

May 9, 2007

EA-06-143

10 CFR 2.201

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop: OWFN, P1-35
Washington, D.C. 20555-0001

Dear Gentlemen:

In the Matter of)
Tennessee Valley Authority)

Docket No. 50-259

BROWNS FERRY NUCLEAR PLANT (BFN) - REPLY TO NOTICE OF VIOLATION (NOV) - EA-06-143

By letter dated April 13, 2007 (Reference 1), NRC provided TVA with an NOV for violation of Radiation Work Permit requirements based on the actions of a contractor foreman employed by TVA. TVA admits the violation and its reply is contained in the Enclosure.

If you have any questions regarding this letter, please
contact me at (256) 729-2636

Sincerely,

Original signed by:

William D. Crouch
Manager of Licensing and
Industry Affairs

Reference:

NRC letter EA-06-143, Joseph W. Shea to Preston D. Swafford, "Notice of Violation (Office of Investigations Report Number 2-2005-006)", dated April 13, 2007.

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cc: (Via NRC Electronic Distribution)

Dr. William D. Travers, Regional Administrator

U.S. Nuclear Regulatory Commission

Region II

Sam Nunn Atlanta Federal Center

61 Forsyth Street, SW, Suite 23T85

Atlanta, Georgia 30303-3415

NRC Senior Resident Inspector

Browns Ferry Nuclear Plant

10833 Shaw Road

Athens, AL 35611-6970

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JEM:BAB

cc (w/o Enclosures):

J. M. Corey, POB 2-H (w/enclosure)
D. C. Matherly, Jr.
R. H. Bryan, Jr., LP 4J-C
J. C. Fornicola, LP 6A-C
R. G. Jones, POB 2C-BFN
J. L. Kennedy, BFT 3B-BFN
G. V. Little, NAB 1D-BFN
B. A. Wetzel, BR 4X-C
B. J. O'Grady, PAB 1E-BFN
P. D. Swafford, LP 6A-C
E. J. Vigluicci, ET 11A-K (w/enclosure)
NSRB Support, LP 5M-C
EDMS WT CA-K, (w/enclosure)

s:lic/submit/NOV Reply EA 06 143.doc

ENCLOSURE

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN) UNIT 1
RESPONSE TO NOTICE OF VIOLATION EA-06-143

(SEE ATTACHED)

ENCLOSURE

**TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN) UNIT 1
REPLY TO NOTICE OF VIOLATION EA-06-143**

RESTATEMENT OF VIOLATION

"During an NRC Office of Investigations investigation completed on April 19, 2006, a violation of NRC requirements was identified. In accordance with the NRC enforcement policy, the violation is listed below:

Technical Specification 5.4.1.a, requires written procedures be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33. Appendix A, Paragraph 7.e of Regulatory Guide 1.33 requires radiation protection procedures addressing access control to radiation areas including a radiation work permit system.

Paragraph 3.6.3 of TVAN Standard Department Procedure RCDP-3, Administration of Radiation Work Permits, Revision 2, states that an individual must receive an RWP briefing from RadCon before use [of the RWP] and that the worker must agree to comply with the RWP requirements as well as verbal instructions given by RadCon.

RWP Number (No.) 04-1021, Worker Instruction No. 13, states that RadCon permission is required prior to welding, grinding, buffing or other surface disturbing activities. Pursuant to this RWP, the verbal instructions provided by RadCon to painters and their supervision during pre-job briefings specified that, due to radiation contamination hazards, the anti-contamination clothing specified in the RWP, including dust mask covers, was appropriate during vacuum blasting. Open blasting and vacuum blasting on non-flat surfaces as expressly prohibited by Radcon.

Contrary to the above, on or about February 24, 2004 a Stone and Webster Engineering Company Lead Foreman deliberately directed or allowed vacuum blasting to be performed on non-flat areas inside the Unit 1 torus in apparent violation of

the requirements of RWP 04112101 and the verbal instructions provided by Radcon.

This is a Severity Level IV violation (Supplement I, IV)."

REASON FOR VIOLATION

The work activities associated with the NOV occurred in January and February 2004 whereby Stone and Webster Company (SWEC) was repairing deteriorated coatings in the Unit 1 torus using either of three methods: vacuum blasting, needle guns, or a chemical means of paint removal. Vacuum blasting uses equipment that surrounds the sand blasting nozzle with a vacuum head tipped with bristles intended to confine the grit used for blasting as well as paint and rust blasted loose from the surface. This equipment removes most, but not all of the grit and removes material continuously as blasting is performed. However, the use of improper vacuum blasting techniques, or conducting vacuum blasting on improper surfaces, can defeat the purpose of vacuuming which can result in the dispersal of material into the surrounding environment.

Although verbal instructions were provided by TVA RadCon under RWP Number (No.) 04-1021, Worker Instruction No. 13, specifying that open blasting and vacuum blasting was prohibited on non-flat surfaces, a SWEC foreman apparently directed or allowed vacuum blasting to be performed on some non-flat surfaces. TVA RadCon personnel maintained a regular presence in the torus area but did not observe any improper work practices by the SWEC foreman or any other SWEC workers.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED

TVA took a number of corrective actions upon receipt of the apparent violation as described in TVA's October 31, 2006, response. Vacuum blasting was discontinued the day after the event and open sand blasting was subsequently used to complete paint removal activities in the Unit 1 torus with appropriate industrial and radiological precautions implemented for the work. Vacuum blasting has not been used at BFN since the event.

The events and circumstances which led up and contributed to this violation were reviewed by BFN Unit 1 and SWEC management to

reinforce lessons learned regarding adherence to procedures and the role of effective supervisory involvement.

To prevent recurrence, Radiation Protection procedure RCI-9.1, "Radiation Work Permits" has been revised to require the use of respirators for vacuum blasting in order to protect workers from airborne radioactivity generated by misuse of the equipment.

CORRECTIVE STEPS THAT WILL BE TAKEN TO PREVENT RECURRENCE

Appropriate actions to preclude recurrence have been taken.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance has been achieved.