



PSEG

Nuclear LLC

Notification Overview

Run Date: 09/21/2010
Run Time: 08:11:10
Page: 1 of 2
Notification 20459689

Notification 20459689
Notification type N1
Description ASME SEC XI AUX Feed Water Pressure Test
Nuc. Maint. Request
Reporter GILES2271 11:32:25
Notification date 04/21/2010
Start date 07/21/2010 End date 07/30/2010
Start time 08:53:36 End time 08:53:36
Priority 7 O-Outage Sig. Level 3 Main WorkCtr. S-MM
Funct. location SCAF
AUXILIARY FEEDWATER (SALEM)
Equipment
Assembly
Order 60089871
PM planner grp 003 SWIM L/T Planning

*****Long Text Object Identification*****

Notification 000020459689 Long text

04/21/2010 11:32:25 NUCLEARNOT (NUCLEARNOT)

Notification submitted by: Edley Giles 856-339-2271 ENTNBU\NUTG:

CONDITION DESCRIPTION/LOCATION (THE INAPPROPRIATE ACTION AND ITS NEGATIVE EFFECT/INCLUDE A DETAILED LOCATION DESCRIPTION):##

The required ASME Section XI Pressure Testing for the buried Auxiliary Feedwater piping required by the ER-AA-330-001 and OU-AA-335-015 procedures were not performed. The ISI program manager has found no evidence of testing. These procedures implement the requirements of 10CFR50.55a. The system pressure test boundary drawing (S2-SPT-336-0) identifies the piping as YARD piping not buried piping. This is applicable to both Salem Units. The Salem unit 1 piping however is being replaced and will be hydro tested to code requirements prior to being placed in service.

ACTIVITIES, PROCESSES, PROCEDURES INVOLVED:

ER-AA-330-001, Section XI pressure Testing

OU-AA-335-015, VT-2 Visual Examination

WHY DID CONDITION HAPPEN?

The system pressure test boundary drawing (S2-SPT-336-0) identifies the piping as YARD piping not buried piping. However, it is commonly understood that it is buried pipe.

CONSEQUENCES:

The implementation of the ASME Section XI pressure testing may not have been completed in the current inspection interval as required. However, the in-service testing required by S2.OP-ST.AF-0007, In-service Testing of Aux Feed Water Valves Modes 4-6, infers that the functional requirements of the test have been met. The test records pump dp and pump flow. The flow measurement occurs down stream of the buried section of piping. The pump dp is taken at pump. This ST uses the 21 and 22 AF pumps. Review of the IST data taken (12 STs since May 1997) shows that the pump dp and flows have been constant (considering instrument and instrument reading inaccuracies) since 1997. No ST has exceeded its upper or lower IST limits. The Quarterly STs provide evidence that the 21 and 22 AF pumps are not degraded. The ability of the AF pumps to achieve required flow downstream of the buried piping section at a consistent pump dp provides assurance that the buried piping system condition has not changed. The test also confirms the code requirement that flow is not impaired.

Salem Unit 1 piping is out of service, is being replaced, and will be subject to Code required pressure

6.14

testing prior to being placed in service.

AFW System TS 3.7.1.2 requires that the AFW system flow paths shall be operable. TS 4.0.5 requires ASME Class 1, 2 and 3 components to be tested in accordance with ASME XI. Since the ASME test was apparently missed, we should treat this as a missed TS surveillance of the buried pipe flow path. TS Surveillance Requirement 4.0.3 states that if the surveillance is not performed within its specified frequency (in this case two (2) cycles), a delay of up to the limit of the specified frequency is allowed IF a risk evaluation is performed for the delay greater than 24 hours and the risk impact is managed.

REQUIREMENTS IMPACTED:

ER-AA-330-001, Section XI pressure Testing

OU-AA-335-015, VT-2 Visual Examination

ADVERSE PHYSICAL CONDITIONS:

No adverse physical condition.

WHO WAS NOTIFIED:

Engineering Director

KNOWLEDGEABLE INDIVIDUALS:

Tim Giles, Ed Maloney, Tom Roberts, H. Berrick, E. Villar

REPEAT OR SIMILAR CONDITION:

No

IMMEDIATE ACTIONS AND RECOMMENDED ACTIONS:

Engineering to provide risk assessment for Unit 2 Auxiliary Feedwater buried pipe to allow delay in test until next refueling outage (2R18). The risk impact associated with this evaluation shall be managed.

Perform required In-service Pressure Testing in next outage on unit 2 (2R18). Buried piping on unit 1 will be tested prior to returning to service during current 1R20 refueling outage.

Revise U1 & U2 Salem In-service Inspection Program Long Term Plans to identify all buried Section XI piping systems and required testing.

Review Hope Creek Section XI Pressure Testing Program for similar conditions.

04/30/2010 15:42:02 JENNIFER JILL GIESE (NUJJG)

mrc notes created n2 20461283 rce

1	Operable	TSCO
NFF	Not a Functional Failure	TSCO
OHP	OH - Other Predictive Maintenance	TSCO
JOHN J SMITH		

End of report

No Critical Components Identified

60089871

Order: 60089871 ASME SEC XI AUX Feed Water Pressure Test
Order Type NUCM
Status
Notification 20459689

Unit S2
Functional Location S2AF AUXILIARY FEEDWATER (SALEM)
Equipment
Assembly
Location
Room
System AF
Priority 7 O-Outage
Main Work Center S-MM Salem Maintenance Mechanical

Basic Dates: Start: 04/15/2011 Finish: 04/18/2011 Overdue:

Sfty Rltd/QA Reqd
Sfty Class SR
Mrule Code REQD
SEISMIC 1
EQ

Permission Date:
to Begin Work Time: 00:00:00

Description of Work

ASME SEC XI AUX Feed Water Pressure Test
IAW CODE CASE N498, a system pressure test required

EQUIPMENT LOCATION: SALEM U2 OUTER PEN, NEAR CAN WALL
LOWER AREA (22AF124 & 24AF124)

1) ORDER HEADER ROADMAP OVERVIEW:

- * OBTAIN MATERIAL AND PREFAB TESTING RIG
(ALL MATERIAL IN-HAND OF FITTERS PER NUWXK)
- * MOBILIZE PUMP, HOSES, FITTING, TEST RIG
- * INSTALL TP&L FOR TEST EQUIP

- * OPERATIONS LINE-UP FOR TEST
- * PERFORM PRESSURE TEST AS DIRECTED AND IAW SC.MD-GP.ZZ-0035
- * COORDINATE WITH WALT SHEET SO HE CAN PERFORM HIS EXAM
- * ENGINEERING SUPPORT TESTING / EVAL RESULTS
- * SECURE TEST
- * OPS RESTORE SYSTEM LINE-UP
- * REMOVE TP&L
- * DEMOBILIZE ALL TOOLS EQUIP FROM OUTER PEN
- RETURN ALL EQUIPMENT AS REQUIRED

- 2) IMPACT TO PLANT EQUIPMENT OPERABILITY:
ER-AA-330-001, Section XI pressure Testing
OU-AA-335-015, VT-2 Visual Examination

LIST APPLICABLE TECH SPECS - CODE CASE N498

- 3) POSSIBLE ACTUATIONS AND/OR ALARMS: NO

- 4) RELEVANT WORK HISTORY / OPERATING EXPERIENCE NUMBER:
* 60089661 S2 G-WAVE INSPECTIONS OF 22/24 AF LINES
* 50052532 10-YEAR HYDROSTATIC TESTS 11/17/03

- 5) RELATED REGULAR MAINT. TASKS FOR POSSIBLE ACCREDITATION:
* 50071761 10-YEAR HYDROSTATIC TESTS 10/15/2012

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WHO WAS NOTIFIED:

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KNOWLEDGEABLE INDIVIDUALS:

