WBN 830423 071

TENNESSEE VALLEY AUTHORITY — DIVISION OF CONSTRUCTION

LOP — NONCONFORMING CONDITION REPORT — LOP

WBNP-QCP-1.2
ATTACHMENT A1 k9

Nuclear Project: WATTS BAR NUCLEAR PLANT	Unit: 1	NCR: 2477 R
2. Area: ☐ Civil ☐ Electrical ☒ Mechanical ☐ Instrumentation ☐ Welding		ASME Code Item: ☒ Yes ☐ No
3. Activity: ☐ Receiving ☐ Storage ☐ Fabricating ☒ Installing ☐ Other ☐ Testing		Contract No.: N/A

4. Type: ☐ Damage ☐ Failure ☐ Defect ☐ Documentation ☒ Other: Damage to pipe

5. Item Description: Box anchor 47A060-70-2
Field weld 1-070A-D147-2A
Drawo subassembly Mkp 70-CC-23y
TVA Class C, ASME Class III

ASME

6. Nonconformance Description (Include Apparent Cause): Subassembly received surface scratches and gouged while cutting box anchor 47A060-70-2 from piping. Cutting operation sheet 1-70-F-29-41 was issued for this cut. Surface scratches and gouges occurred while an air hammer was being used to remove grout on 7-19-80.

Recommended Disposition (Check Block & Detail Below): ☒ Rework ☐ Reject ☒ Repair ☐ Use-As-Is ☐ Other

A base metal repair sheet to be issued per WBNP-[illegible] subassembly to be repaired in accordance with necessary welding procedures.

Action Required to Prevent Recurrence:

Craft supervision to investigate the circumstances of this nonconformance and provide training/discipline as necessary.

QC AUG 15 1980 BRA

NCR Initiator: James T. Dennis Date: 7-29-80

7. Referred to Design Project Organization (DPO): ☐ Yes ☒ No — DPO Coordination Contact: ____

Disposition: ☒ As Recommended ☐ Other (Describe) — Significant Condition: ☐ Yes ☒ No

Approved by Construction Engineer: [signature] Date: 8-1-80

8. DPO Disposition: ☐ As Recommended ☐ Other (Describe)

Approved by Design Project Organization: ____ Date: ____

9. Disposition Inspection and Release from Nonconforming Status: ☒ Yes ☐ No

Inspected by: James T. Dennis Date: 8-21-80

10. Action Required to Prevent Recurrence Complete: ☒ Yes ☐ No

Verified by Construction Engineer: [signature] Date: 9/4/80

Distribution
Site QA Records File
Construction Engineer
Project QA Unit
QA Manager, OEDC
Design Project Organization (Letter to print action only)
Authorized Nuclear Inspector (Code Item Only)
EN DES NEB NLS (Significant NCR's only)
OEB EBS (Significant NCR's only)
MEDS

AUTHORIZED NUCLEAR INSPECTOR — SEP 09 1980

Disposition Reviewed and Accepted By:

[signature] 8-4-80
Authorized Nuclear Inspector — Date

MEDS, W5B63 C-K

TVA 10096 (CONST 10-79)

TVA 20 100-0-001

UNITED STATES GOVERNMENT

Memorandum

TENNESSEE VALLEY AUTHORITY

TO : Robert W. Olson, Construction Engineer, Watts Bar Nuclear Plant CONST

FROM : John E. Treadway, General Construction Superintendent, Watts Bar Nuclear Plant CONST

DATE : September 3, 1980

SUBJECT: WATTS BAR NUCLEAR PLANT - NONCONFORMING CONDITION REPORT NO. 2477R

LOP

The following action was taken to prevent recurrence on the subject nonconforming condition report:

An investigation was made by craft superintendents concerning NCR No. 2477R. Our investigation revealed that the space available to do the chipping with a chipping hammer in a very small area had made it difficult to do the work without possibly scratching and/or gouging the pipe in question. We were unable to definitely say who specifically damaged the pipe; however, a meeting was held with all the employees who were assigned to do the chipping operation at Watts Bar Nuclear Plant. In this meeting, it was brought to all employees attention that if the pipe is scratched or gouges occur, it should be reported to their foreman so that they may report it to the appropriate engineering unit. No disciplinary action is required at this time.

John E. Treadway

LC:LKT

cc: W. C. English, GFD-Watts Bar Nuclear CONST
J. E. Wilkins, PMD-Watts Bar Nuclear CONST

QC&R
SEP 0 8 1980
RL

WBNP
Constr Engr's Office
SEP 3 '80

QC&R
JUL 15 1991
B&L

1-10-1-24-23

TVA-WBNP

REPAIR WELD OPERATION SHEET BASE METAL

TVA Class C ASME Class 3 Original Weld Number REPAIR PER NCR 2477R [redacted] 1634

FWOS NA (Serial Number) Location Aux (Building) Elevation 737' (Floor) Cut NA Repair 1

Pipe Size 4" (Diameter) x 0.237" (Schedule or Wall) Drawing Number E2879 IC 147

Base Material Specification and Grade SA 106 B to NA

Defects Detected By VT (VT,MT,PT,RT) NDE Report NA (Number) Date NA

Original Welding Procedure NA Repair Welding Procedure GTI1-0-1A, R5

Special Instructions Prepare surface and weld to appropriate finish and contour

CHECK LIST OF REPAIR AND INSPECTION OPERATIONS

1. Excavation Release
2. Chipping
3. Grinding
4. Cutting
5. Inspect Excavation
6. Preheat
7. Purge
8. Welding Release
9. Visual (VT)
10. Liquid Penetrant (LP)
11. Magnetic Particle (MT)
12. Radiographic (RT)
13. Ultrasonic (UT)
14. PWHT
15. _____
16. _____

