



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
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ATLANTA, GEORGIA 30303-1257

June 2, 2016

Mr. Michael D. Skaggs
Senior Vice President
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Chattanooga, TN 37402-2801

**SUBJECT: WATTS BAR NUCLEAR PLANT UNIT 2 CONSTRUCTION - NRC INTEGRATED
INSPECTION REPORT 05000391/2016604**

Dear Mr. Skaggs:

On April 30, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of construction and testing activities at your Watts Bar Unit 2 reactor facility. The enclosed integrated inspection report documents the inspection results, which were discussed on May 11, 2016 with Gordon Arent and other members of your staff.

This inspection examined activities conducted under your Unit 2 operating license as they relate to safety and compliance with the Commission's rules and regulations, the conditions of your operating license, and fulfillment of Unit 2 regulatory framework commitments. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

No findings were identified during this inspection.

In accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's Rules of Practice, a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

M. Skaggs

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Should you have questions concerning this letter, please contact us.

Sincerely,

/RA/

James Baptist, Chief
Reactor Projects Branch 8
Division of Reactor Projects

Docket No. 50-391
License No. NPF-96

Enclosure:
IIR 05000391/2016604
w/ Attachment: Supplemental Information

cc w/encl: (See next page)

M. Skaggs

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Sincerely,

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Docket No. 50-391
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w/ Attachment: Supplemental Information

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M. Skaggs

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M. Skaggs

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Letter to Michael D. Skaggs from James Baptist dated June 2, 2016.

SUBJECT: WATTS BAR NUCLEAR PLANT UNIT 2 CONSTRUCTION - NRC INTEGRATED
INSPECTION REPORT 05000391/2016604

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PUBLIC

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 50-391

License No.: NPF-96

Report No.: 05000391/2016604

Licensee: Tennessee Valley Authority (TVA)

Facility: Watts Bar Nuclear Plant, Unit 2

Location: Spring City, TN 37381

Dates: April 1, 2016 – April 30, 2016

Inspectors: E. Patterson, Senior (Acting) Resident Inspector
J. Eargle, Resident Inspector
R. Monk, Senior Project Inspector

Approved by: James Baptist, Chief
Reactor Projects Branch 8
Division of Reactor Projects

Enclosure

SUMMARY

Watts Bar Nuclear Plant, Unit 2

This integrated inspection included aspects of engineering and construction activities performed by Tennessee Valley Authority (TVA) associated with the Watts Bar Nuclear (WBN) Plant Unit 2 construction project. This report covered a one-month period of inspections in the areas of quality assurance (QA), identification and resolution of construction problems, engineering and construction activities, preoperational and startup testing, and follow-up of other activities. The inspection program for Unit 2 construction activities is described in Nuclear Regulatory Commission (NRC) Inspection Manual Chapter (IMC) 2517, "Watts Bar Unit 2 Construction Inspection Program." Information regarding the WBN Unit 2 Construction Project and NRC inspections can be found at <http://www.nrc.gov/info-finder/reactor/wb/watts-bar.html>.

Inspection Results

- The inspectors concluded that issues pertaining to Generic Letter 89-04, Temporary Instruction 2515/110, and Temporary Instruction 2515/114 have been appropriately addressed for WBN Unit 2
- Areas inspected were adequate with no findings identified. These areas included QA; pre-operational testing activities; startup testing activities; and various NRC inspection procedures.

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REPORT DETAILS

Summary of Plant Status

During the inspection period covered by this report, Tennessee Valley Authority (TVA) performed construction completion as well as preoperational and startup testing activities on safety-related systems and continued engineering design activities of the Watts Bar Nuclear (WBN) Plant, Unit 2.

I. MANAGEMENT OVERSIGHT AND CONTROLS

C.1 Construction Activities

C.1.1 Unit 1 and Unit 2 Construction and Testing Activity Interface Controls

a. Inspection Scope

The inspectors independently assessed licensee controls, associated with Unit 2 testing activities, to prevent adverse impact on Unit 1 operational safety. The inspectors attended routine Unit 1/Unit 2 interface meetings to assess the exchange and sharing of information between the two site organizations. Periodic planning meetings were observed, at least once per week, to assess the adequacy of the licensee's efforts to identify those testing activities that could potentially impact the operating unit. This included the review of select testing activities, which the licensee had screened as not affecting Unit 1, to verify the adequacy of that screening effort. Additionally, the inspectors independently assessed select testing activities to verify that potential impacts on the operating unit had been identified and adequately characterized with appropriate management strategies planned for implementation.

