



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

June 28, 2011

Mr. Ashok S. Bhatnagar  
Senior Vice President  
Nuclear Generation Development and Construction  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

**SUBJECT: WATTS BAR NUCLEAR PLANT UNIT 2 CONSTRUCTION - NRC PROBLEM  
IDENTIFICATION AND RESOLUTION INSPECTION REPORT  
05000391/2011611**

Dear Mr. Bhatnagar:

On May 20, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection of construction activities at your Watts Bar Unit 2 reactor facility. The enclosed inspection report documents the inspection results, which were discussed on May 20, 2011, with Mr. Ed Freeman and other members of your staff.

This inspection examined activities conducted under your Unit 2 construction permit as they relate to identification and resolution of problems, compliance with the Commission's rules and regulations, and with the conditions of your construction permit. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

On the basis of the sample selected for review, there were no findings of significance identified during the inspection. The team concluded, in general, that problems were properly identified, evaluated, and corrected within the problem identification and resolution program (PI&R).

Based on the corrective action program being deemed effective, the NRC will no longer perform follow-up inspections on all non-cited violations (NCVs) in accordance with Inspection Manual Chapter 2517, "Watts Bar Unit 2 Construction Inspection Program." NCVs will now be closed based on you entering them into your corrective action program, and follow-up inspections will occur on a sampling basis.

In accordance with 10 CFR 2.390 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 (PARS) component of

TVA

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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/**

Robert C. Haag, Chief  
Construction Projects Branch 3  
Division of Construction Projects

Docket No. 50-391  
Construction Permit No: CPPR-92

Enclosure: Inspection Report 05000391/2011611 w/attachment

cc w/encl: (See next page)

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TVA

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cc email distribution w/encl:  
Greg Scott  
Tennessee Valley Authority  
Electronic Mail Distribution

Watts Bar 2 Licensing  
Tennessee Valley Authority  
Electronic Mail Distribution

Letter to Ashok S. Bhatnagar from Robert C. Haag dated June 28, 2011.

SUBJECT: WATTS BAR NUCLEAR PLANT UNIT 2 CONSTRUCTION - NRC PROBLEM  
IDENTIFICATION AND RESOLUTION INSPECTION REPORT  
05000391/2011611

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PUBLIC

U.S. NUCLEAR REGULATORY COMMISSION  
REGION II

Docket No: 50-391

Construction Permit No: CPPR-92

Report No.: 05000391/2011611

Applicant: Tennessee Valley Authority (TVA)

Facility: Watts Bar Nuclear Plant, Unit 2

Location: 1260 Nuclear Plant Rd  
Spring City TN 37381

Inspection Dates: May 16 through May 20, 2011

Inspectors: A. Hutto, (Lead) Senior (Sr.) Resident Inspector, Reactor  
Projects Branch 1, Division of Reactor Project, Region II  
(RII)  
C. Julian, Construction Inspector, Construction Inspection  
Branch (CIB) 1, Division of Construction Inspection (DCI),  
RII  
P. Van Doorn, Construction Projects Branch 3, (CPB) 3,  
Division of Construction Projects (DCP), RII  
E. Heher, Construction Inspector, CIB2, DCI, RII  
R. Lewis, Resident Inspector, CPB3, DCP, RII

Accompanying  
Personnel: L. Dumont, Construction Inspector (In Training), CIB1, DCI, RII

Approved By: Robert C. Haag, Chief  
Construction Projects Branch 3  
Division of Construction Projects

Enclosure

**EXECUTIVE SUMMARY**  
Watts Bar Nuclear Plant, Unit 2  
NRC Inspection Report 05000391/2011611

**Introduction**

This inspection assessed implementation of the corrective action program for the Watts Bar Unit 2 construction completion project. The inspection program for Unit 2 construction activities is described in NRC Inspection Manual Chapter 2517. Information regarding the Watts Bar Unit 2 Construction Project and NRC inspections can be found at <http://www.nrc.gov/reactors/plant-specific-items/watts-bar.html>.

