

#### NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

March 12, 1980

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

Dear Mr. Keppler:

MONTICELLO NUCLEAR GENERATING PLANT Docket No. 50-263 License No. DPR-22

The following is submitted in response to IE Bulletin 79-01B:

Enclosure 1 provides the "master list", required by Action Item 1 of the Bulletin, of systems and components that are required to function under postulated accident conditions.

Enclosure 2 provides the Component Evaluation Worksheets, required by Action Item 2 of the Bulletin, for the components located inside containment. For components located outside containment, evaluation of component qualification is continuing. Since service condition profiles are not available from the original HELB analysis, additional analyses are required. We expect these to be completed by May 1, 1980. We are also in the process of obtaining qualification data for these components.

Since, in the plant safety analyses, environmental conditions outside containment were not expected to be of a nature that could affect equipment operability, little qualification data is currently available for equipment outside containment. However, it is expected that the results of subsequent testing and analyses are available from the NSSS supplier or the components manufacturers, and that they will show that the equipment will perform its function under accident conditions. We expect this work to be completed by May 1, 1980. It should be noted that equipment qualification for environmental conditions outside containment was evaluated, in a qualitative sense, in the FSAR (refer to sections 5.3.4 and 14.10.1.3) and in the HELB analysis (submitted to the AEC by letter from E. C. Ward (NSP) to A. Giambusso (AEC) dated September 7, 1973). In all cases, the accident environments were determined to not be sufficiently harsh to cause equipment failures.

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Mr. James G. Keppler Page 2 March 12, 1980

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Enclosure 3 provides the service condition profiles available at this time for accident conditions and qualification tests performed.

Yours truly,

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D. E. Gilberts Vice President Power Production

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cc: Mr. G. Charnoff NRC Office of Inspection and Enforcement Washington, D. C.

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Enclosures

# UNITED STATES NUCLEAR REGULATORY COMMISSION

### NORTHERN STATES POWER COMPANY

### MONTICELLO NUCLEAR GENERATING PLANT

Docket No. 50-263

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### LETTER DATED MARCH 12, 1980 RESPONDING TO NRC REQUEST FOR INFORMATION IN IE BULLETIN 79-01B

Northern States Power Company, a Minnesota corporation, by this letter dated March 12, 1980, hereby submits information in response to NRC request for information concerning IE Bulletin 79-01B.

This request contains no restricted or other defense information

NORTHERN STATES POWER COMPANY

Bv:

D. E. Gilberts Vice President Power Production

On this 12th day of March, 1980, before me a notary public in and for said County, personally appeared D. E. Gilberts, Vice President Power Production, and being first duly sworn acknowledged that he is authorized to execute this document on behalf of Northern States Power Company, that he knows the contents thereof and that to the best of his knowledge, information and belief, the statements made in it are true and that it is not interposed for delay.

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JEANNE M. HACKER NOTARY PUBLIC - MINNEBOTA HENNEPIN COUNTY My Commission Expires May b. 1986

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## MONTICELLO NUCLEAR GENERATING PLANT DOCKET NO. 50-263 LICENSE NO. DPR-22

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Response to IEB 79-01B

Enclosure 1

Components and Systems Master List

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STEM: HIGH FLOODE		LOC	ATION
ANT IDENTIFICATION	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CON <del>TA</del> INMENT
MO 2034	Valve Motor Operator	X	
MO 2035	Valve Motor Operator		X
MO 2036	Valve Motor Operator		X
PS 23-68 (A-D)	Pressure Switch		X
PS 23-97 (A, B)	Pressure Switch		x
dPIS 23-76 (A, B)	Differential Pressure Indicating Switch		. X
dPIS 23-77 (A, B)	Differential Pressure Indicating Switch		X
TS 23-101 (A-D)	Temperature Switch		x
TS 23-102 (A-D)	Temperature Switch		X
TS 23-103 (A-D)	Temperature Switch	1 Ja	- X
TS 23-104 (A-D)	Temperature Switch		X
P-217	Aux Oil Pump Mtr		x
	Magnetic Pick-Up		x
EGM	Speed Controller		X .
EGR	Electro-Hydraulic Transducer		x
EGR	Electro-Hydraulic Transducer		X

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LANT IDENTIFICATION	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
MO 2062	Valve Motor Operator		x
MO 2063	Valve Motor Operator		x
MO 2067	Valve Motor Operator		· X
MO 2068	Valve Motor Operator		x
MO 2071	Valve Motor Operator		X
SV 2065	Solenoid Valve		X
FS 23-78	Flow Switch		x
FT 23-82	Flow Transmitter		x
LS 23-91 (A, B)	Level Switch		X
PS 23-84	Pressure Switch		- x
LS 23-74	Level Switch		x
LS 23-75	Level Switch		x
NAMCO EA 170 34101	Limit Switch		X

