

Alabama Power Company
600 North 18th Street
Post Office Box 2641
Birmingham, Alabama 35291-0400
Telephone 205 250-1835

R. P. McDonald
Senior Vice President



May 5, 1988

Docket Nos. 50-348
50-364

Director, Office of Enforcement
U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Gentlemen:

Joseph M. Farley Nuclear Plant Inspections
of May 11-22, June 1-5 and June 11-July 10, 1987

RE: Supplemental Response to Notice of
Violation and Proposed Imposition of
Civil Penalties Regarding Enforcement
Action 87-142

On December 17, 1987 Alabama Power Company responded to the NRC Notice of Violation and Proposed Imposition of Civil Penalties (NOV), dated November 3, 1987, relating to the Joseph M. Farley Nuclear Plant Units 1 and 2 (EA 87-142). The NRC reported additional findings, asserted to relate to EA 87-142, in an Inspection Report issued by letter dated February 4, 1988. In that letter, the NRC requested that Alabama Power Company "provide [its] corrective actions for these additional examples in a supplemental response" to the NOV. As requested, Alabama Power Company describes below the corrective actions taken with respect to these items.

PROCUREMENT OF COMMERCIAL GRADE COMPONENTS FOR EQ APPLICATIONS
(50-348, 364/87-30-01)

General

In the February 4, 1988 Inspection Report, six examples of conditions considered to reflect adversely on Alabama Power Company's procurement process were noted. Four of these items were self-identified by Alabama Power Company. As requested, corrective measures related to those findings are described below. Some of these actions are included in our December 17, 1987 response.

JEH
11

On June 4, 1987, prior to completion of the vendor inspection audit on which the November 3, 1987 NOV was based, plant procedures were revised to require written evaluation and approval of Code C parts prior to their use in safety related functions. This action was an interim measure until a dedication program was approved.

Procedures were revised on November 13, 1987 requiring engineering review of Code C parts prior to installation in safety related components. If the commercial grade part does not perform a safety function, a basis for acceptance is provided. Procedures have also been revised to incorporate a parts dedication program which provides clear guidance for procurement and dedication of commercial grade items (except for parts procured as Code D) for use in performance of safety related functions.

As noted in Alabama Power Company's December 17, 1987 response, Alabama Power Company intends to continue actively working with the NRC and industry committees in an effort to improve the process for dedication of commercial grade items for use in the performance of safety related functions.

Alabama Power Company will further revise its procedures as follows:

1. EQ components and parts that perform a safety function will be procured as safety related or they will be procured as non-safety related and dedicated. If the parts serve no safety related function and are not required to function to satisfy the environmental qualification of the component, they may be purchased as non-safety related.
2. Procurement procedures will be revised to require that items that are procured as non-safety related for dedication for safety related use in EQ applications will undergo an engineering review to determine that the items are the same as the items included in the original qualification test(s) or that any deviations which could affect the qualification status have been satisfactorily addressed.
3. Procurement procedures will be revised as necessary to allow the dedication of Code D (non-safety related) items to be used in safety related functions. This dedication, including a commitment of Alabama Power Company to accept 10CFR21 reporting responsibility, may be a formal dedication plan or it may be a documented engineering review showing the adequacy of the part.

The second paragraph on page 11 of the Inspection Report states in part, "Review of the quality implementing procedure FNP-O-AP-9, Revision 12, revealed that measures had not been established to assure that applicable regulatory requirements are met, and design bases are preserved during the procurement and use of QA Review Code C (Non-safety-Related) and QA review

Code D (Non-safety-Related) items in EQ applications." Alabama Power Company does not agree with the portion of this conclusion regarding Code D items. FNP-0-AP-9, paragraph 9.2.1, states that Code D assemblies, parts or materials and services will be assigned QA requirements per the criteria contained in paragraph 9.2.1.1. Specifically, this paragraph states that design, code, or license requirements shall be included in the procurement documents. This ensures that the design bases are preserved during the procurement of Code D items, including items in EQ applications.

Detailed Discussion of NRC Identified Examples

EXAMPLE 1:

"P.O. No. QP-1481 (QA Review Code D) was issued for the procurement of States type ZWM terminal blocks. The controlling procedure for this procurement was FNP-0-AP-9, revision 12 (Issue Date September 2, 1986). This procedure defined Code D as a non-safety-related procurement of an item where current license requirements are applicable to the part, or special vendor documentation and verification of vendor's QA program is deemed necessary. The requirements of 10 CFR 21 were not imposed on this purchase order. Acceptance of the items by the licensee was by receipt inspection with a Certificate of Conformance that noted the terminal blocks had been manufactured using vendor's standard QA/QC procedures for Class 1E terminal blocks. However, specific supplemental documentation, such as material certificates or reports of tests, was not requested in the purchase order nor were they provided by the vendor."

