

Colt Industries



Fairbanks Morse
Engine Division
701 Lawton Avenue
Beloit, Wisconsin 53511
608-364-4411

September 26, 1978

Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Ill. 60137

Attention: Mr. James G. Keppler, Director, Region III

Subject: Colt Industries-Fairbanks Morse Engine Division,
Emergency Diesel Generators
Possible Exhaust Rocker Arm Defect

Reference: Phone conversation reporting information contained below to U. S.
Nuclear Regulatory Commission, Mr. Bob Heichman by Mr. J. M. Moriarty
of Colt Industries-Fairbanks Morse Engine Division on September 26, 1978

Gentlemen:

A 14-cylinder PC-2 powered engine genset to be delivered for installation at the Northeast Utilities Company's Millstone III site has been undergoing test in preparation for a customer witnessed 300-start qualification test. During this pre-contract test running an exhaust rocker arm failed making the engine inoperable until a new rocker arm was installed. The failure occurred on 9/20/78 and subsequent investigation shows the failure was caused by a stress riser from "fit up" grinding of the arm during assembly to the engine. The hand grinder "slipped or jumped" while the operating clearance was being provided and notched the underside of the arm subject to tensile stress during operation.

In this case, the stress level from operation increased by the factor from the grinding "notch" was high enough to cause the resulting fatigue crack. (No additional factor such as the defective material which was concurrent with the notch on the Beaver Valley rocker arm was required to initiate the fatigue crack because the notch was more severe.)

There is a possibility that such grinding defects exist in other rocker arms installed on delivered units (3 - Alabama Power and 2 - S. Carolina at the customer's site plus 2 - Beaver Valley and the other Millstone unit in storage at Beloit).

The only operating PC-2 units are at Alabama Power Co., Farley Nuclear Plant. We will contact Farley, advise them of this reportable incident and that an inspection/corrective action plan is being developed.

The South Carolina Electric & Gas Co., Summer Station PC-2 units have not been started up yet. We will notify them of this matter and inform them of our intended course of action as soon as it's established.

7811080135

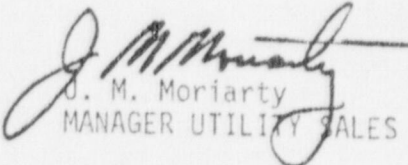
A division of the Colt Industries Operating Corp

U. S. Nuclear Regulatory Commission
September 26, 1978
Page 2

Those units still in Beloit will be inspected with appropriate change out, if necessary, prior to shipment.

We will keep you advised as we proceed on this matter.

Very truly yours,


J. M. Moriarty
MANAGER UTILITY SALES

JMM:jc

cc: Mr. George Hairston
Alabama Power Co.
P. O. Drawer 470
Ashford, AL 36312

Mr. Ronald B. Clary
South Carolina Electric & Gas Co.
P. O. Box 764
Columbia, South Carolina 29218

Mr. George Buffington
Stone & Webster Engineering Corp.
P. O. Box 2325
Boston, Massachusetts 02107

Stone & Webster Engineering Corp.
P. O. Box 2325
Boston, Massachusetts 02107
Attention: Project Engineer For Duquesne J.O. 12241