

TVA EMPLOYEE CONCERNS
SPECIAL PROGRAM

REPORT NUMBER: SWEC-SQN-50

REPORT TYPE: Sequoyah Nuclear Plant Element

REVISION NUMBER: 0

TITLE: Instrument Maintenance Testing

REASON FOR REVISION: N/A

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

PREPARATION

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*SRP Secretary's signature denotes SRP concurrences are in files.

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

Element Title: Instrument Maintenance Testing

SWEC Concerns: A02851211001-001
A02851211001-002

Source Document: NRC Inspection Report 327,328/85-35

Report Number: SWEC-SQN-50

Evaluator:	<u>John Knightly</u> J. J. Knightly	<u>9/17/86</u> Date
Reviewed By:	<u>A. G. Debrige</u> A. G. Debrige	<u>9/17/86</u> Date
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Element Title: Instrument Maintenance Testing

I. Background

During the Nuclear Regulatory Commission's (NRC's) October 6 - November 5, 1985 Sequoyah inspection, which included monthly surveillance observations, NRC issued Violation 50-327/328/85-35-01, (reference 1) covering as a single violation a series of events which occurred during a routine test of instrument response time. The violation cited examples of failure to comply with Technical Specification 6.8.1 which requires that written procedures be implemented and maintained covering safety-related activities stated in Appendix A of Regulatory Guide 1.33, revision 2. Stone and Webster Engineering Company (SWEC) identified two concerns associated with the NRC violation.

A. SWEC Concern A02851211001-001

Instrument Maintenance Instructions IMI-99, RT 611A, "Response Time Testing Engineered Safety Feature Actuation (Reference 5)," IMI-99, RT 7.23, "Response Time Test Loop 4 Steam Generator Level Channel III (L-548)" (Reference 6); and IMI-99, RT 7.17, "Response Time Test Loop 2 Steam Generator Level Channel III (L-528)-(Reference 7)," were established to perform reactor trip response time testing. RT 611A Step 5.5.6 requires that components which are not returned to normal position be listed in the data sheet cover page as discrepancies. RT 7.17 and RT 7.23 require that status lights be verified in a non-illuminated condition except as allowed under Step 2 of these instructions.

These procedures were not properly implemented. Components required to be returned to a normal position by Step 5.5.6 in procedure IMI-99 RT 611A had not been returned to the normal position and had not been listed as discrepancies in the data sheet. Also, verification of status lights had not been made in accordance with procedures IMI-99 RT 7.17 and IMI-99 RT 7.23.

B. SWEC Concern A02 851211 001-002

Administrative Instruction AI-19, Part 4 - "Plant Modifications After Licensing" (Reference 8), was established to implement the use of workplans on major modification efforts on safety related equipment. Workplan 11802 served as the procedure for assembly and testing of safety-related containment penetrations. The workplan requires the use of a validated vendor's manual in the assembly of the feed through tubes. In this instance workplan 11802 was not properly implemented because TVA maintenance had assembled the penetration without the use of a validated vendor manual.

C. NRC made further comments regarding the application of "N/A" to some paragraphs of these procedures.

II. Corrective Actions Taken

- A. In response to NRC, TVA made the following observations and took the following actions. Information was forwarded to NRC via Reference 2.
1. Affected equipment was returned to normal according to the System Operating Instruction (SOI)-30.2 (Reference 9). The use of "not applicable" (N/A) in the conduct of plant surveillance was to be clarified. All personnel, including supervision, were given additional training concerning the need to follow instructions verbatim.
 2. The required vendor manual was not available during preparation of the workplan and was still not available when the work was initially performed. Direction and oral instructions from a vendor representative were followed to perform the work. The vendor manual was still not available by the date the violation was identified. The penetration was subsequently reworked in accordance with written instructions received from the vendor and a validated vendor manual.
- B. NRC accepted TVA's initial response by letter (reference 3).

