

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

March 3, 1982 P12: 5

U.S. Nuclear Regulatory Commission  
Region II  
ATTN: James P. O'Reilly, Regional Administrator  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

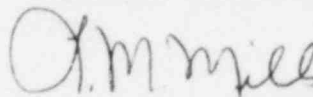
Dear Mr. O'Reilly:

This is in response to R. C. Lewis' January 21, 1982 letter to H. G. Parris, Report Nos. 50-259/81-37, -260/81-37, and -296/81-37, concerning activities at the Browns Ferry Nuclear Plant which appeared to violate NRC requirements. As discussed with NRC-OIE, Region II, Inspector Austin Hardin on February 16, 1982, a 10-day extension was granted on the submittal of this response. If you have any questions, please call Jim Domer at FTS 858-2725.

To the best of my knowledge, I declare the statements contained herein are complete and true.

Very truly yours,

TENNESSEE VALLEY AUTHORITY



L. M. Mills, Manager  
Nuclear Regulation and Safety

Enclosure

8204140472 820318  
PDR ADOCK 05000259  
G PDR

ENCLOSURE  
RESPONSE - NRC INSPECTION REPORT NOS.  
50-259/81-37, 50-260/81-37, AND 50-296/81-37  
R. C. LEWIS' LETTER TO H. G. PARRIS  
DATED JANUARY 21, 1982

Appendix A

Technical Specification 6.3.a requires that detailed written procedures shall be prepared, approved, and adhered to for radiation control and operation of systems involving nuclear safety of the facility.

Contrary to the above, the requirement that detailed written procedures be prepared, approved and adhered to was not met in that:

1. System Operating Instruction (OI)-77, Operation of Radwaste Disposal System, could not be used as written for recirculating the laundry drain tanks because of a modification performed on the system several years ago and not incorporated into the procedure. In addition, five valves were out of position as compared to the normal valve lineup and two valves which were not on the normal valve lineup but were out of position as compared to the system drawing.
2. Containment Atmosphere Dilution Operating Instruction (OI-84) could not be used as written because the procedure referenced incorrect override locations and omitted required hand switch manipulations thus making the system operation not possible if procedural adherence was obeyed.

This is a Severity Level IV Violation (Supplement I.D.3.).

1. Admission or Denial of the Alleged Violation

TVA admits a violation occurred, however, we do not agree that a violation of a Severity Level IV is justified. Our reasons for this position are delineated below.

Example 1

- a. The laundry drain tank recirculation piping was modified under workplan 8278 and the modification completed in August 1979. The modification was performed to allow recirculation through the laundry drain filter before sampling. The modification did not add or delete any valves or active components in the system; however, it did require a change to Operating Instruction (OI) 77 to open the filter inlet valve before recirculation. However, the change to the OI was not made.

Recirculation of laundry drain tanks is performed to ensure mixing of the liquid inside the tank before sampling. The sample line is installed in the piping downstream of the laundry drain filters. It would not be possible to obtain representative samples of the tank liquid without proper recirculation. Sampling and subsequent discharge of the laundry drain system are routine operations and are performed several times each week by the radwaste operators. Operators have continued to recirculate and sample the laundry drain tanks without notice of the one valve error in OI-77 because of the sampling requirements of other plant procedures. We do not believe a safety concern existed because of this deficiency.

- b. The five valves that were found out of position as compared to the valve checklist were components of the laundry drain system, radwaste evaporator system, and clean radwaste processing system. Three of the valves were out of position with respect to the valve checklist to perform specific operations as described in OI-77. Two of the valves were out of the standby readiness position because the radwaste evaporator system was not in service.

The valve checklist is intended to align the system to the standby readiness condition and is not intended to provide alignment for all modes of system operation. The valve alignments for the modes are included in the operating instruction. The five valves found out of position are listed below with the detailed explanation for the possible as-found position of the valve.

HCV 77-779 is located in the recycle line from the waste demineralizer to the waste collector tank. The required position of this valve is variable, dependent upon the recirculation mode which is chosen by the radwaste operator. Operation of HCV 77-779 and position requirements are stated in OI-77, page 25.

HCV 77-790 is located in the recycle line of the waste sample pumps. Position requirements for this valve are variable and are stated in OI-77, page 30.

