

TENNESSEE VALLEY AUTHORITY

KNOXVILLE, TENNESSEE 37902

400 West Summit Hill Drive, E3A8

50390

October 24, 1985

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulator Commission
Washington, D.C. 20555

Dear Mr. Denton:

Your letter to W. F. Willis dated September 26, 1985, requested copies of investigation reports and related documents dealing with potentially safety-related employee concerns on TVA's nuclear plants. Copies of the requested information as outlined in TVA's October 7, 1985, letter are enclosed and cover the period of October 14, 1985 through October 24, 1985. TVA has previously submitted copies of the requested information through October 11, 1985.

If you have questions concerning the material transmitted, please contact M. S. Kidd or B. F. Siefken at FTS No. 856-2289 or 856-6230, respectively.

Sincerely,

M. S. Kidd for
K. W. Whitt
Director, Nuclear Safety
Review Staff

Enclosures

cc (Enclosures):

Mr. James M. Taylor, Director
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. J. Nelson Grace
Regional Administrator
U. S. Nuclear Regulatory Commission, Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30323

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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 24 1985**

SUBJECT: NUCLEAR SAFETY REVIEW STAFF INVESTIGATION REPORT TRANSMITTAL

Transmitted herein is NSRS Report No. I-85-459-WBN

Subject Safeguards Drawing Incident

Concern No. IN-85-915-003

and associated recommendations for your action/disposition.

It is requested that you respond to this report and the attached recommendations by November 6, 1985. Should you have any questions, please contact R. C. Cutshaw at telephone 143-3735.

Recommend Reportability Determination: Yes X No

Original signed by
M. S. Kidd
 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-85-459-WBN
 Subject Safeguards Drawing Incident for action/disposition.

Signature

Date

0049U



TENNESSEE VALLEY AUTHORITY

NUCLEAR SAFETY REVIEW STAFF

NSRS INVESTIGATION REPORT NO. I-85-459-WBN

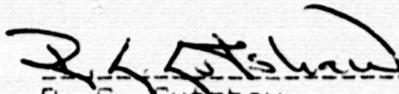
EMPLOYEE CONCERN IN-85-915-003

MILESTONE 1

SUBJECT: SAFEGUARDS DRAWING INCIDENT

DATES OF INVESTIGATION: October 8-16, 1985

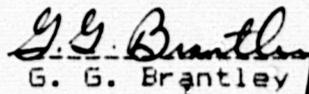
INVESTIGATOR:



R. C. Cutshaw

10/22/85
Date

REVIEWED BY:



G. G. Brantley

10/22/85
Date

APPROVED BY:



W. A. Harrison

10/22/85
Date

I. BACKGROUND

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

A safeguards drawing (45W399-4) Revision 10 was lost. An investigation into this lost document stated it was destroyed. There is no objective evidence to support this report.

II. SCOPE

The scope of this investigation was to determine if there was or was not objective evidence as the original closure stated to indicate that drawing 45W399-4, Revision 10, was destroyed as reported.

III. SUMMARY OF FINDINGS

- A. This concern involved the alleged loss of a safeguards classified drawing by the WBNP Construction Document Control Unit and the subsequent investigation and closure of the incident by Construction DCU and Public Safety Service personnel on June 5, 1985.
- B. The drawing in question was identified as the Unit 2 applicable copy of 45W399-4, Revision 10, "Wiring Diagrams, Security Lighting System, Connection Diagram."
- C. Documentary evidence showed that the drawing was one of two copies of Revision 10 received on 5/24/84.
- D. Documentary evidence showed that a copy of drawing 45W399-4 (either Revision 9 or Revision 10) was removed from and returned to the storage file on 2/1/85.
- E. Of the two persons involved in the transaction (D above):
 1. The user did not recall which revision, 9 or 10, was accessed but did state that he only accessed Unit 1 applicable copies.
 2. The DCU employee recalled nothing of the transaction.
- F. The loss was first discovered when a Document Control Unit internal audit on 5/23/85 revealed that the drawing (Revision 10, Unit 2 applicable copy) was not in its proper place and could not be accounted for.
- G. There were no audits of the DCU safeguard files between the drawing's receipt date of 5/24/84 and the audit date (F above) of 5/23/85.
- H. A review of the original investigation report and interviews with the cognizant investigating personnel provided only theory and conjecture as to the disposition of the Unit 2 applicable copy of drawing 45W399-4, Revision 10. It was theorized that the drawing had been pulled from the files and destroyed as a result of its being stasured not applicable.

Interviews with other cognizant personnel indicated however that as a matter of routine the Unit 2 copies of safeguards drawings that are statused N/A would normally be purged and destroyed only after the yearly internal audit.

- I. A review of the applicable safeguards procedures incorporated in the TVA OEDC Safeguards Information Manual, Volume Three, Construction, dated November 1983 revealed that they were thorough in regard to classification, storage, and handling. There was, however, no guidance provided concerning the investigation, reportability, compromise determination, and ultimate disposition of safeguard materials incidents.
- J. Interviews with cognizant personnel indicated that the DCU implementation of the applicable procedures (I above) governing identification, handling, and storage was basically sound with the exception of Item IV. B.
- K. Ultimate responsibility for the TVA Safeguards Information Program is assigned to the Office of Nuclear Power, Nuclear Security Group, in the TVA General Release Manual, Instruction No. 11.
- L. Due to the nature of the drawing, The Office of Nuclear Power, Nuclear Security Group, was notified by NSRS of this concern on 10/16/85 for the purpose of technical information compromise determination and reportability consideration. On 10/17/85 NSRS was advised that these actions had been completed, that the compromise of this one drawing would not have a negative effect on the involved system or the security of the plant, and that the Nuclear Security Group would communicate directly with the involved line organizations.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- A. The concern of record was substantiated in that there was no objective evidence that drawing 45W399-4, Revision 10, Unit 2 applicable copy, was destroyed as reported in the original investigation report. Objective evidence substantiates that two copies of drawing 45W399-4, Revision 10, were received on 5/24/84, and one copy (Unit 2 applicable) was found missing on 5/23/85. The original investigation lacked depth in that cognizant individuals were not interviewed and documentary evidence, or the lack thereof, was insufficient to support the conclusion that the drawing had been destroyed.
- B. The Safeguards Document Log did not provide adequate document description criteria in that no provision was made for Revision or Unit Applicable Copy entries. Reference Item III. C. This would have aided tracking of the drawing.

