175

REFERENCE: S0123-VI-1.0.1

ENCODE NO. AC1QAC
SO 4
(WHEN FORM FILLED OUT)
Page 1 of 1

TEMPORARY CHANGE NOTICE

TECHNICAL SPECIFICATION VIOLATION IF NOT COMPLETED WITHIN 14 DAYS

Site Document No. S01-12.3-26 Revision No. 0 TCN No. 0-2 (For CDM use only)

Site Document Title AUXILLARY FEEDWATER PUMP OPERABILITY TEST

1. PREPARED BY: J. W. Reynolds (Originator) PAX: 56658 ORGANIZATION: OPG-1

2. DATE/TIME ORIGINATED: 1-11-85/ 0945 3. ISSUANCE DATE: JAN 11 1985 CDM (CDM USE ONLY)

4. If required, TCN Deviation Approval: CFDM (or designee): N/A
Signature/If by telecon print name and so state Date/Time

5. Check appropriate box: [X] Entire Document Attached [ ] Affected Page(s) Attached
Superseded/Incorporated TCN(s): 0-1 (If none, so state)
No.

RECEIVED CDM
JAN 22
SITE FILE COPY

6. This change cannot wait until the next revision of the Site Document and is required:

A. ____ To implement facility design change (PFC, NCR, TFM, etc.)

Facility design change identifier ____ / ____
Indicate PFC, NCR, TFM etc. Identifier

Implementation of the facility design change has been determined. YES ____ NO ____
(If NO, a TCN cannot be approved until the facility design change has been implemented.)

B. X Other (e.g., CAR, Licensing Commitments) Specific Reason:

To ensure the Steam Driven AFW Pump is placed in MANUAL after using the STOP button because the system shifts to AUTO if STOP used.
(Use reverse side, if required)

7. Is the document being TCN'd QA Affecting? YES X NO ___ (If YES, complete the boxes below.) (If NO, see * below.)
(This is indicated on the Table of Contents page of the Site Document. If not indicated, treat as QA Affecting.)

A. Does this change affect FSAR or Tech. Spec. commitments? YES ____ NO X
B. Does this change affect the nonradiological environment of any offsite area previously undisturbed during site preparation and plant construction? YES ____ NO X
C. Is the intent of the original document altered? YES ____ NO X
D. Is the document to be changed an Emergency Operating Instruction? YES ____ NO X
E. Does this change pose an unreviewed safety question per 10 CFR 50.59, i.e., does it increase the probability of occurrence or the consequences of an accident; create the possibility of a different accident; or reduce the Tech. Spec. margin of safety? YES ____ NO X
(IF THE ANSWER TO A, B, C, D or E IS YES, A TCN IS NOT AUTHORIZED.)

8. Does this change affect licensing commitment requirements? YES ___ NO X

9. Copy forwarded to the Nuclear Safety Group. (QA Affecting TCNs only) PERFORMED BY: ____ (CDM) Date: ____

10. The entire document was reviewed in conjunction with this TCN.
REVIEWED AND APPROVED BY: N/A
CFDM or Designee Date

11. SIGNATURES REQUIRED:

INITIAL APPROVAL

REVIEWED AND APPROVED BY:** (AT LEAST ONE (1) SRO ON THE UNIT AFFECTED)

1) [signature] 1-11-85 1034
Plant Management Staff - Unit 1 Date Time

2) ____
Plant Management Staff - Units 2&3 Date Time

Could this TCN affect or does it represent a change to a plant operation in progress? YES*** ____ NO X

3) [signature] 1/11/85 095
SRO - Unit 1 Date Time

Could this TCN affect or does it represent a change to a plant operation in progress? YES*** ____ NO ____

4) ____
SRO - Units 2&3 Date Time

FINAL APPROVAL

REVIEWED AND APPROVED BY:

5) [signature] 1/16/85
Cognizant Functional Division Manager Date

6) [signature] 1/17/85
Quality Assurance - Units 1, 2 and 3 Date

* If a document is Not QA Affecting, obtain initial approval from the Cognizant Supervisor(s) on the affected Unit(s) [signs on Plant Management Staff line(s)] and final approval from the CFDM prior to submittal to CDM. No other signatures are required.

** If QA Affecting, approval shall be by two members of the Plant Management Staff knowledgeable in the areas affected, at least one of whom holds an SRO License on the unit or units affected. (For TCN approval, members of the Plant Management Staff are defined as the supervisor in charge of the shift, or as designated in writing by the CFDM, exercising responsibility in the specific area and unit(s) addressed by the change.)