Admission or Denial

Alabama Power Company admits that specific supplemental documentation was not requested in the purchase order nor was it provided by the vendor.

Evaluation of Violation

Although specific supplemental documentation was not requested nor received in the subject purchase order, subsequent evaluation by the vendor (Multi-amp letter dated May 3, 1988) has demonstrated that the States type ZWM terminal blocks procured Code D were of the same design, materials and manufacturing processes as those tested (Wyle Laboratories Test Report NEQ44354-1 dated March 8, 1979). Therefore Alabama Power Company concludes the subject terminal blocks are acceptable for safety related EQ applications. The States type ZWM terminal blocks were procured Code D under the States Quality Assurance Program, Revision 3, that had been approved by Alabama Power Company prior to procurement. Receipt inspection was done by Alabama Power Company as required by FNP-0-AP-20, which is the same procedure used to document receipt inspection for safety related items. This procedure ensures proper inspection of the items as well as verification that the documentation required by the procurement documents has been received.

In addition, the traceability of the Code D items of this purchase order was maintained per FNP-O-AP-21. These steps, combined with the knowledge of Alabama Power Company that it had previously had Wyle Laboratories perform the necessary EQ testing on this type terminal block, adequately constituted the dedication of the terminal blocks for safety related EQ applications. Further, these steps are equivalent to a dedication of the items under a formal plan. No additional action for 10CFR21 compliance is deemed necessary.

Corrective Action Taken and Results Achieved

No further action required.

Corrective Steps Taken to Avoid Further Violations

Procurement procedures will be revised as necessary to allow the dedication of Code D (non-safety related) items to be used in safety related functions. This dedication, including a commitment of Alabama Power Company to accept 10CFR21 reporting responsibility, may be a formal dedication plan or it may be a documented engineering review showing the adequacy of the part.

Date of Full Compliance

Applicable Farley Nuclear Plant procedures will be revised by June 2, 1988.

EXAMPLE 2:

"The reactive inspection the week of September 14-18, 1987, for followup of licensee identified unqualified taped splices revealed the use of commercially procured tapes for EQ applications. Purchase Order No. B4541 (QA Review Code C) was issued on September 30, 1986 for procurement of miscellaneous electrical supplies including Okonite T-95 insulating tape and No. 35 overlay tape. An engineering determination of the items critical attributes, ability to function in the intended safety-related application, and the acceptance parameters for verification of those critical attributes were never performed by the licensee. An assessment of the impact on EQ status pursuant to receipt of Okonite's letter to Mr. Robert Culp, dated November 11, 1986 [sic], was never performed. This letter gave a qualified shelf life for T-95 tape as 18 months, and for No. 35 tape as 24 months. The controlling procedure for this procurement FNP-O-AP-9, revision 12, did not establish requirements for dedication of commercially procured items prior to use in EQ applications."

Admission or Denial

Alabama Power Company admits that requirements for dedication of commercially procured items prior to use in EQ applications were not established.

Evaluation of Violation

Inadequate procedural guidance resulted in inadequate documentation of the suitability of these commercial grade items prior to their installation in safety related components. To confirm previous verbal information, a letter was obtained from The Okonite Company on June 11, 1987 stating that Okonite T-95 and Okonite #35 tapes are commercial materials manufactured under a commercial QC Program. The tapes have been qualified for use in a nuclear environment (see Report NQRN-3 Rev. 2, 2/16/84). Stock material is run and distributed to warehouses. These stock tapes are the same quality as would be provided if identified for nuclear plant use and traceability requirements imposed in the procurement documents. In addition, a shelf life program was implemented in 1986. An inspection of tape removed as a result of the V-type splice tape replacement program was performed and the tape was in good condition. On this basis, the use of these tapes is acceptable and hence no significant safety issue is involved.

Corrective Action Taken and Results Achieved

No further action required. Evaluations affirmed that the tapes are acceptable.

Corrective Steps Taken to Avoid Further Violations

EQ components and parts that perform a safety function will be procured as safety related or they will be procured as non-safety related and dedicated. If the parts serve no safety related function and are not required to function to satisfy the environmental qualification of the component, they may be purchased as non-safety related.

Date of Full Compliance

Applicable Farley Nuclear Plant procedures were revised on November 13, 1987. Okonite tape has been procured as safety related since September 23, 1987.

EXAMPLE 3:

"Installation of unqualified limit switch and torque switches in motor operated valves discovered during walkdown in response to IEN 86-03. (Procured Code C)."

