NORTHEAST UTILITIES
NU
THE CONNECTICUT LIGHT AND POWER COMPANY
THE HARTFORD ELECTRIC LIGHT COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

P.O. BOX 270
HARTFORD, CONNECTICUT 06101
(203) 666-6911

December 30, 1980

Docket Nos. 50-213
50-245
A00898

Director of Nuclear Reactor Regulation
Attn: Mr. Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

References: (1) D. L. Ziemann letter to W. G. Counsil dated February 15, 1980.
(2) W. G. Counsil letter to D. L. Ziemann dated April 29, 1980.
(3) W. G. Counsil letter to D. G. Eisenhut dated October 31, 1980 (Docket No. 50-213).
(4) W. G. Counsil letter to D. G. Eisenhut dated October 31, 1980 (Docket No. 50-245).

Gentlemen:

Haddam Neck Plant
Millstone Nuclear Power Station, Unit No. 1
Environmental Qualification of Electrical Equipment

In Reference (1), the NRC Staff transmitted guidance for performing an evaluation of the environmental qualification of Class 1E electrical equipment. In Appendix A to Enclosure 1 of Reference (1), the Staff identified typical systems utilized to perform the necessary functions of emergency reactor shutdown, containment isolation, reactor core cooling, containment and reactor heat removal, and prevention of significant releases of radioactive material to the environment.

Connecticut Yankee Atomic Power Company's (CYAPCO's) and Northeast Nuclear Energy Company's (NNECO's) initial response to Appendix A was provided in Reference (2), wherein plant-specific equipment and functions necessary to achieve the above-identified objectives were identified.

As a result of numerous changes in interpretations of Staff guidance, which are documented in References (3) and (4), the Reference (2) information is hereby superseded by the revised lists provided as Attachments 1 and 2 for the Haddam Neck Plant and Millstone Unit No. 1, respectively. These attachments were not a part of the Staff's request for information by November 1, 1980, but they are being docketed to update Reference (2) and to more accurately reflect the content of References (3) and (4).

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Included as Attachment 3 to this submittal are revised pages to Reference (4). The majority of the changes are editorial in nature and do not substantively alter the information provided in Reference (4). In one instance additional qualification documentation is being provided rather than justification for its absence.

It is emphasized that the attached information is not vital to the development of the Staff's Safety Evaluation Report scheduled for February 1, 1981.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

W. G. Counsil

W. G. Counsil
Senior Vice President

DOCKET NO. 50-213

ATTACHMENT 1

HADDAM NECK PLANT

ENVIRONMENTAL QUALIFICATION OF ELECTRICAL EQUIPMENT

December, 1980

RESPONSE TO APPENDIX A

Typical Equipment/Functions From Appendix A	Plant Specific (CY) Equipment/Functions
Engineered Safeguards Actuation	Pressurizer pressure transmitters, containment pressure switches and associated 4A/4B lockout relays.
Reactor Protection	Reactor Protection System
Containment Isolation	CY has 39 automatic containment isolation valves which are: 1. Air Operated Valves 2. Trip Valves 3. Flow Control Valves 4. Motor Operated Valves 5. Solenoid Operated Valves 6. Hand Indicating Control Valves
Main Steamline Isolation	Main Steamline Isolation System
Main Feedwater Shutdown and Isolation	The main feedwater shutdown and isolation is performed by: 1. Main Feedwater Regulation Valves 2. Back-up Motor Operated Valves
Emergency Power	Diesel generators, 4160 V and 480 V switchgear, 125 volt DC system, 120 V vital and semi-vital AC systems, and their associated switchgear, raceway, and cable.

Emergency Core Cooling	Emergency Core Cooling is performed by: 1. High Pressure Safety Injection 2. Low Pressure Safety Injection 3. Charging Pumps 4. Residual Heat Removal System 5. Heat Trace System
Containment Heat Removal	Containment heat removal consists of the following systems: 1. Air Recirculation System 2. Adams Filter 3. Spray System (Back-Up)
Containment Fission Product Removal	Filtration System
Containment Combustible Gas Control	Hydrogen Purge System (Manual System)
Auxiliary Feedwater	Auxiliary Feedwater System
Containment Ventilation	Air Recirculation System, Purge System
Containment Radiation Monitoring	Containment radiation monitoring consists of the following: 1. Reactor Containment Air Particulate Monitor 2. Reactor Containment Gas Monitor
Control Room Habitability System	The control room ventilation and smoke ejection systems.

Ventilation for Areas Containing Safety Equipment	The heating and ventilation systems at CY are not Category I. The environments will be determined assuming its failure.
Component Cooling	Component Cooling System
Service Water	Service Water System
Emergency Shutdown	Emergency shutdown is achieved by: 1. Pressure Control System 2. Reactor Coolant System 3. Chemical & Volume Control System 4. Main Steam System 5. Primary Water Storage System 6. Auxiliary Feedwater System 7. Residual Heat Removal System 8. Component Cooling System 9. Service Water System
Post Accident Sampling & Monitoring	Sampling System
Radiation Monitoring	Radiation Monitoring System
Safety Related Display Instrumentation	All instrumentation which displays information used by operators for essential decision making.