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		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
SV 2377	Solenoid Valve		x
SV 2378	Solenoid Valve		X
SV 2379	Solenoid Valve		x
SV 2380	Solenoid Valve		x
SV 2381	Solenoid Valve		x
SV 2383	Solenoid Valve		x
SV 2384	Solenoid Valve		x
SV 2385	Solenoid Valve		X
SV 2386	Solenoid Valve		x
SV 2387	Solenoid Valve	- 18-	- X
SV 2896	Solenoid Valve		x
dPS 2573	Differential Pressure Switch		X
dPS 2572	Differential Pressure Switch		X

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SYSTEM: Standby Gas T	reatment			
PLANT TDENTIFICATION		LOCATION		
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT	
SV 2944	Solenoid Valve		x	
SV 2945	Solenoid Valve		х	
SV 2978	Solenoid Valve		X	
SV 2979	Solenoid Valve		X	
SV 2982 (A, B)	Solenoid Valve		X	
PS 3462	Pressure Switch		х	
FT 2942	Flow Transmitter		X	
V-EF-17 (A, B)	Fan Motor		X	
FT 2943	Flow Transmitter		X	
FS 2950	Flow Switch	-	- X	
FS 2951	Flow Switch		X	
TS 3368	Temperature Switch		x	
TS 3369	Temperature Switch		X	
K-11	Aux. Compressor Motor		x	
E/P 2942	Electric Pneumatic Transducer		X	
E/P 2943	Electric Pneumatic Transducer		X	

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SYSTEM: Standby Gas	Treatment (Cont'd.)		
PLANT IDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
LC-1 (A-B)	Contactor		x
LC-2 (A-B)	Fused Disconnect		X
E-34 (A-B)	Thermostat		X
Е-34 (А-В)	Unit Heater	· ·	x
K-11	Aux. Compressor Motor Starter		X
K-11	Aux. Compressor Line Switch		X
Tl	Control XFMR	· · · · · · · · · · · · · · · · · · ·	x
K-11	Aux. Compressor Motor		x
Allen-Bradley Bulletin 1492-CD3	Terminal Board		x
General Electric SI-57275	Wire	-	- x
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SYSTEM: Instrumen	t Air		
PLANT IDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
SV 1478	Solenoid Valve		X
SV 7956	Solenoid Valve		X
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SYSTEM: Containment				
PLANT IDENTIFICATION		LOCATION		
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT	
LT 2996	Level Transmitter		X	
PT 2994B	Pressure Transmitter		X	
PT 7348	Pressure Transmitter		· X	
TE 2995 (F, G)	Thermocouple		X	
		· · · · ·		
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S"STEM: Main Steam			
PLANT IDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
MO 2373	Valve Motor Operator	X	
MO 2374	Valve Motor Operator		X
SV 2-71 (D-H)	Solenoid Valve	X	
SV 2-80 (A-D)	Solenoid Valve	X	
SV 2-86 (A-D)	Solenoid Valve		x
TS 2-121 (A-D)	Temperature Switch		x
TS 2-122 (A-D)	Temperature Switch		x
TS 2-123 (A-D)	Temperature Switch		X
TS 2-124 (A-D)	Temperature Switch		X
dPIS 2-116 (A-D)	Differential Pressure Indicating Switch	~	- X
dPIS 2-117 (A-D)	Differential Pressure Indicating Switch		X
dPIS 2-118 (A-D)	Differential Pressure Indication Switch		x
dPIS 2-119 (A-D)	Differential Pressure Indicating Switch		x
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PLANT IDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
SV 2-71 (A-C)	Solenoid Valve	X	
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PLANT IDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMAR CONTAINMENT
?S 5-14 (A-D)	Pressure Switch		x
PS 5-12 (A-D)	Pressure Switch		x
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PLANT IDENTIFICATION	GENERIC NAME	LOCATION	
		INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
MO 1426	Valve Motor Operator		X
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PLANT IDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
MO 2397	Valve Motor Operator	X	
MO 2398	Valve Motor Operator		x
MO 2399	Valve Motor Operator		X
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SISTEM: Radwaste		LOCATION	
PLANT IDENTIFICATION	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
SV 2541 (A, B)	Solenoid Valve		x
SV 2561 (A, B)	Solenoid Valve		X
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SYSTEM: Nuclear Boiler	-Vessel Instrumentation		
PLANT IDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
PS 2-3-49 (A, B)	Pressure Switch		x
·PS 2-3-50 (A,B)	Pressure Switch		X
PS 2-3-51 (A-D)	Pressure Switch		X
PS 2-3-52 (A, B)	Pressure Switch		X
PS 2-3-53 (A, B)	Pressure Switch		X
LIS 2-3-57 (A, B)	Level Indicating Switch		x
LIS 2-3-58 (A, B)	Level Indicating Switch	n	X
LIS 2-3-72 (A-D)	Level Indicating Switch		x
LITS 2-3-73 (A, B)	Level Indicating Transmitter-Switch	-	_ X
LITS 2-3-59 (A, B)	Level Indicating Transmitter-Switch		x
LT 2-3-61	Level Transmitter		X
LT 6-52 (A, B)	Level Transmitter		X
PT 6-53 (A, B)	Pressure Transmitter		X