**Inspection Results**

- The inspectors determined that implementation of the corrective action program (CAP) for the Watts Bar Unit 2 construction completion project was effective. In general, the threshold for initiating problem evaluation reports (PERs) was low, PERs were appropriately categorized, and problem evaluations were effective in identifying corrective actions that addressed the problem (Section Q.1.1).
- The inspectors determined that adequate measures have been established to evaluate and incorporate applicable operating experience into the corrective action program (Section Q.1.1).
- The inspectors determined that TVA and Bechtel have established an acceptable program and environment for allowing employees to identify quality or safety-related concerns. (Section Q.1.1)



## REPORT DETAILS

### I. Quality Assurance Program

#### Q.1 Quality Assurance Program Implementation

##### Q.1.1 Implementation of Corrective Action Program During Construction (IP 35007)

###### a. Inspection Scope

The inspectors assessed the adequacy of the Tennessee Valley Authority (TVA) and Bechtel program for identification, evaluation, and corrective action of conditions adverse to quality during the period since the previous problem identification and resolution inspection in August 2010. This was accomplished by evaluating the thresholds for problem identification, the effectiveness of immediate and preventive corrective actions, the accuracy and thoroughness of problem documentation, and the adequacy of corrective actions for previously identified compliance issues. The inspectors conducted reviews to evaluate management/quality assurance oversight of the corrective action process.

The inspectors reviewed a sample of over 85 PERs and Service Requests (SRs) selected from reports of plant problems at Watts Bar Unit 2. The sample included problems addressed by a diverse selection of plant departments and problems classified under all of the significance levels. The sample also covered a diverse selection of sources, including problems identified in audits and assessments, nonconforming results from inspections and tests, findings from NRC inspections, concerns from anonymous sources, and concerns identified as adverse trends. Most PERs were reviewed after corrective actions had been implemented; however, some were reviewed after the corrective action plan was developed but prior to implementation.

The inspectors also reviewed the applicant's alternate issue tracking systems which address issues that were not classified as conditions adverse to quality. This review targeted verification of appropriate characterization and closure of issues managed outside the corrective action program. The TVA Over, Short, Damaged, and Discrepant (OSDD) report was reviewed to verify that items in the report were appropriately evaluated for potential inclusion in the corrective action program. The OSDD report documents unsatisfactory, overage, shortage and damage (UOS&D) deficiencies during material receiving process.

The inspectors reviewed applicable portions of the applicant's Quality Assurance Program (QAP) implementing procedures in order to ensure that commitments for the identification, evaluation, and resolution of conditions adverse to quality had been adequately addressed. The inspectors review evaluated the applicant's consideration for extent of condition, generic implications, common cause and previous occurrences (trending), including the identification of root and contributing causes along with actions to prevent recurrence for significant conditions adverse to quality.

The inspectors reviewed TVA's and Bechtel's respective programs for resolving employee concerns. This review covered documents and reports, some of which were

documented in previous NRC inspection reports. The inspectors interviewed TVA and the major contractor's (Bechtel) employee concern representatives, reviewed a listing of new employee concerns, and reviewed corrective actions for selected concern files. The inspectors reviewed and evaluated the adequacy of the programs which provide employees with an alternate method to identify quality or safety-related concerns. The inspectors also reviewed the provisions provided for workers to report conditions that may be adverse to quality. The inspectors reviewed several anonymous PERs to determine if they had been adequately captured and addressed.

The inspectors reviewed a sample of 10 management and quality assessments, audits, trend reports, and focused surveillances to verify adverse results were properly evaluated and dispositioned in the corrective action program. The inspectors reviewed the revision history for corrective action program implementing procedures and assessed the integration of industry operating experience into the corrective action process. Direct observations by inspectors included meetings of the Project Review Committee (PRC) and the Construction Completion Management Review Committee (CCMRC) as they screened newly reported problems and reviewed dispositions for selected issues.

