



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS

EMPLOYEE CONCERN ELEMENT REPORT 23502

"ELECTRICAL SAFETY, EXPOSED 480 V BUS AT PANEL TOP"

TENNESSEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

I. SUBJECT

Category: Engineering (20,000)  
Subcategory: Electrical Safety (23500)  
Element: Exposed 480 V Bus at Panel Top (23502)  
Employee Concern: IN-85-064-002

The basis for Element Report 23502, Rev. 0 prepared October 14, 1986, is Watts Bar Employee Concern IN-85-064-002 which states:

"480 V shutdown boards (E1. 757 AZR and A14T) feeders to bus bar compartments; the cabinets are open on top where conduits enter the MCC."

II. SUMMARY OF ISSUE

The employee concern raised issues at Watts Bar regarding the adequacy of TVA construction practices for the conduit installation where the feeders enter the bus bar components. The concern further alleges that proper procedures and design drawings were not followed.

This concern was evaluated by TVA as potentially applicable to Sequoyah (generic) due to the similarity of the two plants.

TVA performed a walkdown of Sequoyah 480 Class IE Shutdown Boards and concluded that established procedures were followed. The underlying NRC question to be assessed is to determine if the Watts Bar condition also exists at Sequoyah and if so, a determination of the impact on plant safety.

III. EVALUATION

NRC and its consultant, SAIC, reviewed the TVA employee concern report. The TVA report stated that a walkdown was performed and that established procedures were followed at Sequoyah. In order to properly understand the TVA report, NRC

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requested additional information (RAI) regarding Sequoyah shutdown panel drawings; cable entry and termination procedures; a discussion of which panels were inspected during the TVA walkdown; and, a justification for limiting this concern to 480 V panels only.

In preparing the TVA responses to the NRC RAI, TVA suggested that a working meeting be held in Bethesda to discuss several electrical concern RAIs. NRC and its consultant met with TVA and its consultants on February 10, 1987, at the TVA offices to discuss this employee concern and TVA's investigation at Sequoyah. TVA stated that this concern was an identified Watts Bar condition and that TVA felt that a review of Sequoyah was necessary to ensure that a similar condition did not exist at the Sequoyah plant. TVA stated that the walkdown found no evidence of the Watts Bar condition at Sequoyah. TVA stated that the Sequoyah review included a 100% walkdown of all 480 Volt load centers, and a sampling of 6.9 KV switchgear. The TVA employee concern report also states that the TVA inspection walkdown reviewed all 480 volts shutdown boards at Sequoyah. NRC has verified TVA finding during an inspection conducted on March 23-27, 1987. (Inspection Report #50-327/87-20.)

#### IV. CONCLUSION

Based on the information presented at the February 10, 1987, and the NRC inspection, the NRC staff concludes that the condition identified and confirmed at Watts Bar does not exist at Sequoyah. Hence this employee concern is considered to be satisfactorily resolved for Sequoyah.