Admission or Denial

Alabama Power Company admits that the installed limit switch and torque switches were procured without environmental qualification supporting documentation.

Evaluation of Violation

Inadequate procedural guidance resulted in an inadequate evaluation of the suitability of commercial grade parts prior to their installation in safety related components. An investigation was initiated which determined that the non-metallic portions of the torque switch and limit switches installed had a whitish-gray color and appeared to be identical to the qualified replacement parts. According to Limitorque, whitish-gray is the same color material they utilize for Code A, safety related, environmentally qualified applications. Code C items, however, are normally red in color. From this review, it was determined that the limit switch and torque switches would have performed their intended function and hence no significant safety issue was involved. Therefore, the extent of the deficiency is limited to a lack of documentation supporting environmental qualification.

Corrective Action Taken and Results Achieved

The torque switch and limit switches were replaced with parts procured as Code A.

Corrective Steps Taken to Avoid Further Violations

EQ components and parts that perform a safety function will be procured as safety related or they will be procured as non-safety related and dedicated. If the parts serve no safety related function and are not required to function to satisfy the environmental qualification of the component, they may be purchased as non-safety related.

Date of Full Compliance

Applicable Farley Nuclear Plant procedures were revised on November 13, 1987. Replacement of all subject components was completed on November 25, 1987.

EXAMPLE 4:

"Installation of Raychem Breakout kits in NAMCO Limit Switches for Chico Seal (Procured Code D without supporting documentation)."

Admission or Denial

Alabama Power Company denies that the Raychem breakout kits were procured without supporting documentation. Alabama Power Company admits that the reporting requirements of 10CFR Part 21 were not addressed.

Reason for Denial

Alabama Power Company purchased the material for Class 1E use inside Containment in accordance with QA Requirements for Safety Related Commodities. Raychem provided the requested documentation as well as a Certificate of Compliance. The Certificate of Compliance certified that the material was equivalent to that tested by test reports EDR-5015, EDR-5009, and Wyle Report 58442-3. Even though the purchase order stated that the material was classified as Code D, safety grade documentation requirements were specified and the vendor supplied proper documentation for safety related or EQ use of the material. This material is therefore acceptable for its installed application. While all documentation supporting safety grade material was supplied by the vendor, the requirements of 10CFR Part 21 were not imposed on this purchase order. Alabama Power Company did, however, handle receipt inspection and issuance per FNP-O-AP-21, which provides the necessary traceability to meet 10CFR Part 21.

Corrective Action Taken and Results Achieved

No further action required.

Corrective Action Taken to Avoid Future Violations

Procurement procedures will be revised as necessary to allow the dedication of Code D (non-safety related) items to be used in safety related functions. This dedication, including a commitment of Alabama Power Company to accept 10CFR Part 21 reporting responsibility, may be a formal dedication plan or it may be a documented engineering review showing the adequacy of the part.

Date of Full Compliance

Applicable Farley Nuclear Plant procedures will be revised by June 2, 1988.

EXAMPLE 5:

"Installation of G.E. O rings in penetrations (Procured Code C, not upgraded for EQ applicable)."

Admission or Denial

While Alabama Power Company admits that the G.E. O rings were procured Code C, we deny that upgrading for EQ applicability is required since the O ring does not affect the environmental qualification of the module.

Evaluation of Violation

Inadequate procedural guidance resulted in an inadequate evaluation of the suitability of commercial grade parts prior to installation in safety related components. This issue was reviewed and it was determined that the material was purchased for use inside Containment on the Electrical Penetration Assemblies supplied by General Electric under P.O. FNP-241. The subject O rings are metallic and serve to seal individual penetration modules for containment leakage considerations. These parts are commercial quality items whose performance is demonstrated by periodic Local Leak Rate Testing of each penetration. General Electric supplied a Product Quality Certification for these parts certifying that the items were supplied in accordance with applicable codes and specifications. From this review it was determined that the seals would have performed their intended function and hence no significant safety issue was involved.

Corrective Action Taken and Results Achieved

No further corrective action necessary.

Corrective Steps Taken to Avoid Further Violations

Components and parts that perform a safety function will be procured as safety related or they will be procured as non-safety related and dedicated.

Date of Full Compliance

Applicable Farley Nuclear Plant procedures were revised on November 13, 1987.

EXAMPLE 6:

"Installation of metal O rings in Conax Penetration (Procured Code C)."

Admission or Denial

Alabama Power Company denies that the violation occurred as described above.

Reason for Denial

The subject containment penetrations were manufactured by General Electric. The General Electric penetrations contain General Electric and/or Conax modules. No metallic O rings have been installed on Conax modules; however, Alabama Power Company admits that General Electric O rings were procured as Code C and installed on four blank plugs supplied by General Electric. Refer to Example 5, Evaluation of Violation, regarding commercially supplied O rings by General Electric.