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SYSTEM: Reactor Reci	rculation		
PLANT IDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME '	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
MO 2-53 (A, B)	Valve Motor Operator	x	
MO 2-54 (A, B)	Valve Motor Operator	X	
SV 2790		X	
SV 2791			х
PS 2-128 (A, B)	Pressure Switch		x
dPIS 2-129 (A-D)	Differential Pressure Indicating Switch		X
dPIS 2-136 (A, B)	Differential Pressure Indicating Switch		X
dPIS 2-137 (A, B)	Differential Pressure Indicating Switch		X
<b>dP</b> IS 2-138 (A, B)	Differential Pressure Indicating Switch		x
dPIS 2-139 (A, B)	Differential Pressure Indicating Switch		- X
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SYSTEM: Residual Heat	Removal			
PLANT IDENTIFICATION		LOCATION		
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT	
MO 1989	Valve Motor Operator		X	
MO 2002	Valve Motor Operator		X	
MO 2003	Valve Motor Operator		X	
MO 2006	Valve Motor Operator		X	
MO 2007	Valve Motor Operator		X	
MO 2008	Valve Motor Operator		X	
мо 2009	Valve Motor Operator		X	
MO 2010	Valve Motor Operator		X	
MO 2011	Valve Motor Operator		X	
MO 2012	Valve Motor Operator 🛷	-	_ X	
MO 2013	Valve Motor Operator		X	
MO 2014	Valve Motor Operator		X	
MO 2015	Valve Motor Operator		X	
MO 2020	Valve Motor Operator		x	
MO 2021	Valve Motor Operator		x	
MO 2022	Valve Motor Operator		X	

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SYSTEM: Residual Hea	t Removal (Cont'd.)		
PLANT IDENTIFICATION	TIFICATION	LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
MO 2023	Valve Motor Operator		X
MO 2026	Valve Motor Operator		X
MO 2027	Valve Motor Operator	X	
мо 2029	Valve Motor Operator	X ·	
мо 2030	Valve Motor Operator		X
MO 2032	Valve Motor Operator		X
мо 2407	Valve Motor Operator		X
SV 1728	Solenoid Valve		X
SV 1729	Solenoid Valve		х
SV 1994	Solenoid Valve	~	- X
SV 1995	Solenoid Valve		X
SV 1996	Solenoid Valve		X
SV 1997	Solenoid Valve		X
E/P 1728	Electric Pneumatic Transducer		X
E/P 1729	Electric Pneumatic Transducer		x
dPT 10-91 (A, B)	Differential Pressure Transmitter		X

SYSTEM: Residual He	at Removal (Cont.d)		
PLANT IDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
PS 7192	Pressure Switch		X
PS 10-105 (A-H)	Pressure Switch		X
PS 10-119 (A-D)	Pressure Switch		X
FS 10-121 (A-D)	Flow Switch		X
P-202 (A-D)	Pump Motor		X
PS 7193	Pressure Switch		X
MO 1986	Valve Motor Operator		X
мо 1987	Valve Motor Operator		X
MO 1988	Valve Motor Operator		X
PS 10-100 (A-D)	Pressure Switch	-	_ X
PS 10-101 (A-D)	Pressure Switch		X
FT 10-109 (A, B)	Flow Transmitter		X .
FT 10-111 (A, B)	Flow Transmitter		X
K-10 (A, B)	Aux. Compressor Motor		X
K-10 (A, B)	Aux. Comp. Mtr. Starte		X
K-10 (A, B)	Aux. Com. Line Sw.		X

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SYSTEM: Residual Heat	Removal (Cont'd.)		
PLANT IDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
K-10 (A, B)	Aux. Comp Line Sw		x
N3347	Aux. Comp Disconnect		X
N4347	Aux. Comp Disconnect		X
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SYSTEM: Core Spray			
PLANT IDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
MO 1749	Valve Motor Operator		x
MO 1750	Valve Motor Operator		X
MO 1751	Valve Motor Operator		X
MO 1752	Valve Motor Operator		X
MO 1753	Valve Motor Operator		x
MO 1754	Valve Motor Operator		x
PS 14-44 (A-D)	Pressure Switch		x
P-208 (A, B)	Pump Motor		x
FT 14-40 (A, B)	Flow Transmitter		x
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SYSTEM: Reactor Core	e Isclation Cooling		
PLANT TDENTIFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
MO 2075	Valve Motor Operator	X	
MO 2076	Valve Motor Operator		X
MO 2078	Valve Motor Operator		X
TS 13-79 (A-D)	Temperature Switch	· ·	x
TS 13-80 (A-D)	Temperature Switch		X
TS 13-81 (A-D)	Temperature Switch		X
TS 13-82 (A-D)	Temperature Switch		X
dPIS 13-83	Differential Pressure Indicating Switch		X
dPIS 13-84	Differential Pressure Indicating Switch		X
PS 13-87 (A-D)	Pressure Switch	-	- x
PS 13-72 (A, B)	Pressure Switch		x
P-210	Pump Motor		x
PT 13-68	Pressure Transmitter		x
PT 13-70	Pressure Transmitter		x
LT 1358	Level Transmitter		x
LT 1359	Level Transmitter		X