Oprn. No.	Procedure Reference	Hold Points WE	ME	AI	Released WE	ME	AI	Remarks Field Data, Report Numbers, etc.
1	NA	X			8-5-80			
3	↓	X			8-5-80			
5	↓	X			8-5-80			# 38424
10	WBNP QCP 4.13 R4	X			8-5-80			# 38424
6	PS.1.M.1.2(b)	X			8-5-80			
8	NA	X	X		8-5-80			
9	WBNP QCP 4.13 R4	X			8-6-80			# 38425
10	↓	X			8-6-80			# 38425

QC R
SEP 05 1980
RTL

Repair Welders GAA _____ _____ Issue Slip Numbers 111638 _____ _____

PWHT Required Yes ___ No X

Reviewed for Hold Points	Date
WE: Sylvia Jane Thelps	8-4-80
ME: James F. Dennis	8-4-80
AI: J. E. Evans	8/4/80

Site QA Approval	Date
By:	

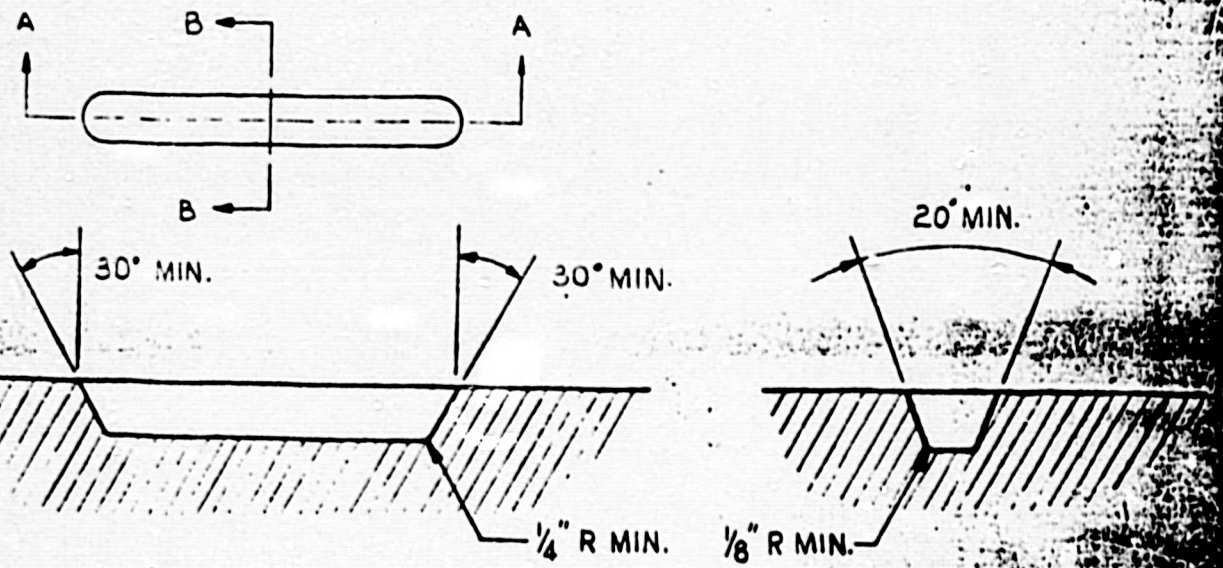
Final Acceptance	Date
Engg. Supervisor Gary L. Bourne	8-22-80
Auth. Insp. J. E. Evans	8/27/80

Original · Mechanical Engineer
1st Copy · Authorized Inspector
2nd Copy · Welding Engineer
Hard Copy · Attach to pipe

(ATTACH TO WELD JOINT)

Rejectable defects revealed by nondestructive examination shall be removed by arc gouging and/or by mechanical means. When gouging is used an additional 1/32-inch of material shall be removed mechanically. The area shall be dye penetrant (PT) or magnetic particle (MT) inspected. Every effort should be made to avoid the necessity for repair welding of minor defects that can be corrected by grinding. Care should also be exercised to remove only those defects that are required to bring the item within acceptable limits.

The repair area shall be contoured to produce an excavation that is fully visible to the welder and allows access of the filler metal to all groove surfaces. Sidewalls of the excavation shall be sloped so they have a minimum of 20° included angle with no sharp breaks in the contour.



SECTION A-A

SECTION B-B

The welding process, parameters, and cleaning requirements of the originally specified welding procedure or acceptable alternate shall be followed when filling the excavation. The repair shall blend into the adjacent area and have no abrupt ridges or valleys and shall meet the finish requirements of the completed weld.

The repaired area shall be examined by the same method(s) that is (are) required for the completed weld.

111638

Control No.

Control No.

Control No.