Specific work activities that the licensee had screened out as not affecting Unit 1 included, but were not limited to, work activities as noted in this inspection report.

b. Observations and Findings

No findings were identified.

c. Conclusions

Overall, management oversight and controls were in place for the observed preoperational tests and surveillance activities that could potentially impact the operating units.

P.1 Preoperational Activities

P.1.1 Preoperational Test Program Implementation Verification (Inspection Procedure 71302)

a. Inspection Scope

02.01 (Weekly Inspection Activities): The inspectors verified that the licensee's management control system was effectively discharging its responsibilities over the preoperational testing program by facility record review, direct observation of activities, tours of the facility, interviews, and discussions with licensee personnel. Preoperational testing activities during the inspection period included the following system or portions thereof:

- System 99 – Reactor Protection System

As systems became available for preoperational testing, inspectors toured the accessible areas of the facility to make an independent assessment of equipment conditions, plant conditions, security, and adherence to regulatory requirements. The inspectors also reviewed the following, as available and on a sampling basis, during the tours:

- general plant/equipment conditions;
- plant areas for fire hazards - examined fire alarms, extinguishing equipment, actuating controls, firefighting equipment, and emergency equipment for operability and also verified that ignition sources and flammable material were being controlled in accordance with the licensee's procedures;
- activities in progress (e.g., maintenance, preoperational testing, etc.) were being conducted in accordance with the licensee's procedures;
- watched for abuse of installed instrumentation such as stepping or climbing on the instrumentation that could affect the calibration or ability to function;
- listened for the public address system announcements to determine that blind spots do not exist; (i.e., cannot be heard clearly enough to be understood)
- construction work force was authorized to perform activities on systems or equipment; and
- looked for uncontrolled openings in previously cleaned or flushed systems or components.

02.02 (Monthly Inspection Activities): The inspectors reviewed maintenance activities on safety-related equipment to include work order (WO) 117714351, "Check valve 2-CKV-063-0551 repair and retest," and WO 117725974, "Check valve 2-CKV-063-0555 repair and retest," to verify that the activities were scheduled in accordance with developed procedures and that these procedures were adequate for the maintenance being performed.

02.03 (Quarterly Inspection Activities): The inspectors reviewed jurisdictional controls to verify that maintenance activities were performed by the proper group and sampled preventative maintenance activities to ensure satisfactory completion. The inspectors also witnessed testing of 2-PTI-99-01 and 2-PTI-99-06 and interviewed personnel to verify that the method for testing was current, that methods existed to assure personnel involved were knowledgeable of the test, that approved change methodologies were

followed, that criteria for test interruptions were discussed, and that test deficiencies were properly documented.

b. Observations and Findings

No findings were identified.

c. Conclusion

The licensee's implementation of the preoperational test program was in accordance with procedures for those activities observed during the inspection period.

P.1.2 Preoperational Test Witnessing (Inspection Procedures 70312 and 70317)

a. Inspection Scope

Background: Previous inspection activities and background information regarding inspection procedure (IP) 70317, "Reactor Protection System Test Witnessing," were documented in integrated inspection report (IIR) 05000391/2016602 (Agencywide Documents Access and Management System [ADAMS] Accession Number [No]. ML 16098A193). The purpose of this preoperational test inspection was to verify through direct observation, personnel interviews, and review of facility records that:

- systems and components important to the safety of the plant are fully tested to demonstrate that they satisfy their design requirements; and
- management controls and procedures, including quality assurance (QA) programs, necessary for operation of the facility have been documented and implemented.

Inspection Manual Chapter (IMC) 2513 requires the preoperational test witnessing of the mandatory tests defined in IMC 2513 and five of the primal tests defined in IMC 2513. The following inspection was performed in relation to satisfying the required preoperational test witnessing.

Inspection Activities: The inspectors witnessed activities associated with the performance of preoperational test instruction (PTI) 2-PTI-099-01, "RPS & ESFAS Response Times," Revision (Rev.) 0, and 2-PTI-099-06, "Reactor Protection Setpoint Verification," Rev. 0, to verify that the testing was conducted in accordance with approved procedures and to verify the adequacy of test program records and preliminary evaluation of test results. The following surveillance instruction was selected for inspection of this item:

- 2-SI-68-14, WO 117250227, "18 Month Channel Calibration Reactor Coolant Flow Loop 1, Chanel III," Rev. 4

The inspectors assessed the following attributes associated with this test observation:

- all test personnel were on station and had the latest revision of the procedure;

- test prerequisites were performed;
- plant systems were in service to support the test;
- minimum crew requirements were met;
- testing was performed in accordance with the approved procedure;
- test interruptions and continuations were handled in accordance with approved procedures and documented in the chronological test log;
- testing events and discrepancies were properly evaluated and documented in the test deficiency log;
- testing was executed and coordinated properly;
- data was properly collected;
- temporary equipment was installed and tracked appropriately;
- administrative test controls were properly followed; and
- test personnel were using approved drawings and vendor manuals.