DOCKET NO. 50-245

ATTACHMENT 2

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 1

ENVIRONMENTAL QUALIFICATION OF ELECTRICAL EQUIPMENT

December, 1980

RESPONSE TO APPENDIX A

Typical Equipment/Functions From Appendix A	Plant Specific (MP1) Equipment/Functions
Engineered Safeguards Actuation	The following engineered safeguards systems are considered Category I and are actuated by independent Category I controls which are part of that system: 1. Emergency core cooling system 2. Steam flow restrictors (passive system)
Reactor Protection	Reactor protection system
Containment Isolation	Primary containment isolation system
Steamline Isolation	Part of primary containment isolation system
Main Feedwater Shutdown and Isolation	MP1 utilizes Category I check valves to provide this function
Emergency Power	Gas turbine generator, diesel generator, 4,160 and 480 volt switchgear, 120 volt vital and instrument AC systems, 125 volt DC system, and their associated switchgear, raceway and cable
Emergency Core Cooling	Core spray system Low pressure coolant injection/CTMT cooling system Automatic depressurization system Feedwater coolant injection system Isolation condenser system
Containment Heat Removal	LPCI/containment cooling system Emergency service water system
Containment Fission Product Removal	Atmospheric control system Standby gas treatment system
Containment Combustible Gas Control	Atmospheric control system (inerting of containment)
Auxiliary Feedwater	MP1 does not have an auxiliary feedwater system. The condensate storage and transfer system provides alternate water for the FWCI system

Containment Ventilation	The containment ventilation system is not Category I at MP1. It is not required to mitigate the consequences of a LOCA or MSLB accident. (There is nothing in the drywell that requires ventilation for the above.)
Containment Radiation Monitoring	Process radiation monitoring system
Control Room Habitability	The control room heating and ventilation system.
Ventilation for Areas Containing Safety Equipment	The turbine building heating and ventilation system at MP1 is not Category I. The environments will be determined assuming its failure.
Component Cooling	Service water system
Service Water	Service water system
Emergency Shutdown	LPCI system Isolation condenser system Automatic depressurization system
Post Accident Sampling and Monitoring	Process radiation monitoring system. The sample system is not Category I at MP1. It is isolated by the primary containment isolation system, which is Category I.
Radiation Monitoring	Process radiation monitoring system
Safety-Related Display Instrumentation	All instrumentation which displays information used by operators for essential decision making (as called out in the emergency operating procedures for the LOCA, LNP, and MSLB accidents; i.e., level, pressure, temperature, flow indication, valve and breaker position, etc.)

DOCKET NO. 50-245

ATTACHMENT 3

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 1

ELECTRICAL EQUIPMENT ENVIRONMENTAL QUALIFICATION

REVISED SYSTEM COMPONENT EVALUATION WORK SHEETS

SUMMARY SHEETS

December, 1980

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

Page I-1
Rev. 5
Date 11-24-80

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: ADS **Plant ID No.:** 1-MS-3A (203-3A) **Component:** Solenoid Valve **Manufacture:** Target Rock **Model Number:** ½ SMS-A-01 (SN #100) **Function:** Actuate relief valves **Accuracy:** NA **Service:** Pressure Relief of Rx **Location:** Drywell-R1	**Operating Time**	90 min.	92 hrs.	S-3	Q-3	vendor data	
	Temperature (^{o}F)	Profile 1	347^{o}F	S-1	Q-3	vendor data	
	Pressure (PSIA)	Profile 2	65 psig	S-1	Q-3	vendor data	
	Relative Humidity(%)	100%	100%	S-1	Q-3	vendor data	
	Chemical Spray	Demin H_2O	NR	NR	NR	NR	
	Radiation	4.3×10^7	1.3×10^7	S-4	Q-3	vendor data	see sum. sht. I-1
	Aging	40 yrs.	285^{o}F 480 hrs.	life of plant	Q-3	vendor data	
Flood Level Elev: 1'-8" **Above Flood Level:** Yes X No	**Submergence**	N/A	N/A	S-6	N/A	N/A	

M-H

*Documentation References:
See attached reference list.

Notes: 1-MS-3B,C,D,E & F

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: PCI **Plant ID No.:** 1-SM-1 (220-44) **Component:** Solenoid Valve **Manufacture:** Aktomatic **Model Number:** 15-527 **Function:** Actuate Rx loop sample valve **Accuracy:** NA **Service:** CTMT Isolation **Location:** Drywell-R1	Operating Time	5.5 sec.	--	S-5	Q-3	vendor data	see sum. sht. I-6
	Temperature (^{O}F)	Profile 1	>300F	S-1	Q-28	vendor data	see sum. sht. I-6
	Pressure (PSIA)	Profile 2	30 psig	S-1	Q-28	vendor data	
	Relative Humidity(%)	100%		S-1			see sum. sht. I-6
	Chemical Spray	Demin H_2O	NR	NR	NR	NR	
	Radiation	1.1 X 10^7		S-4			see sum. sht. I-6
	Aging	40 yrs.		life of plant			see sum. sht. I-6
Flood Level Elev: 1'-8" **Above Flood Level:** Yes X No	Submergence	N/A	N/A	S-6	N/A	N/A	

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*Documentation References:
See attached list.

Notes:

Facility: Millstone Nuclear Pr. Sta.
Unit: One
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SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: PCI **Plant ID No.:** 1-SM-2 (220-45) **Component:** Solenoid valve **Manufacture:** Atkomatic **Model Number:** 15-527 **Function:** Actuate Rx loop sample valve **Accuracy:** NA **Service:** CTMT Isolation **Location:** Rx Building - R17	Operating Time	5.5 sec.	--	S-5			
	Temperature (^{O}F)						
	Pressure (PSIA)						
	Relative Humidity(%)						
	Chemical Spray						
	Radiation	1.3×10^{6}		S-4			see sum. sht. I-7
	Aging	40 yrs.		life of plant			see sum. sht. I-7
Flood Level Elev: NA **Above Flood Level:** Yes No	Submergence						

M-H

*Documentation References:
See attached list.