Recommendations

I-85-459-WBN-01 - Safeguards Document Log Revision Required

The Safeguards Document Log now utilized by the DCU should be changed to include revision and unit applicable notations.

I-85-459-WBN-02 - Guidance for Safeguards Incident Investigation

The involved line organizations should seek clarification and guidance in regard to implementation of safeguards incident investigations and disposition. That clarification and guidance received should be translated into working level instructions and training.

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : E. R. Ennis, Plant Manager, Watts Bar Nuclear Plant
 FROM : K. W. Whitt, Director of Nuclear Safety Review Staff, E3A8 C-K
 DATE : OCT 24 1985
 SUBJECT: NUCLEAR SAFETY REVIEW STAFF INVESTIGATION REPORT TRANSMITTAL

Transmitted herein is NSRS Report No. IN-85-460-X05Subject Excavation of an Arc StrikeConcern No. IN-85-460-X05

and associated recommendations for your action/disposition.

It is requested that you respond to this report and the attached recommendations by November 22, 1985. Should you have any questions, please contact R. L. Newby at telephone 128-615-364-4464.

Recommend Reportability Determination: Yes X No

Original signed by
 M. S. Kidd

 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. IN-85-460-X05
 Subject Excavation of an Arc Strike for action/disposition.

 Signature

 Date

0052U



NSRS RECOMMENDATIONS

Concern IN-85-460-X05

Recommendations:

Q-85-460-X05-01 - Arc Strike NCR - Document this arc strike removal on an NCR (including profile of the material section), and obtain formal OE disposition and approval of the minimum wall calculations and surface profile.

Q-85-460-X05-02 - Deviation from Drawing Requirement - Ensure that "as-constructed" drawings show the deviation from drawing requirements (SA312, schedule 40 pipe was specified by OE on the drawings and bill of materials).

Q-85-460-X05-03 - Review for Generic Application - Review all arc strike removal sheets and determine if required NCRs were initiated for conditions which did not meet the material specifications but did meet minimum design wall specifications. Initiate NCRs for any identified violations.

Q-85-460-X05-04 - Clarification of QCP-4.10-18 - Revise WBN-QCP-4.10-18 Paragraph 6.4.3 to clarify that the wall thickness minimum requirement is that of the material specification. Violation of this requires design approval to use as is based on design minimum wall calculations, Paragraph 6.4.3.3.

Prepared By: _____

R. L. Newby
R. L. Newby

PRW 10/22/85
[Signature]



**QUALITY
TECHNOLOGY
COMPANY**

P.O. BOX 600

• SWEETWATER, TN. 37874 •

(615)365-4414

ERT INVESTIGATION REPORT

CONCERN NO: IN-85-460-X05 Rev. 2

Page 1 of 3

CONCERN: The excavation of arc strike on a 10" schedule 40 stainless steel line of System 72 left a depression referred to as a "golf ball". ENDES determined minimum wall thickness was not violated. Class B line.

INVESTIGATION

PERFORMED BY: William R. Pickering

DETAILS:

Personnel Contacted:

Confidential

FINDINGS:

Arc strike removal operation sheet 1-72-F-6-24 documents the removal of an arc strike in a 10" schedule 40 stainless steel pipe, piece mark 72-CS-33, serial number 8098 of System 72, Containment Spray located in the Auxiliary Building Unit 1, Heat Exchanger Room 1-A, 0'-05" upstream of instrument 1-TW-72-31. The pipe wall thickness was measured ultrasonically and was found to be .400". The depth of excavation was found to be .277", leaving .123" of wall thickness remaining.

TVA Procedure WBNP QCI-1.2 Revision 1 "Control of Nonconforming Items" Section 4.4 states in part "...nonconforming items include but are not limited to: Section 4.4.3 "Items which do not conform to specifications, drawings and/or procedures but which the responsible engineer determines may be an acceptable situation; and Section 6.1.2 states in part "...personnel from the responsible group..shall investigate the condition, and shall initiate a Nonconformance Condition Report (NCR)..". Contrary to this requirement, in effect at the time, a NCR was not initiated to evaluate the condition. ENDES, however, did supply an evaluation (documented on the back of sheet 1-72-F-6-24) which directed the acceptance of the remaining wall thickness.

ERT INVESTIGATION REPORT

CONCERN NO: IN-85-460-X05 Rev. 2

Page 2 of 3

DETAILS: (cont)

According to the recorded evaluation, the minimum acceptable wall thickness is .064". ASME Code 1971 through 1973 Addenda, Article NC 2500 "Examination and Repair of Pressure-Retaining Material" states in part "Pressure-retaining materials for Class 2 components shall be examined and repaired in accordance with the material specification and as otherwise required by the subarticle..." The winter of 1971 Addenda of ASME Section II Specification SA-312 states in part "Material furnished under this specification shall conform to the requirements of ASTM Specification A-530 which states in part "The minimum wall thickness at any point shall not be more than 12.5 percent under the nominal wall thickness specified, (refer to Table A1). Contrary to these requirements the subject excavation exceeds the 12.5 percent maximum as stated for the 10" schedule 40 pipe installed.

NC-2538 "Elimination of Surface Defects" states in part 2 "The depression, after defect elimination is blended uniformly into the surrounding surface". Contrary to this requirement the excavation can be described as being spherical with a ridge present as it meets the pipe surface.

OBSERVATIONS:

Engineers responsible for evaluating acceptable minimum walls of piping are apparently utilizing formulas within ASME Section III 1971 edition, Article NC-3640 "Pressure Design of Components" to determine acceptable minimum wall thickness. These formulas are intended for consideration of pipe wall thickness for purchase of piping for a particular system design function.

