

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

SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS

EMPLOYEE CONCERN ELEMENT REPORT 24103

"NO MEGGER TEST ON LOW VOLTAGE CABLES"

TENNESEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR POWER PLANT UNITS 1 AND 2

I. SUBJECT

Category

Engineering (20,000)

Subcategory

Cable Termination and Splicing (24100)

Element:

No Megger Test on Low Voltage Cables (24103)

Employee Concern: XX-85-094-006

The basis for Element Report 24103 Revision O dated October 31, 1986 is an employee concern which states that "Electrical terminations do not have low voltage megger test."

II. SUMMARY OF ISSUE

This concern was raised at Bellefonte and was considered potentially applicable to Sequoyah. The concern questions the lack of megger testing of low voltage electrical terminations (cables).

III. EVALUATION

TVA has stated that megger testing is performed on all 480 Volt motor circuits for motors over 100 HP and requirements are specified in M&AI-7 (Modification and Additions Instruction1. TVA additionally points out that no industry requirements exist for megger testing of low voltage cables.

IV. CONCLUSION

Based on our review, we have concluded that megger testing of low voltage cables is not required for functional testing, and startup testing and periodic testing should confirm the correct and required operation of installed low voltage cables.