

STONE & WEBSTER ENGINEERING CORPORATION



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

December 10, 1982

BEAVER VALLEY POWER STATION - UNIT NO. 1
DUQUESNE LIGHT COMPANY
NOTIFICATION OF DEFECT, 10CFR21

Stone & Webster Engineering Corporation (SWEC), pursuant to the provisions of 10CFR21, hereby provides notification of a "defect" concerning the Beaver Valley Power Station - Unit No. 1, principally owned by Duquesne Light Company and for which SWEC provided both engineering and construction services.

In accordance with the reporting requirements of Section 21.21(b)(3), the following information is submitted:

- (i) Name and address of the individual informing the Commission:

Mr. P. A. Wild, Director of Engineering
Stone & Webster Engineering Corporation
P.O. Box 2325
Boston, MA 02107

- (ii) Identification of the facility or the basic component supplied for such facility, which contains a defect:

Beaver Valley Power Station - Unit No. 1
Mechanical Shock Suppressors

- (iii) Identification of the firm constructing the facility or supplying the basic component which contains a defect:

Basic component supplied by Pacific Scientific Company and tested by Wyle Laboratories.

- (iv) Nature of the defect and the safety hazard which could be created:

The mechanical shock suppressors were tested by Wyle Laboratories and those which passed were installed in the facility. Those shock suppressors which failed the testing were subsequently inspected and found to have damaged

internals. The shock suppressors which had been installed were then removed, inspected, and also found to have damaged internals. It cannot be determined whether the damaged internals were the result of improper material or were the result of improper testing.

The shock suppressors were procured and installed to limit the velocity and displacement stresses applied to specific valves in the steam generator blowdown lines. These valves were added to the three steam generator blowdown lines inside containment to prevent an unisolable high energy line break from occurring in the cable vault.

Failure of the shock suppressors and the associated valves to operate in the event of a high energy line break would render vital electrical equipment inoperable, thus preventing the ability to shut down the reactor and maintain it in a safe shutdown condition. This is a major reduction in the degree of protection provided to public health and safety and represents a substantial safety hazard.

- (v) Date on which information of such defect was obtained:

December 10, 1982

- (vi) In the case of a basic component which contains a defect, the number and location of all such components in use at, supplied for, or being supplied for facilities subject to the regulations:

Beaver Valley Power Station Unit No. 1
Eleven (11) Mechanical Shock Suppressors

*Are there
others not
SWEC?*

Our investigation has shown that the only SWEC facility affected is that listed above. Should this information change, this report will be supplemented.

- (vii) Corrective action which has been taken; name of individual or organization responsible; and length of time taken to complete the action:

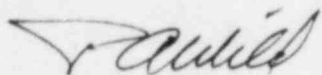
The shock suppressors were repaired, retested, and certified as acceptable by Pacific Scientific Company.

- (viii) Advice related to the defect that has been given to purchasers or licensees:

The Licensee was informed of the deviation and the corrective action involved.

NRC has been previously advised of the problem with the mechanical shock suppressors by a letter dated September 13, 1982, from Kin-Tech Division, Pacific Scientific Company to the Director of the Region V Office of Inspection and Enforcement.

If you require any further information, please contact Mr. J. R. Coombe at (617) 589-8990.



P. A. Wild
Director of Engineering

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