



Duquesne Light

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Pittsburgh, Pennsylvania  
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January 19, 1978

United States Nuclear Regulatory Commission  
Attention: Director of Nuclear Reactor Regulation  
Washington, D. C. 20555

Reference: Beaver Valley Power Station, Unit No. 1  
Docket No. 50-334  
License No. DPR-66  
Response to Diesel Generator Questionnaire

Gentlemen:

In response to your letter regarding the reliability of standby diesel generator units is the attached completed copy of the questionnaire.

If you have any questions concerning the responses to the questionnaire, please contact Mr. J. J. Carey at the reactor site as listed on the attached sheet.

Very truly yours,

G. W. Moore  
General Superintendent  
Power Stations Department

Attachments

780260091

*ACI/S*  
*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 X No \_\_\_\_\_

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

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Gases	Volume (ft )	10 Ton Unit
<u>CO<sub>2</sub></u>		
_____		
_____		
_____		
_____		

- T. Does control system automatically bypass, i. emergency starting, any engine temporarily out of service for maintenance? Yes X No \_\_\_\_\_ (By clearance procedure)

If yes, then how many failures to bypass have occurred?  
None

- U. Does the control system automatically override the test mode under emergency conditions? Yes X No \_\_\_\_\_

- 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? Switchgear

How many failures? seven

Give nature of failure. Failure of output breaker to close  
(during manual operation only).

- 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. Increased testing only  
degrades the equipment internally, tests and inspection  
presently conducted are more than adequate for design  
reliability.

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

Preoperational test Date 9-18-75 (completion)

Engine	Surv. Testing & Maintenance Hrs.	Emergency and Other Service Hrs.	Total Hours
Serial No.	No Load : Loaded		
DG #1			
72-D1-1070	127.8		127.8
DG #2			
72-E1-1037	118.5		118.5

for unloaded condition: hours cannot be determined

2. Surveillance test load (percent of continuous rating) ~ 2850 KW (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
15 hrs.	2 hrs.	17 hrs.

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

- a. Starting date of surveillance testing (OL date) DG #1 6-14-75  
DG #2 7-1-75
- b. Periodic test interval monthly (man.-start)/18 mon. (auto-start)
- c. Total number of surveillance tests performed 38 (man.)/3 (auto)
- d. Total number of test failures 12 (per diesel)

failure to start 2 failure to accept load 9  
 failure to carry load 1 failures due to operator error 0  
 failure due to equipment not being operative during emergency conditions 0

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