

ATTACHMENT A

Consumers Power Company
Palisades Plant
Docket 50-255

RESPONSE TO ITEM (A) IE BULLETIN 85-03

May 15, 1986

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13 Pages

IC0586-0089-NL04

PALISADES PLANT INFORMATION

FOR USE IN RESPONDING TO ITEM (A) IE BULLETIN 85-03

FOR

HIGH PRESSURE SAFETY INJECTION SYSTEM

MOTOR-OPERATED VALVES

AND

AUXILIARY FEEDWATER SYSTEM

MOTOR-OPERATED VALVES

ATTACHMENTS

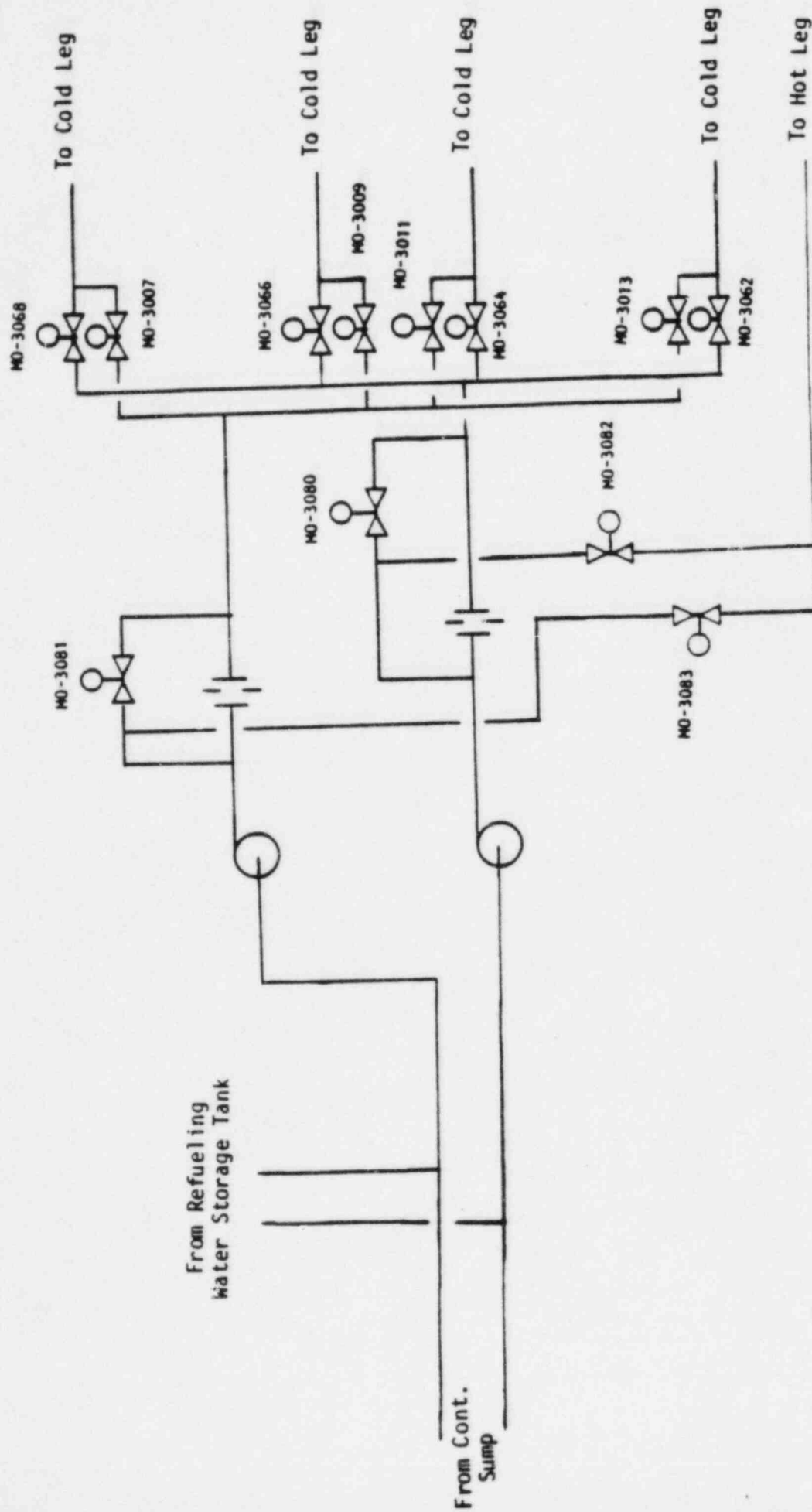
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Palisades Design Bases for Operation of HPSIS MOVs