Type/Size E7018 Size 3/32 Control No. N/A

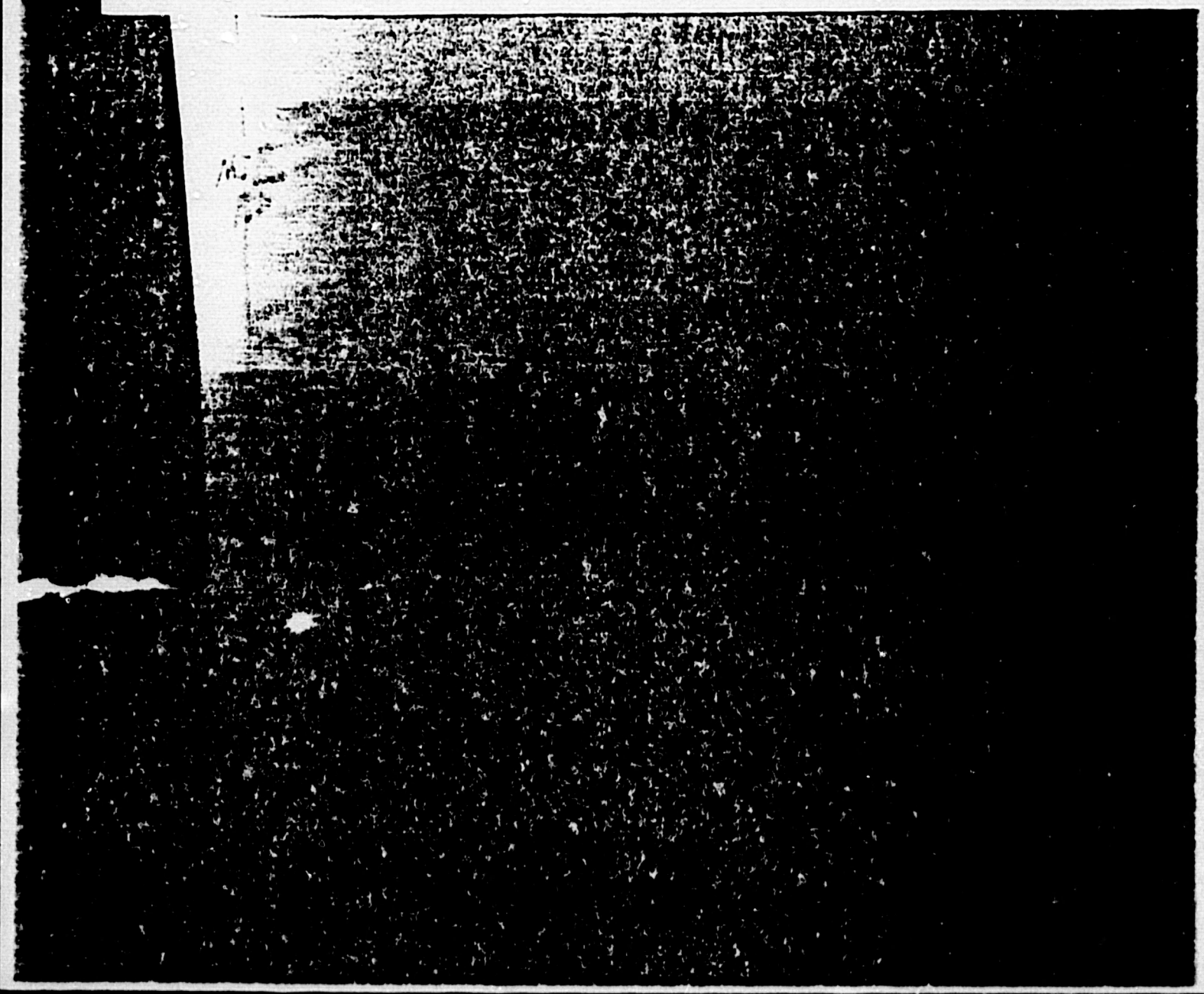
Return Due Size Control No.

Welding Procedure GTAW-0-16-15 Group 1 Remarks Repair - NCR 2477 R1

Welder [illegible] Stencil [illegible] Foreman Sanders

Control Center Attendant [illegible] Date 8-5-80

TVA 10253 (CONST-10-77)



T V A
W B N P

Report Number 3842"

Page 1 of 1

NDE SURFACE EVALUATION DATA SHEET

VISUAL/MAGNETIC PARTICLE/LIQUID PENETRANT

TYPE NDE:
- [X] Visual ---------- Procedure WBNP QCP 4.13 RY
- [X] Liquid Penetrant ---------- Procedure WBNP QCP 4.13 RY
- [ ] Magnetic Particle ---------- Procedure NA

LIQUID PENETRANT

Process: Solvent Removable

- [X] Surface Temperature 60° - 125° F
- [ ] Other NA

Penetration Time 15 MIN.

Developing Dwell Time 8 MIN.

Materials

Penetrant Lot No. 78B032

Developer Lot No. 79E033

Cleaner Lot No. 796030

MAGNETIC PARTICLE

Equipment: [ ] Yoke [ ] Prod [ ] Coil

Equipment Identity No. ____

Current Type [ ] AC [ ] DC

Type Magnetization ____

Prod Spacing ____

Indicating Particle Color ____

NCR 2477R

Weld Number NCR 2477R Cut Number NA Repair Number 1 — Acceptable [X] Rejectable [ ]

Root [ ] Cap [ ] End Prep. [ ] Excavation [X] Other NA

Results: VT & PT NAD

Weld Number ____ Cut Number ____ Repair Number ____ — Acceptable [ ] Rejectable [ ]

Root [ ] Cap [ ] End Prep. [ ] Excavation [ ] Other ____

Results: ____

Weld Number ____ Cut Number ____ Repair Number ____ — Acceptable [ ] Rejectable [ ]

Root [ ] Cap [ ] End Prep. [ ] Excavation [ ] Other ____

Results: ____

Weld Number ____ Cut Number ____ Repair Number ____ — Acceptable [ ] Rejectable [ ]

Root [ ] Cap [ ] End Prep. [ ] Excavation [ ] Other ____

Results: ____

Red Maddox — Operator — II — NDE Level

Red Maddox — NDE Inspector — II — NDE Level — 8-5-80 — Date

TVA (CONSTR-11-77)

TVA
WBNP

Report Number 5N420

Page 1 of 1

NDE SURFACE EVALUATION DATA SHEET

VISUAL/MAGNETIC PARTICLE/LIQUID PENETRANT

TYPE NDE:
- [X] Visual ---------- Procedure WBNP QCP 4.13 R4
- [X] Liquid Penetrant ---------- Procedure WBNP QCP 4.13 R4
- [ ] Magnetic Particle ---------- Procedure NA

LIQUID PENETRANT

Process: Solvent Removable

- [X] Surface Temperature 60° - 125° F
- [ ] Other NA

Penetration Time 15 MIN.
Developing Dwell Time 8 MIN

Materials
Penetrant Lot No. 79B032
Developer Lot No. 79E033
Cleaner Lot No. 79G030

MAGNETIC PARTICLE

Equipment: [ ] Yoke [ ] Prod [ ] Coil
Equipment Identity No. ____
Current Type [ ] AC [ ] DC
Type Magnetization ____
Prod Spacing ____
Indicating Particle Color ____