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60089871

OP	Sub Op.	Work Center	Description	Start Date	Work	No	Durtn	Permit #	Permit Type
0001		S-MM06	COMMENTS:MOVED TO OU TAGE DATE RANGE AS P	04/15/2011	0.0	0	0.0		
0010		S-MM06	S2AF HYDRO: PERFORM PRE-FIELD WORK	04/15/2011	8	2	4		
0020		S-MM06	S2AF HYDRO: PRE-WORK MOBILIZATION	04/15/2011	4	2	2		
0020	0010	S-MM06	PREPARE TRANSIENT CO MBUSTIBLE PERMIT	04/15/2011	1.0	1	1.0		
0030		S-ME09	S2AF HYDRO: INSTALL TP&L PER FORM 1	04/15/2011	4	2	2		
0030	0010	S-MM06	S2AF HYDRO: PREP TP&	04/15/2011	1	1	1		

Operation List Summary
09/21/2010



L FORM 1

0040	S-MC08	I&C SUPPORT / S2AF H YDRO	04/15/2011	4	2	2
0050	S-OSHF	OPS SUPPORT / S2AF H YDRO	04/18/2011	1	1	1
0080	S-MM06	PERFORM S2AF HYDRO T ESTING PER PROC & 00	04/18/2011	24	3	8
0080 0001	S-EEP17	DEVELOP TEST PLAN	09/13/2010	2.0	1	2.0
0080 0005	S-OSHF	S2AF HYDRO: PRODUCTI ON RISK EVALUATION	04/18/2011	1	1	1
0080 0006	S-OSTW	S2AF HYDRO: PREPARE TAGS AS REQ'D	04/18/2011	1	1	1
0080 0011	S-MS	PLAN/S2AF HYDRO	04/18/2011	4	1	4

Operation List Summary
09/21/2010



0080	0020	S-MM06	WORK GROUP PRE & POST JOB BRIEF	04/18/2011	1	1	1
0085		E-ESOS2	Perform Tech Eval - AF23 retest reqmts	04/23/2010	2.0	1	2.0
0090		C-OSNNDE	S2AF HYDRO / VT-2 EXAM AT PRESSURE	04/15/2011	8.0	1	8.0
0110		S-MM06	POST S2AF HYDRO / RESTORATION	04/15/2011	1	1	1
0120		S-OSHF	POST S2AF HYDRO / SYSTEM RESTORATION	04/15/2011	2	1	2
0130		S-ME09	S2AF HYDRO: REMOVE T P&L AFTER TEST	04/18/2011	4	2	2
0140		S-MM06	S2AF HYDRO: POST-WORK DE-MOBILIZATION	04/18/2011	4	2	2
0150		S-EDR02	Prepare 50.59 forms	04/22/2010	0.0	0	0.0

Operation List Summary
09/21/2010



0160	S-EDM03	Review 50.50 forms	04/22/2010	0.0	0	0.0
0170	S-ED	Prepare Technical Evaluation ASME Pressu	04/23/2010	16.0	1	24.0
0180	S-ED	IDV Review Technical Evaluation	04/23/2010	8.0	1	12.0
0190	S-ED	SME Review Technical Evaluation	04/24/2010	8.0	1	12.0
0200	S-ED	Approve Technical Evaluation	04/25/2010	4.0	1	8.0

60089871

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0001 COMMENTS:MOVED TO OUTAGE DATE
RANGE AS P

Work center: S-MM06 NNUC

Status:

Number of People: 0

Scheduled Dates: **Start:** 04/15/2011 **Finish:** 04/15/2011

Planned Hours: 0.0

Actual Dates: **Start:** 04/29/2010 **Finish:**04/29/2010

Actual Hours: 8.000

Description of Work:

COMMENTS:MOVED TO OUTAGE DATE RANGE AS PER E-7 MTG(WK 30).
NUNXL-6-7-10.

"PLACE COMMENTS HERE"

*****Long Text Object Identification*****
Order 000060089871 Operation 0001 Long text

PLACE THE LATEST COMMENT ON THE TOP LINE OF THIS OPERATION, WITH
DATE OF COMMENT, YOUR COMMENT, YOUR NAME or USER ID, & PHONE EXT

Comment line:

Operation Key Info
09/21/2010



Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0010 S2AF HYDRO: PERFORM PRE-FIELD
WORK

Work center: S-MM06 NNUC

Status:

Number of People: 2

Scheduled Dates: **Start:** 04/15/2011 **Finish:** 04/15/2011

Planned Hours: 8

Actual Dates: **Start:** **Finish:**

Actual Hours: 0

Description of Work:

S2AF HYDRO: PERFORM PRE-FIELD WORK

*****Long Text Object Identification*****

Order 000060089871 Operation 0010 Long text

THIS OPERATION IS FOR ANY REQUIRED PRE-FABRICATION, BENCH
TESTING AND/OR REFURBISHMENT WHICH CAN BE PERFORMED PRIOR
TO FIELD WORK.

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test
Operation: 0020 S2AF HYDRO: PRE-WORK MOBILIZATION
Work center: S-MM06 NNUC
Status:
Number of People: 2
Scheduled Dates: Start: 04/15/2011 Finish: 04/15/2011
Planned Hours: 4
Actual Dates: Start: Finish:
Actual Hours: 0

Description of Work:

S2AF HYDRO: PRE-WORK MOBILIZATION

PERFORM PRE-WORK SET-UP AND MOBILIZATION AS REQUIRED.
PREPARE WORK AREA AND SET UP TOOLS.

OBTAIN ANY M&TE, RIGGING AND/OR POWER TOOLS WHICH ARE REQ'D
FOR "MULTI-PERSON" USE TO SUPPORT FIELD WORK.

EQUIPMENT LOCATION: SALEM U2 OUTER PEN, NEAR CAN WALL
LOWER AREA (22AF124 & 24AF124)

Comment line:

Operation Key Info
09/21/2010



Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0020 - 0010 PREPARE TRANSIENT COMBUSTIBLE
PERMIT

Work center: S-MM06 NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 04/15/2011 **Finish:** 04/15/2011

Planned Hours: 1.0

Actual Dates: **Start:** **Finish:**

Actual Hours: 0.000

Description of Work:

PREPARE TRANSIENT COMBUSTIBLE PERMIT

OP-AA-201-009
Revision 0

ATTACHMENT 1
Transient Combustible Permit
Page 1 of 1

SECTION I

Location: Fire Area/CCZ

Start Date: | Duration: | Order #:

Job Supervisor: | Ext.

EVALUATE TRANSIENT COMBUSTIBLES WHICH YOU ANTICIPATE BEING
USED

COMBUSTIBLES | ESTIMATED HEAT CONTENT | TOTAL BTUs

FLAMMABLE LIQUID | |

COMBUSTIBLE LIQUID OR GREASE		
CHARCOAL		
FIBERGLASS LADDER		
CABLE INSULATION		
CARDBOARD		
PAPER		
CLOTH and CLOTH PCs		
PLASTICS		
WOOD		
DRY ION RESINS		
TITANIUM		
ACETYLENE		
OTHER		
OTHER		

Total BTUs = = > |

SECTION II

TCP Requires ED Review ()Yes ()No | By NFPS/Date:

If Yes, TCP to ED: _____,
And: ED Name and Fax # _____ | By NFPS/Date:

If Yes, TCP Approved By ED
()Yes ()No | By ED/Date:

TCP Approved: ()Yes ()No | By NFPS/Date:

TCP Issued. #: _____ | By NFPS/Date

REMOVE ALL TRANSIENT COMBUSTIBLES UPON JOB COMPLETION

Comments:

Special Instructions:

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test
Operation: 0030 S2AF HYDRO: INSTALL TP&L PER FORM
1
Work center: S-ME09 NNUC
Status:
Number of People: 2
Scheduled Dates: Start: 04/15/2011 Finish: 04/15/2011
Planned Hours: 4
Actual Dates: Start: Finish:
Actual Hours: 0

Description of Work:

S2AF HYDRO: INSTALL TP&L PER FORM 1

PROVIDE TEMPORARY POWER AND LIGHT IN ACCORDANCE WITH
APPROVED PROCEDURE LISTED ON PRT SCREEN.