<u>Valve Function</u>	<u>Valve Tag No.</u>	<u>Postulated Upstream Condition</u>	<u>Postulated Downstream Condition</u>	<u>Notes</u>
Auto Open on SIAS	* MO-3007	High: HPSI pump shutoff head	Low: atmos. press.	HPSI isolation valves - normally open
	MO-3009			
	MO-3011			
	MO-3013			
	MO-3062			
	MO-3064			
	MO-3066			
	MO-3068			
Manually close following shutdown	MO-3007	High: HPSI pump shutoff head	Low: atmos. press.	
	MO-3009			
	MO-3011			
	MO-3013			
	MO-3062			
	MO-3064			
	MO-3066			
	MO-3068			
Open for Hot Leg injection	MO-3080	High: HPSI pump shutoff head	Low: atmos. press.	HPSI flow to hot leg
	MO-3081			
Manually close from Control Room	MO-3080	High: HPSI pump shutoff head	Low: atmos. press.	
	MO-3081			
Close for hot leg injection	MO-3082	High: HPSI pump shutoff head	Low: atmos. press.	HPSI bypass valves
	MO-3083			
Manually open from Control Room	MO-3082	High: HPSI pump shutoff head	Low: atmos. press.	
	MO-3083			

* VALVE OPERATOR REMOVED, PIN PLACED THROUGH STEM HOLDING VALVE OPEN,
NEW OPERATOR ORDERED.

Palisades HPSIS Schematic



PALISADES

HIGH PRESSURE SAFETY INJECTIONData Summary

Switch Settings
Prior to Adjustments
as a Result of Bulletin
Normal/Maximum

Final Switch
Settings in Re-
sponse to Bulletin

N.A. Not Available

<u>Valve</u>	<u>Valve Operator</u>	<u>Valve Function</u>	<u>Design Basis ΔP Open/Close</u>	<u>Test ΔP Open/Close</u>	<u>Switch Settings Prior to Adjustments as a Result of Bulletin Normal/Maximum</u>		<u>Final Switch Settings in Response to Bulletin</u>
<u>Component ID, Manufacturer, Type, Model, Size, Rating</u>	<u>Manufacturer, Model, Motor RPM, Output Speed (RPM)</u>						
MO-3007 Velan Valve Corp. Globe WB-376-13HS 2" 1500#/N.A. 650°F/N.A.*	Limatorque SMB-00-15 1700 rpm N.A.	HPSI Isolation	1245 psi/ 1245 psi		1-1/2	2-1/4	
MO-3009 Velan Valve Corp. Globe WB-376-13HS 2" 1500#/N.A. 650°F/N.A.*	Limatorque SMB-00-15 1700 rpm N.A.	HPSI Isolation	1245 psi/ 1245 psi		1-1/2	2-1/4	
MO-3011 Velan Valve Corp. Globe WB-376-13HS 2" 1500#/N.A. 650°F/N.A.*	Limatorque SMB-00-15 1700 rpm N.A.	HPSI Isolation	1245 psi/ 1245 psi		1-1/2	2-1/4	
MO-3013 Velan Valve Corp. Globe WB-376-13HS 2" 1500#/N.A. 650°F/N.A.*	Limatorque SMB-00-15 1700 rpm N.A.	HPSI Isolation	1245 psi/ 1245 psi		1-1/2	2-1/4	

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HIGH PRESSURE SAFETY INJECTION

