MWR WORK PLAN

Residual Heat Removal (RHR) controller repositioning.
Work Order # 9605772
UNIT 2

MR 92-141
September 24, 1996

Step No.	Work Plan Description	Initials	Date
*	The scope of this work plan is to reposition RHR controllers 2HC-00624 and 2HC-00625 as well as 2HC-00626 on main control board shelf 2C03 - 14. The simulator configuration is to be updated as well.		
*	The purpose of this work plan is to reposition 2HC-00624 and 2HC-00625 RHR controller positions. These controllers currently do not conform to plant installation and design guidelines as stated in DG-G01 section 1.2.2 and section 2.5. In addition, controller 2HC-00626 will be moved to a position in between 2HC-00624 and 2HC-00625 to further separate the 'A' train and 'B' train components.		
*	This work plan requires that Unit #2 be in full core offload and will be accomplished during the U2R22 outage.		
*	Due to sufficient existing wire length this work plan does not require new wiring to be used.		
	REFERENCE DRAWINGS: **WESTINGHOUSE 500B728 SH. 203** **WOLFEM E-1589E-A** **E-1591E-A**		
NOTE:	**INFORM OPERATIONS OF WORK BEING PERFORMED ON MAIN CONTROL BOARD SHELF 2C03 - 14.**	I&C	
NOTE:	**FME CONTROLS ARE IN EFFECT FOR THIS WORK PLAN. INSURE THAT NO FOREIGN MATERIAL OR TOOLS ARE LEFT IN THE WORK AREA.**	I&C	
1	In main control board 2C03, unplug 2HC-00624 from outlet box YLC outlet 3.	I&C	

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2	In main control board 2C03, unplug HC-00625 from outlet box YLD outlet 2.	I&C	
3	In main control board 2C03, unplug 2HC-00626 from outlet box YLC outlet 2.	I&C	
4	Disconnect and remove 2HC-00624 from shelf 2C03 - 14.	I&C	
5	Disconnect and remove 2HC-00625 from shelf 2C03 - 14.	I&C	
6	Disconnect and remove 2HC-00626 from shelf 2C03 - 14	I&C	
7	Label the power cord on the back of 2HC-00624.	I&C	
8	Label the power cord on the back of 2HC-00625.	I&C	
9	Label the power cord on the back of 2HC-00626.	I&C	
10	Remove terminal block, power cord, and signal cord corresponding to controller 2HC-00626.	I&C	
11	Remove terminal block, power cord, and signal cord corresponding to controller 2HC-00625 and install them in the position vacated by 2HC-00626 terminal block, power cord, and signal cord.	I&C	
12	Remove terminal block, power cord, and signal cord corresponding to controller 2HC-00624 and install them in the position vacated by 2HC-00625 terminal block, power cord, and signal cord.	I&C	

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13	Install terminal block, power cord, and signal cord corresponding to 2HC-00626 in remaining open position.	I&C	
14	Place 2HC-00626 in shelf mount position vacated by 2HC-00624. (center position - viewed from behind 2C03)	I&C	
15	Place 2HC-00624 in shelf mount position vacated by 2HC-00625. (left of 2HC-00626 - viewed from behind 2C03)	I&C	
16	Place 2HC-00625 in shelf mount position vacated by 2HC-00626. (right of 2HC-00626 - viewed from behind 2C03)	I&C	
17	Connect signal and power cords to the back of 2HC-00624.	I&C	
18	Connect signal and power cords to the back of 2HC-00625.	I&C	
19	Connect signal and power cords to the back of 2HC-00626.	I&C	
20	Plug 2HC-00624 into outlet box YLC outlet 3.	I&C	
21	Plug 2HC-00625 into outlet box YLD outlet 2.	I&C	
22	Plug 2HC-00626 into outlet box YLC outlet 2.	I&C	
2 3	Perform a post maintenance Foreign Material Inspection of the work area (2C03 rear).	I&C	

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24	Post Maintenance Testing: Perform a stroke test of valve 2RH-624, RHR Heat Exchanger Reactor Coolant Outlet Control Valve in order to test the operation of 2HC-624. Verify locally that valve 2RH-624 strokes from fully open to fully closed as required by the setting of controller 2HC-624.	OPS	
25	Post Maintenance Testing: Perform a stroke test of valve 2RH-625, RHR Heat Exchanger Reactor Coolant Outlet Control Valve in order to test the operation of 2HC-625. Verify locally that valve 2RH-625 strokes from fully open to fully closed as required by the setting of controller 2HC-625.	OPS	
26	Post Maintenance Testing: Perform a stroke test of valve 2RH-626, RHR Heat Exchanger Reactor Coolant Outlet Control Valve in order to test the operation of 2HC-626. Verify locally that valve 2RH-626 strokes from fully open to fully closed as required by the setting of controller 2HC-626.	OPS	

NUCLEAR POWER DEPARTMENT
SAFETY EVALUATION REPORT

SER _____

Title of Proposed Modification,
Procedure Change, Test or Experiment: Residual Heat Removal (RHR) Controller Repositioning

Reference Document(s) #: MR 92-141

Prepared By: _____ Date: September 24, 1996

Reviewed By: _____ Date: 9-25, 1996

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.
Unit #2 Residual Heat Removal (RHR) controllers, 2HC-624 and 2HC-625 on 2C03 display an "A" train left and "B" train right configuration. Per Design and Installation Guideline, DG-G01, the convention for Unit #2 should be train "A" right and train "B" left. Modification MR 92-141 will correct this deficiency and also position controller 2HC-626 between 2HC-624 and 2HC-625, in order to improve the separation of the controllers.

