

INSTALLATION WORK PLAN

PBNP MINOR PROCEDURE ☐Check As
ApplicableMAINTENANCE WORK REQUEST WORK PLAN ☒FOR MODIFICATION# 92-008*QMWR# 9701182

INSTALLATION WORK PLAN TITLE

Brine Tank Standpipe ModificationUNIT 0☐ QA-SCOPE☒ NON QA-SCOPE

Originator _____

Date 1/31/97

Reviewer _____

Date 31 JAN 97

Final Design

Group Head _____

Date 1/31/97Quality Engineer N/A

Date _____

Installation

Group Head _____

Date 2-3-97

Manager -

Operations or DSS _____

Date 1/31/97

NOTE: Changes to this work plan must be done with the concurrence of the responsible or team engineer and the installation supervisor, or as delineated within the IWP.

DG-G02.5
Revision 0

WG WORK PLAN

Brine Tank T-118 Standpipe Modification
Originator: Elizabeth Hellman

IWP 92-008*Q-02
Non-QA
January 31, 1997

1. SCOPE

- 1.1 This work plan directs the modification of the standpipe in the Water Treatment System brine tank (T-118). The modification consists of cutting a hole in the wall of the standpipe and attaching a U-shaped plastic or fiberglass tube to the outside surface of the standpipe.
- 1.2 The purpose of this modification is to improve the ability of the brine tank high-high level switch (LE-9212) to prevent brine from overflowing the tank.
- 1.3 The approach is to improve the accuracy with which the standpipe level reflects the bulk tank level during filling of the brine tank by facilitating level equalization between the bulk tank and the standpipe. The reason for installing a U-shaped tube instead of simply drilling a hole in the standpipe is to minimize salt entry into the standpipe. The tube is designed to contain liquid (brine or water) to act as a trap to prevent salt from entering the standpipe and coating the level switch.
- 1.4 This work is Non-QA Scope.
- 1.5 Support Requirements
 - 1.5.1 Operations: Perform equipment isolation, install and remove Danger Tags, and support installation and testing of the modification.
 - 1.5.2 Contemporary Products Incorporated (CPI, contractor): Install the modification.
 - 1.5.3 I&C: Support installation and testing of the modification.
 - 1.5.4 MTN-M: Support installation and testing of the modification.

2. PRE-INSTALLATION REQUIREMENTS

- 2.1 References:
 - 2.1.1 Sketch SK-92-008*Q-04 Sheets 1, 2, and 3
 - 2.1.2 Permanent Drawings:
 - A. Bechtel M-210 Sheet 3

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- B. Gaco 41D Sheet 2
- C. Plstki SK-Model

Responsible engineer has assured that all references listed above are approved and are either with the installation group or attached and assigned to the installation group.

R.E. 8 Date 2/3/97

2.1.3 Supplemental Procedures

- A. NP 1.9.4 "Confined Spaces Procedure"
- 3. NP 8.4.10 "Exclusion of Foreign Material from Plant Components and Systems"

2.2 Installation Preparation Activities:

- 2.2.1 The materials needed for this modification are to be supplied by the contractor, Contemporary Products Incorporated, with the exception of those listed in step 2.2.2.
- 2.2.2 PBNP is to supply a ladder, FME plug and other FME materials, and (if needed) a 1/2" SS Swagelok cap (lot # 901-3709).
- 2.2.3 No new champs identification numbers are required for this installation.

2.3 Identification Of Permits Required

- 2.3.1 The work order (WO) for this work plan has been written and submitted to champs. The WO number is 9701182.

R.E.

Note: This analysis/permit shall be obtained prior to tank entry.

- 2.3.2 If necessary, a Confined Space Entry Permit has been obtained. (The permit is necessary if entry into the brine tank is required for installation of the modification.)

R.E. / MIN

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2.4 Pre-Installation Prerequisites:

- 2.4.1 A pre-installation discussion with the installation group representative, the testing group representative and the acceptance group representative has been performed.

R.E. _____ Date 2/3/97

- 2.4.2 A field walkdown has been performed, if necessary, to verify that all aspects of the procedure may be performed as intended.

Installation Supervisor (I.S.) ✓ _____ Date 2/3/97

2.5 PreInstallation Work

Note: The next two steps may be signed off anytime prior to step 3.1.8 of this work plan.

- 2.5.1 Maintenance has pre-fabricated debris "trap" for catching debris and other materials during U-tube installation on brine tank standpipe.

N/A (will fabricate in field) 2.
R.E. or MTN

- 2.5.2 Contractor has pre-fabricated plastic/fiberglass U-tube.

R.E. _____

2.6 Operational Installation Prerequisites:

2.6.1 Plant Conditions:

The installation of the U-tube is expected to take one shift; however, the material used to join the U-tube to the standpipe requires four days to cure. Testing will also require one additional shift following the curing period. The plant conditions required to support this installation are as follows:

- A. Salt shall *not* be delivered to the brine tank until after the completion of the installation, curing, and testing phases.
- B. Prior to installation, the salt level in the brine tank shall be as low as possible.

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C. The liquid level should also be maintained as low as possible to minimize the quantity that must be drained from the tank.

D. During the installation, curing, and testing periods (approximately six days total), Operations will not be able to perform any organic trap regenerations. Therefore, the organic trap resin should be freshly regenerated prior to beginning the installation.

2.6.2 Prepare the following Danger Tags for the items listed below. Do not hang the tags until instructed to do so in the installation section.

A. Breakers B52-712B and B52-712D Off
(Power for P-85A and P-85B)

B. Valve DI-68 Shut
(DI water supply to brine tank)

C. Valve DI-69 Shut
(DI water supply to brine tank sprays)

D. Sliders TB3-47 and TB3-48 in C-211 Open
(Power to LE-9212)

E. Valve IA-1460 (Bubbler system) Shut
IA isolation)

2.6.3

Release For Installation

2/5/97
F. Valves WT-250A and WT-250B
(Discharge valves for brine pumps P-85A & P-85B) Shut
All of the above operational installation prerequisites have been met and it is acceptable to proceed with the installation.

DSS _____ Date 2/5/97 Time 1339

Note: Steps 2.5.1 and 2.5.2 do not have to be completed at this time, but they must be completed prior to step 3.1.8 of this work plan.

~~2.7~~
~~2.6.4~~

All other installation prerequisites have been met.

R.E. _____ Date 2/3/97

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3. INSTALLATION

3.1 Installation Description:

Note 1: The following is a detailed step-by-step listing of the actions necessary to perform this IWP. These steps can be completed in any logical order, as long as all necessary equipment isolation tags are hung at the appropriate times. If any of the steps cannot be completed as written or a change is necessary to complete the task, work must stop and the situation must be discussed with the responsible engineer or the installation supervisor.

Note 2: Foreign material exclusion (FME) work practices are in effect during the performance of this procedure. Check all tools and equipment for loose parts and dirt. Cover all openings when the system or component is open. Perform visual inspections for foreign material prior to assembling the system or components when access will be limited.

Note 3: Notify Terry Slack and/or Dennis Evers before draining T-118. (Brine sump pump discharge goes to STP.)

3.1.1 Drain tank T-118 by opening valve V/T-252 "T-118 Brine Tank Drain" until liquid level is about one foot above top of gravel (about two feet above bottom of tank). ~~there is no liquid level in the tank.~~ *or by using portat pump to pump brine to waste well*

OPS

3.1.2 Danger Tag breakers B52-712B and B52-712D into the OFF position to isolate power to brine pumps P-~~85~~A/B.

OPS

3.1.3.a Danger Tag open the following sliders to isolate power to high-high level switch LE-9212:

TB3-47 and TB3-48 located in C-211.

OPS

3.1.3.b Danger tag shut bubbler system valve IA-1460. *IA isolation*

3.1.3.c Danger tag shut valves DI-68, DI-69, WT-250A and WT-250B.

OPS

WCS

CPS

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- 3.1.4 ^{2/5/97} Verify circuit for LE-9212 is de-energized, then
Using wire removal form, disconnect wiring from level switch LE-9212. Then, ^{4/13/97} remove level switch from flange and store in safe place until re-installation per this IWP. Clean level switch probe with water if coated with salt.
Storage location: _____

Note: Before removing the flange, the stainless steel tubing from the bubbler system and the brine pump seal flush discharge may need to be disconnected. Make sure that the seal flush discharge tube can be re-connected following testing. Additionally, the bubbler tube (1" dia.) will need to be un-coupled during removal.

- ^(Revised 2/13/97 by) 3.1.5 Unbolt and remove flange from top of brine tank standpipe. Store flange and attachments in a safe place until re-installation per this IWP. Clean level switch probe if coated with salt (use water). Make sure that PVC level probe is protected during storage. M.

- ^(Revised 2/13/97 by) 3.1.6 Insert plug in standpipe below level of existing hole in standpipe wall so that top of plug is at least 26" below top of standpipe. MIN

- 3.1.7 If disconnected, cap stainless steel line from bubbler level control system. MIN

Note: Verify that steps 2.5.1 and 2.5.2 of this work plan have been completed prior to performing step 3.1.8.

- 3.1.8 Open manway on top of brine tank and insert ladder. OPS or CPI

- 3.1.9 Install temporary debris "trap" in brine tank. MIN or I 2/5/97

Note: Utilize good FME practices while drilling holes and installing U-tube, such as taping pockets and using lanyards for tools.

- 3.1.10 Per Sketch SK-92-008*Q-04, drill new hole or modify existing vent hole in wall of standpipe to accept new U-shaped tube. CPI

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- 3.1.11 If existing vent hole was modified in step 3.1.10, drill new 1/4" diameter vent hole in wall of standpipe as indicated by Sketch SK-92-008*Q-04.

N/A
CPI

- 3.1.12 Install U-shaped tube in brine tank. Orientation shall be as indicated on Sketch SK-92-008*Q-04.

CPI

- 3.1.13 Remove temporary debris "trap" ^{and pipe plug} from brine tank. ^{4/31/97} _{2/5/97}

OK CPI 2/5/97

- 3.1.14 FME Closeout: Check to make sure debris is cleaned up around location of work. Verify all tools and foreign materials have been removed from work area.

MTN

CPI

- 3.1.15 Close manway and cover standpipe.

OPS or MTN

- 3.1.16 Allow installation to cure at room temperature for four days or as recommended by CPI. (Note CPI's recommendations below.)

> 24 hrs.

REDAK E
OPS or R I

3.2 As-Built Description

This IWP was installed by: _____ Date 2/5/97

The installation was performed in accordance with this IWP and Sketch SK-92-008*Q-04.

Attach any additional documentation for the as-built description to this IWP.

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IWP 92-008*Q-02
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3.3 The installation of this IWP is complete.

R.E.

Date

2/5/97

I.S.

Date

2/10/97

4. TESTING

4.1 Testing Prerequisites:

The intent of the testing is as follows:

- A. To verify that the newly installed U-tube functions as expected, and
- B. To verify that the ultrasonic level switch is set up properly.

2-12-97

4.2 Level Equalization Testing

EAH
2/5/97

4.2.1 Remove pipe plug after vacuuming debris off of it.

MTN

4.2.2 Remove danger tag for DI-69, open DI-69, and begin filling brine tank with water. Monitor both bulk tank and standpipe levels during fill process and, if possible, note (below) any difference between the two levels.

3" difference w/ ~2 1/2' liquid in tank

8" difference w/ ~5 1/2' liquid in tank

12" difference w/ ~8 1/2' liquid in tank

15" difference w/ ~10' liquid in tank

Ops for Ops.

4.2.3 When liquid level is even with the uppermost horizontal surface of the U-tube, begin timing how long it takes for the standpipe level to reach the bulk tank level. Continue filling tank with water until liquid level is at least 2" above uppermost horizontal surface of U-tube (but not high enough to cause tank to overflow).

Verify that level in standpipe reaches bulk tank level within one minute. Record how long it takes for levels to equalize.

Level equalized before tank reached top horizontal surface of U-tube

OPS or R.E.

4.3 Ultrasonic Level Switch Testing

4.3.1 Mount level switch LE-9212 on brine tank standpipe flange. Place flange on standpipe but do not bolt flange to standpipe.

I&C

4.3.2 Re-connect wiring to LE-9212 per wire removal form generated in step 3.2.4

I&C

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- 4.3.3 Remove Danger Tags and close following sliders to provide power to LE-9212:
TB3-47 and TB3-48 located in C211.

