



July 12, 1979

Serial No. 1-79

Docket No. 50-346

License No. NPF-3

JAMES S. GRANT

Vice President  
Energy Supply  
(419) 259-5232

Mr. James G. Keppler  
Regional Director, Region III  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

Enclosed is the Davis-Besse Nuclear Power Station, Unit #1 response to IE Bulletin No. 79-01 as requested in your letter dated February 9, 1979.

Yours very truly,

JSJ:TJM

Enclosure

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Davis-Besse Nuclear Power Station Unit 1

Response to IE Bulletin 79-01 and 79-01A

In accordance with IE Circular 78-08 and IE Bulletin 79-01, Toledo Edison Company has conducted a review of the environmental qualification of Class IE equipment installed inside the Davis-Besse Unit 1 containment which must function under postulated accident environmental conditions. The results of this review are summarized and attached.

The description of the environment shows maximum values for the listed parameters for both the required conditions (SPEC) and the equipment qualification (QUAL). The data was simulated LOCA profile as evaluated in the DB-1 Final Safety Analysis Report.

We do NOT have any stem mounted limit switches on safety related valves which are the type described in Bulletin 79-01.

We do NOT have items which are identified as not meeting the qualification requirements for the service intended.

POOR ORIGINAL

PLANT NAME: Davis-Besse Unit #1

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ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF**	REMARKS
			PARAMETER	SPEC.	QUAL.			
1	CTMT AIR COOLERS							
	AMERICAN AIR FAN	LONG TERM	Temp. (°F)	264°F	300°F	SEQUENTIAL	(1) (2)	
	JOY FAN		Press. (psia)	54.7	94.7			
	RELIANCE MOTOR		Rel. Hum.	100%	100%			
			Radiation	1 X 10 <sup>8</sup> RADS	1 X 10 <sup>8</sup> RADS			
			Chem.	BORATED WATER SPRAY	INJECTED CHEM 5 DAY IEEE 334-1971			
2	CTMT RECIRC FANS							
a.	JOY FAN 75-17-3500	LONG TERM	Temp. (°F)	264°F	300°F	SEQUENTIAL	(3)	
b.	RELIANCE MOTOR 1YF-2B1548		Press. (psia)	40	80			
			Rel. Hum.	AIR STEAM MIX 1.4 STEAM / LB AIR	100%			
			Radiation	1 X 10 <sup>8</sup> RADS	1 X 10 <sup>8</sup> RADS			
			Chem.	BORATED WATER SPRAY	INJECTED CHEM 5 DAY IEEE 334-1971			
3	ROSEMONT DIFFERENTIAL PRESSURE TRANSMITTER	LONG TERM	Temp. (°F)	264°F	350°F	SEQUENTIAL	(20) (21)	
	1152 DPSA92PB		Press. (psia)	54.7	139.7			
			Rel. Hum.	100%	100%			
			Radiation	5 X 10 <sup>6</sup> RADS	3.3 X 10 <sup>7</sup> RADS			
			Chem.	1800 PPM BORIC ACID	BORIC ACID, SODIUM THIOSULFATE SODIUM HYDROXIDE			
4	LIMIT SWITCHES	LONG TERM	Temp. (°F)	264°F	NONE AVAILABLE			THESE SWITCHES PROVIDE INDICATION ONLY, AND WILL BE QUALIFIED BY TESTING OR REPLACED DURING THE FIRST FUELING CYCLE
	NAMCO EX10513000		Press. (psia)	54.7	SEE REMARKS			
			Rel. Hum.	100%				
			Radiation	3.5 X 10 <sup>7</sup> RADS				
			Chem.	pH 4-9				

This list is a compilation of items by component. Do not list the same type of component more than once.  
 Use limiting environment where more than one applies.

\*ie, separate effects, sequential, etc.  
 \*\*Please attach typed lists of reference documents

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PLANT NAME: Davis-Besse Unit #1