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SYSTEM: Reactor Core	Isolation Cooling (Cont	'd.)		
PLANT IDENTIFICATION		LOCATION		
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT	
MO 2100	Valve Motor Operator		x	
MO 2101	Valve Motor Operator		X	
MO 2102	Valve Motor Operator		X	
MO 2106	Valve Motor Operator		X	
MO 2107	Valve Motor Operator		X	
MO 2110	Valve Motor Operator		X	
мо 3502	Valve Motor Operator		X	
SV 2104	Solenoid Valve		X	
FS 13-57	Flow Switch		X	
FT 13-58	Flow Transmitter	~	_ X	
PS 13-67	Pressure Switch		x	
PT 13-65	Pressure Transmitter		x	
PT 13-60	Pressure Transmitter		x	
P-211	Pump Motor		- X	
	Magnetic Pick-Up			
ĖGM	Speed Controller		x	

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PLANT TOFNTTFICATION		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
EGR	Electro-Hydraulic Transducer		X
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		LOCATION	
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT
SV 3267	Solenoid Valve		x
SV 3268	Solenoid Valve		x
SV 3269A	Solenoid Valve		X
SV 3305	Solenoid Valve		X
SV 3306	Solenoid Valve		X
SV 3307	Solenoid Valve		. X
SV 3308	Solenoid Valve		X
SV 3309	Solenoid Valve		x
SV 3310	Solenoid Valve		x
SV 3311	Solenoid Valve	<i>14</i>	- x
SV 3312	Solenoid Valve		X
SV 3313	Solenoid Valve		X
SV 3314	Solenoid Valve		X

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PLANT IDENTIFICATION	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT	
SV 3-140 (A, B)	Solenoid Valve		x	
SV 3-31 (A, B)	Solenoid Valve		X	
SV 3-13-117	CRD Scram Solenoid Valve		X	
SV 3-13-118	CRD Scram Solenoid Valve		x	
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SYSTEM: 250 VDC			8	
PLANT IDENTIFICATION NUMBER	GENERIC NAME	LOCAT INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT	
D311	Motor Control Center		x	
D312	Motor Control Center		x	
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PLANT IDENTIFICATION		LOCATION			
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMAR CONTAINMENT X X		
MCC 142	Motor Control Center				
MCC 143 (A,B)	Motor Control Center				
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PLANT IDENTIFICATION		LOCATION			
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT		
V-AC-4	Fan Motor				
V-AC-5	Fan Motor		X		
V-AC-6	Fan Motor		x		
V-AC-8 (A,B)	Fan Motor		X		
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	COMPONENTS				
DIANT IDENTIFICATION		LOCATION			
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT		
General Electric SI-58007	Electrical Cable		x		
General Electric SI-58136	Electrical Cable		X		
General Electric SI-58081	Electrical Cable		x		
General Electric SI-58109	Electrical Cable	x			
Rockbestos Firewall III	Electrical Cable	x	X		
Samuel Moore Co. #1802/1852/1862	Instrument Cable		. X		
General Electric SI-58042	Electrical Cable		x		
JX-105 (A,C,D)	Electrical Penetration	X			
Raychem WCSF-N	Field Splice	x			
General Electric CR151D3	Terminal Board	-	- X		
NAMCO EA08021100	Limit Switch		X		
NAMCO D2400X ST	Limit Switch		X		
NAMCO EA 170 14100	Limit Switch		X		
NAMCO D1200G	Limit Switch		·X		
NAMCO SL5-C3L	Limit Switch		x		
NAMCO Sl3-b2W	Limit Switch		· v		

Page 1 of 2

	COMPONENTS		# <u>************************************</u>		
PLANT IDENTIFICATION		LOCATION			
NUMBER	GENERIC NAME	INSIDE PRIMARY CONTAINMENT	OUTSIDE PRIMARY CONTAINMENT		
NAMCO EA-740-50100	Limit Switch	x			
NAMCO EA-740-8000	Limit Switch	X			
MICRO-SWITCH BZE6-2RN	Limit Switch		x		
MICRO-SWITCH BZE6-2RQ2	Limit Switch		X		
E. F. Johnson 108-0300-01	Banana Plug		X		
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#### MONTICELLO NUCLEAR GENERATING PLANT DOCKET NO. 50-263 LICENSE NO. DPR-22