Data Summary

Valve	Valve Operator	Valve Function	Design Basis ΔP Open/Close	Test ΔP Open/Close	Switch Settings Prior to Adjustments as a Result of Bulletin Normal/Maximum	Final Switch Settings in Response to Bulletin
Component ID, Manufacturer, Type, Model, Size, Rating	Manufacturer, Model, Motor RPM, Output Speed (RPM)					
MO-3062 Velan Valve Corp. Globe WB-376-13MS 2" 1500#/N.A. 300°F/N.A. *	Limatorque SMB-00-15 1700 rpm N.A.	HPSI Isolation	1245 psi/ 1245 psi		1-1/2 2-1/4	
MO-3064 Velan Valve Corp. Globe WB-376-13MS 2" 1500#/N.A. 300°F/N.A. *	Limatorque SMB-00-15 1700 rpm N.A.	HPSI Isolation	1245 psi/ 1245 psi		1-1/2 2-1/4	
MO-3066 Velan Valve Corp. Globe WB-376-13MS 2" 1500#/N.A. 300°F/N.A. *	Limatorque SMB-00-15 1700 rpm N.A.	HPSI Isolation	1245 psi/ 1245 psi		1-1/2 2-1/4	
MO-3068 Velan Valve Corp. Globe WB-376-13MS 2" 1500#/N.A. 300°F/N.A. *	Limatorque SMB-00-15 1700 rpm N.A.	HPSI Isolation	1245 psi/ 1245 psi		1-1/2 2-1/4	

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HIGH PRESSURE SAFETY INJECTION

Data Summary

<u>Valve</u>	<u>Valve Operator</u>	<u>Valve Function</u>	<u>Design Basis ΔP Open/Close</u>	<u>Test ΔP Open/Close</u>	<u>Switch Settings Prior to Adjustments as a Result of Bulletin Normal/Maximum</u>	<u>Final Switch Settings in Response to Bulletin</u>
Component ID, Manufacturer, Type, Size, Rating	Manufacturer, Model, Motor RPM, Output Speed (RPM)					
MO-3080 Anchor/Darling Gate Dg.No.4315-3-Ø 6" 2500#/2485 psig 650 F/682 F **	Limiterque SMB-0-25 1800 rpm N.A.	HPSI Train Isolation	1238 psi/ 1238 psi		2 2	
MO-3081 Anchor/Darling Gate Dg.No.4350-3 6" 2500#/2485 psig 650 F/682 F **	Limiterque SMB-0-25 1800 rpm N.A.	HPSI Train Isolation	1239 psi/ 1239 psi		2 2	
MO-3082 Kerotest Globe D-PAL-D-22546MO-1 2" 2500#/2485 psig 650 F/682 F **	Limiterque SMB-00-10 1800 rpm N.A.	HPSI Hot Leg Isolation	1235 psi/ 1235 psi		1 2-1/2	
MO-3083 Kerotest Globe D-PAL-D-225L16MO-1 2" 2500-/2485 psig 605 F/682 F **	Limiterque SMB-00-10 1800 rpm N.A.	HPSI Hot Leg Isolation	1235 psi/ 1235 psi		1 2-1/2	

* Pressure Class/Op. Press., Design Temp./Max. Temp.

