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DEC 05 1997

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

10 CFR 2.201

Gentlemen:

In the Matter of)
Tennessee Valley Authority)

Docket No. 50-390

**WATTS BAR NUCLEAR PLANT (WBN) - UNIT 1 - NRC INSPECTION
REPORT NO. 50-390, 391/97-07 - REPLY TO NOTICE OF VIOLATION
(NOV)**

This letter provides WBN's reply to NOV 50-390/97-07-06 which is documented in the subject inspection report dated November 5, 1997.

This NOV resulted from a radiation worker training records problem which was previously documented as Unresolved Item (URI) 390/97-01-07. As cited, the NOV states that TVA failed to conduct site specific training from January 1, 1996 through June 16, 1997. This is not the case, however, as TVA's investigation found that the problem was limited to site specific training or training records problems for six individuals. Accordingly, Enclosure 1 provides WBN's response to problems associated with those individuals.

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The investigation into the training records problem documented in URI 390/97-01-07 identified additional training data records mismatches between the Radiological Exposure System (REXS) and Nuclear Employee Training System (NETS). WBN does not consider these problems to be part of the NOV, but for completeness, has provided the corrective actions implemented to address the training records problems in Enclosure 2.

If you should have any questions, please contact P. L. Pace at (423) 365-1824.

Sincerely,



J. A. Scalice

Enclosures

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ENCLOSURE 1

TENNESSEE VALLEY AUTHORITY
WATTS BAR NUCLEAR PLANT (WBN)
UNIT 1

INSPECTION REPORT NUMBER 50-390/97-07
REPLY TO NOTICE OF VIOLATION (NOV)

I. RESTATEMENT OF VIOLATION 50-390/97-07-06

"Title 10 of the Code of Federal Regulations (CFR) 19.12, Instructions to Workers, (a)(2)&(5), requires that individuals be instructed in health protection and in precautions or procedures to minimize exposure. Workers are also required to be instructed in appropriate response to warnings made in the event of any unusual occurrence or malfunction that may involve exposure to radiation or radioactive material.

Technical Specification 5.7.1.1 requires, in part, that procedures shall be established, implemented, and maintained governing the activities recommended in Appendix A of Regulatory Guide 1.33, Quality Assurance Program Requirements (Operations) Revision 2, February 1978, Section 1. Tennessee Valley Authority Nuclear Training Procedure TRN-2 titled General Employee Training in Section 3.1.E requires that site specific training be included in each related general employee training course.

Contrary to the above, the licensee failed to conduct site specific training from January 1, 1996 through June 16, 1997."

TVA's REPLY TO VIOLATION 50-390/97-07-06

1. Reason For The Violation

As mentioned in the cover letter transmitting this enclosure, it is not the case that WBN failed to conduct site specific training from January 1, 1996, through June 16, 1997. During the period indicated, WBN conducted radiation

worker training in accordance with the requirements of 10 CFR 19.12, and except as specifically noted below, WBN site specific training in accordance with TVA's Nuclear Training procedure TRN-2, "General Employee Training." This site specific training is oriented at identifying plant contacts, locations, and methods that differ among TVA's nuclear plant sites. It was in the course of WBN's review of the training records mismatches identified in URI 390/97-01-07 that 40 individuals were identified with data differences regarding only their site specific training.

Of these 40 individuals, 34 of the individuals never entered the radiologically controlled area (RCA). One of the remaining six individuals was provided with special training and was escorted in the RCA by trained personnel. For one other individual, an error occurred during a transition period from an earlier plant access training program to the current plant access training and radiation worker training program. During this training records transition period, this individual did not receive site specific training but he was erroneously allowed to retain his dosimetry. Access to the RCA by the remaining four individuals resulted from a data input error. At the time dosimetry was issued to these individuals, the Radiation Control (RADCON) technician erroneously read the site specific plant access training dates from the Nuclear Employee Training System (NETS) and input these dates into the Radiation Exposure System (REXS).

2. **Corrective Steps Taken And Results Achieved**

RADCON management has counseled the involved technician on the data entry error that was made in the updating of REXS. In addition, training has been provided to the individual impacted during the training program transition period. The four individuals involved in the data entry error were no longer employed at WBN at the time the records review for this issue was performed.