Action Taken to Reinforce Continued Compliance

Refer to Example 5, above.

UPGRADING EQ EQUIPMENT DURING PROCUREMENT
(50-348, 364/87-30-02)

General

In the February 4, 1988 Report the NRC Staff describes an alleged deficiency (concerning upgrading of equipment) related to the procurement of certain limit switches as an additional example of a previously cited violation.

Detailed Discussion of NRC Identified Example

EXAMPLE:

"An example of failure to upgrade during procurement is the purchase of Snap-Lock limit switches. P.O. No. QP-1164 (QA Review Code A) was issued for the procurement of environmentally qualified Snap-Lock limit switches on September 8, 1986. The switches were procured as safety-related equipment, and the provisions of 10 CFR 21 were imposed on the purchase order. However, the P.O. specified that the Certificate of Compliance should certify compliance with ACME-Cleveland Development Report No. QTR/105 Revision 4, dated January 8, 1984. This report establishes

environmental qualification (EQ) to NUREG-0588 Category II. Contrary to the requirements of 10 CFR 50.49(l) the equipment was not upgraded to 10 CFR 50.49 and reasons to the contrary for not doing so were never documented. The controlling procedure for procurement activities, FNP-O-AP-9, revision 12, did not establish requirements for procurement of upgraded items. This failure of the licensee procurement program to establish measures that ensure upgrade of equipment in accordance with requirements of 10CFR50.49(l) is identified as a violation..."

Admission or Denial

Alabama Power Company admits that replacement equipment, as interpreted by the NRC, was not upgraded to 10CFR50.49 or "sound reasons to the contrary" documented.

Evaluation of Violation

On January 11, 1984, a meeting with NRC staff in Bethesda, Maryland was held to discuss Alabama Power Company position on maintaining equipment qualification. On February 29, 1984, Alabama Power Company documented, via letter to the NRC, minutes of the January 11, 1984 meeting in which Alabama Power Company's position on procurement of replacement equipment was described. Specifically, Alabama Power Company stated that it would procure "identical components" as replacements unless identical components cannot be obtained. On December 13, 1984, NRC issued an SER specifically referencing the February 29, 1984 Alabama Power Company letter and concluding that Alabama Power Company's EQ program is in accordance with the requirements of 10CFR50.49.

As shown above, Alabama Power Company informed the NRC through a meeting and by letter of its intended actions on maintaining qualification of equipment; specifically, replacement equipment. It was Alabama Power Company's understanding that the NRC SER documented that Alabama Power Company's EQ program, including Alabama Power Company's interpretation of replacement equipment, was in compliance with 10CFR50.49 requirements. During an EQ inspection conducted during the period of September 14-18, 1987, a concern was identified that the requirements of 10CFR50.49(l) were not being properly implemented. To resolve ongoing NRC concerns, Alabama Power Company revised procedures on November 16, 1987 to require that replacement equipment be upgraded to 10CFR50.49 or "sound reasons to the contrary" be documented.

Corrective Action Taken and Results Achieved

All EQ components replaced since February 1983 have been reviewed. It has been determined that all items were qualified to 10CFR50.49 requirements or "sound reasons to the contrary" have been documented. In addition, a review of store-room inventories was conducted to determine the level of qualification of all EQ components in inventory. Any components not qualified to 10CFR50.49 were removed from the EQ inventory.

Corrective Steps Taken to Avoid Further Violations

On November 16, 1987, Alabama Power Company revised procedures requiring replacement equipment to be upgraded to 10CFR50.49 or "sound reasons to the contrary" be documented.

Date of Full Compliance

Review of storeroom inventories and replacement EQ equipment including the disposition of the results of this review was completed on May 2, 1988.

CONCLUSION


Alabama Power Company believes that the actions described above fully respond to the conditions identified in the original NOV and to the conditions identified above, many of which were in fact identified through Alabama Power Company's efforts. In addition, as noted, each of the examples referenced by the NRC in the February 4, 1988 Inspection Report have been evaluated and found to be acceptable for use in EQ applications. Thus, none of these findings represent conditions of adverse safety significance.

In view of the above, Alabama Power Company maintains that the positions taken in the December 17, 1987 response to the NOV remain valid and we reassert those here.

If you have any questions, please advise.

Respectfully submitted,

ALABAMA POWER COMPANY


R. P. McDonald

RPM/JAR:dst-D1V8.21

cc: Mr. L. B. Long
Dr. J. N. Grace
Mr. E. A. Reeves
Mr. W. H. Bradford