Specific documents reviewed are listed in the attachment.

b. Observations and Findings

No findings of significance were identified. The following observations were noted:

(1) Effectiveness of Identifying, Evaluating, and Correcting Problems

Identifying Problems

The inspectors determined that the applicant was effective in identifying problems and entering them into the CAP. PERs normally provided complete and accurate characterization of the subject issues. In general, the threshold for initiating PERs was low as evidenced by the continued large number of PERs entered annually into the CAP. Employees were encouraged by management to initiate PERs. Site management was actively involved in the CAP and focused appropriate attention on significant plant issues. The inspectors' independent review did not identify any significant adverse conditions which were not in the CAP for resolution.

Evaluating Problems

The inspectors found no significant issues with the evaluations provided for individual PERs and determined that the applicant had adequately prioritized issues entered into the CAP consistent with established procedures. This was confirmed through the review of audits conducted by the applicant and the assessment conducted by the inspection team during the on-site period. Generally, the applicant performed evaluations that were technically accurate and of sufficient depth. The inspectors determined that site trend reports were thorough and that a low threshold was established for evaluation of potential trends. Use of trending at the site was comprehensive and effective in identifying areas for improvement.

The team determined that the applicant conducted an adequate number of root cause analyses based on the overall number and significance of issues entered into the CAP. The classifications were consistent with established procedures. A variety of causal analysis techniques were used depending on the type and complexity of the issue. For root causes that were identified, the applicant appropriately developed corrective actions to prevent recurrence (CAPR).

The team did identify one example (PER 247196) where the completion of the root cause analysis did not meet the applicant's timeliness requirements; however, immediate corrective actions and the extent of condition that was performed was sufficient such that there were no adverse consequences from the late root cause.

The inspectors also identified one example (PER 268797) where the development of the corrective action plan had not been completed within the assigned due date and no extensions had been initiated. The inspectors found three examples of C Level PERS (287646, 323361, and 356557) that identified corrective actions to address the identified issue, but did not evaluate potential underlying process weakness that could have contributed to the issue. For C Level PERs, this type of review is not required; however, the inspectors noted these PERs represented opportunities to better understand process weaknesses.

### Correcting Problems

Based on a review of numerous PER corrective actions and their implementation, the team found, for the most part, that the applicant's corrective actions developed and implemented for problems were timely, effective, and commensurate with the safety significance of the issues. Effectiveness reviews for CAPRs and audits were generally of good depth and correctly identified issues.

The inspectors did find several examples where the documentation of corrective actions were incomplete or inaccurate. One example (PER 262178) failed to document the completion of an effectiveness review that was completed two months previously and the open corrective action status was a month past due. Two examples were identified (PERs 326539 and 335991) where corrective action status was incorrect. One PER (321209) closed out a corrective action plan to an email that contained little documentation as to what was done, and the associated corrective action within the PER remained open. The applicant corrected these issues at the time of the inspection.

#### (2) Use of Operating Experience

The inspectors found that the applicant's measures to evaluate and incorporate applicable operating experience into the corrective action program contained processes for including vendor recommendations and internally generated lessons learned. The industry and operating experience (I&OE) information was collected, evaluated, and communicated to affected internal stakeholders as specified in TVA procedures, and appropriate corrective actions were developed for issues applicable to the Watts Bar Unit 2 Construction Completion Project.

(3) Safety Conscious Work Environment (SCWE)

The inspectors determined that TVA's and Bechtel's employee concern programs were adequate with significant improvement noted for the Bechtel program, in that the program procedure had undergone significant improvement and use of employee surveys had resulted in improvement initiatives. Employees interviewed expressed knowledge of the employee concerns program and the ability to raise safety related concerns through various available means. Generally, there appeared to be a low threshold for initiating PERs with strong management support for the program evident.