Repositioning the controllers will entail: Disconnecting power to the three controllers, Disconnecting connection cords on the back of each individual controller, Removal and repositioning of terminal blocks on the back of shelf 14 of MCB 2C03 per the modified position scheme, Removal and repositioning of applicable RHR controllers on MCB 2C03 per the modified position scheme, Connecting cords on the back of each individual controller, Connecting power to the three controllers. Operation and performance of the three controllers will be checked with the performance of a Post Maintenance Test for each of the controllers. The PMT will consist of a stroke test of each of the valves via their respective controllers.

B. 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.

C. 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.) ☐ Yes ☒ 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.) ☐ Yes ☒ No

c. Will any procedure described in the PBNP FSAR be altered? (Refer to NP 10.3.1, Attachment A, Part E, for guidance.) ☐ Yes ☒ No

Section 1 - Continuation

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? ☐ Yes ☒ 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? ☐ Yes ☒ No

f. Is a 10 CFR 50.59 evaluation required (are any of the above questions answered yes)? ☐ Yes ☒ 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.) ☐ Yes ☒ 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.) ☐ Yes ☒ No

c. Will any procedures described in the ISFSI Licensing Basis documents be altered? ☐ Yes ☒ 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? ☐ Yes ☒ 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? ☐ Yes ☒ No

f. Is a 10 CFR 72.48 evaluation required (are any of the above questions answered yes)? ☐ Yes ☒ No

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

D. Basis for determination that a safety evaluation is not required:
Modification MR 92-141 will reposition the existing residual heat removal (RHR) controllers on the main control board 2C03 in order to maintain the "A" train right and "B" train left configuration used at PBNP. This repositioning will correct the discrepancies to Design and Installation Guideline, DG-G01.

This modification changes the physical location of the RHR controllers, 2HC-624, 2HC-625, and 2HC-626. It does not change the operation or function of the controllers. The modification will be worked and completed during U2R22 when Unit 2 is in full core offload.

The operation and function of the RHR controllers will be checked with the performance of a Post Maintenance Test for each of the controllers. The PMT will consist of a stroke test of each of the valves via their respective controllers verifing that the correct valve strokes from fully open to fully closed.

This modification does not affect the Independent Spent Fuel Storage Installation (ISFSI).

Work Control Document # 960522

Time/Date of application: 0730 10-1-96	Time/Date Tags Required: 0700 10-1-96
Requesting Individual:	Requesting Work Group: IC
Responsible Supervisor: E- Supv	Estimated Job Completion (Time/Date): 1700 10-1-96

Equipment ID: C-603 - HC-621, 625, 626 Unit: 1&2

Scope of Work: Relocate controllers

Additional Work Control Documents:

Recommended Danger Tagging/Explanation:

No Tags Req'd: ☒ Double Isolation: ☐

Positive Control: ☐ Grounding Req'd: ☐

Partial Removal Req'd: ☐

NOTE: The RMP/IWP/SMP/Work Order/Work Plan may be referenced above for the recommended danger tagging.

References: (*NOTE: Must include Rev. number for controlled documents used to verify adequacy.*)

Information: 3904

Appendix R: ☐ Yes ☐ No If yes, attach Fire Round Sheet

LCO Req'd: ☐ Yes ☐ No If yes, attach LCO Tracking Form PBF-9133

Preparer:

Date:

Reviewer Date Approver (SRO) Date 10-1-96

NOTE: Additional reviews and approvals req'd for changes or additions to original tagout. Describe changes in information section.

Reviewer Date Approver (SRO) Date

Reviewer Date Approver (SRO) Date

Danger Tags No Longer Required and Protected Worker Log Sign-Offs Complete

Responsible Supervisor Date

Tag Series No.

Work Order No. 9605772

Return to Service Testing Reviews

INITIALS
Pre-Release / Pre or Post-RTS

Work Group Post-Maintenance Testing

Functional test of Controller

Section XI Equipment (Y) / N

Operability Testing
IT-395

Inservice Testing
IT-395

ENGINEERING REVIEW

SECTION XI ENGINEERING REVIEW N/A

IWP NUMBER: _____ #42 | Page ___ of ___

INSTALLATION WORK PLAN

PBNP MINOR PROCEDURE ☐

Check As Applicable ~~MWR 12/17/96~~ ~~961256~~

MAINTENANCE WORK REQUEST WORK PLAN ☒ 9612596 9612604

FOR MODIFICATION# MR 96-073 , MWR# 9613263

INSTALLATION WORK PLAN TITLE
U2R22 INSTALLATION AND MODIFICATION OF PIPE SUPPORTS

UNIT 2 ☒ QA-SCOPE ☐ NON QA-SCOPE

Originator _____ Date 12/11/96

Reviewer _____ Date 12-13-96

Final Design Group Head _____ Date 12/16/96

Quality Engineer _____ Date 12/17/96

Installation Group Head _____ Date 12/20/96

Manager - Operations or DSS _____ Date 12/20/96

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

DG-G02.5
Revision 0