NCR 8-680

Weld Number NCR 2477R Cut Number NA Repair Number 1
Root [ ] Cap [X] End Prep. [ ] Excavation [ ] Other NA
Results: VT + PT NAD
Acceptable [X] Rejectable [ ]

Weld Number ____ Cut Number ____ Repair Number ____
Root [ ] Cap [ ] End Prep. [ ] Excavation [ ] Other ____
Results: ____
Acceptable [ ] Rejectable [ ]

Weld Number ____ Cut Number ____ Repair Number ____
Root [ ] Cap [ ] End Prep. [ ] Excavation [ ] Other ____
Results: ____
Acceptable [ ] Rejectable [ ]

Weld Number ____ Cut Number ____ Repair Number ____
Root [ ] Cap [ ] End Prep. [ ] Excavation [ ] Other ____
Results: ____
Acceptable [ ] Rejectable [ ]

Rod Maddox — Operator — II — NDE Level

Rod Maddox — NDE Inspector — II — NDE Level — 8-6-80

DIVISION OF CONSTRUCTION

NONCONFORMING CONDITION REPORT

WBNP-QCP-1.2
ATTACHMENT A1 R9

1. Nuclear Project: WATTS BAR NUCLEAR PLANT | Unit 1 | NCR: 2477 R

2. Area: ☐ Civil ☐ Electrical ☒ Mechanical ☐ Instrumentation ☐ Welding | ASME Code Item ☒ Yes ☐ No

3. Activity ☐ Receiving ☐ Storage ☐ Fabricating ☒ Installing ☐ Other ☐ Testing | Contract No. N/A

4. Type: ☐ Damage ☐ Failure ☐ Defect ☐ Documentation ☒ Other Damage to pipe

5. Item Description: Box anchor 47A060-70-2
Field weld 1-070A-D147-2A
Dravo subassembly Mk# 70-CC-239
TVA Class C, ASME Class III

ASME

6. Nonconformance Description (Include Apparent Cause): Subassembly received surface scratches and gouged while cutting box anchor 47A060-70-2 from piping. Cutting operation sheet 1-70-F-29-41 was issued for this cut. Surface scratches and gouges occurred while an air hammer was being used to remove grout on 7-19-80.

Recommended Disposition: ☒ Rework ☐ Reject ☒ Repair ☐ Use-As-Is ☐ Other
(Check Block & Detail Below) A base metal repair sheet to be issued per WBNP-QCP-6.10, subassembly to be repaired in accordance with necessary welding procedures.

Action Required to Prevent Recurrence:

Craft supervision to investigate the circumstances of this nonconformance and provide training/discipline as necessary.

AUG 04 1980
RL

NCR Initiator: James T. Dennis Date 7-29-80

7. Referred to Design Project Organization (DPO): ☐ Yes ☒ No | DPO Coordination Contact

Disposition: ☒ As Recommended ☐ Other (Describe) | Significant Condition ☐ Yes ☒ No

Approved by Construction Engineer: [signature] Date 8-1-80

8. DPO Disposition: ☐ As Recommended ☐ Other (Describe)

Approved by Design Project Organization: Date

9. Disposition Inspection and Release from Nonconforming Status: ☐ Yes ☐ No

Inspected by: Date

10. Action Required to Prevent Recurrence Complete: ☐ Yes ☐ No

Verified by Construction Engineer: Date

Distribution:
Site QA Records File
Construction Engineer
Project QA Unit
QA Manager, OEDC
Design Project Organization (Items for his action only)
Authorized Nuclear Inspector (Code items only)
EN DES NEB-NCS (Significant NCR's only)
OHS NSHS (Significant NCR's only)
MEDS

Disposition Reviewed and Accepted By:

[signature] 8-4-80
Authorized Nuclear Inspector Date

TVA [illegible] (EXCEL 10-79)

NRC

TVA 24 (08-6-88)

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 15 1985

SUBJECT: TRANSMITTAL OF INVESTIGATION REPORTS

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

WI-85-055-001	EX-85-021-002
WI-85-056-001	IN-85-424-011
IN-85-503-001	IN-85-540-001
IN-85-778-001	IN-85-426-002
IN-85-493-004	IN-85-815-001
IN-85-770-003	IN-85-835-002
IN-85-346-003	IN-85-352-001
IN-85-532-004	IN-85-612-006
IN-85-532-005	IN-85-091-K02
IN-85-543-002	

Original Signed By
M. A. Harrison

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):
J. W. Coan, P-104 SB-K
H. W. Culver, W12A19 C-K
E. R. Ennis, Watts Bar Nuclear Plant
G. Wadewitz, Watts Bar Nuclear Plant
W. F. Willis, E12B16 C-K (4)

QUALITY
TECHNOLOGY
COMPANY

P.O. BOX 600
Sweetwater, TN
37874

ERT INVESTIGATION REPORT,REV. 1

CONCERN NO: WI-85-055-001 — MASTER TRACKING ITEM
WI-85-056-001

CONCERN: See Details Below

INVESTIGATION
PERFORMED BY: William Kemp, Jr.

DETAILS:

WI-85-055-001

The welder certification test presently being administered to welders at Watts Bar, in the recertification efforts following a recent stop work order (No. 25) is not in compliance with Code (ASME Section 9).

WI-85-056-001

CI was told, (by welders who are in the process of retesting), that they are being tested on flat plate, in the flat position, for welding pipe using the TIG & SMAW processes. This is not in accordance with ASME code requirements.