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Response to IEB 79-01B

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Enclosure 2

Component Evaluation Worksheets



### COMPONENT EVALUATION WORKSHEET

	ENVIRONMENT		DOCUMENTATION REF.		QUALIFI-	OUTSTAND-	
EQUIPMENT DESCRIPTION	PARAMETER	SPECIFI- CATION	QUALIFI- CATION	SPECIFI- CATION	QUALIFI- CATION	METHOD	ITEMS
SYSTEM: Reactor Recirc PLANT I.D. NO.: NA	OPERATING TIME	30 hrs.	30 days	FSAR Figure 5-2-15	Reference 1	Sequential Test	
COMPONENT: Limit Switch MANUFACTURER: National ACME (NAMCO)	TEMPERATURE (°F)	SEE ACCII TEST PRO PROVIDE	DENT & DFILES ED	FSAR Figure 5-2-15	Reference 1	Sequential Test	
MODEL NO.: EA-740-8000 FUNCTION: Position Indication	PRESSURE (PSIG)			FSAR 🛓 Figure 5-2-14	Reference 1	Sequential Test	
ACCURACY: NA SERVICE: CV-2790	RELATIVE HUMIDITY (%)	100	100	FSAR Section 5.2.3.2	Reference 1	Sequential Test	
	CHEMICAL SPRAY	NA	NA	NA	NA	NA	NA
	RADIATION (RADS)	3.3 x 10 <sup>7</sup>	2 x 10 <sup>8</sup>	FSAR Table 14-10	Reference -4 1	Sequential Test	
LOCATION: Containment	AGING		40 yrs.		Reference 1	Sequential Test	
FLOOD LEVEL ELEV: 922' ABOVE FLOOD LEVEL: YES X NO	SUBMERGENCE	NA	NA	NA	NA	NA	NA

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#### COMPONENT EVALUATION WORKSHEET

	E	NVIRONMENT		DOCUMENTA	TION REF.	QUALIFI-	OUTSTAND-	
EQUIPMENT DESCRIPTION	PARAMETER	SPECIFI- CATION	QUALIFI- CATION	SPECIFI- CATION	QUALIFI- CATION	METHOD	ITEMS	
SYSTEM: Main Steam	OPERATING TIME	30 Hrs.	30 days	FSAR Figure 5-2-15	Reference 1	Sequential Test		
COMPONENT: Limit Switch MANUFACTURER: National ACME (NAMCO	TEMPERATURE (°F)	SEE ACCID TEST PRO PROVIDE	ENT & FILES D	FSAR Figure 5-2-15	Reference 1	Sequential Test		
MODEL NO.: EA-740-50100 FUNCTION: Position Indication	PRESSURE (PSIG)			FSAR Figure 5-2-14	Reference 1	Sequential Test		
ACCURACY: NA SERVICE: AO 2-80 (A-D)	RELATIVE HUMIDITY (%)	100	100	FSAR Figure 5.2.3.2	Reference 1	Sequential Test		
۲	CHEMICAL SPRAY	NA	NA	NA	NA	NA	NA	
	RADIATION (RADS)	3.3 x 10 <sup>7</sup>	2 x 10 <sup>8</sup>	FSAR Table 14-10-4	Reference 1	Sequential Test		
LOCATION: Containment	AGING		40 years		Reference 1	Sequential Test		
FLOOD LEVEL ELEV: 922' Above flood level: yes <u>x</u> No	SUBMERGENCE	NA	NA	NA	NA	NA	NA	



Test Chamber Temperature Profile for Accident Environment Simulation

REFERENCES:	NOTES :	
1. ACME Cleveland Development Company, Test Plan dated 8/31/77.		
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#### COMPONENT EVALUATION WORKSHEET

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	E	<b>WIRONMENT</b>		DOCUMENTA	TION REF.	QUALIFI-	OUTSTAND-	
EQUIPMENT DESCRIPTION	PARAMETER	SPECIFI- CATION	QUALIFI- CATION	SPECIFI- CATION	QUALIFI- CATION	METHOD	ITEMS	
SYSTEM: Reactor Recirc	OPERATING TIME	5 min.	30 days	GE Spec 22A1132	Reference 1	Sequential Test	None	
COMPONENT: Solenoid Valve MANUFACTURER: ASCO	TEMPERATURE (°F)	SEE ACCII TEST PRO PROVIDE	DENT & DFILES D	FSAR Figure 5-2-15	"	11	None	
MODEL NO.: NP 8321A1E FUNCTION: Pilot Air Control for Isolation Valve	PRESSURE (PSIG)			FSAR 🔅 Figure 5-2-14	11	T	None	
ACCURACY: N/A SERVICE: Reactor Water Sample	RELATIVE ' HUMIDITY (%)	100	100	FSAR Section 5.2.3.2	rt.	11	None	
Line Isolation	CHEMICAL SPRAY	NA	NA	NA	NA	NA	NA	
	RADIATION ' (RADS)	5 x 10 <sup>6</sup>	5 x 10 <sup>7</sup>	GE Spec 22A1132	11	U	None	
LOCATION: Containment	AGINC .	Not Required	4.4 yrs.		11	11	None	
FLOOD LEVEL ELEV: 922' ABOVE FLOOD LEVEL: YES X NO	SUBMERGENCE	NA	NA	NA	NA	NA	NA	