OPS

Note: In the following step, Switch SW1 on LE-9212 will be depressed to actuate a test of the functionality of the ultrasonic switch.

- 4.3.4 Depress the Test button SW1 on LE-9212 and verify that the Green Led light powers on and Red Led light powers off.

I&C

- 4.3.5 Verify that WT-9211-S is in auto (not in manual override).

~~switch position~~ auto = east
manual = west

OPS

- 4.3.6 Inform Control Room that testing of the brine tank high-high level switch is about to begin which will bring in an alarm on Pretreatment Control Panel C-110.

OPS or R.E.

- 4.3.7 Open valve DI-69 (Brine Tank Spray Supply).

OPS

Note 1: OPS should be prepared to shut valve DI-69 if the newly installed solenoid valve WT-9211-S does not shut when expected in the following step.

Note 2: The next two steps may be accomplished by keeping LE-9212 mounted on the flange and having one person hold the flange above the standpipe while another person handles the container of water.

- 4.3.8 I&C: Dip the probe on the ultrasonic level switch slowly into a container of water so that the gap is submerged.
OPS: Verify that valve WT-9211-S shuts when the ultrasonic level switch gap is submerged.

OPS

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- 4.3.9 I&C: Slowly take the ultrasonic level switch probe out of the water.
OPS: Verify that valve WT-9211-S opens when the ultrasonic level switch probe is taken out of the water.
OPS
- 4.3.10 Shut valve DI-69.
OPS
- 4.3.11 Inform Control Room that testing of the brine tank high-high level switch has been completed and all further alarms on Pretreatment Control Panel C-210 should be regarded.
OPS or R.E.
- 4.3.12 Perform FME closeout inspection for standpipe.
MTN
- *CAUTION* DO NOT OVERTIGHTEN THE FLANGE BOLTS. OVERTIGHTENING THE BOLTS MAY DAMAGE THE FIBERGLASS STANDPIPE.**
- 4.3.13 Bolt flange back onto top of standpipe and reconnect tubing for brine pump seal flush discharge. (Bubbler tube does not need to be re-coupled. Air supply line to bubbler tube does not need to be re-connected.)
MTN
- (Revised 2/3/97 by

4.4 Testing Results:

- 4.4.1 The testing of the installation has been completed and the results are described below:
Standpipe V-tube and CE-9212 both operate as expected. Testing was completed satisfactorily.
- 4.4.2 The testing is completed and adequately tests the modification and the associated installation:

Testing Supervisor E
R.E.

Date 2/28/97
Date 2/28/97

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January 31, 1997

5.0 Restoration:

5.1 Pre-Acceptance:

Prior to acceptance, all ECRs shall have final approvals and all applicable control room and work control center drawings shall be updated.

All items that need to be completed prior to acceptance have been completed.

R.E. _____ Date 2/28/97

5.2 System Restoration:

Note 1: ^{Any that 2/2/97} Danger Tags remain hung on breakers B52-712B and B52-712D, valve DI-68, ~~and valve DI-69~~ and can be removed at the discretion of the DSS.

2/5/97 Note 2: The salt level in T-118 is low and the liquid level is high. Salt may need to be ordered soon. Before salt can be delivered to the tank, the liquid level will probably need to be lowered. 2/14/97

Realign system as required for normal operations/per DSS. System ready for release.

DSS _____ Date 2/28/97 Time 1118

6.0 Restoration:

6.1 Conditional Acceptance N/A 2/28/97

6.1.1 The following items cannot be accepted and require resolution of the listed conditions. Interim operating conditions are also listed below (attach additional documentation as necessary).

6.1.2 Concurrence with Conditional Acceptance

Mgr of Acceptance Group/DSS _____ Date _____

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January 31, 1997

6.2 Final Acceptance

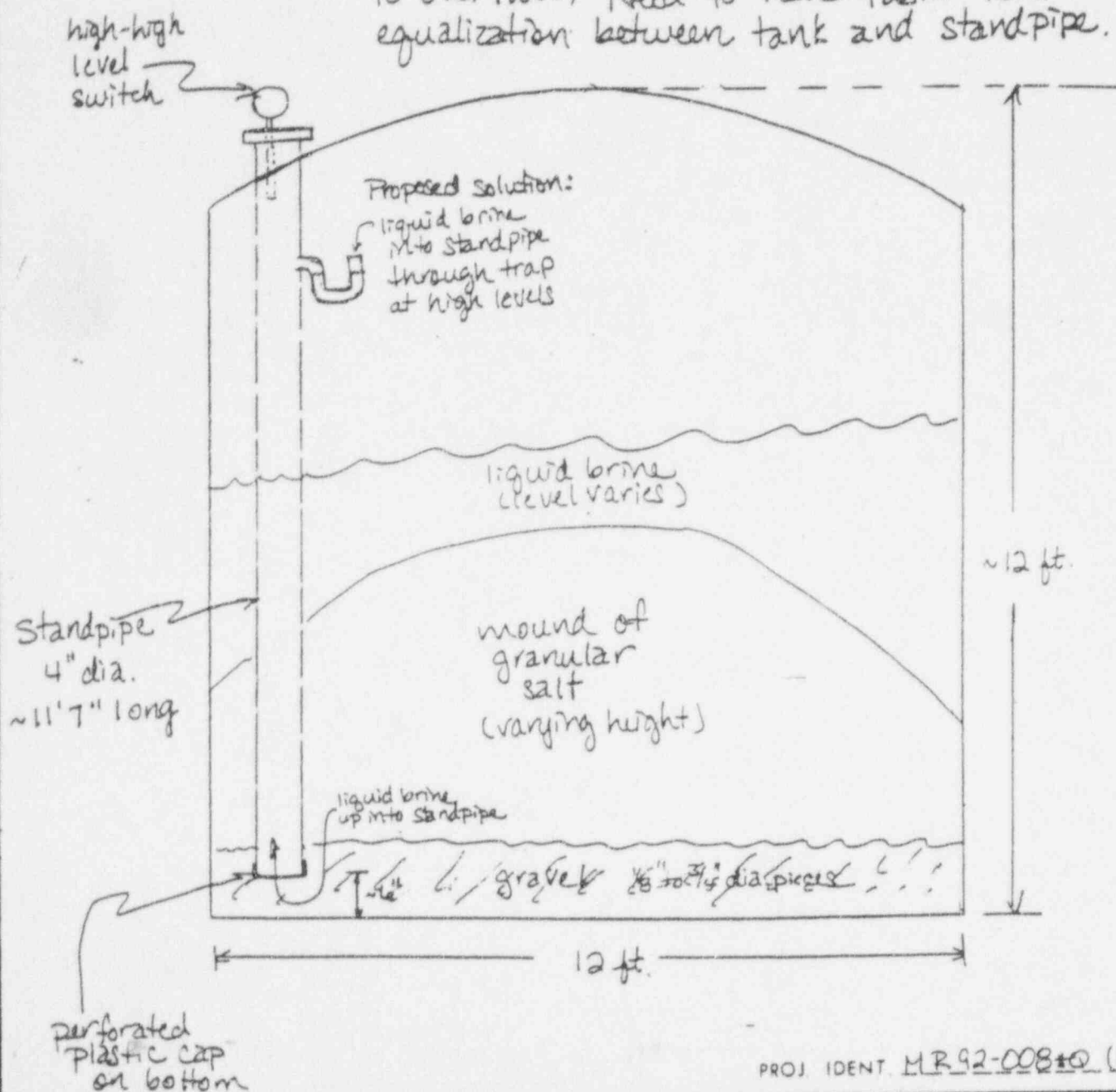
Realign system as required for normal operations/per DSS. System ready for release.

Mgr of Acceptance Group/DSS ____ Date 2/28/97

**RETURN THE COMPLETED IWP AND MODIFICATION REQUEST TO
RESPONSIBLE ENGINEER.**

A

Problems: Liquid level in Standpipe does not rise as quickly as liquid level in rest of tank, which may cause tank to overflow. Need to have faster level equalization between tank and standpipe.



PROJ. IDENT. MR-92-008*Q (Non-QA)

MICROFORM NO

TITLE



Wisconsin
Electric

SK-92-008*Q-04 Sh. 1 of 3
Brine Tank Standpipe
Modification

DRAWN DATE APPVD. DATE

CHECKED APPVD.

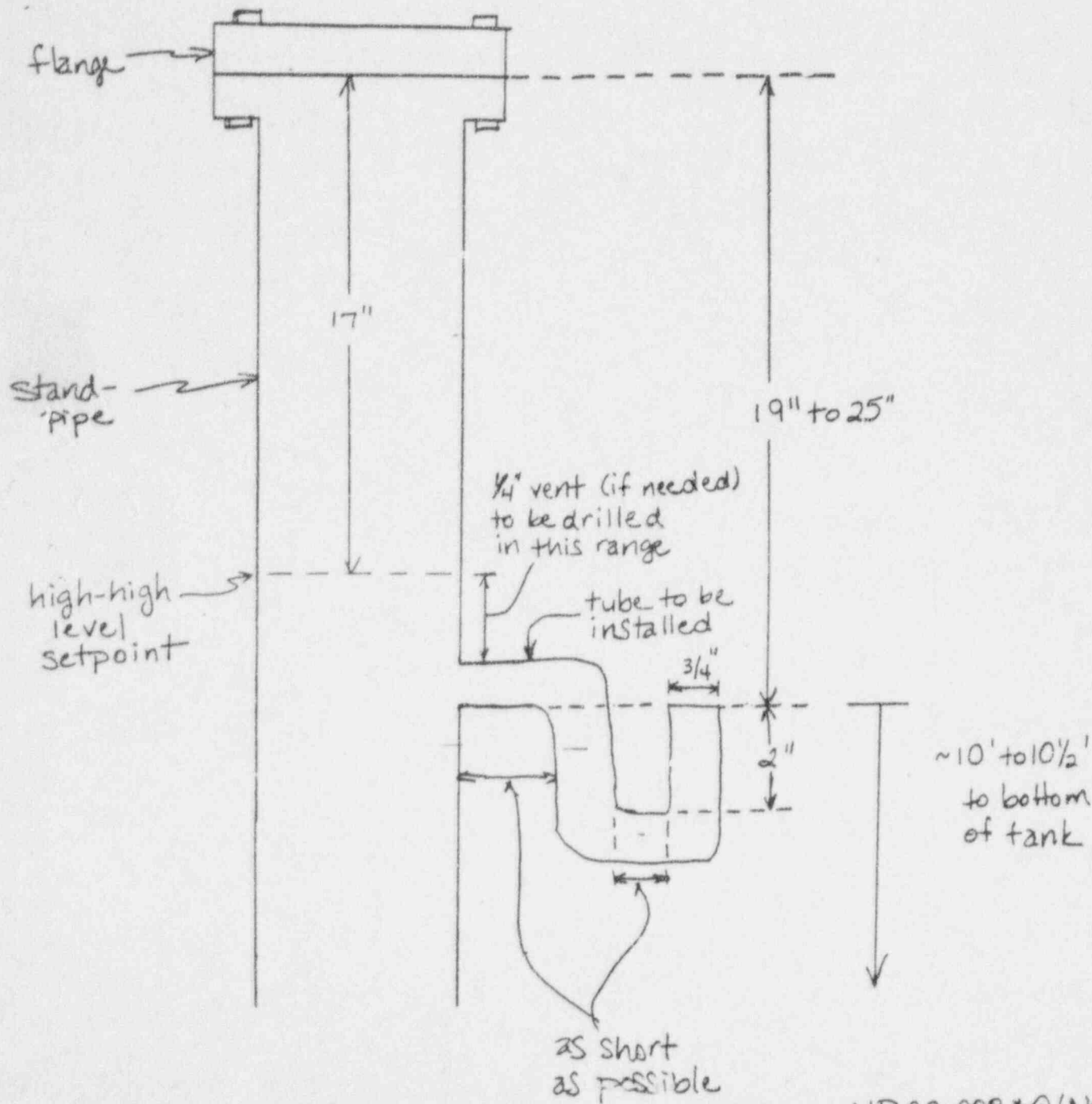
DRAFTG. APPVD.