DOCUMENTATION/CODES/REQUIREMENTS REVIEWED

FSAR 3.1
ASME Code Section III & IX
Stop Work Authority # 25 Rev. 1 issued 8/23/85
NCR 6277 issued 8/26/85
NRC Letter Docket 50-390/50-391
Watts Bar Nuclear Plant Informal Memo dated 8/28/85
Letter L44-85-0910-804 Response to confirmation of action letter dated September 11, 1985, to Dr. J. N. Grace, Region II NRC, from H. G. Parris
Memorandum C01-85-0903-004 Confirmation of Action Letter Welder Certification Program, from G. Wadewitz to J. W. Coan
ANI SIS Report, dated 9/18/85
Memo Watts Bar Code Welding (TOO 850823 916) dated August 23, 1985 stated: "Temporary suspend all code welding" IE: Critical Structure Systems Components welding

CONCERN NO: WI-85-055-001
WI-85-056-001

PERSONNEL CONTACTED Confidential

SUMMARY OF INVESTIGATION

These concerns are substantiated.

On 9/13/85, Mr. M. Harrison of NSRS contacted ERT and assigned WI-85-055-001 to ERT for investigation. While performing the investigation, a related concern, WI-85-056-001, was also authorized by NSRS for immediate investigation. Both concerns were investigated as one issue.

The purpose of the investigation was to determine if the actions taken by TVA in recertifying the welders in response to Stop Work Authority # 25, met FSAR requirements. In reviewing the program established by TVA and the associated documentation concerning the recertification of welders, it has been determined that the ASME and AWS codes were not met, and that the status of welders recertified under this new program is indeterminate.

FINDINGS:

The following documents were reviewed to determine what corrective action measures TVA had committed to and taken in recertifying their welders; Stop Work Authority # 25, Nonconformance Report 6277 and TVA's commitment letter 1.44-85-091-803 to USNRC, Region II.

The following are excerpts taken from those documents listed above:

Non-conformance Report 6277, dated 8/26/85, references Stop Work Authority # 25, and in the corrective method block it states that: "A review of the program will be conducted."

Stop Work Authority # 25, issued 8/23/85, (Rev. 1) states: "Adequacy of some aspects of the welder certification program is indeterminate. Welding will be curtailed until adequacy of the program can be re-evaluated."

CONCERN: WI-85-055-001
WI-85-056-001

DETAILS, continued

TVA's commitment letter to NRC, L44-85-0910-804, dated September 11, 1985, states under the corrective action heading that: "All initial welder certifications older than 90 days have been rescinded...(reference Attachment "B" for details)". Attachment B states that: "Stop Work Authority # 25 was issued August 23, 1985, and all welder certifications were revoked effective August 26, 1985, with the exception of 30 welders". Attachment "B" goes on further to state that "a renewal qualification test program was initiated on August 28, 1985, for all welders whose certifications were revoked".

The information provided in TVA's letter to the NRC was a reiteration of the commitments made in TVA memorandum C01-85-0903-004 dated 9/3/85.

(G. Wadewitz to J. W. Coan). This memorandum C01-85-0903-004 states that the welders certifications had been "rescinded" and "revoked".

On 9/13/85, after reviewing TVA's commitment to "rescind/revoke welders certifications", Mr. W. Kemp and Mr. O. Thero met with G. Wadewitz, Project Manager of Watts Bar, to discuss the rescinding/revoking of welders' certifications. It was stated by ERT that revoking welders certification would require requalification of all welders, not renewal of certifications. Mr. G. Wadewitz contacted Mr. S. Stagnolia of ENDES who stated that ERT was talking semantics. By the conclusion of the meeting, the subject of rescinding/revoking of welders' certification had not been resolved.

On 9/13/85, a discussion was held with the site ANI to establish code compliance. It was stated by the ANI that there was a problem with those recertifying under the recertification program, who failed the test and were retested with only one test conducted not two as required by ASME IX QW 321. However, the ANI was not aware that TVA had stated that the welder certifications were rescinded/revoked.

On 9/13/85, Mr. M. Harrison of NSRS was contacted by Mr. O. Thero and it was stated that these concerns were substantiated.

From 9/14/85 to 9/16/85 a further review of related recertification documentation identified the following:

1) There was a 15% failure rate for the welders on the first retest and a 4% failure rate for the second retest.

2) Welders' cards stated that their certifications were rescinded on 8/26/85.

3) There were "special" procedures issued for these tests. These tests were not intended for initial certification, but for recertification only.

CONCERN NO: WI-85-055-001
WI-85-056-001

DETAILS, continued

4) The initial issuance of NCR 6277, block 1A stated: "The welder recertification program...". A corrected copy of NCR 6277 (8/26/85) stated: "The welder certification program....". The copy of NCR 6277 received on 9/20/85 which is attached to Stop Work Authority # 25 again states: "The welder recertification program..."

5) TVA commitments to NRC as documented in L44-85-0910-804 states that the welders certifications were "rescinded/revoked". In reviewing the ASME and AWS code requirements, welders certifications are no longer valid based upon the revoking of their certifications. This according to ASME/AWS would require initial qualification of all welders. Reference ASME Section IX, QW 461.9.

On 9/17/85 Mr. G. Wadewitz stated that the NRC had given verbal approval for the welders to return to work, however, although the craft were being called back, no work would commence until the release was received in writing. It was inquired if TVA's position on rescind/revoke remained the same. It was stated that the verbage would stand as is.

On 9/18/85, Stop Work Authority # 25 was lifted.

On 9/18/85, the authorized inspection agency issued a SIS report raising the same code compliance questions as noted in this investigation.

On 9/19/85, Mr. G. Wadewitz and Mr. S. Stagnolia stated to ERT that the wording of rescinding/revoking would be changed to administrative withdrawal or some wordage as to that effect. At the time of this report the wording has not been changed.

9/20/85 - The offices of AWS, ASME and the National Board were contacted to request their opinions on the rescinding/revoking of welders certifications. It was the combined opinions that if qualifications (certifications) were revoked/rescinded, then the welder(s) must be initially qualified to position(s), material and process, just as if it was an initial qualification.