The inspectors observed the tests to verify that the overall test acceptance criteria were met. The inspectors conducted a review with the responsible test engineer to assure that the preliminary test evaluations were consistent with the inspector's observations. During the tests, the inspectors observed important data gathering activities to ensure the data was properly gathered and recorded. A post-test cursory review of the test data was performed to verify legibility, traceability, and permanence of the data sheet entries.

b. Observations and Findings

No findings were identified.

c. Conclusions

The inspectors determined that the applicant's test procedure was performed in a manner consistent with the guidance of procedure SMP-9, Watts Bar Nuclear Plant Unit 2, "Conduct of Test," Rev. 9. The inspectors determined the completed preoperational tests of the reactor protection system (RPS) and engineered safeguards features actuation system (ESFAS) was adequate. IP 70317 is closed.

SU.1 STARTUP TESTING ACTIVITIES

SU.1.1 Startup Test Procedure Review (Inspection Procedures 72300 and 72578)

a. Inspection Scope

Background: The purpose of IMC 2514, "Light Water Reactor Inspection Program – Startup Testing Phase," issue date August 21, 1989, is to verify that the licensee is meeting the requirements and conditions of the facility license for precritical tests, initial fuel loading, initial criticality, low-power testing, and power ascension tests. This verification is to be achieved through reviewing procedures and records, direct observation, witnessing tests, reviewing test data, and evaluating test results.

Inspection Activities: The inspectors reviewed test procedures (2-PET-301, "Core Power Distribution Factors"; 2-TI-41, "Incore Flux Mapping"; 2-SI-0-20, "Hot Channel Factors

Determination”; 2-SI-0-21, “Excure QPTR & Axial Flux Difference”; and 2-SI-0-22, “Incore QPTR”) to verify that the test procedures adequately addressed NRC requirements and licensing commitments outlined in the Final Safety Analysis Report (FSAR), docketed correspondence, safety evaluation report (SER), Technical Specifications (TS), and Regulatory Guide 1.68. Additionally, the inspectors reviewed test procedures to verify that the procedures contained the following administrative good practice attributes:

- the title described the purpose of the procedure;
- the cover page had appropriate information and approval signatures;
- procedure format was consistent with Regulatory Guide 1.68, Appendix C;
- a clear statement of procedure purpose/objectives;
- planning information such as prerequisites, precautions, required tools, reference documents, and coordination requirements;
- acceptance criteria were clearly identified and evaluated against the source of the comparison of results with acceptance criteria;
- adequate initial test conditions were specified;
- the procedure included a section listing references to appropriate FSAR sections, technical specifications, drawings, specification, codes, and other requirements;
- signoff requirements including concurrent and independent verification steps established where appropriate;
- actions to be taken within the steps were specifically identified;
- provisions were made for recording details of the conduct of the test, including observed deficiencies, their resolution, and retest;
- procedure provided for identification of personnel conducting the testing and evaluating the test data;
- the procedure, as issued, was consistent with the test description provided in the FSAR; and
- provisions were made for the data taker to indicate the acceptability of the data.

IP 72578 inspection requirements were reviewed to:

- Verify that the procedure contained acceptance criteria for the following:
 - (1) Core radial and axial power distribution, radial and axial peaking factors, and linear heat rates were determined and compared to predicted values
 - (2) Critical peaking factors, departure from nucleate boiling ratio (DNBR), peak linear heat rate and its location were determined and compared to predicted values
- Verify that precautions require:
 - (1) DNBR within requirements
 - (2) Linear heat rates within TS limits
- Verify that test conditions included:
 - (1) Steady state operations
 - (2) 25%, 50%, 75% and 100% power test conditions

b. Observations and Findings

No findings were identified. The first test is to be performed at 30%, not 25%. As discussed in R.G. 1.68, Revision 2, Paragraph C.8, power hold points (power test conditions) are approximate. The licensee may choose to select power hold points at 5% to 10% from the 10%, 25%, and 50% power levels.

