Enclosure 3

Omaha Public Power District

1623 HARNEY • OMAHA, NEBRASKA 68102 • TELEPHONE 536-4000 AREA CODE 402

January 20, 1978

Assistant Director for Operating Reactors
ATTN: Mr. Karl R. Goller
Division of Operating Reactors
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Reference: Docket No. 50-285

Gentlemen:

The Omaha Public Power District received a letter from the Commission, dated December 15, 1977, requesting that the District complete a questionnaire in regard to standby diesel generator units. Accordingly, please find attached, a completed questionnaire and supporting materials.

Informal follow-up communications in regard to the questionnaire should be addressed to Mr. B. J. Hickle; telephone number. 402-536-4413. Written communications should continue to be addressed to the undersigned.

Sincerely,

W C Jones

for T. E. Short
Division Manager
Production Operations

TES/KJM/BJH:jmm

Attach.

DOP
A 0141S
1/1

S. Are any foreign gases such as propane, freon, halon, carbon dioxide, etc. stored in the: Diesel Engine room? Yes ____ No x or adjacent buildings? Yes ___ No x

If yes, (other than hand portable fire extinguishers), then identify gases and give approximate tank size.

Gases	Volume (ft^3)
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

T. Does control system automatically bypass, in emergency starting, any engine temporarily out of service for maintenance? Yes ____ No x

If yes, then how many failures to bypass have occured?

_____

U. Does the control system automatically override the test mode under emergency conditions? Yes ____ No x

V. Have repetitive mechanical failures occurred in any component part or subsystem of the engine, generator, or switch gear, etc.? Yes x No ____

If yes, then which part or subsystem? air-start system

How many failures? 14

Give nature of failure. Moisture in system clogged motors. This problem has been alleviated by blowing down the system more frequently.

W. Would periodic (yearly or other) evaluation and/or testing by "outside experts" contribute significantly to the diesel-generator reliability? Yes ____ No x

Give brief reasons for the answer. Sufficient expertise exists within the District for normal maintenance and testing. The manufacturer is available should any assistance be required.

X. 1. Give the accumulated time-load operating record for each diesel-generator unit from installation to the present (Running Hours):

Preoperational test Date 4/73

Engine Serial No.	Surv. Testing & Maintenance Hrs. No Load	Loaded	Emergency and Other Service Hrs.	Total Hours
70-C1-1052	2	48	62	112
70-C1-1068	2	48	65	115

2. Surveillance test load (percent of continuous rating) 100%

3. Give the projected or planned time-load operation for each diesel-generator unit during the next 12 months.

Surveillance & Maintenance Hrs.	Emergency and other Service Hrs.	Total Hours	
26	2	28	

4. Provide the following summary of the periodic surveillance testing experience.

a. Starting date of surveillance testing (OL date) 9/73
b. Periodic test interval minor monthly; major each refueling out.
c. Total number of surveillance tests performed 52
d. Total number of test failures 9

* failure to start 7 failure to accept load 1
failure to carry load ____ failures due to operator error 1
failure due to equipment not being operative during emergency conditions 0

e. Supply a copy of the surveillance test procedures with this completed questionnaire.

*This includes failure to start within prescribed 10 seconds.

Additional Comments

Y. General Suggestions

Briefly give constructive criticism or suggestions for improvement in reliability of the diesel generator [illegible] remarks may cover tests, maintenance, practices, [illegible] policy, adjustments, etc.

Initial problems with the diesel generators were due primarily to moisture accumulating in the air-start system. These difficulties were compounded by the fact that the ductwork for the radiators was open to the outside. Consequently, during cold weather, the temperature near the diesels was low enough to promote freezing of the water in the air system.

The District has corrected the air-start problems by installing automatic dampers in the radiator ductwork and initiating frequent blowdown of the moisture in the air system. In addition, comprehensive maintenance and surveillance procedures have been developed.

As a result of these measures, reliability of the emergency diesel generators has improved dramatically, and this system is now considered to be very reliable.