AWS	-	Mr. D. Seal	Florida
NB	-	Mr. M. Hoyle	Columbus, Ohio
ASME	-	Welding Dept.	NY, NY

CONCERN NO: WI-85-055-~~002~~ 001 Rev
WI-85-056-001

DETAILS, continued

9/23/85 - A meeting was held with Mr. G. Wadewitz and Mr. S. Stagnolia to review this report. The statement was made by Mr. Stagnolia that for those welders who failed their initial test a single pass on a test coupon is acceptable, if training is performed. ASME Section IX, QW 321.3, "Further Testing" states: "When the welder or the welding operator has had further training or practice, a complete retest shall be made for each position on which he failed to meet the requirements. Rev 1

CONCLUSION

These concerns are substantiated. Based on the investigation of the concerns it is concluded that the recertification program does not satisfy ASME/AWS code requirements.

This conclusion is based on the following:

* The revoking/rescinding of certifications (i.e. initial qualification versus requalification)
* Retesting of failures is not in compliance with code/standards.

Revised Report Reviewed & ACCEPTED:
10/2/85

NOTE: See Original Report for: NRC
WI-85-055-001
WI-85-056-001 for recommendations for corrective action. No new recommendations made.

PREPARED BY D M Kemph Date

REVIEWED BY D L Thiers 9/24/85 Date

ERT INVESTIGATION REPORT

CONCERN NO: IN-85-503-001, IN-85-778-001, IN-85-612-006,
IN-85-493-004, IN-85-770-003, IN-85-346-003,
IN-85-532-004, IN-85-532-005, IN-85-543-002,
EX-85-021-002, IN-85-424-011, IN-85-540-001,
IN-85-426-002, IN-85-815-001, IN-85-835-002,
IN-85-352-001 — MASTER TRACKING ITEM

CONCERN: See "DETAILS" Below

INVESTIGATION PERFORMED BY: William Kemp
Rana Ahmed

DETAILS:

This report contains the findings derived from a generic investigation of the concerns listed below:

IN-85-503-001

CONCERN: Individual (name known) in concerned individual's (hereafter CI) crew was given 2 weeks off for failing to have welding card updated by weld engineering. Individual had performed required welds but was out sick on the day update was required. Other individuals in CI's crew who had failed to get their cards updated received no disciplinary action or had received only an oral warning.

IN-85-778-001

CONCERN: Welder certifications have been improperly updated. No further details available.

IN-85-612-006

CONCERN: Welder certification update is inadequate and not enforced per an established set of criteria. Welders given time off without pay for failure to update certifications.

IN-85-493-004

CONCERN: Welder certification update is inadequate to verify that the welder can continue to weld a particular process.

IN-85-346-003

CONCERN: Welder certifications are updated on evidence of rod withdrawal slips. The process may not have been used in the applicable time period, 90 day or/80 day, depending on ASME or AWS.

CONCERN: See "DETAILS" below

DETAILS: (cont)

IN-85-532-004

CONCERN: Memo issued by management that provides direction that is contrary to the established procedure for welder re-certification.. (Author of memo known to QTC)

#IN-85-532-005

CONCERN: Welders are recertified without verification that welders have performed specific weld technique.

IN-85-543-002

CONCERN: Welder certification update procedure is inadequate. Welders can be off work over 90 days and not be required to re-test upon returning to work.

EX-85-021-002

CONCERN: There is no method/objective evidence to verify that a welder has used a specific process when their weld cards are stamped/updated by QC.

IN-85-540-001

CONCERN: Inadequate welder certification update. Welder is "punished" if he/she forgets to update on time yet the update is a formality. There is no verification the process was used during the 90 day period. Employees are kept updated even though they do not weld for years at a time.

IN-85-426-002

CONCERN: Updating of welder certifications is inadequate in that a welder is only required to present their card for updating and sometimes is asked to run a bead - never a complete.

IN-85-815-001

CONCERN: Re-certification of some welders consists only of completing paperwork. These employees do not have to prove welding ability. This is done for some employees who have not welded for years.

CONCERN: See "DETAILS" page 1 & 2

DETAILS: (cont)

IN-85-835-002

CONCERN: Welders recertification can be accomplished by simply having ones card stamped. No performance test is required or conducted in the process.

IN-85-352-001

CONCERN: Welder updates certification by going to QC Welding and burning a rod or just striking an arc. No weld using the process is done or verification that the process had been used once during the 90/180 day period is required.

IN-85-424-011

CONCERN: Welder certification updating process is inadequate, and basing disciplinary actions on failing to comply with the process is unfair (e.g. welders who fail to renew certificates are given two weeks off, but recertification consists only of getting card stamped - no welding is involved).

IN-85-770-003

CONCERN: Individuals possessing invalid welder certifications.

Personnel Contacted: Confidential

Reference Documents:

Quality Assurance Manual 5.1 (ASME) Welding Control
Quality Control Instructions 4.02 Welder/Welding Operator Performance Qualification
G29 Project Specification Manual 1.M.2.2 Welder/Welding Operator Performance Qualification
IN-85-113-003
WBN-85 0108 200 Jan. 8, 1985
Letter May 24, 1984 Welder Certification/Update
WBN-84 0123 201 Jan. 23, 1984
ERT Inveatigation Reports WI-85-055-001 AND WI-85-056-001
Stop Work Authority #25

This inveatigation waa conducted to determine the availability of documented evidence to support the welders qualification renewal of program a welders qualification.

CONCERN: See "DETAILS" page 1 & 2

DETAILS: (cont)

The following deficiencies were noted:

1) QAM 5.1 (ASME), G29 PSM 1.M.2.2 and QCI 4.02 are discrepant in identifying the responsibilities for the test shop and qualification tests. For example, QAM 5.1 states that the construction engineer designates the engineer who is to supervise the test shop and perform qualification testing. QCI 4.02 states the Welding Engineering Unit will be responsible for the test shop and qualification testing while G29 PSM 1.M.2.2 states that the test supervisor shall be responsible for the test shop and qualification testing.

