

**QUALITY
TECHNOLOGY
COMPANY**

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HL/PA

ERT INVESTIGATION REPORT

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CONCERN NOS. WI-85-046-003 HI
WI-85-046-X18 HI,QA

CONCERN: NDE reports for NDE trainees have been back dated (falsified)

INVESTIGATION

PERFORMED BY: William Kemp, Jr.

DETAILS

WI-85-046-003

Concern: NDE training reports for NDE trainees have been back dated to show that a trainee has received the proper amount (time) of on-the-job training. This back dating occurred to expedite the certification process of NDE personnel.

WI-85-046-X18

Concern: NDE reports for NDE trainees have been falsified to show that a trainee has received the proper amount (time) of on-the-job training. This falsification occurred to expedite the certification process of NDE personnel.

CLARIFICATION OF CONCERNS:

It has been established that these concerns deal with Nuc Power, Base Line and ISI NDE training records relative to personnel qualification/certification to NDE disciplines and levels during the years of 1984 and 1985.

PERSONNEL INVOLVED: (CONFIDENTIAL)

8604160162 860411
PDR ADOCK 05000259
P PDR

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WI-85-046-X18

DETAILS, continued

PROCEDURES, COMMITMENTS, RECORDS REVIEWED:

Topical Report TVA 75/R Regulatory Guidance for Quality Assurance During Station Operations.

Regulatory Guide 1.33 Rev. 2 Feb. 1978

ANSI N18.7 1976

Regulatory Guide 1.58 Rev. 1 1980

ANSI N45-2.6 1978/1973

Watts Bar Nuclear Plant Codes/Standards Information Notice No. 3

ASME Section XI 1974 Summer 1975, Summer 1976 Addenda
1977 Summer 1978 Addenda
1980 Winter 1981 Addenda

Procedure Number 0202.14 (No Revision Number) Qualification and Certification Program for Nondestructive Examination Personnel.

CAR-NCO-CAR-83-009-WB

DPM-N75C01 All Revisions - Qualification & Certification Program for Non-destructive Examination Personnel.

SNT-TC-1A 1980 Personnel Qualification & Certification in Nondestructive Testing.

NSRS Report No. IN-85-373-NPS, Documentation of Required OJT for NDE Personnel Certification for SQNP.

ERT Investigation Reports for concerns at SQNP:

XX-85-069-001
XX-85-069-006
IN-86-230-001
XX-85-069-002
XX-85-069-007
XX-85-069-003
XX-85-069-X13

ASME XI 1980 Winter 1981 Addenda (applicable to Watts Bar)

NDE Certification List-Chattanooga-ISI (Information Only)

Quality Control & Nondestructive Examination On The Job Training Manual (Draft copy-not approved as of 3/17/86)

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DETAILS, continued

SUMMARY OF INVESTIGATION:

The concerns are substantiated. The investigation from March 3 to March 17 involved the review of commitments, codes and standards requirements, and the review of NDE personnel certification files to assure implementation of the applicable requirements.

SUMMARY OF REQUIREMENTS REVIEWED:

The applicable codes, standards and procedural requirements were reviewed to establish the documentation requirements for verifying On-the-Job-Training (OJT) to support NDE qualification prior to certification.

TVA Topical Report-75-1A commits TVA to Reg. Guide 1.58 (revision 1) September 1980 which endorses ANSI N45-2.6 1978. The Reg. Guide specifies SNT-TC-1A 1975 however, TVA has taken exception and committed to SNT-TC-1A 1980. This exception came about in mid 1983. Prior to the change in commitments, the SNT-TC-1A 1975 was required.

ANSI N45-2.6 states, in part, "Recertification of Level III NDE personnel shall be required at intervals no longer than five years".

The Code of Record for Watts Bar Unit 1 is ASME XI 1980 Winter 1981 Addenda for inservice testing of pumps and valves, repair and replacement, and inservice inspection. IWA 2300, "Qualification of Nondestructive Examination Personnel," states in part, "(a) personnel performing nondestruction examination shall be qualified with a written procedure prepared in accordance with SNT-TC-A 1980. (1) all Level III personnel shall be qualified to SNT-TC-1A 1980 by examination. All Level I, II and III personnel shall be recertified by examination on a triennial basis."

10CFR50 Appendix B Criteria IX and XVII state in part;

IX Control of Special Processes

Measures shall be established to assure that special processes, including welding, heat treating, and nondestructive testing, are controlled and accomplished by qualified personnel using qualified procedures in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

XVII. Quality Assurance Records

Sufficient records shall be maintained to furnish evidence of activities affecting quality. The records shall include at least the following: Operating logs and the results of reviews,

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DETAILS, continued

SUMMARY OF REQUIREMENTS REVIEWED, continued

10CFR50 Appendix B, continued

XVII. Quality Assurance Records, continued

inspections, tests, audits, monitoring of work performance, and materials analyses. The records shall also include closely-related data such as qualifications of personnel, procedures, and equipment. Inspection and test records shall, as a minimum, identify the inspector or data recorder, the type of observation, the results, the acceptability, and the action taken in connection with any deficiencies noted. Records shall be identifiable and retrievable. Consistent with applicable regulatory requirements, the applicant shall establish requirements concerning record retention, such as duration, location, and assigned responsibility.