Notes:

SUMMARY SHEET NO. I-7

SCEW SHEET NO. I-7

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT: 1-SM-2 Solenoid Valves

MANUFACTURER: Atkomatic Model 15-527

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION FOR CONTINUED OPERATION:

1. Primary containment isolation.
2. The valves are redundant to other safety related equipment which is not simultaneously exposed to a harsh environment.
3. This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.
4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.
5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

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SYSTEM COMPONENT EVALUATION WORK SHEET

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: ATMOS. Cont. **Plant ID No.:** 1-AC-11 (v12-11) **Component:** Solenoid Valve **Manufacture:** ASCO **Model Number:** LB831615 **Function:** Actuate cntl. vent valves **Accuracy:** NA **Service:** CTMT Isolation **Location:** Reactor building-R6,R8	Operating Time	11 sec.		S-5			see sum. sht. I-9
	Temperature (^{o}F)						
	Pressure (PSIA)						
	Relative Humidity(%)						
	Chemical Spray						
	Radiation	1.3 X 10^{6}		S-4			see sum. sht. I-9
	Aging	40 yrs.		life of plant			see sum. sht. I-9
Flood Level Elev: NA **Above Flood Level:** Yes No	Submergence						

M-H

*Documentation References:
See attached list.

Notes:

1-AC-6
1-AC-5
1-AC-4
1-AC-10

SUMMARY SHEET NO. I-16

SCEW SHEET NO. I-16

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT: 1-CU-2A Solenoid Valves

MANUFACTURER: ASCO Model HT 8320

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data.

SAFETY FUNCTION AND JUSTIFICATION FOR CONTINUED OPERATION:

1. Primary containment isolation.
2. The valves are redundant to other safety related equipment which is not simultaneously exposed to a harsh environment.
3. This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.
4. The valve is normally closed and stay closed.
5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

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SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: FWCI **Plant ID No.:** 1-MW-96A (V7-143) **Component:** Motor Operator **Manufacture:** Teledyne **Model Number:** T-4-25 **Function:** Emergency condensate transfer pump discharge valve **Accuracy:** NA **Service:** Fdwtr. supply **Location:** Reactor Building R6	Operating Time	Continuous		S-3			See Summ. Sheet II-3
	Temperature (^{o}P)						
	Pressure (PSIA)						
	Relative Humidity(%)						
	Chemical Spray						
	Radiation	2.1×10^{6}		S-4			See Summ. Sheet II-3
	Aging	40 Years		Life of Plant			See Summ. Sheet II-3
Flood Level Elev: NA **Above Flood Level:** Yes No	Submergence						

M-H

*Documentation References:
See attached list

Notes:
S.N. #11947

SUMMARY SHEET NO. II-6

SCEW SHEET NO. II-6

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT: 1-LP-15A & B M.O. Valve

MANUFACTURER: Teledyne Model T40-80

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Primary Containment Cooling during LOCA, ONLY.

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

4. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT: 1-LP-16A & B M.O. Valve

MANUFACTURER: Teledyne Model T4-25

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Primary Containment Cooling during LOCA ONLY.

2. Thi equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

4. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
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SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Core Spray **Plant ID No.:** 1-CS-4A (V10-13A) **Component:** Motor operator **Manufacture:** Teledyne **Model Number:** T-10-40 **Function:** Core Spray Injection Valve **Accuracy:** N/A **Service:** Emergency Core Cooling **Location:** Rx Bldg. R17, R19	**Operating Time**	30 sec.		S-3			See Summ. Sheet II-9
	Temperature (°F)	Profile 6,9		S-2			See Summ. Sheet II-9
	Pressure (PSIA)	Profile 10		S-2			See Summ. Sheet II-9
	Relative Humidity(%)	Profile 8		S-2			See Summ. Sheet II-9
	Chemical Spray	N/A					
	Radiation	1.3×10^6		S-4			See Summ. Sheet II-9
	Aging	40 Years		Life of Plant			See Summ. Sheet II-9
Flood Level Elev: 1'-8" **Above Flood Level:** Yes X No	**Submergence**	N/A	N/A				

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***Documentation References:**

See attached list.

Notes:

1-CS-4A

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Service Water **Plant ID No.:** I-SW-9 (V4-21) **Component:** Motor operator **Manufacture:** Limitorque **Model Number:** SMB-0 **Function:** Isolation Valve for Non-Essential Equip. **Accuracy:** NA **Service:** Emerg. water **Location:** Turbine Building-T5C	**Operating Time**	< 30 sec.		S-3			See Summ. Sheet II-11
	Temperature (°F)	Profile 12		S-2			See Summ. Sheet II-11
	Pressure (PSIA)	Profile 13		S-2			See Summ. Sheet II-11
	Relative Humidity(%)	Profile 14		S-2			See Summ. Sheet II-11
	Chemical Spray	N/A	N/A	N/A	N/A	N/A	
	Radiation	2.8×10^4		S-4			See Summ. Sheet II-11
	Aging	40 Years		Life of Plant			See Summ. Sheet II-11
Flood Level Elev: NA **Above Flood Level:** Yes No	**Submergence**	N/A	N/A	N/A	N/A	N/A	

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***Documentation References:**

See attached list.

Notes:

Facility: Millstone Nuclear Pr. Sta.
Unit: One
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SYSTEM COMPONENT EVALUATION WORK SHEET

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EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Isolation Cond. **Plant ID No.:** 1-IC-4 (V16-4) **Component:** Valve **Manufacture:** Teledyne **Model Number:** T-10-60 **Function:** Isolation Valve **Accuracy:** N/A **Service:** Ctmt. Isolation **Location:** Drywell R1	**Operating Time**	21 sec.		S-5			See Summ. Sheet II-13
	Temperature (^{o}F)	Profile 1		S-1			See Summ. Sheet II-13
	Pressure (PSIA)	Profile 2		S-1			See Summ. Sheet II-13
	Relative Humidity(%)	100%		S-1			See Summ. Sheet II-13
	Chemical Spray	Demin. H_2O	N/A	N/A	N/A	N/A	
	Radiation	1.1×10^7		S-4			See Summ. Sheet II-13
	Aging	40 Years		Life of Plant			See Summ. Sheet II-13
Flood Level Elev: 1'8" **Above Flood Level:** Yes X No	**Submergence**	N/A	N/A	S-6	N/A	N/A	

M-H

*Documentation References:
See attached list.

