Deficiency Report
(10CFR Part 50, Paragraph 55(e))

Report 3 Unit Millstone Unit 3

Final _____ Interim X

Reference: 1) J. M. Moriarty (Colt Industries) letter to J. G. Keppler (NRC Region III Office of Inspection and Enforcement) dated September 22, 1978.

2) J. M. Moriarty (Colt Industries) letter to J. G. Keppler (NRC Region III Office of Inspection and Enforcement) dated September 26, 1978.

3) J. M. Moriarty (Colt Industries) letter to J. G. Keppler (NRC Region III Office of Inspection and Enforcement) dated September 29, 1978.

1) Description of Deficiency

On October 3, 1978, NRC Office of Inspection and Enforcement Region I was contacted by Northeast Utilities and were informed that problems were being experienced during performance of the 300-start qualification test of the Millstone Unit 3 Emergency Diesel Generators at the manufacturer's facility. At that time, it was pointed out that the problems encountered were in fact reported to the NRC Office of Inspection and Enforcement Region III offices by the manufacturer as required by 10CFR21. It was pointed out that Northeast Utilities was reviewing these items to determine if a significant deficiency, as defined in 10CFR50.55(e) existed, and asked the NRC Regional Inspector whether such reporting was mandatory if in fact the problem had been reported by the vendor as required by 10CFR21.

On October 4, 1978, NRC Office of Inspection and Enforcement Region I was again contacted wherein Northeast Utilities was advised that if it was determined a significant deficiency defined in 10CFR50.55(e) existed, reporting by Northeast Utilities would be required. At that time, the NRC was informed that Northeast Utilities' review had been completed and that a significant deficiency as defined under 10CFR50.55(e) existed.

As required by 10CFR50.55(e), Northeast Utilities therefore is reporting three significant deficiencies in final approved design, which were subsequently released for manufacturing.

1) Fuel injection pump failures - During the 300-start qualification test, several barrel to plunger seizures occurred caused by improper design/manufacturing leaving the associated fuel injection pump inoperable. (See Reference (1) enclosed for further detail.)

2) Exhaust rocker arm failure - During the 300-start qualification

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test, one exhaust rocker arm failed due to manufacturing error leaving the engine inoperable. (See Reference (2) enclosed for further detail.)

3. Lubricating oil header failure - During the 300-start qualification test, catastrophic failure of the lubricating oil header caused by improper design change left the engine inoperable. (See Reference (3) enclosed for further detail.)

2) Safety Implications

Such deficiencies, if left undetected, could have rendered the diesel inoperable and hence reduced the capability to mitigate the consequences of an accident.

3. Constructive Action

Subsequent to the completion of the 300-start qualification test, all parties have been reviewing the probable causes of the failures enumerated above, together with proposals for corrective action. To date no definite plan has been agreed to by the parties involved. We will report to the NRC on our proposed corrective action in the near future.

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