Article NC-3641 states in part "... that after minimum wall thickness has been determined the next heavier commercial wall thickness shall be selected from standard thickness schedules as contained in ANSI B36.19...". If the minimum wall thickness for that portion of System 72 is .064" as documented on the arc strike removal sheet, the next heavier commercial wall thickness would have been schedule 5s for 10" nominal pipe size.

ERT INVESTIGATION REPORT

CONCERN NO: IN-85-460-X05 Rev. 2

Page 3 of 3

DETAILS: (cont)

CONCLUSION:

This concern is substantiated.

- 1) ASME Code 1971 thru 1973 Summer Addenda Section NC-2500, minimum wall thickness was violated.
- 2) NCR was not initiated as required by WBNP QCI-1.2 Revision 1
- 3) Engineering evaluation of the nonconforming condition "use-as-is", was not documented properly.
- 4) Physical as is condition of the excavation violates ASME Code 1971 Section NC-2538.

Prepared By

O. J. Theriault for WRP 10/17/85

Reviewed By

O. J. Theriault 10/17/85

Report Reviewed & Accepted:

[Signature] 10/21/85
NSRIS

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-460-X05 (ERT Concern No.) (ID No., if reported)
2. Identification of Item Involved: Piece Mark 72-CS-33, System 72, Containment Spr
(Nomenclature, system, manuf., SN, Model, etc.)
3. Description of Problem (Attach related documents, photos, sketches, etc.)
The excavation of an arc strike located 5" upstream from instrument 1-TW-
72-31 violates minimum wall thickness.

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 If Yes, Explain: Potential for pipe rupture.

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 If Yes, Explain: A nonconformance report was not initiated. 10CFR50 App B Criteria 15 and Criteria 16

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 Yes If Yes, Explain: _____

OR

NRC

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : E. R. Ennis, Plant Manager, Watts Bar Nuclear Plant

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

DATE : - **OCT 24 1985**

SUBJECT: NUCLEAR SAFETY REVIEW STAFF INVESTIGATION REPORT TRANSMITTAL

Transmitted herein is NSRS Report No. I-85-362-WBN

Subject "Electrical Manholes"

Concern No. IN-85-945-001

and associated recommendations for your action/disposition.

It is requested that you respond to this report and the attached recommendations by November 20, 1985. Should you have any questions, please contact G. R. Owens at telephone 143-3825.

Recommend Reportability Determination: Yes X No

Original signed by
M. S. Kidd

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-85-362-WBN
Subject "Electrical Manholes" for action/disposition.

Signature

Date



TENNESSEE VALLEY AUTHORITY

NUCLEAR SAFETY REVIEW STAFF

NSRS INVESTIGATION REPORT NO. I-85-362-WBN

EMPLOYEE CONCERN IN-85-945-001

MILESTONE 5

SUBJECT: ELECTRICAL MANHOLES

DATES OF INVESTIGATION: October 7-11, 1985

INVESTIGATOR: *G. R. Owens*
G. R. Owens

10/22/85
Date

REVIEWED BY: *Paul B. Border*
P. B. Border

10/22/85
Date

APPROVED BY: *M. A. Harrison*
M. A. Harrison

10/22/85
Date

I. BACKGROUND

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

Electrical manholes are in a very disorganized state. Cables are laying out of trays with several feet of slack due to cables being spliced and not laced down properly. Examples may be found in the manhole next to the "FAB" shop or manholes in front of the Turbine Building and Aux. Building entrance.

II. SCOPE

Entry was made into 10 electrical manholes for the purpose of observing the condition of the cabling and cable trays. In addition, the manhole covers for 20 other manholes were removed and observations made into those manholes. Inspection procedures and design drawings were reviewed, and discussions were conducted with cognizant personnel to evaluate the concern of record.

III. SUMMARY OF FINDINGS

A. Electrical manholes 1N, 2S, 8B, 13, 18S, 19S, 20, 23N, 25, and 26N were entered by the investigator to observe the condition of the cables and cable trays. Manholes, 1, 2, 18, and 26 are located in the areas addressed by the concern of record. The others are located randomly throughout the yard areas. In addition, the covers were removed from electrical manholes 1S, 2N, 3, 4A, 5A, 5B, 6A, 6B, 7A, 7B, 8A, 9B, 14B, 15, 24, 26S, 27N, 27S, 28, and 29 and observations made into the manholes. These manholes are all shown on electrical conduit and grounding drawing 14WB10-1. The following general observations were made.

1. General debris and unused items had been left in some of the cable trays such as paper, plastic, plywood, light receptacles, rolled-up (unused) cables, and electrical light cords. This appeared to be particularly significant in the manholes near the reactor building. The manholes in the switchyard and between the switchyard and the intake pumping station appeared to have much less debris.
2. Several cable tray covers were loose, out of place, or missing in most of the manholes. Some were laying loose on top of cables in the cable trays.
3. The cabling systems were designed and constructed so that only one safety train or division is routed through a specific manhole.
4. In the south compartment of manhole 18, nine cables had been routed outside the cable trays. Six of these cables were routed together and had silver tape attached. The other three cables had no apparent identification. None of these nine cables were laced down in the cable trays. Some cables were also observed partially out of trays in manholes 26N, 29, 8B, 19S, and 8A.

