

SOUTH CAROLINA ELECTRIC & GAS COMPANY

POST OFFICE 764

COLUMBIA, SOUTH CAROLINA 29218

O. W. DIXON, JR.  
VICE PRESIDENT  
NUCLEAR OPERATIONS

April 6, 1983

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NRC REGIONAL  
ATLANTA, GEORGIA

Mr. J. P. O'Reilly,  
Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II, Suite 2900  
101 Marietta Street, N.W.  
Atlanta, GA 30303

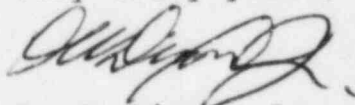
Subject: Virgil C. Summer Nuclear Station  
Docket No. 50/395  
Operating License No. NPF-12  
Computer Analyzed Gap Requirements  
for Guide Restraints  
Significant Deficiency

Dear Mr. O'Reilly:

South Carolina Electric and Gas Company's (SCE&G) final report dated September 15, 1982, on the subject significant deficiency, did not identify as one of the causes for the condition the misinterpretation of box guide gap requirements by craft and Quality Control personnel. This cause was addressed, however, in the original corrective action implemented for this deficiency. Attached Nonconformance Notice 149 A was reviewed by NRC Inspector, Mr. Ang, who suggested that the final report be revised to include this information.

This letter is a supplement to our final report on this deficiency and does not require any additional action.

Very truly yours,

  
O. W. Dixon, Jr.

RBC:OWD/fjc

cc: V. C. Summer  
T. C. Nichols, Jr./O. W. Dixon, Jr.  
E. C. Roberts  
H. N. Cyrus  
Group/General Managers  
O. S. Bradham  
R. B. Clary  
C. A. Price  
A. R. Koon

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South Carolina Electric & Gas Company  
Virgil C. Summer Nuclear Station  
**NONCONFORMANCE NOTICE**

1497H

**ORIGINAL  
(Red)**

DATE 6-17-82

ITEM DESCRIPTION Pipe Supports EFH-080, 099, and 4020			APPLICABLE SPEC. CODE DRAWING NO.
S/N NUMBER N/A	LOCATION IB	WP-VII-07	
SYSTEM EF-01, 03	QC INSPECTOR F.S. McKinnon	FQCP 6.3.1	
P.O./CONTRACT NO. N/A	HOLD TAG PLACED N/A	RESPONSIBLE Crisp	
TYPE INSPECTION RECEIVING <input type="checkbox"/> VISUAL <input type="checkbox"/> STORAGE <input type="checkbox"/> INSTALLATION <input type="checkbox"/> STUFF <input type="checkbox"/> EOT <input type="checkbox"/> OTHER Audit			

DETAILED DESCRIPTION OF NONCONFORMANCE:

See Attachment #1 to NCN 1497H

DISCIPLINE QC SUPERVISOR

**DISPOSITION RECOMMENDATION**

USE AS-IS WAIVER REQUIRED	REPAIR PROCEDURE REQUIRED	REWORK PROCEDURE REQUIRED	REJECT APPROVAL REQUIRED	CONDITIONAL RELEASE CONDITIONS REQUIRED
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See Attachment #1 to NCN 1497H

BY F.S. McKinnon	DATE REQUIRED 6-21-82
TEMPORARY WAIVER REQUESTED BY N/A	QC MANAGER CONCURRENCE M.W. Woods

CAUSE AND CORRECTIVE ACTION  
COGNIZANT DEPARTMENT HEAD:

DCC Piping Manager, SCE&G QC Manager

CAUSE: See letter CGSS-2195-OCM

CORRECTIVE ACTION REQUIRED YES ☒ NO ☐ IF YES CORRECTIVE ACTION TAKEN:

See letter CGSS-2195-OCM  
DATE 7/30/82

COGNIZANT DEPARTMENT HEAD DATE

**NUCLEAR PROJECT ENGINEERING REVIEW**

REVIEWER'S COMMENTS CONCURRENCE H. L. L. 7/14/82	WAIVER APPROVAL WBG-SCE&G/QA 7/8/82
REMARKS - APPROVED DISPOSITION: REVIEW FOR 50.55 (E)?	See attached PARTIAL DISPOSITION dated 6/21/82.
YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> SEE AMENDMENT TO PARTIAL DISPOSITION DATED 6/23/82	SEE ATTACHMENT #2 & 3 FOR AMENDMENT TO PARTIAL DISPOSITION DATED 7-8-82
FOR FINAL DISPOSITION, SEE ATTACHMENT "4" TO NCN 1497 H	