*** If YES, the Shift Superintendent shall provide the required SRO approval.

SPG

AUXILIARY FEEDWATER PUMP OPERABILITY TEST

TABLE OF CONTENTS

AUXILIARY FEEDWATER PUMP OPERABILITY TEST

1.0 OBJECTIVES

1.1 Provide instruction to support Instrument and Test Procedure SO1-II-1.76, Auxiliary Feedwater System (Surveillance Monthly), on a monthly basis in Modes 1-3.

1.2 Provide instruction to support Engineering Procedure SO1-V-2.14.1, Auxiliary Feedwater In-Service Pump Test. (Tech. Spec. 4.1.9.A)

1.3 This surveillance shall be performed to support I&C and/or Engineering Surveillance in Modes 1-3 or any other Mode, as desired.

2.0 REFERENCES

2.1 Licensing Commitment

2.1.1 Unit 1 Technical Specifications

2.2 Procedures

2.2.1 SO1-II-1.76, Auxiliary Feedwater System (Surveillance Monthly)

2.2.2 SO1-V-2.14.1, Auxiliary Feedwater In-Service Pump Test

2.3 Operating Instruction

2.3.1 SO1-7-20, Auxiliary Feedwater System Alignment

3.0 PREREQUISITES

3.1 Prior to use of an uncontrolled (pink) copy of this Station Document to perform work, verify that it is current by checking it against a controlled copy and any TCNs or by use of the method described in SO123-VI-0.9.

3.2 The Auxiliary Feedwater System is aligned in accordance with SO1-7-20, Auxiliary Feedwater System Alignment.

3.3 I&C Department and/or the Engineering Department is standing by to perform SO1-II-1.76 and/or SO1-V-2.14.1.

4.0 PRECAUTIONS

4.1 Both Steam Generator Auxiliary Feedwater Pumps and associated flow paths shall be OPERABLE (in Modes 1 through 3) as follows:

4.1.1 One Auxiliary Feedwater Pump capable of being powered from an emergency electrical power source, and

4.1.2 One Auxiliary Feedwater Pump capable of being powered from an OPERABLE steam supply system. (Tech. Spec. 3.4.3.)

4.0 PRECAUTIONS (Continued)

4.2 With one Auxiliary Feedwater Pump Inoperable, restore both Auxiliary Feedwater Pumps (one capable of being powered from an emergency electrical power source and one capable of being powered by an OPERABLE steam supply system) to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours. (Tech. Spec. 3.4.3.)

4.3 The Auxiliary Feedwater Storage Tank (AFST) shall be OPERABLE with a contained water volume of at least 150,000 gallons of water in Mode 1 through 3. (Tech. Spec. 3.4.4.)

4.4 With the AFST Inoperable, within 4 hours restore the AFST to OPERABLE status or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours. (Tech. Spec. 3.4.4.)

4.5 The instrumentation channels shown in Tech. Spec. Table 3.5.7-1 shall be OPERABLE with their trip setpoints set consistent with the Trip Setpoint column of Tech. Spec. Table 3.5.7-2. (Tech. Spec. 3.5.7.)

4.6 With an instrumentation channel trip setpoint less conservative than the value shown in the Allowable Values column of Tech. Spec. Table 3.5.7-2, declare the channel inoperable and apply the applicable ACTION requirement to Tech. Spec. Table 3.5.7-1 until the channel is restored in OPERABLE status with the trip setpoint adjusted consistent with the Trip Setpoint Value. (Tech. Spec. 3.5.7.)

4.7 With an instrumentation channel inoperable, take the action shown in Tech. Spec. Table 3.5.7-1. (Tech. Spec. 3.5.7.)

4.8 Do not exceed 4850 RPM on the Steam Driven Auxiliary Feedwater pump.

4.9 Operation of the Motor Driven or Steam Driven Auxiliary Feedwater Pump with Condensate Storage Tank level below ~5 feet may cause the AFW pump low suction pressure alarm to actuate. This will trip the pump, if in AUTO. If this occurs during manual operation and the pump is not needed for feeding the steam generators, stop the pump. Refill the Condensate Storage tank prior to restarting the pump, except in an emergency.

4.10 Ensure idle AFW Pump suction valves are closed prior to closing Condensate Storage Tank outlet valve to prevent overpressure in condensate lines by possible AFW check-valve backleakage.

4.11 Ensure idle AFW Pump discharge valves are closed prior to closing Auxiliary Feedwater Storage Tank outlet valve to the idle AFW Pump to prevent overpressure in the Auxiliary Feedwater Suction lines by possible AFW check-valve backleakage.