5. Temporary construction-type barricades were installed around two of the manholes with the manhole covers removed although no apparent work was going on in the manholes. In one case, a temporary wooden manhole cover was used instead of a metal cover. None of the permanent metal covers were found bolted in place. In several cases the bolt studs were not installed.
- B. From discussions with cognizant personnel it was determined that the manholes were under the responsibility of Nuclear Power. These discussions revealed the manhole cable tray systems were transferred according to OC procedure OCI-1.22, and the transfer was documented by Transfer No. 299. Once accepted by Nuclear Power, the manholes were expected to be entered only for troubleshooting, maintenance, or approved modification work.
- C. Programmatic QC inspections have been limited to postmodification inspections involving safety-grade modifications to the cabling systems. Nonsafety-grade modifications are inspected by the appropriate discipline management. In accordance with AI-1.8, Plant Housekeeping, most workplans include a final housekeeping requirement to return the work area to normal conditions. AI-1.8 does not specifically address either manholes or cable trays. Different plant sections have been assigned responsibility to perform routine housekeeping inspections of various portions of the plant. AI-1.8 calls for individual areas to be inspected frequently enough to assure proper housekeeping. As a practice, manholes have not been included in the inspections because they are confined areas involving very little work activity.
- D. Drawings 46W502-19 R2 and -22 R7, note 1, indicated that six of the nine cables in manhole 18S were temporary security cables (TSC) and were not to be routed in the cable trays but were to be strapped to the tray supports or to the bottom of the trays. No such information was obtained on the other three cables; but, from personnel discussions, it has been normal practice to route temporary cables outside the trays in order to easily distinguish them from the permanently routed cables. In addition, it was learned that it has been a normal practice to identify temporary cables with silver tape (not now a documented requirement).
- E. Design drawing 15W810-10 R15 (dated 7/4/85) has recently been revised to delete the six temporary cables. One of the other three cables was determined to be a temporary telephone cable. Although attempted, the other two cables could not be identified.
- F. From personnel discussions, it was revealed that cable tray covers were specified on design drawings in order to provide EMI protection and to mitigate fire propagation in the event of a cable fault. Electrical conduit and grounding drawing series 15W810 shows the cable tray cover requirements.
- G. Construction Specification G-38, Installing Insulated Cable Rated Up to 15,000 Volts, stated that cable ties may be used where required to maintain a neat, orderly arrangement of cables or to maintain the required nominal spacing between medium-voltage circuits. It also states in order to limit the quantities of combustible materials, use of cable ties should be kept to the minimum number needed for the purpose intended.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

1. The concern of record was substantiated regarding the disorganized state of electrical manholes. This conclusion was based on the personal observation of general debris in the cable trays, missing cable tray covers, and cables routed outside of some cable trays.
2. Debris was observed in many cable trays creating potential fire hazards and/or cable insulation damage. The covering of manholes was loosely controlled, and one was in a temporary and deteriorating condition. Inspections and/or management controls have not been adequate to ensure good housekeeping.
3. Cables have been installed outside the cable trays, and some were not positively identified as temporary. Temporary cables are not required to be laced in the cable trays.
4. The design intent has been violated by not installing cable tray covers in accordance with the design drawing. Therefore, the potential exists to compromise EMI protection and fire propagation from a faulted cable. (Since redundant safety-grade circuits are routed through separate manholes, safety-level cable separation was not an issue.)

B. Recommendations

I-85-362-WBN-01 - Inspect Electrical Manholes

Conduct an inspection of all electrical manholes and remove the debris and unused material. Make a general inspection of the cables in the manholes to ensure cable insulation damage has not occurred.

I-85-362-WBN-02 - Install Cable Tray Covers

Ensure cable tray covers are installed on all electrical manhole cable trays according to the respective drawings.

I-85-362-WBN-03 - Control Manhole Access

Install permanent manhole covers on all electrical manholes and secure. Consider installing a sign at each manhole that indicates entry must be authorized by a workplan or Maintenance Request.

I-85-362-WBN-04 - Identify Cables Outside Cable Trays

Determine if all the cables routed outside the cable trays are temporary cables. If any are determined to be permanent cables, make changes to establish a permanent installation with appropriate support for the cables.

NRC

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : S. Schum, QTC/ERT Program Manager, Watts Bar Nuclear Plant

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

DATE : OCT 24 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-85-825-002
- IN-85-671-004
- IN-85-534-002
- IN-86-155-004

Original signed by
 M. S. Kidd

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)

0047U



TENNESSEE VALLEY AUTHORITY
NUCLEAR SAFETY REVIEW STAFF
NSRS INVESTIGATION REPORT NO. I-85-339-WBN
EMPLOYEE CONCERN IN-85-825-002
MILESTONE 3

SUBJECT: CLARITY IN PROCEDURE

DATES OF INVESTIGATION: September 26-30, 1985

INVESTIGATOR:



R. C. Cutshaw

10/22/85
Date

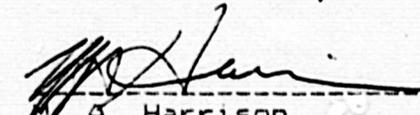
REVIEWED BY:



G. G. Brantley

10/22/85
Date

APPROVED BY:



M. A. Harrison

10/22/85
Date

I. BACKGROUND

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

TVA has several procedures which need to have portions rewritten for clarity or more defined criteria. Examples are TI-27 Part 3 ("Cognizant Engineer shall determine acceptance as it applies . . .". No method of documenting this acceptance exists.) MIA-14 ("Cognizant Engineer, or qualified personnel can complete the data sheet as appropriate".) No definition of "Qualified Personnel" exists.

II. SCOPE

Prior to determining the scope of this investigation, further clarifying information was requested from the CI through QTC. No further information was provided. The scope of this investigation was determined by the concern of record.

- A. Determine if TI (Technical Instruction) 27, Part 3, did or did not provide for the documentation of acceptance.
- B. Determine if MAI (Modifications and Additions Instruction) 14 did or did not refer to "Qualified Personnel" without further definition of what constituted a "Qualified Person" in reference to who could complete a data sheet.

III. SUMMARY OF FINDINGS

- A. A review of WBNP TI-27 Part III, "Visual and Chemical Specifications (Cleanliness Criteria for Piping Systems)" Revision 22, dated 8/23/85, revealed that the instruction did provide for the documentation of acceptance/rejection.

The provisions for documenting acceptance/rejection resulted from WBNP Corrective Action Report (CAR) 85-34 initiated on 4/19/85 as a result of a survey of instrument maintenance MRs.

Remedial Action No. 3 of CAR 85-34 states:

Instrument maintenance procedures will be revised to adequately give directions to individuals performing troubleshooting activities. This revision will delineate guidelines for documenting TI-27 part III requirements and guidelines for other maintenance activities performed during troubleshooting or reference appropriate implementing procedures.

The CAR was completed and closed on 10/7/85.

