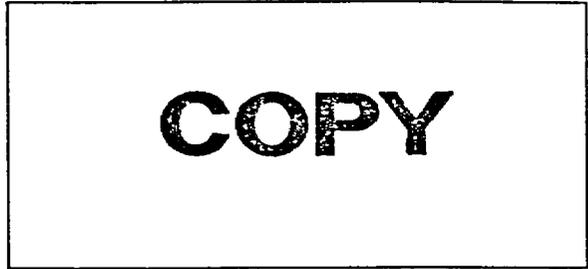


Point Beach Nuclear Plant  
**PROCEDURE RECORD AND FIELD COPY TRACKING**

Record/Field Copy Identification



Field Copy Number



RED - Record Copy; BLACK - Field Copy

Procedure Number IT 10 Unit PB0 Revision Number 45

Procedure Title Test of Electrically-Driven Auxiliary Feed Pumps and Valves Revision Date 9/9/02

Procedure Revision Checked and Current; Tracking Checked for Temporary Changes:

By *[Signature]*

Date 10/23/02

Record Copy Holder/Location Control Operator / Control Room

FIELD COPY DISTRIBUTION			
Copy No.	Holder/Location	Issue Date	Return Date
1	Field Operator / AFW Pump Room		
2			
3			
4			
5			
6			
7			
8			
9			
10			

NOTE 1: ANY TEMPORARY CHANGES MADE TO THIS PROCEDURE SHALL BE MADE TO THE RECORD COPY AND ALL OTHER FIELD COPIES THAT HAVE BEEN ISSUED.

NOTE 2: RETURN ALL FIELD COPIES TO THE HOLDER OF THE RECORD COPY UPON PROCEDURE COMPLETION.

*A/262*

IT 10

TEST OF ELECTRICALLY-DRIVEN  
AUXILIARY FEED PUMPS AND  
VALVES (QUARTERLY)

DOCUMENT TYPE: Technical

CLASSIFICATION: Safety Related

REVISION: 45

EFFECTIVE DATE: September 9, 2002

REVIEWER: Qualified Reviewer

APPROVAL AUTHORITY: Department Manager

PROCEDURE OWNER (title): Group Head

OWNER GROUP: Operations

Verified Current Copy: \_\_\_\_\_  
Signature Date Time

List pages used for Partial Performance

1-21, 36-56

Controlling Work Document Numbers

9947513

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED  
PUMPS AND VALVES (QUARTERLY)

INITIALS

4.0 INITIAL CONDITIONS

4.1 This test is being done to satisfy:

X The normally scheduled callup. Task sheet No. 9947513

NOTE: If this test is being performed to satisfy PMT or off-normal frequency requirements, Shift Management may N/A those portions of the procedure that are NOT applicable for the performance of the PMT. The use of N/A is NOT acceptable for Initial Conditions, Precautions and Limitations, or procedure steps that pertain to the equipment requiring PMT. nor is it acceptable for restoration of equipment/components unless the component has been declared inoperable.

\_\_\_\_\_ Post maintenance operability test  
Equipment ID 0-35A  
WO No(s). 0205651  
Task Sheet No.(s) \_\_\_\_\_  
\_\_\_\_\_ Special test - no numbers.  
Explain: \_\_\_\_\_

BT

4.2 Auxiliary feed system lined up for critical operation per CL 13E, Part 2, Auxiliary Feedwater Valve Lineup Motor-Driven.

SD

4.3 Standby emergency power shall be available to the 4160 V safeguards buses 1A05, 1A06, 2A05, 2A06, or the component(s) to be tested is/are in the same train that is out of service.

YES

4.4 Chemistry notified about auxiliary feed injection.

YES & USED

4.5 Reactor power on both Units is reduced a minimum of 2% OR to a power level directed by DSS. (Mark step N/A if in TS Modes 3, 4, 5, 6, & defueled).

YES

4.6 The IST Coordinator is available for PMT data review if the MDAFW pumps have been replaced, disassembled, realigned to the motor (motor replacement included) or the coupling has been disassembled. This review will establish new reference values and is performed prior to declaring the pump operable. (Mark N/A for oil changes and other minor maintenance which does NOT affect pump vibration or hydraulic performance).

N/A SD

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED  
PUMPS AND VALVES (QUARTERLY)

INITIALS

4.7 The IST Coordinator is available for power operated valve reference value data review prior to declaring the valve operable. This step is not applicable if PBF-2114, "Return to Service Testing Reviews" does NOT specify performance of a reference value test.

SD

4.8 Permission to Perform Test

The conditions required by this test are consistent with required plant conditions, including equipment operability. Permission is granted to perform this test.