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ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)				QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.				
5	CABLE BOSTON INSULATED WIRE INCHES ALPE JKT 5 NEOPRENE	LONG TERM	Temp. (°F)	26.4	29.0		SEQUENTIAL	(13)	
			Press. (psia)	54.7	59.7				
			Rel. Hum.	100 %	100 %				
			Radiation	1 X 10 <sup>8</sup> RADS BORATED WATER SPRAY 1800 PPM	1 X 10 <sup>8</sup> RADS BORATED WATER SPRAY 1800 PPM				
6	SPICE KITS RAYCHEM WESP	LONG TERM	Temp. (°F)	26.4	36.0		SEQUENTIAL	(14)	
			Press. (psia)	54.7	184.7				
			Rel. Hum.	100 %	100 %				
			Radiation	1 X 10 <sup>8</sup> RADS BORATED WATER SPRAY 1800 PPM	2 X 10 <sup>8</sup> RADS 2% BORIC ACID SPRAY				
7	ELECTRICAL PENETRATIONS EAPHECOL UNUNITED HEADER ELECTRIC PENETRATIONS	LONG TERM	Temp. (°F)	26.4	26.4		SEQUENTIAL	(15) (16)	
			Press. (psia)	59.7	59.7				
			Rel. Hum.	100 %	100 %				
			Radiation	1 X 10 <sup>8</sup> RADS BORATED WATER SPRAY 1800 PPM	1 X 10 <sup>8</sup> RADS BORATED WATER SPRAY 1800 PPM				
			Temp. (°F)						
			Press. (psia)						
			Rel. Hum.						
			Radiation						

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PLANT NAME: Davis-Besse Unit #1

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ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF**	REMARKS
			PARAMETER	SPEC.	QUAL.			
8	SOLENOID VALVES AUTOMATIC SWITCH CO ASCO	SHORT TERM	Temp. (°F)	264	264	ANALYSIS	(4)	ASSURANCE THAT VALVE WILL PERFORM INTENDED FUNCTION IS DOCUMENTED.
			Press. (psia)	54.7	54.7			
			Rel. Hum.	100 %	100 %			
			Radiation	5.7 x 10 <sup>4</sup> RADS/24HRS	5.7 x 10 <sup>4</sup> RADS/24HRS			
			Chem.	SPRAY pH 4-9	SPRAY pH 4-9			
9	HERMETIC SEALS CONAX PL-14-B2-P PL-14-B4-P	LONG TERM	Temp. (°F)	264	304	SEQUENTIAL	(5)	
			Press. (psia)	54.7	60			
			Rel. Hum.	100 %	100 % + HELIUM LEAK TESTED			
			Radiation	5.7 x 10 <sup>4</sup> RADS	5.7 x 10 <sup>7</sup> RADS			
			Chem.	pH 4-9	pH 11.0			
10	CABLE KERITE INSUL: KERITE HTK (POWER) JKT: KERITE FR INSUL: KERITE HTK (CONTROL) JKT: KERITE FR	LONG TERM	Temp. (°F)	264°F	320°F	SEQUENTIAL	(6)	
			Press. (psia)	54.7	96.7			
			Rel. Hum.	100 %	100 %			
			Radiation	1 x 10 <sup>8</sup> RADS	1.2 x 10 <sup>8</sup> RADS			
			Chem.	BORATED WATER SPRAY 1800 PPM / 1 WK	BORATED WATER SPRAY 15000 PPM / 1 WK			
11	CABLE OKONITE INSUL: EPR JKT: NEOPRENE	LONG TERM	Temp. (°F)	264°F	346	SEQUENTIAL	(7)	
			Press. (psia)	54.7	127.7			
			Rel. Hum.	100 %	100 %			
			Radiation	1 x 10 <sup>8</sup> RADS	1.5 x 10 <sup>8</sup> RADS			
			Chem.	BORATED WATER SPRAY 1800 PPM / 1 WK	BORATED WATER SPRAY 2000 PPM / 30 DAYS			

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PLANT NAME: Davis-Besse Unit #1

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ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF**	REMARKS
			PARAMETER	SPEC.	QUAL.			
12	LIMITORQUE VALVE OPERATORS							
a	SMB-00-10	LONG TERM	Temp. (°F)	264°F	356°F	SEQUENTIAL	(8) (9)	
b	SMB-3-150		Press. (psia)	54.7	104.7		(23) (24)	
c	SMB-00-2		Rel. Hum.	100%	100%			
			Radiation	1 x 10 <sup>8</sup> RADS	2.04 x 10 <sup>8</sup> RADS			
			Chem.	BORIC ACID SPRAY	STEAM & CHEMICAL			
	LIMITORQUE VALVE OPERATORS							
d	SMB-000	LONG TERM	Temp. (°F)	264°F	340°F	SEQUENTIAL	(10)	
e	SMB-000-5		Press. (psia)	54.7	119.7			
			Rel. Hum.	100%	100%			
			Radiation	1 x 10 <sup>8</sup> RADS	1 x 10 <sup>8</sup> RADS			
			Chem.	CHEM SPRAY	STEAM & CHEM.			
13	DIFFERENTIAL PRESSURE							
	TRANSMITTERS		Temp. (°F)	264°F	286°F	SEQUENTIAL	(11)	SEE B&W TOPICAL REPORT BAW 10003
a	BAILEY BY3X41X-AX	SEE REMARK(2)	Press. (psia)	54.7	73.7			1. REQUIRED FOR STEAM LINE ECC AN AND SMALL LOCA
b	BAILEY BY3B40-AX	LONG TERM (1)	Rel. Hum.	100%	100%			
c	BAILEY BY8B41X-A	LONG TERM (1)	Radiation	5.7 x 10 <sup>4</sup> RADS	18 x 10 <sup>4</sup> RADS			2. REQUIRED FOR LINE SIZING FOR 10% OF REACTOR COOLANT FLOW
			Chem.	pH 4-9	—			
14	PRESSURE TRANSMITTER							
	ROSEMONT 1152 GP	SHORT TERM	Temp. (°F)	264°F	350°F	SEQUENTIAL	(12)	
			Press. (psia)	54.7	64.7			
			Rel. Hum.	100%	100%			
			Radiation	5.7 x 10 <sup>4</sup> RADS	5 x 10 <sup>6</sup> RADS			
			Chem.	CHEM. SPRAY	CHEM. SPRAY			