Notes:

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1-MS-5 M.O. Valve

MANUFACTURER:

Limitorque Model SMB-000

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data

SAFETY FUNCTION AND JUSTIFICATION FOR CONTINUED OPERATION:

1. Primary Containment Isolation for a MSLB.

2. This valve is normally closed and stays closed. It is used to drain steam lines to the condenser only when less than 5% power (start-up and shutdown).

3. This valve is redundant to other safety related equipment which is not simultaneously exposed to a harsh environment.

4. This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
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SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REP*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: PCI **Plant ID No.:** 1-CU-5 (V11-4) **Component:** Motor Operator **Manufacture:** Teledyne **Model Number:** T-4-15 **Function:** Reactor Clean Up Pump Suction Valve **Accuracy:** NA **Service:** Ctmt. isolation **Location:** Reactor Building-R17	Operating Time	20 sec.		S-5			See Summ. Sheet II-15
	Temperature (^{o}F)						
	Pressure (PSIA)						
	Relative Humidity(%)						
	Chemical Spray						
	Radiation	1.3 x 10^{6}		S-4			See Summ. Sheet II-15
	Aging	40 Years		Life of Plant			See Summ. Sheet II-15
Flood Level Elev: NA **Above Flood Level:** Yes No	Submergence						

M-H

*Documentation References:
See attached list.

Notes:

SUMMARY SHEET NO. II-16

SCEW SHEET NO. II-16

REV. 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1-MS-6 M.O. Valve

MANUFACTURER:

Limitorque Model SMB-000

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Primary containment isolation for a MSLB.

2. This valve is normally closed and stays closed. It is used to drain steam lines to the condenser only when less than 5% power (start-up and shutdown).

3. This valve is redundant to other safety related equipment which is not simultaneously exposed to a harsh environment.

4. **This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT: 1-LP-14A & B M.O. Valves

MANUFACTURER: Teledyne Model T40-10

QUALIFICATION DISCREPANCY:
Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION FOR CONTINUED OPERATION:

1. Suppression Chamber (Torus) Cooling during LOCA, only.

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

4. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

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SCEW SHEET NO. II-29

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT: 1-LP-13A & B M.O. Valves

MANUFACTURER: Teledyne Model T40-10

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION FOR CONTINUED OPERATION:

1. Suppression Chamber (Torus) Cooling during LOCA, only.

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

4. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

SUMMARY SHEET NO. II-30

SCEW SHEET NO. II-30

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT: 1-LP-43A & B M.O. Valve

MANUFACTURER: Teledyne Model T10-25

QUALIFICATION DISCREPANCY:
Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Emergency Core Cooling Test Valve.

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

4. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

SUMMARY SHEET NO. II-33

SCEW SHEET NO. II-33

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT: 1-LP-7A & B M.O. Valves

MANUFACTURER: Teledyne Model T10-60

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION FOR CONTINUED OPERATION:

1. Emergency Core Cooling during LOCA.
2. The valves are in the heat exchanger by-pass line and any malfunction is inconsequential.
3. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.
4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.
5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT: 1-LP-44A & B M.O. Valve

MANUFACTURER: Teledyne Model T40-100

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION FOR CONTINUED OPERATION:

1. Emergency Core Cooling Test Valve.

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

4. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

SUMMARY SHEET NO. II-37

SCEW SHEET NO. II-37

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT: 1-CS-21A & B M.O. Valve

MANUFACTURER: Teledyne Model T4-10

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Emergency Core Cooling Test Valve.

2. A normally closed and stays closed valve except during a 30 second surveillance operation.

3. Malfunction of these valves is only credible upon the coincident happenings of:

   a. The Iso-Condenser Break
   b. An LNP
   c. Failure of the Diesel Generator
   d. Surveillance Testing in progress

4. This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.

5. Due to the desirability f long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Various Plant ID No.:	Operating Time	Continuous	8 days	S-3	Q-11		
Component: Terminal block	Temperature (^{o}F)	Profiles 6,9	340^{o}F	S-1	Q-11		
Manufacture: G.E.	Pressure (PSIA)	Profile 10	103 psig	S-1	Q-11		
Model Number: CR151	Relative Humidity(%)	Profile 8	100%	S-1	Q-11		
Function: Terminations	Chemical Spray	NA	NA	NA	NA		
Accuracy: NA	Radiation	2.1 x 10^{6}		S-4			see sum. sht. III-5
Service: Various	Aging	40 yrs.		life of plant			see sum. sht. III-5
Location: Rx bldg.							
Flood Level Elev: NA Above Flood Level: Yes / No	Submergence	NA	NA	NA	NA		

M-H

*Documentation References:
See attached list.

Notes: T. blocks located on instrument racks and misc. boxes.

SUMMARY SHEET NO. IV-9a

SCEW SHEET NO. IV-9a

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

Cable

MANUFACTURER:

G. E. Vulkene

QUALIFICATION DISCREPANCY:

Lacks fully documented qualification test data for radiation.

SAFETY FUNCTION AND JUSTIFICATION FOR CONTINUED OPERATION:

1. Electric continuity.

2. In addition to the $4x10^7$ rad exposure for which the samples were tested they were taken from a plant in service for 10 years. Thus the actual radiation exposure for 10 years of normal life should be included.

3. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

4. This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.

5. Due the the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practible, prior to Juen 30, 1982, assuming that procurement delays do not preclude replacement by that date.

SUMMARY SHEET NO. IV-9b

SCEW SHEET NO. IV-9b

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

Cable

MANUFACTURER:

G. E. Vulkene

QUALIFICATION DISCREPANCY:

Lacks fully documented qualification test data for radiation.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Electric continuity.

2. In addition to the $4x10^7$ rad exposure for which the samples were tested they were taken from a plant in service for 10 years. Thus the actual radiation exposure for 10 years of normal life should be included.

3. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

4. This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practible, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Various Plant ID No.: K9-1	Operating Time	Continuous		S-3			see sum. sht. IV-10
Component: Cable	Temperature (°F)						
Manufacture: G.E.	Pressure (PSIA)						
Model Number: Cu/Coustantan	Relative Humidity(%)						
Function: Elec. circuitry	Chemical Spray		NA	NA	NA	NA	
Accuracy: NA							
Service: Torus temp.	Radiation	2.1×10^6		S-4			see sum. sht. IV-10
Location: Rx Bldg. R10	Aging	40 yrs.		life of plant			see sum. sht. IV-10
Flood Level Elev: Above Flood Level: Yes / No	Submergence	NA	NA	S-6	NA	NA	

M-H

*Documentation References:
See attached list.

Notes: C1811T
C1811U

SUMMARY SHEET NO. IV-10

SCEW SHEET NO. IV-10

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

Cable

MANUFACTURER:

GE

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION FOR CONTINUED OPERATION:

1. Electric continuity.

Components are copper/constantan temperature elements which provide signals to a temperature recorder in control room.

This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in qualification documentation, concerns radiation and aging considerations. The deletected affects resulting from these parameters are time-dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. Reference letter from Northeast Utilities to NRC Docket No. 50-245 dated June 20, 1980. This will be accomplished as soon as practible, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: VARIOUS Plant ID No.: K1-16 Component: Cable Manufacture: G.E. Model Number: S1-58073 Function: Elec. circuitry Accuracy: NA Service: Ctmt. isolation Location: DRYWELL R1	Operating Time	Continuous	96 hrs.	S-3	Q-19,20	test similarity	
	Temperature (^{o}F)	Profile 1	340^{o}F	S-1	Q-19,20	test similarity	
	Pressure (PSIA)	Profile 2	62 psig	S-1	Q-19,20	test similarity	
	Relative Humidity(%)	100%	100%	S-1	Q-19,20	test similarity	
	Chemical Spray	Demin H_2O	N/A	N/A	N/A	N/A	
	Radiation	9.4 x10^{7}	>4 x 10^{7}	S-4	Q-19,20	test similarity	see sum. sht. IV-11
	Aging	40 yrs.	268^{o}/54 days + 10 yr.	life of plant	Q-19,20	test similarity	
Flood Level Elev: Above Flood Level: Yes No	Submergence	N/A	N/A	N/A	N/A	N/A	

M-H

*Documentation References:
See attached list.

Notes: K1-16=1/C #4(62 vulkene)
C1460
C1443

SUMMARY SHEET NO. IV-11

SCEW SHEET NO. IV-11

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

Cable

MANUFACTURER:

G. E. Vulkene

QUALIFICATION DISCREPANCY:

Lacks fully documented qualification test data for radiation.

SAFETY FUNCTION AND JUSTIFICATION FOR CONTINUED OPERATION:

1. Electric continuity.
2. In addition to the $4x10^7$ rad exposure for which samples were tested, they were taken from a plant in service for 10 years. Thus the actual radiation exposure for 10 years of normal life should be included.
3. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.
4. This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.
5. Due to the desirability of long term operability OF THIS EQUIPMENT, they will be replaced with qualified equipment. This will be accomplished as soon as practible, prior to June 30,1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Various Plant ID No.: K2-2 Component: Cable Manufacture: G.E. Model Number: SI-58081 Function: Elec. circuitry Accuracy: NA Service: Various Location: Steam tunnel R-4	Operating Time	Continuous	500 hrs.	S-3	Q-29	similarity test	
	Temperature (^{o}F)	Profile 3	90^{o}C (202^{o}F)	S-2	Q-29	similarity test	
	Pressure (PSIA)	Profile 4	40 psig	S-2	Q-29	similarity test	
	Relative Humidity(%)	Profile 5	100%	S-2	Q-29	similarity test	
	Chemical Spray	NA	NA	NA	NA	NA	
	Radiation	2.9 x 10^{6}	5.4 x 10^{7}	S-4	Q-29	similarity test	
	Aging	40 yrs.	40 yrs.	life of plant	Q-29	similarity test	
Flood Level Elev: NA Above Flood Level: Yes No	Submergence	NA	NA	NA	NA	NA	M-H

*Documentation References:
See attached list.

Notes: K2-3
K2-5
K2-21
See attached list.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEM:
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Various **Plant ID No.:** Various **Component:** Cable **Manufacture:** G.E. **Model Number:** SI-58145 **Function:** Elec. circuitry **Accuracy:** NA **Service:** **Location:** Rx Bldg.	Operating Time	Continuous	96 hrs.	S-3	Q19,20	test	
	Temperature (^{o}F)	Profiles 6,9	340^{o}?	S-2	Q19,20	test	
	Pressure (PSIA)	Profile 10	62 psig	S-2	Q19,20	test	
	Relative Humidity(%)	Profile 8	100%	S-2	Q19,20	test	
	Chemical Spray	NA	NA	NA	NA	NA	
	Radiation	2.8 x 10^{4}	>4 x 10^{7}	S-4	Q19,20	test	
	Aging	40 yrs.	268^{o}F/54 days + 10 yrs.	life of plant	Q19,20	test	
Flood Level Elev: **Above Flood Level:** Yes / No	Submergence	NA	NA	NA	NA	NA	

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*Documentation References:
See attached list

Notes:
SI-58145=30 mil vulk./45 mil neop.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEM
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Various Plant ID No.: Various Component: Cable Manufacture: G.E. Model Number: SI-58081 Function: Elec. Circuitry Accuracy: N/A Service: Various Location: T. bldg.	Operating Time	Continuous	500 hrs	S-3	Q-29	Similarity Test	
	Temperature (^{o}F)	Profile 12	95^{o}C	S-2	Q-29	Similarity Test	
	Pressure (PSIA)	Profile 13	40 PSIG	S-2	Q-29	Similarity Test	
	Relative Humidity(%)	Profile 14	100%	S-2	Q-29	Similarity Test	
	Chemical Spray	NA	NA	NA	NA	NA	
	Radiation	2.8 x 10^{4}	5.4 X 10^{7}	S-4	Q-29	Similarity Test	
	Aging	40 yrs.	40 yrs.	life of plant	Q-29	Similarity Test	
Flood Level Elev: Above Flood Level: Yes No	Submergence	NA	NA	NA	NA	NA	

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*Documentation References:

See attached list.

