February 27, 1995

Tennessee Valley Authority
ATTN: Mr. Oliver D. Kingsley, Jr.
President, TVA Nuclear and
Chief Nuclear Officer
6A Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: NRC INSPECTION REPORT NOS. 50-327/94-41 AND 50-328/94-41

Gentlemen:

Thank you for your response of January 30, 1995, to our Notice of Violation, issued on December 30, 1994, concerning activities conducted at your Sequoyah facility.

We have reviewed your response to Violation 50-327, 328/94-41-01. The violation identified an administrative requirement to have a Fuel Handling Supervisor present during any fuel movement, including fuel shuffle (Example 1). You agreed that you did not meet this requirement on November 25, 1994, during the shuffle of spent fuel in the spent fuel pool. The violation also identified Fuel Handling Instruction (FHI)-3 as inadequate in that it did not provide adequate precautions or instructions regarding the retrieval and storage of the spent fuel handling tool in its storage rack (Example 2). You denied this example of the violation because you considered the procedure to be adequate for the work that was being performed.

Part of your response to Example 1 of the Violation stated that the reason the Fuel Handling Supervisor was not present was that the site procedure was not adequately reviewed at the time that a standing order was issued, stating that a senior reactor operator was not required to be continually present at the spent fuel pit during shuffle of spent fuel for the rerack project. You stated that the standing order resulted in the failure to meet the requirement for the Fuel Handling Supervisor to be present during fuel movement. Your corrective action for this example of the violation consisted of revocation of the standing order. We agree that the corrective actions addressed the specific violation; however, we are concerned about the review of processes, such as standing orders, where administrative requirements could be overlooked. During a telephone conversation on February 17, 1995, between Mr. Mark Lesser of my staff and Mr. Ken Meade of your staff, Mr. Meade agreed that a revised response would be provided by March 17, 1995 with additional information as to the extent of condition of reviews conducted in the areas of other standing orders or processes that could circumvent administrative requirements.

After careful consideration of the bases for your denial of Example 2 of the violation, we have concluded, for the reasons presented in the enclosure to this letter, that the violation occurred as stated in the Notice of Violation.

9503080280 950227
PDR ADOCK 05000327
Q PDR

IE01

Therefore, in accordance with 10 CFR 2.201(a), please submit to this office within 30 days of the date of this letter a written statement describing steps which have been taken to correct Example 2 of the violation and the results achieved, corrective steps which will be taken to avoid further violations, and the date when full compliance will be achieved.

We will examine the implementation of your actions to correct Example 2 of the violation during future inspections.

The responses directed by this letter and its enclosure are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, Pub. L No. 96-511.

We appreciate your cooperation in this matter.

Sincerely,

(Original signed by S. Ebneter)

Stewart D. Ebneter
Regional Administrator

Docket Nos. 50-327, 50-328
License Nos. DPR-77, DPR-79

Enclosure: Evaluations and Conclusion

cc w/encl: (See page 3)

cc w/encl:
Mr. O. J. Zeringue, Senior Vice Pres.
Nuclear Operations
Tennessee Valley Authority
3B Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Dr. Mark O. Medford, Vice Pres.
Engineering & Technical Services
3B Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Mr. D. E. Nunn, Vice Pres.
New Plant Completion
Tennessee Valley Authority
3B Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

Mr. R. J. Adney, Site Vice Pres.
Sequoyah Nuclear Plant
Tennessee Valley Authority
P. O. Box 2000
Soddy Daisy, TN 37379

General Counsel
Tennessee Valley Authority
ET 11H
400 West Summit Hill Drive
Knoxville, TN 37902

Mr. P. P. Carier, Manager
Corporate Licensing
Tennessee Valley Authority
4G Blue Ridge
1101 Market Street
Chattanooga, TN 37402-2801

Mr. Ralph H. Shell
Site Licensing Manager
Sequoyah Nuclear Plant
Tennessee Valley Authority
P. O. Box 2000
Soddy Daisy, TN 37379

TVA Representative
Tennessee Valley Authority
Rockville Office
11921 Rockville Pike
Suite 402
Rockville, MD 20852

Mr. Michael H. Mobley, Dir.
Div., of Radiological Health
3rd Floor, L and C Annex
401 Church Street
Nashville, TN 37243-1532

County Judge
Hamilton County Courthouse
Chattanooga, TN 37402

Mr. Bill Harris
RR 1 Box 26
Ten Mile TN 37880

Distribution w/encl: (See page 4)

Distribution w/encl:
M. S. Lesser, RII
S. E. Sparks, RII
F. J. Hebdon, NRR
D. E. LaBarge, NRR
Document Control Desk

NRC Resident Inspector
U. S. Nuclear Regulatory Commission
2600 Igou Ferry
Soddy-Daisy, TN 37379

NRC Resident Inspector
U. S. Nuclear Regulatory Commission
Route 2, Box 700
Spring City, TN 37381

SEND TO PUBLIC DOCUMENT ROOM? YES NO						
OFFICE	DRP/RII	DRP/RII	EICS/RII	NLO w/changes		
SIGNATURE / NAME	MLesser:vyg	EMarsh	BUryc	CEvans		
DATE	02 / 17 / 95	02 / 23 / 95	02 / 17 / 95	02 / 22 / 95	02 / / 95	02 / / 95
COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\SEC4A\RESP9441.DER

EVALUATIONS AND CONCLUSION

On December 30, 1994, a Notice of Violation (Notice) was issued for a violation identified during a routine NRC inspection. TVA responded to the Notice on January 30, 1995. In your response, you admitted Example 1 of the violation and you denied Example 2 of the violation. The NRC's evaluations and conclusion regarding the licensee's response are as follows:

Restatement of Violation

Technical Specification Section 6.8.1 requires, in part, that procedures shall be established, implemented, and maintained covering the activities recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Appendix A of Regulatory Guide 1.33 includes administrative procedures for authorities and responsibilities for safe plant operation and general plant operating procedures for refueling equipment operation. Implicit in these requirements is that the procedures be adequate.

