

B-LINE SYSTEMS, INC.
509 West Monroe Street
Highland, Illinois 62249, U.S.A.
618-654-2184, Telex 44-7755

World Headquarters



November 2, 1981

Director
Office of Inspection & Enforcement
Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Sir:

Recently a series of type tests were conducted by B-Line Systems on 1/4" thick strut fittings to evaluate the performance of these fittings in a variety of configurations. While performing these tests, we noted that some 1/4" fittings exhibited brittle fracturing at levels above the required ultimate static loads.

We then performed various non-standard tests and called in the services of consulting metallurgists and an independent laboratory. The results of this additional investigation are not conclusive; however, these results could cause concern if 1/4" strut fittings, which were made from ASTM A 575 material, are installed in safety-related applications. Section 5.3 of ASTM A 575 allows internal imperfections in the steel which might affect the capability of the fitting to withstand shock loads within the bend area of the fitting.

Our investigations indicate that the incidence of these imperfections in the bend area occur on an isolated basis. This still leaves the problem that these allowable internal imperfections can occur and potentially effect the ability of these parts to withstand shock loads.

ASTM A 575 is an industry standard for strut manufacturers and is referenced in NEMA Standard ML-1 which is included on most specifications for strut material purchased for nuclear power plants. Since these parts are purchased "commercial grade," the manufacturer has no indication whether the material is to be dedicated on site for use in safety-related applications.

8111060530 811102
PDR PT21 EMVBLINE
81 PDR

IF 5-20

Director
Office of Inspection & Enforcement
Nuclear Regulatory Commission
Washington, D. C. 20555

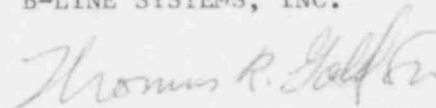
November 2, 1981

Page 2

We have instituted a request for testing sample parts which are still in storage at all construction sites we have supplied over the past year. This testing will be done in B-Line's test lab to see if we can find evidence of this condition. At this point, we are reporting this as a "suspected defect" as required by 10 CFR, Part 21. Please advise if any further action or information is needed by your office.

Sincerely,

B-LINE SYSTEMS, INC.

A handwritten signature in dark ink, appearing to read "Thomas R. Gold, Sr.", is written over the printed name.

Thomas R. Gold, Sr.
President

TRG/meg