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Plant I.D. No.: SV 2790 Test Chamber Temperature Profile for Accident Environment Simulation

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IEEE Std 382-1972

	REFERENCES:	NOTES:
1.	ASCO Test Summary supplied as Certificate of Compliance to NSP Purchase Order #M05813.	
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#### COMPONENT EVALUATION WORKSHEET

	Е	NVIRONMENT	· · · · · · · · · · · · · · · · · · ·	DOCUMENTA	TION REF.	QUALIFI-	OUTSTAND-
EQUIPMENT DESCRIPTION	PARAMETER	SPECIFI- CATION	QUALIFI- CATION	SPECIFI- CATION	QUALIFI- CATION	METHOD	ITEMS
SYSTEM: NA	OPERATING TIME	30 hrs.	96 hrs/ 30 days	FSAR Figure	Reference 1	Sequential Test	None
		·		5-2-15		l	
COMPONENT: Field Splices	TEMPERATURE (°F)	SEE ACCII TEST PRO	DENT &	FSAR			None
MANUFACTURER: Raychem	PROVIDED			5-2-15		1	None
MODEL NO.: WCSF-N	PRESSURE					1	
FUNCTION: NA	(PSIG)			FSAR Figure	11	71	None
ACCURACY: NA	RELATIVE			FSAR			
	HUMIDITY (%)	100	100	Section	¥1	TT	None
SERVICE: NA				5.2.5.2			
	CHEMICAL	NA	NA	ΝΔ	NA	NA	NA
	RADIATION (Rads)	3.3 x 10 <sup>7</sup>	$4 \times 10^{7}_{8}$ 2 x 10 <sup>8</sup>	FSAR Table 14-10-4	11	17	None
		Nat					
	AGING	Required	40 yrs		17	11	None
LOCATION: Containment							
FLOOD LEVEL ELEV: 922'	SUBMERGENCE	NA	NA	NA	NA	NA	NA
ABOVE FLOOD LEVEL: YES X NO							



Figure 1. 4-Day LOCA Profile (Test Items 1A through 4A)

VII -7 Report 441

44114-2





LOCA PROFILE

		T	NOTES:		 	
REFERENCES:		+				
<ol> <li>Wyle Laboratories Qualifi #44114-2 for General Elect Rockbestos Company docume fication of Raychem Splic 1978 for Rockbestos Cable</li> </ol>	cation Test Report stric cable splices. ent "Class 1E Quali- ces" dated April 14, e splices.					
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### COMPONENT EVALUATION WORKSHEET

	EI	VIRONMENT		DOCUMENTA	TION REF.	QUALIFI-	OUTSTAND- ING	
EQUIPMENT DESCRIPTION	PARAMETER	SPECIFI- CATION	QUALIFI- CATION	SPECIFI- CATION	QUALIFI- CATION	METHOD	ITEMS	
	ODED ATTING				· · · · · · · · · · · · · · · · · · ·			
SYSTEM: Reactor Recirc	TIME	43 Sec.	30 days	Réference	Reference 2	Sequential Test	None	
LANT I.D. NO.: See Below					~			
COMPONENT: Valve Operator	TEMPERATURE	SEE ACCIL	ENT &	FSAR			<b>N</b> 7	
MANUFACTURER: Limitorque		PROVIDE	D D	Figure " 5-2-15			None	
MODEL NO.: SB, SMB	PRESSURE			FSAR				
FUNCTION: Actuate Recirc Pump Discharge Valves	(PSIG)	SIG)			<b>11</b>	11	None	
ACCURACY: NA	RELATIVE			FSAR				
	(%)	100	100	Section 5-2.3.2	11	41	None	
SERVICE:								
MO 2-55 A-B	SPRAY	NA	NA	NA	NA	NA	NA	
	RADIATION	1 x 10 <sup>6</sup>	$2 \times 10^8$	FSAR Table	11	11	None	
	(KAD2)			14-10-4				
	ACINC	Not				Sequential Test/Engin-		
LOCATION: Containment	AGING	Required	40 yrs.		11	eering Anal ysis	_ <sup>None</sup>	
FLOOD LEVEL ELEV: 922'	SUBMERGENCE	NA	NA	NA	NA	NA	NA	
ABOVE FLOOD LEVEL: YES X NO								

