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U.S. NUCLEAR REGULATORY COMMISSION

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50-327/328/390/391/438/439
50-518-521/553/554/566/56

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TO:
Mr. James P. O'Reilly

FROM:
Tennessee Valley Authority
Chattanooga, Tennessee
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DESCRIPTION

ENCLOSURE

First Interim Rept. - Reportable Condition (not numbered) related to OEDC QA Audit M77-7 -

(1-P)

(3-P)

RJL 2/14/78

PLANT NAME: Sequoyah 1 & 2/Watts Bar 1 & 2/ Bellefonte 1 & 2/Hartsville 1-2-3-4/ Phipps Bend 1 & 2/Yellow Creek 1 & 2

1 ENCL

FOR ACTION/INFORMATION

SAFETY		ENVIRONMENTAL	
ASSIGNED AD:	VASSALLO	ASSIGNED AD:	V. MOORE (LTR)
BRANCH CHIEF:	VARGA	BRANCH CHIEF:	
PROJECT MANAGER:	H. SILVER	PROJECT MANAGER:	
LIC. ASST:	M. SERVICE	LIC. ASST:	
	STAHLE		
			B. HARLESS

INTERNAL DISTRIBUTION

REG FILES	SYSTEMS SAFETY	PLANT SYSTEMS	SITE SAFETY &
NRC PDR	P. MATTSON	TEDESCO	ENVIRON ANALYSIS
I & E (2)	SCHROEDER	BENAROYA	DENTON & MULLER
OELD		LAINAS	CRUTCHFIELD
GOSSICK & STAFF	ENGINEERING	IPPOLITO	
HANAUER	KNIGHT	E. ROSA	ENVIRON TECH
MIPC	BOSNAK		ERNST
CASE	SIHWEIL	OPERATING REACTORS	BALLARD
BOYD	PAWLICKI	STELLO	YOUNGBLOOD
DeYOUNG		EISENHUT	
PROJECT MANAGEMENT	REACTOR SAFETY	SHAO	SITE TECH
SKOVHOLT	ROSS	BAER	GAMMILL (2)
P. COLLINS	NOVAK	BUTLER	
HOUSTON	ROSZTOCZY	GRIMES	SITE ANALYSIS
MELTZ	CHECK		VOLLMER
HELTEMES		S. D	BUNCH
SK	AT & I	PARR	J. COLLINS
	SALTZMAN	PIKE	KREGER
	RUTBERG	RUSHBROOK	
		MINER	
		COX	

EXTERNAL DISTRIBUTION

(5) CHATTANOOGA/		CONTROL NUMBER
LPDR: SCOTTSBURO/ HARTSVILLE		
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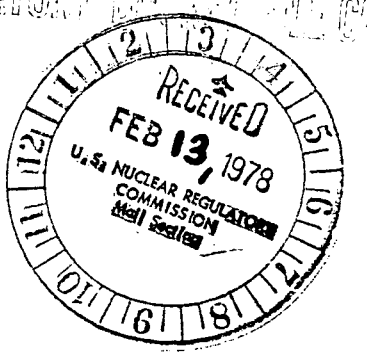
780450264

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

830 Power Building
February 6, 1978



Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Region II - Suite 1217
230 Peachtree Street, NW.
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

TVA NUCLEAR PLANTS - DOCKET NOS. 50-327, -328, -390, -391, -438, -439, -518, -519, -520, -521, -553, -554, -566, -567 - REPORTABLE CONDITION RELATED TO OEDC QA AUDIT M77-7 - FIRST INTERIM REPORT

The subject deficiency was initially reported to NRC-OIE Inspector Bob Wright on January 6, 1978, in accordance with 10 CFR 50.55(e). Enclosed is our first interim report. We anticipate providing additional information by June 23, 1978.

Very truly yours,

D L Cross for

J. E. Gilleland
Assistant Manager of Power

Enclosure
cc: Dr. Ernst Volgenau, Director (Enclosure)
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, DC 20555

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1 | 1

FIRST REPORT

DEFICIENCIES RELATED TO OEDC QA AUDIT M77-7

I. Description Of Deficiency.

There are six subparts to this deficiency as described below. Each of these involves a failure to identify and control significant conditions adverse to quality. They are related to OEDC QA Audit M77-7, deficiencies 13, 15, and 17 (partial).

These deficiencies have been found as a result of:

1. an OEDC QA audit on nonconformances,

2. follow up investigation of that audit which uncovered additional deficiencies, and

3. a review of procedures undertaken as a part of OEDC organizational changes.

These actions spanned the entire scope of OEDC activities related to implementation of 10 CFR 50 Appendix B Criteria XV and XVI thereby providing assurance that additional significant deficiencies in this area do not exist.

Other procedural deficiencies were uncovered by the audit and are being resolved. However, the items below are those considered to be reportable under 10 CFR 50.55(e).