III. Specific Evaluation Methodology

- A. The SWEC concerns identified for Employee Concerns Task Group (ECTG) evaluation were stated as follows:

<u>RIMS NO.</u>	<u>ISSUE</u>	<u>RIMS ITEM</u>
AO2 851211 001	Instrument response time procedures not adequately implemented in that components were not returned to a normal position and status lights had not been verified	RIMS-001
AO2 851211 001	Maintenance workplan required electric penetration using a manual reviewed and validated by PORC, verbal vendor instructions were followed, rework required for QC hold point 5	RIMS-002

- B. A review was conducted of Sequoyah Compliance Licensing files for internal and external correspondence, and any subsequent NRC inspection reports issued on the same subject. NRC reports and related correspondence, plus informal interviews held with SQN compliance engineers formed the basis for this verification activity.

IV. Verification Analysis

The ECTG review of the pertinent documentation indicated that the NRC item was adequately resolved (-001). Instrument Maintenance Section Instruction Letter IMS-A6 was distributed February 3, 1986, and the applicable Surveillance Instruction SI-1 (Reference 10) was revised effective March 31, 1986, to provide guidance for using "N/A" in plant procedures. In general, procedures are to identify that reviewers are responsible for approving all N/A's in a package in order to assure more adequate procedural implementation (-002). The penetration was reworked in accordance with a validated vendor manual. The NRC closed the violation in April 1986 (reference 4).

V. 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.

VI. References

1. NRC Inspection Report No. 50-327/328/85-35 dated December 10, 1985, from D. Walker to H. G. Parris
2. TVA letter, NRC Inspection Report 50-327/328/85-35 - Response to Violations, dated January 9, 1986 J. A. Domer to J. N. Grace
3. NRC letter, Report No. 50-327/328/85-35, dated February 3, 1986 from J. A. Olshinski to S. A. White
4. NRC Inspection Report No. 50-327/328/86-15 dated April 4, 1986 (A02860407004)
5. IMI-99 RT 611A, "Response Time Testing Engineered Safety Feature Actuation."
6. IMI-99 RT 7.23 "Response Time Test Loop 4 Steam Generator Level Channel III (L-548)."
7. IMI-99 RT 7.17 "Response Time Test Loop 2 Steam Generator Level Channel III (L-528)."
8. Administrative Instruction AI-19 Part 4 "Plant Modifications after Licensing."
9. System Operating Instruction SOI-30.2 "Containment Purge System Operation."
10. Surveillance Instruction SI-1 "Surveillance Program - Units 1 and 2."

ECTG WRITER'S GUIDE	NSRS/ERT*	WELD PROJECT (WP) REPORTS	NOTES/COMMENTS
1.0 Issue Characterization	Background Info (Section I)	Issues Addressed By Concerns (Section II)	
2.0 List Of Concerns	Background Info (Section I)	Scope of Evaluation (Section I and Att-1)	
3.0 Evaluators	Coversheet	Coversheet	
4.0 Evaluation Process	Scope (Section II)	Not Delineated As Part Of The WP Reports however it is addressed as part of the Weld Projects Program Manual	
5.0 Findings	Findings (Section III)	Validity or Substantiation (Section III)	
6.0 Root Cause** and Conclusion	Conclusion and Recommendations (Section IV)***	Validity or Substantiation (Section III)	<p>*** Note that recommendations are not included in element reports under the current ECTG program.</p> <p>** Overall Root Cause will not be considered at this report level.</p>

*The Weld Project has endorsed a number of ERT Reports and general issue level reports as adequately addressing the concerns at this level for SQN.

ECTG WRITER'S GUIDE		ELEMENT REPORT FORMAT
1.0	Issue Characterization	1. Characterization of Issue(s)
2.0	Summary	9. Discussion, Findings and Conclusions
3.0	Evaluators	Cover Sheet Information
4.0	Evaluation Process	8. Evaluation Process
5.0	Findings	9. Discussion, Findings, and Conclusions
6.0	Root Cause (Collective Significance)**	** <u>Overall</u> Root Cause will not be considered at this report level.
7.0	Attachments/ List of Concerns	Attachments as required
Other items included in Engineering Element Reports		2. Have issue(s) been identified in another systematic analysis? 3. Document nos., tag nos., locations or other specific descriptive identifications stated in element. 4. Interview files reviewed 5. Documents reviewed related to the element

ECTG WRITER'S GUIDE

ELEMENT REPORT FORMAT

Other items included
in Engineering Element
Reports
(cont'd)

6. What regulations, licensing commitments, design requirements, or other apply or control in this area?

 7. List requests for information, meetings, telephone calls, and other discussions related to element.
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CONSTRUCTION CATEGORY Enclosure 3