A

SCALE

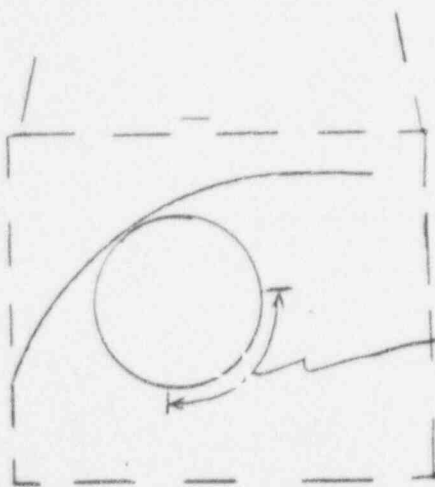
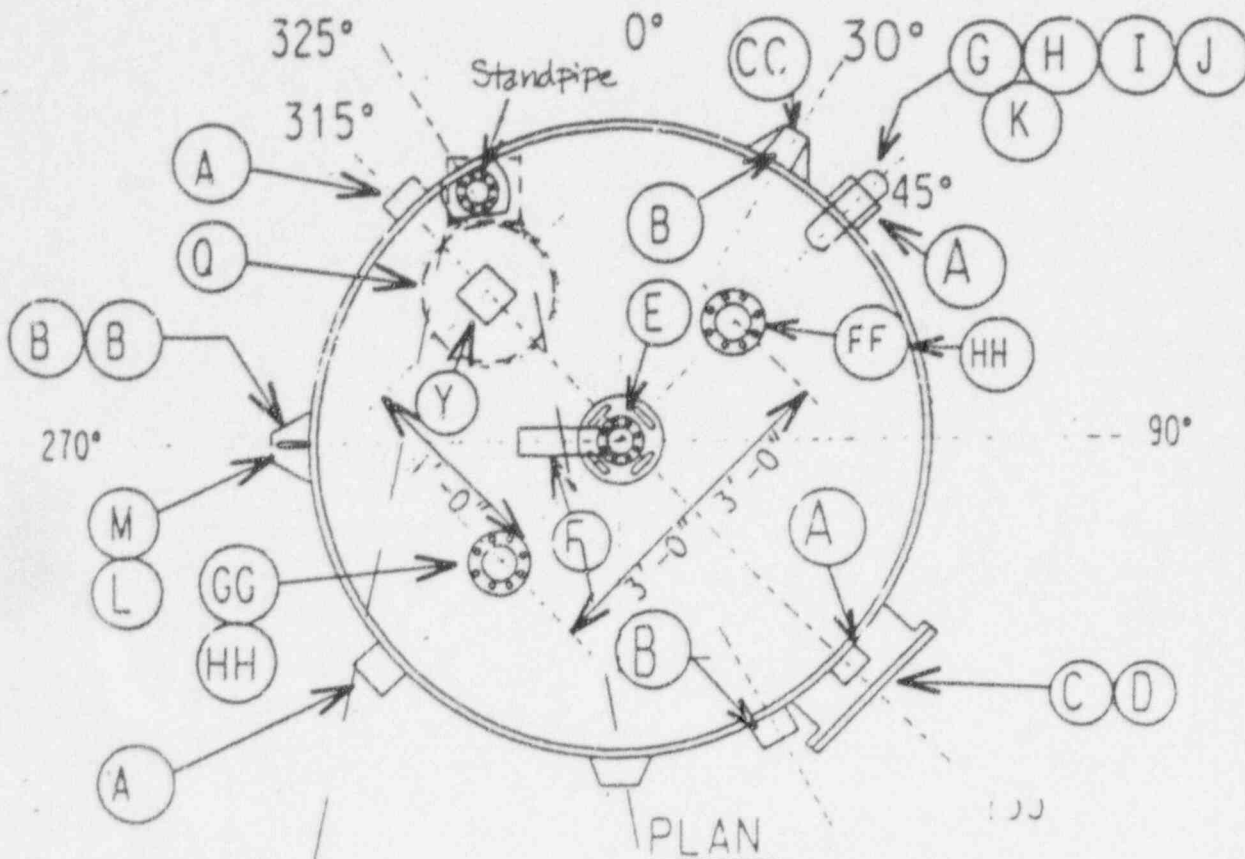
RELEASE DATE

A




PROJ. IDENT. MR 92-008*Q (Non-QA)

MICROFORM NO			TITLE	
			SK-92-008*Q-04 Sh. 2 of 3 rine Tank Standpipe Modification	
DRAWN EAW:1	DATE 4/8/97	APPROVD. 	DATE -	A
CHECKED		APPROVD.		
DRAFTG.		APPROVD.		
		SCALE	RELEASE DATE	



Position U-tube
and vent (if needed)
in this range.

PROJ. IDENT. MR 92-008*Q (Non-QA)

MICROFORM NO		 Wisconsin Electric		TITLE	
				SK-92-008*Q-04 sh. 3 of 3 Brine Tank Standpipe Modification	
DRAWN EAH	DATE 11/31/97	APPRVD.	DATE		
CHECKED		APPRVD.			
DRAFTG.		APPRVD.			
SCALE A				RELEASE DATE	

**NUCLEAR POWER BUSINESS UNIT
ENGINEERING CHANGE REQUEST**

ECR# 97-0008		Sheet 1 of 3 + sketch (3 sheets)
Project Manager: Elizabeth Hellman	Mod#/Affected Document #: MR 92-008*Q	<input type="checkbox"/> QA <input checked="" type="checkbox"/> Non-QA
Reference Documents: IWP 92-008*Q		
<p>Problem Description and Proposed Changes:</p> <p>MR 92-008*Q was initiated in part to provide a means of overflow protection independent of the normal level control system for the Water Treatment System Brine Tank, T-118. The installation of an ultrasonic, gap sensor-type level switch in the brine tank standpipe and a high-high level alarm provided the independent overflow protection. However, questions remain as to how accurately the level in the standpipe reflects the level in the bulk of the tank. Thus, the ability of the high-high level switch to prevent brine from overflowing the tank is questionable.</p> <p>The proposed change is to implement some means of improving the accuracy with which the standpipe level reflects the bulk tank level.</p> <p>Preliminary Approval By/Date: N/A</p> <p>Resolution: (see attached sheets.)</p>		
Documentation Updates Required: (specs, procedures, drawings, etc.) DUC	10 CFR 50.59 and 72.48 Evaluations Required: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Drawing Plstki SK-Model Perm. Draw.	Design Verification Required: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Initiation By/Date: 1/16/97	Additional Reviews By/Date: Technical Re	
Resolution By/Date: 1/29/97		
Project Manager Review By/Date: 1/29/97		
Group Head Approval By/Date: 1/31/97	Implementation Completed By/Date:	

Design Documentation
MR 92-008*Q/ECR 97-0008
Brine Tank Standpipe Modification

ECR 97-0008 Resolution:

In order to improve the accuracy with which the standpipe level reflects the bulk tank level, the brine tank standpipe will be modified to facilitate brine transfer from the bulk of the brine tank to the standpipe. This modification involves cutting a hole out of the wall of the standpipe and attaching a U-shaped tube to the outer wall of the standpipe at the location of the hole. The U-tube will contain water or brine at all times to trap and dissolve salt before it can enter the standpipe and coat the high-high level switch probe.

The U-tube will be fabricated (by a contractor) from fiberglass or plastic so that the tube will withstand corrosion and will be capable of bonding to the fiberglass standpipe. The diameter of the tube will be 3/4-inch nominal per Calculation # 97-0031. The dimensions of the tube will be as shown on Sketch SK-92-008*Q-04. The dimensions of the tube are based on the following criteria:

- The horizontal dimensions of the tube should be as small as possible to prevent the tube from becoming "weighted down" and to minimize its chances of getting in the way of any maintenance activities inside the tank.
- The vertical dimension of 2 inches was chosen to keep the tube small and unobtrusive and yet allow liquid to be maintained in the tube.

The hole and U-tube should be located low enough on the standpipe to ensure that level equalization occurs in time for the high-high level switch (LE-9212) to prevent overflow yet high enough so as to minimize the exposure to the salt mound. To ensure that the U-tube remains filled with liquid, the tube should be placed within the range of the de-ionized water spray in the tank. Since the high-high level setpoint is located 17 inches below the flange on the standpipe (which equates to about 2 inches below the straight side of the tank), the hole should be drilled at least 2 inches below the setpoint for an extra margin of safety. (During a salt delivery to the brine tank, the liquid level in the tank takes at least one minute to rise 2 inches. Based on Calculation # 97-0031, an 18-inch level difference can be made up within about ^{100s?} 2 seconds.) The hole may need to be lower depending on the spray water coverage. Therefore, the hole should be located 19 to 25 inches below the flange on standpipe (or 10 to 10.5 feet above the floor of the tank). If the existing vent hole in the side of the standpipe is in that range, it should be enlarged to accommodate the attachment of the U-tube and a new, smaller vent hole of approximately 1/4 inch in diameter shall be drilled in the standpipe wall as indicated on Sketch SK-92-008*Q-04.

The U-tube will be provided and installed by Contemporary Products Incorporated of Milwaukee. The installation is expected to take one day, and a curing time of about 4 days will be required following attachment of the U-tube to the standpipe.

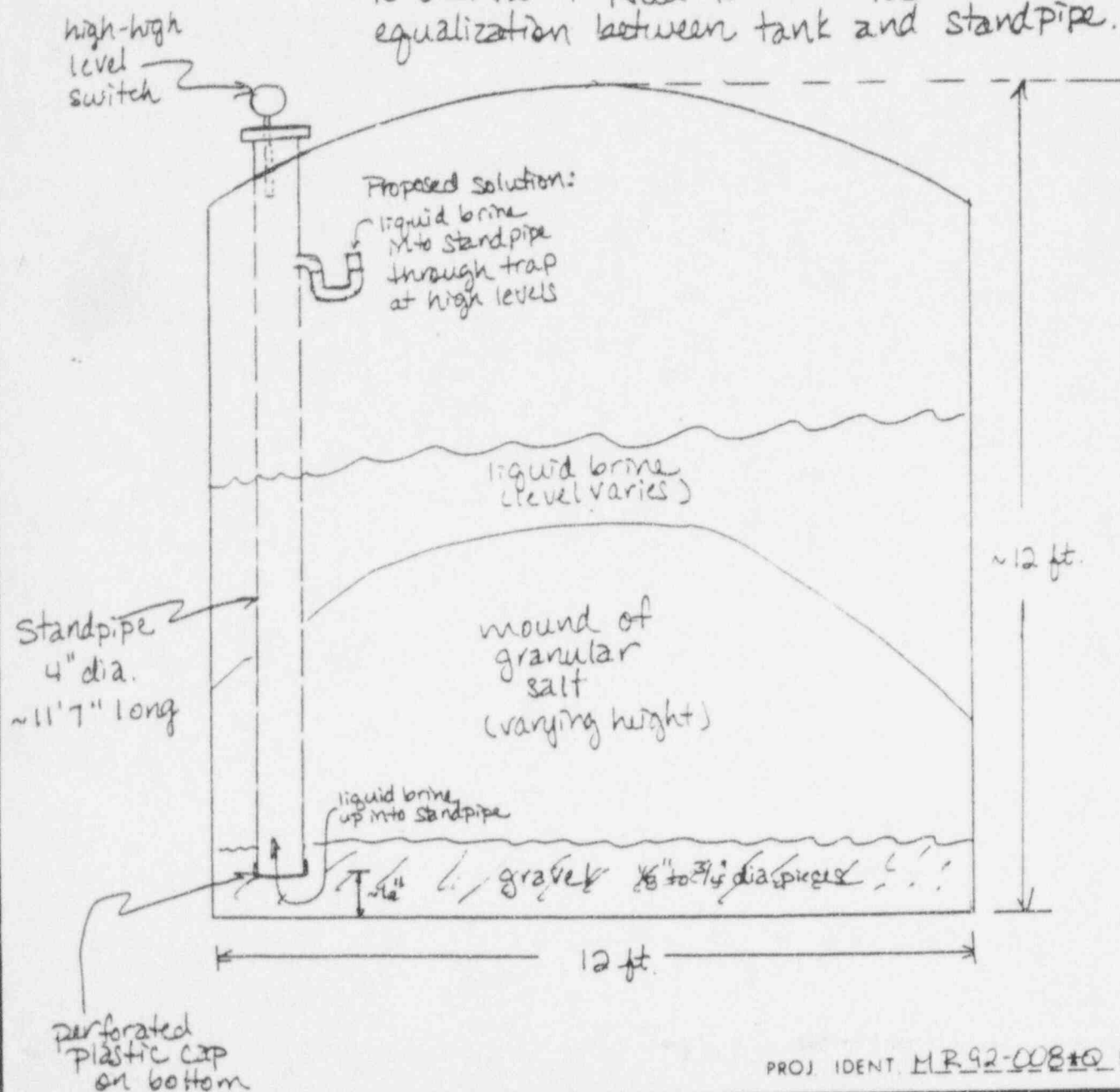
Additional References:

Sketch SK-92-008*Q-04


Permanent Drawing Plstki SK-Model

Calculation # 97-0031

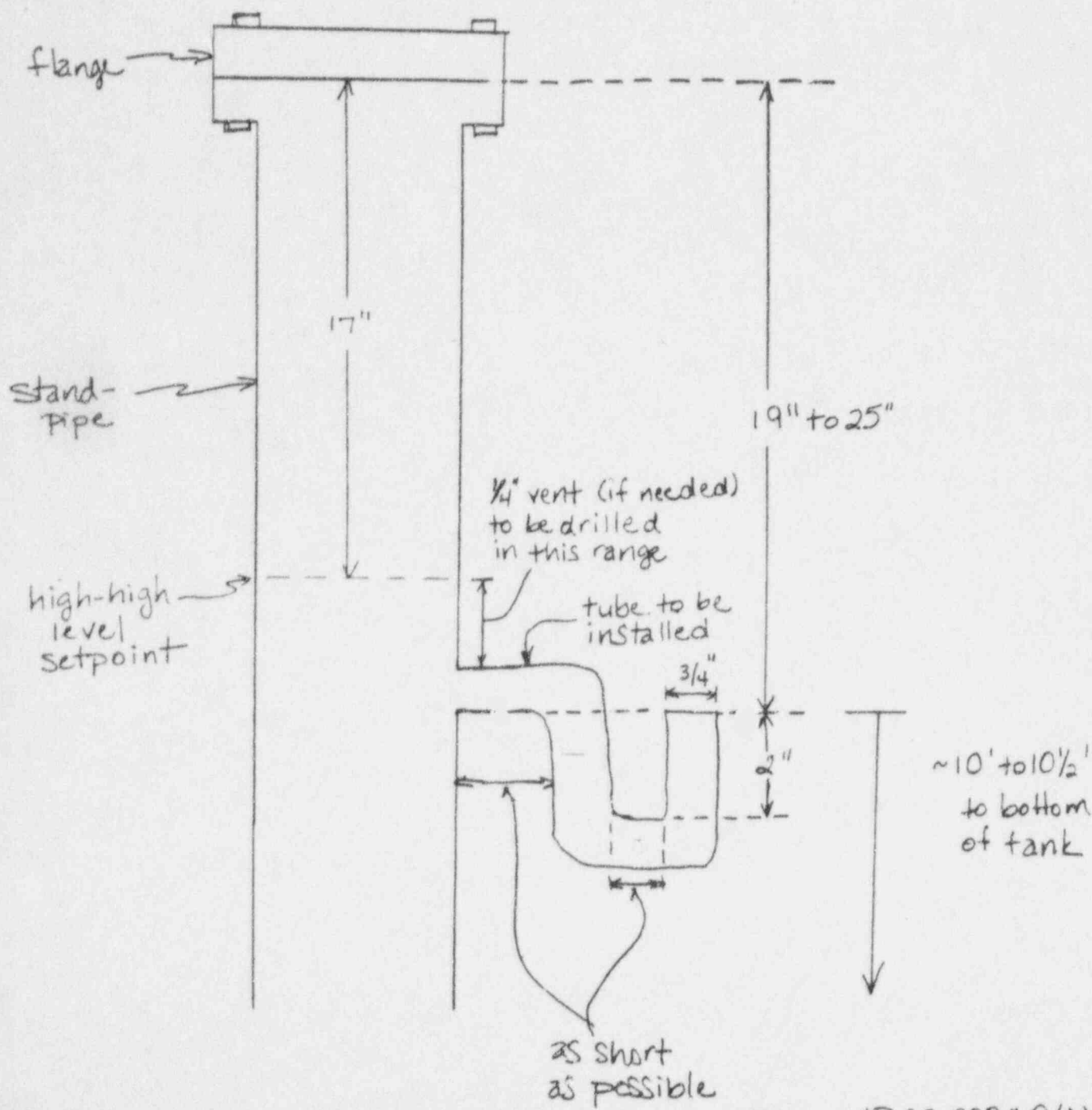
Problems: Liquid level in Standpipe does not rise as quickly as liquid level in rest of tank, which may cause tank to overflow. Need to have faster level equalization between tank and standpipe.





PROJ. IDENT. MR-92-008*Q (Noni-QA)

MICROFORM NO			TITLE	
			SK-92-008*Q-04 SH. 1 of 3 Brine Tank Standpipe Modification	
DRAWN	DATE	APPRVD	DATE	<div style="text-align: center; font-size: 2em; font-weight: bold;">A</div>
CHECKED		APPRVD		
DRAFTG.		APPRVD		
		SCALE		RELEASE DATE

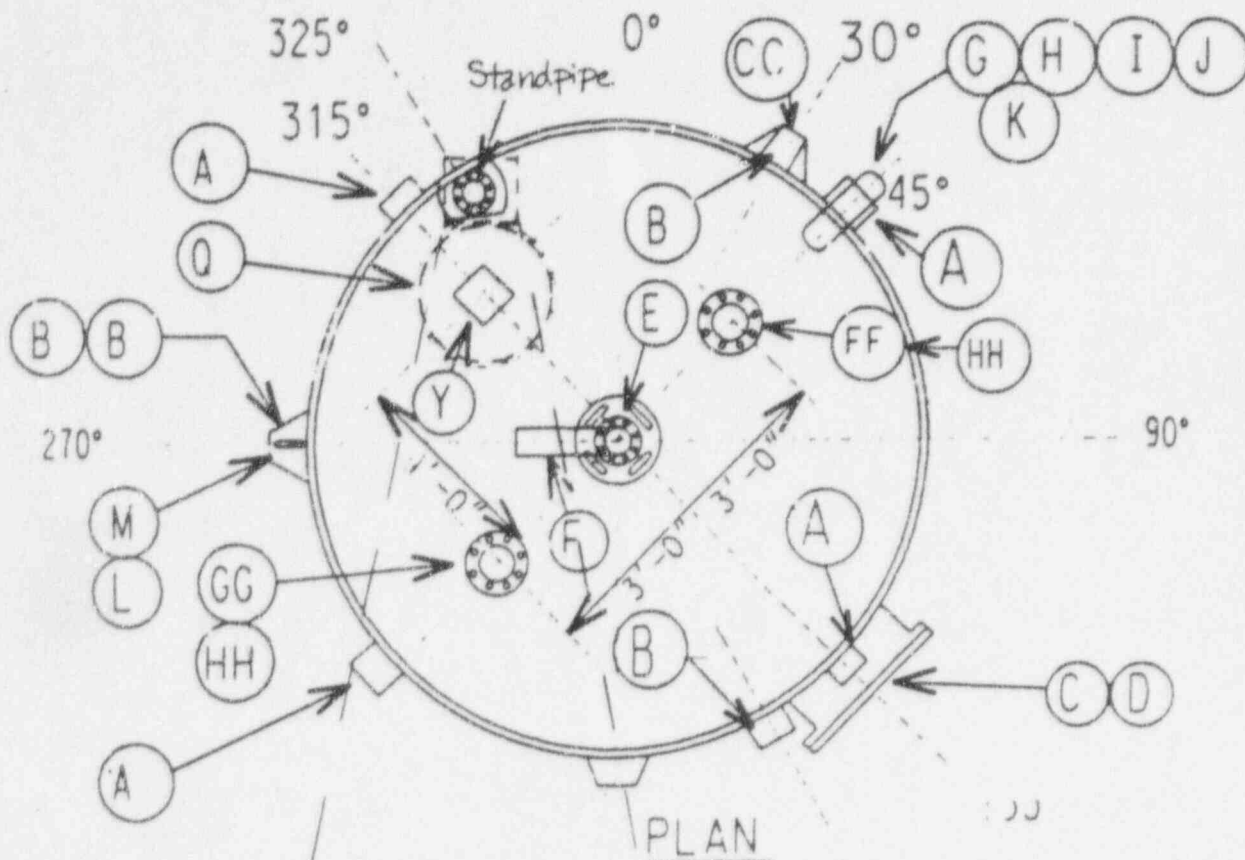
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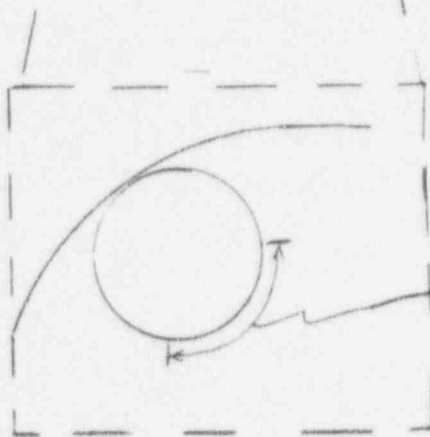
PROJ IDENT. 1R 92-008 * G (Non-9A)

MICROFORM NO		 Wisconsin Electric	TITLE	
			SK-92-008 * G-04 Sh. 2 of 3 Brine Tank Standpipe Modification	
DRAWN EAT/1	DATE 4/3/97	APPRVD. 	DATE	<p>A</p> <p>SCALE</p> <p>RELEASE DATE</p>
CHECKED		APPRVD.		
DRAFTG.		APPRVD.		

A



N
↑



Position U-tube
and vent (if needed)
in this range.

PROJ. IDENT. MR 92-008*Q (Non-QA)

MICROFORM NO



TITLE

SK-92-008*Q-04 sh. 3 of 3
Brine Tank Standpipe
Modification

DRAWN E.A.H.	DATE 1/31/97	APPRVD.	DATE
CHECKED		APPRVD.	
DRAFTG.		APPRVD.	

A

SCALE

RELEASE DATE

DESIGN VERIFICATION NOTICE

Title of Document Brine Tank Standpipe Modification
 Document No. ECR 97-0008 / MR 92-00840 Rev. 0 Date 1/29/97
 Design Verification Method: ☒ Design Review ☐ Alternate Calcs ☐ Qualification Testing

REVIEWER CHECKLIST CONSIDERATIONS:

	Yes	No	N/A
1. Were the inputs correctly selected and incorporated into design?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are assumptions necessary to perform the design activity adequately described and reasonable? Where necessary, are the assumptions identified for subsequent reverifications when the detailed design activities are completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are the appropriate quality and quality assurance requirements specified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are the applicable codes, standards, and regulatory requirements including issue and addends properly identified and are their requirements for design met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have applicable construction and operating experience been considered?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Have the design interface requirements been satisfied?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Was an appropriate design method used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is the output reasonable compared to inputs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are the specified parts, equipment and processes suitable for the required application?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are the specified materials compatible with each other and the design environmental conditions to which the material will be exposed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Have adequate maintenance features and requirements been specified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Are accessibility and other design provisions adequate for performance of needed maintenance and repair?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Has adequate accessibility been provided to perform the in-service inspection expected to be required during the plant life?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Has the design properly considered radiation exposure to the public and plant personnel?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15. Are the acceptance criteria incorporated in the design documents sufficient to allow verification that design requirements have been satisfactorily accomplished?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Have adequate pre-operational and subsequent periodic test requirements been appropriately specified, including acceptance criteria?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17. Are adequate handling, storage, cleaning, and shipping requirements specified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18. Are adequate identification requirements specified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19. Are requirements for records adequately specified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20. Will the change remain within the analyzed or specified capabilities of any affected equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21. Has a field inspection been done?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Have impacts on other systems been identified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

COMMENTS: ☐ None ☐ Attached (Use Form QP 17.1-2)

Design Prepared By: _____ Date 1/29/97
 Reviewed By: _____ Date 1/31/97
 Approval By: _____ Date 1/31/97

**NUCLEAR POWER DEPARTMENT
SAFETY EVALUATION REPORT**

SER _____
Page 1

Title of Proposed Modification,
Procedure Change, Test or Experiment: Brine Tank Standpipe Modification

Reference Document(s) #: ECR 97-0008, MR 92-008*Q

Prepared By: _____ Date: 1/29/97

Reviewed By: _____ Date: 30 JAN 97

Reviewed by Multidisciplinary Review Team: 1. _____ Date: _____

2. _____ Date: _____

MSS Review/Date: _____ MSS # _____

Manager - PBNP Approval: _____ Date: _____

In lieu of MSS and Manager signature, attach PBF-0026d if serial review has been conducted. (MSS and manager approvals are not necessary for a determination of non-applicability.)