EQUIPMENT LOCATION: SALEM U2 OUTER PEN, NEAR CAN WALL
LOWER AREA (22AF124 & 24AF124)

PRT: SA-AA-129-2118 PRC 000 00
Description: GENERAL GUIDELINES FOR TEMPORARY POWER (
Control key: 3

PRT: ELEC TPNL OE17708 OED 000 00
Description:
Control key: 3

PRT: ELEC TPNL OE18863 OED 000 00
Description:

Operation Key Info
09/21/2010



Control key: 1

PRT: SPEC TPNL OE17738 OED 000 00

Description:

Control key: 1

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test
Operation: 0030 - 0010 S2AF HYDRO: PREP TP&L FORM 1
Work center: S-MM06 NNUC
Status:
Number of People: 1
Scheduled Dates: Start: 04/15/2011 Finish: 04/15/2011
Planned Hours: 1
Actual Dates: Start: Finish:
Actual Hours: 0

Description of Work:

S2AF HYDRO: PREP TP&L FORM 1

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FORM-1

TEMPORARY POWER AND LIGHT REQUEST FORM-
TPA/SUPERVISOR FOR TP&L/WCC LOG

REQUESTOR: _____ PHONE: _____ DEPT.: _____

TP&L REQUEST NO. _____ DATE RECEIVED: _____

DATE REQUIRED: _____

ANTICIPATED REMOVAL: (Expiration Date) _____

TP&L CONTACT: _____ EXT: _____ BEEPER: _____

DCP/PKG NO. _____ WORK ORDER/ACTIVITY: _____

UNIT: BLDG: _____ ELEVATION: _____

LOCATION: _____ North _ East _ South _ West

INFORMATION OF EQUIPMENT REQUIRING TEMPORARY POWER

POWER: VOLTAGE: [] 480 [] 220 [] 120 []

OTHER _____

NORMAL OPERATING CURRENT OF EQUIPMENT: _____

IF HEATING ELEMENT, WATTAGE SIZE: _____

MOTOR HORSEPOWER _____

SUPPORT INSTALLATION ☐ EQUIP. REPAIR ☐
REQUIRED: REMOVAL ☐ LIGHTING ☐
PARTIAL REMOVAL ☐ SCAFFOLD LTG ☐
MODIFICATION ☐ SCAFFOLD # ☐
MAINTENANCE ☐ BUS OUTAGE ☐
OTHER ☐

COMMENTS: _____

TPA/SUPERVISOR FOR TP&L USE ONLY

BUS and BREAKER SUPPLY POWER _____
REMAINING BUS MARGIN (if applicable) _____

INSTALLED CABLE SEPERATION HAS BEEN REVIEWED AND ACCEPTED BY:

_____	DATE _____
INSTALLED _____	DATE _____
TP&L REMOVED _____	DATE _____
REQUEST APPROVED _____	DATE _____

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0040 I&C SUPPORT / S2AF HYDRO

Work center: S-MC08 NNUC

Status:

Number of People: 2

Scheduled Dates: **Start:** 04/15/2011 **Finish:** 04/18/2011

Planned Hours: 4

Actual Dates: **Start:** **Finish:**

Actual Hours: 0

Description of Work:

I&C SUPPORT / S2AF HYDRO

*****Long Text Object Identification*****
Order 000060089871 Operation 0040 Long text

SUPPORT OF OPERATIONS TESTING

EQUIPMENT LOCATION: SALEM U2 OUTER PEN, NEAR CAN WALL
LOWER AREA (22AF124 & 24AF124)

SAFETY CONCERNS:

1) PROPOSED OPERATION WORK PLAN:
SET UP TESTING EQUIPMENT IN SUPPORT OF OPERATIONS PER PLAN

2) FOREIGN MATERIAL EXCLUSION CONTROLS REQUIRED (Y/N): ____

SUGGESTED FMW IAW MA-AA-716-008 FMEA# _____

PRT: S-C-MPOO-MGS-0001 SPC 000 00
Description: SALEM PIPING SPECIFICATION (61-6200)
Control key: 3

PRT: SC.IC-GP.ZZ-0177 PRC 000 00
Description: PANAMETRICS FLOW INSTRUMENT DATA PROCEDU
Control key: 3

Comment line:

Operation Key Info
09/21/2010



Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0050 OPS SUPPORT / S2AF HYDRO

Work center: S-OSHF NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 04/18/2011 **Finish:** 04/18/2011

Planned Hours: 1

Actual Dates: **Start:** **Finish:**

Actual Hours: 0

Description of Work:

OPS SUPPORT / S2AF HYDRO

CHEMISTRY TO MANIPULATE SYSTEM(S) AS REQUIRED TO REMOVE
EQUIPMENT FROM SERVICE AND DRAIN/FLUSH AS NECESSARY TO SUPPORT
MAINTENANCE WORK.

EQUIPMENT LOCATION: SALEM U2 OUTER PEN, NEAR CAN WALL
LOWER AREA (22AF124 & 24AF124)

PRT: EN-AA-51 PRC 000 00
Description: CHEMICAL MANAGEMENT PROCESS
Control key: 3

PRT: JHA TEMPLATE JHA 000 00
Description:
Control key: 3

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0080 PERFORM S2AF HYDRO TESTING PER
PROC & 00

Work center: S-MM06 NNUC

Status:

Number of People: 3

Scheduled Dates: **Start:** 04/18/2011 **Finish:** 04/18/2011

Planned Hours: 24

Actual Dates: **Start:** 04/22/2010 **Finish:** 04/22/2010

Actual Hours: 0

Description of Work:

PERFORM S2AF HYDRO TESTING PER PROC & 0080-0001

*****Long Text Object Identification*****
Order 000060089871 Operation 0080 Long text

EQUIPMENT LOCATION: SALEM U2 OUTER PEN, NEAR CAN WALL
LOWER AREA (22AF124 & 24AF124)

IDENTIFIED SAFETY CONCERNS: FLAG OFF TEST AREA
MAINTAIN PROPER PPE, WORKING WITH PRESSURIZED HOSE
USE APPLICABLE HOSE RESTRAINT CONTROLS

- 1) PROPOSED OPERATION WORK PLAN:
- * COORDINATE WITH OPERATIONS FOR VALVE MANIPULATIONS
 - * SET-UP AND PERFORM HYDRO TEST IAW SC.MD-GP.ZZ-0035 AND AS DIRECTED BY TESTING PLAN
 - * COORDINATE WITH WALT SHEET SO HE CAN PERFORM HIS EXAM
 - * MONITOR ALL TEST EQUIPMENT WHILE TEST IN PROGRESS

- * SECURE TEST WHEN DIRECTED
- * DIRECT OPERATIONS TO RESTORE VALVES TO NORMAL POSITION WHEN TESTING IS COMPLETE.