(4) Corrective Action Program Performance Insights

The sample of audits, assessments, and surveillances reviewed by the inspectors confirmed that management and quality personnel actively conducted observations and effectiveness reviews of the corrective action program. These program assessments concluded that overall, the corrective action program was effectively implemented which was consistent with the inspectors' observations and assessments during this inspection.

The sample of reported problems reviewed by the inspectors, interviews with responsible personnel, observations of program activities, and evaluation of program trends identified the following insights:

- The corrective action plan and corrective action (CA) backlog was relatively high due to extensions and late actions as identified by Bechtel trending in these areas. As a result, an action plan has been developed to complete development of overdue and extended corrective action plans and to schedule realistic completion dates for CAs tied to system schedule milestones.
- The CCMRC provided an appropriate level of management focus and input to the CAP. Committee members were engaged and their review of PER categorization and corrective actions was critical and probing. This level of management involvement in the PER review process provided added value and illustrated management's commitment to improving the CAP at Watts Bar Unit 2.
- There were opportunities to perform an increased number of apparent cause evaluations for Level C PERs. The inspectors noted several examples were Level C PER corrective action plans only addressed the problem identified but did not address potential process breakdowns that led to the problem. Only 16 Level C PERs written since the last PI&R inspection were determined to require apparent cause evaluations and this potentially represents missed opportunities for additional improvements that could be realized from the CAP.
- PER 247196 was a Level A PER associated with potential falsification of quality records involving electrical cable determinations and measurements. This PER was initiated on August 31, 2010. The inspector noted that the Root Cause evaluation was not completed until March 31, 2011. The applicant indicated that one of the delays was because the potential personnel issues required special investigation. The inspector was concerned that technical aspects of the problem may not have been addressed in a timely manner. Further inspector review showed that sufficient actions had been taken

to address the technical issued in a reasonable time before the Root Cause was completed. These included an extent of condition review which consisted of reviewing all work performed by the individuals and evaluating whether any other problems existed. None were found. In addition, the applicant held briefings with the affected department personnel. Additional training was implemented after the Root Cause was completed. While the applicant did not meet the timeliness requirements of the applicable procedure, management had made a decision to delay the final evaluation so as not to prejudice the investigation, and sufficient intermediate actions were taken to address prevention of similar problems and evaluate if any others existed.

(5) Corrective Action Program Effectiveness

As discussed above, the inspectors found that the applicant had conducted program assessments and focused assessments which addressed effectiveness. The inspectors determined the implementation of the CAP since the last NRC 2010 PI&R inspection (August 2010) has improved. Problem areas identified in the 2010 report associated with the identification and corrective action components of the program were not observed to the same extent and significance during this inspection. The CAP improvement appears to be a result of increased management attention and resources to the program and the communication of program expectations to the staff and contractors.

c. Conclusions

As documented above, the inspectors determined that implementation of the CAP for the Watts Bar Unit 2 construction completion project was effective. The threshold for initiating PERs was appropriate, PERs were categorized in accordance with their significance, and problem evaluations were effective in identifying appropriate corrective actions.

The inspectors determined that adequate measures had been established to evaluate and incorporate applicable operating experience into the corrective action program.

In regards to maintaining a Safety Conscious Work Environment, the inspectors determined that TVA and Bechtel had established an acceptable program and environment for allowing employees to identify quality or safety-related concerns.

Inspection Manual Chapter (IMC), 2517, Section 10.03 contained a provision to stop the NRC's practice of performing follow-up inspections for all non-cited violations when the applicant's corrective action program is deemed to be effective. Based on the results of this PI&R inspection, the NRC will not be required to perform follow-up inspections for all non-cited violations. Corrective actions for future non-cited violations will be assessed on a sampling basis by NRC inspections, including PI&R inspections.

**V. Management Meetings**

**X.1 Exit Meeting Summary**

On May 20, 2011, the inspectors presented the inspection results to Mr. Ed Freeman and other members of his staff. Proprietary information reviewed during the inspection was returned and no proprietary information was included in this inspection report.