SNT-TC-1A-1980 Para 9 certification, subpara 9.6.1 states in part, "the qualifications records of the certified individuals shall be maintained by the employer and should include the following:

A statement indicating satisfactory completion of training in accordance with the employers written program."

National codes exist for the qualification of certain specialized workers, i.e., welders and inspectors. Where applicable, codes should be incorporated as minimum requirements for training and qualification of key personnel. However, all of these must be supplemented by local procedures for both OJT and class room training.

Successful application of nondestructive methods for the inspection of construction and operation activities requires that the operators have sufficient training and experience.

Education of all levels of personnel engaged in nondestructive inspection including formal training and certification in accordance with government, technical society or industry standards, is probably the greatest single factor affecting the quality of nondestruction inspection. Inadequate education of personnel jeopardizes the reliability of inspection.

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DETAILS, continued

SUMMARY OF REQUIREMENTS REVIEWED, continued

TVA Procedure N75C01, Qualification and Certification Program for Nondestructive Examination Personnel, Section III Education, Experience and Training Requirements states in part, "candidates for initial Level I or Level II certification in a method may acquire minimum experience in the method during employment in the Division of Nuclear Power. For such candidates, responsible supervision shall summarize this experience on a form similar to Exhibit "D" and submit this record to the Nuclear Training Branch for inclusion in the individuals certification file." Section IV Examinations states in part, "A) Review of Candidates Records, Candidate's Records of education, experience and training shall be submitted for review by a TVA NDE Level III or his designee to determine the candidates eligibility prior to the administration of technical training and examination"

On March 6, 1983, TVA Procedure Number 0202.14 "replaced TVA Procedure DPM N75C01 which is being deleted from program area 15."

The one notable change between the two procedures is that in Section IV where instead of TVA NDE Level III N75C01 Para 4.1.6a states in part, "NTB Level III."

Exhibit "D", experience summary, was reviewed and it was determined that the form recorded the period of time (date to date) received (months) of NDE experience, at least 25% in the prescribed method, for the candidate who is attempting to qualify for NDE certification.

ASME Section XI 1990 Winter of 1981 Addenda IWA 2300, Qualifications of Nondestructive Examination Personnel states in part,

"(b) Personnel performing nondestructive examinations utilizing methods not covered by (a) above shall be trained and qualified to comparable levels of competency by subjection to comparable examinations on the particular method involved; for example, the visual examination VT-1 of IWA-2211. The method examination shall be performed using procedures and parts representative of the Owner's plant.

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DETAILS, continued

SUMMARY OF REQUIREMENTS REVIEWED, continued

(c) Personnel performing the visual examinations VT-2, VT-3, and VT-4 of IWA-2212, IWA-2213, and IWA-2214, respectively, shall be qualified by the Owner or the Owner's agent in accordance with the comparable levels of competency as defined in ANSI N45.2.6-1973.

(d) The Owner shall establish a visual examination qualification program for VT-1, VT-2, VT-3, and VT-4 personnel. Qualification shall be based on education, experience, training, testing and evaluation. Recertification of these visual examination qualifications shall be at least once every 3 years based on retraining and testing."

FINDINGS:

Based on the review of commitments, procedures and NDE certifications records, the following findings are noted:

1. One individual's Level II certification for PT and UT expired (PT) 2/9/86 and (UT) 3/15/86. There was no indication in the file as to whether this individual's certification was pulled (expired) and/or if the individual has been retested/recertified.
2. One individual's eye exam was due 3/11/86; no current eye exam was available.
3. One Level III had no record of past or current eye exams.
4. One individual's certification (line Item 2 on Cert Form) did not have "Level", as required.
5. One individual was certified Level II PT on 2/9/83 and again on 2/16/84.

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DETAILS, continued

FINDINGS, continued

16. When a certification file gets full, "old" information is removed from the file and stored in RIMS.
17. The certifications files contain no objective evidence as to a background verification of previous NDE certification, training and experience prior to TVA.

OBSERVATIONS.

The review of previous reports of ERT/NSRS investigations (as referenced) has determined these discrepancies/violations have been ongoing and appears not to be corrected.

The findings in this report were discussed with the NDE Unit Supervisor and he is fully aware of the discrepancies and program inadequacies.

Attention/Correction of the documentation inadequacies may correct these problems in the future, however, inadequacies in past qualifications must be addressed for impact on quality affected activities.

CONCLUSIONS:

The concerns are substantiated.

1. Objective evidence to support certification is nonexistent and/or does not comply with SNT-TC-1A 1980 and ASME Section XI 1980 Addenda Winter 1981 for UT/MT/RT/EC/PT/VT.
2. Exhibit "D" statement is not supported by objective evidence as to percentages and on-the-job-training.
3. Certifications were signed and dated prior to all prerequisites being met for qualification. This is contrary to the requirements of ASME/SNTC1A/ANSI N45.2.6 1973.
4. The certifications files are not in a "auditable" condition, i.e., no supporting documentation, no complete records, certifying prior to the determination of qualification, all of which tend to make the validity of the certifications indeterminate.

