

SOUTH CAROLINA ELECTRIC & GAS COMPANY

POST OFFICE 764

COLUMBIA, SOUTH CAROLINA 29218

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

May 11, 1983

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: Virgil C. Summer Nuclear Station  
Docket No. 50/395  
Operating License No. NPF-12  
Service Water Intake Structure  
1983 Diver's Inspection  
License Condition 2.C.5

Dear Mr. Denton:

South Carolina Electric and Gas Company, acting for itself and as agent for South Carolina Public Service Authority, hereby submits forty (40) copies of the January 17, 1983, Diver's Report on Service Water Intake Structure at the Virgil C. Summer Nuclear Station, along with the engineering evaluation of the diver's inspection by Gilbert Commonwealth Associates. This report is submitted in response to the NRC letter from Mr. Novak dated March 24, 1983.

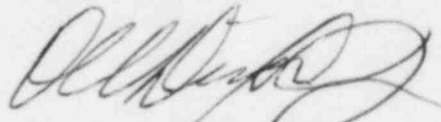
Based on results of the 1983 Diver's Report, it is our position that the service water intake structure has essentially stabilized and shows no signs of structural degradation. We therefore, feel that the external monitoring program (Dixon letter to Denton dated November 24, 1982 which requested a License Amendment) is entirely adequate for future survey of this structure, and that no further diver's inspection be required unless dictated by results of the external monitoring program or after a seismic event exceeding the Operating Basis Earthquake (OBE).

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We request your review of this report and concurrence of  
the above proposal for future monitoring.

Very truly yours,



O. W. Dixon, Jr.

NEC:RBW:OWD/fjc

cc: V. C. Summer  
T. C. Nichols, Jr./O. W. Dixon, Jr.  
E. C. Roberts  
H. N. Cyrus  
J. P. O'Reilly  
Group/General Managers  
O. S. Bradham  
R. B. Clary  
C. A. Price  
A. R. Koon  
C. L. Ligon (NSRC)  
G. J. Braddick  
J. C. Miller  
J. L. Skolds  
J. B. Knotts, Jr.  
NPCF  
File (Lic./Eng.)

GILBERT COMMONWEALTH ASSOCIATES  
Evaluation of Diver Inspection Report dated January 17, 1983  
for the V.C. Summer Service Water Intake Tunnel

The evaluation of the January 17, 1983 Eason Diving & Marine Contractors, Inc. report was made incorporating information from the original crack report\* at time of grouting in 1978 and the diver report\*\* of June, 1979.

After the tunnel was cleaned by the divers, any ungrouted cracks were readily observed due to a white deposit along their length. Due to the fineness of the white film, the diver was unable to remove an adequate sample for analysis that might provide information on the nature of the deposit.

