

50-354

Public Service
Electric and Gas
Company

Thomas J. Martin
Vice President
Engineering and Construction

80 Park Plaza, Newark, NJ 07101 201-430-8316 Mailing Address: P.O. Box 570, Newark, NJ 07101

February 12, 1985

Dr. Thomas E. Murley, Administrator
U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Dr. Murley:

SIGNIFICANT CONSTRUCTION DEFICIENCY
EDG FUEL PUMP VALVE HOLDER
HOPE CREEK GENERATING STATION

On January 9, 1985, a verbal report was made to Region I, Office of Inspection and Enforcement representative, Mr. E. Kelly, advising of a significant construction deficiency concerning a possible defect in the fuel injector pump delivery valve holders on our Emergency Diesel Generators. The following final report is provided in accordance with 10CFR50.55(e).

Description of the Deficiency

Colt Industries has advised our Architect/Engineer and Constructor, Bechtel, of a possible defect in the fuel injection pump delivery valve holders on our Emergency Diesel Generators. Colt states that a fatigue crack can occur at the filter seat radius (shown on attachment) and progress to the holder O.D. The crack results from an insufficient radius at the filter seat, causing a stress riser at this point. This may result in leakage of fuel oil under high pressure during the injection stroke.

There are twelve (12) potentially defective pump delivery valve holders on each of our four (4) Emergency Diesel Generators. This deficient condition is being controlled and documented by Nonconformance Report No. 5950.

8503280349 850212
PDR ADOCK 05000354
S PDR

1/ 1E 27

Safety Analysis

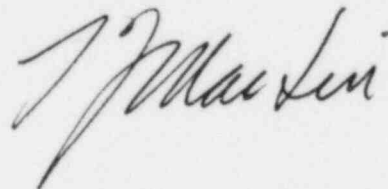
Bechtel has evaluated the safety implications and determined that if the fuel injection pump delivery valve holder problem had gone undetected and the unit cracked, leakage of fuel oil under high pressure would create a potential fire hazard in the diesel generator bay through the presence of vaporized fuel oil. This could result in the failure of the associated diesel generator.

The Emergency Diesel Generators are safety related items of equipment and under Loss of Power (LOP) conditions, they provide power to class 1E motor control centers and other safety related equipment required for safe shutdown of the plant. Therefore, we conclude that the subject deficiency could adversely affect safe shutdown of the plant and we consider it reportable in accordance with 10CFR50.55(e).

Corrective Action

In accordance with instructions received from Colt Industries, Bechtel will replace all forty-eight (48) of the affected components with acceptable replacements provided by the manufacturer. This activity will be witnessed and documented by Bechtel Quality Control personnel.

Very truly yours,

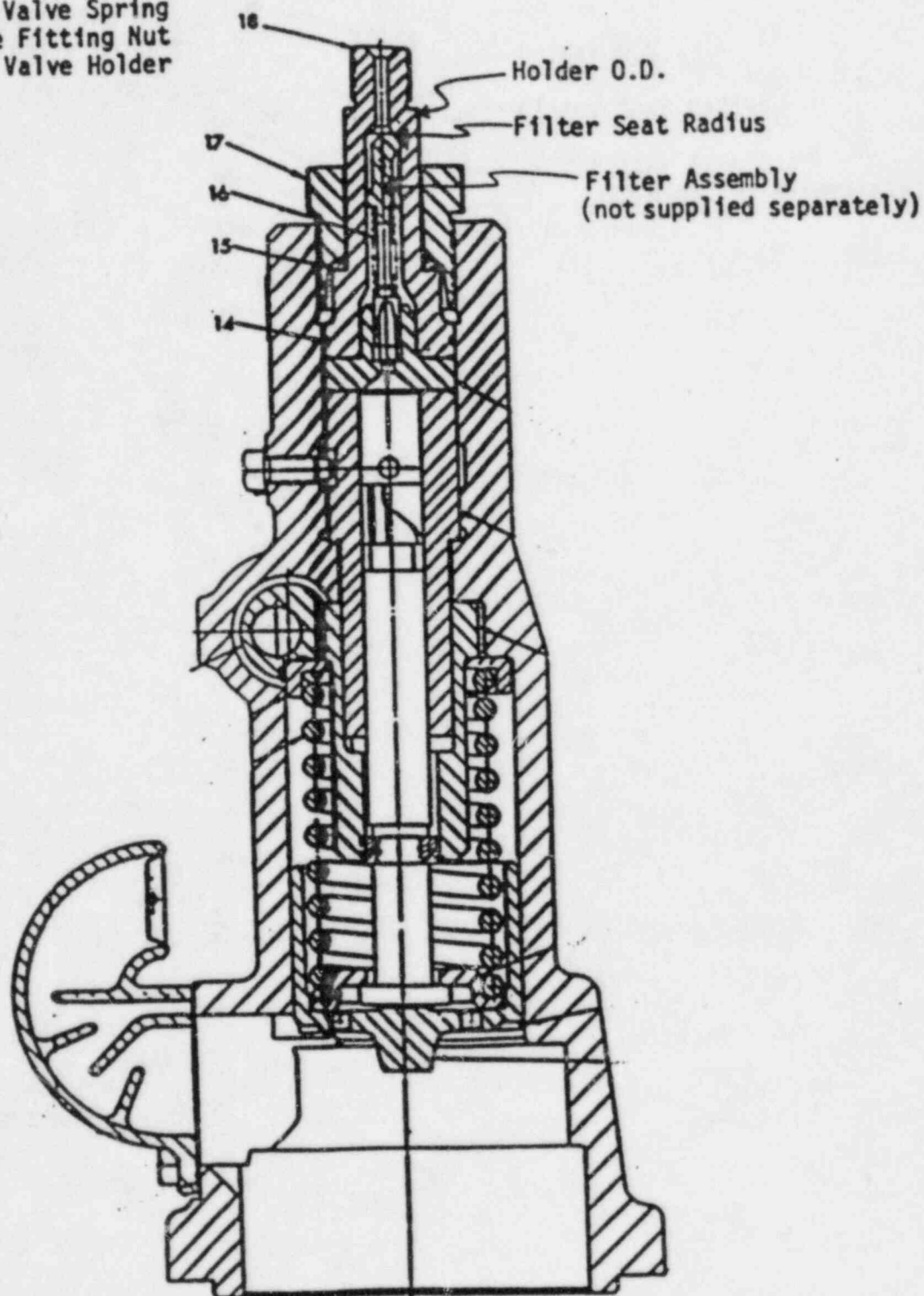
Attachment

C Office of Inspection and Enforcement
Division of Reactor Construction Inspection
Washington, D. C. 20555

NRC Resident Inspector - Hope Creek
P. O. Box 241
Hancocks Bridge, NJ 08038

Records Center
Institute of Nuclear Power Operations
1100 Circle 75 Parkway, Suite 1500
Atlanta, GA 30339

- 14. O-Ring (93-009 150)
- 15. Discharge Fitting Ring
- 16. Delivery Valve Spring
- 17. Discharge Fitting Nut
- 18. Delivery Valve Holder



FUEL INJECTION PUMP ASSEMBLY