Section 1
Screening - Determination if Safety Evaluation is Required

- A. Describe the modification, procedure change, test, or experiment and its expected effects. Include interim configurations or conditions.

ECR 97-0008 seeks to improve the accuracy with which the brine tank (T-118) standpipe level reflects the level in the bulk of the tank. The proposed means of improving level equalization between the standpipe and the bulk of the tank is to cut a 3/4-inch diameter hole in the wall of the standpipe and attach a 3/4-inch diameter U-shaped tube to the outer wall of the standpipe at the location of the hole. The U-tube will contain water or brine at all times to trap and dissolve salt before it can enter the standpipe and coat the high-high level switch probe. The hole and U-tube will be located low enough on the standpipe to ensure that level equalization occurs in time for the high-high level switch (LE-9212) to prevent overflow yet high enough so as to minimize the exposure to the salt mound. To ensure that the U-tube remains filled with liquid, the tube will be placed within the range of the de-ionized water spray in the tank. Given those constraints, the hole and U-tube will be located within 10 to 10.5 feet above the floor of the tank, with the exact location to be determined in the field at the time of installation.

During the installation and for approximately four or five days afterward, the brine tank will be out of service and no organic trap regenerations will be possible. Additionally, salt shall not be delivered to the brine tank until after the testing phase of the installation has been completed.

- B. List the FSAR sections or VSC-24-SAR sections where the system, structure, component, procedure, test or experiment is described.

None

- C. Does the change, test or experiment involve a change in the Technical Specification? ☐ Yes ☒ No
If a change is required, briefly describe what the change should be and why it is required.
NOTE: NRC approval is required prior to implementation.

**NUCLEAR POWER DEPARTMENT
SAFETY EVALUATION REPORT**

SER _____
Page 2

Section 1 - Continuation

D. Screening for 10 CFR 50.59 and 10 CFR 72.48 Applicability:

1. 10 CFR 50.59 Screening:

- | | | | | |
|--|--------------------------|-----|-------------------------------------|----|
| a. Will any system, structure or component (SSC) described in the PBNP FSAR, including its figures, be altered? (Refer to NP 10.3.1, step 3.1.2 for exception. This question may be answered "no" although the SSC is described in the PBNP FSAR.) | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| b. Could, within reasonable possibility, the proposed change affect the intended design, operation, function, or method of function, of an SSC important to safety which is described in the PBNP FSAR? (This includes interim conditions.) | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| c. Will any procedure described in the PBNP FSAR be altered? (Refer to NP 10.3.1, Attachment A, Part E, for guidance.) | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| d. Will a test or experiment be performed which is not described in the PBNP FSAR and affects the design, operation, function, or method of function, of an SSC important to safety which is described in the PBNP FSAR? | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| e. Will implementation affect a prior documented regulatory commitment to the NRC pertaining to the design, operation, function, or method of function, of an SSC important to safety which is described in the PBNP FSAR? | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| f. Is a 10 CFR 50.59 evaluation required (are any of the above questions answered yes)? | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |

*NOTE: If no, then provide basis for decision in Part D.
If yes, complete Sections 2 and 3.*

2. 10 CFR 72.48 Screening for the Independent Spent Fuel Storage Installation (ISFSI):

- | | | | | |
|---|--------------------------|-----|-------------------------------------|----|
| a. Will any system, structure, or component (SSC) described in the ISFSI Licensing Basis document, including its figures, be altered? (Refer to Step 3.1.2 for exception. This question may be answered "no" although the SSC is described in the ISFSI Licensing Basis documents.) | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| b. Could, within reasonable possibility, the proposed change affect the intended design, operation, function, or method of function, of an SSC important to safety which is described in the ISFSI Licensing Basis documents? (This includes interim conditions.) | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| c. Will any procedures described in the ISFSI Licensing Basis documents be altered? | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| d. Will a test or experiment be performed which is not described in the ISFSI Licensing Basis documents and affects the design, operation, function, or method of function, of an SSC important to safety which is described in the ISFSI Licensing Basis documents? | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| e. Will implementation affect a prior documented regulatory commitment to the NRC pertaining to the design, operation, function, or method of function, of an SSC important to safety which is described in the ISFSI Licensing Basis documents? | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| f. Is a 10 CFR 72.48 evaluation required (are any of the above questions answered yes)? | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |

*NOTE: If no, then provide basis for decision in Part D.
If yes, complete Sections 4 and 5.*

NUCLEAR POWER DEPARTMENT
SAFETY EVALUATION REPORT

NER _____
Page 3

Section 1 - Continuation

D. Basis for determination that a safety evaluation is not required:

This modification adds a U-tube to the standpipe in the Water Treatment System Brine Tank (T-118) to improve level equalization between the standpipe and the bulk of the tank and thereby improve the ability of the high-high level switch (LE-9212) to prevent the tank from overflowing. Thus, the modification involves making a change to a Non-QA Scope, Non-Safety Related component which will not affect the ISFSI or any SSC important to safety. The Water Treatment System Brine Tank is not referenced in the PBNP FSAR or Technical Specifications. For these reasons, neither a 10CFR50.59 nor a 10CFR 72.48 evaluation is required.

POINT BEACH UNIT 2 RESTART COMMITMENT
INDEPENDENT REVIEW RESULTS

Commitment ID Number 70

Commitment Description

Install a new level control system for the brine tank (T-118) per Modification 92-008*Q.

The tank overflows because the installed automatic level control system is not effective, and there is no high-high level alarm for the tank. This has been a recurring human performance issue exasperated by design. This modification will minimize the human performance challenges.

Review Methodology

Review modification with Responsible Engineer.

Review modification scope, and if scope was changed, determine change rationale and if there is any safety impact.

Review modification design and installation documents against scope. Identify and review documentation acceptance items.

Verify that the documentation is adequate and that the documentation acceptance items have been completed and documented.

Review the modification tests to verify that the tests are appropriate and were successfully completed.

Determine if Condition Reports (CR's) were generated in performance of this modification and verify that they are documented/tracked.

Review Results

MR 92-008*Q is the Brine Tank Level Control Modification. The original design installed for MR 92-008*Q under IWP 92-008*Q did not provide an acceptable solution to the brine tank level indication control problem. Although the Work Plan was installed, tested, and restored to operability, only a portion of the physical work was conditionally accepted for use. Restart Commitment #70 was initiated to address the elimination of the Operator Workaround for the brine tank (T-118) overflow. This commitment exists because IWP 92-008*Q was unable to install an effective design solution. Therefore, to address Restart Commitment #70, ECR 97-0008 was initiated to modify the standpipe with a U-shaped tube to provide an alternate fill method of the standpipe. This tube would quickly equalize the bulk tank level with the standpipe level, thus ensuring an accurate reading for the high-high level alarm. Since the high-high level alarm was successfully installed, tested and conditionally accepted under IWP 92-008*Q, this review will only consider the workscope related to modifying the standpipe under ECR 97-0008.

The scope of work associated with ECR 97-0008 was discussed with the Responsible Engineer (RE). No issues or concerns regarding installation or testing of the modification were identified by the RE.

POINT BEACH UNIT 2 RESTART COMMITMENT
INDEPENDENT REVIEW RESULTS

Commitment ID Number 70

The Safety Evaluation screening, ECR 97-0008 and Installation Work Plan 92-008*Q-02 were reviewed. The safety evaluation screening matched the ECR and Work Plan (both in scope and content).

IWP 92-008*Q-02 has been completed and approved by the DSS. Work Order 9701182 is currently at a status 70 even though the work has been completed and tested. Acceptance by the DSS of the Work Order needs to be provided as an acceptance item to the Unit 2 restart.

The modification has been satisfactorily installed. The acceptance items identified in IWP 92-008*Q-02 identified that ECR's and Control Room/WCC drawings need to be updated. Based on discussions with the RE, no ECRs were generated in support of this workscope, and no Control Room/WCC drawing changes were required. Therefore the acceptance items identified in IWP 92-008*Q-02 were not required.

PMT consisted of functional testing of the stand pipe fill line and ultrasonic level switch. In addition, an operational test of automatic isolation valves was performed. The PMT actions have been satisfactorily completed and signed off. Based on the scope of this installation, these tests are appropriate PMT for the installation.

No Condition Reports have been generated in performance of ECR 97-0008. This was concluded based on an interview with the Responsible Engineer and performing an electronic search of the NUTRK system using the Modification number and Work Order number as search criteria.

Conclusion

Work Order 9701182 needs to be approved by the DSS.

Based on this independent review, pending acceptance of the Work Order by the DSS, there are no items involved with Restart Commitment #70 which would impede Unit 2 start up.

Reviewer:

ACTION ITEM STATUS REPORT

PAGE 1
03/31/97

***** Responsible Person.
* Trkid: U2R22 RESTART * Urgency: DONE
* Action Number: 74 * Work Priority: 99

Activity Pending is: DONE

ASSOCIATED WITH A COMMITMENT

-----TITLE AND TASK DESCRIPTION-----

Unit 2 Refueling 22 Startup Commitments

Prior to criticality, ensure each operating crew receives simulator training to gain proficiency in casualty response, the expected response of the newly installed steam generators and reactor core, and placing the turbine on-line.

-----DATES-----

Source Record: 01/10/97	***** Evaluation *****	***** Correction *****
Commitment:	Eval Due:	Corr Act Due: 02/13/97
Action Create: 01/14/97	Orig Eval Due:	Orig CA Due: 02/13/97
Action Closed: 03/31/97	Eval Done:	Corr Act Done: 03/24/97

-----PEOPLE-----

Responsible for Overall Action: TROPS
Responsible for Current Pending Activity:
Issue Manager:
Initiator:
Punchlist Administrator:

-----UPDATE-----

(01/16/97) Changed Responsible Person: From () to (). Bob is currently conducting this training.

(01/22/97) this TWR basically consists of training upon 5 separate items: 1. Bringing the turbine online (from POAH to about 15%) 2. Reviewing the differences between U1 and U2 SGs 3. Identifying differences between U1 and U2 response on a normal trip 4. Addressing differences between U1 and U2 response to instrument failures 5. Conducting casualty response to dynamic scenarios.

All these items are being addressed in LOR training cycle 97-1. Items 1-4 are contained in LP2522, "Unit 2 Startup training/SG Review" and is being conducted IAW the LOR cycle 97-1 training cycle. As of this date OPS staff personnel, Crew A licensed operators and Crew C licensed operators have received the required training.

Item 5 is being covered as a separate item through the administration of casualty scenarios each week of the training cycle on each specific crew:

- Ops staff personnel participated in a casualty scenario (SES-43) on 1/9/97 (See attached attendance sheet) - Crew C licensed personnel met the requirements of this item by participating in 2 casualty scenarios (SES-009A and SES30) on 1/13/97 during the INPO simulator evaluation (See attach attendance sheet)

- Crew A licensed personnel met the requirements of this item by participating in 2 casualty scenarios (SES-009A and SES-47) on 1/14/97 during the INPO simulator evaluation (See attached attendance sheet)

(01/29/97) As of this date Crew E has attended LP2522, thereby completing Items 1-4 of this TWR. (See Attached attendance sheet)

(02/03/97) As of this date Crew E has now completed item 5 of this TWR by participating in practice casualty scenarios on 1/30/97 (See Attached sheet)

(02/12/97) As of this date Crews D and F have attended LP2522, thereby satisfying items 1-4 of this TWR.

(02/17/97) As of this date crew D and crew F have completed item 5 of this TWR by participating in practice scenarios on 2/12/97 and 2/13/97 (see attached sheets) Also Crew B has completed items 1-4 of this TWR by attending LP2522 on 2/17/97 (see attached sheet)

(02/25/97) As of this date all required Ops personnel have attended training to complete items 1-4 of this TWR. Also Crew D has completed item #5 of this TWR by participating in practice dynamics on 2/20/97 (SES-47 and SES 30). See attached sheet.