- B. A review was made of WBNP MAI-14, "Installation and Inspection of Electrical Penetration Pressure Seals, Fire-Stop Barriers, and Flame-Retardant Cable Coating," Revision 5, dated 5/15/85. This instruction revision did not use the term "Qualified Personnel." Personnel references to data sheets and packages included "QC Inspectors" and "Craft Foreman" as signatories.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The concerns of record were not substantiated due to recent revision of the instructions in question.

Recommendations

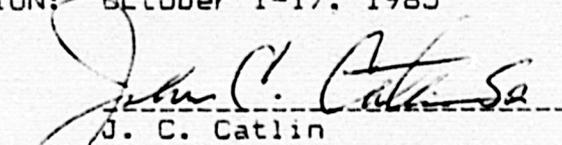
None.

TENNESSEE VALLEY AUTHORITY
NUCLEAR SAFETY REVIEW STAFF
NSRS INVESTIGATION REPORT NO. I-85-499-WEN
EMPLOYEE CONCERN IN-85-671-004
MILESTONE 3

SUBJECT: WELDING INSPECTION

DATES OF INVESTIGATION: October 1-17, 1985

INVESTIGATOR:


J. C. Catlin

22 OCT 85
Date

REVIEWED BY:


F. B. Border

10/22/85
Date

APPROVED BY:


M. A. Harrison

10/22/85
Date

I. BACKGROUND

An investigation was conducted to determine the validity of an employee concern received by Quality Technology Company (QTC) on August 22, 1985. The concern was in regard to structural welds in Unit 1 auxiliary building. It was alleged that certain welds were rejected following radiographic examination (RT). It was further alleged that these same welds were subsequently reworked/repared and later accepted by visual examination (VT) but without further examination by RT. The location was defined as in north and south valve rooms, column line 1 and C, 6 and C (or E), on Unit 1. The practice occurred during June 1985.

II. SCOPE

The original scope of the investigation was to include identification of the questioned welds, review of weld records and inspection reports, review of inspectors' certifications in the forms of nondestructive examinations (NDE) required, identification of applicable specifications and procedures, and verification of the observation noted in the concern. However, the scope was modified during the process of the investigation because some of the findings indicated that some redefinition of the problem was required.

The revised scope of the investigation included identification of the method of NDE actually conducted, the reason for conducting this NDE, inspection and/or NDE requirements for the questioned welds, and ancillary events leading up to the statement of this concern.

III. SUMMARY OF FINDINGS

A. Requirements and Commitments

1. Codes and Standards Requirements (in effect at the time of design and construction)
 - a. 10CFR50.55a Paragraph (a) (1) Structures
 - b. American Welding Society - Structural Welding Code AWS D1.1 - 1975
 - c. Quality Assurance Topical Report TR75-1A R8, Paragraph 17.1.10, Inspection
 - d. American Society for Nondestructive Testing SNT-TC-1A (1975 and 1980)
2. Procedures Requirements
 - a. G-29C Process Specification O.C.1.1, Welding of Structures, Paragraphs 6.7 and 8.6
 - b. G-29C Process Specification 3.C.5.2 (R2), Visual Examination of Welds
 - c. G-29C Process Specification 3.C.5.4, Final Visual Weld Examination at WBNP
 - d. G-29C Process Specification 3.C.5.5, Visual Examination of Welds

B. Findings

1. Both the AWS Code and the G-29C Process Specification required visual inspection only for structural welds unless otherwise required by drawing or specification.
2. There were no additional requirements other than visual for any of the structural welds in the valve rooms.
3. The AWS Code stated that any repaired or replaced weld shall be retested by the method originally used.
4. No evidence could be found that any RT had been performed on any of these structural welds.
5. Noncompliance Report (NCR) 4753 had been written covering some of the welds in the valve rooms. This NCR states:

Structural steel in main steam valve rooms shown on the EN DES drawings series 48W1707 and 48W1708 (excluding protective devices). The quality of welding is not in strict compliance with drawing and specification requirements. This structural steel has minor discrepancies which deal with joint and weld configuration. Welding was previously accepted but not inspected with strict adherence to visual inspection requirements of G29-C.
6. During the process of investigating NCR 4753, Construction Quality Control used ultrasonic examinations (UT) on some of the structural welds in the valve rooms to determine the configuration of these welds. They were made in an earlier timeframe, probably during 1984 in Unit 1.
7. Welds which Construction QC examined by UT were ground smooth, and all weld spatter and other surface irregularities were removed by grinding prior to performing the UT. Inspection stamps showing prior VT were also removed.
8. It was decided to repair some of these welds. After the repairs were made, inspection was made by VT. Welds were stamped with a new inspection stamp showing VT acceptance.
9. Inspection by VT after repairs complies with the requirements of G-29C PS 3.C.5.2, R2.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

1. Because no evidence could be found of any RT being performed on any of the structural welds in the valve rooms, the allegation as stated could not be substantiated.
2. The UT which was performed on certain structural welds in the valve rooms was conducted in conjunction with the investigation of an NCR. It was not required by codes or specifications.
3. Assuming that the concerned individual mistook UT for RT, the allegation as restated with UT substituted for RT, and in an earlier time period, could be substantiated.
4. Even though the allegation could be substantiated, there was no violation of codes or procedures.

B. Recommendations

None.

TENNESSEE VALLEY AUTHORITY

NUCLEAR SAFETY REVIEW STAFF

NSRS INVESTIGATION REPORT NO. I-85-454-WBN

EMPLOYEE CONCERN IN-85-534-002

MILESTONE 3

SUBJECT: FIRE PROTECTION LINES DO NOT MEET NFPA CODE

DATES OF INVESTIGATION: October 4-16, 1985

INVESTIGATOR: P R Bevil 10/22/85
P. R. Bevil Date

REVIEWED BY: Paul B. Border 10/22/85
P. B. Border Date

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

I. BACKGROUND

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

Fire protection lines do not meet NFPA Code, both units. Some supply lines are 1/2", which is too small. Example: Located in fresh air handling room Aux Bldg Unit 1. 30' from air lock to Reactor Bldg, on left, 713' elevation.