2) During the investigation it was stated by a welding engineer "we do not qualify welders to Section IX only to G29." However, QAM 5.1 (ASME) refers to the "code", QCI 4.02 references the G29 specification and G29 PSM 1.M.2.2 states that welder qualification is in accordance with ASME Section IX.

3) A random selection of related NCRs (#4868, 5194, 4508R, 5304, 5303, 5065, 5034, 4577R) from 1981 to 1984 concerning expired welder qualification determined that the root cause was never evaluated or determined.

4) There is no documented evidence per QCI 4.02, paragraph 6.4.1.2 and QAM 5.1-(2.4) as to the verifiction of welders welding to a specific process to support tneir renewal of certification. The only evidence is if someone in QC saw or knows that the welder has performed an in process weld thus, justifying his renewal. However, no documentation is available to support QC's claim that this took place.

5) During the investigation the following incident was observed: A welder came to the test shop to update his welding certification. The welder was advised by a welding engineer to go to the test booth. After 2 or 3 minutes the welder came back to the office and gave his card to the weld engineer in the test shop office who stamped and initialed his card. It may be noted that both of the welding engineers were busy at that time with the ERT investigator. The welding engineer did not observe or verify the welders process per QCI 4.02, paragraph 6.1.5.1, 6.1.5.2, 6.1.3.1, 6.1.3.2. There was no observation of the welder taking any weld filler metal to the test booth (QCI 4.02, paragraph 6.1.1.3) or the welder bringing any hot metal to prove the process in the test booth (QCI 4.02 paragraph 6.1.5.3.1). It was also stated by the welding engineer that they do not observe all the welders all of the time (only 70%).

CONCERN: See "DETAILS" page 1 & 2

DETAILS: (cont)

6) If no one in QC has seen or has knowledge of the welder using a process in a 3 month period, the welder goes to the weld test shop to "burn a rod" on a plate to the process he is qualifying for with or without verification of position, current and material. The welder has now welded to a process within a 3 month period and his certification is renewed with no more documentation than a signature on a certification card.

Stop Work Authority #25 was issued to stop all weld activities on August 23, 1985. The following corrective action by management has been initiated and is in process. Reference ERT Investigation Reports WI-85-055-001/ WI-85-056-001 - on Stop Work Authority #25.

1) Re-certifing approximately 536 welders except for 30 welders which had been certified within 90 days previous to the stop work order being issued.

2) QCI 4.02 Welder and Welding Operator Performance Instruction, has been revised to include controls and specific objective evidence for welders preformance, verification and revewal of certification.

3) TVA Form 10204A (QC-8-85), Welding Material Requisition, will be revised to include the statement: "I certify that on this date this welder use the above welding process on _____(feature)."

   The material requisition shall be kept for the life of construction and will be inputted into the computerized welder-welding operator listing on a daily basis.

4) Quality Training Program Manual 3-3 and QAM 5.1 will be revised to reflect the program for the control of welder's certification.

With the initiation of these controls by management, this should eliminate future problems however past problems on welders qualification must still be evaluated.

Memorandums WBN-84-0123-201, WBN-85-0108-200 and a memorandum which was dated May 24, 1984, all state:

1) "If the welders certification expire because of failure to have them updated the following actions will be taken"
   "First Offence - Two week suspension"
   "Second Offence - Termination"

CONCERN: See "DETAILS" page 1 & 2

DETAILS: (cont)

2) "The welder would be held responsible"

3) "Each welder is responsible"

4) "Alteration of penalty for welders" who fail to update the certification

However, the requirements per QAM 5.1 Rev. 20 states that for welder & welding operator qualification maintenance, the responsibility for this control is with the "Welding Engineering Unit/Welding Quality Control."

QCI 4.02 Rev. 3 states that the Welding Engineering Unit is responsible to control verification and renewal of qualifications.

ASME IX, QW 300.2 states that the manufacturer (TVA) is responsibility for welder qualification.

ASME Section III, Subsections NB, NC, and ND states that the manufactuer or installer shall maintain records of qualification of welders.

AWS D1.1 states that welder qualification requirements shall be controlled by the manufacturer & installer.

From these requirements and the performance of this investigation the following items are noted.

1) Responsibility for control of welder qualification (renewal) was not retained by management (per applicable requirements) but was directed to craft (welders).

2) There was no system or control to identify welders whose qualifications were up for renewal.

3) Memos surcomvented procedure requirements and commitments for control of welders qualifications.

Based on the findings in the investigation, this concern is substantiated. It is noted that TVA has initiated corrective action to resolve this concern, however the impact of past welder qualification problems must be evaluated.

Prepared by W M Kemper 9/26/85 Date

Report reviewed and accepted NSRS 10/2/85

Reviewed by O K Thew 9/26/85 Date

NO new recommendations offered. Refer to IN 85 113 003 For corrective action. NSRS 10/2/85

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-503-001 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

OR

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

No X Yes ___ If Yes, Explain: _____

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

This Condition was Identified by: _____ 365-4464
ERT Group Manager Phone Ext.

_____ 365-4464
ERT Project Manager Phone Ext.

Acknowledgment of receipt by NSRS

_____ Date 10/3/85 Time 1215
Signed

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-778-001 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain; _____

_____

_____

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

This Condition was Identified by: _____ 365-4464
ERT Group Manager Phone Ext.

_____ 365-4414
ERT Project Manager Phone Ext.

Acknowledgment of receipt by NSRS

_____ Date 10/3/85 Time 1257
Signed

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-612-006 (ERT Concern No.) _____ (ID No., if rep.:ted)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

OR

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

No X Yes ___ If Yes, Explain; _____

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

This Condition was Identified by: D. K. Thew — ERT Group Manager — 365-4464 Phone Ext.