CP

Date Training Completed:	Activity Code	Duration	Title
1/13/97	LP2522	3.0	UNIT 2 START UP TRAINING / SG REVIEW

Trainee's Name (Last, First, MI) Please Print	Trainee's Signature	Identification Number	Activity Test Scores				
			1	2	3	4	5
[Signature]	" "	B2642					
		PB5815					
		LJE3128					
		PLW736					
		3257					
		PB2248					
		AJ3121					
		PB3221					

Comments: _____

Instructor: [Signature] _____

POINT BEACH NUCLEAR PLANT
TRAINING ATTENDANCE REPORT

Date Training Completed: <u>1/21/97</u>		Activity Code 1. <u>LP2522</u> 2. _____ 3. _____ 4. _____ 5. _____	Duration <u>3.0</u>	Title <u>U2 STARTUP TRAINING/SG REVIEW</u>
Trainee's Name (Last, First, MI) Please Print		Trainee's Signature	Identification Number	Activity Test Scores
			<u>WE 5462</u>	1 2 3 4 5
			<u>PB1524</u>	
			<u>WE2133</u>	
			<u>PB3343</u>	
			<u>PB5467</u>	
			<u>PB7721</u>	
			<u>WE-1609</u>	
			<u>PB1422</u>	
			<u>PB7326</u>	
Comments:				
Inspector				

POINT BEACH NUCLEAR PLANT
TRAINING ATTENDANCE REPORT

Date Training Completed: <u>1/27/97</u>	Activity Code 1. <u>LP2522</u> 2. _____ 3. _____ 4. _____ 5. _____	Duration <u>3.0</u>	Title <u>U-2 STARTUP TRAINING/SG REVIEW</u>	Trainee's Name (Last, First, MI) Please Print	Trainee's Signature	Identification Number	Activity Test Scores					
							1	2	3	4	5	
						<u>PB 5648</u>						
						<u>PB 5815</u>						
						<u>PB 2841</u>						
						<u>PB 5952</u>						
						<u>PB 0807</u>						
						<u>PB 2581</u>						
						<u>PB 9918</u>						
						<u>PB 4208</u>						
						<u>PB 1798</u>						
Comments:												
Instructor:												

Date Training Completed:	Activity Code	Duration	Title	Activity Test Scores				
2/10/97	1. LP2522	4 HRS	UNIT 2 STARTUP TRAINING / SG REVIEW					
	2.							
	3.							
	4.							
	5.							

Trainee's Name (Last, First, MI) Please Print	Trainee's Signature	Identification Number	Activity Test Scores				
	[Signature]	PB2296					
		PB 2566					
		0811					
		WE-2X64					
		WE 1384					
		WE3128					
		WE7849					
		PB3058					
		PB5129					

Comments:

Instructor: T J. J. J.

POINT BEACH II NUCLEAR PLANT
TRAINING ATTENDANCE REPORT

Date Training Completed: <u>2/10/97</u>		Activity Code 1. <u>LP2522</u> 2. _____ 3. _____ 4. _____ 5. _____	Duration <u>3.0</u>	Title <u>Unit 2 STATUS TRAINING/SG REVIEW</u>				
Trainee's Name (Last, First, MI) Please Print	Trainee's Signature	Identification Number	Activity Test Scores					
			1	2	3	4	5	
		<u>PB8511</u>						
		<u>PB7809</u>						
		<u>PB1710</u>						
		<u>PB 2250</u>						
		<u>WE1284</u>						
		<u>1658</u>						
		<u>PB 3334</u>						
Comments:								
Instructor								

POINT BEACH NUCLEAR PLANT
TRAINING ATTENDANCE REPORT

Date Training Completed: <u>2/17/97</u>		Activity Code <u>LP2522</u>	Duration <u>3.0</u>	Title <u>U2 STARTUP TRAINING / SG REVIEW</u>
1. _____		2. _____	3. _____	4. _____
2. _____		3. _____	4. _____	5. _____
3. _____		4. _____	5. _____	
4. _____		5. _____		
5. _____				

Trainee's Name (Last, First, MI) Please Print	Trainee's Signature	Identification Number	Activity Test Scores				
			1	2	3	4	5
_____	_____	WE 1961					
_____	_____	PB 4391					
_____	_____	WE 2571					
_____	_____	WE 8241					
_____	_____	WE 3333					
_____	_____	PB 0928					
_____	_____	WE-3165					
_____	_____	PB-2692					
_____	_____	PB-0318					
_____	_____	PB 0705					
_____	_____	PB 2641					
_____	_____	PB 1633					

Comments: _____

Instructor: _____

PBNP

ON-LINE TRAINING LESSON RECORD

TOPIC: CREW DYNAMIC (PRACTICE MODE) CYCLE 97-1

INSTRUCTOR: _____

TECH REVIEW: _____
(Optional)

DATE: 3-14-97 DURATION (HRS): 3

REFERENCES (TNA, NUTRK, Tech. Manual,
etc.): _____

N/A

LEARNING OBJECTIVES: _____

1. PROVIDE SIMULATOR TIME TO THE CREW TO ALLOW REFRESHER TRAINING ON CASUALTY
RESPONSE TO EOP USAGE

MATERIAL COVERED (summarize or attach material covered)

1. USING SES-043 AS A GUIDE, RAN A SIMULATOR SCENARIO ON THE CREW INTENT IS TO PROVIDE SIMULATOR TIME FOR CREW TO PRACTICE CASUALTY RESPONSE TO ACCIDENTS/FAILURES AND EOP USAGE

2. REVIEW SCENARIO WITH CREW UPON COMPLETION

3

Supervisor: _____

Date _____

Training Coordinator

Date _____

PBNP

ON-LINE TRAINING LESSON RECORD

TOPIC CREW PRACTICE DYNAMIC

INSTRUCTOR

TECH REVIEW N/A
(Optional)

DATE 2/12/97 DURATION (HRS) 3

REFERENCES (TNA, NUTRK, Tech. Manual,
etc.)

N/A

LEARNING OBJECTIVES

1. PROVIDE SIMULATOR TIME FOR THE CREW TO ALLOW REFRESHER TRAINING ON CASUALTY
RESPONSE AND EOP USAGE

MATERIAL COVERED (summarize or attach material covered)

1. USING SES-47 AND SES-30 AS GUIDES RUN SIMULATOR SCENARIOS ON THE CREW INTENT IS TO PROVIDE SIMULATOR TIME FOR CREW TO PRACTICE CASUALTY RESPONSE TO ACCIDENTS/SYSTEMS FAILURES AND EOP USAGE

2. REVIEW EACH SCENARIO WITH CREW UPON COMPLETION

[illegible]

Date _____

Date _____

PBNP

ON-LINE TRAINING LESSON RECORD

TOPIC: CREW PRACTICE DYNAMIC

INSTRUCTOR: _____

TECH REVIEW: N/A
(Optional)

DATE: 2/13/97

DURATION (HRS) 3

REFERENCES (TNA, NUTRK, Tech. Manual,
etc) _____

N/A

LEARNING OBJECTIVES _____

1. PROVIDE SIMULATOR TIME FOR THE CREW TO ALLOW REFRESHER TRAINING ON CASUALTY
RESPONSE AND EOP USAGE

MATERIAL COVERED (summarize or attach material covered)

1. USING SES-47 AND SES-30 AS GUIDES RUN SIMULATOR SCENARIOS ON THE CREW INTENT IS TO PROVIDE SIMULATOR TIME FOR CREW TO PRACTICE CASUALTY RESPONSE TO ACCIDENTS SYSTEMS FAILURES AND EOP USAGE

2. REVIEW EACH SCENARIO WITH CREW UPON COMPLETION

[illegible]

Training Coordinator

Date _____

PBNP

ON-LINE TRAINING LESSON RECORD

TOPIC CREW PRACTICE DYNAMIC (CYCLE 97-1)

INSTRUCTOR _____

TECH REVIEW _____

(Optional)

DATE ~~11/29/97~~ 11/30/97

DURATION (HRS) 3

REFERENCES (TNA, NUTRK, Tech. Manual,
etc.) _____

N/A

LEARNING OBJECTIVES _____

1. PROVIDE SIMULATOR TIME FOR THE CREW TO ALLOW REFRESHER TRAINING ON CASUALTY
RESPONSE AND EOP USAGE

MATERIAL COVERED (summarize or attach material covered)

1. USING SES-30 AND SES-47 AS GUIDES, RUN SIMULATOR SCENARIOS ON THE CREW. INTENT IS TO PROVIDE SIMULATOR TIME FOR CREW TO PRACTICE CASUALTY RESPONSE TO ACCIDENTS/SYSTEMS FAILURES AND EOP USAGE

2. REVIEW SCENARIOS WITH CREW UPON COMPLETION

[illegible]

Training Coordinator

Date _____

Date _____

PBNP

ON-LINE TRAINING LESSON RECORD

TOPIC CREW DYNAMIC PRACTICE MODE CYCLE 97-1

INSTRUCTOR _____

TECH REVIEW
(Optional) _____

DATE 1/9/97

DURATION (HRS) 3

REFERENCES (TNA, NUTRK, Tech Manual,
etc.) _____

N/A

LEARNING OBJECTIVES _____

1. PROVIDE SIMULATOR TIME TO THE CREW TO ALLOW REFRESHER TRAINING ON CASUALTY
RESPONSE AND EOP USAGE

MATERIAL COVERED (summarize or attach material covered)

1. USING SES-043 AS A GUIDE, RAN A SIMULATOR SCENARIO ON THE CREW INTENT IS TO PROVIDE SIMULATOR TIME FOR CREW TO PRACTICE CASUALTY RESPONSE TO ACCIDENTS, FAILURES AND EOP USAGE

2. REVIEWED SCENARIO WITH CREW UPON COMPLETION

NAME	EMPLOYEE NO	SIGNATURE
	WE 3104	
	PB 6915	
	PB 1539	
	WE 2421	
	PB 0599	
	PB 1422	
	PB 3221	

Training Coordinator

Date _____

Date _____

PBNP

ON-LINE TRAINING LESSON RECORD

TOPIC: CREW PRACTICE DYNAMIC

INSTRUCTOR: _____

TECH REVIEW: N/A
(Optional)

DATE: ~~2/18/97~~ 2/20/97 DURATION (HRS) 3

REFERENCES (TNA, NUTRK, Tech. Manual,
etc.): _____

N/A

LEARNING OBJECTIVES _____

1. PROVIDE SIMULATOR TIME FOR THE CREW TO ALLOW REFRESHER TRAINING ON CASUALTY
RESPONSE AND EOP USAGE

MATERIAL COVERED (summarize or attach material covered)

1. USING SES-47 AND SES-30 AS GUIDES RUN SIMULATOR SCENARIOS ON THE CREW INTENT IS TO PROVIDE SIMULATOR TIME FOR CREW TO PRACTICE CASUALTY RESPONSE TO ACCIDENTS/SYSTEMS FAILURES AND EOP USAGE

2. REVIEW EACH SCENARIO WITH CREW UPON COMPLETION

ATTENDEES

[illegible]

Supervisor

2-20-97
Date

Training Coordinator

Date 2/28/97

POINT BEACH NUCLEAR PLANT
TRAINING ATTENDANCE REPORT

Date Training Completed: <u>1/16/97</u>		Activity Code: <u>10097.1(R)</u>	Duration: <u>3.5</u>	Title: <u>INPO Evaluated Scenario (Remediation)</u>																																																																	
Trainee's Name (Last, First, MI) Please Print		<table border="1"> <thead> <tr> <th rowspan="2">Identification Number</th> <th colspan="5">Activity Test Scores</th> </tr> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> </tr> </thead> <tbody> <tr> <td><u>PB2523</u></td> <td><u>SAT</u></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>PB5815</u></td> <td><u>SAT</u></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>PB5327</u></td> <td><u>SAT</u></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>PB2642</u></td> <td><u>SAT</u></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>PB1126</u></td> <td><u>SAT</u></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>WE3128</u></td> <td><u>SAT</u></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>3257</u></td> <td><u>N/A</u></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>PB5467</u></td> <td><u>N/A</u></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td><u>PB2248</u></td> <td><u>SAT</u></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Identification Number	Activity Test Scores					1	2	3	4	5	<u>PB2523</u>	<u>SAT</u>					<u>PB5815</u>	<u>SAT</u>					<u>PB5327</u>	<u>SAT</u>					<u>PB2642</u>	<u>SAT</u>					<u>PB1126</u>	<u>SAT</u>					<u>WE3128</u>	<u>SAT</u>					<u>3257</u>	<u>N/A</u>					<u>PB5467</u>	<u>N/A</u>					<u>PB2248</u>	<u>SAT</u>				
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	3					WE2133					
	4					WE1609					
	5					PB3455					
						WE5466					
						PB1524					
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Instructor:											

Date Training Completed: 1/14/19

Activity Code

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INPO SIMULATOR SCENARIO

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Activity Test Scores

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Comments:

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POINT BEACH UNIT 2 COMMITMENT
INDEPENDENT REVIEW RESULTS

Commitment ID Number 74

Commitment Description

Each operating crew will receive simulator training to gain proficiency in casualty response, the expected response of the newly installed steam generators and reactor core, and placing the turbine on-line.

