



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

March 22, 2013

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

SUBJECT: BELLEFONTE NUCLEAR PLANT - NRC INSPECTION REPORT NO.
05000438/2013601

Dear Mr. Skaggs:

On February 13, 2013, the NRC completed an inspection at your Bellefonte 1 reactor facility. The results of the inspection were discussed with Mr. Stinson and other members of your staff. The enclosed report presents the results of that inspection.

The purpose of the inspection was to determine whether activities authorized by the construction permits were conducted safely and in accordance with NRC requirements. Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, verification of completed activities and observation of activities in progress.

Based on the results of this inspection the inspectors did not identify any findings.

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).

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

Sincerely,

/RA/

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

Docket No. 50-438,
License No. CPPR-122

Enclosure: NRC Inspection Report 05000438/2013601
w/Attachment - Supplemental Information

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

Sincerely,

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* See Previous Concurrence

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cc with enclosures

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Letter to Mike Skaggs from Robert C. Haag dated March 22, 2013

SUBJECT: BELLEFONTE NUCLEAR PLANT - NRC INSPECTION REPORT
NO. 05000438/2013601

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket No: 50-438

License No: CPPR-122

Report No: 50-438/2013601

Applicant: Tennessee Valley Authority (TVA)

Facility: Bellefonte Nuclear Plant, Unit 1

Location: Bellefonte Road
Hollywood, AL 35752

Dates: February 11-13, 2013

Inspector: C. Huffman, Construction Resident Inspector
J. Christensen, Construction Inspector

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

Enclosure

EXECUTIVE SUMMARY

Bellefonte Nuclear Plant, Unit 1 NRC Inspection Report 05000438/2013601

The inspection included aspects of engineering and construction activities, performed by Tennessee Valley Authority (TVA), associated with the Bellefonte Nuclear Plant (BLN), Unit 1 project. This report covered a three-day period of inspections in the areas of quality assurance (QA), and identification and resolution of problems. The inspection was primarily performed using the guidance in NRC inspection procedures (IP) 92050, "Review of Quality Assurance for Extended Construction Delay"

The inspection evaluated if TVA had properly implemented the NRC-approved QA program, adequately identified the status and quality of currently installed and stored equipment, and established associated processes and controls necessary to comply with regulatory requirements associated with its construction permits.

Inspection Results:

- The portions of the spent fuel pool storage racks walkdowns observed were conducted in accordance with approved procedures and the results were appropriately documented and conducted by qualified personnel. (Section 1)
- The portions of the core flood system walkdowns that were independently reviewed by the inspectors were conducted in a thorough manner and the walkdown results were appropriately documented. The qualifications of walkdown personnel were verified. (Section 1)
- Preservation activities associated with the reactor vessel and core barrel were implemented in accordance with approved procedures. (Section 2)
- Quality related records reviewed by the inspectors were created, stored and controlled in accordance with requirements. (Section 3)
- Quality Assurance audits and surveillances of the walkdown process were performed, with results entered into the corrective action program when required. (Section 4)

Report Details

1.0 Plant Walkdowns (Inspection Procedure 92050)

a. Inspection Scope

The Bellefonte Nuclear Plant equipment remains in an indeterminate status. The inspectors accompanied the licensee in the walkdown of the spent fuel storage racks to observe the status of the system. This walkdown documented basic material condition, captured equipment identification numbers, and confirmed the accuracy of existing plant drawings. The inspectors reviewed BLN-EDP-11 Rev.007, "Walkdown Procedure for General Walkdown Requirements," to verify that the procedure used in implementing the fuel storage rack walkdown was approved before use, the procedure was complete and controlled, and the most recent version was used.

The inspectors reviewed the documentation of the spent fuel pool storage rack components as-is configuration and material condition to verify that conditions adverse to quality were identified, documented, and entered into a formal process for resolution.

The inspectors also reviewed BLN1-WP-M-NL-001A-00, Core Flood System, to verify that the following requirements stated in BLN-EDP-11 were met:

- personnel who performed the walkdown were qualified for the appropriate discipline;
- the walkdown was conducted in accordance with the procedure; and
- the results of the walkdown were appropriately addressed through drawing markups and/or corrective action program entries.

The inspectors performed a system walkdown to independently verify the Core Flood system walkdown package results as documented in the "Mechanical Walkdown Findings" section and associated drawing markups of BLN1-WP-M-NL-001A-00.

The inspectors reviewed BPP-03.1 Rev.0007, "Corrective Action Program" for information about the Problem Evaluation Report (PER) screening process and the PER classification criteria. The results of Core Flood system walkdown were reviewed to ensure the correct screening process was used to document identified issues and potential conditions adverse to quality were entered into a formal process for resolution.

