With the B Emergency Diesel Generator out for annual maintenance, at 1255 hours on September 24, 1983, the A generator was declared inoperable for failing the operability tests acceleration requirement. This entered the Unit in the Action Statement of Tech Spec 3.8.1.1.b (reportable per 6.9.1.9.b). The A generator passed the subsequent test and was returned to emergency standby condition at 1440 hours on September 24, 1983. No significant occurrence resulted from this event.

Retests could not repeat initial conditions. Eight (8) Diesel Generator operability tests were performed subsequent to this event and all were successful. Manufacturer's investigation determined that the cause of this event was a defective control box for the diesel's governor. The control box has been replaced.
1. **EXPLANATION OF THE OCCURRENCE**

While the "B" Emergency Diesel Generator was out-of-service for annual preventive maintenance at 1255 hours on September 24, 1983, an operability test was performed on the "A" Emergency Diesel Generator (DF-X-1A). The "A" Generator failed to accelerate to 900 rpm within ten (10) seconds as required by Recovery Operations Surveillance 4.8.1.1.2.a.4. During this test, DF-X-1A required four (4) minutes to reach 900 rpm and, thus, was declared inoperable. This placed the unit in the Action Statement of Technical Specification 3.8.1.1.b, which is reportable pursuant to Technical Specification 6.9.1.9(b). The operability test on Generator DF-X-1A was repeated and at 1440 hours on September 24, 1983, the "A" Emergency Diesel Generator was declared operable and returned to emergency standby condition. During the retest, DF-X-1A reached 900 rpm in 7.25 seconds. No adjustment or maintenance was performed on DF-X-1A between successive operability tests. No effect on the plant, its operation, or the health and safety of the public resulted from this event.

2. **CAUSE OF THE OCCURRENCE**

At the time of this event the cause of the Diesel Generator failure could not be determined. Initial conditions could not be repeated during subsequent tests. A review of INPO's NPRDS failure information indicated several similar events, some caused by governor problems.

Subsequently, an investigation of this event determined that the control box to the electric governor of DF-X-1A was defective. The control box was removed, replaced, and the defective component was returned to the manufacturer for analysis. The manufacturer determined that the cause of the component failure was a broken terminal strip (which did not result in a discontinuity of any circuit) and a weak transformer. The manufacturer determined that neither of these failures is a recurring or generic problem.

3. **CIRCUMSTANCES SURROUNDING THE OCCURRENCE**

At the time of the occurrence, the Unit 2 facility was in a long-term cold shutdown state. The reactor decay heat was being removed via loss to ambient. Throughout the event there was no effect on the Reactor Coolant System or the core.

4. **CORRECTIVE ACTIONS TAKEN OR TO BE TAKEN**

Eight (8) diesel generator operability tests were performed between September 24 and October 20, 1983. All tests were successful.
The control box was replaced and satisfactorily tested on March 5, 1984.

5. COMPONENT FAILURE DATA

The control box for DF-X-1A is manufactured by the Woodward Governor Co.
US Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Updated Licensee Event Report 83-049, Revision 1

Attached is updated Licensee Event Report 83-049/03X-1 concerning the inoperability of Emergency Diesel Generator DF-X-1A on September 24, 1983.

Sincerely,

F. R. Standerfer
Vice President/Director, TMI-2

FRS/RDW/jep

Attachments

cc: Regional Administrator - Office of I & E, Dr. T. E. Murley
Program Director - TMI Program Office, Dr. B. J. Snyder
Deputy Program Director - TMI Program Office, Dr. W. D. Travers