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PLANT NAME: Davis-Besse Unit #1

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ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
15	PRESSURE TRANSMITTER							
	a FOXBORO E11GH	LONG TERM	Temp. ( $^{\circ}$ F)	264 $^{\circ}$ F	318 $^{\circ}$ F	SEQUENTIAL	(17)	SEE B&W TOPICAL REPORT BAW 10003
	b FOXBORO E11G		Press. (psia)	54.7	90		(5)	
			Rel. Hum.	100%	100%			
16	TEMPERATURE ELEMENTS		Radiation	5.7 X 10 <sup>8</sup> RADS	3.7 X 10 <sup>7</sup> RADS			
			Chem.	pH 4-9	pH 11			
	ROSEMONT 177HW	LONG TERM	Temp. ( $^{\circ}$ F)	264 $^{\circ}$ F	600 $^{\circ}$ F		(18)	SEE B&W TOPICAL REPORT BAW 10003
			Press. (psia)	54.7 / 3125	94.7 / 3125		(22)	
17	POWER RANGE NEUTRON		Rel. Hum.	100%	100%			
			Radiation	3.7 X 10 <sup>8</sup> RADS	3.8 X 10 <sup>8</sup> RADS			
			Chem.	CHEM SPRAY				
	FLUX DETECTOR WESTINGHOUSE WL-23636B	SHORT TERM	Temp. ( $^{\circ}$ F)	300 $^{\circ}$ F	320 $^{\circ}$ F	SEQUENTIAL	(19)	SEE B&W TOPICAL REPORT BAW 10003 NOT REQUIRED FOR LOCA
			Press. (psia)	54.7	88.7			
			Rel. Hum.	100%	100%			
			Radiation	3.7 X 10 <sup>7</sup> RADS	1 X 10 <sup>9</sup> RADS			
			Chem.	NA	NA			
			Temp. ( $^{\circ}$ F)					
			Press. (psia)					
			Rel. Hum.					
			Radiation					
			Chem.					

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# DAVIS-BESSE UNIT N°1

DOCUMENT REFERENCE PERFORMED BY OR FOR

REF. N°

①	AMERICAN AIR FILTER	AAF25-1342
②	JOY FAN	X-421
③	JOY FAN	X-411
④	ASCO	LETTER OF 6/3/79
⑤	WILEY LABS (PROPRIETARY)	26304
⑥	FRANKLIN INSTITUTE RESEARCH LAB	F-C2737
⑦	FRANKLIN INSTITUTE RESEARCH LAB	F-C3694
⑧	LIMITORQUE	600193
⑨	LIMITORQUE	600376A
⑩	ENVIRONMENTAL TEST LABS	ETL5721
⑪	BABCOCK & WILCOX	58-0031-00
⑫	BABCOCK & WILCOX	58-0220-00
⑬	BOSTON INSULATED WIRE & CABLE	73C212, 95C008
⑭	RAYCHEM BY DR. CANADY	7110
⑮	BUNKER RAMO CORP. (DAVID D. YUE)	123-1263
⑯	BUNKER RAMO CORP. (DAVID D. YUE)	123-1269
⑰	BABCOCK & WILCOX	58-0079-00
⑱	BABCOCK & WILCOX	58-0372-00
⑲	BABCOCK & WILCOX	58-0039-01
⑳	ROSEMONT	117415
㉑	ROSEMONT	127563
㉒	B & W TOPICAL REPORT	BAW10003A
㉓	FRANKLIN INSTITUTE RESEARCH LAB	FC3441
㉔	LIMITORQUE	600456

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