The inspectors reviewed a sample of corrective action program entries generated as a result of various system walkdown activities to ensure that entries into the corrective action program were consistent with procedural guidance.

b. Observations and Findings

No findings of significance were identified.

2.0 Preservation Activities (Inspection Procedure 92050)

a. Inspection Scope

The inspectors reviewed preservation activities in the reactor vessel and core barrel through observations to verify that a dehumidification and preservation system was in place in accordance with Work Request 655 and Temporary Installation or Omission Control Form FS-1382. These actions were taken as a result of PER 201271.

b. Observations and Findings

No findings of significance were identified.

3.0 Records (Inspection Procedures 92050 and 35100)

a. Inspection Scope

The inspectors reviewed BPP-31.2 Rev.005, "Records Management", for records retention and protection requirements. Visual observations and interviews were performed by the inspectors to ensure that records retention, protection, and access control associated with the 10% engineering walkdown packages met the requirements as defined in the QA program and BPP-31.2.

b. Observations and Findings

No findings of significance were identified.

4.0 Quality Assurance Audits/Surveillances (Inspection Procedures 92050 and 35100)

a. Inspection Scope

The inspectors reviewed procedure BLN-QA-PR-1001, Preparing and Conducting QA Surveillance, to determine whether surveillances of walkdown activities included scope and purpose of audits to be performed and provided for documentation of identified issues.

The inspectors reviewed the following quality assurance records to verify that quality assurance audits and observations were being performed, corrective action entries were created when required, and results were communicated to management:

- Audit BLA1201 – TVA Quality Assurance – Nuclear Construction (NC) – Bellefonte Nuclear Plant Units 1 and 2 Construction Permit and Deferred Status Activities
- NGDC-BL-12-001 – Bellefonte Units 1 and 2 – Quality Assurance (QA) – Observations from October 1, 2011 through December 31, 2011
- NGDC-BL-12-002 – Bellefonte Units 1 and 2 – Quality Assurance (QA) – Observations from January 1, 2012 through March 31, 2012
- NC-BL-1203 – Bellefonte Site Performance April 1, 2012 through September 30, 2012

b. Observations and Findings

No findings of significance were identified.

5.0 Exit Meeting Summary

The inspectors presented the inspection results to Mr. D. Stinson, Vice President, Bellefonte Nuclear Plant, and other members of management on February 13, 2013. Some proprietary information was reviewed during this inspection. All proprietary material was returned to the applicant.

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Marty Bryan (Areva Licensing)
Nathan Hottle (Areva Licensing)
Darryl Romashko (Quality Assurance Manager)
Robert McConnell (Walkdown personnel)
Kyle Russell (Walkdown personnel)
Sandeep Shrestha (Walkdown personnel)
Wally Justice (Engineering Manager)

LIST OF INSPECTION PROCEDURES

IP 92050, "Review of Quality Assurance for Extended Construction Delay"
IP 35100, "Review of QA Manual"

LIST OF ITEMS OPENED AND CLOSED

Opened

None

Closed

None

LIST OF DOCUMENTS REVIEWED

Procedures

BLN-EDP-11, Walkdown Procedure for General Walkdown Requirements, Rev. 7
BLN-EDP-11, Walkdown Procedure for General Walkdown Requirements, Rev. 6
BPP-03.1, Corrective Action Program, Rev. 7
BLN-QA-PR-1001, Preparing and Conducting QA Surveillance Rev. 0
BPP-31.2, Records Management, Rev. 5

Audits/Surveillances

NGDC-BL-12-001, Bellefonte Units 1 and 2 – Quality Assurance (QA) – Observations from October 1, 2011 Through December 31, 2011
NGDC-BL-12-002, Bellefonte Units 1 and 2 – Quality Assurance (QA) – Observations from January 1, 2012 Through March 31, 2012
BLA1201, TVA Quality Assurance – Nuclear Construction (NC) – Bellefonte Nuclear Plant Units 1 and 2 Construction Permit and Deferred Status Activities – Audit BLA1201
NC-BL-1203, Bellefonte Site Performance April 1, 2012 through September 30, 2012

Miscellaneous

TVA Temporary Installation or Omission Control Form FS-1382

BLN1-WP-M-NL-001A-00, TVA Bellefonte Walkdown Package Core Flood System

Corrective Action Documents

Service Request 670584 – Operator and limit switches removed from core flood system valve

Service Request 585981 - Operator and limit switches removed from 14" check valve

PER 491674 – Relief valve blocking access to motor on decay heat removal pump

PER 595377 – Auxiliary feedwater piping does not match drawing