5.0 CHECKLISTS

5.1 Checklist 1, Motor Driven Auxiliary Feedwater Pump OPERABILITY Test.

5.2 Checklist 2, Steam Driven Auxiliary Feedwater Pump OPERABILITY Test.

6.0 INSTRUCTIONS

NOTE: This instruction will normally be performed in conjunction with the I&C Department Surveillance Procedure SO1-II-1.76, and the Engineering Department Procedure SO1-V-2.14.1, on a monthly basis.

6.1 Utilize Checklist 1, Motor Driven Auxiliary Feedwater Pump OPERABILITY Test, to perform the OPERABILITY Test for the motor driven pump.

6.2 Utilize Checklist 2, Steam Driven Auxiliary Feedwater Pump OPERABILITY Test, to perform the OPERABILITY Test for the steam driven pump.

7.0 ACCEPTANCE CRITERIA

7.1 None. This test is being performed to support I&C Department and/or Engineering Department Surveillances.

8.0 RECORDS

8.1 Initial and provide appropriate code number designating how the testing was completed in the spaces provided on SO(1) 37, "Tech. Spec. Non-Tech. Spec. Routine Test Check-Off."

8.2 Make log entry stating that the surveillance was completed.

8.3 File completed Checklists in the Shift Superintendent's Completed Surveillance file.

8.4 If this test is a retest, attach the Checklist of this test to the original test located in the Retest file. File the completed package in the Completed Surveillance file.

MOTOR DRIVEN AUXILIARY FEEDWATER PUMP OPERABILITY TEST

MODE _____(1 - 3) DATE COMPLETED _____ TIME COMPLETED _____

[ ] Scheduled Surveillance [ ] Other Reason _____

[ ] Retest - Date of Initial Unsatisfactory Test _____

1.0 PREREQUISITES INITIALS

1.1 Obtain the SRO Operations Supervisor approval to perform this Checklist during Mode 1-3. _____ SRO Ops. Supv.

1.2 All personnel performing this Checklist have been advised to note all missing, incorrect, or deteriorated component I.D. tags in the "Comments" section of this Checklist.

2.0 INSTRUCTIONS INITIALS

2.1 All Prerequisites and Precautions in the Instruction have been reviewed. _____

NOTE: If this test is being performed in conjunction with SO1-II-1.76, the steps marked with an asterisk should not be performed until requested by the I&C Department.

*2.2 Place Train A Auxiliary Feedwater System (AFW) Mode pushbutton in MANUAL. _____

2.3 Verify that the Aux. Feedwater Train A Out of Service annunciator (window 22) actuates. _____

NOTE: If this test is being performed in conjunction with SO1-II-1.76 other alarms may be received due to I&C Department installation of test equipment.

*2.4 CLOSE the following Train A AFW header isolation valves:

2.4.1 AFW-313, Train A Isol. to FCV-3300. _____

2.4.2 AFW-314, Train A Isol. to FCV-2301, 3301. _____

2.4.3 AFW-316, Train A Isol. to FCV-2300. _____

2.0 INSTRUCTIONS (Continued)

INITIALS

*2.5 Place Train A AFW in AUTO. _____ | TCN

2.6 Request I&C Department Initiate Train A by injecting a simulated signal for low level in Steam Generators A and B in accordance with SO1-II-1.76. _____

OR

If this test is NOT being performed in conjunction with SO1-II-1.76, DEPRESS the Train A Initiate pushbutton. _____

2.7 Verify the following:

2.7.1 AFW Train A Initiated alarm (window 2) annunciates. _____

2.7.2 Motor Driven AFW Pump STARTS. _____

2.7.3 MOV-1202 OPENS. _____

2.7.4 Verify bearing and seal water is established. _____

2.8 If this test is being performed in conjunction with SO1-V-2-14.1, allow the Auxiliary Feedwater Pump to continue to run for the Engineering Department to take IST data. _____

2.9 If this test is being performed in conjunction with SO1-II-1.76, request I&C Department to perform the Motor Driven Auxiliary Feedwater Pump low suction pressure trip. _____

*2.10 Place Train A AFW System in MANUAL, and CLOSE MOV-1202. _____ | TCN 1

*2.11 Reset Train A AFW System. _____

2.12 STOP the Motor Driven AFW Pump, if not tripped. _____

NOTE: If this test is NOT being performed in conjunction with SO1-II-1.76 go to step 2.24.

