



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

March 10, 2008

10 CFR 2.201

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of) Docket No. 030-17797
Tennessee Valley Authority)

REPLY TO A NOTICE OF VIOLATION - NRC INSPECTION 03017797/2007003 OF
TVA'S RADIOGRAPHY LICENSE NO. 41-06832-06

The purpose of this letter is to reply to a Notice of Violation (NOV) dated February 11, 2008. The notice of violation is associated with NRC inspection 03017797/2007003 of TVA's radiography License No. 41-06832-06. Enclosure 1 provides TVA's reply to the referenced notice of violation.

TVA does not contest that a violation occurred, but we respectfully ask that the NRC reassess the severity level assigned to the violation. TVA requests that NRC staff reconsider this NOV to be a Non-Cited Violation (NCV) based on TVA's evaluation of the circumstances for a Severity Level IV violation. TVA believes this event does not meet the circumstances for a cited Severity Level IV violation as defined in NRC Enforcement Policy, Section VI, "Disposition of Violations," Subsection A.8, "All Other Licensees." Enclosure 2 provides the bases for TVA's request.

If you have any questions, please contact Kevin Casey at (423) 751-8523.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 10th day of March 2008.

Sincerely,

Original signed by

Beth A. Wetzel
Manager, Corporate Licensing and
Industry Affairs

Enclosures

cc: (see Page 2)

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Enclosures

cc: (Enclosures)
Regional Administrator
U.S. Nuclear Regulatory Commission
Region I
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Director
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Washington, D.C. 20555-0001

ENCLOSURE 1

REPLY TO A NOTICE OF VIOLATION

1. *The reason for the violation.*

Subsequent to the incident on September 8, 2007, a Level B Problem Evaluation Report (PER) was written, PER 130039. As required by the Corrective Action Program, a Root Cause Analysis was performed. The Root Cause was determined to be:

The root cause of the event was that the radiographer, who was operating the source, failed to maintain positive control of his fellow radiographer. This resulted in an incorrect assumption as to the location of the second radiographer when the source was exposed. The event was determined to be an isolated skill based human error.

2. *The corrective steps that have been taken and the results achieved.*

Corrective actions were identified, developed and implemented in accordance with TVA's Corrective Action Program. Those corrective actions and action taken as documented in PER 130039 are as follows.

Corrective Action No. 130039-001

A comprehensive review of IEP-400, Industrial Radiography Operating and Emergency Procedure, was performed to identify any areas of weakness which could result in a similar condition. No weaknesses were identified. Enhancements/clarifications were identified and incorporated into a procedure revision including the use of a "STOP" sign on the device controls which requires the radiographer to verify that all personnel are out of the exposure areas and that the radiographer communicate to involved personnel that the source is about to be exposed.

IEP-400 Revision 8 was completed and implemented on October 3, 2007.

Corrective Action No. 130039-002

An outside (non-TVA) industry expert performed a comprehensive review of the TVA radiography program, including IEP-400, to identify any areas of weakness which could result in a similar condition. No weaknesses were identified. The following enhancement was recommended and incorporated into a procedure revision: When more than one fully qualified radiographer is involved in a radiography operation, one of the radiographers shall be appointed as the Lead Radiographer.

IEP-400 Revision 8 was completed and implemented on October 3, 2007.

(Note: There is not a Corrective Action No. 130039-003.)

Corrective Action No. 130039-004

IEP-400 was revised to incorporate enhancements identified in Corrective Action No. 130039-001 and -002. In addition, the revision added steps to ensure that all personnel are out of the immediate exposure area and in a predetermined safe location prior to exposing the radiography source and to conduct a positive verification of their movement. The procedure was also revised to enhance requirements for use of human performance error prevention tools.

IEP-400 Revision 8 was completed and implemented on October 3, 2007.

Corrective Action No. 130039-005

Retraining was developed and administered to radiography personnel. Training included: review of the event, review of the PER, review of the findings and recommendations of the Root Cause Analysis, revisions to IEP-400, review of current revisions to TVA nuclear plant Radiological Control Instructions (RCI's), and human performance error prevention tools.