DNBR is not an acceptance criteria nor is it in the precautions to maintain DNBR within requirements. DNBR is not a measured value; it is maintained within limits by staying within the TS safety limits and within TS requirements for hot channel factors. The core power distribution is compared to predicted values in the Westinghouse WINCISE procedure which is scheduled to be performed at the 30% power level.

c. Conclusions

The inspectors determined that the applicant's test procedure was written in a manner consistent with the guidance of procedure 2-TI-438, "Watts Bar Nuclear Plant Unit 2 Power Ascension Test Program," Rev. 5. This completes the procedure review of startup test procedure 2-PET-301.

SU.1.2 Startup Test Procedure Review (Inspection Procedure 72300)

a. Inspection Scope

Background: The background for this startup test procedure review is the same as that in the background of Section SU.1.1 above.

Inspection Activities: The inspectors reviewed test procedure 2-PAT-1.2, "Load Swing Test," Rev. 1, to verify that the test procedure adequately addressed NRC requirements and licensing commitments outlined in the FSAR, docketed correspondence, SER, TS, and Regulatory Guide 1.68. Additionally, the inspectors reviewed power ascension test procedure 2-PAT-1.2 to verify that the procedure contained the following administrative good practice attributes:

- the title described the purpose of the procedure;
- the cover page had appropriate information and approval signatures;
- procedure format was consistent with Regulatory Guide 1.68, Appendix C;
- a clear statement of procedure purpose/objectives;
- planning information such as prerequisites, precautions, required tools, reference documents, and coordination requirements;
- acceptance criteria were clearly identified and evaluated against the source of the comparison of results with acceptance criteria;
- adequate initial test conditions were specified;
- the procedure included a section listing references to appropriate FSAR sections, technical specifications, drawings, specification, codes, and other requirements;
- signoff requirements including concurrent and independent verification steps established where appropriate;
- actions to be taken within the steps were specifically identified;

- provisions were made for recording details of the conduct of the test, including observed deficiencies, their resolution, and retest;
- procedure provided for identification of personnel conducting the testing and evaluating the test data;
- the procedure, as issued, was consistent with the test description provided in the FSAR; and
- provisions were made for the data taker to indicate the acceptability of the data.

b. Observations and Findings

No findings were identified.

c. Conclusions

The inspectors determined that 2-PAT-1.2, was written in a manner consistent with the guidance of procedure 2-TI-438, "Watts Bar Nuclear Plant Unit 2 Power Ascension Test Program," Rev. 5. This completes the procedure review of power ascension test procedure 2-PAT-1.2, Rev. 1.

SU 1.3 Startup Test Procedure Review (Inspection Procedure 72300)

a. Inspection Scope

Background: The background for this startup test procedure review is the same as that in the background of Section SU.1.1 above.

Inspection Activities: The inspectors reviewed 2-PAT-6.1, "Automatic Reactor Control System," Rev. 1, to verify that the power ascension test procedure adequately addressed NRC requirements and licensing commitments outlined in the FSAR, docketed correspondence, SER, TS, and Regulatory Guide 1.68. Additionally, the inspectors reviewed power ascension test procedure 2-PAT-6.1 to verify that the procedure contained the following administrative good practice attributes:

- the title described the purpose of the procedure;
- the cover page had appropriate information and approval signatures;
- procedure format was consistent with Regulatory Guide 1.68, Appendix C;
- a clear statement of procedure purpose/objectives;
- planning information such as prerequisites, precautions, required tools, reference documents, and coordination requirements;
- acceptance criteria were clearly identified and evaluated against the source of the comparison of results with acceptance criteria;
- adequate initial test conditions were specified;
- the procedure included a section listing references to appropriate FSAR sections, technical specifications, drawings, specification, codes, and other requirements;
- signoff requirements including concurrent and independent verification steps established where appropriate;
- actions to be taken within the steps were specifically identified;
- provisions were made for recording details of the conduct of the test, including observed deficiencies, their resolution, and retest;

- procedure provided for identification of personnel conducting the testing and evaluating the test data;
- the procedure, as issued, was consistent with the test description provided in the FSAR; and
- provisions were made for the data taker to indicate the acceptability of the data.

b. Observations and Findings

No findings were identified.

c. Conclusions

The inspectors determined that 2-PAT-6.1 was written in a manner consistent with the guidance of procedure 2-TI-438, "Watts Bar Nuclear Plant Unit 2 Power Ascension Test Program," Rev. 5. This completes the procedure review of 2-PAT-6.1, Rev. 1.

