PSR

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50171

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # EX-85-052-006

Category: 52 Confidentiality: _YES _NO (I&H)

Supervisor Notified: _X_YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: Conduit is frequently torn out when it shows on the drawings as being in place and it is documented as being there. Construction dept concern. CI has no further information.

O K Green 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS _V___

OTHERS (SPECIFY) _____

Construct Control

Bruce L Seeglen 10/21/85
NSRS DATE

P3c

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50171

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # EX-85-053-005

Category: 48 Confidentiality: _YES _NO (I&H)

Supervisor Notified: _X_YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: Fire Protection equipment is neglected and not checked at proper intervals. Construction dept concern. CI has no additional information.

O B Throe 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS __✓___

OTHERS (SPECIFY) _____

Operations Control

Bruce L Sieffen 10/21/85
NSRS DATE

PSR

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50171

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # EX-85-053-006

Category: 10 Confidentiality: _YES _NO (I&H)

Supervisor Notified: _X_YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: Most engineers are lazy and don't do their job. They seldom take the necessary time to research problems before putting work packages together. Construction concern. CI has no additional information.

O. B. Pruet 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS __✓___

OTHERS (SPECIFY) _____

Construction control

Bruce L. Loafman 10/21/85
NSRS DATE

P5K

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50170

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # IN-85-019-001

Category: 10 Confidentiality: _YES _NO (I&H)

Supervisor Notified: _X_YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: Other units (depts) have attached or cut-out members of our features which resulted in NCR's. All affected features were not identifed, resulting in overloaded structures. ERT attempted to contact CI. CI would not respond/provide any additional information. Construction dept concern.

O B Trent 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS __✓___

OTHERS (SPECIFY) _____

Construct Control

Bruce P Siefken 10/16/85
NSRS DATE

BSR

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER TS0170

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # IN-85-057-001

Category: 39 Confidentiality: _YES _NO (I&H)

Supervisor Notified: _X_YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: Inconsistency of Q.C. inspectors knowledge of procedures and application of procedures to inspections. ERT attemped to contact CI. CI would not respond/provide and additional details. Construction dept concern.

O.K. Thies 10/18/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS __✓___

OTHERS (SPECIFY) _____

Inspection
Inspectors

Bruce P. Siffen 10/18/85
NSRS DATE

PSR

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50170

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # IN-85-057-003

Category: 20 Confidentiality: _YES _NO (I&H)

Supervisor Notified: _X_YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: Integrity is degraded by rework even with Quality Control Inspectors. ERT attempted to contact CI. CI would not respond/provide any additional information. Construction dept concern.

O K Theis 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS ✓

OTHERS (SPECIFY) _____

QA effort

Bruce L Siglen 10/16/85
NSRS DATE

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50169

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # IN-85-947-002

Category: 19 Confidentiality: _YES _NO (I&H)

Supervisor Notified: ___YES _X_NO NUCLEAR SAFETY RELATED _YES_

Concern: Torque verification methods for redheads are not clearly defined: The 0-50 notes say, "...the torque shall be read while the nut is in a tightening motion." But craft have been told they will get an IRN if the bolt turns when the inspector checks the torque with the calibrated wrench. Construction dept concern. Steamfitters - 1985. CI has no more information.

O A Pace 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS __✓___

OTHERS (SPECIFY) _____

Hangers
050 Notes

Bruce L Siffers 10/18/85
NSRS DATE

FSR

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50169

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # IN-85-947-004

Category: 43 Confidentiality: _YES _NO (I&H)

Supervisor Notified: ___YES _X_NO NUCLEAR SAFETY RELATED _YES_

Concern: A test of concrete anchor pull strength was to be conducted at 3200 lbs. The portapower unit which was used had on a 3000 lb. gauge. Enter the containment via ship's ladder to 720' el. Turn left, and go around containment to concrete wall. Hanger is on left (outer) at ± 730' el, in or below the last "window" (ice chute opening) (Occurred about June 1985 in Unit 2) Construction dept concern. CI has no further information.

O. K. Peace 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS ✓

OTHERS (SPECIFY) _____

civil anchors

Bruce L. Snyder 10/18/85
NSRS DATE

PSP

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER TS0170

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # IN-85-947-006

Category: 52 Confidentiality: _YES _NO (I&H)

Supervisor Notified: ___YES _X_NO NUCLEAR SAFETY RELATED _YES_

Concern: TVA is more concerned about arc strikes on hanger base plates than about mechanical dents and gouges in main steam piping. CI feels inspection criteria is inadequate. Construction dept concern. CI has no more information.

O.T. Rees 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS __✓___

OTHERS (SPECIFY) _____

Inspection criteria

Bruce L. Siebken 10/18/85
NSRS DATE

May 16

PSE

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50170

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # IN-85-947-007

Category: 11 Confidentiality: _YES _NO (I&H)

Supervisor Notified: ___YES _X_NO NUCLEAR SAFETY RELATED _YES_

Concern: Hanger 2-63-209, (~ el. 720, Unit 2 containment) is designed with too little clearance between its sharp edges and the 1" to 1 1/2" stainless steel line that runs through it. During plant operation, vibration and/or shock loading could cause the hanger to damage the stainless pipe. Construction dept concern. CI has no further information.

O. B. Thrasher 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS _✓___

OTHERS (SPECIFY) _____

Hanger Install

Bruce P. Snyder 10/18/85
NSRS DATE

BSR

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50169

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # IN-86-112-001

Category: 31 Confidentiality: _YES _NO (I&H)

Supervisor Notified: _X_YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: The use of calibrated instruments and tools is not to properly documented. The personnel responsible for this activity receive inadequate procedural training. Nuc power dept concern- Unit 1. CI has no further information.

O.S. Hess 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS ___✓___

OTHERS (SPECIFY) _____

Operations Control

Bruce L. Loftin 10/18/85
NSRS DATE

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50169

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # IN-86-115-001

Category: 41 Confidentiality: _YES _NO (I&H)

Supervisor Notified: ___YES _X_NO NUCLEAR SAFETY RELATED _YES_

Concern: Self Drilling Expansion Shell anchors are being overtorqued. This is done to correct excessive gap between baseplate and wall. Craft personnel are not trained to the requirements of Spec. G-32 paragraph 3.2. Construction dept concern- CI has no further information. Units 1 & 2.