W. S. Stokes — ERT Project Manager — 36 > 4141 Phone Ext.

Acknowledgment of receipt by NSRS

Signed _____ Date 10/3/05 Time 1225

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-493-004 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ____ If Yes, Explain: _____

OR

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

No X Yes ____ If Yes, Explain: _____

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

This Condition was Identified by: D. L. Shea — ERT Group Manager — 365-4464 Phone Ext.

W. Shawn S. Nelson — ERT Project Manager — 376-4141 Phone Ext.

Acknowledgment of receipt by NSRS

Signed _____ Date 10/3/85 Time 1251

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-770-003 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain; _____

_____

_____

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

This Condition was Identified by: D. L. Shea — ERT Group Manager — 365-4464 Phone Ext.

William A. Jackson — ERT Project Manager — 365-4414 Phone Ext.

Acknowledgment of receipt by NSRS

M. Lee — Signed — Date 10/3/85 — Time 1251

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-346-003 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain; _____

_____

_____

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

This Condition was Identified by: D. L. Thaus — ERT Group Manager — 365-4464 Phone Ext.

W. Alan S. Nelson — ERT Project Manager — 365-4414 Phone Ext.

Acknowledgment of receipt by NSRS

M. M. Lee — Signed — Date 10/3/84 — Time 1251

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-532-004 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain: _____

_____

_____

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

This Condition was Identified by: D. L. Shaw 365-4464
ERT Group Manager Phone Ext.

W. Stevenson Jr. 615-44141
ERT Project Manager Phone Ext.

Acknowledgment of receipt by NSRS

Signed _____ Date 10/3/85 Time 1251

ERT Form M

REQUEST FOR REPORTABILITY EVALUATION

FINAL

1. Request No. IN-85-532-005 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain: _____

_____

_____

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

This Condition was Identified by: D. L. Shea — ERT Group Manager — 365-4464 Phone Ext.

W. Blair Stokes — ERT Project Manager — 365-4401 Phone Ext.

Acknowledgment of receipt by NSRS

W. H. Lain — Signed — Date 10/3/85 — Time 1251

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-543-002 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

ERT Form M

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain; _____

_____

_____

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

This Condition was Identified by: D. L. Shaw — ERT Group Manager — 365-4464 Phone Ext.

W. Alan Schaeffer — ERT Project Manager — 365-4414 Phone Ext.

Acknowledgment of receipt by NSRS

M. W. Lee — Signed

Date 10/3/85 Time 1251

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. EX-85-021-002 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain: _____

_____

_____

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

This Condition was Identified by: D. L. Shea — ERT Group Manager — 365-4464 Phone Ext.

W. Alan Jackson — ERT Project Manager — 365-4141 Phone Ext.

Acknowledgment of receipt by NSRS

M. O'Lein — Signed — Date 10/3/85 Time 1251

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-424-011 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain; _____

_____

_____

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

This Condition was Identified by: D. L. Shea — ERT Group Manager — 365-4464 Phone Ext.

W. Thomas Stetson — ERT Project Manager — 365-4414 Phone Ext.

Acknowledgment of receipt by NSRS

Signed _____ Date 10/3/85 Time 1251

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-540-001 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain: _____

_____

_____

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

This Condition was Identified by: D K Theis — ERT Group Manager — 365-4464 Phone Ext.

W Stein S Sebo — ERT Project Manager — 365-4401 Phone Ext.

Acknowledgment of receipt by NSRS

Signed _____ Date 12/3/85 Time 1251

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-426-002 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification w.. conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain: _____

_____

_____

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

This Condition was Identified by: D. L. Shea — 365-4464
ERT Group Manager — Phone Ext.

W. Klein A. Lehm — 365-4464
ERT Project Manager — Phone Ext.

Acknowledgment of receipt by NSRS

_____ Date 10/3/85 Time 1251
Signed

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-815-0[illegible] (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

ERT Form M

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ____ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ____ If Yes, Explain: _____

_____

_____

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

This Condition was Identified by: D. K. Shaw 365-4464
ERT Group Manager Phone Ext.

W. Alan Stokes 315-4441
ERT Project Manager Phone Ext.

Acknowledgment of receipt by NSRS

Signed _____ Date 12/3/85 Time 1257

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-835-002 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain: _____

_____

_____

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

This Condition was Identified by: _____ 365-4464
ERT Group Manager Phone Ext.

_____ 365-4464
ERT Project Manager Phone Ext.

Acknowledgment of receipt by NSRS

_____ Date 10/3/85 Time 1257
Signed

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-352-001 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

_____

_____

OR

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

No X Yes ___ If Yes, Explain: _____

_____

_____

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

This Condition was Identified by: D. L. Shaw — ERT Group Manager — 365-4464 Phone Ext.

William S. Lehn — ERT Project Manager — 365-4414 Phone Ext.

Acknowledgment of receipt by NSRS

_____ Signed — Date 10/5/85 — Time 1251

ERT Form M

FINAL

REQUEST FOR REPORTABILITY EVALUATION

1. Request No. IN-85-352-001 (ERT Concern No.) _____ (ID No., if reported)

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

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

Updating of welder's certification was conducted without objective documentation evidence

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

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

NO ___ YES X If Yes, Explain: Without objective documented evidence to support renewal of certification, welding certification is indeterminate.

AND

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

No ___ Yes X If Yes, Explain: 10CFR50 Appendix 50 Criteria IX ANSI N45.2

OR

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

No X Yes ___ If Yes, Explain: _____

OR

REQUEST FOR REPORTABILITY EVALUATION

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

No X Yes ___ If Yes, Explain: _____

OR

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

No X Yes ___ If Yes, Explain: _____

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

This Condition was Identified by: D. K. Shaw — ERT Group Manager — 365-4464 Phone Ext.

William S. Scheu — ERT Project Manager — 365-4414 Phone Ext.

Acknowledgment of receipt by NSRS

Signed _____ Date 10/3/85 Time 1251

ERT Form M