** Pressure Class/Design Pressure, Design Temp./Max. Temp.

PALISADES

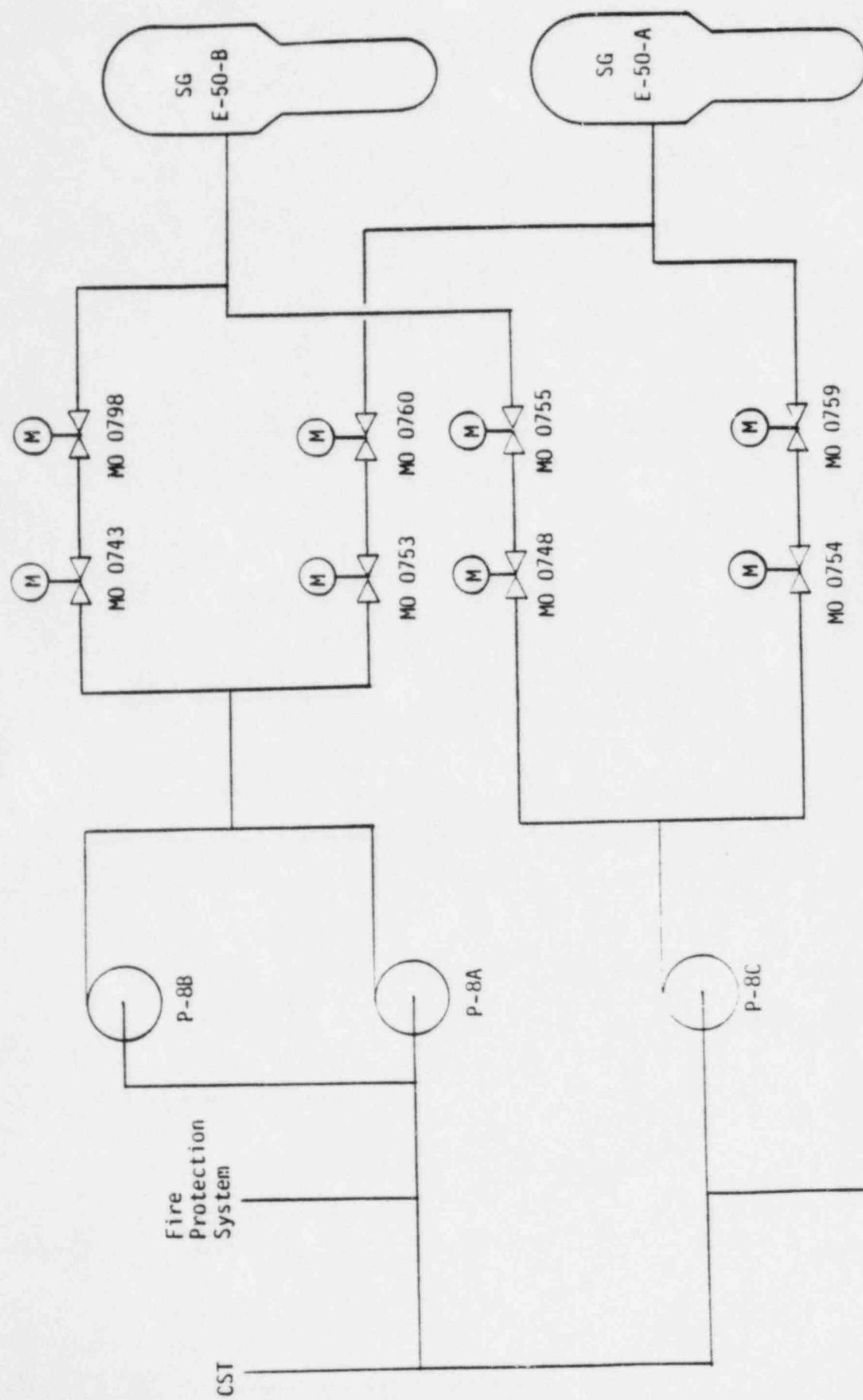
HPSIS MOVs

List of References

1. Combustion Engineering Emergency Procedure Guidelines, CEN-152, Rev. 2.
2. Palisades FSAR, Section 6.1, Safety Injection System, Rev. 0.
3. Reference Drawings and Figures:
 - C-E Drawing No. E-578-310-001, Rev. 2
 - FSAR Figures
 - 6-1, Sh. 1, Rev. 1
 - 6-1, Sh. 2, Rev. 1
 - 6-2, Sh. 1, Rev. 1
 - 6-2, Sh. 1A, Rev. 1
 - 6-2, Sh. 1B, Rev. 1
4. Consumers Power Company Letter, J. Ford (CPC) to R. Paakkonen (C-E), dated 3-27-86.

Palisades Design Bases for Operation of AFWS MOVs

<u>Valve Function</u>	<u>Valve Tag No.</u>	<u>Postulated Upstream Condition</u>	<u>Postulated Downstream Condition</u>	<u>Notes</u>
Auto Open on AFAS	M0-0743	High: AFWP shutoff	Low: atmos. press.	AFWP downstream isolation valves
	M0-0748	head pressure		
	M0-0753	including service		-normally open
	M0-0754	water pump shutoff		
	M0-0755	head or fire pump		
	M0-0759	shutoff head or head		
	M0-0760	due to maximum		
	M0-0798	CST level		
Close for FOGG	M0-0743	High: AFWP shutoff	Low: atmos. press.	
	M0-0748	head pressure		
	M0-0753	including service		
	M0-0754	water pump shutoff		
	M0-0755	head or fire pump		
	M0-0759	shutoff head or head		
	M0-0760	due to maximum CST		
	M0-0798	level		