O R Thiro 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS ✓

OTHERS (SPECIFY) _____

Civil
Anchors

Bruce R. Sieglen 10/16/85
NSRS DATE

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER TS0169

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # IN-86-135-003

Category: 39 Confidentiality: _YES _NO (I&H)

Supervisor Notified: _X_YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: Instrumentation lines and supports were not completely inspected in Unit 1. CI doesn't know if walkdowns were performed to verify if documentation agreed with hardware installation. No specific systems identified by CI. Construction dept concern. CI has no further information.

O.B. Hess 10/11/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS ___✓___

OTHERS (SPECIFY) _____

Manager Instead

Bruce L. Siefken 10/11/85
NSRS DATE

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50172

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern: OW-85-003-001

Category: 33 Confidentiality YES NO (I&H)

Supervisor Notified: YES N/A NO NUCLEAR SAFETY RELATED YES

Concern: THE BOX ANCHORS ON THE 3/4" AND 1" STAINLESS PIPE (NO FURTHER LOCATION DETAILS KNOWN) ARE OVER-ENGINEERED. CI IS CONCERNED THAT WHEN "ALL THAT METAL IS WELDED ON", THE PIPE HAS TO GET SO HOT THAT IT COULD ADVERSELY AFFECT THE PIPE MATERIAL. CI HAS NO FURTHER INFORMATION.

NO FOLLOW UP REQUIRED.

O K Thee 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT ___

NSRS ✓

OTHERS (SPECIFY) _____

Bruce L Sieglen 10/21/85
NSRS DATE

Design Adequacy

PSF

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50172

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern: OW-85-003-002

Category: 33 Confidentiality YES NO (I&H)

Supervisor Notified: YES NO NUCLEAR SAFETY RELATED YES

Concern:CRAFT PERSONNEL CONSTANTLY COMPLAINED ABOUT THE "SORRY JOB THE WELDING MACHINES WERE DOING". CI FEELS THAT TVA DID NOT HAVE THE PROPER MACHINES NEEDED FOR THE JOB. CI HAS NO FURTHER INFORMATION.

NO FOLLOW UP REQUIRED.

O K Thorp 10/10/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT ____

NSRS ✓

OTHERS (SPECIFY) _____

welding equipment

Bruce L. Scoffin 10/21/85
NSRS DATE

PSR

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50169

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # WI-85-040-002

Category: 19 Confidentiality: _YES _NO (I&H)

Supervisor Notified: _X_YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: ERCW cement mortar lining was installed utilizing an inadequate procedure & inspection plan which resulted in bad workmanship & a number of NCRs in 1982. Details known to QTC, withheld due to confidentiality. Construction dept concern. CI has no further information.

O.K. Dent 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS __✓___

OTHERS (SPECIFY) _____

Mechanical
ERCW

Bruce L. Siefken 10/18/85
NSRS DATE

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50170

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # WI-85-040-004

Category: 52 Confidentiality: _YES _NO (I&H)

Supervisor Notified: ___YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: The ERCW pipe lines were not constructed on the natural shale bed as the requred base support. The sand, with in 10-15 feet of the shale, was no excavated. The base support of these pipes is silty sand. In a seismic event, the sand could potentially liquefy and leave the pipes un-supported which could cause the rupture of the pipes and cut-off the water supply to the reactors. Construction dept concern. CI has no further information.

O. K. Thero 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS __✓___

OTHERS (SPECIFY) _____

Civil Backfill

Bruce F. Sullivan 10/16/85
NSRS DATE

May 11

PSR

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER TS0170

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # WI-85-064-006

Category: 88 Confidentiality: _YES _NO (I&H)

Supervisor Notified: _X_YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: Weld documentation has been "manipulated". Construction dept concern. CI refused to provide any further information.

O B Thrue 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS ___✓___

OTHERS (SPECIFY) _____

Welding Document

Bruce L Loftin 10/16/85
NSRS DATE

May 16

TSK

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50172

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern: XX-85-102-005

Category: 51 Confidentiality YES NO (I&H)

Supervisor Notified: X YES NO NUCLEAR SAFETY RELATED YES

Concern: BROWN'S FERRY: HARDWARE IS NOT PROPERLY IDENTIFIED IN THE FIELD. A PERSON NEEDS A DRAWING TO IDENTIFY IT. NUCLEAR POWER DEPT CONCERN. CI HAS ADDITIONAL INFORMATION

NO FOLLOW UP REQUIRED.

O. K. Rose 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT ___

NSRS ✓

OTHERS (SPECIFY) ___

Operations control

Bruce F. Sieffers 10/21/85
NSRS DATE

151

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50172

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern: XX-85-102-006

Category: 39 Confidentiality YES NO (I&H)

Supervisor Notified: X YES NO NUCLEAR SAFETY RELATED YES

Concern: BROWN'S FERRY: THE VISUAL EXAMINATION PROCEDURE WHICH COVERS ASME SECTION II IS VERY NON SPECIFIC. NUCLEAR POWER DEPT. CONCERN. CI HAS NO ADDITIONAL INFORMATION.

NO FOLLOW UP REQUIRED.

O K Thero 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT ___

NSRS ✓

OTHERS (SPECIFY) _____

Bruce A Crofton 10/21/85
NSRS DATE

Welding Inspection

May 16

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50172

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern: XX-85-102-007

Category: 57 Confidentiality YES NO (I&H)

Supervisor Notified: X YES NO NUCLEAR SAFETY RELATED YES

Concern: BROWN'S FERRY: NDE INSPECTORS CAN ONLY WRITE A NOTICE OF INSPECTION ON IN-SERVICE RELATED DEFECTS. PRESERVICE DEFECTS CAN ONLY BE IDENTIFIED BY A MAINTENANCE REQUEST. NUCLEAR POWER DEPT. CONCERN. CI HAS NO ADDITIONAL INFORMATION.

NO FOLLOW UP REQUIRED.

