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united engineers & constructors inc.

30 South 17th Street Post Office Box 8223 Philadelphia, PA 19101 BOSTON DALLAS ECHELON KNOXVILLE PHILADELPHIA VALLEY FORGE

August 7, 1981

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

Dear Sir:

Subject: 10CFR21 Report of a Potential Defect related to Public Service Company of New Hampshire - Seabrook Station and Washington Public Power Supply System - WNP 1 and 4

This report describes a condition found during a routine engineering test program being performed on cable tray supports. The test results indicate that:

- a. Load capabilities provided in strut vendor catalogues cannot be confirmed by tests by the vendor and lead to wrong conclusions.
- b. UE&C criteria based on vendors published catalogue data do not provide acceptable margin.

Applicable details as required by 10CFR21, paragraph 21.21(b)(3) are contained in the attached report. This condition has been reported by Public Service Company of New Hampshire under the provisions of 10CFR50.55(e) and will be reported by Washington Public Power Supply System.

Very truly yours,

G. E. Sarsten Vice President - Power

Attachment

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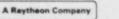
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copy: Regional Director USNRC - Region 1

PDR

Regional Director USNRC - Region 5



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.

Seabrook Station of Public Service Company of New Hampshire

Nuclear Project Nos. 1 & 4 - Washington Public Power Supply System

The design of cable tray and conduit supports (struts) is based on the locd-carrying capabilities published in manufacturers design catalogues for struts, which cannot be supported by test results.

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

United Engineers & Constructors Inc., architect, engineer, and construction manager.

Super Strut Inc., Metal Framing Division, Midland Ross Corp., Oakland, California, manufacturers of "Super Strut"

Power Strut Division, Van Huffel Tube Corp., Warren, Ohio, manufacturers of "Power Strut"

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

The strut support system used for the cable tray and conduit supports could be subject to slippage at the bolted strut fittings at the published allowable loads when multiple bolt fastening methods are used.

The defect, if left uncorrected, could cause a failure of the cable tray and conduit supports to properly retain safety-related electrical cables during seismic events.

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

- 1 -

August 7, 1981.

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 REGULATION IN THIS PART.

This defect applies to some cable tray and conduit supports for safety-related cables in the Seabrook Station and Washington Nuclear Project Nos. 1 and 4.

THE CORRECTIVE 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.

Corrective Action

- 1. Identify all applicable strut fitting configurations which are based on incorrect load tables.
- Determine appropriate applicable allowable loads for the configurations identified.
- 3. Develop acceptance criteria and appropriate design modifications for the defective configurations.

Name of the Organization Responsible for Corrective Action

Power Division of United Engineers & Constructors Inc.

Length of Time That Will Be Taken to Complete the Action

By November 15, 1981

ANY ADVICE RELATED TO THE DEFECT OR FAILURE 13 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 informed Region I on July 27, 1981 according to the provisions of 10CFR59.55(e).

Washington Public Power Supply System was advised by G. E. Sarsten on August 7, 1981.

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