PALISADES AUXILIARY FEEDWATER SYSTEM SCHEMATIC

PALISADES
AUXILIARY FEEDWATER SYSTEM

Data Summary

N.A. Not Available

<u>Valve</u>	<u>Valve Operator</u>	<u>Valve Function</u>	<u>Design Basis ΔP Open/Close</u>	<u>Test ΔP Open/Close</u>	<u>Switch Settings Prior to Adjustments as a Result of Bulletin Normal/Maximum</u>	<u>Final Switch Settings in Response to Bulletin</u>
Component ID, Manufacturer, Type, Model, Size, Rating	Manufacturer, Model, Motor RPM, Output Speed (RPM)					
MO-0743 Anchor/Darling Gate 1-4F-5A 4" 900#/1690 psig 100°F/120°F *	Limatorque SMB-00-10 1800 rpm N.A.	AFWP, P-8A and P-8B, discharge to SG E-50-B	1714 psi/ 1714 psi		2-1/2 2-3/4	
MO-0743 Anchor/Darling Gate 1-4F-5A 4" 600#/1337 psig 100°F/120°F *	Limatorque SMB-00-10 1800 rpm N.A.	AFWP, P-8C, discharge to SG E-50-B	1354 psi/ 1354 psi		2-1/4	
MO-0753 Anchor/Darling Gate 1-4F-5A 4" 900#/1690 psig 100°F/120°F *	Limatorque SMB-00-10 1800 rpm N.A.	AFWP, P-8A and P-8B, discharge to SG E-50-A	1714 psi/ 1714 psi		2-1/2	
MO-0754 Anchor/Darling Gate 1-4F-5A 4" 600#/1337 psig 100°F/120°F *	Limatorque SMB-00-10 1800 rpm N.A.	AFWP, P-8C, discharge to SG E-50-A	1354 psi/ 1354 psi		2-1/2	

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AUXILIARY FEEDWATER SYSTEM

Data Summary

Valve	Valve Operator	Valve Function	Design Basis ΔP Open/Close	Test ΔP Open/Close	Switch Settings Prior to Adjustments as a Result of Bulletin Normal/Maximum	Final Switch Settings in Re- sponse to Bulletin
Component ID, Manufacturer, Type, Model, Size, Rating	Manufacturer, Model, Motor RPM, Output Speed (RPM)					
MO-0755 Anchor/Darling Gate 1-4F-5A 4" 600#/1337 psig 100°F/120°F *	Limatorque SMB-00-10 1800 rpm N.A.	AFWP, P-8C, discharge to SG E-50-B	1351 psi/ 1351 psi		2-1/4	
MO-0759 Anchor/Darling Gate 1-4F-5A 4" 600#/1337 psig 100°F/120°F *	Limatorque SMB-00-10 1800 rpm N.A.	AFWP, P-8C, discharge to SG E-50-A	1351 psi/ 1351 psi		2-1/4	
MO-0760 Anchor/Darling Gate 1-4F-5A 4" 900#/1690 psig 100°F/120°F *	Limatorque SMB-00-10 1800 rpm N.A.	AFWP, P-8A and P-8B, discharge to SG E-50-A	1711 psi/ 1711 psi		2-1/2	
MO-0798 Anchor/Darling Gate 1-4F-5A 4" 900#/1690 psig 100°F/120°F *	Limatorque SMB-00-10 1800 rpm N.A.	AFWP, P-8A and P-8B, discharge to SG E-50-B	1711 psi/ 1711 psi		2-1/2	

PALISADES

AFWS MOVs

List of References

1. Combustion Engineering Emergency Procedure Guidelines.
2. Palisades FSAR Sections: 9.1, Service Water System, Rev. 0
9.6, Fire Protection, Rev. 0, 1
9.7, Auxiliary Feedwater System, Rev. 0, 1
3. Reference Drawings and Figures:
 - Bechtel Drawing Nos. M-205, Rev. 6
M-207, Rev. 5
M-220, Rev. 4
 - FSAR Figures 9-1, Sh. 1A, Rev. 1
9-1, Sh. 2, Rev. 1
9-12, Sh. 1, Rev. 1
9-13, Rev. 1
9-15, Rev. 1
4. Consumers Power Company Letter, J. Ford (CPC) to R. Paakkonen (C-E),
dated 3-27-86.