Ozzie Thaxton 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT ___

NSRS ✓

OTHERS (SPECIFY) _____

Bruce L. Siefken 10/21/85
NSRS DATE

QA
effect

P5

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50172

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern: XX-85-102-009

Category: 93 Confidentiality YES NO (I&H)

Supervisor Notified: X YES NO NUCLEAR SAFETY RELATED NO ~~YES~~ BB

Concern: BROWN'S FERRY: THE PERMANENT PLANT HEALTH PHYSICS PEOPLE ARE POORLY TRAINED. CI DOES NOT FEEL THE PRESENT HP STAFF HAS AN ADEQUATE KNOWLEDGE OF WORKING IN RADIATED AREAS. NUCLLEAR POWER DEPT. CONCERN. CI HAS NO ADDITIONAL INFORMATION.

NO FOLLOW UP REQUIRED.

O K Thero 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT ___

NSRS ✓

OTHERS (SPECIFY) _____

Operations Contact

Bruce A. Scaggs 10/21/85
NSRS DATE

May 16

FSR

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50172

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern: XX-85-102-010

Category: 5 Confidentiality YES NO (I&H)

Supervisor Notified: X YES NO NUCLEAR SAFETY RELATED YES

Concern: BROWN'S FERRY: THE QUALITY PROGRAM AT BROWN'S FERRY LIMITS THE PROPER DOCUMENTATION AND REPAIR OF DEFECTS. IF INSPECTORS OBSERVE DEFECTS IN EQUIPMENT WHICH THEY WERE NOT AUTHORIZED TO INSPECT, THEY ARE NOT ALLOWED TO DOCUMENT THE DEFICIENCY IN A PROGRAMMATIC WAY WHICH ASSURES DOCUMENTED INSPECTION AND REPAIR. NUCLEAR POWER CONCERN. CI HAS NO ADDITIONAL INFORMATION.

NO FOLLOW UP REQUIRED.

D B Thro 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT ____

NSRS ✓

OTHERS (SPECIFY) _____

Bruce L. Loftin 10/21/85
NSRS DATE

QA effect

May 16

PSF

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50172

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern: XX-85-102-011

Category: 57 Confidentiality YES NO (I&H)

Supervisor Notified: X YES NO NUCLEAR SAFETY RELATED YES

Concern: SEQUOYAH: NDE INSPECTORS CAN ONLY WRITE A NOTICE OF INSPECTION ON IN-SERVICE RELATED DEFECTS. PRESERVICE RELATED DEFECTS CAN ONLY BE IDENTIFIED BY A MAINTENANCE REQUEST. NUCLEAR POWER DEPT. CONCERN. CI HAS NO FURTHER INFORMATION.

NO FOLLOW UP REQUIRED.

O K Price 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT ____

NSRS ✓

OTHERS (SPECIFY) _____

Operations contact

Bruce A Scalice 10/21/85
NSRS DATE

PSE

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50172

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern: XX-85-102-012

Category: 93 Confidentiality YES NO (I&H)

Supervisor Notified: X YES NO NUCLEAR SAFETY RELATED ~~NO~~ YES BY.

Concern: SEQUOYAH: THE PERMANENT PLANT HEALTH PHYSICS PERSONNEL ARE POORLY TRAINED. CI DOES NOT FEEL THE PRESENT HP STAFF HAS AN ADEQUATE KNOWLEDGE OF WORKING IN RADIATED AREAS. NUCLEAR POWER DEPT. CONCERN. CI HAS NO ADDITIONAL INFORMATION.

NO FOLLOW UP REQUIRED.

O K Thrasher 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT ___

NSRS ✓

OTHERS (SPECIFY) _____

Operations Control

Bruce L Sefflow 10/21/85
NSRS DATE

EMPLOYEE CONCERN ASSIGNMENT REQUEST

TO: Director - NSRS TRANSMITTAL NUMBER T50171

ERT has received the Employee concern identified below, and has assigned the indicated category and priority:

Priority: 1 Concern # XX-85-104-X01

Category: 53 Confidentiality: _YES _NO (I&H)

Supervisor Notified: ___YES ___NO NUCLEAR SAFETY RELATED _YES_

Concern: Bellefonte: CI questions QC inspection and quality of ERCW lining work at Bellefonte site with one QC inspector on the job, when WBNP experienced quality problems on ERCW lining at Watts Bar with five QC inspectors on the job. Furthermore, at Bellefonte, the contractor filled out TVA QA documentation. Construction dept concern. CI has no further information.

O. J. Powell 10/16/85
MANAGER, ERT DATE

NSRS has assigned responsibility for investigation of the above concern to:

ERT ___

NSRS/ERT _____

NSRS _✓___

OTHERS (SPECIFY) _____

Mechanical
ERCW

Bruce F. Griffin 10/21/85
NSRS DATE

NEC

TVA 64 (05-9-85)

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : E. R. Ennis, Acting Site Director, Watts Bar Nuclear Plant

FROM : K. W. Whitt, Director of Nuclear Safety Review Staff, E3A6 C-K

DATE : OCT 21 1985

SUBJECT: CORRECTIVE ACTION RESPONSE EVALUATION

REPORT NO. : I-85-130-WBN

SUBJECT : Air Lock Air Flow

CONCERN NO.: N/A

(X) ACCEPT ( ) REJECT

( ) ACCEPT WITH COMMENT

K. W. Whitt

cc (Attachment):
H. N. Culver, W12A19 C-K
W. F. Willis, E12B16 C-K (4)
QTC/ERT, CONST-WBN--For response to employee.

0040U

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

TVA 64 (05-9-65)

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : K. W. Whitt, Director, Nuclear Safety Review Staff, E3A8 C-K

FROM : Guenter Wadewitz, Project Manager, Watts Bar Nuclear Plant OC

DATE : OCT 08 1985

SUBJECT: WATTS BAR NUCLEAR PLANT - NUCLEAR SAFETY INVESTIGATION REPORT

Attached is our response to NSRS Report No. I-85-130-WBN.

Guenter Wadewitz

GW:LR
Attachments

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

RESPONSE TO NSRS REPORT NO. I-85-130-WBN

Regarding the safety hazard at personnel lock/submarine hatch, unit 2, reactor building, we concur with the findings that the air flow presents a safety hazard. As a result, a wire cage is being placed on top of and around part of the hatch. Part of the cage is already installed, and a wire gate will be completed by September 23, 1985.