2) FOREIGN MATERIAL EXCLUSION CONTROLS REQUIRED (Y/N): _Y_
SUGGESTED OPTION IAW FME PROCEDURE - FMEA# _2_

TAGS REQUIRED

PRT: MA-AA-716-004 PRC 000 00
Description: CONDUCT OF TROUBLESHOOTING
Control key: 3

PRT: SA-SA-2113 PRC 000 00
Description: CHEMICAL SAFETY
Control key: 3

PRT: EN-AA-51 PRC 000 00
Description: CHEMICAL MANAGEMENT PROCESS
Control key: 3

PRT: MA-AA-716-009 PRC 000 00
Description: USE OF MAINTENANCE PROCEDURES
Control key: 3

PRT: MA-AA-716-100 PRC 000 00
Description: MAINTENANCE ALTERATIONS PROCESS
Control key: 3

PRT: MA-AA-716-008 PRC 000 00
Description: FOREIGN MATERIAL EXCLUSION PROGRAM
Control key: 3

PRT: SA-AA-0301 PRC 000 00
Description: PSEG NUCLEAR INDUSTRIAL SAFETY POCKET GU
Control key: 3

PRT: OU-AA-335-015 PRC 000 00
Description: VT-2 VISUAL EXAMINATION
Control key: 1

PRT: ER-AA-330-001 PRC 000 00
Description: SECTION XI PRESSURE TESTING
Control key: 3

PRT: SC.MD-GP.ZZ-0035 PRC 000 00
Description: PRESSURE TESTING OF NUCLEAR CLASS 2 AND
Control key: 1

Comment line:

Operation Key Info
09/21/2010



Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0080 - 0001 DEVELOP TEST PLAN

Work center: S-EEP17 NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 09/13/2010 **Finish:** 09/13/2010

Planned Hours: 2.0

Actual Dates: **Start:** **Finish:**

Actual Hours: 0.000

Description of Work:

DEVELOP TEST PLAN

*****Long Text Object Identification*****
Order 000060089871 Operation 0080 Sub-operation 0001 Long text

NDE SUPPORT REQUIRED
PROVIDE NDE SUPT AS REQUIRED TO SUPPORT MAINTENANCE ACTIVITIES
Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0080 - 0005 S2AF HYDRO: PRODUCTION RISK
EVALUATION

Work center: S-OSHF NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 04/18/2011 **Finish:** 04/18/2011

Planned Hours: 1

Actual Dates: **Start:** **Finish:**

Actual Hours: 0

Description of Work:

S2AF HYDRO: PRODUCTION RISK EVALUATION

PRODUCTION RISK EVALUATION
WC-AA-104

CHECK PROCEDURE FOR PROPER REVISION:

ATTACHMENT 1
Production Risk Evaluation Data

Work Group Section:

NOTE: Attachment 1 is required for all packages not
meeting the EXEMPT criteria per WC-AA-104.

Description of Task: _____
WO No.: _____

Production Risk Activity Screening:

1. Is the work activity on a system that is on the Station

Production Risk System Matrix (found on Exelon Nuclear Intranet, see references) or near production risk sensitive equipment?

Yes ___ No ___

IF question 1 is NO, THEN this is NOT Production Risk Activity and no operations review is required.

NOTE: Attachment 3 should be used in conjunction with the following questions to provide clarification on the questions intent.

If question 1 above is answered Yes, then continue at Question 2.

2. Activity could cause equipment actuations that could cause a loss of planned generation?
Yes ___ No ___
3. Instrument, fuse, circuit board removal/installations that could cause a loss of planned generation?
Yes ___ No ___
4. Activity will cause a 1/2 scram/ 1/2 trip that could cause a loss of planned generation?
Yes ___ No ___
5. Pressurization of common sensing lines that could cause a loss of planned generation?
Yes ___ No ___
6. Placing of jumpers or disconnection of "daisy chains" that could cause a loss of planned generation?
Yes ___ No ___
7. Activity could cause vibration near production risk vibration sensitive equipment that could cause a loss of planned generation?
Yes ___ No ___
8. Is a special procedure or JIT training required to mitigate the threat to generation?
Yes ___ No ___
9. During the activity, a single human error or omission could cause a loss of planned generation?
Yes ___ No ___
10. Is the activity a non-routine activity in the switchyard?
Yes ___ No ___

11. If any question 2 through 10 is answered YES, then the activity is Production Risk.

COMMENTS:

Risk Screening Performed by: _____
Name / Signature

No Production Risk _____ Production Risk _____

OPERATIONS SECTION:

NOTE: Existing material condition issues should be considered such that failure, in conjunction with performing the proposed activity could affect planned generation.

1. IF during the performance of this activity there is a predicted severe weather (i.e. high winds, severe icing, lighting OR other acts of nature such as sunspots), condition, which may interact the activity to potentially affect planned generation, THEN this activity should be classified as production risk.

COMMENTS:

Operations Review: _____
Name / Signature

No Production Risk _____ Production Risk _____

2. If production risk determination is different than from initial screening, notify the Work Week Manager upon determination and prior to performing the activity.

Comment line:

Operation Key Info
09/21/2010



Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0080 - 0006 S2AF HYDRO: PREPARE TAGS AS REQ'D

Work center: S-OSTW NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 04/18/2011 **Finish:** 04/18/2011

Planned Hours: 1

Actual Dates: **Start:** **Finish:**

Actual Hours: 0

Description of Work:

S2AF HYDRO: PREPARE TAGS AS REQ'D
OPERATIONS TO PREPARE SYSTEM/EQUIPMENT TAGOUT AS REQUIRED.

Comment line:

Operation Key Info
09/21/2010



Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0080 - 0011 PLAN/S2AF HYDRO

Work center: S-MS NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 04/18/2011 **Finish:** 04/18/2011

Planned Hours: 4

Actual Dates: **Start:** 04/22/2010 **Finish:** 04/22/2010

Actual Hours: 12

Description of Work:

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0080 - 0020 WORK GROUP PRE & POST JOB BRIEF

Work center: S-MM06 NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 04/18/2011 **Finish:** 04/18/2011

Planned Hours: 1

Actual Dates: **Start:** **Finish:**

Actual Hours: 0

Description of Work:

WORK GROUP PRE & POST JOB BRIEF

MA-AA-1000

NOTE: All sites will have a coordinated re-enforcement of PJB/HLA/IPA and Post Job Critiques. The Common Procedure Provides Guidance for Conducting Activity Briefings:

- . The Common Procedure Does NOT Give Direction for:
- . ALARA Briefs
- . Safety Briefs
- . Emergency Plan Briefs
- . Clearances
- . Elements for all Briefing Types:
- . Participation by all Directly Involved
- . Briefing Location Free from Distractions
- . Opportunity for Questions & Checking Understanding
- . If Warranted, Provisions for Post-Job Critique
- . Review of Production Risk Requirements (if applicable)
- . Topics for All Briefing Types
- . Job Purpose and Scope
- . Roles and Responsibilities
- . Hazards and Contingencies

- . Safety Requirements and ALARA
- . Previous Lessons Learned
- . Defenses (Error Prevention Barriers)
- . Stop Work Criteria
 - Activities requiring PJB
- . Requires Coordinating Two or more People
- . Involves Simultaneous use of Multiple Procedures
- . Involves Special Hazards like Asbestos, Lead, etc.
- . Significant Consequences if Done Wrong (e.g., reset)
- . Jobs Unfamiliar to Workers
- . Potential Effects on Other Equipment or Areas
- . Potential for Significant Radiological Consequences
- . Screened as Production Risk with a frequency < Quarterly
- . Activities requiring HLA
- . Screened as Production Risk by Work Control and Performed Less Often than Quarterly
- . Non-routine Evolutions requiring Coordination of Four or more People or Multiple Departments, AND
- . Potential adverse Affect on Reactivity Control, Reactor Status, or Emergency Safety Function Protection Systems System Status, OR
- . Potential Adverse Affect on SG or Rx Vessel Level or Flow, or Core Cooling, OR Pressure, Steam
- . Potential for Radioactive Release OR Potential to Effect Electrical Generation
- . Multiple Evolutions in Progress
- . Any Evolution Designated by Senior Line Management, Shift Manager, or Department Head
- . Activities requiring IPA
- . Potential to Degrade Plant Level of Nuclear Safety
- . Special Tests
- . Low Power Physics testing
- . Reduced Inventory Evolution
- . Maintenance During Reduced Inventory with Potential for Vessel Level Adversely Impacting
- . Placing Plant in unusual Configuration, Requiring complex Coordination/Sequencing, or Involving Complex Sequencing, and having Potentially Significantly Regulatory, Political or Financial Impact
- . Station Blackout Testing
- . Shutdown from Outside Control Room Testing
- . As Directed by Senior Line Management