This simulator training will consist of:

Bringing the turbine on-line (from the POAH to about 15% power).

Reviewing the differences in steam generator response between Units 1 and 2.

Conducting normal trips and identifying the differences in response between Units 1 and 2.

Addressing instrument failure response differences between Units 1 and 2.

Conducting casualty response dynamic scenarios in the training mode.

Review Methodology

Review the simulator lesson plans that are used to conduct this simulator training and verify the above objectives are specified.

Observe this simulator training, to the extent possible, to qualitatively assess the crew's level of proficiency and adaptation to any observable differences in plant response due to the new steam generators.

Verify each operating crew has either had this specific simulator training or is scheduled to have this training in the near future.

POINT BEACH UNIT 2 COMMITMENT
INDEPENDENT REVIEW RESULTS

Commitment ID Number 74

Review Results

Verified that lesson plan LP 2522 Rev. 0 contains the objectives of review stated in commitment number 74 with the following exceptions:

1. Bringing the turbine on line was initiated from about 5% power, not the point of adding heat (POAH). Discussions with the responsible person relative to this starting point revealed that he believed that initiating the scenario from 5% or from the POAH had little impact on the major part of the exercise which was rolling the turbine and electrically bringing the generator on line. Subsequent to this discussion, this issue was resolved by additional discussions with the Restart Issues Coordinator. The NRC Commitment was to conduct simulator training as described in the first sentence of the commitment. The training scenarios used to complete this training was at the discretion of the PBNP staff. Therefore the starting point of the turbine roll exercise is no longer an open issue.
2. The training that conducts casualty response to dynamic scenarios is carried out in the training mode by using various pre-selected requalification simulator drills without the use of lesson plans. This also does not represent an open issue to this reviewer.

Observed the simulator training sessions in the morning of 2/10/97. This training exercised Operating Procedure, OP-1C, "Low Power Operation To Normal Power Operation" starting from an initial condition of about 5% Reactor Power and ending with the Turbine Generator on line producing about 40 Mwe. During the exercise, there were several points of discussion with training material handouts, which reviewed the differences in response between Unit 1 and Unit 2 in the areas of steam generator, reactor and instrumentation responses. After the Turbine Generator had been put on line, the simulator was reset to 100% normal plant conditions. Again in the training mode, a B Steam Generator Feedwater control valve was failed open and the crew took action to take manual control of flow, reselect away from the failed instrument and restore the control valve to automatic. Following this exercise, the operators were given a normal reactor trip to which they responded appropriately to stabilize the plant at hot shutdown without Safety Injection or Auxiliary Feedwater initiating.

During this simulator session, the following observations were discussed which may warrant further discussion and follow-up action by the Operations staff.

1. During the turbine roll and generator on line exercise, there were only two operators on the console and three really active stations. One operator was in charge of the turbine and steam generator water level control (SGWL) while the other operator was in control of the reactor. During this critical evolution, it would seem more appropriate to have these stations split among three operators to minimize the distractions and provide more focused attention to these critical stations. Discussions with the Operations Manager, who was also observing this training, indicated that real plant start ups do involve extra operators on the control board who are brought out on overtime.

POINT BEACH UNIT 2 COMMITMENT
INDEPENDENT REVIEW RESULTS

Commitment ID Number 74

2. The operator controlling the turbine and SGWL had to turn his back to the control board to find adequate level trends that would support his needs in controlling S/G water level. The CRT which had these trends available on the vertical control board facing the operator had degraded to the point that it was too difficult to read. From discussions, the trending CRT in the vertical panel in the actual control room does provide adequate indication. While the operator appeared to handle the added burden of operating both stations (turbine and SGWL) and working around the degraded indications of vital parameters, there is some concern for the impact of training in a manner that is not consistent with the manning and equipment status that exists in the actual control room. It is noted that subsequent to this observation, this reviewer became aware of Enforcement Conference Commitment Item No. 21. This commitment requires consideration for improvements to the Control Operator's Work Station that would permit the operators to face the main control boards and have optimum access to the controls.

Using the "Continuing Training Cycle/Initial Training Course Schedule" Rev. 3 dated 1/24/97, the reviewer was able to identify and verify the 6 crew composition. With the "Training Attendance Reports", the reviewer was able to verify those individuals on the crews who have attended the training which pertained to the first 4 of 5 objectives in this commitment. The results of this review indicate that 6 of the 6 crews have attended this training as of 2/17/97.

To verify the 5th objective of this commitment, the reviewer attended the casualty response dynamic training performed on 2/13/97. During this training session, two separate scenarios were conducted to provide refresher training in casualty response. The first scenario was brief and was meant to time the operators' response from Auxiliary Feedwater Actuation to the time the operators had manual control of AFW flow within the prescribed limits of the procedure. During this 2/13/97 performance as well as the 2/12/97 performance which was also witnessed, the operating crews demonstrated very timely recognition of AFW actuation with AFW flow control established well within one minute from the time AFW actuated.

The second scenario was performed in about 1.5 hours and involved an unexpected reactor trip; reactor coolant pump seal failure; loss of one engineered safeguards electrical bus ('A' Train), and the subsequent failure of 'A' train Safety Injection. The crew, which was somewhat short handed, demonstrated proficiency in recognizing the casualty symptoms and taking the proper actions to stabilize the plant and maintain core cooling in accordance with their procedures. By reviewing the "Training Attendance Reports", the reviewer was able to confirm that 6 of 6 crews have attended this training as of 2/20/97. It is noted that one individual from 'B' Shift Crew missed this portion of the training due to personal reasons. This particular case is familiar to the Training Department and plans are in place to get this individual trained on this commitment.

POINT BEACH UNIT 2 COMMITMENT
INDEPENDENT REVIEW RESULTS

Commitment ID Number 74


Recommendations

While there are observations noted on the need to keep the operator positioned to control the plant and to maintain the fidelity between the simulator training and the actual practices in the Control Room, these observations are for consideration by the PBNP staff and should not hinder satisfactory completion of this commitment.

This independent review is considered complete with one open item to be tracked to completion by the PBNP staff. The open item is the one individual from 'B' Shift Crew that needs the casualty response simulator training.

When closure of the open item is documented by the PBNP staff, Restart Commitment No. 74 will be completely satisfied. In recognition of this open item, and based on this independent review of the completed work, there are no other items associated with Restart Commitment No. 74 which would impede Unit 2 Restart.

All personnel in Operations assigned to attend the training have done so.

Reviewed By: 

POINT BEACH NUCLEAR PLANT UNIT 2 STARTUP COMMITMENT LIST

March 27, 1997 Status Update

IDENTIFICATION AND RESOLUTION OF ISSUES PERTINENT TO REACTOR SAFETY

The following actions will be taken prior to Unit 2 criticality, except as specifically noted. The scope of reviews will be examining the identified documents or items for accuracy and compliance with requirements. Should any reviews identify either generic issues or significant discrepancies which could negatively impact reactor safety, the scope of those reviews will be expanded. Where discrepancies are identified, appropriate corrective and preventive actions will be taken commensurate with their safety significance.

Commitment ID Number	Description	Status
1	Complete a detailed Unit 2 Containment Materiel Condition Assessment, addressing housekeeping, system walkdowns, materiel condition, and instrumentation. Extensive work inside Containment was conducted this outage due to the Steam Generator replacement project.	In progress.
2	Walkdown all accessible Unit 2 and common Maintenance Rule systems for adequate visual material condition.	In progress.
3	Walkdown all accessible Unit 2 and common systems for outstanding work order tags. Note: The scope was expanded to include all accessible Unit 1 systems.	All work and verification completed. Documentation sent to NRC.
4	Conduct as-built inspections of the electrical and I&C components on the Unit 2 CVCS and CCW systems (Work Orders 9607322, 9611140, 9606548, and 9611139).	All work and verification completed. Documentation sent to NRC.
5	Complete Work Orders 9513222 through 9513225 to conduct inspections of Appendix R alternate power transfer switches.	All work and verification completed. Documentation sent to NRC.
6	Complete Work Order 9604151 to perform foreign material exclusion inspections on the Unit 2 4160V safeguards bus 2A-06 and breakers.	All work and verification completed. Documentation sent to NRC.
7	Complete a review of Unit 2 administrative controls implementing or referencing Technical Specifications to ensure Technical Specification requirements are appropriately reflected in the administrative controls.	All work and verification completed. Documentation in route to NRC.

8	Review 20% of the Operations Technical Specification, Inservice Test, and Operations Refueling Test related surveillance procedures, with concentration on those involving major equipment. Upgrade as necessary to include appropriate initial conditions, return to service lineups, properly specified independent verification, reviewing acceptance criteria, and Technical Specification implementation.	In progress. Scheduled completion date is April 25, 1997.
9	Review the In Service Testing (IST) acceptance criteria for the remaining IST pumps to ensure that the IST acceptance criteria meets the design basis/accident analysis requirements. Make any changes necessary as a result of this review.	All work and verification completed. Documentation sent to NRC.
10	Review the In Service Testing acceptance criteria for all IST valves to ensure that the IST acceptance criteria meets the design basis/accident analysis requirements. Complete necessary operability evaluations, revise procedures, and resolve Unit 2 equipment discrepancies.	All work and verification completed. Documentation sent to NRC.
11	<p>Complete the following regarding installed instrumentation used in the IST program:</p> <ul style="list-style-type: none"> • Identify the Unit 2 installed instruments used in the IST program. • Review the performance of the identified instruments over the last 3 years. • Review the suitability of the instrumentation for use in the IST program. • Review all IST pump hydraulic data over the past year for adverse trends. <p>As necessary, make changes as a result of these actions.</p>	All work and verification completed. Documentation sent to NRC.
12	<p>Review 20% of the surveillance procedures associated with safety significant non-pump and valve components (such as heat exchangers and fans) to ensure that the surveillance acceptance criteria satisfy the requirements of the plant design basis/accident analysis. Make changes as necessary as a result of this review.</p> <p>Note: This has been expanded to a 100% review.</p>	In closeout verification process.
13	Review other operating procedures that contain maintenance activities and revise as necessary to ensure PMT and QC are properly addressed by those procedures.	In closeout verification process.
14	Review equipment return to service testing requirements prior to the following U2R22 mode change readiness reviews to ensure the required equipment is operable prior to changing modes: core reload, leaving cold shutdown, and the approach to criticality.	Will occur approximately one week prior to each of the mode changes.
15	Review 20% of the work orders performed since January 1, 1995 on Unit 2 or common PSA safety significant systems (AFW, SW, EDG, IA, 4.16 kv, gas turbine, and CCW) to verify adequate PMT was performed to ensure system/component safety function.	All work and verification completed. Documentation in route to NRC.
16	Complete all Unit 2 Maintenance Rule related work order post-work, pre-PMT reviews prior to the approach to criticality.	All work and verification completed. Documentation in route to NRC.

17	Review 50.59 screenings conducted in 1996. Upgrade those determined to require a 50.59 evaluation.	Review completed. Upgrading in progress. Scheduled completion date is March 31, 1997.
18	Review outstanding JCO's. Perform operability determinations and 50.59 evaluations needed to address the issues.	In progress. Scheduled completion date is May 5, 1997.
19	Conduct a review of 50.59 evaluations from this outage. Ensure all conditions of the evaluations have been completed.	Initial review completed. Reviews of emergent 50.59 evaluations in progress. Tracking completion of conditions through the outage.
20	Review items from existing open item lists (e.g., NUTRK) to identify potentially degraded equipment.	In progress. Scheduled completion date is April 4, 1997.
21	Review open items from the Design Basis Document development program.	In progress. Scheduled completion date is April 4, 1997.
22	All open operability evaluations for Unit 2 and common equipment will be reviewed for acceptable closure of the degraded equipment issue. Disposition outstanding issues in accordance with 10CFR50.59 and Generic Letter 91-18.	In progress. This will continue through the outage.
23	Review 20% of the Condition Reports closed since January 1, 1995 which are associated with PSA safety significant systems for degraded equipment operability issues to ensure that we have adequately identified and dispositioned operability issues. This has been expanded to a 100% review of PSA safety significant systems.	In closeout verification process.
24	Complete an additional Outage Safety Review for the startup phase of the outage.	In progress. Scheduled completion date is April 4, 1997.
25	Conduct an integrated review of all outage licensing commitments (50.59's, enforcement conference items, Technical Specification Change Requests, and Reload Safety Analysis). Ensure all requirements are met.	In progress. Scheduled completion date is April 4, 1997.
26	Revise ORT-3 and DCS 3.1.11 to ensure Technical Specification 15.4.6.A.2 testing includes dynamic loading of the EDG with sequenced loads.	All work and verification completed. Documentation sent to NRC.
27	Test all EDGs in accordance with revised ORT-3 and DCS-3.1.11. Return the electrical systems to normal alignment prior to leaving cold shutdown.	Re-opened. QA is reviewing the ORT-3 documentation.