We cannot reduce the air flow in this area, as it would have a direct effect on air circulation and fresh air in the reactor containment area. This would result in an increase in our breathing air contaminants caused by welding fumes and dust particles in containment; we are trying to maintain or improve this condition. Additionally, the circulation helps to reduce heat in the building. The only other alternative we have for getting fresh air into the building is to cut a hole in the shield wall or containment. This, however, would be very costly and impractical.

A memorandum to all trades and labor employees will be issued by October 3, 1985, informing them of the hazards that air flow creates at the personnel hatch. They will also be reminded that they are to carry only small tools and materials they can secure upon their person while walking through this area. In addition, warning signs will be posted on each side of the personnel lock to remind employees of the potential hazard.

Principally prepared by Randy W. Higginbotham, extension 236

NRC

TVA 64 (05-9-85)

UNITED STATES GOVERNMENT

Memorandum TENNESSEE VALLEY AUTHORITY

TO : E. R. Ennis, Acting Site Director, Watts Bar Nuclear Plant

FROM : K. W. Whitt, Director of Nuclear Safety Review Staff, E3A8 C-K

DATE : OCT 21 1985

SUBJECT: NUCLEAR SAFETY REVIEW STAFF INVESTIGATION REPORT TRANSMITTAL

Transmitted herein is NSRS Report No. I-85-415-WBN

Subject HYDRAZINE SPILL

Concern No. IN-86-055-003

and associated recommendations for your action/disposition.

It is requested that you respond to this report and the attached recommendations by November 1, 1985. Should you have any questions, please contact Terry Frizzell at telephone 3818-WBN.

Recommend Reportability Determination: Yes ____ No X

Director, NSRS/Designee

Attachment
cc (Attachment):
H. N. Culver, W12A19 C-K
QTC/ERT, Watts Bar Nuclear Plant
W. F. Willis, E12B16 C-K (4)

--Copy and Return--

To : K. W. Whitt, Director of Nuclear Safety Review Staff, E3A8 C-K

From: _____

Date: _____

I hereby acknowledge receipt of NSRS Report No. I-85-415-WBN
Subject HYDRAZINE SPILL for action/disposition.

_____ Signature _____ Date

0037U

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

TENNESSEE VALLEY AUTHORITY

NUCLEAR SAFETY REVIEW STAFF

NSRS INVESTIGATION REPORT NO. I-85-415-WBN

EMPLOYEE CONCERN IN-86-055-003

MILESTONE 1

SUBJECT: HYDRAZINE SPILL

DATES OF INVESTIGATION: September 19-October 9, 1985

INVESTIGATOR: _____ 10.17.85
T. O. Frizzell Date

REVIEWED BY: _____ 10-17-85
G. G. Brantley Date

APPROVED BY: _____ 10/17/85
M. A. Harrison Date

I. BACKGROUND

NSRS has investigated Employee Concern No. IN-86-055-003 which was communicated to the Quality Technology Company (QTC) in response to the Watts Bar Employee Concern Program. The specific concern analyzed and discussed in this report was expressed to QTC as follows:

"1984. 300 gallons of hydrazine spilled in RB1. lower containment."

QTC relayed to the NSRS that the individual who submitted this concern had no further information on the incident. However, the concern implies inadequacies related to plant operations, procedure adherence, and/or control of valve and systems operation.

II. SCOPE

The scope of the investigation was directed at verification of the event occurrence, determination of the root cause of the event if substantiated, assessment of the industrial safety and health controls and actions associated with handling the hydrazine spill, and review of the actions taken to prevent recurrence of the incident. During the conduct of the inquiry, examinations were made of WBN Operations Section daily journals for 1984, as well as activity log books of the WBN Building Services and Industrial Safety and Fire Protection Engineering Sections. Reviews were also made of the procedures and records related to the event occurrence to include the WBN Hazard Control Instructions, Operations Instructions, Administrative Instructions, 1984 CAR/DR Logs, Clearance Sheets (form TVA 7295), and Temporary Alteration Control Forms (form TVA 6266). Additionally, interviews were conducted with cognizant NUC PR management and implementing personnel from the following WBN sections: Building Services, Industrial Safety and Fire Protection Engineering, Operations, Instrument Maintenance, Quality Assurance, and Engineering.

III. SUMMARY OF FINDINGS

A. Based on the results of record reviews and personnel interviews, it was substantiated that on 7/21/84, a spill of steam generator layup water to the Unit 1 lower containment occurred. The volume of the spill was documented as being between 250 and 350 gallons and contained approximately 160 parts per million (ppm) hydrazine. The source of the spill was a burst tygon tube which was attached to steam generator No. 1 upper and lower tap-root valves for the purpose of measuring layup-water levels due to inoperable normal-level monitoring instrumentation. It was verified that in accordance with the criteria of WBN Administrative Instruction AI-2.15, "Temporary Alterations," the Operations Section processed a Temporary Alteration Control Form (No. 1-84-36-3) on 4/1/84 to document installation of the tygon tubing on all four steam generators.

B. By procedure, hydrazine is employed in the secondary side of the steam generator at concentrations of approximately 150 ppm as an oxygen-scavenging agent. During the timeframe of the incident, the hydrazine solution was introduced into the steam generator from the Unit 1 hydrazine supply tank via the chemical feed pumps and the condensate feedwater system. There is no source of pumping concentrated hydrazine directly into the containment building. The Industrial Safety Supervisor states that there is no known potential personnel safety or health hazard associated with hydrazine spills at the concentrations utilized in the steam generators.

C. Cleanup of the spilled layup water by the Building Services personnel was initiated by the Operations Shift Engineer after termination of the leak source, blocking off the area with caution signs, and analysis of the hydrazine concentration by Engineering Section chemistry technicians. Actual cleanup did not commence until the Industrial Safety Staff had been contacted for specific guidance. Building Services workers were advised as a purely precautionary measure to dilute the spill with DI water to below 100 ppm hydrazine and to wear protective clothing (rain suits and respirators) during the cleanup. Records indicate that after dilution of the spill the hydrazine concentration was only 60 ppm. Interviews with the cleanup personnel and a review of the Building Services Supervisor's activity log book indicated that all Industrial Safety Staff recommendations were properly implemented.