Retraining was completed on October 29, 2007.

Corrective Action No. 130039-006

RCI's for control of radiography operations at TVA's nuclear plant sites (Browns Ferry RCI-20, Sequoyah RCI-16 and Watts Bar RCI-129) were reviewed to assure that the recommendations of INPO SEN-260 have been adequately implemented. The review was completed on October 26, 2007.

(Note: There is not a Corrective Action No. 130039-007.)

Corrective Action No. 130039-008

TVA's procedure IEP-208, "Administration of Radiation Safety Procedures for Isotope Radiography and Electrical X-Ray Devices," which contains requirements for Management oversight and inspections of the radiography program was revised to enhance requirements for Management Audits, address use of human performance error prevention tools, procedure use and adherence, and to address periodic self assessments of the radiography program.

Revisions to IEP-208 Revision 3 were completed and implemented on November 20, 2007.

Effectiveness of the actions taken is being measured through personnel and job audits/inspections and management oversight activities to assure compliance with revised procedure requirements. Evidence of the effectiveness is demonstrated by adherence to procedures and no further similar events having occurred to date.

3. *The corrective steps that will be taken to avoid further violations.*

The training developed and administered as defined in Corrective Action No. 130039-005 above has been incorporated into the Radiographer and Radiographer Assistant initial training, and into annual retraining that is required and conducted for radiography personnel.

As part of the PER, Corrective Action No. 130039-009 requires a focused self assessment be performed to assess the effectiveness of procedure changes, use of human performance error prevention tools, and procedure use and adherence. The focused self assessment outline/plan has been developed and is scheduled to be conducted during the period of July 7, 2008 through August 1, 2008. The action will be completed by August 30, 2008.

Continued Management oversight activities will focus on effectiveness of procedure changes, use of human performance error prevention tools, and procedure use and adherence.

4. *The date when full compliance will be achieved.*

TVA is in compliance. With exception of Corrective Action No. 130039-009, all corrective actions have been completed. Corrective Action No. 130039-009, as defined above, will be completed by August 30, 2008.

ENCLOSURE 2

BASES FOR CONTESTING THE SEVERITY LEVEL OF VIOLATION

The NRC Enforcement Policy, Section VI, "Disposition of Violations," Subsection A.8, "All Other Licensees," describes the circumstances any one of which will result in consideration of an NOV requiring a formal written response. The four circumstances and TVA's response relative to this event are discussed below:

a. The licensee failed to identify the violation.

The radiography event was immediately self-identified. TVA's Inspection Service Organization (ISO) entered the event in TVA's Corrective Action Program by initiating Problem Evaluation Report (PER) 130039 on September 8, 2007, which was the day of the event.

Though the event was not reportable in accordance with 10 CFR 30, ISO placed a voluntary call to the NRC Region I to make them aware of the event and inform them that TVA had ceased license activity until corrective actions were implemented.

b. The licensee did not correct or commit to correct the violation within a reasonable time by specific corrective action committed to by the end of the inspection, including immediate corrective action and comprehensive corrective action to prevent recurrence.

As described in paragraph (a) above, PER 130039 was initiated the day of the event. ISO's immediate action to address the event was to discontinue licensed activity until the Root Cause was identified and corrective actions were developed and implemented. A Root Cause Analysis was performed and corrective actions were developed and implemented in accordance with the Corrective Action Program. Corrective actions were developed and either implemented or implementation was in progress prior to the NRC's first inspection in response to this event.

c. The violation is repetitive as a result of inadequate corrective action.

The violation was not a repeat event. There has been no prior identification of weaknesses associated with this event and no violations have been issued by the NRC against TVA radiography license-related activities in the past 15 years.

d. The violation was willful.

It was determined through Root Cause Analysis and the TVA Disciplinary Action Matrix that the event was not willful; rather, the event was determined to be an isolated skill based human performance error, with habit intrusion and wrong assumption as precursors. There was absolutely no evidence of willfulness on any level associated with the event.

Based on response to the four circumstances, TVA respectfully requests this violation be classified as a Non-Cited Violation (NCV).