

TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE
37401



March 7, 1974

Mr. John F. O'Leary, Director
Directorate of Licensing
Office of Regulation
U.S. Atomic Energy Commission
Washington, DC 20545

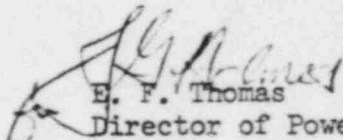
Dear Mr. O'Leary:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT UNIT 1 -
DOCKET NO. 50-259 - FACILITY OPERATING LICENSE DPR-33 - ABNORMAL
OCCURRENCE REPORT BFAO-7413W

The enclosed report is to provide details concerning start system failure on standby diesel engine A which occurred on Browns Ferry Nuclear Plant unit 1 on February 25, 1974, and is submitted in accordance with Appendix A to Regulatory Guide 1.16, Revision 1, October 1973.

Very truly yours,

TENNESSEE VALLEY AUTHORITY


E. F. Thomas
Director of Power Production



Enclosure

CC (Enclosure):

Mr. Norman C. Moseley, Director
Region II Regulatory Operations Office, USAEC
230 Peachtree Street, NW., Suite 818
Atlanta, Georgia 30303

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ABNORMAL OCCURRENCE REPORT

Report No.: BFAO-7413W
Report Date: March 7, 1974
Occurrence Date: February 25, 1974
Facility: Browns Ferry Nuclear Plant unit 1

Identification of Occurrence

Start system failure on standby diesel engine "A."

Conditions Prior to Occurrence

Reactor was at 63-percent power.

Description of Occurrence

On February 25, 1974, during testing of the diesel generator, "A" diesel generator failed to start with the left bank of starters; however, it did start satisfactorily with the right bank of starters.

Analysis of Occurrence

Each diesel engine contains two completely independent air-starting systems, either of which is capable of starting the engine. When the left bank of starters did not start the engine in the required time, the right bank of starters was energized automatically and started the engine. Failure of the left bank starters threatened the starting capability of the diesel generator but did not render it inoperable. The left bank starters failed to develop enough torque to start the engine.

Corrective Action

Both left bank starters were removed from the engine. Disassembly of the removed starters revealed rust from the air supply system. Replacement starters were installed. The air supply system was blown out, the air line filter was cleaned, and the air line lubricator was serviced. The engine started satisfactorily using the replacement starters. An accelerated program of removing starting motors, blowing down air lines, cleaning inlet strainers, and replacing starters with rebuilt starters has begun and will be completed within one month. Consideration is being given to the replacement of ferritic material in the air system with stainless steel to eliminate rusting.

The starting ability of both starter banks on each diesel will be checked twice a month until three successful consecutive starts demonstrate reliability. Following satisfactory demonstration of reliability at this frequency, a bimonthly starting ability check will be resumed.

Failure Data

Starter data: Ingersoll-Rand, size 150 BMP, model 289 RH-49.

A similar type failure occurred on diesel generator "B" on January 16, 1974 (see BFAO-744W). As a result of that occurrence, the frequency of inspection of all diesel generator air start motors was changed from annual to semiannual. The air start system on "A" diesel generator was inspected, cleaned, and blown down; and clean air start motors were installed on February 6, 1974, as a result of this accelerated program.