D. As previously discussed, the direct cause of the layup-water spill was due to the rupture of a tygon tube being utilized to measure the steam generator (S/G) No. 1 water level. Cognizant Operations and Engineering Section personnel indicate that the use of tygon tubing in this "abnormal configuration" is an acceptable practice for determining the fluid level in any tank when normal level-monitoring instrumentation is not available. From the unit operator's daily journal, it was noted that on 7/15/84 S/G No. 1 was filled with layup water and nitrogen placed on it. No other Operations' daily journal entries regarding S/G No. 1 were made prior to the 7/21/85 entry on the tygon-tube rupture. Analysis of the operational activities during this timeframe indicates that the S/G No. 1 feedwater isolation valve was slowly leaking causing a pressure buildup in the S/G and tygon tube from the feedwater system that ultimately resulted in the tygon tube's rupture. Leakage of the feedwater isolation valve was also indicated by the Cognizant Engineering Section personnel due to changes in S/G chemical levels and layup water levels. However, rupture of the tygon tube would not have occurred if the tap-root valves to which the tygon was attached had been isolated.

E. The review of Operations' daily journals also revealed that on 7/17/84 the tygon tube attached to measure layup-water levels in the No. 2 S/G blew off and caused a water leak which required isolation. Even though a similar event occurred just four days later (the 7/21/84 spill), reviews of the 1984 CAR/DR log books verified that no long-term corrective actions were initiated to assure continued prevention of the event's recurrence. However, records do indicate that as a result of the 7/21/84 layup-water spill, the on-duty Operations Shift Engineer issued a Caution Order (No. 19523) on the S/G tygon tubes which required isolation of the upper and lower tap-root valves except when checking layup-water levels. This Caution Order was kept in effect until removal of the tygon tubing from the four S/Gs on 8/10/84; and as stipulated in WBN Administrative Instruction AI-2.12, "Clearance Procedure," issuance of the Caution Order was an appropriate immediate corrective action for handling the "abnormal configuration." It should be noted that the clearance procedure is the method used in NUC PR for the protection of personnel and equipment; and, specifically, the caution order is utilized where hazardous or abnormal conditions exist.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

1. The employee concern as stated was substantiated. Specifically, conduct of this NSRS investigation verified that an approximate 300-gallon spill of S/G layup water containing hydrazine did in fact occur in 1984. However, the hydrazine concentration of the layup water was at such small levels that there were no potential health hazards associated with the event. Cleanup of the spill was appropriately managed under the cognizance of the WBN Industrial Safety Staff, and the actions of the Operations Section in handling the indicent (i.e., isolating leak, posting area, obtaining chemical analysis of hydrazine concentration, initiating cleanup, and issuing a Caution Order on the S/G tygon tubing to prevent any additional spills of this nature during the remaining timeframe of the temporary system alteration) were satisfactory.

2. It was verified that S/G layup water was spilled on at least two separate occasions (7/17/84, S/G No. 2; and 7/21/84, S/G No. 1) due to problems with use of the tygon tubing. Even though the similar precursor event occurred, no immediate corrective actions were taken to prevent the second incident which resulted in the 300-gallon layup-water spill. As a result of the 7/17/84 spill incident, actions should have been initiated to assess root cause and generic applicability and steps taken to assure that future occurrences of this nature were prohibited.

3. It was assessed that the use of tygon tubing for obtaining visual indications of container fluid levels is an acceptable temporary configuration when normal level-monitoring instrumentation is not available. However, there were no established procedural controls identified which would support or assure proper selection, installation, and use of the tubing.

B. Recommendations

I-85-415-WBN-01 - Delayed Recurrence Control Execution

WBN management should emphasize to the plant staff that a recurrence control program is in place (CAR/DR system) that should be promptly used without hesitation to analyze events of this nature to determine root cause and generic applicability and to assure that decisive corrective action is taken to prevent recurrence.

I-85-415-WBN-02 - Inadequate Procedural Controls

Requirements should be clearly established and delineated in writing which provide criteria for the selection, installation, and use of tygon tubing in abnormal configurations for water-level measurement. In particular, the criteria should stipulate that any time tygon tubing is utilized, the root valves to which the tubing is attached must be controlled by an issued Caution Order which requires that the valves be opened only while actually monitoring the fluid levels.

NRC

TVA 64 (08-9-85)

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : E. R. Ennis, Acting Site Director, Watts Bar Nuclear Plant

FROM : K. W. Whitt, Director of Nuclear Safety Review Staff, E3A8 C-K

DATE : OCT 21 1985

SUBJECT: NUCLEAR SAFETY REVIEW STAFF INVESTIGATION REPORT TRANSMITTAL

Transmitted herein is NSRS Report No. I-85-170-WBN & I-85-425-WBN

Subject INADEQUATE REVIEW OF PLANT PROCEDURES BY PORC

Concern No. IN-85-457-001/IN-86-090-003

and associated recommendations for your action/disposition.

It is requested that you respond to this report and the attached recommendations by November 1, 1985. Should you have any questions, please contact J. D. Smith at telephone 3834-WBN.

Recommend Reportability Determination: Yes ____ No X

Director, NSRS/Designee

Attachment
cc (Attachment):
H. N. Culver, W12A19 C-K
QTC/ERT, Watts Bar Nuclear Plant
W. F. Willis, E12B16 C-K (4)

--Copy and Return--

To : K. W. Whitt, Director of Nuclear Safety Review Staff, E3A8 C-K

From: _____

Date: _____

I hereby acknowledge receipt of NSRS Report No. I-85-170/425-WBN
Subject Inadeq Rev/PORC for action/disposition.

_____ Signature _____ Date

0039U

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

TENNESSEE VALLEY AUTHORITY

NUCLEAR SAFETY REVIEW STAFF

NSRS INVESTIGATION REPORT NOS. I-85-170-WBN AND I-85-425-WBN

EMPLOYEE CONCERNS IN-85-457-001 AND IN-86-090-003

MILESTONE 1

SUBJECT: INADEQUATE REVIEW OF PLANT PROCEDURES BY PLANT OPERATIONS REVIEW COMMITTEE (PORC)

DATES OF INVESTIGATION: September 19-October 3, 1985

LEAD INVESTIGATOR: J. D. Smith — J. D. Smith — 10-11-85 Date

INVESTIGATOR: R. L. Newby — R. L. Newby — 10-11-85 Date

REVIEWED BY: P. R. Washer — P. R. Washer — 10-16-85 Date

APPROVED BY: M. A. Harrison — M. A. Harrison — 10/22/85 Date

I. BACKGROUND

NSRS has investigated employee concerns IN-85-457-001 and IN-86-090-003 which Quality Technology Company identified during the Watts Bar Employee Concern Program. The concerns were worded:

IN-85-457-001

"Inadequate review of plant procedures by Plant Operations Review Committee (PORC). Reviews not conducted in accordance with AI-3.1 (refer to site surveillance instructions procedure)."

