



Consolidated Controls

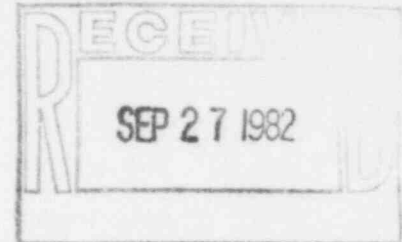
Consolidated Controls Corporation

A Condec Company
15 Durant Avenue
Bethel, CT 06801
(203) 743-6721

TWX 710-456-0446
Telex #969615

September 21, 1982

NUCLEAR REGULATORY COMMISSION
611 Ryan Plaza Drive
Suite 1000
Arlington, TX 76011



ATTENTION: Uldis Potapovs
Chief Vendor Program Branch

SUBJECT: Consolidated Controls Corporation's "Corrective Actions"

REFERENCE: NRC letter to CCC dated September 2, 1982

Gentlemen:

The foregoing will address those nonconformances delineated by "Appendix A" of NRC letter, dated September 2, 1982. CCC's corrective actions, actions planned to preclude recurrence and the date of effectivity, are included herein.

Nonconformance (A)

Prior to July 1981 all tests and inspections were performed and documented by Inspection Personnel, Department 481. All testing is now performed and documented by Department 490 Electronic Test Technicians. Failure of Inspection to enter the visual inspection disposition upon the test data record prior to shipment resulted in part from this transition of duties. The "Record of Inspection" form #81-069 which is the attachment to the Manufacturing Routing for each module type was posted and does provide inspection record traceability for each module by order number, description, part number and individual serial number. In addition, each accepted module bears an acceptance stamp indicating acceptance status, and the completion of all inspections and tests as defined by the Manufacturing Routing for the product type.

Corrective Actions Implemented

- (1) Test data records for all module types, part numbers 6N191 through 6N196, 6N198, 6N199 and 6N215 have been completed by application of an acceptance stamp in the designated block for each serial number previously accepted by CCC and TVA. The completed record results were reviewed by Quality Control Engineering to assure completion of all entries. A label was placed upon each test data record book indicating Q.C. review, the reviewer's initials, and date completed.

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PDR GA999 EMVCCO
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- (2) Manufacturing Routings for part numbers 6N191 and 6N193 have been revised at operation #155 "Final Inspection" to include the wording, "Enter and verify all entries are complete on test data sheets and form #81-069".

Corrective Actions to Preclude Recurrence

QCI089 entitled, "Electronic Testing and Quality Control Functions" will be revised to include specific instructions to assure that test data documented by Department 490 is reviewed, and inspection entries completed by Department 481 prior to presentation of acceptable products to the customer and prior to shipment of those products.

Compliance will be monitored by Quality Control Engineering during the performance of Internal Auditing on a periodic, scheduled frequency and will be documented under, "Observations made and Elements Sampled" on form #81-206.

Date of Effectivity

- (1) Test data records for all module types have been completed to denote acceptance for visual inspection as of August 1982.
- (2) Q.C. Engineering has been implementing the Final Inspection instruction note on all new manufacturing routings for module assemblies, at the final visual operation beginning in July 1982. This statement will continue to be added during Q.C. review of all new and revised manufacturing routings. This effort will be implemented on manufacturing routings for other product types where functional testing is a requirement.
- (3) QCI089 will be revised October 1982.

Nonconformance (B)

Q.C. investigation concludes that this test entry was posted in error for part number 6N193, serial number 033, which was scrapped per D.R. #1-0962 disposition dated November 13, 1981.

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Corrective Action Implemented

Discrepancy Report #1-0962 has been annotated on Test Data record to provide continuity of DR disposition action for part number 6N193, serial number 033.

Corrective Actions to Preclude Recurrence

All future Discrepancy Reports that authorize scrap disposition will have the DR Number posted on the module test data record in addition to the entry noted upon form #81-069, "Record of Inspection". This will provide continuity of disposition actions on all affected documents. A copy of the DR will be sent to the Inspection Supervisor in addition to the copy routed to the originator. Compliance to the above will be monitored during the Internal Auditing of Inspection and Test Departments.