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RECEARCH I ARORATORIES

REFERENCES:	NOTES :
<ol> <li>Letter, G. H. Scott (GE) to L. R. Eliason(NSP) dated November 15, 1978.</li> </ol>	
<ol> <li>Limitorque Qualification Test Report, Project 600376A, dated May 13, 1976.</li> </ol>	·
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	1	CALLON	UNITON	UNITON	LOATION	<b></b>	
SYSTEM: NA ANT I.D. NO.: NA	OPERATING TIME	30 hrs.	96 hrs.	FSAR FIGURE 5-2-15	Reference 1	Sequential Test	None
COMPONENT: Electrical Cable MANUFACTURER: General Electric	TEMPERATURE (°F)	SEE ACCIDENT & TEST PROFILES PROVIDED		FSAR Figure 5-2-15	11	"	None
MODEL NO.: SI-58109 FUNCTION: NA	PRESSURE (PSIG)			FSAR Figure 5-2-14	11	11	None
ACCURACY: NA	RELATIVE HUMIDITY (%)	100	100	FSAR Section 5.2.3.2	IJ	11	None
	CHEMICAL SPRAY	NA	NA	NA	NA	NA	NA
	RADIATION (Rads)	3.3 x 10 <sup>7</sup>	4 x 10 <sup>7</sup>	FSAR Table 14-10-4	11	11	None
LOCATION: Containment	AGING	Not Required	40 yrs		11	11	None
FLOOD LEVEL ELEV: 922' ABOVE FLOOD LEVEL: YES X NO	SUBMERGENCE	NA	NA	NA	NA	NA	NA

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Figure 1. 4-Day LOCA Profile (Test Items IA through 4A)

V11 -7 Report 44114-2

REFERENCES:	NOTES:
1. Wyle Laboratories Qualification Test Report #44114-2.	
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#### COMPONENT EVALUATION WORKSHEET

	E	WIRONMENT		DOCUMENTA	TION REF.	QUALIFI-	OUTSTAND-
EQUIPMENT DESCRIPTION	PARAMETER SPECIFI- CATION		QUALIFI- CATION	SPECIFI- CATION	QUALIFI- CATION	METHOD	ITEMS
SYSTEM: NA LANT I.D. NO.: NA	OPERATING TIME	30 hrs	30 days	FSAR Figure 5-2-15	Reference 1	Sequential Test	None
COMPONENT: Electrical Cable MANUFACTURER: Rockbestos	TEMPERATURE (°F)	SEE ACCID TEST PRO PROVIDE	ENT & FILES D	FSAR Figure 5-2-15	11	"	None
MODEL NO.: Firewall III FUNCTION: NA	PRESSURE (PSIG)			FSAR Figure 5-2-14	11	"	None
ACCURACY: NA SERVICE: NA	RELATIVE HUMIDITY (%)	100	100	FSAR Figure 5.2.3.2	11	11	None
	CHEMICAL SPRAY	NA	NA	NA	NA	NA	NA
	RADIATION (RADS)	3.3 x 10 <sup>7</sup>	2 x 10 <sup>8</sup>	FSAR Table 14-10-4	11	11	None
LOCATION: Containment	AGING	Not Required	40 yrs		11	11	None
FLOOD LEVEL ELEV: 922' ABOVE FLOOD LEVEL: YES X NO	SUBMERGENCE	NA	NA	NA	NA	NA	NA

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LOCA Profile



REFERENCES:	NOTES :	
<ol> <li>Rockbestos Co. Document "Qualification of Firewall III Class 1E Electric Cables" dated February 1, 1977.</li> </ol>		

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## Test Conditions:

Temperature	Pressure	
Temperature	65 psig	2 min.
340°F	45 naig	3 hrs.
340°F	45 ps1g	3 hrs.
320°F	45 paig	90 hrs.
250°F	25 barg	

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REFERENCES:	NOTES:
1. GE document, Plant Equipment Design Memo #126-62.	<ol> <li>In the FSAR, aging was not considered a service con- dition. The effect of aging on this equipment will be evaluated as required by Action Item #4 of this Bulletin.</li> </ol>
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SUBMERGENCE

NA

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FLOOD LEVEL ELEV: 922'

ABOVE FLOOD LEVEL: YES X

NO

COMPONENT EVALUATION WORKSHEET

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NA

NA

NA

#### Temperature Exposure

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The following is a tabulation of total temperature exposure above 250°F commenced on August 27, 1970 on the Automatic valves.

111

- a. Time above 250°F: 9.3 hours
- b. Time above 310°F: 3.5 hours
- c. Time above 340°F: 3.3 hours

1

Saturated steam conditions were maintained during the test.

REFERENCES:	NOTES:
1. Rockwell Co. Test Report #2792-03-02.	<ol> <li>In the FSAR, radiation was not considered a service condition. The effect of radiation on this equipment will be evaluated as required by Action Item #4 of this Bulletin.</li> </ol>
	<ol> <li>In the FSAR, aging was not considered a service condition. The effect of aging on this equipment will be evaluated as required by Action Item #4 of this Bulletin.</li> </ol>