HU-AA-1211
Revision 2
Page 13 of 21
Attachment 1 Page 1 of 1

Activity Description _____
Briefing Leader _____

Ensure Positive Engagement by all participants

Use Reverse Briefs as appropriate

Job Purpose/Job Scope
Expected results/ Job Duration Estimate
Boundaries

Turnover Items
Abnormal line-ups
Parallel activities

Roles and Responsibilities
Workers qualified to perform work
Master copy holder
Worker specific actions
Interdepartmental dependencies
Firewatch

Task Instructions
Prerequisites / Limitations
Sequencing of Tasks
Work package and N/A.ed instructions
reviewed and understood
Technical Specifications
IV, CV, Hold Points
Administrative Controls
Procedure compliance / Level of use
Evolution steps clearly understood

Contingencies
Lessons Learned/OPEX/Site Events
. List actions taken or should be taken
to prevent a similar event
Contact whom, if a problem is identified.

Error Precursors
Distractions / Time Pressure
Overconfidence / Stress
Poor Communications
Poor or vague work instructions
First time performing task
High work load / Performing multiple tasks
First shift back to work
Abnormal line-ups / conditions
Fatigue or inadequate rest (hours worked)
Other identified precursors

Potential Hazards and /Planned Responses
Confined space / Electrical
Chemical Hazards (MSDS) / Storage
Asbestos / Lead based paint removal
Fire Protection requirements
Other _____

Defenses
STAR / Peer Check / Communications
Ensure correct UNIT/TRAIN/COMPONENT
Attention to detail / Questioning attitude
Verification Techniques / OOPS
First Check / Technical HU tools
Flagging / Robust Operational Barriers
Procedure compliance / Level of use

Safety Requirements and Precautions
Personal Protective Equipment (PPE)
Electrical / Chemical / Other
Fall Protection / Special safety considerations
Job Hazard Awareness

Foreign Material Exclusion
FME Area requirements
FME work practices
FME Boundaries, devices, & logging

ALARA and Radiological Concerns
High Radiation Area entry required
RWP review (dose rates and dosimeter alarms)
RP hold points
Low dose areas \ Contamination levels
DAW minimization

Stop Work Criteria
Expected results not obtained

Reactivity Management / Nuclear Safety
Discuss reactivity management concerns
Any potential and/or actual impact
Contingencies

Production Risk Concerns
- Mark or highlight critical step(s) in the activity that relates to production risk.
- Obtain authorization from Unit or Control Room Supervisor directly prior to performing a critical step or series of critical steps related to production risk.

- Monitor / Validate performance of each critical step related to production risk, by direct oversight in the field, by work group supervision. Identify sensitive panels/equipment
- Discuss protected pathways and equipment

Post-Job Critique Considerations

The 5 Key Questions

What are the Critical Steps in this task?

What are the Error Likely Situations?

What is the Worst Thing that can go wrong?

What Defenses are we relying upon?

What actions will assure proper Configuration Control?

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure Test
Operation: 0085 Perform Tech Eval - AF23 retest reqmts
Work center: E-ESOS2 NNUC
Status:
Number of People: 1
Scheduled Dates: **Start:** 04/23/2010 **Finish:** 04/24/2010
Planned Hours: 2.0
Actual Dates: **Start:** 04/23/2010 **Finish:** 04/24/2010
Actual Hours: 0.000

Description of Work:

Perform Tech Eval - AF23 retest reqmts ion>

*****Long Text Object Identification*****
Order 000060089871 Operation 0085 Long text

loaded for NUF3S by nurbs

Retest requirements for AF23 following 22 and 24 Aux Feed Water buried piping
System Pressure Testing
Technical Evaluation Template

Document Number: 60089871 / 20459689

Title: Retest requirements for AF23 following 22 and 24 Aux Feed Water buried
piping System Pressure Testing

Reason For Evaluation / Scope:

The purpose of this evaluation is to determine if there are any retest requirements for the 22AF23 and 24AF23 following manual closure in support of the ASME XI System Pressure Test for the 22 and 24 Aux Feed Water buried piping

Detailed Evaluation:

The AF23 stop check valves will be manually held closed in support of performing an ASME XI (ISI) required Periodic System Pressure Test of the buried sections of the 22 and 24 Aux Feed Water piping. This test is not normally performed on line.

The AF23 valves are 4" Edward Valve Co. stop check valves. These are a Univalve angle body design. This design is essentially a globe valve with the stem not connected to the valve plug. With the valve stem inserted by the manual handwheel, the plug is held to the seat and will prevent forward (and reverse) flow. With the valve stem retracted the plug can lift to allow forward flow, or fall to prevent reverse flow. The stem is a one piece design, and incorporates an integral backseat.

The AF23 valves are Nuclear Class 2 Seismic 1. This valve and the piping downstream fall into Piping Schedule SPS 16A.

The AF 23 valves have a safety functions in both the open and closed directions. AF23 is a containment isolation valve but is not subject to Appendix J Type C testing, or leakage testing in the reverse direction. Full forward flow IST testing is only performed during Cold Shutdowns and, at a minimum, each refueling outage by S2.OP-ST.AF-0005. Reverse flow IST testing is performed quarterly in modes 1 thru 3 by S2.OP-ST.AF-0006.

Operating guidance provided by Edward Valve in VTD 316527 page 17 of 17 bullets 6, 7 and 10 should be followed: a minimum of three impacts (with the impactor handwheel) is required to properly close the valve, or a handwheel rim-pull of 198 lbs (98 lb push - pull). Thirteen handwheel turns to full close or full open is expected. Minimum seating torque = 155 ft-lb and Maximum seating torque = 385 ft-lb.

Closing these stop check valves manually (as designed) does not constitute maintenance, therefore the PMT requirements of MA-AA-716-012 Attachment 3 would not apply. Manipulation of valves in support of normal plan operation or testing also does not require performance of ASME OM (IST) surveillance testing to prove operational readiness.

Forward flow of the AF23 valves using discharge of the Aux Feed pumps generates approximately 4000 lb of force to unseat the valve plug, based 1300 psig discharge pressure during full flow testing for both the motor drive and steam driven pumps and a 2.0 inch port diameter.

However, use of the manual isolation feature of the AF23 valves is not routine. Performing a partial forward flow test after re-opening the AF23 valves would validate without question that they remain capable of their full forward flow safety function.

The post maintenance partial forward flow test would be accomplished by relaxing the closing force on the handwheel and observing a pressure reduction to BF pressure. Since the fluid is non-compressible, the amount introduced into the BF piping would be on the order of ounces. This amount is negligible compared to the mass flow rate of the BF system and will have no impact on reactivity.

Conclusions / Findings:

Operation Key Info

09/21/2010



PSEG

Nuclear LLC

No IST operational readiness testing of the AF23 stop check valves is required after retracting the valve stem. A partial forward flow test, if feasible or at the first opportunity would validate readiness.

References:

ASME OMB Code-2003 Addenda to ASME OM Code 2001 for Operation and Maintenance of Nuclear Power Plants, IST-A and IST-C.

