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| WISCONSIN PUBLIC SERVICE CORPORATION KEWAUNEE NUCLEAR POWER PLANT JOB PERFORMANCE MEASURE | NO. O-LRQ-JPM-173A REV. Orig TITLE: SHUTDOWN AND COOLDOWN WITH A FIRE IN A DEDICATED ZONE (BORON CONTROL & MISC. EQUIP.) DATE: PAGE: 1 |
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APPROVED BY

Nuclear Training Supervisor-Operations

Assistant Manager - Plant Operations

PERFORMED BY

Trainee

Evaluator

| | | |
|------------------------------|---|--|
| EVALUATION LOCATION: | PLANT/SIMULATOR/CONTROL ROOM | Simulator |
| EVALUATION METHOD: | PERFORM/SIMULATE | Perform |
| AVE. COMPLETION TIME: | AVE. TIME FOR THIS JPM | 5 MINUTES |
| TIME CRITICAL TASK: | YES/NO | No |
| MAX. COMPLETION TIME: | N/A FOR NON-TIME CRITICAL TASKS | N/A |
| PERFORMANCE LEVEL: | SRO/RO/NAO | SRO/RO |
| TASK NUMBER: | FROM OPS TRAINING DATABASE | E070010501 |
| IMPORTANCE RATING: | INITIAL/CONTINUING (FROM OPS TRAINING DATABASE) | Continuing |
| PLANT SYSTEM: | NUMBER AND NAME | 035, CVC 025, ACC 018, RBV 016, TAV 014, ASV |
| CRITICAL STEPS: | (C) = CRITICAL | 3, 4, 5, 6, 7, 8, 9, and 11 |
| | (S) = SEQUENCE CRITICAL | NONE |
| | (T) = TIME CRITICAL | NONE |
| SPECIAL TOOLS AND EQUIPMENT: | SPECIAL ITEMS REQUIRED TO COMPLETE JPM | NONE |
| REFERENCES: | REFERENCES USED FOR PERFORMANCE OF JPM | E-O-07, Rev. O |

FOR SIMULATOR USE ONLY

IF the operator is present when setting up for the JPM, THEN read the following:

PLEASE STANDBY WHILE WE ESTABLISH CONDITIONS FOR THE NEXT JPM.

SET UP:

1. Reset to IC-12, MOL, 100% power.
2. Insert malfunction ED01 to cause a loss of off-site power, ED08E to cause a Bus 5 Lockout and allow D/G B to pick up Bus 6.
3. Perform E-0-07, step 5.b and e, except for AFW Pump B and SI Pump B.
4. Perform E-0-07, step 7.b; and step 13.a & c.
5. Enter the following I/O overrides:
 - 46239-G,,OFF
 - 46389-G,,OFF
 - 46390-G,,OFF
 - 46393-G,,OFF
 - 46394-G,,OFF
 - 46399-G,,OFF
 - 46400-G,,OFF
 - 46414-G,,OFF
 - 46415-G,,OFF
 - 46992-G,,OFF
 - 46993-G,,OFF
6. CLOSE both MSIVs (MS-1A & B), AFW-10B, and CVC-211. MSIVs should be closed after PRZR level is less than 20%.
7. Position LD-3 control switch to CLOSE.
8. Open SI-15A and insert I/O Override 46385 and 46382 to fail open SI-15A and SI-9B.
9. Start SI Pump B and increase PRZR level to approximately 50%. If necessary open PR-1B to reduce pressure and increase fill rate. Opening PR-1B requires I/O overrides @937, @938, and @939 to be entered to remove inconsistent alarms.
10. Acknowledge and reset all annunciators, then FREEZE AND SNAP IC if desired

ENSURE simulator is clear of all unauthorized individuals and conducive to conducting the examination.

ENSURE that all procedures and other materials necessary to conduct the JPM examination are in the proper locations.

GO TO THE NEXT PAGE.

READ THE FOLLOWING TO THE OPERATOR:

THIS TASK IS NOT TIME CRITICAL

THE TASK CONDITIONS ARE:

The Plant was at 100% power before tripping due to a fire in a Dedicated Zone.

You are the Control Operator A.

The Control Operator B is in the plant performing local actions of E-0-07.

E-O-07, Fire in Dedicated Zone, has been completed through step 15.

THE STEPS IN THIS JPM SHOULD BE: PERFORMED

INITIATING CUE:

The Control Room Supervisor directs you to perform E-0-07, Fire in Dedicated Zone, steps 16 through 17.

DO YOU HAVE ANY QUESTIONS BEFORE WE BEGIN?

Answer any questions the Operator may have, THEN read the following to the Operator to initiate the JPM performance:

LET'S BEGIN

THIS TASK IS NOT TIME CRITICAL

THE TASK CONDITIONS ARE:

The Plant was at 100% power before tripping due to a fire in a Dedicated Zone.

You are the Control Operator A.

The Control Operator B is in the plant performing local actions of E-0-07.

E-O-07, Fire in Dedicated Zone, has been completed through step 15.

INITIATING CUE:

The Control Room Supervisor directs you to perform E-0-07, Fire in Dedicated Zone, steps 16 through 17.

FOR SIMULATOR USE ONLY

Take the simulator out of freeze.

Use the JPM evaluation form to mark the operator's performance as the task is being done.

Provide any necessary cues that the JPM calls for which are NOT provided by the Simulator feedback.

Take notes to support the resulting pass/fail grade.

For unsatisfactory grades, documentation must be noted in the comment section of the JPM evaluation form.