*2.13 Place Train A AFW System in AUTO. _____

*2.14 DEPRESS the Train A Initiate pushbutton. _____

2.15 Request I&C Department to perform the Motor Driven Auxiliary Feedwater Pump low discharge pressure trip. _____

*2.16 Place Train A AFW System in MANUAL, and CLOSE MOV-1202. _____ | TCN 1

*2.17 Reset Train A AFW System. _____

2.0 INSTRUCTIONS (Continued) INITIALS

2.18 STOP the Motor Driven AFW Pump, if not tripped. _____

2.19 With the system in MANUAL request I&C Department to test the Initiation signal on low level in Steam Generators A and C. _____

* 2.20 Reset Train A AFW System. _____

2.21 With the system in MANUAL request I&C Department to test the Initiation signal on low level in Steam Generators B and C. _____

*2.22 Reset Train A AFW System. _____

NOTE: I&C Department will remove test equipment.

*2.23 If the removal of test equipment caused an Initiation, reset Train A AFW system. _____

			VERIF. INIT.
*2.24	OPEN the following Train A AFW header isolation valves.		
2.24.1	AFW-313, Train A Isol. to FCV-3300.	_____	_____
2.24.2	AFW-314, Train A Isol. to FCV-2301, 3301.	_____	_____
2.24.3	AFW-316, Train A Isol. to FCV-2300.	_____	_____
*2.25	Place Train A AFW System in AUTO, if required.	_____	_____

2.26 Approximately 30 minutes after the Motor Driven AFW Pump has been stopped, check the Auxiliary Feedwater piping temperatures for signs of check valve backleakage. Indicate results of inspection. _____

_____

NOTE: Backleakage is evidenced by increasing pipe temperatures. Temperature should be checked on top of the pipes due to stratification that can occur under low flow conditions.

COMMENTS: _____

_____

_____

PERFORMED BY:

Operator Signature	Initials	Date	Time

VERIFICATION PERFORMED BY:

Operator Signature	Initials	Date	Time

3.0 ACCEPTANCE CRITERIA

3.1 None. This test is being performed to support I&C Department and/or Engineering Department Surveillances.

4.0 TEST EVALUATION

4.1 Evaluate test results to determine whether they impact Operability.

4.2 If it is determined that Operability is not met, proceed in accordance with applicable Tech. Spec. and SOI-12.0-2, Operating Surveillance Implementation. In addition, list all Deficiencies which have caused the system or component to be considered inoperable. Include all Deficiency Tag numbers.

4.3 If the Operability is met, list any deficiencies and action taken. Include all Deficiency Tag numbers.

DEFICIENCIES AND ACTION TAKEN: _____

_____

_____

_____

_____

_____

_____

APPROVED BY: _____ _____
Shift Superintendent Date

STEAM DRIVEN AUXILIARY FEEDWATER PUMP OPERABILITY TEST

MODE _____(1 - 3) DATE COMPLETED _____ TIME COMPLETED _____

[ ] Scheduled Surveillance [ ] Other Reason _____

[ ] Retest - Date of Initial Unsatisfactory Test _____

1.0 PREREQUISITES INITIALS

1.1 Obtain the SRO Operations Supervisor approval to perform this Checklist during Mode 1-3.

SRO Ops. Supv.

1.2 All personnel performing this Checklist have been advised to note all missing, incorrect, or deteriorated component I.D. tags in the "Comments" section of this Checklist.

2.0 INSTRUCTIONS INITIALS

2.1 All Prerequisites and Precautions in the Instruction have been reviewed. _____

NOTE: If this test is being performed in conjunction with SO1-II-1.76, the steps marked with an asterisk should not be performed until requested by the I&C Department.

*2.2 Place Train B Auxiliary Feedwater System (AFW) Mode pushbutton in MANUAL. _____

2.3 Verify that the Aux. Feedwater Train B Out of Service annunciator (window 27) actuates. _____

NOTE: If this test is being performed in conjunction with SO1-II-1.76 other alarms may be received due to I&C Department installation of test equipment.

*2.4 CLOSE the following Train B AFW header isolation valves:

2.4.1 AFW-305, Train B Isol. to FCV-2300. _____

2.4.2 AFW-306, Train B Isol. to FCV-2301, 3301. _____

2.4.3 AFW-308, Train B Isol. to FCV-3300. _____

2.0 INSTRUCTIONS (Continued) INITIALS

*2.5 Place Train B AFW in AUTO. _____

2.6 Request I&C Department Initiate Train B by injecting a simulated signal for low level in Steam Generators A and B in accordance with SO1-II-1.76. _____

OR

If this test is NOT being performed in conjunction with SO1-II-1.76, DEPRESS the Train B Initiate pushbutton. _____

