NORTHEAST UTILITIES
THE CONNECTICUT LIGHT AND POWER COMPANY
THE HARTFORD ELECTRIC LIGHT COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

P.O. BOX 270
HARTFORD, CONNECTICUT 06101
(203) 666-6911

September 16, 1982
MP-4127

Mr. Ronald C. Haynes
Regional Administrator, Region 1
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Reference: Provisional License DPR-21
Docket No. 50-245
Reportable Occurrence RO-82-17/3L

Dear Mr. Haynes:

This letter forwards the Licensee Event Report for Reportable Occurrence RO-82-17/3L required to be submitted within 30 days pursuant to the requirements of the Millstone Unit 1 Technical Specifications, Section 6.9.1.9.b. An additional three copies of the report are enclosed.

Yours truly,

NORTHEAST NUCLEAR ENERGY COMPANY

E. J. Mroczka
Station Superintendent
Millstone Nuclear Power Station

EJM/TST:mo

Attachment: LER RO-82-17/3L

cc: Director, Office of Inspection and Enforcement, Washington, D. C. (30)
Director, Office of Management Information and Program Control, Washington, D. C. (3)
U. S. Nuclear Regulatory Commission, c/o Document Management Branch, Washington, D. C. 20555

IE22

ATTACHMET TO LER 82-17/3L
NORTHEAST NUCLEAR ENERGY COMPANY
MILLSTONE NUCLEAR POWER STATION - UNIT 1
PROVISIONAL LICENSE NUMBER DPR-21
DOCKET NUMBER 245

Identification of Occurrence

Operation in a degraded mode permitted by a limiting condition for operation occurred when the Gas Turbine failed to start.

Conditions Prior to Occurrence

Prior to occurrence the unit was operating at a steady state power level of 100 percent.

Description of Occurrence

On August 17, 1982, at 0450 hours, and August 24, at 0500 hours, while performing Gas Turbine Emergency Fast Start Test, the Gas Turbine failed to start when given a fast start signal from the control room. Operations personnel re-energized the 14G bus and declared the Gas Turbine Generator inoperable. Technical Specification 3.9.a requires the Diesel Generator and the Gas Turbine Generator (both emergency power sources) to be operable at all times.

Apparent Cause of Occurrence

Investigation revealed that the air start motor did not receive an air supply. The air pressure regulating valve which controls air pressure to the start motor failed. Disassembly showed that the valve contained particles of rust.

Analysis of Occurrence

Inoperability of the Gas Turbine did not result in a condition which had not been analyzed. The Gas Turbine is one out of two emergency power sources that are utilized for engineered safeguard systems. In an actual emergency condition where emergency core cooling systems are required and a loss of off-site power accompany it, the Gas Turbine and the Diesel provide emergency power. Each power source is independent of the other, thereby allowing the Gas Turbine or Diesel to solely provide emergency power to redundant systems if the other fails.

Corrective Action

During the August 17th occurrence, the air pressure regulator was cleaned, inspected and tested satisfactorily. Additionally the main in line Y-strainer was disassembled for cleaning and reinstalled.

During the 1982 refuel outage the air receiver will be sandblasted and coated. The existing carbon steel air line from the air receiver to the air start motor will also be replaced with 304 stainless steel. This will greatly reduce the potential for rust.

During the August 24th occurrence, the air pressure regulator was replaced with a rebuilt unit from the vendor. To maintain Gas Turbine air system reliability until the 1982 refuel outage, a water and air flush was performed on the air line and receiver.

In addition to the above mentioned Gas Turbine modifications, a 60 micron filter will be placed in the air pressure regulator instrument lines that sense upstream and downstream pressure. It is suspected that rust particles travel through these lines and cause the valve to jam in the actuating solenoid.

Similar occurrences were RO 82-13/3L.