TOLEDO EDISON

RICHARD P. CROUSE
Vice President
Nuclear
(419) 259-5221

Docket No. 50-346

License No. NPF-3

Serial No. 749

October 13, 1981

Mr. John F. Stolz, Chief
Operating Reactors Branch No. 4
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Stolz:

Your July 9, 1981 (Log No. 754) letter requested information regarding Station Blackout, Unresolved Safety Issue A-44. Toledo Edison's response to your request is enclosed as it relates to the Davis-Besse Nuclear Power Station Unit No. 1.

The July 9 request contained a questionnaire with four tables to be completed. In response, Tables 1-3 are enclosed. Unfortunately, the time and manpower necessary to detail all equipment modifications for Table 4 completion is extensive and as a result is not provided. However, all such modifications to the Emergency Diesel Generators are reviewed and documented through the Facility Change Request System. All are subject to a nuclear safety review in accordance with Part 50.59 of the Title 10 to the Code of Federal Regulation. This process gives Toledo Edison a high degree of confidence that any proposed change that might have negative nuclear safety impact on the diesel generator emergency power system has been screened and rejected.

Very truly yours,

R. P. Crouse/lab

RPC:DAH:lab

enclosures

cc: DB-1 NRC Resident Inspector

A015
S
1

Enclosure 1 -
Plant Name Davis-Besse
Unit No. 1

TABLE 1

Diesel Generator Operations Data
Calendar Year 19 80

Reason for DG Operation, & scheduled Duration of Run	DG No.	Number of Starts	Number of Failures	Percent Loading of DG (KW)	Duration of Run Before Stop For Each DG Failure	Identification of Failure (Refer to attached LERs or Table 3)
Tech. Spec Req'd Test						
Monthly Surveillance	1	22	0	100	--	
Test (1 hr.)	2	21	0	100	--	
(2 starts/test)						
Refueling Outage	1	1	0	100	--	
(1 hr.)	2	1	0	100	--	
Misc. Tech. Spec. Req.	1	18	0	0	--	
Tests (Start only)	2	23	0	0	--	
T-Mod to ST	1	0	0	0	--	
(24 hr. test run)	2	1	1	100	22 hrs. 35 min.	LER #2
DG Actual Demand Starts not for Testing						
	1	3	0	0	--	
	2	3	0	0	--	
Miscellaneous Tests (Specify Type)						
Verify Repairs	1	5	0	0	--	
	2	8	0	0	--	

Enclosure 1 -
Plant Name Davis-Besse
Unit No. 1

TABLE 1

Diesel Generator Operations Data
Calendar Year 1979

Reason for DG Operation, & scheduled Duration of Run	DG No.	Number of Starts	Number of Failures	Percent Loading of DG (KW)	Duration of Run Before Stop For Each DG Failure	Identification of Failure (Refer to attached LERs or Table 3)
Tech. Spec Req'd Test						
Monthly Surveillance	1	25	1	100	Indeterminate	LER #8
(1 hr.)	2	27	0	100	--	
(2 starts/test)						
Refueling Outage	1	1	0	100	--	
(1 hr.)	2	1	0	100	--	
Misc. Tech. Spec. Req.	1	43	0	0	--	
Tests (Start only)	2	46	0	0	--	
DG Actual Demand Starts not for Testing						
	1	1	0	Indeterminate	--	
	2	1	0	Indeterminate	--	
Miscellaneous Tests (Specify Type)						
Verify Repairs	1	4	0	0	--	
	2	4	0	0	--	

Enclosure 1 -
Plant Name Davis-Besse
Unit No. 1

TABLE 1

Diesel Generator Operations Data
Calendar Year 19 78

Reason for DG Operation, & scheduled Duration of Run	DG No.	Number of Starts	Number of Failures	Percent Loading of DG (KW)	Duration of Run Before Stop For Each DG Failure	Identification of Failure (Refer to attached LERs or Table 3)
Tech. Spec Req'd Test						
Monthly Surveillance	1	26	2	100	Indeterminate: 3 min.	LER #15 and 16
(1 hr.)	2	26	0	100	--	
(2 starts/test)						
Refueling Outage	1	1	1	100	Indeterminate	LER #14
(1 hr.)	2		0	100	--	
Misc. Tech. Spec. Req.	1	10	1	0	0min	LER #13
Tests (Start only)	2	15	0	0	--	
DG Actual Demand Starts not for Testing						
	1	0	0	0	--	
	2	1	0	Indeterminate	--	
Miscellaneous Tests (Specify Type)						
Verify Repairs	1	6	0	0	--	
	2	2	0	0	--	

Enclosure 1 -
Plant Name Davis-Besse
Unit No. 1

TABLE 1

Diesel Generator Operations Data
Calendar Year 19 77

Reason for DG Operation, & scheduled Duration of Run	DG No.	Number of Starts	Number of Failures	Percent Loading of DG (KW)	Duration of Run Before Stop For Each DG Failure	Identification of Failure (Refer to attached LERs or Table 3)
Tech. Spec Req'd Test						
Monthly Surveillance	1	17	0	100	--	
(1 hr.)	2	18	0	100	--	
(2 starts/test)						
Refueling Outage	1	1	0	100	--	
(1 hr.)	2	1	0	100	--	
Misc. Tech. Spec.	1	0	--	--	--	
Reqd. Tests	2	0	--	--	--	
(Start only)						
DG Actual Demand Starts not for Testing						
	1	1	1	0	0 min.	LER #18
	2	1	0	Indeterminate	--	
Miscellaneous Tests (Specify Type)						
Verify Repairs	1	5	0	0	--	
	2	5	0	0	--	