SSP-12.1, Conduct of Operations, Revision 10, was established, in part, to delineate the responsibilities of the Fuel Handling Supervisor. Section 3.1.15 requires that the Fuel Handling Supervisor be present during any fuel movement, including fuel shuffle.

FHI-3, Movement of Fuel, Revision 26, was established, in part, to provide prerequisites, precautions, and instructions for the transfer of fuel assemblies within the auxiliary building.

Contrary to the above:

1. Procedure SSP-12.1 was not implemented in that on November 25, 1994, the Fuel Handling Supervisor was not present in the spent fuel pit area during the shuffle of spent fuel.

2. Procedure FHI-3 was inadequate in that it did not provide adequate precautions or instructions regarding the retrieval and storage of the spent fuel handling tool in its storage rack.

Summary of Licensee's Response

The licensee denied Example 2 of the violation. The licensee argues that "while the spent fuel handling tool was being moved from its storage bracket, a substantial jar was felt on the bridge." The licensee conducted an investigation and determined that "the tool had caught on an object and then became free, resulting in the jar felt by the Assistant Unit Operator (AUO) and the spotter on the bridge."

The licensee argues that a review of FHI-3 resulted in a feeling "that the procedure was adequate for the work that was being performed. They stated that "the AUO operating the hoist had previously performed this operation numerous times without incident." The licensee felt "this incident was a result of the lack of attention to detail on the part of the operator and not a procedural inadequacy."

TVA stated that they believe "that there is an inherent risk in putting statements in procedures which indicate to the performer that every detail of every activity will be delineated by the procedure." They stated that "procedures written under this philosophy indicate to the performer that the responsibility for the correct performance of the work lies solely with the procedure rather than a shared responsibility between the individual and the procedure. Additionally, procedures written this way generally discourage the performer from applying his knowledge and expertise."

NRC Evaluation

The NRC staff has carefully reviewed the licensee's response and has concluded that the licensee did not provide any information that was not already considered in determining the significance of the violation. The fact remains that the procedure in use did not have precautions or specific instructions to alert operators to important measures necessary to assure that the handling tool properly cleared the spent fuel storage rack in the particularly confined area of the tool storage location. The question of procedure adequacy may be determined from the existing requirements for precautions in procedures.

The TVA Nuclear Quality Assurance Plan, TVA-NQA-PLN89-A, Appendix B list NRC Regulatory Guide (RG) 1.33 - "Quality Assurance Program Requirements (Operations)," Revision 2, 1978 which endorses ANSI N18.7-1976/ANS 3.2. ANSI N18.7-1976/ANS 3.2, Paragraph 5.3.2(5) discusses the use of precautions in the preparation and use of instructions and procedures. The paragraph states, in part, as modified by RG 1.33 Section C.5, that "precautions [shall] be established to alert the individual performing the task to those important measures which should be used to protect equipment and personnel, including the public, or to avoid an abnormal or emergency situation." In the case of Example 2 of the violation, FHI-3 was determined to be inadequate because Paragraph 5.3.2(5) of ANSI N18.7-1976/ANS 3.2 was not implemented in this case.

We agree that a contributing cause for the fuel handling problem was associated with a lack of attention to detail in correctly performing the evolution. We further believe a lack of adequate supervisory overview also contributed to the problem. However, we do not agree with your position that procedures were adequate for the evolution. It is not our intent to prescribe a detailed handling process for removal of the spent fuel handling tool from its storage rack. However, the licensee failed to give appropriate consideration for inclusion of a precaution in the procedure, based on the condition of the tight clearances between the stored tool and the spent fuel racks adjacent to the storage location. The meticulous movement which must be performed in this location to properly clear the spent fuel storage racks to prevent equipment damage clearly warrants additional attention in a procedure.

We consider a precaution of this nature is required and would typically be a part of the pre-job brief to assist in providing additional sensitivity to evolutions which may be considered as routine. Furthermore, these types of precautions might prompt operators to question poor working conditions, such as the inadequate lighting which also existed in this area. We noted that you included precautions of this nature in a revision to the rerack project work order issued on November 30, 1994, five days after the violation event occurred.

Inspection Report 50-327, 328/94-45 also discussed an event, which occurred on December 5, 1995. The issue involved a debris canister lifting tool which experienced a cable separation of the operating cable for latching the retaining plate of the tool to the canister. No canister was latched when the cable failed. However, review of this issue revealed that no procedure existed for moving a debris canister or for operating the canister lifting tool. This issue was also discussed as a further example of Violation 327, 328/94-41-01, Example 2, and debriefed with the licensee in the resident inspector monthly exit conducted on January 9, 1995. We noted in Report 50-327, 328/94-45 that corrective actions for this issue included revision of FHI-2 and FHI-3 to include functional testing and use of the debris canister handling tool. However, your response of January 30, 1995, failed to address this example as requested.

We consider appropriate safety sensitivity and attention to detail on the part of nuclear plant personnel in performance of their duties, along with procedures that prescribe conduct of evolutions to the detail required to accomplish activities safely and correctly, are all necessary to provide defense in depth for operation of a nuclear power plant.

NRC Conclusion

For the above stated reasons, the NRC staff concludes that the violation occurred as stated.