MA-AA-716-012 Post Maintenance Testing

S2.OP-ST.AF-0005(Q)- Rev. 16 IST AF Valves Modes 4-6

S2.OP-ST.AF-0006(Q)- Rev. 12 IST AF Valves

AF23 valves:

VTD 316527 - Forged Steel Univalve Globe Stop Check Valve Figure D36268T1

VTD 316314 - Edward Valves Univalve Operation and Maintenance Manual

VTD 316529 - Design Report for Mark F-88

VTD 316530 - Seismic Report Size 4 Fig D36268T1

VTD 316826 - Code Edition / Addenda Material Reconciliation

VTD 121141 - 4" 4306TY Weld End Detail

SPEC S-C-1979-DSP-6281 Specification for Steel Globe, Gate and Check Valves 2 1/2" and larger

Preparer: Frank Szanyi

Date: 4/22/2010

Independent Review: R. Swartzwelder

Date: 4/23/2010

Approved:

Date:

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0090 S2AF HYDRO / VT-2 EXAM AT
PRESSURE

Work center: C-OSNNDE NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 04/15/2011 **Finish:** 04/15/2011

Planned Hours: 8.0

Actual Dates: **Start:** **Finish:**

Actual Hours: 0.000

Description of Work:

S2AF HYDRO / VT-2 EXAM AT PRESSURE

*****Long Text Object Identification*****

Order 000060089871 Operation 0090 Long text

EQUIPMENT LOCATION: SALEM U2 OUTER PEN, NEAR CAN WALL
LOWER AREA (22AF124 & 24AF124)

NDE SUPT REQUIRED

1)PROPOSED WORK PLAN:
PROVIDE NDE SUPT AS REQUIRED TO SUPPORT MAINTENANCE ACTIVITIES

Visual Examination while the system was pressurized.
10 minute hold prior to commencing the exam.

PRT: ER-AA-330-001 PRC 000 00

Description: SECTION XI PRESSURE TESTING
Control key: 3

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0110 POST S2AF HYDRO / RESTORATION

Work center: S-MM06 NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 04/15/2011 **Finish:** 04/15/2011

Planned Hours: 1

Actual Dates: **Start:** **Finish:**

Actual Hours: 0

Description of Work:

POST S2AF HYDRO / RESTORATION

EQUIPMENT LOCATION: SALEM U2 OUTER PEN, NEAR CAN WALL
LOWER AREA (22AF124 & 24AF124)

PMT- REQ'D TESTING TO BE DETERMINED BASED ON EXTENT OF REPAIRS:
VERIFY PROPER OPERATION/INDICATION PER PLANT CONDITIONS.

RETURN ANY M&TE, RIGGING AND/OR POWER TOOLS WHICH WERE ISSUED
FOR "MULTI-PERSON" USE TO THE APPLICABLE TOOL ROOM.

VERIFY EQUIPMENT/COMPONENTS DISTURBED DURING PERFORMANCE
OF THIS CM HAVE BEEN RETURNED TO PROPER PLANT CONFIGURATION.

VERIFY READINGS ARE CONSISTENT WITH CURRENT PLANT
CONDITIONS.

IF THE FUNCTIONAL LOCATION HAS FAILED THE INSERVICE THEN
INITIATE A NOTIFICATION TO PERFORM A REWORK.

PRT: MA-AA-716-012 PRC 000 00

Description: POST MAINTENANCE TESTING
Control key: 3

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test
Operation: 0120 POST S2AF HYDRO / SYS RESTORATION
Work center: S-OSHF NNUC
Status:
Number of People: 1
Scheduled Dates: **Start:** 04/15/2011 **Finish:** 04/15/2011
Planned Hours: 2
Actual Dates: **Start:** **Finish:**
Actual Hours: 0

Description of Work:

POST S2AF HYDRO / SYS RESTORATION

EQUIPMENT LOCATION: SALEM U2 OUTER PEN, NEAR CAN WALL
LOWER AREA (22AF124 & 24AF124)

OPS TO VERIFY PROPER INSERVICE OPERATION AND INDICATION
AS PER PLANT CONDITIONS.

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Press
Test

Operation: 0130 S2AF HYDRO: REMOVE TP&L AFTER
TEST

Work center: S-ME09 NNUC

Status:

Number of People: 2

Scheduled Dates: Start: 04/18/2011 Finish: 04/18/2011

Planned Hours: 4

Actual Dates: Start: Finish:

Actual Hours: 0

Description of Work:

S2AF HYDRO: REMOVE TP&L AFTER TEST

REMOVE TP&L AFTER FIELD WORK UNDER ORDER COMPLETE

EQUIPMENT LOCATION: SALEM U2 OUTER PEN, NEAR CAN WALL
LOWER AREA (22AF124 & 24AF124)

PRT: SA-AA-129-2118 PRC 000 00
Description: GENERAL GUIDELINES FOR TEMPORARY POWER (
Control key: 3

PRT: ELEC TPNL OE17708 OED 000 00
Description:
Control key: 3

PRT: ELEC TPNL OE18863 OED 000 00
Description:
Control key: 1

PRT: SPEC TPNL OE17738 OED 000 00
Description:
Control key: 1

PRT: SA-SA-129-2118 PRC 000 00
Description: GENERAL GUIDELINES FOR TEMPORARY POWER (
Control key: 3

Comment line:

Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0140 S2AF HYDRO: POST-WORK
DE-MOBILIZATION

Work center: S-MM06 NNUC

Status:

Number of People: 2

Scheduled Dates: **Start:** 04/18/2011 **Finish:** 04/18/2011

Planned Hours: 4

Actual Dates: **Start:** **Finish:**

Actual Hours: 0

Description of Work:

S2AF HYDRO: POST-WORK DE-MOBILIZATION

DEMOBILIZE WORK AREA. INSPECT AND ENSURE THAT ALL TOOLS AND EQUIPMENT HAVE BEEN REMOVED FROM WORK AREA. LEAVE AREA CLEANER THAN AS FOUND.

EQUIPMENT LOCATION: SALEM U2 OUTER PEN, NEAR CAN WALL
LOWER AREA (22AF124 & 24AF124)

PRT: SA-AA-0301 PRC 000 00
Description: PSEG NUCLEAR INDUSTRIAL SAFETY POCKET GU
Control key: 3

Comment line:

Operation Key Info
09/21/2010



Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test
Operation: 0150 Prepare 50.59 forms
Work center: S-EDR02 NNUC
Status:
Number of People: 0
Scheduled Dates: **Start:** 04/22/2010 **Finish:** 04/22/2010
Planned Hours: 0.0
Actual Dates: **Start:** 04/22/2010 **Finish:** 04/22/2010
Actual Hours: 0.000

Description of Work:

Prepare 50.59 forms

*****Long Text Object Identification*****
Order 000060089871 Operation 0150 Long text

50.59 REVIEW COVERSHEET FORM LS-AA-104-1001
Revision 2
Page 1 of 1
Station/Unit(s): Salem Unit 2

Activity/Document Number: 60089871 / S2010-087 Revision Number: 0

Title: System Pressure Test for Unit 2, buried section of Auxiliary
Feed-water System

NOTE: For 50.59 Evaluations, information on this form will provide the basis for preparing the biennial summary report submitted to the NRC in accordance with the requirements of 10 CFR 50.59(d)(2).

Description of Activity:
(Provide a brief, concise description of what the proposed activity involves.)

The proposed activity is to perform an ASME Section XI System Pressure Test for the buried pipe portion of the Auxiliary Feedwater (AFW) System. The test will be performed IAW approved plant procedures for pressure testing of Nuclear Class 2 and 3 components and systems. The evolution will isolate one AFW flow path to one steam generator at a time during the implementation of a test. The applicable Technical Specification Action Statement will be entered.

Reason for Activity:

(Discuss why the proposed activity is being performed.)

Notification 20459689 was initiated to document a missed Technical Specification Surveillance for underground sections of the No. 22 and No. 24 AFW lines.