Date of Effectivity

July 1982

Nonconformance (C1)

Corrective Actions Implemented:

Departments 481 and 490 Inspection and test personnel have completed their entries to reflect the complete and correct dates for all TVA module types, part numbers 6N191 through 6N196, 6N198, 6N199 and 6N215. All test data record document books were reviewed by Q.C. Engineering for completeness and have been affixed with a label on the book cover indicating date of Q.C. review and the initials of the person performing the review.

Corrective Actions to Preclude Recurrence

Test and Inspection Supervisors have been directed to instruct their personnel to post complete entry dates upon all test documents, for accuracy and future retrievability. Periodic scheduled Internal Audit activity will monitor compliance with this requirement.

Date of Effectivity

July 1982, and concurrent with all scheduled Internal Audits of Inspection and Test Departments.

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Nonconformance (C2)

Corrective Actions:

Test Data Records have been posted for the applicable part and serial number denoting the Discrepancy Report Number.

- Reference: DR #2-0103, P/N 6N191, S/N 597
 DR #2-0345, P/N 6N191, S/N 805
 DR #2-0836, P/N 6N193, S/N 1219
 DR #2-0410, P/N 6N193, S/N 085 & 845

Corrective Action to Preclude Recurrence

As noted for nonconformance (B).

Date of Effectivity

July 1982

Nonconformance (D)

Corrective Action Proposed:

Effective immediately, all revisions to (Product Class 35) Quality Control Instructions and Quality Control Standards will be signed by the Quality Control Manager or the Assistant Quality Control Manager, as required by QCI057. New QCI's and Q.C. Standards will be altered to provided adequate provision for revision signature on form #81-096.

Nonconformance (E)

Corrective Action Proposed:

Consolidated Controls, Field Service Manager will be directed to retrieve and retest "Field Buffer Modules" part number 6N193. Serial numbers 062, 081, 139, 172, 223, 310, 317, 586, 625 and 661, Quantity (10) at TVA, Bellefonte, Scottsboro, Alabama, to assure all functional requirements are acceptable. This effort will be coordinated with TVA Knoxville, TN and Bellefonte site personnel. Appropriate actions will be taken concurrent with the disposition reporting action of CCC Field Service Personnel, including completion of affected test reports.

Date of Effectivity

To be determined at time of CCC visit to TVA, Knoxville, Tennessee during the last week of September 1982. Your office will be advised accordingly.

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Corrective Actions to Preclude Recurrence

Those actions described for Nonconformance (A) shall apply to the above.

Nonconformance (F)

The transistors purchased to replace those originally installed on "Control Buffer" part number 6N191 were pre-burned-in and identified with a (blue dot) located on the transistor case, part number 2N4898.

This transistor change out was the only exception to (Table I) requirements for semiconductor devices. All 6N191 "Control Buffer" modules had been previously subjected to burn-in requirements. Table I appears in the CCC document entitled, "Inspection Check List", initiated exclusively for TVA module rework. In this instance no additional actions are required.

Concluding Summary of Nonconformances

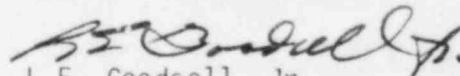
- (A) Failure to enter evidence of visual inspection, upon test data record for 6N191 and 6N193 modules for 1981 to 1982.
- (B) Failure to document evidence of testing for (10) 6N193 modules.
- (C) Incorrect test data entry for (1) 6N193 module, dispositioned as scrap.

The above discrepancies comprise the nonconformances of CCC rework effort totalling (4238) modules on orders 35-0550, 35-2406 and 36-6650. We trust those corrective actions taken and proposed will be considered satisfactory to preclude recurrence of the nonconformances described.

If additional information is required, or if you have any questions, please contact us.

Very truly yours,

CONSOLIDATED CONTROLS CORP.



L.E. Goodsell, Jr.
Quality Control Manager

cc: J.K. Engelberger
F.W. Chandler (TVA Knoxville, TN)
F. Ross (TVA Providence, RI)
F. Butler
G.L. Schoenbaum
W.D. Fox
R. Martello