2.7 Verify the following:

2.7.1 AFW Train B INITIATED annunciates (window 7); _____

2.7.2 SV-3211, Steam Line Drain, OPENS for 10 seconds, then CLOSES; _____

2.7.3 SV-3205, Lube Oil Cooling Water, OPENS; _____

2.7.4 SV-3200, Warm-up Valve, OPENS; _____

2.7.5 After a 2 1/2 minute warmup CV-3201, Steam Supply Valve, OPENS; _____

2.7.6 SV-3202, SV-3203 and SV-3204, Case Drain Valves, CLOSE; _____

2.7.7 SV-3214, Steam Line Drain, CLOSES; _____

2.7.8 CV-3213, Discharge Valve, OPENS. _____

2.8 If this test is being performed in conjunction with SO1-V-2-14.1 allow the Auxiliary Feedwater Pump to continue to run for the Engineering Department to take IST data. _____

2.9 If this test is being performed in conjunction with SO1-II-1.76, request I&C Department to perform the Steam Driven Auxiliary Feedwater Pump low suction pressure trip. _____

*2.10 Place Train B AFW System in MANUAL. _____

*2.11 Reset Train B AFW System. _____

2.12 STOP the Steam Driven AFW Pump, if not tripped. _____

NOTE: If this test is NOT being performed in conjunction with SO1-II-1.76 go to step 2.24.

2.0 INSTRUCTIONS (Continued)

		INITIALS
*2.13	Place Train B AFW System in AUTO.	
*2.14	Depress the Train B Initiate pushbuttcn.	
2.15	Verify the following:	
2.15.1	AFW Train B INITIATED annunciates (window 7);	
2.15.2	SV-3211, Steam Line Drain, OPENS for 10 seconds, then CLOSES;	
2.15.3	SV-3205, Lube Oil Cooling Water, OPENS;	
2.15.4	SV-3200, Warm-up Valve, OPENS;	
2.15.5	After a 2 1/2 minute warmup CV-3201, Steam Supply Valve, OPENS;	
2.15.6	SV-3202, SV-3203 and SV-3204, Case Drain Valves, CLOSE;	
2.15.7	SV-3214, Steam Line Drain, CLOSES;	
2.15.8	CV-3213, Discharge Valve, OPENS.	
*2.16	Place Train B AFW System in Manual.	
*2.17	Reset Train B AFW System.	
*2.18	STOP the Steam Driven AFW Pump, and place in MANUAL.	TCN
2.19	With the system in MANUAL request I&C Department to test the Initiation signal on low level in Steam Generators A and C.	
*2.20	Reset Train B AFW System.	
2.21	With the system in MANUAL request I&C Department to test the initiation signal on low level in Steam Generators B and C.	
*2.22	Reset Train B AFW System.	
	NOTE: I&C Department will remove test equipment.	
*2.23	If the removal of test equipment caused an initiation, reset Train B AFW system.	

2.0 INSTRUCTIONS (Continued)

		INITIALS	VERIF. INIT.
*2.24	OPEN the following Train B AFW header isolation valves.		
2.24.1	AFW-305, Train B Isol. to FCV-2300.	_____	_____
2.24.2	AFW-306, Train B Isol. to FCV-2301, 3301.	_____	_____
2.24.3	AFW-308, Train B Isol. to FCV-3300.	_____	_____
2.25	Place Train B AFW System in AUTO, if required.	_____	_____
2.26	Approximately 30 minutes after the Steam Driven AFW Pump has been stopped, check the Auxiliary Feedwater piping temperatures for signs of check valve backleakage. Indicate results of inspection.	_____	

_____

NOTE: Backleakage is evidenced by increasing pipe temperatures. Temperatures should be checked on top of the pipes due to stratification that can occur under low flow conditions.

COMMENTS: _____

_____

_____

_____

PERFORMED BY:

Operator Signature	Initials	Date	Time
_____	_____	_____	_____
_____	_____	_____	_____

VERIFICATION PERFORMED BY:

Operator Signature	Initials	Date	Time
_____	_____	_____	_____
_____	_____	_____	_____

3.0 ACCEPTANCE CRITERIA

3.1 None. This test is being performed to support I&C Department and/or Engineering Department Surveillances.

4.0 TEST EVALUATION

4.1 Evaluate test results to determine whether they impact Operability.

4.2 If it is determined that Operability is not met, proceed in accordance with applicable Tech. Spec. and SOI-12.0-2, Operating Surveillance Implementation. In addition, list all deficiencies which have caused the system or component to be considered inoperable. Include all Deficiency Tag numbers.

4.3 If the Operability is met, list any deficiencies and action taken. Include all Deficiency Tag numbers.

DEFICIENCIES AND ACTION TAKEN: _____

_____

_____

_____

_____

_____

_____

APPROVED BY: _____ _____
Shift Superintendent Date