A. Procurement Deficiencies (EN DES). The procedure for handling supplier nonconformances (EN DES QAP 5.3, redesignated EN DES EP 5.44) did not specifically require determination and documentation of the cause of significant conditions adverse to quality, as required by 10 CFR 50 Appendix B Criterion XVI. However, EN DES QAP 1.10 (now EN DES EP 2.02) did require that the cause be reported to NRC for those conditions judged reportable under 10 CFR 50.55(e).

B. Nonconformance Definition (EN DES). EN DES QAP 1.5 (now EP 1.26), which addressed "Design Nonconformance" and "Procurement Nonconformance," may not have covered all of the conditions adverse to quality as identified in 10 CFR 50 Appendix B Criteria XV and XVI. This situation involves adequacy of the terminology used in the procedure and whether personnel subject to the procedure used the procedure properly as a result.

C. Preoperational Testing (EN DES and P PROD). In some cases, conditions adverse to quality identified by preoperational tests were not documented and controlled in accordance with 10 CFR 50 Appendix B Criteria XV and XVI. This was due to insufficient procedures and inadequate implementation of existing procedures.

Specifically, test deficiencies were not being reviewed for significance and the cause was not being determined and documented in accordance with 10 CFR 50 Appenix B Criterion XVI.

D. Design Changes (EN DES). Certain conditions adverse to quality were being corrected by design changes, but were not being documented and controlled in accordance with 10 CFR 50 Appendix B Criteria XV and XVI, and EN DES QAP 1.5.

E. Audit Reports (OEDC). OEDC QA procedure QAS-QAP 3.1, OEDC QA Audits, did not contain provisions for reviewing each deficiency for significance and did not require identification and documentation of significant conditions adverse to quality identified during audits, in accordance with 10 CFR 50 Appendix B Criterion XVI.

F. Audit Reports (CONST). CONST QA procedure QAP 18.01, Auditing Construction Activities, did not contain provisions for reviewing each deficiency for significance and did not require identification and documentation of significant conditions adverse to quality identified during audits, in accordance with 10 CFR 50 Appendix B Criterion XVI.

II. Implications to Safety.

In the case of each subpart above, conditions adverse to safety were being identified and corrected in accordance with written procedures. However, since there were no requirements to determine cause, repetitive failures may have occurred, some of which might not have been identified and corrected, thereby reducing the assurance of quality.

III. Causes of the Deficiency

The root cause of all subparts was the failure, of the originator of the applicable procedures and the personnel performing the function, to recognize that, for all significant conditions adverse to quality, there were requirements beyond just identifying and correcting the condition.

A. Procurement Deficiencies (EN DES). The applicable procedure does not distinguish between significant and nonsignificant condition in regard as to how these are handled.

B. Nonconformance Definition (EN DES). The applicable procedure was tailored to the requirements of 10 CFR 50.55(e) and did not fulfill all the requirements of 10 CFR 50 Appendix B.

C. Preoperational Testing (P PROD and EN DES). The applicable EN DES procedure did not specifically address the requirements of Criterion XVI nor provide specific reference to EN DES QAP 1.5. Due to the deficiency in definition of nonconformance (discussed in I.B. above),

EN DES preoperational test representatives and coordinators were not applying EN DES QA 1.5 when deficiencies were found. Furthermore, personnel performing these functions were not aware of how 10 CFR 50 Appendix B Criteria XV and XVI applied to deficiencies identified as the result of preoperational tests.

D. Design Changes (EN DES). In some cases, personnel did not recognize the need to determine the cause of, and reporting of, significant conditions adverse to quality even though these conditions were being corrected.

E. Audit Reports (OEDC QA). QA personnel recognized the need (and had procedures) for the conducting and reporting of audits, following up on identified deficiencies, and documenting corrective actions. However, the need to review audit deficiencies for significance (and possible reporting under 10 CFR 50.55(e)) and the documenting of the cause of the deficiency was not recognized, therefore, procedures to implement these requirements were not developed.

F. Audit Reports (CONST). QA personnel recognized the need (and had procedures) for the conducting and reporting of audits, following up on identified deficiencies, and documenting corrective actions. However, the need to review audit deficiencies for significance (and possible reporting under 10 CFR 50.55(e)) and the documenting of the cause of the deficiency was not recognized, therefore, procedures to implement these requirements were not developed.

IV. Applicability to TVA Plants.

Subparts A (Procurement Deficiencies), B (Nonconformance Definition), E (Audit Reports - OEDC), and F (Audit Reports - CONST) apply to all six plants (SQN, WBN, BLN, HTN, PBN, and YCN). Subpart C (Preoperational Testing) applies only to SQN and WBN since testing has not begun on the other plants. Subpart D (Design Changes) applies to all except YCN since changes to final design have not yet begun on that plant. SQN, WBN, BLN, and HTN hold construction permits; PBN holds an LWA-2 (CP isued 18 Jan 78); and YCN has not received a CP or LWA.

V. Proposed Corrective Action.

Proposed corrective actions consists of:

(1) Familiarization of personnel with applicable requirements

(2) Preparation of new or revised procedures.

This corrective action is expected to be complete by July 1, 1978.