3. **Corrective Steps That Have Been Taken To Prevent Recurrence**

The plant access training and radiation worker training expire on a quarterly basis. The next quarter ends as of December 31, 1997. WBN Training is providing a report to RADCON which identifies the WBN personnel that will have to receive radiation worker training before the end of the quarter. RADCON will withdraw the dosimetry for any individual listed on the report whose training is not updated by December 31, 1997. Generation of this report will continue until a pending revision of TVA Nuclear procedure TRN-2 is approved. This revision will allow for personnel to complete the plant access and radiological worker training at any of the three TVA plants and be qualified for entry into the RCA at each of the plants.¹ Also, RADCON management cautioned their personnel by memorandum that only NETS was to be used to verify training records for the issuance of dosimetry. To further strengthen this requirement, RADCON initiated Revision 11 of Radiological Control Instruction (RCI) 115, "Dosimetry Administrative Processes." This revision became effective on August 26, 1997, and clarified that NETS is used to verify training prior to issuing dosimetry.

4. **Date When Full Compliance Will Be Achieved**

With respect to the cited violation, WBN is in full compliance.

¹ This change in TRN-2 is part of a planned training process enhancement which did not result from this NOV. Therefore, TVA does not consider this action a regulatory commitment.

ENCLOSURE 2

TENNESSEE VALLEY AUTHORITY
WATTS BAR NUCLEAR PLANT (WBN)
UNIT 1

ACTIONS TAKEN IN RESPONSE TO
UNRESOLVED ITEM (URI) 390/97-01-07

I. Problem Identified:

URI 390/97-01-07 states the following:

"During inprocessing at the dosimetry/wholebody desk, the inspectors requested a review of their site specific training. The site specific training records are maintained in data file Net-p and RCA access training records are maintained on data file REXS. Both of these files can be accessed from each of the licensee's nuclear plant sites and corporate office. A review of the inspector's records indicated that incorrect information resided in the Net-p file. A request was made to review other personnel training records and the licensee identified that there were 21 incorrect records for WBN, 35 incorrect records for SQN and 14 incorrect records for Browns Ferry in the "Net-p" file. These records were for individuals who have TLDs issued but are not current with site specific training. The licensee opened a PER, WBP970070, but because this appeared to be a generic issue that PER was closed and a corporate PER, CHPER970007, was opened. The licensee, at the conclusion of the inspection, had not demonstrated that no individuals entered the RCA without the required General Employee Training (REXS)."

Actions Taken:

This URI was caused by a programming error in the Radiological Exposure System (REXS), the system used to record personnel exposure at TVA. The REXS system allows personnel at each of the TVA nuclear plants to enter data regarding site specific training into the system. However, the programming error allowed data input for a specific plant to be recorded as if the

training had been taken for another plant based on how the system identified which plant "owned" the record.

The REXS system does not validate that site specific training is current prior to allowing access to the radiologically controlled area (RCA) on a radiation work permit (RWP). The system does verify that an employee has an active dosimeter and the employee has received radiation worker training. This ensures compliance with 10 CFR 19.12 requirements. However, as discussed in the response to NOV 390/97-07-06, a report is being provided by WBN Training to RADCON which identifies the WBN personnel that will have to receive radiation worker training before the end of the quarter. This measure will ensure the requirements for site specific training are met until appropriate changes to TRN-2 are approved.

TVA Nuclear Information Systems modified REXS to resolve the programming problem which allowed data input for a specific plant to be recorded as if the training had been taken for another plant. This action was complete as of February 13, 1997. It should also be noted in order to clarify this issue, that the following statement from the URI refers to the NET-p system when the actual incorrect information resided in REXS:

"A review of the inspector's records indicated that incorrect information resided in the Net-p file."

II. Problem Identified:

TVA's investigation of the above URI also identified that when an employee completed the site specific training covering each of TVA's nuclear plant sites, and personnel at one plant attempted to update the radiological worker training data contained in the Nuclear Employee Training System (NETS) for each of the plants, NETS would transmit data to REXS which indicated that the employee had only received the training at the plant that had entered the data. TVA determined that this problem was caused by a programming error in the NETS program.

Action Taken:

Information Systems made the required programming changes to address the problem with the transmitting of the site specific training data from NETS to REXS. These changes were in effect as of April 21, 1997.

III. Problem Identified:

TVA's review of the URI also identified that during the period of March 18, 1997 and March 31, 1997, the radiological worker training data in NETS for approximately 1,200 workers at multiple locations was not transmitted to REXS.

Action Taken:

TVA found that this problem had been caused by an unexpected interaction with another computer system during the placement of a new system into operation. Information Systems made programming changes to address the interaction problem and these changes were in effect as of April 16, 1997. A special update between NETS and REXS was processed on April 3, 1997, to ensure that the data for the March time period was updated.

IV. Additional Actions Taken:

Through these reviews and the actions implemented for NOV 390/97-07-06, WBN has confirmed that no entries into the RCA were made without the radiation worker training required by 10 CFR 19.12. In addition, corrective action documents have been initiated at TVA's Sequoyah and Browns Ferry plants to address the problems related to the control of training records.