DSS: SD for Ref TIME 0106 DATE 10/21/02

NOTE: Attachment L shall be used to document performance of multiple step performance and to record data. A separate copy of Attachment L shall be prepared for each step series requiring multiple performance and all copies shall be attached to this procedure when the procedure is complete.

5.0 PROCEDURE

5.1 IF in Modes 5, 6, or defueled,  
THEN verify the following:

- The Steam Generators are drained to a level sufficient to accept FW flows.
- The RCS is NOT solid.

N/A <sup>Yes</sup>

N/A <sup>Yes</sup>

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED  
PUMPS AND VALVES (QUARTERLY)

INITIALS

NOTE: When operability testing of Train A is NOT required, then N/A Steps 5.2 through 5.38.

5.2 TRAIN A TEST

5.2.1 IF performing Section 5.2.

THEN the following auxiliary feedwater pumps with their associated flow paths, are operable as applicable. (N/A the step that is NOT applicable.)

a. For two-unit operation:

P-38B, 1P-29, and 2P-29 are operable.

yes

b. For single-unit operation:

P-38B and 1P-29 are operable for Unit 1.

OR

P-38B and 2P-29 are operable for Unit 2.

N/A GDS

5.2.2 IF sufficient qualified operators are NOT available on shift to support Step 5.2.3, THEN consider the equipment unavailable per Maintenance Rule AND N/A Step 5.2.3.

N/A GDS

5.2.3 Assign a Level 4 Dedicated Operator in the Control Room AND a Level 4 Dedicated Operator in the field per OM 3.26, Use of Dedicated Operators, to perform the restoration steps of Attachment J, if required. (Otherwise mark this step as N/A) 612

yes

5.3 Enter the appropriate TS Action Condition for P-38A. (N/A this step if NOT required for current plant conditions per TS: 3.7.5)

TIME 0400 DATE 10<sup>23</sup>-~~25~~-02

yes

5.4 IF at any time during the performance of this test an Auxiliary Feedwater Initiation is required, THEN immediately perform Attachment J to recover Train A. (N/A this step if NOT required.)

N/A SD

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED  
PUMPS AND VALVES (QUARTERLY)

INITIALS

CAUTION

If, at any time, equipment operation appears abnormal, secure the pump.

NOTE: C01A 2-8 and 2-10, Auxiliary Feedwater System Disabled,  
annunciator will clear when P-38A is removed from PULLOUT.

5.14 Start P-38A.

Time Start 0159

JAS

NOTE: P-38A suction pressure trip is set at 6.5 psig (with a 20 second time delay).

5.15 Verify P-38A suction pressure as read on PI-4010A is greater than the 7.0 psig low suction pressure alarm setpoint. Record on Attachment B.  
15.5

JAS for JAS

5.16 Check AF-4007, P-38A AFP Mini-Recirc Control, mini-recirculation valve open.

JAS for JAS

NOTE: The following step satisfies full stroke exercising of AF-115, P-38A Minimum Flow Check Valve.

5.17 Check mini-recirculation flow equal to or greater than 70 gpm on FIT-4050A AND record on Attachment B.  
63.5

64.5  
① 70 UNSAT

5.18 Check the packing glands for excessive leakage or overheating.

① N/A

5.19 Check pump and motor for unusual noise or overheating.

① N/A

5.20 WHEN P-38A has run for two-minutes,  
THEN record the following on Attachment B.

- PI-4011, Pump Discharge Pressure.
- PI-4010A, Pump Suction Pressure.
- Recirculation Flow Vibration Data.

① N/A





TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED  
PUMPS AND VALVES (QUARTERLY)

ATTACHMENT A

VALVE STROKE VERIFICATION

NOTE: Data that falls outside the listed Acceptance Criteria constitutes inoperability of the related equipment.

Quarterly Full Stroke Open and Shut, Timing and Position Indication of AF-4022, P-38A AFP Discharge to 2HX-1A Steam Generator						
Step No.	Parameter Measured	Instrument Used	Units	Reading	Acceptance Criteria	Initials
5.5.1	Time to OPEN	Stopwatch	sec.	17.95	15.27 - 20.67	JPS
5.5.1	Local Position Indication	N/A	N/A	Open	OPEN	JPS for JAS
5.5.2	Time to SHUT	Stopwatch	sec.	17.93	15.76 - 21.32	JPS
5.5.2	Local Position Indication	N/A	N/A	Shut	SHUT	JPS for JAS