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	ENVIRONMENT			DOCUMENTATION REF.		QUALIFI-	OUTSTAND-	
EQUIPMENT DESCRIPTION	PARAMETER	SPECIFI- CATION	QUALIFI- CATION	SPECIFI- CATION	QUALIFI- CATION	METHOD	ITEMS	
SYSTEM: Various LANT I.D. NO.: See Below	OPERAT ING TIME	5 min.	7 days	GE Spec 22A1132	Reference 1	Sequential Test	None	
COMPONENT: Valve Operator MANUFACTURER: Limitorque	TEMPERATURE (°F)	SEE ACCIDENT & TEST PROFILES PROVIDED		FSAR Figure 5-2-15	11	H	None	
MODEL NO.: SMB FUNCTION: Actuate Containment Isolation Valve	PRESSURE (PSIG)			FSAR Figure 5-2-14	"	11	None	
ACCURACY: N/A SERVICE:	RELATIVE HUMID1TY (%)	100	100	FSAR Section 5.2.3.2	11	11	None	
MO-2029 2034 2027 2075 2397 2373	CHEMICAL SPRAY	NA	NA	NA	NA	NA	NA	
	RADIATION (Rads)	1 x 10 <sup>6</sup>		FSAR Table 14-10-4			Note 1	
LOCATION: Containment	AGING	Not Required	40 yrs.		Reference 2	11	None	
FLOOD LEVEL ELEV: 922' ABOVE FLOOD LEVEL: YES X NO	SUBMERGENCE	NA.	NA	NA	NA	NA	NA	



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REFERENCES:		NOTES :		
<ol> <li>Franklin Institute Ter</li> <li>Limitorque Engineering January 2, 1969.</li> </ol>	st Report F-C2232-01. 3 Order 600198 dated	<ol> <li>At the time of qua was not considered effect of radiatio evaluated as requi Bulletin.</li> </ol>	lification testing, rad as a service condition n on this equipment wi red by Action Item #4 o	liation n. The ll be of this
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COMPONENT EVALUATION WORKSHEET

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#### TEST REQUIREMENTS

The electrical penetration test requirements are listed below:

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1. Environmental Conditions based on a postulated design basis accident.

Test Conditions	1	2	3	4	5*
Temperature, °F	340	340	320	250	200
Pressure, psig	56	35	35	25	20
Relative Humidity%	100	100	100	100	100
Duration	45 sec	3 hr	6 hr	1 day	100 days

\* This test condition conducted for 36 hours. Past testing showed that the penetration will sustain the fifth condition.

	REFERENCES :		NOTES :
1. 2.	General Electric document, Qualification Report for FO1 Penetration Assembly. Letter, G. G. Sherwood (GE) to NRC, dated December 2, 1977.	1.	In the FSAR, aging was not considered a service condition. The effect of aging on this equip- ment will be evaluated as required by Action Item #4 of this Bulletin.
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#### MONTICELLO NUCLEAR GENERATING PLANT DOCKET\_NO. 50-263 LICENSE NO. DPR-22

Response to IEB 79-01B

#### Enclosure 3

#### Service Condition Profiles



NSF-1

Figure 5-2-14. Containment Pressure Response



Figure 5-2-15. Drywell Temperature Response

**NSP-1** 5/15/69

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Accession

MT8003310002



#### NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

March 12, 1980

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

Dear Mr. Keppler:

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#### MONTICELLO NUCLEAR GENERATING PLANT Docket No. 50-263 License No. DPR-22 Response to IE Bulletin 80-03 Dated February 6, 1980

IE Bulletin 80-03 requested that power reactor facilities perform inspections of the charcoal adsorbers for loss of charcoal due to adsorber cell degradation. The only safeguards system at Monticello that contains charcoal adsorbers is the Standby Gas Treatment System. Information on the two charcoal adsorbers and the inspections performed as requested in Item 1 of the bulletin are given below.

System: Standby Gas Treatment System (2 Trains)
Adsorber Units: Quantity - 1 per train
Adsorber Cells: Quantity - 12 per unit
Type - 11, Barneby-Cheney Type FC-1521
1, Barneby-Cheney Type FC-2645 (test cell)
Weight - 94 lbs.
Design - Cells held in place by studs and retaining
clips. Perforated screens secured to cells
by rivets spaced 1/2 to 5/8 inches apart.

Inspections of the adsorber units were performed in accordance with Section 5 of ANSI N510-1975. The cells were in excellent condition with no signs of sagging, channeling or other degradation. There were no gaps between the perforated screens and casings. The visual inspection did reveal a minute amount of charcoal (approximately one tablespoon) on the floor of the exhaust side of each unit. These small amounts of charcoal are believed to have fallen through the screens during handling of removal of test cartridges and to have accumulated over a period of several years.

MAR 1 4 1980

<sup>か/シ</sup> シ 8003310000

Central file
Mr. James G. Keppler Page 2 March 12, 1980

Monticello performs in-place halogenated hydrocarbon tests on the charcoal adsorbers once each operating cycle. The penetrations into the adsorbers have always been less than the maximum specified in the Technical Specifications ( $\leq$  1%) and minute losses of charcoal have not affected the results.

No defective cells were identified, therefore no additional actions as described in Items 2 and 3 of the bulletin have been taken. Please contact Plant Management if you require additional information concerning our response.

Yours truly,

DEJ

D. E. Gilberts Vice President Power Production

DEG:nk

cc: Mr. G. Charnoff NRC Division of Fuel Facility and Materials Safety Inspection Washington, D. C.