

TVA EMPLOYEE CONCERNS  
SPECIAL PROGRAM

REPORT NUMBER: SWEC-SQN-08

REPORT TYPE: Sequoyah Nuclear Plant Element

REVISION NUMBER: 0

TITLE: Location of Embedded Equipment

REASON FOR REVISION: N/A

SWEC SUMMARY STATEMENT: The item in this report was identified by the Nuclear Regulatory Commission (NRC) and was included in the Stone & Webster Engineering Corporation (SWEC) systematic analysis. The item evaluated within this report was verified to be adequately addressed and was closed by the NRC.

PREPARATION

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TENNESSEE VALLEY AUTHORITY  
WATTS BAR NUCLEAR PLANT  
EMPLOYEE CONCERNS TASK GROUP  
OTHER SITES  
CEG

Element Title: Location of Embedded Equipment  
SWEC Concern: A02841109009-001  
Source Document: NRC Report 50-327, 328/84-27  
Report Number: SWEC-SQN-08

Evaluator:	<u>John Knightly</u> J. J. Knightly	<u>9/17/86</u> Date
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I. Introduction

During a follow-up inspection September 6 - October 5, 1984 of work activities which resulted in a severing of Upper Head Injection (UHI) cable, the Nuclear Regulatory Commission (NRC) identified and reported (reference 1) one violation (327,328/84-27-01) which was included in the Stone & Webster Engineering Corporation (SWEC) systematic analysis:

A02841109009-001 Embedded equipment location.

Information on the background, the corrective actions taken, the verification methodology, the verification analysis, the completion status, and any pertinent reference for this violation is included in this report.

II. Verification of SWEC Issue A02841109009-001

A. Background

The NRC inspector determined that during concrete drilling for workplan 11088 in September of 1984, UHI electrical cable inside a conduit embedded in concrete was cut making auto-isolation valve 1-FCV-87-23 inoperable. The NRC followup found that Administrative Instruction AI-17 "Drilling, Cutting, Chipping, and Excavation," which requires review before drilling, was inadequate in its guidance for field-run drawings which do not identify the exact placement of embedded items.

B. Corrective Actions Taken

Sequoyah Nuclear Plant (SQN) stated that outstanding drilling permits were cancelled, and Instruction AI-17 was revised to provide the needed guidance through a cross-disciplinary mechanical/electrical review as needed. In addition, an attachment device to detect embedded metal was purchased for the core drilling machines.

C. Verification Methodology

The SWEC concerns identified for Employee Concerns Task Group (ECTG) verification was stated as follows:

<u>RIMS #</u>	<u>Issue</u>	<u>RIMS Item</u>
A02841109009	Procedure for locating embedded equipment before concrete cutting provided no guidance in event exact equipment location was indeterminate	RIMS-001

ECTIG reviewed the Sequoyah Compliance Licensing files for internal and external correspondence related to this issue, applicable procedures, and NRC status and closure files. This review of the pertinent documentation, in addition to discussions with compliance engineering personnel, formed the basis for this verification activity.

D. Verification Analysis

The ECTIG review of the pertinent documents indicated that the SWEC item was adequately resolved. SQN cancelled all drilling permits that were outstanding and revised Administrative Instruction AI-17, "Drilling, Cutting, Chipping and Excavation," Revision 7, effective September 21, 1984. The instruction now provides specific guidance for instances where the location of embedded equipment is not precisely known. In addition, three conductance type power interruption devices were purchased and prescribed for use when applicable drawings are not clear about the locations. The NRC found these SQN corrective actions to be acceptable and closed the violation in Report 327/85-27 (reference 3).

E. Completion Status

Based on the SQN corrective actions, compliance with requirements, and NRC closure of the item, no further action on this item is required. This item is closed.

III. References

1. NRC Inspection Report Nos. 50-327/84-27 and 50-328/84-27, dated November 7, 1984, from J. A. Olshinski to H. G. Parris.
2. "Sequoyah Nuclear Plant Units 1 and 2-NRC-OIE Regions II Inspection Report 50-327/84-27 and 50-328/84-27-Response to Violation," dated December 13, 1984, from J. A. Domer to J. P. O'Reilly.
3. NRC Inspection Report Nos. 50-327/85-27 and 50-328/85-28, dated October 1, 1985, from R. D. Walker to H. B. Parris.