Enclosure 1 -
Plant Name Davis-Besse
Unit No. 1

TABLE 2

Diesel Generator Scheduled Downtime Record
Calendar Year 19 80

Reason for Downtime	Hours of Downtime										Comments
	Reactor shutdown					Reactor not shutdown					
	DG# 1	DG# 2	DG#	DG#	DG#	DG# 1	DG# 2	DG#	DG#	DG#	
Scheduled Maintenance											
Preventive Maintenance	6	45				34	19				
Corrective Maintenance	34	40				0	0				
Equipment Modification	20										Modify EDG #1 idler gear bolt - prior to failure
Time DG is unavailable for emergency service because of required tests											

Enclosure 1 -
Plant Name Davis-Besse
Unit No. 1

TABLE 2

Diesel Generator Scheduled Downtime Record
Calendar Year 19 7[illegible]

Reason for Downtime	Hours of Downtime										Comments
	Reactor shutdown					Reactor not shutdown					
	DG# 1	DG# 2	DG#	DG#	DG#	DG# 1	DG# 2	DG#	DG#	DG#	
Scheduled Maintenance											
Preventive Maintenance	43	32				36	58				
Corrective Maintenance	37	6				9	9				
Time DG is unavailable for emergency service because of required tests											

Enclosure 1 -

Plant Name Davis-Besse

Unit No. 1

TABLE 2

Diesel Generator Scheduled Downtime Record
Calendar Year 19 78

Reason for Downtime	Hours of Downtime										Comments
	Reactor shutdown					Reactor not shutdown					
	DG# 1	DG# 2	DG#	DG#	DG#	DG# 1	DG# 2	DG#	DG#	DG#	
Scheduled Maintenance											
Preventive Maintenance	26.5	70.5				51	11				
Corrective Maintenance	0	2				7	0				
Time DG is unavailable for emergency service because of required tests											

Enclosure 1 -
Plant Name Davis-Besse
Unit No. 1

TABLE 2

Diesel Generator Scheduled Downtime Record
Calendar Year 1977

Reason for Downtime	Hours of Downtime										Comments
	Reactor shutdown					Reactor not shutdown					
	DG# 1	DG# 2	DG#	DG#	DG#	DG# 1	DG# 2	DG#	DG#	DG#	
Scheduled Maintenance											
Preventive Maintenance	28	48				0	8.5				
Corrective Maintenance	32	20.5				2	0				
Time DG is unavailable for emergency service because of required tests											

Enclosure 1 -
Plant Name Davis-Besse
Unit No. 1

TABLE 2

Diesel Generator Scheduled Downtime Record
Calendar Year 1976

Reason for Downtime	Hours of Downtime										Comments
	Reactor shutdown					Reactor not shutdown					
	DG#	DG#	DG#	DG#	DG#	DG#	DG#	DG#	D	DG#	
Scheduled Maintenance											Preoperational testing of EDG's 8/11/76 through 3/7/77
Time DG is unavailable for emergency service because of required tests											

Enclosure 1 -
Plant Name Davis-Besse
Unit No. 1

TABLE 3 Diesel Generator Unscheduled Downtime Record
Calendar Year 19 76-80

LER Abstract No. (Refer to attached LER Abstracts)	Downtime Hours				Comments - If any of the reported failures would not have been a failure under emergency conditions, please explain here. Refer to attached LERs or the failures listed in Table 1.
	Total Hours	Trouble-shooting	Parts, Delivery, etc	Repair/ Replace	
1	-0-				Design deficiency in the SFAS sequencer could result in an undesired instantaneous loading of the EDG.
2	175				
3	.13				Loss of breaker position indication on C1 and the 4160 VAC Essential bus. This placed EDG 1-1 inoperable.
4	404				EDG 1-1 did not actually fail, it had a condition which required repair to prevent further damage.
5	-0-				No failure. Design deficiency.
6	-0-				Revision to abstract No. 1
7	-0-				No actual failure of DG 1-1. Maintenance was investigating load swings on DG 1-1 and had mistakenly racked out the output breaker for DG 1-2. For approximately 20 minutes, the station was in the action statement of T.S. 3.8.1.2 which requires one DG to be operable in Modes 5 or 6.
8	51				
9	22				
10	3				The DG room temperature rose to 110°F. The outside air damper would not open. DG 1-2 would start and would have continued to function for an undetermined amount of time.

TABLE 3 Diesel Generator Unscheduled Downtime Record
Calendar Year 1976-80

Enclosure 1 -
Plant Name Davis-Besse
Unit No. 1

LER Abstract No. (Refer to attached LER Abstracts)	Downtime Hours				Comments - If any of the reported failures would not have been a failure under emergency conditions, please explain here. Refer to attached LERs or the failures listed in Table 1.
	Total Hours	Trouble-shooting	Parts, Delivery, etc	Repair/ Replace	
11	-0-				Failure to perform required surveillance testing during inoperability of EDG 1-1. EDG 1-2 was able to start and supply electrical power to the essential busses.
12	-0-				Procedure inadequacy to verify the time of acceleration to 900 RPM. Had emergency power been required, the diesels would have been able to start and supply electrical energy to the essential busses as verified by the monthly tests.
13	9.5				
14	106.5				
15	49.5				
16	3.5				
17	-0-				Failure to perform required surveillance testing during inoperability of EDG 1-1. When EDG 1-1 was declared inoperable, the required surveillance was performed within one hour successfully. After the surveillance error was identified and the surveillance was performed, EDG 1-2 performed satisfactorily.
18	66.5				
19	0				No failure. Design deficiency. No LER associated with this abstract.
20	0				No LER associated with this abstract. This failure was during preoperational testing.
*21	14.5				

*LER ABSTRACT NO. 21 is attached to Table 3. This abstract was not enclosed with the LER documentation in your letter of July 9, 1981.