BY L. J. L. 6/21/82	DATE 6-21-82	DATE 6/22/82
DISPOSITION ACTION FOLLOW-UP & APPROVAL		
DISPOSITION ACTION VERIFIED AND / OR NONPENDING		

INSPECTOR F.S. McKinnon	ACCEPTED <input checked="" type="checkbox"/> REJECTED <input type="checkbox"/> DATE 7-29-82	IF REJECTED, SEE 408 10.
QC MANAGER M.W. Woods	DATE 7/29/82	QC FORM 106 REV. 22 9-79

Attachment #1 to NCN 1497H

DETAILED DESCRIPTION OF NONCONFORMANCE:

An independent audit of the EF system has identified pipe to support gaps in excess of design and program requirements. The details are as follows (Current measurements of field hardware are reported at the time of this NCN initiation):

- EFH-080: The 1/8 inch clearance in the vertical direction as shown on the support drawing actually measures 5/32 inch.
- EFH-099: The 1/8 inch max. gap shown on the support drawing (taken to be the sum of both gaps) actually measures 0 inch at one angle and 7/32 inch at the other angle for a total of 7/32 inch.
- EFH-4020: The 1/8 inch max. gap in the vertical direction as shown on the support drawing actually measures 5/32 inch.

DISPOSITION RECOMMENDATION:

It is recommended that Nuclear Engineering evaluate these conditions for acceptance or to provide detailed direction for gap rework. If it is requested that further inspection of gaps on similar supports be performed, then it is expected that NE will identify such supports, provide direction on specific measuring tools and techniques to be used, and establish appropriate acceptance criteria.

PARTIAL DISPOSITION TO SCE&G NCN 1497H

Hangers EFH-080, 099 & 4020 shall be reworked to obtain acceptable gaps per approved procedures. Further inspection of gaps on similar supports shall be performed. NE provided QC with computer printout of V. C. Summer Pipe Supports - Sort by: Guides, Printout, dated 6/15/82. QC shall measure the gaps at the closest point of contact and provide any unacceptable ~~(1/32" min 1/8" max)~~ gap to NE for final disposition.

DELETE THIS STATEMENT <sup>LHC</sup> 6-23-82

AMENDMENT TO PARTIAL DISPOSITION

Acceptable gaps are gaps as shown on Gilbert 04-4461-S-321-XXX Hanger Drawings. Tolerances as stated in GAI Erection Standards 321-001, Sect. 3.5 shall also be applied. If gaps deviate from the above, QC will provide actual gaps to NE for evaluation.

L. M. Klingaman 6/23/82  
L. M. Klingaman DATE  
GAI Resident Engineer

D. A. [Signature] (EE) 6/23/82  
QA DATE

H. Radin 6/12/82  
H. Radin DATE  
SCE&G Senior Engineer

L. M. Klingaman 6/21/82  
L. M. Klingaman Date

J. Parsons 6/23/82  
QA Date

H. Radin 6/12/82  
H. Radin DATE  
SCE&G Senior Engineer

ATTACHMENT TO NCN-1497H.

SOUTH CAROLINA ELECTRIC & GAS COMPANY

Inter-Office Correspondence

QUALITY CONTROL MANAGER

(Office)

CGSS-2195-QCM

Subject NCN 1497H

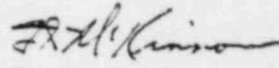
Date July 29, 1982

To Mr. D. A. Lavigne

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Attention of

This letter is written to address the cause and corrective action associated with subject NCN. Where box guide type supports function as seismic restraints, the sum of gaps in either direction should have been limited to the range 1/8 inch maximum and 1/32 inch minimum; however, nomenclature on the support drawings sometimes specified the total gap to be 1/8 inch maximum. According to established criteria, where gaps were dimensioned on the drawings they were to override the concept as stated above. This appears to be responsible for some of the inadequate gaps identified as well as subsequent movement of pipes and excessive painting of pipe and hanger material. QC and Craft personnel have become sufficiently indoctrinated so that the sum of gaps (whether detailed as 1/8 inch max., 1/8 inch total, 1/8 inch max./1/32 inch min., 1/16 typical both sides, etc.) on box guides type supports are held to the range of 1/8 inch maximum to 1/32 inch minimum where the guide functions as a seismic restraint. No further action on this behalf is necessary.

  
F. S. McKinnon

  
M. W. Clonts

FSM/mrg

cc: Mr. H. Radin  
Mr. N. Caudle  
Mr. F. McKinnon

~~PRO~~

File