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BOSTON  
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June 17, 1983  
SBU: 74452  
Ref: Letter to Director,  
Office of Inspection  
and Enforcement  
dated April 18, 1983  
from United Engineers  
& Constructors Inc.  
File: 9.1, DCC

Director  
Office of Inspection and Enforcement  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Sir:

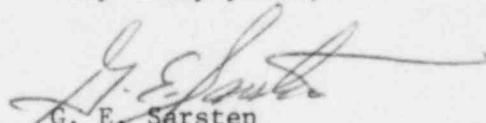
Subject: 10CFR21 Interim Report on a Defect Related to  
Public Service Company of New Hampshire  
Seabrook Station - Units 1 and 2

This is to inform you of the corrective action taken for a defect related to the adequacy of the Circulating Water Pump House structure for the Seabrook Station. We are providing this 10CFR21 interim report to assure that the Commission has been adequately informed.

A final report will be issued on August 19, 1983 covering the corrective action for the Service Water Pump House defect reported to you in the referenced letter covering both structures.

Details of our report are attached.

Very truly yours,

  
G. E. Sarsten  
Vice President - Power

Attachment

copy: Regional Director  
USNRC - Region 1

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NAME AND ADDRESS OF THE INDIVIDUAL OR INDIVIDUALS INFORMING THE COMMISSION.

G.E. Sarsten, Vice President - Power  
United Engineers & Constructors Inc.  
30 South 17th Street  
Philadelphia, PA 19101

IDENTIFICATION OF THE FACILITY, THE ACTIVITY, OR THE BASIC COMPONENT SUPPLIED FOR SUCH FACILITY OR SUCH ACTIVITY WITHIN THE UNITED STATES WHICH FAILS TO COMPLY OR CONTAINS A DEFECT.

Public Service Company of New Hampshire, Seabrook Station. Design of the Service Water and Circulating Water Pump House station.

IDENTIFICATION OF THE FIRM CONSTRUCTING THE FACILITY OR SUPPLYING THE BASIC COMPONENT WHICH FAILS TO COMPLY OR CONTAINS A DEFECT.

United Engineers & Constructors Inc.

NATURE OF THE DEFECT OF FAILURE TO COMPLY AND THE SAFETY HAZARD WHICH IS CREATED OR COULD BE CREATED BY SUCH DEFECT OR FAILURE TO COMPLY.

A "defect" exists in the structural design of the concrete walls separating pump cells in the Category I Service Water and Circulating Water Pump House. This "defect" is due to the fact that these concrete walls were not designed to withstand forces associated with differences in water levels in adjacent cells when one of these cells is dewatered for maintenance (access to the travelling screens and pumps).

The forces associated with differences in water levels of adjacent cells when one cell is dewatered for maintenance would cause overstress in the lower portions of the concrete walls. In the Circulating Water Pump House, during a surge caused by the trip of the circulating water pump, the differential water pressure head can reach 61 feet. The overstress caused by such pressure could cause the lower parts of the concrete walls to experience extensive cracking with the possibility of some spalling on both sides of these walls.

THE DATE ON WHICH THE INFORMATION OF SUCH DEFECT OF FAILURE TO COMPLY WAS OBTAINED.

April 18, 1983.

IN THE CASE OF A BASIC COMPONENT WHICH CONTAINS A DEFECT OR FAILS TO COMPLY, THE NUMBER AND LOCATION OF ALL SUCH COMPONENTS IN USE AT, SUPPLIED FOR, OR BEING SUPPLIED FOR ONE OR MORE FACILITIES OR ACTIVITIES SUBJECT TO THE REGULATIONS IN THIS PART.

This defect applies only to the Seabrook Station, Units 1 and 2.

THE CORECTIVE ACTION WHICH HAS BEEN, IS BEING, OR WILL BE TAKEN: THE NAME OF THE INDIVIDUAL OR ORGANIZATION RESPONSIBLE FOR THE ACTION: AND THE LENGTH OF TIME THAT HAS BEEN OR WILL BE TAKEN TO COMPLETE THE ACTION.

The analysis and design of the required structural modifications for the Circulating Water Pump House have been completed as scheduled. The analysis and design of the needed structural modifications for the Service Water Pump House is being performed and will be completed by August 19, 1983.

ANY ADVICE RELATED TO THE DEFECT OR FAILURE TO COMPLY ABOUT THE FACILITY, ACTIVITY, OR BASIC COMPONENT THAT HAS BEEN, IS BEING, OR WILL BE GIVEN TO PURCHASERS OR LICENSEES.

Public Service Company of New Hampshire will be advised to report the defect under the provisions of 10CFR50.55(e).