ECTG WRITER'S GUIDE		ELEMENT REPORT FORMAT
1.0	Issue Characterization	I. Introduction II. Summary of Perceived Problem
2.0	Summary	IV. Summary of Findings Conclusions (Portion)
3.0	Evaluators	Cover Sheet Information
4.0	Evaluation Process	III. Evaluation Methodology
5.0	Findings	IV. Summary of Findings
6.0	Root Cause (Collective Significance)**	V. Root Cause ** <u>Overall</u> Root Cause will not be considered at this report level.
7.0	Attachments/ List of Concerns	VIII. Attachments
Other items included in Construction Element Reports		VI. Corrective Actions (To be provided by line organizations) VII. Generic Applicability

MATERIALS CONTROL Enclosure 3

ECTG WRITER'S GUIDE		ELEMENT REPORT FORM
1.0	Issue Characterization	I. Introduction II. Summary of Perceived Problem
2.0	Summary	IV. Summary of Findings Conclusions (Portion)
3.0	Evaluators	Cover Sheet Information
4.0	Evaluation Process	III. Evaluation Methodology
5.0	Findings	IV. Summary of Findings
6.0	Root Cause (Collective Significance)**	V. Root Cause ** <u>Overall</u> Root Cause will not be considered at this report level.
7.0	Attachments/ List of Concerns	VIII. Attachments
Other items included in Element Reports		VI. Corrective Actions (To be provided by line organizations) VII. Generic Applicability

OPERATIONS CATEGORY

Enclosure 3

ECTG WRITER'S GUIDE	OPERATIONS (OP) ELEMENT REPORTS	NOTES/COMMENTS
1.0 Issue Characterization	I. Title Very brief introduction	The brief introduction touches on the source of the concerns.
2.0 Summary	I. Title Very brief introduction III. Finding (Conclusions)	1. The Conclusions are towards the end of the findings. 2. The Conclusions services as a summary of the findings.
3.0 Evaluators	Cover Sheet	1. The printed name of the original evaluator(s) appears on the cover sheet. 2. The peer reviewer and CEG-H approval signatures are also on the cover sheet.
4.0 Evaluation Process	II. Specific Evaluation Methodology	
5.0 Findings	III. Findings	

3. Verification Methodology

The SWEC concern identified for ECTG verification was stated as follows:

<u>RIMS Number</u>	<u>Issue</u>	<u>RIMS Item</u>
A02 850624 003	Failure to have all radioactive material containers properly labeled.	RIMS-003

A review was conducted of SQN compliance licensing files for internal and external correspondence, NRC inspection reports, and applicable HP procedures concerning the labeling of the radioactive material containers (reference 4). This documentation review plus interviews with SQN HP personnel formed the basis for this verification activity.

4. Verification Analysis

Based on the ECTG verification activities, it was determined that this NRC item was adequately resolved. The SQN corrective actions were examined by NRC on January 21-30, 1986, found acceptable, and closed by NRC in Inspection Reports 50-327, 328/86-04.

5. Completion Status

Based on the SQN labeling practices, HP training, procedural adequacy, handbook issuance, sign postage, and NRC closure, the SQN implementation is assessed to be progressing satisfactorily. This item is closed.

III. REFERENCES

1. NRC Inspection Reports 50-327, 328/85-20 dated June 20, 1985, from R. D. Walker to H. G. Parris, and follow-up memorandum, NRC Inspection Reports 50-327, 328/85-20 dated July 29, 1985 and May 1, 1986 [SQN CATS 85273].
2. TVA memorandum, "Sequoyah Nuclear Plant Units 1 and 2 - NRC - OIE Region II Inspection Report 50-327/85-20 and 50-328/85-20 - Response to Violations," dated July 19, 1985, from J. A. Domer to J. N. Grace, and follow-up memorandum, "Sequoyah Nuclear Plant Units 1 and 2 - NRC - OIE Region II Inspection Report 50-327/85-20 and 50-328/85-20 - Response to Violations," dated October 30, 1986 and April 4, 1986
3. SQN Procedure RCI-3, Personnel Monitoring, Revision 17
4. SQN Technical Instruction (TI)-61, Waste Classification and Scaling Factors, November 1, 1985