HCVs 77-816 and 77-813 are located in the radwaste evaporator distillate tank discharge system. OI-77 includes instructions on the operation of the distillate system. However, the radwaste evaporator system has never been used and remains out of service. HCVs 77-816 and 77-813 are closed to provide isolation between the clean radwaste system and the radwaste evaporator system.

HCV 77-902 is located in the cask decontamination collector tank drain line to the laundry drain pumps. The standby readiness valve checklist requires that these valves be initially lined up in the closed position. However, the instructions in OI-77, page 33, require the operator to open the valves when the tanks are filling and discharge is not being accomplished. This provides additional capacity for storage of laundry drain wastes.

- c. The two valves that were not on the valve checklist were HCV 77-1116 and 77-884. Upon investigation, it was found that HCV 77-1116 was on the valve checklist. HCV 77-1116 is in the radwaste system discharge line to the cooling tower blowdown. This valve was not as shown on the drawing because the cooling towers were not in service in the closed mode, and discharge from radwaste to the cooling tower blowdown line was not desirable. HCV 77-884 was not on the valve checklist. It is assumed that this was a typographical error. However, OI-77 does address the use and position requirements of this valve on pages 33 and 34. HCV 77-884 performs the same type of function as HCV 77-902 as described above and was positioned appropriately for this operation.

In summary, TVA's position regarding this example of the violation is as follows:

1. The valves which were "out of position" were in reality in the proper position regarding operation of the particular subsystem, the positions were known to the operators and were in said position in accordance with the text of the operating instructions.
2. OI-77 is not a procedure required by either Technical Specification 6.3.A.7 or 6.3.A.1. It is identical to a large number of system operating instructions at Browns Ferry for non-critical systems; that is, it is written for operator convenience and as a sound operating practice.
3. TVA does concur that one valve was not on the valve checklist and that the OI was out of date regarding the manipulation of recirculating the laundry drain tank. As stated above, the manipulation of the valve was described in the procedure. This does not constitute a violation. For the second example, TVA believes that a potential Severity Level V Violation exists in that our administrative procedures were not followed in allowing the modification to not be reflected in the operating instructions.

### Example 2

The Containment Atmosphere Dilution (CAD) System Operating Instruction (OI-84) had a deficiency. The method to vent containment to use CAD was described in the OI, although a panel number for one switch (84-20) was incorrect. The modification was made as a result of an NRC-required post-TMI modification regarding reset of containment isolation signals. Because of this modification, this switch (84-20), which previously had existed on two separate panels (9-3, 9-55) became switch 64-35 on panel 9-3. (Switch 84-20 therefore existed only on panel 9-55.) This modification allowed this switch (64-35) to be used in conjunction with keylock switches to vent containment during normal operation.

The initial TVA approach to this modification was found not acceptable to NRC during a postimplementation review, and the system was required to be modified a second time. At some stage of these modifications, the required changes (changing panel number for switch 84-20 and changing method for venting containment during normal operation) were not picked up in the operating instructions. However, all operators are well aware of how the CAD system operates. It is also of note that CAD system operation is not required for at least four hours after a design basis accident. Experienced operations personnel know how the safety system functions and have enough time in the event of an accident to overcome a slight procedural oversight. We do concur that a potential Severity Level V exists in that our administrative procedures did not fully reflect this modification into the operating instructions.

### 2. Reasons For The Violation If Admitted

The reasons for the violation are as described above.

### 3. Corrective Steps Which Have Been Taken and Results Achieved

#### Example 1

OI-77 has been revised to correctly include all modification changes performed under workplan 8278.

A new valve checklist has been run on radwaste systems to ensure proper alignment of all valves listed in the valve checklist.

#### Example 2

Operating instruction (OI) 84 is being revised to include correct switch manipulation and switch locations for venting containment. OI-84 was changed initially after identification of the problem by the inspector, but further drawing review has concluded that the initial change was not sufficient.

4. Corrective Steps Which Will Be Taken To Avoid Further Violations

Examples 1 and 2

Before the violation, Operations Section Instruction Letter No. 94 was issued on October 20, 1981 to inform operators of the need to identify procedure errors and ensure they are corrected.

5. Date When Full Compliance Will Be Achieved

Example 1

A new valve checklist was completed before February 1, 1982.

Example 2

Procedure changes will be completed by March 10, 1982.