Notes:

SI-58081=30PE/15PVC/45PVC

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REP*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: ISO Cond. **Plant ID No.:** 1-IC-6 (1301-17) **Component:** Limit switch **Manufacture:** Micro **Model Number:** DTF2-2RN2-RN **Function:** Valve Position **Accuracy:** N/A **Service:** Containment Isolation **Location:** R14 Reactor Building	**Operating Time**	Continuous		S-3			See Sum. Sheet V-4
	Temperature (^{o}F)	Profile 6 & 9		S-2			See Sum. Sheet V-4
	Pressure (PSIA)	Profile 10		S-2			See Sum. Sheet V-4
	Relative Humidity(%)	Profile 8		S-2			See Sum. Sheet V-4
	Chemical Spray	N/A	N/A	N/A	N/A	N/A	
	Radiation	2.1×10^{6}		S-4			See Sum. Sheet V-4
	Aging	40 Years		Life of Plant			
Flood Level Elev: N/A **Above Flood Level:** Yes No	**Submergence**	N/A	N/A	N/A	N/A	N/A	

M-H

***Documentation References:**
See attached list.

Notes:
1-IC-7 (1301-20)

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1-SS-3, 4, 13 & 14 Limit Switches

MANUFACTURER:

Micro Switch #DTF2-2RN

QUALIFICATION DISCREPANCY:

Lacks documented qualification Test Data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Valve Position Indication

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time-dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. **This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

Page V-12
Rev. 5
Date 11-24-80

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Atmos. control **Plant ID No.:** 1-AC-5	Operating Time	Continuous		S-3			See Sum. Sheet V-12
Component: Limit switch	Temperature (^{o}F)						
Manufacture: Micro	Pressure (PSIA)						
Model Number: BAF1-2RN2 **Function:** Valve position	Relative Humidity(%)						
	Chemical Spray						
Accuracy: NA							
Service: Ctmt. isolation	Radiation	2.1 x 10^{6}		S-4			See Sum. Sheet V-12
Location: Reactor building R8	Aging	40 Years		Life of Plant			See Sum. Sheet V-12
Flood Level Elev: NA **Above Flood Level:** Yes / No	Submergence						

M-H

*Documentation References:
See attached list.

Notes:

SUMMARY SHEET NO. V-12

SCEW SHEET NO. V-12

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1-AC-5 Limit Switch

MANUFACTURER:

Micro Model BAF1-2RN2

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Valve Position Indication

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time-dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. **This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

SUMMARY SHEET NO. V-13

SCEW SHEET NO. V-13

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1-AC-6 & 11 Limit Switches

MANUFACTURER:

Micro Model DTF2-2RN2

QUALIFICATION DISCREPANCY:

Lacks documented qualification Test Data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Valve Position Indication

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time-dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. **This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1-AC-7 & 8 Limit Switches

MANUFACTURER:

Micro Model DTF2-2RN2

QUALIFICATION DISCREPANCY:

Lacks documented qualification Test Data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Valve Position Indication

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time-dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. **This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Atmos. control **Plant ID No.:** 1-AC-9 (1601-24) **Component:** Limit switch **Manufacture:** Micro **Model Number:** 51MLT 6022 **Function:** Valve position **Accuracy:** NA **Service:** Ctmt. isolation **Location:** Reactor building R12	Operating Time	Continuous		S-3			See Sum. Sheet V-15
	Temperature (°F)						
	Pressure (PSIA)						
	Relative Humidity(%)						
	Chemical Spray						
	Radiation	2.1×10^6		S-4			See Sum. Sheet V-15
	Aging	40 yrs.		Life of Plant			See Sum. Sheet V-15
Flood Level Elev: **Above Flood Level:** Yes / No	Submergence						

M-H

*Documentation References:

See attached list.

Notes:

SUMMARY SHEET NO. V-15

SCEW SHEET NO. V-15

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1-AC-9 Limit Switch

MANUFACTURER:

Micro Model 51MLT-6022

QUALIFICATION DISCREPANCY:

Lacks documented qualification Test Data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Valve Position Indication

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time-dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. **This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
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SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Atmos. control Plant ID No.: 1-AC-10(1601-28) Component: Limit switch Manufacture: Micro Model Number: BAF1-2RN2 Function: Valve position Accuracy: NA Service: Ctmt. isolation Location: Reactor building R6	Operating Time	Continuous		S-3			See Sum. Sheet V-16
	Temperature (^{O}F)						
	Pressure (PSIA)						
	Relative Humidity(%)						
	Chemical Spray						
	Radiation	2.1×10^{6}		S-4			See Sum. Sheet V-16
	Aging	40 yrs.		Life of Plant			See Sum. Sheet V-16
Flood Level Elev: NA Above Flood Level: Yes / No	Submergence						

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*Documentation References:
See attached list.

Notes:

SUMMARY SHEET NO. V-16

SCEW SHEET NO. V-16

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1-AC-10 Limit Switch

MANUFACTURER:

Micro Model BAF1-2RN2

QUALIFICATION DISCREPANCY:

Lacks documented qualification Test Data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Valve Position Indication

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the [illegible] deficiency in the qualification documentation concerns radiation and ag[illegible]onsiderations. The deleterious affects resulting from these parameters [illegible]time-dependent phenomena which could not reasonably be expected to resul[illegible]quipment failure in the short term.