Procedures ER-AA-330-001 and OU-AA-335-015 require ASME Section XI Pressure Testing for the affected sections of AFW piping.

Effect of Activity:

(Discuss how the activity impacts plant operations, design bases, or safety analyses described in the UFSAR.)

In order to perform the required testing, the section of AFW piping to be tested must be isolated. The isolation will take place between the associated AF21 supply valve and AF23 containment isolation stop-check valve, by closing manual valves AF22 and AF86. This will cause one motor-driven AFW pump and the turbine-driven AFW pump to be considered inoperable. The inoperable motor-driven AFW pump will only be able to supply feedwater to 1 of 2 required steam generators. The inoperable turbine-driven AFW pump will only be able to supply feedwater to 3 of 4 required steam generators. This action is governed by Technical Specification 3.7.1.2 Action b, which states that with two AFW pumps inoperable, the plant must be in Hot Standby within 6 hours and Hot Shutdown within the following 6 hours.

The system pressure test will pressurize the affected section of piping to the normal operating pressure of 1195 PSIG plus 10% or 1315 PSIG. The affected sections of piping are applicable to Piping Schedule SPS54E, which has a maximum design pressure rating of 1950 PSIG. Therefore, the value to which the system will be pressurized is within the design of the system.

Summary of Conclusion for the Activity's 50.59 Review:

(Provide justification for the conclusion, including sufficient detail to recognize and understand the essential arguments leading to the conclusion. Provide more than a simple statement that a 50.59 Screening, 50.59 Evaluation, or a License Amendment Request, as applicable, is not required.)

The proposed activity is a system pressure test for two sections of AFW piping. Pressure testing within the design basis of the AFW system does not involve a change that adversely affects an UFSAR described design function. No procedure changes are required. There is no change to any evaluation methodologies. The proposed activity is considered a test, however, the test is performed within the reference bounds of the AFW system. No changes are required to the Technical Specifications or the Operating License. Therefore, no 50.59 evaluation is required.

Attachments:

Attach all 50.59 Review forms completed, as appropriate.

(NOTE: if both a Screening and Evaluation are completed, no Screening No. is required.)

Forms Attached: (Check all that apply.)

1 Applicability Review

1 50.59 Screening

50.59 Screening No. S2010-087 Rev. 0

0 50.59 Evaluation

50.59 Evaluation No. Rev.

=====

50.59 APPLICABILITY REVIEW FORM LS-AA-104-1002

Address the questions below for all aspects of the Activity. If the answer is yes for any portion of the Activity, apply the identified process(es) to that portion of the Activity. Note that it is not unusual to have more than one process apply to a given Activity.

See Section 4 of the Resource Manual (RM) for additional guidance.

I. Does the proposed Activity involve a change:

1. Technical Specifications or Operating License
(10CFR50.90)? 1 NO 0 YES
See Section 4.2.1.1 of the RM

2. Conditions of License
Quality Assurance program (10CFR50.54(a))?
Security Plan (10CFR50.54(p))?
Emergency Plan (10CFR50.54(q))?
1 NO 0 YES
See Section 4.2.1.2 of the RM

1 NO 0 YES

1 NO 0 YES

3. Codes and Standards
IST Program Plan (10CFR50.55a(f))?
ISI Program Plan (10CFR50.55a(g))?
1 NO 0 YES
See Section 4.2.1.3 of the RM

1 NO 0 YES

4. ECCS Acceptance Criteria (10CFR50.46)? 1
NO 0 YES

See Section 4.2.1.4 of the RM

5. Specific Exemptions (10CFR50.12)? 1 NO 0
YES
See Section 4.2.1.5 of the RM

6. Radiation Protection Program (10CFR20)? 1
NO 0 YES
See Section 4.2.1.6 of the RM

7. Fire Protection Program (applicable UFSAR or
operating license condition)? 1 NO 0 YES
See Section 4.2.1.7 of the RM

8. Programs controlled by the Operating License
or the Technical Specifications (such as the ODCM). 1 NO 0 YES
See Section 4.2.1.7 of the RM

9. Environmental Protection Program 1 NO 0
YES
See Section 4.2.1.7 of the RM

10. Other programs controlled by other regulations.
1 NO 0 YES
See Section 4.2.1 of the RM
II.

Does the proposed Activity involve maintenance which restores SSCs
to their original condition or involve a temporary alteration supporting maintenance
that will be in effect during at-power operations for 90 days or less? 1 NO 0 YES
See Section 4.2.2 of the RM

III. Does the proposed Activity involve a change to the:

1. UFSAR (including documents incorporated by
reference) that is excluded from the requirement to perform a 50.59 Review by NEI
96 07 or NEI 98 03? 1 NO 0 YES
See Section 4.2.3 of the RM

2. Managerial or administrative procedures
governing the conduct of facility operations (subject to the control of 10CFR50,
Appendix B) 1 NO 0 YES
See Section 4.2.4 of the RM

3. Procedures for performing maintenance
activities (subject to 10CFR50, Appendix B)? 1 NO 0 YES
See Section 4.2.4 of the RM

4. Regulatory commitment not covered by another
regulation based change process (see NEI 99-04)? 1 NO 0 YES
See Section 4.2.3/4.2.4 of the RM

IV. Does the proposed Activity involve a change to the Independent Spent Fuel Storage Installation (ISFSI) (subject to control by 10 CFR 72.48) 1 NO 0
YES

See Section 4.2.6 of the RM

Check one of the following:

0 If all aspects of the Activity are controlled by one or more of the above processes, then a 50.59 Screening is not required and the Activity may be implemented in accordance with its governing procedure.

1 If any portion of the Activity is not controlled by one or more of the above processes, then process a 50.59 Screening for the portion not covered by any of the above processes. The remaining portion of the activity should be implemented in accordance with its governing procedure.

Signoff:

1 50.59 Screener/0 50.59 Evaluator:

Brian Syvertson Sign:	60089871 Op.	Date	See SAP
(Check One)	(Print name)	(Signature)	

=====

50.59 SCREENING FORM LS-AA-104-1003

Revision 1

Page 1 of 1

50.59 Screening No. S2010-087 Rev. No. 0

Activity/Document Number: 60089871 Revision Number: 0

I. 50.59 Screening Questions (Check correct response and provide separate written response providing the basis for the answer to each question)(See Section 5 of the Resource Manual (RM) for additional guidance):

1. Does the proposed Activity involve a change to an SSC that adversely affects an UFSAR described design function? (See Section 5.2.2.1 of the RM)

The Auxiliary Feedwater (AFW) System serves as a backup for supplying feedwater to the secondary side of the steam generators at times when the Main Feedwater System is not available (during start-up, cool-down and shut-down). The AFW System is relied upon to prevent core damage and system over pressurization in the event of accidents such as a loss of normal feedwater or a major secondary system pipe rupture, and to provide a means for plant cooldown.

Each unit has its own, independent Auxiliary Feed-water System. The system consists of one turbine-driven and two motor-driven AFW pumps, one AFST and associated piping. Each motor-driven pump discharges to two steam generators with a normally isolated (21 and 22AF923 valves) cross-connect line joining the motor-driven pump discharge headers. The turbine-driven pump feeds all four steam generators.

The proposed activity is to perform a pressure test on buried section of AFW pipe. This will require the isolation of one section of AFW piping at a time. The isolation will be achieved by closing valves, AF22 supply valve, AF23 containment isolation stop-check valve, and valve AF86. This will cause one motor-driven AFW pump and the turbine-driven AFW pump to be considered inoperable. The inoperable motor-driven AFW pump will only be able to supply feedwater to 1 of the 2 steam generators normally supplied by this pump. The inoperable turbine-driven AFW pump will only be able to supply feedwater to 3 of 4 required steam generators. This action is governed by Technical Specification 3.7.1.2.b, which states that with two AFW pumps inoperable, the plant must be in Hot Standby with 6 hours and Hot Shutdown within the following 6 hours.