SU 1.4 Startup Test Procedure Review (Inspection Procedure 72300)

a. Inspection Scope

Background: The background for this startup test procedure review is the same as that in the background of Section SU.1.1 above.

Inspection Activities: The inspectors reviewed 2-PAT-6.2, "Automatic Steam Generator Level Control Transients at 50% Power," Rev. 3, to verify that the power ascension test procedure adequately addressed NRC requirements and licensing commitments outlined in the FSAR, docketed correspondence, SER, TS, and Regulatory Guide 1.68. Additionally, the inspectors reviewed 2-PAT-6.2 to verify that the procedure contained the following administrative good practice attributes:

- the title described the purpose of the procedure;
- the cover page had appropriate information and approval signatures;
- procedure format was consistent with Regulatory Guide 1.68, Appendix C;
- a clear statement of procedure purpose/objectives;
- planning information such as prerequisites, precautions, required tools, reference documents, and coordination requirements;
- acceptance criteria were clearly identified and evaluated against the source of the comparison of results with acceptance criteria;
- adequate initial test conditions were specified;
- the procedure included a section listing references to appropriate FSAR sections, technical specifications, drawings, specification, codes, and other requirements;
- signoff requirements including concurrent and independent verification steps established where appropriate;
- actions to be taken within the steps were specifically identified;
- provisions were made for recording details of the conduct of the test, including observed deficiencies, their resolution, and retest;
- procedure provided for identification of personnel conducting the testing and evaluating the test data;

- the procedure, as issued, was consistent with the test description provided in the FSAR; and
- provisions were made for the data taker to indicate the acceptability of the data.

b. Observations and Findings

No findings were identified.

c. Conclusions

The inspectors determined that 2-PAT-6.2 was written in a manner consistent with the guidance of procedure 2-TI-438, "Watts Bar Nuclear Plant Unit 2 Power Ascension Test Program," Rev. 5. This completes the procedure review of 2-PAT-6.2, Rev.3.

SU 1.5 Startup Test Procedure Review (Inspection Procedure 72300)

a. Inspection Scope

Background: The background for this startup test procedure review is the same as that in the background of Section SU.1.1 above.

Inspection Activities: The inspectors reviewed 2-PAT-6.3, "Calibration of Steam and Feedwater Flow Instruments at 50% Power," Rev. 1, to verify that the power ascension test procedure adequately addressed NRC requirements and licensing commitments outlined in the FSAR, docketed correspondence, SER, TS, and Regulatory Guide 1.68. Additionally, the inspectors reviewed 2-PAT-6.3 to verify that the procedure contained the following administrative good practice attributes:

- the title described the purpose of the procedure;
- the cover page had appropriate information and approval signatures;
- procedure format was consistent with Regulatory Guide 1.68, Appendix C;
- a clear statement of procedure purpose/objectives;
- planning information such as prerequisites, precautions, required tools, reference documents, and coordination requirements;
- acceptance criteria were clearly identified and evaluated against the source of the comparison of results with acceptance criteria;
- adequate initial test conditions were specified;
- the procedure included a section listing references to appropriate FSAR sections, technical specifications, drawings, specification, codes, and other requirements;
- signoff requirements including concurrent and independent verification steps established where appropriate;
- actions to be taken within the steps were specifically identified;
- provisions were made for recording details of the conduct of the test, including observed deficiencies, their resolution, and retest;
- procedure provided for identification of personnel conducting the testing and evaluating the test data;
- the procedure, as issued, was consistent with the test description provided in the FSAR; and
- provisions were made for the data taker to indicate the acceptability of the data.

b. Observations and Findings

No findings were identified.

c. Conclusions

The inspectors determined that 2-PAT-6.3 was written in a manner consistent with the guidance of procedure 2-TI-438, "Watts Bar Nuclear Plant Unit 2 Power Ascension Test Program," Rev. 5. This completes the procedure review of 2-PAT-6.3, Rev.1.

II. OTHER ACTIVITIES

OA 1.1 (Closed) Generic Letter 89-04: Guidance on Developing Acceptable In-Service Testing Programs; Temporary Instruction 2515/114: Inspection Requirements for Generic Letter 89-04, Acceptable In-Service Testing Programs; Temporary Instruction 2515/110: Performance of Safety-Related Check Valves

a. Inspection Scope

Background: Previous inspection activities and background information regarding GL 89-04, TI 2515/110, and TI 2515/114 were documented in the following IIRs:

- 05000391/2014614, Section OA.1.1 (ADAMS Accession No. ML 14363A315)
- 05000391/2015604, Section OA.1.9 (ADAMS Accession No. ML 15181A446)
- 05000391/2015607, Section OA.1.1 (ADAMS Accession No. ML 15273A452)
- 05000391/2015608, Section OA.1.1 (ADAMS Accession No. ML 15287A166)
- 05000391/2015610, Section OA.1.1 (ADAMS Accession No. ML 16041A520)
- 05000391/2016601, Section OA.1.1 (ADAMS Accession No. ML 16069A268)
- 05000391/2016602, Section OA.1.1 (ADAMS Accession No. ML 16098A193)

Inspection Activities: The inspectors selected a sample of check valves from the Watts Bar Unit 2 in-service test (IST) program and reviewed the pre-service test procedures 2-SI-0-906, "Primary Pressure Boundary Isolation Valve Leak Test Safety Injection System Secondary Check Valves," Rev. 2, and 2-SI-0-903, "Primary Pressure Boundary Isolation Valve Leak Test (Boron Injection Hot Leg Injection Check Valves)," Rev. 3, to verify the sampled check valves were properly implemented into the IST program. The inspectors observed the check valve flow test for 2-CKV-63-545 and reviewed the test results for 2-CKV-63-551, and 2-CKV-63-555, to verify that the check valve tests were completed in accordance with the approved procedures, the tests met the requirements of American Society of Mechanical Engineers (ASME) Operation and Maintenance Code 2004 Edition through 2006 Addenda, and the check valves met the leakage acceptance criteria.

The following samples were inspected:

- TI 2515/110 Section 03.01.b – three samples
- TI 2515/110 Sections 03.02.g,h,i,j – three samples
- TI 2515/114 Section 03.05 e, f, and g – three samples

b. Observations and Findings

No findings were identified.

c. Conclusions

The pre-service tests completed for the check valves in accordance with the approved procedures and met the requirements of ASME Operation and Maintenance Code 2004 Edition through 2006 Addenda. The licensee's IST program and implementation of the IST program was determined to be adequate. Generic Letter 89-04, TI 2515/114, 2515/110 are closed.

IV. MANAGEMENT MEETINGS

X1 Exit Meeting Summary

An exit meeting was conducted on May 11, 2016, to present inspection results to Gordon Arent. The inspectors identified that no proprietary information had been received during the inspection and none would be used in the inspection report. The licensee acknowledged the observations and provided no dissenting comments.

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

P. Simmons, TVA – Site Vice President
J. O'Dell, TVA - Regulatory Compliance
R. Proffitt, TVA – Licensing
M. Skaggs, TVA – Senior Vice President
G. Arent, TVA – Licensing Manager

INSPECTION PROCEDURES USED

IP 70312	Preoperational Test Witnessing
IP 70317	Reactor Protection System Test Preoperational Test Witnessing
IP 71302	Preoperational Test Program Implementation Verification
IP 72300	Startup Test Procedure Review
IP 72578	Power Ascension Test Procedure Review Valuation of Core Performance

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Closed

70317	IP	Reactor Protection System Test Witnessing (Section P.1.2)
89-04, 2515/114, and 2515/110	GL and TIs	Generic Letter 89-04: Guidance on Developing Acceptable In-Service Testing Programs; Temporary Instruction 2515/114: Inspection Requirements for Generic Letter 89-04, Acceptable In-Service Testing Programs; Temporary Instruction 2515/110: Performance of Safety-Related Check Valves (Section OA.1.1)

LIST OF ACRONYMS

ADAMS	Agencywide Documents Access and Management System
ASME	American Society of Mechanical Engineers
CFR	<i>Code of Federal Regulations</i>
DNBR	Departure from Nucleate Boiling Ratio
ESFAS	Engineered Safeguards Features Actuation System
FSAR	Final Safety Analysis Report
GL	Generic Letter
IIR	Integrated Inspection Report
IMC	Inspection Manual Chapter (NRC)
IP	Inspection Procedure
IST	Inservice Testing
No.	Number
NRC	Nuclear Regulatory Commission
QA	Quality Assurance
QC	Quality Control
Rev.	Revision
RPS	Reactor Protection System
SER	Safety Evaluation Report
TI	Temporary Instruction
TS	Technical Specification
TVA	Tennessee Valley Authority
WBN	Watts Bar Nuclear Plant
WO	Work Order