IN-86-090-003

"Several hundred S.I.'s were approved by the Power Operations Review Committee (PORC) without performing required reviews. AI-1.1 and 3.1 provides for a PORC review of a procedure if an 'informal PORC review' had not been performed. 'Reviews' were a result of an NRC finding."

II. SCOPE

The scope of the investigation was determined from the stated concern to be: Numerous Surveillance Instructions (SIs) did not have an Informal Plant Operations Review Committee (PORC) Review (IPR) prior to formal PORC review. It should be noted that PORC reviews but does not actually "approve" instructions. NSRS reviewed the implementing procedures governing PORC review of procedures, PORC meeting minutes for the last six months, a random sampling of issued SIs, and interviewed PORC representatives during this investigation.

III. SUMMARY OF FINDINGS

Based on review of applicable documents and interviews with responsible personnel, which included PORC members, the NSRS substantiated the identified concern. This is based on the following.

A. Interview with a PORC representative which revealed that some SIs have gone through formal PORC review that should have been routed on an Informal PORC Review (IPR) in accordance with WB-AI-3.1, paragraph 5.3.4, so that a technical adequacy review could be performed. The time period stated was between April and July of 1985.

B. The investigators reviewed selected SIs which had been reviewed, approved by the Plant Manager, and issued since March 1985. All the SIs selected received formal PORC review as indicated in PORC meeting minutes; however, only 19 of 42 reviewed had a documented IPR. By the criteria of AI-3.1, Paragraph 5.3.4, which is used to determine if an IPR is needed, 10 additional SIs of the 42 selected should have had an IPR; i.e., they were a "general" or "all" revision. The PORC meeting minutes do not denote any discussion of instructions or if formal review was based on an IPR.

C. The reviews performed by PORC (both formal and informal) had previously been determined by NRC inspections and Plant QA Staff reviews to have been inadequate to assure comprehensive technical adequacy of the SI program. A review program in response to the NRC Inspector Followup Item 390/85-21-06 was initiated in February 1985 to review the SIs for technical adequacy. This was done and the SIs were revised, reviewed by PORC, and issued. Upon followup by the NRC, additional problems were identified which resulted in NRC violation 390/85-32-02. As a result of this violation a second SI program review was initiated by WBN (RIMS T01 850501 626) to "again do a technical review . . ." of SIs that had already had a "technical soundness" (AI-3.1, Paragraph 5.3.4.9) review performed by PORC.

D. A related problem with the IPR was recently identified by the Plant QA Staff (PQA). PQA has performed three activity surveys on IPR comment incorporation by responsible sections. Numerous comments were identified by PQA that were not incorporated or resolved prior to formal PORC review. These have been documented on plant Discrepancy Reports (DRs), and corrective action is taking place.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This concern was substantiated since IPRs were not performed on certain SIs reviewed by the investigator; personnel interviewed confirmed that for a period of time IPRs were not performed as needed; and, if IPRs were adequately performed previously, the constant additional technical reviews would not be warranted.

Recommendations

The current SI review program should provide assurance that the SIs are technically sound. However, the following recommendations are necessary to ensure that PORC reviews are adequate.

A. I-85-170-WBN-01

Revise WB-AI-3.1 to require an IPR for all initial issues and all changes of a technical nature to all instructions, not just SIs, except emergency changes.

B. I-85-170-WBN-02

Expand the content of the PORC meeting minutes to include descriptive text of procedure discussions, and indicate if the review was based on an IPR.

C. I-85-170-WBN-03

Consider the establishment of a program, such as instruction qualification (validation), which will prove technical adequacy of the previously PORC-reviewed and -issued instructions.

TVA 64 (05-9-65)

NRC

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : E. R. Ennis, Acting Site Director, Watts Bar Nuclear Plant

FROM : K. W. Whitt, Director of Nuclear Safety Review Staff, E3A8 C-K

DATE : OCT 21 1985

SUBJECT: NUCLEAR SAFETY REVIEW STAFF INVESTIGATION REPORT TRANSMITTAL

Transmitted herein is NSRS Report No. I-85-527-WBN

Subject POSSIBLE BARRIER BREACH

Concern No. EX-85-049-001

and associated recommendations for your action/disposition.

It is requested that you respond to this report and the attached recommendations by November 1, 1985. Should you have any questions, please contact R. C. Cutshaw at telephone 3735-WBN.

Recommend Reportability Determination: Yes ____ No X

Director, NSRS/Designee

Attachment
cc (Attachment):
H. N. Culver, W12A19 C-K
QTC/ERT, Watts Bar Nuclear Plant
W. F. Willis, E12B16 C-K (4)

--Copy and Return--

To : K. W. Whitt, Director of Nuclear Safety Review Staff, E3A8 C-K

From: _____

Date: _____

I hereby acknowledge receipt of NSRS Report No. I-85-527-WBN
Subject POSSIBLE BARRIER BREACH for action/disposition.

_____ Signature _____ Date

0038U

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

TENNESSEE VALLEY AUTHORITY

NUCLEAR SAFETY REVIEW STAFF

NSRS INVESTIGATION REPORT NO. I-85-527-WBN

EMPLOYEE CONCERN EX-85-049-001

*MILESTONE 1

SUBJECT: POSSIBLE BARRIER BREACH

DATES OF INVESTIGATION: October 4-7. 1985

INVESTIGATOR: R. C. Cutshaw — Date: 10-16-85

REVIEWED BY: G. G. Brantley — Date: 10-17-85

APPROVED BY: M. A. Harrison — Date: 10/22/85

*Note: This concern was not reviewed by the Milestone Review Committee. It was assigned a milestone 1 investigation priority by NSRS upon receipt due to the nature of the concern.

I. BACKGROUND

A. A concern was received by the Quality Technology Company Employee Response Team that stated:

> Above floor elevation 713' and 737' South of the elevator it is possible for a person to walk on the cable trays (running East and West) and cross between Units 1 and 2, as there is no security barrier in this area. CI feels that this is a breach of security. Nuclear Power concern. CI has no further information.