## **SUPPLEMENTAL INFORMATION**

### **Partial List of Persons Contacted**

#### Applicant personnel

B. Crouch, Licensing Manager, Unit 2  
D. Stinson, Vice President, Unit 2  
R. Baron, Nuclear Assurance Project Manager, TVA, Unit 2  
B. Briody, Maintenance and Modifications Manager, TVA, Unit 2  
D. Charlton, Licensing, TVA, Unit 2  
T. Cheek, Corrective Action Program Coordinator, TVA, Unit 2  
D. Fink, Corrective Action Manager for Construction, Bechtel  
E. Freeman, Engineering Manager, TVA, Unit 2  
M. Grohman, WBNPP Unit 2 Site Coating Superintendent  
M. Hickey, Project Director, Bechtel  
M. Lackey, ECP Rep, TVA, Unit 2  
B. Perkins, Lead Civil Engineer, Bechtel  
T. Ryan, Licensing, TVA, Unit 2  
G. Scott, Licensing, TVA, Unit 2

### **Inspection Procedure Used**

IP 35007                      Quality Assurance Program Implementation during Construction

### **List of Items Opened, Closed, and Discussed**

#### Opened

None

#### Closed

None

#### Discussed

None

### **List of Documents Reviewed**

#### Problem Evaluation Reports (PERs) and Service Requests (SRs)

PER 218423, Results of the Unit 2 Use-As-Is Special Program Self Assessment  
PER 220664, NRC EN 45722 – Part 21 Defective Stud Attachment to Embed Plates  
PER 241073, Associated with NCV 05000391/2010604-01  
PER 241128, Historical Issue: CCE SYS WBN061 2-TE-0210F has damaged cable  
PER 242183, RCP 2-1 Upper Internal Package Contacted Transport Support Box  
PER 242243, Document Discrepancies for ASME Work  
PER 243266, Breaker Setting Incorrect  
PER 243564, Pitting Found in Loop 4 Piping

PER 243566, Bypassed QC Hold Point  
PER 243568, Wrong Documentation used and QC Verification not Performed  
PER 243577, Unacceptable PT Indications on Loop 4  
PER 243695, Associated with NCV 05000391/2010603-08  
PER 244088, Adverse Trend for Verbatim Procedure Compliance  
PER 244458, PER 178558 Corrective Action is Ineffective, Design Control Audit Finding  
PER 245011, Welding Inspection Hold Points Bypassed  
PER 245256, Failed PSI Inspection of Valve Bolting  
PER 245304, No Accurate Accounting for Historical DCNs that Modified Unit 1  
PER 245934, Near Miss: Electronic Dosimeter Alarmed During Radiography Activities  
PER 246355, Class 1E Cables not Installed Correctly  
PER 246373, Bypassed QC Hold Point  
PER 246901, Associated with NCV 05000391/2010607-01  
PER 246942, Welding Performed without QC Fit-Up Inspection  
PER 247196, Potential Discrepancies Between Cable/Wire Lift and Re-Land Sheet and Field  
PER 247409, NSRB Observations/Comments Relating to Unit 2 Transition Activities  
PER 247634, PER 241128 Inappropriately Closed Without Completed Actions  
PER 254366, Craft Working Outside Scope of WO and Procedure  
PER 255649, NRC Identified – Corrective Actions in PER 218423 not Completed  
PER 255663, Associated with NCV 05000391/2010605-03  
PER 258316, The 1E Classifications are Listed Incorrectly  
PER 261401, Unauthorized Material Substitution for Valve Diaphragms  
PER 262178, Trend in Red-line Process Issues  
PER 263619, NRC EN 46289 – Dresser Masoneilan Part 21 Report Model 77N-40 Air Regulators  
PER 266487, Missed QC Hold Points - Welding  
PER 268797, Plant Design Rework  
PER 272446, Possible Unit 1 Calculation N317R Error  
PER 274554, Someone Signed My Signature on a Legibility Stamp Falsely  
PER 280760, Anonymous PER: Bechtel Management Lack in Resolving Issues  
PER 280777, Associated with NCV 05000391/2010604-01  
PER 284106, Associated with NCV 05000391/2010607-01  
PER 285467, Hot Pipe Clearance Violation between New Conduit and CVCS Piping  
PER 287616, Associated with NCV 05000391/2010605-04  
PER 287646, Undocumented Valve Disassembly/Pipe Min. Wall Violation  
PER 293078, Anonymous PER: QC Inspected Hanger without Workers Present  
PER 293175, NRC Part 21 ENS 46449 - Rosemount Model 1152 DP Transmitters  
PER 293689, Replacement for PER 148667 – RV Arc Strike  
PER 296266, Associated with NCV 05000391/2010602-01  
PER 297661, Anonymous PER: QC Final Inspections without Craft Present  
PER 297689, Trend of QC In Process Rejections  
PER 305879, ABSCE Valves Found Open  
PER 307957, ABSCE Valves Found Unlocked  
PER 309775, During Movement of the 2A Safety Injection Pump the Pump Slid Forward  
PER 316584, Personnel Signing for Items they are not Qualified For  
PER 317273, Anonymous PER: Non-conformance of Procedure 25402-000-GPP-000-N1106  
PER 317321, Anonymous PER: Procedural Non-compliance 25402-000-GPP-000-N1206  
PER 320066, Associated with NCV 05000391/2010605-04  
PER 320115, Associated with NCV 05000391/2010602-02  
PER 320145, Anonymous PER: Quality and Safety Concerns, Non-compliance of Procedures  
PER 320700, Anonymous PER: Closing Partial Work Orders Procedure Violation