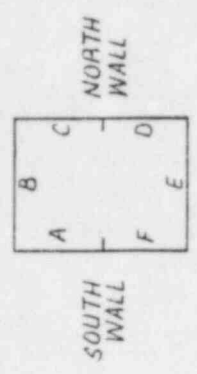
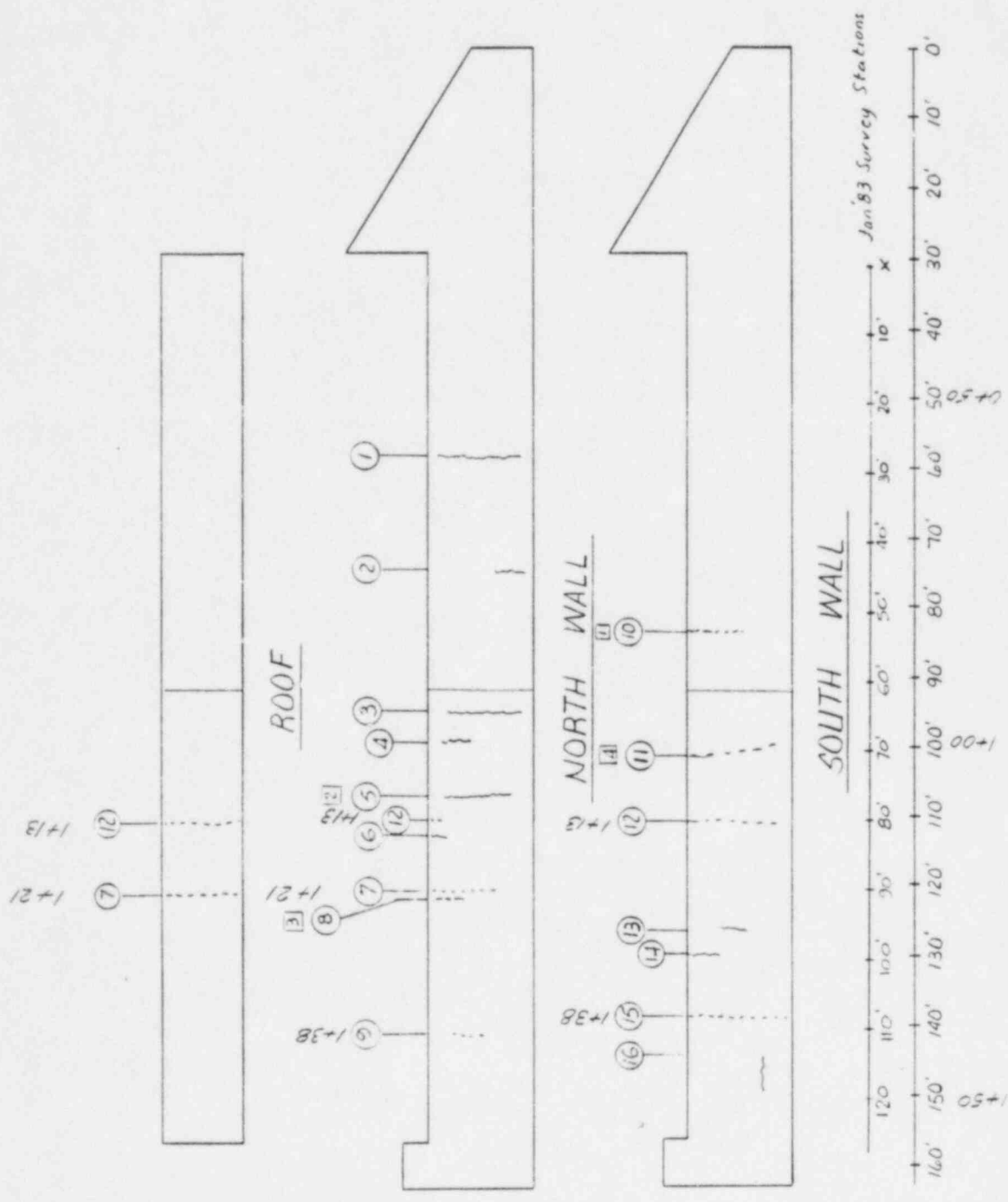
The sealer on the old repaired cracks, which was found to be flaking off in some locations is not unexpected. This flaking was observed to be entirely a surface condition and does not affect the grouting repair in the actual crack. The sealer within the crack is reported in good condition.

All of the cracks identified were less than 0.015 inch wide. After plotting and comparing with existing crack information (Attached Figure 1) it appears that eight of the sixteen cracks were not previously charted and may be considered new since the 1979 inspection. The direction, location, and size of the cracks do not indicate they have been caused by bending or shear stresses in the structure. These fine cracks will not affect the function or integrity of the structure.

Based on the hairline nature and geometry of the cracks observed, the diver report confirms the results of the external monitoring program that the structure has essentially stabilized and shows no sign of structural degradation.

\*Report No. 2, Service Water Intake Structure, Settlement Effects and Related Work, V.C. Summer Nuclear Station Unit 1.

\*\*Final Report, Service Water Intake Structure, Settlement Effects and Related Work, V.C. Summer Nuclear Station, October, 1979.



JAN '83 INSPECTION CRACK #	JUNE '79 INSPECTION CRACK #	UNROUTED ORIG. CRACK DESIGNATION	NEW CRACK SINCE JUNE '79 INSPECTION
1			✓
2			✓
3			✓
4			✓
5	2		
6			
7		1+21	✓
8	3		
9		1+38	
10	7		
11	4		
12		1+13	
13			✓
14			✓
15		1+38	
16			✓

**FIGURE 1**  
CRACK SURVEY DATA  
SERVICE WATER INTAKE STRUCTURE  
(UPDATED TO INCLUDE JAN '83 DIVER INSPECTION)