

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401
500A Chestnut Street Tower II

January 11, 1984

Mr. James P. O'Reilly, Director
U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Dear Mr. O'Reilly:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNITS 1 AND 2 -
DOCKET NOS. 50-259 AND -260 - FACILITY OPERATING LICENSES DPR-33 AND -52 -
10 CFR 21 REPORT

During receipt inspection of items bought on contract No. 341119, it was discovered that numerous problems existed with ELMA power supplies (part No. 164C5261P004). These were bought as spare parts for two modifications. Among the problems found were defective wiring, cold solder joints, and overall poor quality workmanship. The power supplies have thus far been installed only in the reactor protection system and are in a "fail safe" configuration. Of those installed, eight in unit 1 and eight in unit 2, all have been checked and defects repaired.

This problem is reportable under 10 CFR 21 and was reported to me on January 10, 1984. The enclosed part 21 report contains additional information about this matter.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

H. G. Parris
H. G. Parris
Manager of Power

Enclosure

8401240254 840111
PDR ADOCK 05000259
S PDR

Enclosure

EVALUATION LOGIC FOR PART 21

PROBLEM: Defective wiring & Poor Quality workmanship on EIMA Model #164C5261 P004 Power Supply
IDENTIFIED BY: Receipt Inspection of Items on Contract # 341119

A. Does the problem involve:

1. Failure of goods and services to comply with applicable NRC requirements (regardless of whether these requirements are included in the procurement document). Yes ☐ No ☒ (If yes, go to C)
2. A procured basic component failure resulting in a condition or circumstance that could contribute to exceeding a safety limit as defined by plant technical specifications. Yes ☒ No ☒ (If yes, go to B)
3. Departure of a delivered component or service from the technical requirements of a procurement document. Delivery occurs upon acceptance by NUC PR (e.g., at receipt inspection). Yes ☒ No ☐ (If yes, go to B)

* Answer all 3 questions above. If all "No's", STOP HERE. If any "Yes's", continue as indicated by the applicable "GO TO" statement.

B. Is component necessary to ensure:

1. The integrity of the reactor coolant pressure boundary Yes ☐ No ☒
2. The capability to shut down the reactor and maintain it in a safe shutdown condition Yes ☒ No ☐
3. The capability to prevent or mitigate the consequences of accidents Yes ☒ No ☐

Is security system deficiency involved?

Yes ☐ No ☒

If all "No's", STOP HERE - If any "Yes's" - GO TO C

C. Could the defect have caused a substantial safety hazard? Yes ☒ No ☐
(By definition, item A2 constitutes a substantial safety hazard.)

If "No", this item is not reportable - If yes, this item is reportable under Part 21.

D. Is this item reportable by NUC PR under Part 21? Yes ☒ No ☐

Submitted: RE Burns / 12/2/83
Reviewer Date
Reviewed: Samuel King / 12/2/83
Quality Assurance Supervisor Date
Approved: JE Swindell / 1/10/84
PORC Chairman Date

cc: Compliance Supervisor

Retention: Period - Lifetime; Responsibility - Document Control Supervisor

*Revision: yes

Attachment 1

Part 21

Report #

PART 21 REPORT

Plant BFNP References DCR's 2820

and 2821

Component or System Identification EIMA Model #164C5261P004 Power Supply

Supplier of Component NU-THERM

Nature of Defect or Noncompliance and Cause Defective Wiring, Cold Solder Joints and overall poor quality workmanship.

Extent of Safety Hazard Could contribute to failure of ECCS systems, Failure could prevent initiation

Date Which Defect or Noncompliance Was Discovered 12/2/83

Number of Identical Components in Use 16

Location of Components 8 in Unit 2 Auxilliary Instrument Room and 8 in Unit 1 Auxilliary Instrument Room

Corrective Action and Recurrence Control Taken or To Be Taken All

Elma Power Supplies currently in service will be inspected, No Elma Power Supplies will be installed on ECCS systems and DCR's 2820 and 2821 have been written to replace these Power Supplies.

Expected Completion Date Inspections will be performed on Unit 1 prior to start up and at earliest opportunity on Unit 2

Has defect or noncompliance been reported previously? Yes / / No / /

If yes, by what means?

RE Burns 12/2/83
H.T. Chambers 12/2/83
Submitted by Date

J.E. Sundell 1/6/84
PORC Review Date

A.T. Korn 1/6/84
Superintendent Approval Date

Retention: Per

etime, Responsibility - Document Control Supervisor