PER 321201, Anonymous PER: Being Told to Violate Procedures to Close WOs  
 PER 321209, Anonymous PER: Procedures Being Violated to Close Sys 067 PERs and Actions  
 PER 321876, New Conduits Installed Below Flood Level  
 PER 323361, Weld Documents Changed after QC Verification  
 PER 324535, Associated with NCV 05000391/2010605-03  
 PER 324537, Associated with NCV 05000391/2010605-04  
 PER 324539, Anonymous PER: Work Order Procedure Violation Issues  
 PER 325633, Associated with NCV 05000391/2010602-02  
 PER 326529, Anonymous PER: Why Can't Bechtel Hire Qualified Planners and Engineers  
 PER 326559, Copper Identified in Concrete Core  
 PER 327495, Anonymous PER: Procedure Non-compliance 25402-000-GPP-000-N1206  
 PER 330701, Observation of Deficiencies While Performing Inspections  
 PER 332015, NRC EDSFI Inspection – Electrical Cable Separation Inside Conduit Vault  
 PER 335354, 2-FCV-67-107 and 2-FCV-67-112 Power Cables Rolled  
 PER 335991, Anonymous PER: Unqualified People Are Making Bad Decisions  
 PER 335999, Anonymous PER: Power Cords Wrapped Around Equipment  
 PER 338918, Anonymous PER: Violation of Procedure  
 PER 339694, 2V3039A & 2V3082A Cable Pulls not Documented  
 PER 341467, PERs Closed without Addressing Open NDRFs  
 PER 341471, Anonymous PER: Adverse Trend in Safety Related Valves Turned Over to PSE  
 PER 342101, Cables 2V9059-B and 2V9060-B not Terminated as Required  
 PER 345792, Anonymous PER: Major Problem with Retaining Engineers  
 PER 343923, Clearance Related Water Spill ERCW U-2 713 Pen Room  
 PER 352247, NRC IDVP Inspection – ITE EF3 Type Circuit Breaker Interrupting Capacity  
 PER 352630, Associated with NCV 05000391/2010602-01