28	Resolve the containment penetration commitments, including: <ul style="list-style-type: none"> • CP-32 (Containment penetration for Auxiliary Charging line). • Penetration thermal relief issue. 	In progress. Scheduled completion date is April 30, 1997.
29	Complete a 50.59 evaluation for the existing CCW supply to the RCP seals as a safety function.	Re-opened. Does not appear that a 50.59 is an appropriate vehicle to do this. Considering alternatives.
30	Update the diesel generator loading calculation N-91-016 to properly reflect the loading of the Containment Fan Coolers.	In progress. Scheduled completion date is April 1, 1997.
31	Evaluate the adequacy of coordination on the 120 VAC instrument bus system through a 50.59 or operability review.	In progress. Scheduled completion date is April 4, 1997.
32	Implement interim improvements for the Condition Reporting process, based on a review of assessments and identified recommendations for improving that process.	In progress. Scheduled completion date is Mar. 31, 1997.
33	Implement interim improvements for the 50.59 process to require that all screenings be either authored or reviewed by a member of the multi-disciplinary review team.	All work and verification completed. Documentation in route to NRC.
34	Upgrade Unit 2 operations checklists to include requirements for initials, time, and date. During the review, verify that the checklists are technically correct.	Re-opened. Scheduled completion date is April 25, 1997.
35	Revise applicable IST program documents to prevent equipment from being returned to service (declared operable) with vibrations in the alert range.	All work and verification completed. Documentation sent to NRC.
36	Revise NP 8.1.1, Work Order Processing, and NP 8.1.3, Post-Maintenance Testing to ensure post-maintenance testing, operability testing, and surveillance test requirements are properly addressed.	Re-opened. Additional revisions appear necessary.
37	Include return to service testing in the plant schedule, both outage and nonoutage.	All work and verification completed. Documentation in route to NRC.

COMPLETE PHYSICAL WORK WHICH SUPPORTS SAFE STARTUP AND POWER OPERATIONS

Modifications which Point Beach Nuclear Plant has identified as being significant to safety and scheduled for completion in U2R22 will be in an accepted status (i.e., the applicable physical work completed, post-maintenance testing completed satisfactorily, and the associated component/system being declared operable) prior to being required to be operable per Technical Specifications. These modifications are:

Commitment ID Number	Description	Status
38	Modification 96-033 - replace control power transformers on Motor Control Centers 2B32 and 2B42.	In progress. One remains to be installed.
39	Modification 90-048 - replace Boric Acid and Reactor Makeup Water totalizers, replace the CVCS control switch, replace flow indicators, and refurbish flow controllers. This resolves an Operator workaround issue.	Awaiting PMT. Scheduled completion date is May 10, 1997.
40	Modification 94-097 - remove six RCS loop drain valves.	Awaiting PMT. Scheduled completion date is May 13, 1997.
41	Modification 92-141 - relocate the RHR flow control valve controllers on 2CO3 for human factoring.	All work and verification completed. Documentation in route to NRC.
42	Modification 96-073 - seismically upgrade CCW, SI, RHR, and RHR/letdown piping supports and remove an AFW snubber.	All work and verification completed. Documentation sent to NRC.
43	Modification 94-066 - install a soft seat in containment isolation valve 2SI-834D, and add a relief valve and pressure regulator in the nitrogen supply line to the SI accumulators. This resolves an Operator workaround issue.	In closeout verification process.
44	Modification 96-065B - seismically upgrade the Refueling Water Storage Tank recirculation line.	In closeout verification process.
45	Modification 96-054 - install pressure gauges in the service water return header from the Emergency Diesel Generator GO1 and GO2 glycol coolers, and reset the throttle valves in that line.	On hold. Waiting for plant condition changes.
46	Modification 96-022 - install a new 125 VDC feed to 480V safeguards bus 2B03.	All work and verification completed. Documentation sent to NRC.

47	Modification 94-055 - add seismic supports to the raceway between risers 56 and 62 on C04 (Reactor and Primary Plant Control Board).	All work and verification completed. Documentation sent to NRC.
48	Modification 96-068B - eliminate containment heating steam and condensate return containment isolation valves.	In progress. Scheduled completion date is Mar. 28, 1997.
49	Modification 96-053 - replace an elbow in the west service water header.	In progress. Scheduled completion date is Apr. 4, 1997.
50	Modification 95-070 - seismically upgrade the containment cooling fans and filters.	In closeout verification process.
51	Modification 96-026 - install, delete, and modify supports for feedwater, main steam, and SI system piping for the 79-14 project.	All work and verification completed. Documentation sent to NRC.
52	Modification 96-058 - move Power Plant Computer System alarms to the exterior of C-20 panels.	All work and verification completed. Documentation sent to NRC.
53	Modification 94-095 - replace 8 Main Steam Condenser steam dump valves with improved design.	Awaiting PMT (PMT will be completed following reactor startup).
54	Modification 95-029 - replace SI accumulator level transmitters.	Awaiting PMT. Scheduled completion date is Apr. 1, 1997.
55	Modification 95-035 - modify Containment Spray additive tank controller circuit.	In closeout verification process.
56	Modification 96-063 - replace 345 KV breakers (3-4, 4-5, and 142).	Awaiting PMT (PMT will not be completed until Unit 2 is on-line).
57	Modification 96-069 - replace four breakers (1Y-06-01, 1Y-06-03, 1Y-06-05, and 1Y-06-11) associated with instrument bus 1Y-06.	In closeout verification process.
58	Modification 95-058*O - repair Steam Generator intermediate leg supports. This may be resolved through analysis.	Awaiting PMT (will not be completed until the unit is heated-up).
59	Modification 96-070 - replace molded case circuit breakers associated with instrument buses 2Y-05 and 2Y-06.	In closeout verification process.

The work and testing associated with these Work Orders will be completed prior to the associated component/system being declared operable. Emergent Work Orders associated with Maintenance Rule Risk Significant Systems which Point Beach Nuclear Plant defines as priority level 1 to 4 will be completed prior to Unit 2 criticality.

Commitment ID Number	Description	Status
60	Work Orders 9601506, 9602502, 9603921, 9611267, 9611278, and 9611755 - replace proximity switches and targets with an improved design and overhaul the Fuel Transfer Cart to enhance control system operation. This resolves an Operator workaround issue.	In progress. Scheduled completion date is April 4, 1997.
61	Work Orders 9613568 and 9613569 - provide bonnet pressure locking relief for the SI-857A and SI-857B valves (interface valves between RHR and High Head SI) on Unit 2.	Work complete. Determining additional PMT. Scheduled completion date is April 11, 1997.
62	Work Order 9611757 - correct the leakage which leads to boric acid buildup in the cylinder blocks of "B" Charging Pump.	Awaiting PMT. Scheduled completion date is May 12, 1997.
63	Work Order 9603532 - repair the handswitch for 2P-2A, the "A" Charging Pump.	Awaiting PMT. Scheduled completion date is May 12, 1997.
64	Work Orders 9611624 through 9611626 - replace existing pneumatic turbine generator circuitry time delay relays with plug-in, electronic time delay relays.	Work is scheduled. The scheduled completion date is Mar. 31, 1997.
65	Work Order 9606626 - reinstall switches on the Unit 2 Containment hatch third door to allow monitoring of door status.	All work and verification completed. Documentation sent to NRC.
66	Work Order 9611052 - replace the 2P-10B switch, the "B" RHR Pump control switch.	All work and verification completed. Documentation sent to NRC.
67	Work Orders 9611198 and 9611199 - repair the body-to-bonnet boric acid leak on CV-307 B (lowside tap for "B" RCP #1 seal d/p) and CV-308B (lap seal d/p for "B" RCP).	Awaiting PMT. Scheduled completion date is April 8, 1997.

The following actions will be completed to correct Operator workarounds prior to Unit 2 criticality, except as specifically noted:

Commitment ID Number	Description	Status
68	Repair valve AR-3511 per Work Order 9513340. The Unit 2 priming air ejector is blank flanged due to air in-leakage through the condenser air removal isolation valve, AR-3511.	Awaiting PMT. Scheduled completion date is May 12, 1997.
69	Repair the drain valve for the heating steam moisture separator per Work Order 9613451. The Unit 2 heating steam moisture separator level has been difficult to maintain during normal operations, and frequent alarms were received due to low level. This will be tested following Unit 2 startup.	Work is scheduled. Scheduled completion date is May 12, 1997.
70	Install a new level control system for the brine tank (T-118) per Modification 92-008*Q. The tank overflows because the installed automatic level control system is not effective, and there is no high level alarm for the tank.	All work and verification completed. Documentation in route to NRC.
71	Repair MS-249, the Unit 2 steam line sample valve, per Work Order 9603128. The valve had a packing leak which required steam header sampling to be shifted to the B steam header.	Awaiting PMT. Scheduled completion date is May 12, 1997.
72	Repair alarm switch 2LS-2511 per Work Order 9605711. The Unit 2 D MSR level was being maintained low in the band due to level oscillations and a steam leak from the alarm switch.	Awaiting PMT. Scheduled completion date is May 12, 1997.
73	Repair P116, the Unit 2 Boric Acid Recirculation Pump, per Work Order 9603130. It has a significant seal leak.	Work is scheduled. Scheduled completion date is May 12, 1997.

PERSONNEL AND LICENSING READINESS

The following actions will be completed prior to Unit 2 criticality:

Commitment ID Number	Description	Status
74	Each operating crew will receive simulator training to gain proficiency in casualty response, the expected response of the newly installed steam generators and reactor core, and placing the turbine on-line.	All work and verification completed. Documentation in route to NRC.
75	Revise the initial and requalification operator training plans to include a review of the administrative procedures identified as significant to daily operation of the plant during each two year operations training plan.	Re-opened. Need to better define the administrative controls.
76	Conduct roundtable discussions with all MSS\SS\DTA personnel regarding conservative decisionmaking, Technical Specification interpretations, and lessons learned from recent regulatory communications and perspectives. Review outlier Technical Specification interpretations for interim applications.	In progress. Three people remain to receive the training. Scheduled completion date is April 4, 1997.
77	Complete the procedure changes and training associated with the new Technical Specification on ECCS regarding the new Containment Integrity Analysis.	In progress. Scheduled completion date is April 15, 1997.
78	Communicate specific expectations regarding AFW and EDG status control to Operators.	In progress. Scheduled completion date is April 11, 1997.
79	Restore a proceduralized capability to operate the Containment Spray Pumps in the recirculation mode of the ECCS.	In progress. Scheduled completion date is Apr. 1, 1997.
80	Obtain amendments requested by Change Requests 187 and 189 related to Steam Generator replacement; 192 related to Service Water operability, and 194 related to Low Temperature Overpressurization limits. This will include resolution of issues related to Control Room and offsite dose evaluations for the analyzed events.	In progress. Scheduled completion date is May 7, 1997.

81	<p>Submit the following requests for license amendments resulting from the review of existing Technical Specification interpretations:</p> <ul style="list-style-type: none"> • Revise the maximum acceptable power level when crossover steam dumps are inoperable (TS 5.3.4.E). • Revise requirements for offsite power lines availability to address adequacy (TS 15.3.7.A.1.a). • Remove allowances in TS 15.3.1.A.1.a for single reactor coolant pump operation. • Appropriately modify the minimum required boron concentration in the Refueling Water Storage Tanks. 	<p>In progress. Scheduled completion date is May 7, 1997.</p>
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Status Explanation:

In closeout verification process - work and PMT, as applicable, have been reported as complete. The independent review by Duke Engineering is either in progress or issues from that review are being addressed.