The sections of piping being tested is governed by Piping Specification SPS54E, which has normal operating and design pressure rating of 1195 PSIG and 1950 PSIG respectively. The system pressure test will pressurize the affected sections of piping to 1315 PSIG. Therefore the test pressure is well below the system design pressure. Therefore, the proposed activity does not involve a change that adversely affects an UFSAR described design function.

0 YES

1 NO

2. Does the proposed Activity involve a change to a procedure that adversely affects how UFSAR described SSC design functions are performed or controlled? (See Section 5.2.2.2 of the RM)

The proposed activity will be implemented IAW approved station procedures. This activity does not require a change to any existing procedures. Since this activity has not been performed previously a new procedure or a special test procedure will be created to perform only this activity. Therefore, this activity does not involve a change to a procedure that adversely affects how UFSAR described SSC design functions are performed or controlled.

0 YES

1 NO

3. Does the proposed Activity involve an adverse change to an element of a UFSAR described evaluation methodology, or use of an alternative evaluation methodology, that is used in establishing the design bases or used in the safety analyses? (See Section 5.2.2.3 of the RM)

The proposed activity is a system pressure test of the buried section of AFW system. This activity does not create or alter any evaluation methodologies described in the UFSAR. Therefore, the proposed activity does not involve an adverse change to an element of a UFSAR described evaluation methodology, or use of an alternative evaluation methodology, that is used in establishing the design bases or used in the safety analyses.

0 YES

1 NO

4. Does the proposed Activity involve a test or experiment not described in the UFSAR, where an SSC is utilized or controlled in a manner that is outside the reference bounds of the design for that SSC or is inconsistent with analyses or descriptions in the UFSAR? (See Section 5.2.2.4 of the RM)

The proposed activity does involve a test of the AFW system buried section piping. However, the test is being implement IAW approved plant procedures. The portion of AFW system will be pressurized to 1315 PSIG. The system design pressure rating is 1950 PSIG. The test pressure is well below the system design pressure. Therefore, the proposed activity does not involve a test or experiment not described in the UFSAR, where an SSC is utilized or controlled in a manner that is outside the reference bounds of the design for that SSC or is inconsistent with analyses or descriptions in the UFSAR.

0 YES

1 NO

5. Does the proposed Activity require a change in the Technical Specifications or Operating License? (See Section 5.2.2.5 of the RM)

Technical Specification 3.7.1.2 Action b will be entered during the implementation of the system pressure test. This required action statement will be followed as written and no changes to the Technical Specifications are required as a result of this activity. Therefore, the proposed activity does not require a change in the Technical Specifications or Operating License.

0 YES

1 NO

II. List the documents (e.g., UFSAR, Technical Specifications, other licensing basis, technical, commitments, etc.) reviewed, including sections numbers where relevant information was found (if not identified in the response to each question).

UFSAR 10.4.7.2 - AUXILIARY FEEDWATER SYSTEM

UFSAR 3.9.4: INSERVICE TESTING PUMPS AND VALVES

UFSAR 15.2.8, LOSS OF NORMAL FEEDWATER

UFSAR 15.2.9, LOSS OF OFFSITE POWER TO STATION AUXILIARIES (LOP)

UFSAR 15.3.1, LOSS OF REACTOR COOLANT FROM SMALL RUPTURED PIPES (SBLOCA)

UFSAR 15.4.1, MAJOR REACTOR COOLANT SYSTEM PIPE RUPTURES (LBLOCA)
UFSAR 15.4.2, MAJOR SECONDARY SYSTEM PIPE RUPTURE (MSLB)
UFSAR 15.4.3, MAJOR RUPTURE OF MAIN FEEDWATER LINE (FWLB)
UFSAR 15.4.4, STEAM GENERATOR TUBE RUPTURE (SGTR)

Technical Specification 3.3.2.1 - ENGINEERED SAFETY FEATURES ACTUATION
SYSTEM INSTRUMENTATION

Technical Specification 3.3.3.7 - ACCIDENT MONITORING INSTRUMENTATION

Technical Specification 3.7.1.2 - AUXILIARY FEEDWATER SYSTEM

Technical Specification 3.7.1.3 - AUXILIARY FEED STORAGE TANK

ASME Section XI article IWA-5000

Procedure: ER-AA-330-001

Procedure: OU-AA-335-015

Procedure: SC.MD-GP.ZZ-0035

Drawing: 205336 REV 49

III. Select the appropriate conditions:

1 If all questions are answered NO, then complete the 50.59 Screening and implement the Activity per the applicable governing procedure.

0 If question 1, 2, 3, or 4 is answered YES and question 5 is answered NO, then a 50.59 Evaluation shall be performed.

0 If questions 1, 2, 3, and 4 are answered NO and question 5 is answered YES, then a License Amendment is required prior to implementation of the Activity.

0 If question 5 is answered YES for any portion of an Activity, then a License Amendment is required prior to implementation of that portion of the Activity. In addition, if question 1, 2, 3, or 4 is answered YES for the remaining portions of the Activity, then a 50.59 Evaluation shall be performed for the remaining portions of the Activity.

IV. Screening Signoffs:

50.59 Screener: Brian Syvertson / S. Bhardwaj Sign: 60089871 OP. Date
4/22/10

(Print name)

(Signature)

50.59 Reviewer: Michael Crawford Sign:
4/22/10

60089871 Op. Date

(Print name)

(Signature)

=====

Comment line:

Operation Key Info
09/21/2010



Order:	60089871	ASME SEC XI AUX Feed Water Pressure
Test		
Operation:	0160	Review 50.50 forms
Work center:	S-EDM03	NNUC
Status:		
Number of People:	0	
Scheduled Dates:	Start: 04/22/2010	Finish: 04/22/2010
Planned Hours:	0.0	
Actual Dates:	Start: 04/22/2010	Finish: 04/22/2010
Actual Hours:	0.000	

Description of Work:

Comment line:

Operation Key Info
09/21/2010



Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test
Operation: 0170 Prepare Technical Evaluation ASME Pressu
Work center: S-ED NNUC
Status:
Number of People: 1
Scheduled Dates: **Start:** 04/23/2010 **Finish:** 04/24/2010
Planned Hours: 16.0
Actual Dates: **Start:** 04/23/2010 **Finish:**04/24/2010
Actual Hours: 0.000

Description of Work:

Prepare Technical Evaluation ASME Pressure Test

*****Long Text Object Identification*****
Order 000060089871 Operation 0170 Long text

Comment line:

Operation Key Info
09/21/2010



Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0180 IDV Review Technical Evaluation

Work center: S-ED NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 04/23/2010 **Finish:** 04/24/2010

Planned Hours: 8.0

Actual Dates: **Start:** 04/23/2010 **Finish:** 04/24/2010

Actual Hours: 0.000

Description of Work:

Comment line:

Operation Key Info
09/21/2010



Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0190 SME Review Technical Evaluation

Work center: S-ED NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 04/24/2010 **Finish:** 04/24/2010

Planned Hours: 8.0

Actual Dates: **Start:** 04/24/2010 **Finish:** 04/24/2010

Actual Hours: 0.000

Description of Work:

Comment line:

Operation Key Info
09/21/2010



Order: 60089871 ASME SEC XI AUX Feed Water Pressure
Test

Operation: 0200 Approve Technical Evaluation

Work center: S-ED NNUC

Status:

Number of People: 1

Scheduled Dates: **Start:** 04/25/2010 **Finish:** 04/25/2010

Planned Hours: 4.0

Actual Dates: **Start:** 04/25/2010 **Finish:** 04/25/2010

Actual Hours: 0.000

Description of Work:

Comment line:
