



**Gilbert/Commonwealth** engineers and consultants

GILBERT ASSOCIATES, INC., P. O. Box 1498, Reading, PA 19603/Tel. 215 775-2600/Cable Gilasoc/Telex 836-431

May 9, 1983

N. R. BARKER  
Vice President and General Manager  
Quality Assurance Division

United States Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
Washington, D.C. 20555

Attention: Mr. R. C. DeYoung

Re: Reportable Event  
Ring Duct Stiffener Failure

Dear Mr. DeYoung:

This documents my telephone report under the provisions of 10CFR21 to Mr. George Lavik and Mr. Bill Mills on May 6, 1983, at approximately 2:45 p.m.

Individual Who Reported

Mr. Norman R. Barker, Vice President and General Manager, Quality Assurance Division - Gilbert Associates.

Facility Involved

V. C. Summer Nuclear Station Unit 1, South Carolina Electric and Gas Company (SCE&G).

Activity Involved

Design of Reactor Building HVAC main cooling duct internal stiffener.

Nature of Defect

A section of the ring stiffener that internally bridges the intersection of the circular duct and outlet duct, used to cool the Reactor Building, failed due to airflow induced vibration. This broken piece of ring stiffener could fall from its intended location and damage electrical pullboxes and conduits which are located beneath the ducts. The pullboxes and conduits that may be damaged by the falling stiffener might affect safety-related instruments. A loss of any of these safety-related instruments coincident with a single active failure in the redundant channel for each instrument might constitute a significant degradation of plant safety.

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Date Information Attained

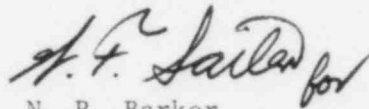
The QAD General Manager was informed on April 18, 1983 that the evaluation of reportability of this issue would be completed within the fourteen (14) days provided in the procedure. The evaluation has determined the issue to be reportable.

Corrective Action

A design change has been completed and submitted to SCE&G for implementation. The required hardware changes have eliminated the airflow induced vibration along with a redesign of the ring stiffener to assure no degradation of plant safety. Evaluation of possible applicability to other safety related systems on other plants designed by Gilbert/Commonwealth has determined this issue to be applicable only to V. C. Summer. Note that, for operating units, Gilbert may not have current plant design information.

If you require any further information on this matter, please contact me at (215) 775-2600, Extension 7545.

Very truly yours,

A handwritten signature in dark ink, appearing to read "N. R. Barker" with a stylized flourish at the end.

N. R. Barker  
Vice President and General Manager  
Quality Assurance Division

NRB:kb

cc: H. Lorenz  
T. M. Demers  
R. C. DeYoung - 2  
U. Potapovs - NRC Region IV  
Document Management Branch