II. SCOPE

A personal inspection was made of the concerned area, applicable codes were reviewed, interviews were conducted with cognizant personnel, and as-constructed design drawings were reviewed in order to evaluate the concern of record.

III. SUMMARY OF FINDINGS

A. Applicable Requirements and Commitments

1. Codes and Standards Requirements

- a. 10CFR50.48, Fire Protection
- b. 10CFR50, Appendix A, Criterion 3, Fire Protection
- c. 10CFR50, Appendix R, Fire Protection
- d. FSAR, Paragraph 9.5.1.1, Criterion B (includes NFPA Codes by Reference)

2. The sprinkler system was designed in compliance with National Fire Codes Specification NFPA 13, Standard for the Installation of Sprinkler Systems, 1976 Edition.

B. Findings

1. The specific example given in the concern was investigated for validity. No 1/2-inch fire protection piping was found. However, two 1/2-inch pipes were found which were painted white (the same color as all of the sprinkler system lines). These two pipes were not fire protection lines; one was for control air and the other for service air.
2. In discussion with Preoperational Testing personnel, it was determined that in accordance with design drawings, no 1/2-inch lines are in the sprinkler system other than lines to trim packages on deluge valves and possibly a few drain lines. None of these lines could be considered as "supply" lines, and all are in accordance with the NFPA code.

Preoperational Testing has also performed flow-rate tests for both Unit 1 and 2 sprinkler systems. All tests indicated adequate flow rates. If 1/2-inch pipe was installed on the supply side of any part of the sprinkler system, the flow-rate tests would have revealed the rate to be unacceptably low.

3. Office of Engineering (OE) personnel have performed three separate walkdowns of the Unit 1 and 2 sprinkler systems. These inspections were accomplished in approximately late 1983, mid-1984, and late 1984 through mid-1985. These walkdowns included checking for improper sized piping such as that discussed in the employee concern.
4. Office of Construction's (OC) Mechanical Quality Control group and Welding Quality Control group both performed inspections of the Units 1 and 2 sprinkler systems. Both groups checked for piping size adherence to design drawings.
5. OC's Quality Assurance group also performed verification activities of the fire protection system. Some of these verification activities included verifying proper sizing of piping.
6. Nuclear Mutual Limited is WBN's property insurer. In this capacity, the company employs fire inspectors who perform periodic inspections at WBN. Two such inspections have been performed to date. These inspections include checking for problem areas such as undersized piping in the sprinkler systems.

No 1/2-inch piping was found improperly located in any of the Unit 1 and 2 systems through any of the above inspections, walkdowns, or tests.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The concern was not substantiated. The specific example of noncompliance given in the concern was not found. In addition, due to all of the numerous inspections, walkdowns, and other verification activities performed on the WBN sprinkler systems for Units 1 and 2, the existence of noncompliant 1/2-inch sprinkler supply lines at WBN is extremely unlikely. It is therefore concluded that this problem does not exist, and all fire protection lines meet the NFPA code.

Recommendations

None.

TENNESSEE VALLEY AUTHORITY
NUCLEAR SAFETY REVIEW STAFF

NSRS INVESTIGATION REPORT NO. I-85-500-WBN

EMPLOYEE CONCERN IN-86-155-004

MILESTONE 1 - FUEL LOAD

SUBJECT: REACTOR BUILDING DOME WELD INSPECTIONS

DATES OF INVESTIGATION: September 30-October 4, 1985

LEAD INVESTIGATOR: *R. N. Russell*
R. N. Russell

10/22/85
Date

REVIEWED BY: *G. G. Brantley*
G. G. Brantley

10/22/85
Date

APPROVED BY: *M. A. Harrison*
M. A. Harrison

10/22/85
Date

I. BACKGROUND

The employee concern as received from the ERT stated: "The welds in the dome, RB#1 and #2, may not have been inspected and brought off."

This concern was Quality Technology Company No. IN-86-155-004 dated August 26, 1985.

II. SCOPE

Documentation related to weld inspection requirements, inspections performed, and inspection results were reviewed to ensure that dome weld inspections were done and the records of those inspections existed in storage.

III. SUMMARY OF FINDINGS

A. Weld Inspection Requirements

FSAR section 3.8.2.7.2 lists the inspection requirements for the welds in the reactor building domes. It states: "Welds in the cylinder wall and dome in ASME Code Section III, Categories A and B, were 100 percent radiographed. Welds in Categories C and D were examined by magnetic particle, liquid penetrant, or by ultrasonic methods."

B. Weld Inspections

1. Chicago Bridge and Iron Company was required as part of the erection contract (73061-75320) for the reactor buildings to perform all required inspections. Radiography of welds was done on the reactor building dome for Unit 1 starting in mid-January 1977 with a completion date of June 1977. The Unit 2 dome was radiographed during the period of August 1977 to February 1978. The dome-plate welds were all ASME class A or B welds. These dates were determined from meeting notes between TVA and CB&I that are on file in RIMS.
2. The attachments to the dome are the ASME Category C and D welds that were examined by magnetic particle, liquid penetrant, or ultrasonic methods.
3. The CB&I weld map on file in the Construction Document Control Center contains considerable information. It lists weld numbers, welder numbers (for welder certification checks), NDE report number for each weld, and repair number (if repair was done). From this report it can be verified that each weld on the containment dome was inspected by the appropriate NDE method.
4. Engineering personnel in Knoxville have reviewed the inspection results. This was verified through telephone conversations with personnel in Knoxville.

C. Inspection Results

1. Radiographs and other inspection test results are in storage at the Federal Storage Depository at East Point, Georgia. Chicago Bridge and Iron drawings showing weld locations for correlation to the radiographs were located in the Construction Drawing Control Center.
2. A problem with inspection documentation for weld repairs was identified in 1977. CB&I was not providing quality documentation on the repairs. This problem was resolved early, and the required documentation was provided. For each weld repair TVA prepared a nonconformance report. Each NCR documents the repair and problem resolution for each weld repair.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The allegation is unsubstantiated for the following reasons.

