

FARLEY NUCLEAR PLANT
ABNORMAL OPERATING PROCEDURE
FNP-0-AOP-31.0

LOSS OF SERVICE WATER POND

PROCEDURE USAGE REQUIREMENTS	SECTIONS
CONTINUOUS USE - Each step of the procedure is to be read prior to performing that step. Each step is to be performed in the sequence given. Where required, each step is to be signed off as complete before proceeding to the next step.	
REFERENCE USE - The procedure is to be referred to periodically to confirm that all required parts of a work activity have been performed. Where required, steps are to be signed off to show that procedure requirements have been met.	ALL
INFORMATION USE - An activity may be performed from memory, but the procedure should be available for use as needed and for training.	

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Approved:

Scott L. Lerner (for)
Manager-Operations

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Date Issued: 6-28-93

OPS/AOP-10
DOC. 18/10

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A. Purpose

This procedure provides actions for response to loss of the service water pond.

This procedure is applicable at all times.

B. Symptoms or Entry Conditions

- I. This procedure is entered when a loss of the service water pond is indicated by any of the following.
 - a. Actuation of Unit 1 SW POND LVL A TRN LO annunciator AG3 or SW POND LVL B TRN LO annunciator AH3 (184 ft 4 in)
 - b. Actuation of Unit 1 SW WET PIT LVL A TRN LO annunciator AG4 or SW WET PIT LVL B TRN LO annunciator AH4 (170 ft 0 in)

Step	Action/Expected Response	Response NOT Obtained
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	<p>NOTE:</p> <ul style="list-style-type: none">* All RW pumps will start at 184 ft 4 in.* RW TO POND A(B) TRN valves will close and RW EMERG SUPP TO SW WET PIT valves will open at 184 ft 0 in.* SW A(B) HDR EMERG RECIRC TO POND valves on both units will open, SW HDR NORMAL DISCH ISO A(B) TRN valves on both units will close, SW TO WET PIT EAST(WEST) HDR ISO valves will open and SW TO POND EAST(WEST) HDR ISO will partially close to divert approximately 50% of the SW recirculation flow to the wet pit at 180 ft 0 in.	
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1	Verify all available RW pumps started.	
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- * Verify all available Unit 1 RW pumps - STARTED.

RW PUMP

- ☐ #4
- ☐ #5
- ☐ #8
- ☐ #9
- ☐ #10

- * Verify all available Unit 2 RW pumps - STARTED.

RW PUMP

- ☐ #1
- ☐ #2
- ☐ #3
- ☐ #6
- ☐ #7

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Step	Action/Expected Response	Response NOT Obtained
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NOTE: Steps 2 and 3 are continuing action steps.

2 IF SW pond level less than
184 ft 4 in AND SW pond level
falling,
THEN align SW system for
recirculation.

2.1 Secure any liquid waste
release from either unit.

2.2 Open SW recirculation to
pond valves.

SW A(B) HDR EMERG

RECIRC TO POND

[] Q1P16V539

[] Q1P16V538

SW A(B) HDR EMERG

RECIRC TO POND

[] Q2P16V539

[] Q2P16V538

Step 2 continued on next page.

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Step	Action/Expected Response	Response NOT Obtained
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CAUTION: Step 2.3 will isolate flow to the SW dilution. No liquid waste releases are permitted.

NOTE: * Step 2.3 will isolate CW canal makeup and the water treatment plant clarifier.

* Steps 2.1 and 2.2 must be complete before step 2.3 is performed.

2.3 Close SW normal discharge valves.

SW HDR NORMAL
DISCH ISO A(B) TRN

[] Q1P16V546
[] Q1P16V545

SW HDR NORMAL
DISCH ISO A(B) TRN

[] Q2P16V546
[] Q2P16V545

NOTE: Technical Specification 3.7.6.2 details SW pond level LCO requirements.

3 IF SW pond level less than
184 ft 0 in,
THEN place both units in Mode 5
using FNP-1(2)-UOP-3.1, POWER
OPERATION, FNP-1(2)-UOP-2.1,
SHUTDOWN OF UNIT FROM MINIMUM LOAD
TO HOT STANDBY and FNP-1(2)-UOP-2.2,
SHUTDOWN OF UNIT FROM HOT STANDBY
TO COLD SHUTDOWN.

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Step	Action/Expected Response	Response NOT Obtained
4	<p>WHEN SW pond level less than 184 ft 0 in, THEN verify RW discharge aligned to SW wet pit.</p> <p>RW EMERG SUPP TO SW WET PIT</p> <p>[] QSP25V517 open [] QSP25V518 open</p> <p>RW TO POND A(B) TRN</p> <p>[] QSP25V514 closed [] QSP25V513 closed</p>	

CAUTION: To ensure adequate suction supply to the SW pumps, step 5 must be completed before SW pond level falls to 181 ft 10 in.

NOTE: SW pond level will fall to 181 ft 10 in within approximately 4 days following loss of makeup.

5 IF SW pond level falling due
to loss of RW AND SW pond dam
NOT failed,
THEN perform the following.

5.1 Dispatch personel to SWIS for
local breaker operations.

5.2 Verify SW TO POND EAST HDR
ISO QSP16V507 - OPEN.

5.3 WHEN SW TO POND EAST HDR ISO
QSP16V507 open,
THEN open BKR FK-A4.

5.4 Verify SW TO WET PIT EAST
HDR ISO QSP16V505 - CLOSED.

5.5 WHEN SW TO WET PIT EAST HDR
ISO QSP16V505 closed,
THEN open BKR FK-M5.

Step 5 continued on next page.

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Step	Action/Expected Response	Response NOT Obtained
5.6	Verify SW TO POND WEST HDR ISO QSP16V508 - OPEN.	
5.7	WHEN SW TO POND WEST HDR ISO QSP16V508 open, THEN open BKR FL-A4.	
5.8	Verify SW TO WET PIT WEST HDR ISO QSP16V506 - CLOSED.	
5.9	WHEN SW TO WET PIT WEST HDR ISO QSP16V506 closed, THEN open BKR FL-M5.	
5.10	Direct Maintenance to remove SW wet pit upper stoplogs.	
6	Monitor both units SW systems. * Check SW system pressure - GREATER THAN 60 psig. * Check SW pond level - GREATER THAN 180 ft 0 in.	6 Perform FNP-1(2)-AOP-10.0, LOSS OF A OR B TRAIN SERVICE WATER in conjunction with this procedure.
7	Maintain SW pond level greater than 184 ft 0 in.	
7.1	Check RW system - AVAILABLE.	7.1 Consult Operations Manager to evaluate temporary means of makeup to SW pond.
7.2	Check RW flow - GREATER THAN OR EQUAL TO SW FLOW.	7.2 Consult Operations Manager to evaluate isolating SW loads to reduce SW flow.
8	Check SW pond restored. * Check RW supply - ADEQUATE. * Check SW pond level - GREATER THAN 185 ft 0 in. * Check SW pond level - STABLE OR RISING.	8 Return to step 1.

Page Completed

Step	Action/Expected Response	Response NOT Obtained
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9	Restore both units SW systems to normal operation using FNP-1(2)-SOP-24.0, SERVICE WATER SYSTEM.	
10	Go to procedure and step in effect.	

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