch
- Design Criteria WB-DC-40-29, Flood Protection Provisions
- Annunciator Response Instruction, ARI-166-172, Miscellaneous & HPFP, Page 13 of 48, response for TURB/AUX/RX BLDG FLOODED.

Section 1R12

- PER 03-003466-000, NRC-identified issue regarding functional evaluations for ERCW screen section corrosion
- N3-67-4002, ERCW System Description
- UFSAR Section 9.2.1, Essential Raw Cooling Water (ERCW)

Section 1R19

- PER 63799, NRC-identified issue regarding post maintenance testing of instruments when maintenance is performed on associated sensing lines.

- PER 64509, NRC-identified issue regarding system description operability information for gagging open auxiliary control air system isolation valve with credit taken for a check valve.

Section 1R22

- PER 62641, Licensee-identified issue regarding turbine driven AFW recirculation flows exceeding acceptance criteria during performance of 1-SI-3-902.

Section 4OA2

- Maintenance Rule Panel - Meeting Minutes, February 12, 2004
- Maintenance Rule Panel - Meeting Minutes, April 30, 2004
- PER 9251, Fire door A062 was found ajar
- PER 9412, Fire door W003 found closed but not latched
- PER 9357, Fire door A030 found not fully closed and latched
- PER 9539, Fire door A033 was stuck open
- PER 9858, Fire door A004 was found open
- PER 9931, Fire door C022 latch found stuck and not engaged with door closed
- PER 9957, Fire door A033 found open
- PER 12966, Fire door T089 found not closed
- PER 14745, The latch for fire door A189 was sticking and not allowing the door to latch
- PER 14753, Fire door A030 found not closed and latched
- List of closed corrective maintenance WOs, 12/15/2003 - 6/15/2004
- List of open corrective maintenance WOs, 6/15/2004
- SPP-3.1, Corrective Action Program
- Nuclear Engineering Department Procedure (NEDP) -12, System and Component Health, Equipment Failure Trending
- WBN - Site Integrated Analysis for Second Quarter of 2004
- WBN - Site Integrated Analysis for Third and Fourth Quarters of 2003
- WBN System Status Fourth Quarter 2003
- WBN System Status First Quarter 2004
- WBN Tech Program and Component Status 1$^{st}$ Quarter FY04

Section 4OA5

- Intergroup Agreement (IGA)-6, Transmission Power Supply
- Technical Instruction (TI) - 12.15, 161KV Offsite Power Requirements
- WBN 161- and 500-kV Grid Voltage Schedules and Operating Instructions, dated August 31, 2001
- TI-124, Equipment to Plant Risk Matrix