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DETAILS, continued

CONCLUSIONS, continued

5. The continuing philosophy of no supporting documentation prior to qualification needs to be investigated by OGC for possible falsification of quality records affecting activities of safety related functions.

PREPARED BY: *CA Thero for WMC* *4/1/86*

DATE

REVIEWED BY: *OR Thero* *4/1/86*

DATE

FINAL

REQUEST FOR REPORTABILITY EVALUATION

WI-85-046-003

1. Request No. WI-85-046-X18
(ERT Concern No.)

(ID No., if reported)

2. Identification of Item Involved: NDE Certifications
(Nomenclature, system, manuf., SN,
Model, etc.)

3. Description of Problem (Attach related documents, photos,
sketches, etc.)

NDE training reports for NDE trainees have been backdated (falsified to expedite
the certification process.)

4. Reason for Reportability: (Use supplemental sheets if necessary)

A. This design or construction deficiency, were it to have
remained uncorrected, could have affected adversely the safety
of operations of the nuclear power plant at any time throughout
the expected lifetime of the plant.

No _____ Yes X If Yes, Explain: Violates 10 CFR 50 Appendix F

Criteria IX and XVII in that the inspectors certifications are indeterminate

and therefore inspections performed are indeterminate.

AND

B. This deficiency represents a significant breakdown in any
portion of the quality assurance program conducted in
accordance with the requirements of Appendix B.

No _____ Yes X If Yes, Explain: Violates 10 CFR 50 Appendix B

Criteria XVII in that records providing evidence of activities effecting
quality (i.e. inspectors certifications) are indeterminate.

OR

C. This deficiency represents a significant deficiency in final
design as approved and released for construction such that the
design does not conform to the criteria bases stated in the
safety analysis report or construction permit.

No X Yes _____ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

D. This deficiency represents a significant deficiency in construction of or significant damage to a structure, system or component which will require extensive evaluation, extensive redesign, or extensive repair to meet the criteria and bases stated in the safety analysis report or construction permit or to otherwise establish the adequacy of the structure, system, or component to perform its intended safety function.

No Yes If Yes, Explain: _____

OR

E. This deficiency represents a significant deviation from the performance specifications which will require extensive evaluation, extensive redesign, or extensive repair to establish the adequacy of the structure, system, or component to perform its intended safety function.

No Yes If Yes, Explain: _____

IF ITEM 4A, AND 4B OR 4C OR 4D OR 4E ARE MARKED "YES", IMMEDIATELY HAND-CARRY THIS REQUEST AND SUPPORTING DOCUMENTATION TO NSRS.

This Condition was Identified by:

M. D. ...
ERT Investigator

365-7135
Phone Ext.

O. H. ...
ERT Project Manager

365-4464
Phone Ext.

Acknowledgment of receipt by NSRS

----- Date ----- Time -----
Signed

INVESTIGATION REPORTS PREPARED BY NUCLEAR SAFETY REVIEW STAFF
AND NOT REVIEWED BY THE EMPLOYEE CONCERN TASK GROUP (ECTG)

NSRS REPORT NUMBER:

- I-86-132-SQN (XX-85-116-014)
- I-85-773-BFN (XX-85-122-026)
- I-85-861-SQN (XX-85-090-002)
- Clarification memorandum of 3/28/86
- I-85-516-BFN (N/A)

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : H. L. Abercrombie, Site Director, Sequoyah Nuclear Plant
FROM : K. W. Whitt, Director of Nuclear Safety Review Staff, E3A8 C-K
DATE : April 1, 1986
SUBJECT: NUCLEAR SAFETY REVIEW STAFF INVESTIGATION REPORT TRANSMITTAL

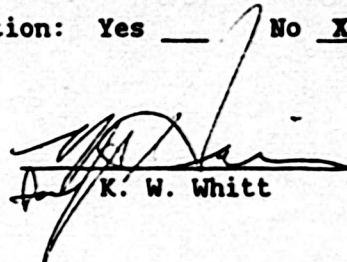
Transmitted herein is NSRS Report No. I-86-132-SQN

Subject SQN SECONDARY WATER CHEMISTRY

Concern No. XX-85-116-014

No response or corrective action is required for this report. It is being transmitted to you for information purposes only. Should you have any questions, please contact W. D. Stevens at extension 6231-K.

Recommend Reportability Determination: Yes No



K. W. Whitt

JJK:BRP

Attachment

cc (Attachment):

- W. C. Bibb, BFN
- W. T. Cottle, WBN
- J. P. Darling, BLN
- R. P. Denise, LP6N40A-C
- G. B. Kirk, SQN
- M. L. Martin, IOB-WBN
- D. R. Nichols, E10A14 C-K
- QTC/ERT, WBN
- E. K. Sliger, LP6N48A-C
- J. H. Sullivan, SQN (2)