- A. Requirements for dome-weld inspections appear in the CB&I contract and the Final Safety Analysis Report.
- B. Radiographs and other weld inspection records are on file in East Point, Georgia.
- C. Weld maps showing weld numbers, welder identification, inspection number, nonconformance identification (if necessary), and location of welds are available in the Construction Document Control Center. These maps also identify the inspections done on each weld.
- D. Weld inspections have been reviewed by OE personnel.

Recommendations

None.

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 # EX-85-048-001

Category: 19

Confidentiality: YES NO (I&H)

Supervisor Notified: X YES NO

NUCLEAR SAFETY RELATED YES

Concern: A TVA foreman does not like to obtain written Hold Orders to perform work. He tries to have work performed by using just a verbal Hold Order. He creates dangerous work conditions for his workers. Construction concern. Names and details to this specific case are known to QTC and are withheld to maintain confidentiality.

Ohlman 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 S. Siegel 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 # HI-85-107-001

Category: 80

Confidentiality: YES NO (I&H)

Supervisor Notified: YES X NO

NUCLEAR SAFETY RELATED YES

Concern: Employee reported quality concerns and experienced a degree of pressure that resulted in employee tendering resignation. (Names/details to the specific case are known to QTC and withheld to maintain confidentiality). Construction dept concern. CI has no further information.

OK Thero 10/14/85
MANAGER, ERT DATE

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

ERT X

NSRS/ERT _____

NSRS _____

OTHERS (SPECIFY) 06c

QA
effect

Bruce L. Boyler 10/18/85
NSRS DATE

PR

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: 2

Concern # HI-85-108-001

Category: 80

Confidentiality: YES NO (I&H)

Supervisor Notified: X YES NO

NUCLEAR SAFETY RELATED YES

Concern: Employee was coerced (after refusing) into signing off incomplete and/or incorrectly performed test documentation. (Names/details to the specific case are known to QTC and withheld to maintain confidentiality). Construction dept concern. CI has no further information.

Oh There 10/21/85
MANAGER, ERT DATE

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

ERT ✓

NSRS/ERT _____

NSRS _____

OTHERS (SPECIFY) OGC

Bruce J. ... 10/21/85
NSRS DATE

Testing
Construction

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: 2

Concern # HI-85-112-001

Category: 80

Confidentiality: YES NO (I&H)

Supervisor Notified: YES NO

NUCLEAR SAFETY RELATED

~~NO~~ YES *(initials)*

Concern: Sequoyah- Employees who refuse direct orders to violate QA procedures, with witnesses to the issuance of the direct order, are threatened with termination or given the most undesirable work available. Construction dept concern - CI has no further information.

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

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

ERT

NSRS/ERT

NSRS

OTHERS (SPECIFY) *OGC*

Bruce P. Siedler 10/21/85
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 # IN-85-533-009

Category: 07

Confidentiality: _YES _NO (I&H)

Supervisor Notified: ___YES _X_NO

NUCLEAR SAFETY RELATED _YES_

Concern: General foreman (known) still maintains welder's certification, even though individual has not welded in over 10 years. The recent shutdown to re-qualify welders did nothing to resolve the problem of this GF maintaining welding certs for all of those years without welding. Construction department concern. CI has no further information.

OK There 10/10/85
MANAGER, ERT DATE

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

ERT

NSRS/ERT _____

NSRS _____

OTHERS (SPECIFY) _____

*welder's
welder*

Bruce P. Soper 10/10/85
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 # IN-85-533-X11

Category: 38

Confidentiality: YES NO (I&H)

Supervisor Notified: YES X NO

NUCLEAR SAFETY RELATED YES

Concern: Welder's certifications have been falsified, as an individual has maintained current certifications and has not welded in over 10 years. Construction dept concern. CI has no further information.

Of These 10/16/85
MANAGER, ERT DATE

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

ERT

NSRS/ERT

NSRS

OTHERS (SPECIFY) OGC

Welder's
Welder

Bennett S. Suggs 10/21/85
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 # IN-85-725-X16

Category: 33

Confidentiality: YES NO (I&H)

Supervisor Notified: YES NO

NUCLEAR SAFETY RELATED YES NO

Concern: No calibrated tongmeters were available to measure welding amperage during the construction wide welder recertification. Construction dept concern. CI has no more information.

O. J. [Signature]
MANAGER, ERT 10/14/85 DATE

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

ERT

NSRS/ERT

NSRS

OTHERS (SPECIFY) _____

*Welding
Welder*

Bruce P. [Signature]
NSRS 10/14/85 DATE

7/16/85

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 # IN-85-767-003

Category: 33

Confidentiality: YES NO (ISH)

Supervisor Notified: YES NO

NUCLEAR SAFETY RELATED YES

Concern: CI expressed concern regarding the inspection of painted welds. CI feels NRC is involved due to having approved the procedure of inspecting welds that are painted. Details known to QTC, withheld due to confidentiality. Construction dept concern. CI has no further information.

O. A. New 12/16/85
MANAGER, ERT DATE

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

ERT

NSRS/ERT -----

NSRS -----

OTHERS (SPECIFY) -----

Welding Inspection

Bruce P. Saffner 11/21/85
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 # IN-85-767-005

Category: 07

Confidentiality: YES NO (I&H)

Supervisor Notified: YES NO

NUCLEAR SAFETY RELATED YES

Concern: (TVA's) Managements' lack of knowledge in selecting qualified QA programs and ineffective implementation which resulted in abolition of QA dept in Aug/Sept '85. Details known to QTC, withheld due to confidentiality. Construction dept concern. CI has no further information.

O.A. Thore 10/16/85
MANAGER, ERT DATE

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

ERT

NSRS/ERT

NSRS

OTHERS (SPECIFY) _____

Bruce J. Sipler 10/24/85
NSRS DATE

QA Effect

May 16

P56

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-85-767-006

Category: 07

Confidentiality: YES NO (I&H)

Supervisor Notified: YES NO

NUCLEAR SAFETY RELATED YES

Concern: CI expressed that plant operators are not adequately trained to nor abide by the QA requirements of plant procedures. Details known to QTC, withheld due to confidentiality. Construction dept concern. CI has no further information.

O. H. 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 Control

Bruce R. Suffer 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 # IN-85-947-X08

Category: 07

Confidentiality: YES NO (I&H)

Supervisor Notified: YES NO

NUCLEAR SAFETY RELATED Yes

Concern: Welders (known) who had been passing ASME x-ray welds for two years failed the recertification tests twice: This indicates a problem in the test coupons, or in the radiographic process/film. CI had no further information. Construction dept concern.

Ok There 10/16/85
MANAGER, ERT DATE

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

ERT

NSRS/ERT -----

NSRS -----

OTHERS (SPECIFY) -----

*Welding
Welder*

Bruce P. Seifert 10/18/85
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: 2

Concern: IN-85-954-X04

Category: 88

Confidentiality YES NO (I&H)

Supervisor Notified: YES X NO

NUCLEAR SAFETY RELATED YES

Concern: EMPLOYEES (DEPT. KNOWN) FALISFIED CHECKLISTS (KNOWN).
NUCLEAR POWER DEPT. CONCERN. CI HAS NO FURTHER INFORMATION.

NO FOLLOW UP REQUIRED.

[Signature] 10/16/85
MANAGER, ERT DATE

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

ERT

NSRS/ERT _____

NSRS _____

OTHERS (SPECIFY) OGC

[Signature] 10/21/85
NSRS DATE

EMPLOYEE CONCERN ASSIGNMENT REQUEST
REVISION

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-86-003-001

Category: 33

Confidentiality: _YES_ _NO_ (I&H)

Supervisor Notified: X_YES ___NO

NUCLEAR SAFETY RELATED _YES_

Concern: CI has the concern that the weld specified for a hanger is undersized and will not support component. Details known to QTC, withheld due to confidentiality. Hanger located in Unit 2. Construction dept concern. CI has no further information.

Eric Thero _____ *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. Liffman _____ *10/18/85*
NSRS DATE

May 16

251

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-86-112-002

Category: 33

Confidentiality: YES NO (I&H)

Supervisor Notified: X YES NO

NUCLEAR SAFETY RELATED Yes

Concern: 6010 welding rods were used for 3 or 4 days between Sept - Dec. 1984. No approved welding procedure addressed the weld rod. CI thinks that weld rod was procured from Watts Bar Steam Plant. Details known to QTC, withheld due to confidentiality. Rods may have been used in the Turbine building on the station sump. Nuc power concern.

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

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

ERT

NSRS/ERT _____

NSRS _____

OTHERS (SPECIFY) _____

welding Rod

Bruce R. Saffers 10/18/85
NSRS DATE

May 16

PSK

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-86-112-003

Category: 05

Confidentiality: YES NO (I&H)

Supervisor Notified: YES NO

NUCLEAR SAFETY RELATED YES NO

Concern: Failure of QA audit process to adequately resolve identified problem. Details known to QTC, withheld due to confidentiality. CI has no further information. Nuclear power concern.

O. A. [Signature] 12/16/85
MANAGER, ERT DATE

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

ERT

NSRS/ERT

NSRS

OTHERS (SPECIFY) _____

QA
Effect

Bruce J. [Signature] 12/18/85
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 # WI-85-040-001

Category: 53

Confidentiality: YES NO (I&H)

Supervisor Notified: YES NO

NUCLEAR SAFETY RELATED YES NO

Concern: NCR (number known) was written on ERCW line in '81 (Nov.), to document non-conforming condition with cement mortar patches on lining. CI questions the validity of the disposition of this NCR because it was signed off under duress. Supervisor's name known. Details known to QTC, withheld due to confidentiality. Construction dept concern.

Ob. Stevo 10/14/85
MANAGER, ERT DATE

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

ERT

NSRS/ERT _____

NSRS _____

OTHERS (SPECIFY) _____

Mechanics
ERCW

Bruce L. Soper 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 # WI-85-040-003

Category: 54

Confidentiality: YES NO (I&H)

Supervisor Notified: YES NO

NUCLEAR SAFETY RELATED YES NO

Concern: ERCW trench B has an artesian well condition. Details known to QTC, withheld due to confidentiality. Construction dept concern. CI has no further information.

O.S. Hines 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 J. Siedem 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-85-064-005

Category: 33

Confidentiality: YES NO (I&H)

Supervisor Notified: YES NO

NUCLEAR SAFETY RELATED YES NO

Concern: Fire protection system piping has been improperly welded. Details known to QTC, withheld due to confidentiality. Construction dept concern. CI has no further information.

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

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

ERT

NSRS/ERT _____

NSRS _____

OTHERS (SPECIFY) _____

*Welding
Workmanship*

Bruce J. Sullivan 10/18/85
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: EX-85-052-003

Category: 10

Confidentiality YES NO (I&H)

Supervisor Notified: X YES NO

NUCLEAR SAFETY RELATED YES

Concern: ENGINEERING SHOWS VERY POOR PLANNING IN MUCH OF THEIR WORK PACKAGE PREPARATION. ENGINEERING IS THE BIGGEST PROBLEM, NOT THE CRAFTS. THE LAYOUTS ARE INADEQUATE WHEN GIVEN TO THE CRAFTS. THEY OFTEN OMIT IMPORTANT DETAILS. CONSTRUCTION DEPT. CONCERN. CI HAS NO ADDITIONAL INFORMATION.

NO FOLLOW UP REQUIRED.

OA Shaw 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 L. Saffin 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 # EX-85-052-005

Category: 07

Confidentiality: YES NO (I&H)

Supervisor Notified: YES X NO

NUCLEAR SAFETY RELATED YES

Concern: Inspectors are not knowledgeable of the work and the craft they are inspecting. CI has no additional information. Construction dept concern.

 D. Thero 10/16/85
MANAGER, ERT DATE

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

ERT

NSRS/ERT

NSRS ✓

OTHERS (SPECIFY)

*Inspectors
Inspectors*

 Bruce Poffen 10/21/85
NSRS DATE