B. This concern was transferred to NSRS at 1500 hours on 10/3/85. Due to the nature, this concern was immediately passed to NUC PR authorities for information and action.

II. SCOPE

The scope of this investigation was determined by the concern of record: To determine if there was a possible security breach in the enhancement portion of the Unit 1/2 interface barrier fence at the location(s) mentioned.

III. SUMMARY OF FINDINGS

A. The barrier in question was the barbed-wire stranding utilized to enhance the security of the area between the top of the interface fence (elev. 713) and the ceiling above (elev. 737) or upward to other barriers such as cable trays, piping, columns, etc.

B. The "enhancement" portion of the barrier, while not specifically required, was the result of a verbal recommendation made by NRC Region 2 Security Inspector Bervin Hall in July of 1984 and is not committed to or mentioned in the WBNP Physical Security and Contingency Plan (Rev. 13) dated 4/12/85.

C. A memorandum from Cottle to Wadewitz stated that the enhancement portion of the interface fence was not configured to stop a dedicated entry effort. It was added to the required interface fence to "preclude easy or inadvertent access."

D. A similar concern (IN-85-233-001) was received by QTC, passed to the NUC PR Public Safety Service, and acted upon in June 1985 by hardening an adjacent portion of the enhancement barrier.

E. On October 3, 1985, a walkdown inspection of the area(s) in question revealed a possible location where a dedicated person might cross from Unit 2 to Unit 1.

F. As a result of E above, the PSS Patrol Force was advised to increase its surveillance of the area in question.

G. The PSS has requested that the area in question be hardened by adding strands of wire to the existing interface fence enhancement wire.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

1. The concern of record was substantiated in that a dedicated person could pass between Units 1 and 2 at the area in question.

2. The increased surveillance of the area by PSS patrols and the hardening of the enhancement portion of the interface barrier should mitigate the concern.

B. Recommendations

I-85-527-WBN-01 - Increased Enhancement of the Unit 1/2 Interface Barrier

The enhancement portion of the interface barrier should be hardened as requested by PSS and increased surveillance provided as planned. The enhancement portion of the Unit 1/2 interface barrier should be addressed in the WBNP Physical Security and Contingency Plan as to its description and performance objectives.

NRC

TVS 84 (05-8-85)

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : S. Schum, QTC-ERI Program Manager, WBN CONST

FROM : K. W. Whitt, Director of Nuclear Sfety Review Staff, E3A8 C-K

DATE : OCT 18 1985

SUBJECT: TRANSMITTAL OF ACCEPTED FINAL REPORTS

The following final reports have been reviewed and accepted by NSRS and are transmitted to you for preparation of employee responses.

IN-85-581-002	
IN-85-915-002	
IN-85-853-X02	

K. W. Whitt

Please acknowledge receipt by signing below, copying and returning this form to J. T. Huffstetler, E3B37 C-K

Name _____ Date _____

Attachments
cc (Attachments):
H. N. Culver, W12A19 C-K
W. F. Willis, E12B16 C-K (4)
T. R. Ennis, WBN

REPO7:G4

TENNESSEE VALLEY AUTHORITY

NUCLEAR SAFETY REVIEW STAFF

NSRS INVESTIGATION REPORT NO. I-85-445-WBN

EMPLOYEE CONCERN IN-85-581-002

MILESTONE 1

SUBJECT: WELDERS TERMINATING ELECTRICAL CABLE

DATES OF INVESTIGATION: September 27-October 4, 1985

LEAD INVESTIGATOR: P. R. Bevil — Date: 10/17/85

INVESTIGATOR: G. R. Owens — Date: 10/17/85

REVIEWED BY: P. B. Border — Date: 10/17/85

APPROVED BY: M. A. Harrison — Date: 10/17/85

FINAL

I. BACKGROUND

NSRS has investigated the following employee concern which was identified to Quality Technology Company (QTC) during the WBN employee concern program.

> Welders which were not qualified as Electricians were used to terminate electrical cables. This was done on day shift at Senior Manager's (known) direction in the Aux Bldg - to - intake pump structure underground ducts. (Circa 1979, Construction)

II. SCOPE

NSRS reviewed plant records and interviewed plant personnel to determine if any evidence exists to indicate that nonelectrician welders have terminated cables. If applicable, a determination was made as to whether this situation could have caused a safety problem.

III. SUMMARY OF FINDINGS

A. Applicable Requirements and Commitments

The applicable procedure in effect at the time of the identified concern was WBNP-QCP-3.6, "Electrical and Instrumentation Equipment Installation, Standard Tests, Inspections, and Documentation," R7, 5/30/78; R8, 2/23/79; R9, 3/8/79; R10, 5/23/79; and, R11, 8/10/79.

B. Findings

1. During the middle to late 70s the WBN electrical section utilized welders to weld conduit and cable tray supports. This was done prior to the adequate availability of electrician welders; i.e., those who are qualified to perform both welding and electrician work. The concern of record alleges that at least some of these welders who were not qualified as electricians were directed by higher management to terminate cables. Therefore, the possibility of improper termination of CSSC cables and a resultant safety concern exists. During the investigation, NSRS attempted to identify the specific questionable cable terminations involved based on the information in the stated concern. The exact cable terminations, however, could not be identified from among potentially several hundred with the limited information given.

2. To help determine if a problem actually existed and, if applicable, its frequency of reoccurrence, NSRS interviewed several electrical section personnel who worked at WBN in 1979, the general timeframe of the identified problem.

3. Except for very few isolated instances, the interviewees stated that they had not observed anyone performing electrician activities, such as terminating cable, other than electricians during the stated time period. Since these few instances did occur, however, NSRS reviewed the inspection process to determine the degree of assurance that any improper termination would have been corrected. After reviewing the inspection process and the inspection procedure in effect at the time of the identified problem (WBNP-QCP-3.6, R7-R11), it was judged that if CSSC cable was initially improperly terminated, the electrical engineering unit inspectors would have inspected, identified, and had corrected any cable termination anomaly. The WBN cable termination inspection process included: having an electrician disconnect each wire, checking for continuity, shorts, and grounds; checking for adequate crimping; verifying proper location of each wire; and then having the wires reterminated by an electrician.