#### Quality Audit, Assessment, and Surveillance Reports

25402-WBN-SR-11-1556, Surveillance to evaluate closed level C system 67 PERs, dated 02/11/2011  
 25402-WBN-SR-11-1633, Surveillance to evaluate open nonconformance disposition forms against closed PERs, dated 04/13/2011  
 25402-WBN-SR-11-1647, Surveillance of corrective action program monthly review, dated 04/07/2011  
 25402-WBN-SR-11-1655, Surveillance to evaluate nonconforming material handling and disposition, dated 04/14/2011,  
 25402-SA-MGT-10-002, Bechtel Self-assessment Report, Safety Conscious Work Environment – Non-manual Pulsing Survey Assessment of TVA Watts Bar Unit 2 Safety Conscious Work Environment, dated 04/11-15/2011  
 NGDC-WB-11-001, Watts Bar Nuclear Plant Unit 2 – Quality Assurance Assessment Report – Corrective Action Program, dated 04/05/2011  
 WBN2-QA-11-1, Corrective Action Program Problem Evaluation Report Closure Self Assessment, dated 05/06/2011  
 Bechtel CAP Status Report, dated 4/30/2001  
 Day & Zimmerman NPS CAP Status Report, March 2011

#### Procedures and Programs

2504-MGT-0003, Watts Bar Nuclear Plant Unit 2 Construction Completion Project - Corrective Action Program, Rev. 10



25402-MGT-0004, Watts Bar Nuclear Plant Unit 2 Construction Completion Project - Incident Investigation and Root Cause Analysis, Rev. 2  
 NGDC PP-3, Watts Bar Nuclear Plant Unit 2 Construction Completion Project - Corrective Action Program, Rev. 7  
 NGDC PP-8, Operating Experience/Construction Experience, Rev. 1  
 25402-000-GPP-0000-N6104, Watts Bar Nuclear Unit 2 Construction Completion Project Procedure– Materials Receiving, Rev. 6  
 25402-000-GPP-0000-N3525, Valve Refurbishment (SR/QR), Rev. 2  
 Bechtel Project Nuclear Quality Assurance Manual (PNQAM), Rev. 8  
 TVA-NQA-PLN89-A, Nuclear Quality Assurance Plan, Rev. 24-A1, September 2010

### Other

SR 219408, PER 241128 Inappropriately Closed Without Completed Actions  
 SR 213137, NRC EN 46085 - Part 21 re Rosemount Pressure Transmitter Model 3051N  
 WO 111937216  
 WO 111749016  
 TVA Over, Short, Damaged, & Discrepant (OSDD) Report  
 ALARA Preplanning Report, April 2011-011, Rev. 0  
 Radiological Work Permit Number 10200182, Rev. 2  
 OE Screening Teleconference Log, 4/21/11 - 5/2/11  
 OE Screening Teleconference Log, 5/17/11 - 5/19/11  
 Bechtel PER Backlog Corrective Action Plan

### **List of Acronyms**

BFN	Browns Ferry Nuclear Plant
CAP	Corrective Action Program
CAPR	Corrective Action to Prevent Recurrence
CCMRC	Construction Completion Management Review Committee
CFR	Code of Federal Regulations
I&OE	Industry and Operating Experience
IMC	Inspection Manual Chapter
IP	Inspection Procedure (NRC)
NCR	Nonconformance Report
NRC	Nuclear Regulatory Commission
OE	Operating Experience
OSDD	Over, Short, Damaged, and Discrepant
PER	Problem Evaluation Report
PI&R	Problem Identification and Resolution
PRC	Project Review Committee
QA	Quality Assurance
QAP	Quality Assurance Program
QC	Quality Control
SCWE	Safety Conscious Work Environment
SR	Service Request
TVA	Tennessee Valley Authority
UOS&D	Unsatisfactory Overage, Shortage and Damage
WBN	Watts Bar Nuclear Plant
WO	Work Order