

SOUTH CAROLINA ELECTRIC & GAS COMPANY

POST OFFICE BOX 764

COLUMBIA, SOUTH CAROLINA 29218

T. C. NICHOLS, JR.
VICE PRESIDENT AND GROUP EXECUTIVE
NUCLEAR OPERATIONS

November 11, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSION
Region II
101 Marietta Street, N.W.
Atlanta, GA 30303

ATTENTION: Mr. James P. O'Reilly, Director

Subject: V. C. Summer Nuclear Station
Unit #1, Docket No. 50/395
License CPRP-94, Reportable Item
in Accordance with 10CFR50.55(e),
Questionable Material Acceptability
of Pipe Hanger Components

Gentlemen:

On October 10, 1980, Region II (J. Rausch) was notified of a reportable item relative to the questionable material acceptability of pipe hanger components. Specifically, standard component parts (ie, pipe clamps, pins, end brackets, transition tubes, paddle plate straps, U-bolts, etc.) were purchased from our pipe hanger vendor (Bergen-Patterson) as spare parts and possibly interchanged with similar parts on safety related hangers. The safety related hanger installation system confirmed material acceptability while at the supplier and anticipated the installation of a complete hanger "mark" number assembly in the field without need to confirm material acceptability of individual component parts. Investigation has shown that it is possible that hanger assemblies have not always remained intact. The possible interchanging of component parts would be acceptable if all pipe hanger parts had been purchased as safety related. However, non-safety related hanger parts had also been purchased and used in non-safety related systems. This condition raised a question as to whether or not non-safety related hanger parts were used in safety related hangers. SCE&G Nonconformance Notice (NCN) 1154H was initiated to identify the subject concern and was dispositioned to require a reinspection of safety related hanger parts. In dispositioning NCN 1154H, the Engineer made a list of all Bergen-Patterson parts in the safety related and non-safety related catalogues. From this information, a single list of parts in both catalogues was compiled. Next, all non-safety related purchase orders for hanger parts were reviewed and the items listed that would be duplicated on the previous Bergen-Patterson list. From this information, three groupings of parts were determined to be relevant to the reinspection of the hangers:

1. Parts that are only safety related.
2. Parts from Bergen-Patterson that are safety related if marked with a lot code.
3. Parts from a variety of sources, that are safety related, if marked with a lot code to Bergen-Patterson standards.

S 8011180549

Bo19
S
110

Concerning the traceability of structural steel in hanger assemblies, both the safety related and the non-safety related structural steel specification state that unless otherwise noted on the drawings, all steel shall conform to Spec. ASTM A36-70a. This is identical to ASME SA-36 material per the requirement of ASME Section III. Therefore, all structural steel on site has a minimum requirement of ASTM A-36 which is acceptable for use in pipe supports. Using the information herein, the SCE&G reinspection of pipe hanger parts was initiated. Consequently, a number of components lacking adequate identification were found and are presumed to be non-safety related. All pipe hangers with the applicable parts given in the NCI 1154H disposition will be reinspected and the rejected parts changed out using traceable material.

Cause

The cause of the condition is the failure to properly control non-safety related pipe hanger parts. In addition, the cause is attributed to the failure to install and verify the Bill of Material item with respect to traceability on the part of the Code craft and QC organization. This relates to the breakdown in the ASME inspection program previously reported, the reasons resulting from any of a combination of factors, including inadequate procedural coverage, training, competency, attitudes and supervision inadequacies. The lack of controls and failures to perform occurred commensurate with other facets of the Code QC Breakdown. Once discovered, a systematic means to identify parts involved and extent of problems was implemented concurrent to work in process with full knowledge that an independent reinspection by SCE&G/QC personnel would be involved.

Safety Implications

To determine the exact safety implication, Engineering would need to evaluate each specific condition and the combination of conditions by hanger as they relate to their effect on a specific hanger and subsequently on a system. The extent of this effort is indeterminate since the extent and specifics of the conditions are unknown prior to reinspection. Since it is apparent that defective conditions exist in that some material cannot be confirmed as adequate, it is not possible to rule out the potential of some specific defect existing and having safety implication. For this reason, the conditions are conservatively being classified as a potential significant deficiency which will be corrected to remove any doubt as to product acceptability.

Actions to Correct Conditions

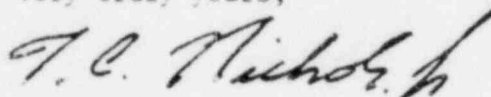
SCE&G is in the process of implementing a controlled program to identify all safety related hangers which have been fabricated from the applicable parts listed in NCI 1154H, reinspect them and have all deficient unidentified parts replaced with acceptable parts. SCE&G/QC is performing the subject reinspection.

Corrective Action to Prevent Recurrence

The applicable procedures have been revised to reflect the criteria given in the disposition of NCN 1154H. Applicable training to these procedures has been performed. All non-safety related parts have been removed from the field and placed in a controlled storage area so as not to become intermingled with safety related parts. SCE&G/QC had direct control over the pipe hanger reinspection and new hanger inspection activities and is exercising strict controls over the traceability of parts.

SCE&G believes the action outlined above will adequately resolve the traceability concern with pipe hanger parts. Since a definite course of action is determined, this is considered a final report on this subject. Action taken will be available at the construction site for NRC review. Also, NCN 1154H will remain open and the work and inspection subject to SCE&G/QA surveillance. Since it is apparent that implementation of these actions will take some time, we will modify this final report only if any facet of the pipe hanger program changes to differ from that described herein. Should further information be required, please contact us.

Very truly yours,



T. C. Nichols, Jr.

TCN:jfr

cc: B. A. Bursey
V. C. Summer
G. H. Fischer
W. A. Williams
E. H. Crews
D. A. Nauman
O. S. Bradham
O. W. Dixon
J. B. Knotts
Ron Clary
I&E (Washington)
Document Management Branch
(55e/21/LER only)
NPCF/Whitaker
J. L. Skolds
File

POOR ORIGINAL