4. Based on personnel discussion, there did not appear to be any NCRs or NRC findings on the specific subject concern.

Note: During the investigation it was also noted that TVA recently developed a craft position within the electrical section entitled subjourneyman. Plant personnel in these "helper" positions, it was found, terminate cable and perform other electrician work at times, although they are not classified as qualified electricians. No Construction QA procedures or instructions appeared to exist which govern what safety-related activities should not be performed by these unqualified personnel in these positions. The only document available which describes the duties of a subjourneyman is in a job description in the Division of Construction Policy Manual. This document describes only vague, general duties for the subjourneyman position; and the document is not a QA procedure or instruction.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The concern appeared to be substantiated. As stated previously, interviews with craft personnel indicated the specific concern of record could have occured. There is a high degree of assurance, however, that if it had occured, the frequency of occurrence would have been small and electrical quality control inspections would have both found and corrected any inadequate termination(s).

Recommendations

No action is required concerning the specific concern of record; however, the recommendations are proposed relative to work performed by subjourneymen and are addressed in NSRS Report IN-85-130-001.

TENNESSEE VALLEY AUTHORITY

NUCLEAR SAFETY REVIEW STAFF

NSRS INVESTIGATION REPORT NO. I-85-458-WBN

EMPLOYEE CONCERN IN-85-915-002

MILESTONE 6

SUBJECT: DRAWING CONTROL

DATES OF INVESTIGATION: October 1-7, 1985

INVESTIGATOR: John Knightly — J. J. Knightly — 10/17/85 — Date

REVIEWED BY: Paul B. Border — P. B. Border — 10/17/85 — Date

APPROVED BY: M. A. Harrison — 10/17/85 — Date

FINAL

I. BACKGROUND

The Nuclear Safety Review Staff (NSRS) investigated employee concern IN-85-915-002 which Quality Technology Company (QTC) identified during the Watts Bar Employee Concern Program. The concern was worded as follows:

> TVA requires drawing transmittals being returned to DCU to have the superseded drawing corners (containing title, number, etc.) attached. Why does DCU no longer verify these corners to be correct? CI has no further information.

II. SCOPE

NSRS has reviewed drawing control requirements, implementing instructions, sample drawing transmittals and receipts, logs of the verification sampling program for drawings, and recent audit findings concerning this subject. Additionally, several individuals responsible for transmittal, receipt, and audit of the drawings have been contacted to discuss effectiveness of the drawing control process as it relates to the employee's concern.

III. SUMMARY OF FINDINGS

A. Applicable Requirements and Commitments

1. 10CFR50, Appendix B - Document control measures shall assure that documents, including changes, "are distributed to and used at the location where the prescribed activity is performed."

2. Topical Report TVA-TR-75-1, Revision 8, Paragraph 17.1.64 - "Provisions shall be established, delineated, and executed to preclude the use of obsolete or superseded documents at locations where the prescribed activities are being performed. . . . An updated document list or equivalent shall exist to assure that obsolete or superseded documents are replaced in a timely manner by updated applicable document revisions."

3. NRC, NSRS, and TVA Office of Construction Quality Assurance Branch Audits and Reviews - One deviation related to the employee's concern was identified. This deviation is discussed later in this report under B.4.

4. Watts Bar Nuclear Plant Quality Control Instruction 1.01, "Drawing and Document Control."

B. Findings

1. In accordance with Quality Control Instruction QCI-1.01, "Drawing and Document Control," document holders acknowledge receipt of drawings by signing the drawing transmittal and returning it to the Document Distribution Center (DDC) along with the title block corners of superseded N and W size drawings, or the whole drawing for A and B size and vendor drawings. The Document Distribution Center personnel review the returned drawing transmittals to verify document holders have acknowledged receipt, and followup on document holders who fail to acknowledge. All returned title block corners and superseded drawings are discarded.

2. An early revision of the controlling procedure, WBN-QCI-1.01, Revision 4, dated June 14, 1982, specified that Drawing Control Unit personnel were to review ". . . that the required title blocks of the superseded drawings . . . have been returned." This requirement for verifying correctness of returned title blocks was deleted at Revision 5 dated September 1982. Revision 15 dated October 9, 1985 also deletes the requirement for return of the title blocks by document holders. The document control office supervisor stated that the administrative philosophy in the procedure is to place ultimate responsibility for controls with the document holders rather than with DCU.

3. Verification of drawing control is accomplished in three ways: (1) document holders periodically receive a list of controlled documents assigned to them and are required by procedure WBN-QCI-1.01-1, "Document Control Sampling," to ensure that the documents held are as shown by the issuing unit records; (2) DCU periodically samples holders of controlled documents to ensure that the documents held are as shown by the issuing unit records; and, (3) Quality Assurance performs document control audits which include verifications of drawing controls at work stations.

4. Document Distribution Center (DDC) personnel accomplish document control verification in accordance with Quality Control Instruction QCI-1.01-1, "Document Control Sampling" (initial issue 12/20/83). The results of their sampling verification are maintained by DDC in the Document Control Sample Results Logs. A review of these logs for 1985 showed levels of accuracy as follow: Of 3,974 drawings sampled at 48 engineers' and crafts' work stations, 3,908 (98.4 percent) were accurate in all attributes checked, with 3,958 (99.6 percent) accurate for revision level. Twenty drawings were found for which the holder was not on distribution. Only 2 drawings of the 3,974 were found to be old revisions not properly dispositioned.

5. A recent TVA Office of Construction Quality Assurance Branch audit (WB-A-85-07) evaluated document controls and reported that controlled documents at work stations were verified to be the current revisions. One audit finding of deviation (WB-A-85-07-D02) stated that the document control sampling program requirements were not always implemented on schedule and that some holders had not been checked. Following corrective action, this deviation was closed July 26, 1985 with a comment that the "self-audit verification appears to be in compliance." Additional discussions with the quality assurance personnel indicated considerable confidence in the present controls.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

A concern in this area is not substantiated. The previous title block verification has been replaced with other controls including: (1) DCU sampling; (2) Quality Assurance auditing; and, (3) document holders' self-verification from lists provided by the DCU. These verifications, which now indicate high levels of accuracy, are considered adequate.

B. Recommendation

None.