Quarterly Full Stroke Open and Shut, Timing and Position Indication of AF-4023, P-38A Discharge to 1HX-1A Steam Generator						
Step No.	Parameter Measured	Instrument Used	Units	Reading	Acceptance Criteria	Initials
5.6.1	Time to OPEN	Stopwatch	sec.	17.95	15.55 - 21.03	JPS
5.6.1	Local Position Indication	N/A	N/A	Open	OPEN	JPS for JAS
5.6.2	Time to SHUT	Stopwatch	sec.	17.51	15.62 - 21.14	JPS
5.6.2	Local Position Indication	N/A	N/A	Shut	SHUT	JPS for JAS

Quarterly Stroke Open, Timing and Position Indication Test of AF-4012, P-38A AFP Discharge Control, and Forward Exercising of AF-133, P-38A AFP AF-4012 N <sub>2</sub> Backup First-Off Isol						
Step No.	Parameter Measured	Instrument Used	Units	Reading	Acceptance Criteria	Initials
5.7.3	Time to OPEN	Stopwatch	sec.	5.70	4.8 - 14.4	JAS
5.7.3	Local Position Indication	N/A	N/A	Open	OPEN	JPS for JAS
5.7.4	Time to SHUT (info only)	Stopwatch	sec.	7.68	N/A	JPS
5.7.4	Local Position Indication	N/A	N/A	Shut	SHUT	JPS for JAS

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED  
PUMPS AND VALVES (QUARTERLY)

ATTACHMENT A - Continued  
VALVE STROKE VERIFICATION

NOTE: Data that falls outside the listed Acceptance Criteria constitutes inoperability of the related equipment.

Quarterly Stroke Open and Shut, Timing, Position Indication, and Fail-Safe Test of AF-4007, P-38A AFP Mini-Recirc Control						
Step No.	Parameter Measured	Instrument Used	Units	Reading	Acceptance Criteria	Initials
5.9.3	Time to OPEN	Stopwatch	sec.	3.62	1.9 - 5.68	Yop & JAS
5.9.3	Local Position Indication	N/A	N/A	Open	OPEN	Yop & JAS
5.9.5	Time to SHUT	Stopwatch	sec.	11.92	8.94 - 14.9	Yop & JAS
5.9.5	Local Position Indication	N/A	N/A	Shut	SHUT	Yop & JAS

Acceptance Criteria Satisfied for all tested valves in Attachment A: (Circle one) **SAT** UNSAT  
Remarks:

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 / 10.24.2002 0136  
 Performer      Date/Time

 / 10/24/02 0508  
 SRO      Date/Time

TEST OF ELECTRICALLY-DRIVEN AUXILIARY FEED  
PUMPS AND VALVES (QUARTERLY)

ATTACHMENT B  
P-38A, AFW PUMP PERFORMANCE DATA (RECIRCULATION FLOW)

NOTE 1: Data that falls outside the listed Acceptance Criteria constitutes inoperability of the related equipment.

NOTE 2: Vibration points which are shaded must be recorded by the Micro-logger but are NOT required to be transferred to the table. Only points marked A, B, C, D, and E must be transferred to the table and are required for ASME OM Code. See Figure 1 for locations.

Step No	Parameter Measured	Units	Reading	Acceptance Criteria	Initials
5.12.3	PI-4010A, P-38A AFP Suction Pressure	psig	15.8	N/A	JRS
5.15	PI-4010A, P-38A AFP Suction Pressure	psig	15.8	>7	JRS
5.17	Full Stroke Open Test of AF-115 FIT-4050A, Mini-Recirc Flow	gpm	64.5	≥70	JRS
5.20	PI-4011 Pump Discharge Pressure	psig		N/A	
5.20	PI-4010A, P-38A AFP Suction Pressure	psig		N/A	
5.20	Recirculation Flow Vibration Data	INSTRUMENT	UNITS	READINGS	
	P38A 1V ips	Micro-logger	IPS pk		
	P38A 1H ips	Micro-logger	IPS pk		
	P38A 1H ae	Micro-logger	G env		
	P38A 1H acc	Micro-logger	G pk		
	P38A 1A ips	Micro-logger	IPS pk		
	P38A 2V ips	Micro-logger	IPS pk		
	P38A 2H ips	Micro-logger	IPS pk		
	P38A 2H ae	Micro-logger	G env		
	P38A 2H acc	Micro-logger	G pk		
	P38A 2A ips	Micro-logger	IPS pk		
	P38A 3V ips	Micro-logger	IPS pk		
	P38A 3H ips	Micro-logger	IPS pk		
	P38A 3H ae	Micro-logger	G env		
	P38A 3H acc	Micro-logger	G pk		
	P38A 4V ips	Micro-logger	IPS pk		
	P38A 4H ips	Micro-logger	IPS pk		
	P38A 4H ae	Micro-logger	G env		
	P38A 4H acc	Micro-logger	G pk		
	P38A 4A ips	Micro-logger	IPS pk		

UNSAT  
JRS  
10/29/02