3. **This equipment will [illegible]ve completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Atmos. Control **Plant ID No.:** 1-AC-12	**Operating Time**	Continuous		S-3			See Sum. Sheet V-17
Component: Unit Switch	**Temperature (^{o}F)**						
Manufacture: Micro	**Pressure (PSIA)**						
Model Number: 51ML76922	**Relative Humidity(%)**						
Function: Valve Position	**Chemical Spray**						
Accuracy: N/A							
Service: Containment Isolation	**Radiation**	2.1×10^{6}		S-4			See Sum. Sheet V-17
Location: R6 Reactor Building	**Aging**	40 Years		Life of Plant			See Sum. Sheet V-17
Flood Level Elev: **Above Flood Level:** Yes No	**Submergence**						

M-H

*Documentation References:

See attached list.

Notes:

SUMMARY SHEET NO. V-17

SCEW SHEET NO. V-17

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1-AC-12 Limit Switch

MANUFACTURER:

Micro Model 51ML7-6922

QUALIFICATION DISCREPANCY:

Lacks documented qualification Test Data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Valve Position Indication

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time-dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. **This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Atmos. Control **Plant ID No.:** 1-AC-17 (1601-6) **Component:** Limit Switch **Manufacture:** Micro **Model Number:** BAF1-2RN2 **Function:** Valve Position **Accuracy:** N/A **Service:** Containment Isolation **Location:** Rx Bldg. R8	Operating Time	Continuous		S-3			See Sum. Sheet V-18
	Temperature (^{o}F)						
	Pressure (PSIA)						
	Relative Humidity(%)						
	Chemical Spray						
	Radiation	2.1×10^{6}		S-4			See Sum. Sheet V-18
	Aging	40 Years		Life of Plant			See Sum. Sheet V-18
Flood Level Elev: N/A **Above Flood Level:** Yes / No	Submergence						

M-H

*Documentation References:
See attached list.

Notes:

SUMMARY SHEET NO. V-18

SCEW SHEET NO. V-18

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1-AC-17 Limit Switch

MANUFACTURER:

Micro Model BAF1-2RN2

QUALIFICATION DISCREPANCY:

Lacks documented qualification Test Data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Valve Position Indication

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time-dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. **This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REP*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Atmos. Control Plant ID No.: 1601-8A	Operating Time	Continuous		S-3			See Sum. Sheet V-19
Component: Limit Switch	Temperature (^{O}F)						
Manufacture: Micro	Pressure (PSIA)						
Model Number: BAF1-2RN2	Relative Humidity(%)						
Function: Volve Position	Chemical Spray						
Accuracy: N/A							
Service: Containment Isolation	Radiation	2.1 x 10^{6}		S-4			See Sum. Sheet V-19
Location: Rx Bldg. R10	Aging	40 Years		Life of Plant			See Sum. Sheet V-19
Flood Level Elev: Above Flood Level: Yes No	Submergence						

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*Documentation References:
See attached list.

Notes:
1601-8B

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1601-8A & B Limit Switches

MANUFACTURER:

Micro Model BAF1-2RN2

QUALIFICATION DISCREPANCY:

Lacks documented qualification Test Data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Valve Position Indication

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time-dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. **This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

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SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REP*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Atmos. Control **Plant ID No.:** 1-AC-4 (1601-19) **Component:** Limit Switch **Manufacture:** Micro **Model Number:** BAF1-2RN2 **Function:** Valve Position **Accuracy:** N/A **Service:** Containment Isolation **Location:** Rx Bldg. R8	**Operating Time**	Continuous		S-3			See Sum. Sheet V-21
	Temperature (^{O}F)						
	Pressure (PSIA)						
	Relative Humidity(%)						
	Chemical Spray						
	Radiation	2.1×10^{6}		S-4			See Sum. Sheet V-21
	Aging	40 Years		Life of Plant			See Sum. Sheet V-21
Flood Level Elev: **Above Flood Level:** Yes / No	**Submergence**						

M-H

*Documentation References:
See attached list.

Notes:

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

1-AC-4 Limit Switch

MANUFACTURER:

Micro Model BAF1-2RN2

QUALIFICATION DISCREPANCY:

Lacks documented qualification Test Data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Valve Position Indication

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time-dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. **This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

4. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

5. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

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SYSTEM COMPONENT EVALUATION WORK SHEET

Page VI-4
Rev. 5
Date 11-24-80

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REP*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: FWCI Plant ID No.: M7-28 Component: Pump Motor Manufacture: General Electric Model Number: 5K818841A134 Function: Emerg. Cond. Transf. Accuracy: N/A Service: Replenish Cond. H_2O Location: Rx Bldg. R6	Operating Time	Continuous		S-3			See Summ. Sht. VI-4
	Temperature (^{o}F)						
	Pressure (PSIA)						
	Relative Humidity(%)						
	Chemical Spray						
	Radiation	2.1 X 10^6		S-2			See Summ. Sht. VI-4
	Aging	40 yrs.		life of Plant			
Flood Level Elev: N/A Above Flood Level: Yes No	Submergence						

*Documentation References:

See attached list.

Notes:

SUMMARY SHEET NO. VI-4

SCEW SHEET NO. VI-4

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

Emergency Condensate Transfer Pump M7-28

MANUFACTURER:

GE Model 5K818841A134

QUALIFICATION DISCREPANCY:

Lacks documentated qualification test data for radiation & aging.

SAFETY FUNCTION AND JUSTIFICATION FOR CONTINUED OPERATION:

1. Emergency Core Cooling water supply during LOCA.

2. This equipment is not required to operate during a HELB outside containment. For a LOCA, the only deficiency in the qualification documentation concerns radiation and aging considerations. The deleterious affects resulting from these parameters are time-dependent phenomena which could not reasonably be expected to result in equipment failure in the short term.

3. An independent laboratory has been retained by NUSCO to provide radiation and time/temperature aging analysis for this equipment.

4. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: LPCI **Plant ID No.:** M8-75A (1502A) **Component:** Pump (Motor) 500 H.P. **Manufacture:** G.E. **Model Number:** 5K6329XC3A **Function:** Emer. Core/CTMT. Cooling pumps **Accuracy:** NA **Service:** Emerg. core cooling **Location:** Rx Bldg. R7 & R9	**Operating Time**	continuous	12 hrs.	S-3	Q-18	Test	
	Temperature (^{o}F)	Profiles 6,9	212^{o}F	S-2	Q-18	Test	
	Pressure (PSIA)	Profile 10	0 psig	S-2	Q-18	Test	
	Relative Humidity(%)	Profile 8	100%	S-2	Q-18	Test	
	Chemical Spray	N/A	N/A	N/A	N/A	N/A	
	Radiation	2.1 X 10^{6}		S-4			See Sum. Sheet VI-6
	Aging	40 Years		Life of Plant	Q-18	Test	See Sum. Sht. VI-6
Flood Level Elev: NA **Above Flood Level:** Yes No	**Submergence**	N/A	N/A	N/A	N/A	N/A	

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***Documentation References:**
See attached list.

Notes:
M8-75B
M8-75C
M8-75D

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Core Spray **Plant ID No.:** 1401A **Component:** Pump (Motor) 700 H.P. **Manufacture:** G.E. **Model Number:** 5K6338XC2 8A **Function:** Core spray cooling pump **Accuracy:** NA **Service:** Emerg. core cooling **Location:** RxBldg. R7 &R9	Operating Time	continuous	12 hrs.	S-3	Q-18	Test	
	Temperature (^{o}F)	Profiles 6,9	212^{o}F	S-2	Q-18	Test	
	Pressure (PSIA)	Profile 10	0 psig	S-2	Q-18	Test	
	Relative Humidity(%)	Profile 8	100%	S-2	Q-18	Test	
	Chemical Spray	N/A	N/A	N/A	N/A	N/A	
	Radiation	2.1 X 10^{6}		S-4			See Sum. Sheet VI-8
	Aging	40 Years		Life of Plant			See Sum. Sheet VI-8
Flood Level Elev: NA **Above Flood Level:** Yes / No	Submergence	N/A	N/A	N/A	N/A	N/A	

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*Documentation References:

See attached list.

Notes:

1401B

Facility: Millstone Nuclear Pr. Sta.
Unit: One
Docket: 50-245

SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REP*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: LPCI **Plant ID No.:** V10-5A **Component:** Relay **Manufacturer:** Chromalox **Model Number:** D2936-25 Contactor **Function:** Actuate Cooling Water **Accuracy:** N/A **Service:** LPCI Pump Motors **Location:** Rx Bldg. R7 & R9	Operating Time	< 30 sec.		S-3			See Sum. Sh. VIII-1
	Temperature (°F)	Profile 6 & 9		S-2			See Sum. Sh. VIII-1
	Pressure (PSIA)	Profile 10		S-2			See Sum. Sh. VIII-1
	Relative Humidity(%)	Profile 8		S-2			See Sum. Sh. VIII-1
	Chemical Spray	N/A	N/A	N/A	N/A	N/A	N/A
	Radiation	2.1×10^6		S-4			See Sum. Sh. VIII-1
	Aging	40 Years		Life of Plant			See Sum. Sh. VIII-1
Flood Level Elev: N/A **Above Flood Level:** Yes No	Submergence	N/A	N/A	N/A	N/A	N/A	N/A

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*Documentation References:
See attached list.

Notes:
V10-5B
V10-4A and B (Core Spray)

SUMMARY SHEET NO. V111-1

SCEW SHEET NO. V111-1

REV. 5 11-24-80

EQUIPMENT ENVIRONMENTAL QUALIFICATION

DISCREPANT EQUIPMENT SUMMARY

MILLSTONE UNIT 1

EQUIPMENT:

Relay

MANUFACTURER: Chromalox Model D2936-25 Contactor SN-K320FU

QUALIFICATION DISCREPANCY:

Lacks documented qualification test data

SAFETY FUNCTION AND JUSTIFICATION
FOR CONTINUED OPERATION:

1. Transfer LPCI and C.S.P.P.S. from space heaters to water cooling.

2. **This equipment will have completed its safety function within the first 30 seconds of an incident. Based on our engineering evaluation, considering the equipment operating time and expected effects associated with the qualification discrepancy, it is concluded that this equipment would satisfactorily perform its design function.**

3. Due to the desirability of long term operability of this equipment, they will be replaced with qualified equipment. This will be accomplished as soon as practicable, prior to June 30, 1982, assuming that procurement delays do not preclude replacement by that date.

Facility: Millstone Nuclear Pr. Sta.
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SYSTEM COMPONENT EVALUATION WORK SHEET

EQUIPMENT DESCRIPTION	ENVIRONMENT			DOCUMENTATION REF*		QUAL. METHOD	OUTSTANDING ITEMS
	Parameter	Spec.	Qual.	Spec.	Qual.		
System: Atmos. Control **Plant ID No.:** 1601-36A **Component:** Temperature Element **Manufacture:** Thermo-Electric **Model Number:** Type "T" **Function:** Indication **Accuracy:** **Service:** Torus Water Temperature **Location:** Reactor Bldg.	Operating Time	Continuous					See Sum. Sheet IX-6
	Temperature (^{O}F)						
	Pressure (PSIA)						
	Relative Humidity(%)						
	Chemical Spray						
	Radiation	2.1 x 10^{6}		S-4			See Sum. Sheet IX-6
	Aging	40 Years		Life of Plant			See Sum. Sheet IX-6
Flood Level Elev: **Above Flood Level:** Yes / No	Submergence						

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*Documentation References:

See Attached List

Notes:

1601-36B
(See IV-10b for cable)