LOG START TIME:

| STEP | PERFORMANCE ITEM | * STANDARD | SAT/ UNSAT | S U |
|--------|---|--|---------------|-----|
| 1. | REFER to E-O-07, Fire in Dedicated Zone, steps 16 through 17. | * REFER to E-O-07, steps 16 through 17. | | |
| 2. | <p>ESTABLISH COLD SHUTDOWN BORON CONCENTRATION:</p> <p>Direct the Control Operator B to perform steps 16.a through 16.c.</p> <p>(CUE[Booth]: Steps 16.a through 16.c. are complete.)</p> | * Direct the Control Operator B to perform steps 16.a through 16.c. | | |
| (c) 3. | POSITION LD-301/CV-31090, Excess Letdown Control Selector switch, to MAN. | * POSITION LD-301 Control Selector switch to MAN. | | |
| (c) 4. | POSITION LD-302/CV-31235, Excess Letdown To VCT/RCDT to RD TANK. | <p>* POSITION LD-302 to RD TANK.</p> <p>* VERIFY right red light ON, left red light OFF.</p> | | |
| (c) 5. | OPEN LD-300/CV-31236, Excess Letdown Isolation. | <p>* VERIFY LD-300 control switch in OPEN.</p> <p>VERIFY red light ON, green light OFF.</p> | | |
| (c) 6. | Using LD-301/CV-31090, Excess Letdown Manual Control, ESTABLISH required excess letdown flow. | <p>* Position LD-301 Manual Control to INCR.</p> <p>VERIFY red light ON.</p> <p>VERIFY PI-121 and/or TI-122 increase.</p> | | |
| (c) 7. | <p>OPERATE SI-15A as necessary to maintain Przr Level 20-50%.</p> <p>If required provide following: (CUE[Floor]: PRZR level is >45%.)</p> | <p>* Verify Przr Level >20%.</p> <p>* POSITION SI-15A Control switch to CLOSE.</p> <p>VERIFY red light ON, green light OFF.</p> | | |

| STEP | PERFORMANCE ITEM | * STANDARD | SAT/ UNSAT | S U |
|---------|--|--|---------------|-----|
| (c)8. | DETERMINE SI-15A did NOT close and attempt to close SI-9B. | * POSITION SI-9B Control switch to CLOSE. * VERIFY red light ON, green light OFF. | | |
| (c)9. | Determine SI-9B did NOT close and stop SI Pump B. | * POSITION SI Pump B Control switch to PULLOUT. VERIFY red light OFF, green light OFF. VERIFY SI Pump B Motor Amps go to ZERO (0). VERIFY SI flow goes to ZERO (0). | | |
| 10. | CHECK STATUS OF SUPPORT EQUIPMENT: IF one Service Water Pump is running, START standby pump. | * VERIFY Service Water Pump Current indication for both Train B pumps comes on scale. * Service Water Pump B1 and B2 indicating lights red light ON, Green light OFF. | | |
| (c) 11. | START Containment Fan Coil Units C and D. | * POSITION CFCU C control switch to ON. VERIFY red light ON, green light OFF. VERIFY SI Active Light 47010-55, ON. * POSITION CFCU D control switch to ON. VERIFY red light ON, green light OFF. VERIFY SI Active Light 47010-57, ON. | | |

| STEP | PERFORMANCE ITEM | * STANDARD | SAT/ UNSAT S U | |
|------|--|--|----------------------|--|
| 12. | OPEN SW-903C/MV-32058 and SW-903D/MV-32059, Cntmt Fan Coil Unit C/D SW Return Isolation. | * VERIFY SW-903C control switch in AUTO. VERIFY red light ON, green light OFF. VERIFY SI Active Light 47010-56, ON. * VERIFY SW-903D control switch in AUTO. VERIFY red light ON, green light OFF. VERIFY SI Active Light 47010-58, ON. | | |
| 13. | START Control Room A/C Fan B. | * VERIFY OR POSITION CRAC B control switch to ON. * VERIFY or POSITION CRAC A control switch to OFF/AUTO. VERIFY red light ON, green light OFF. | | |
| 14. | VERIFY the following, RUNNING: a. Turbine Building Fan Coil Unit B b. Aux Bldg Basement Fan Coil Unit B c. Battery Room B Fan Coil Unit B | * VERIFY red light ON, green light OFF.(VERT. A) VERIFY SI Active Light 47010-36, 47010-75, 47010-86, ON. | | |
| 15. | VERIFY Screenhouse Fan B is operating as required (cycles with temperature). If required provide following: (CUE[Floor]: Screenhouse Fan B is operating as required.) | * VERIFY indicating lights ON. | | |
| 16. | VERIFY Diesel Generator B Room Vent Fan, RUNNING. | * VERIFY red light ON, green light OFF. VERIFY SI Active Light 47010-16, ON. | | |

| STEP | PERFORMANCE ITEM | * STANDARD | SAT/ UNSAT S U | |
|------|---|---|----------------------|--|
| 17. | POSITION Nuclear Recorder Pen 1/2 Selector switches to S1 and S2. | * POSITION Nuclear Recorder Pen 1/2 Selector switches to S1 and S2. VERIFY recorder pens on scale. | | |
| 18. | REQUEST Plant Electricians determine feasibility of returning both CRDM Cooling Fans to service. (CUE[Booth]: Plant Electricians will look to running both CRDM Cooling Fans.) | * REQUEST Plant Electricians determine feasibility of returning both CRDM Cooling Fans to service. | | |
| 19. | INFORM CRS that step 17 is completed (Cue[Floor]: CRS is informed.) | * INFORM CRS that step 17 is complete. | | |

* Indicates required items for satisfactory completion of performance items.

LOG STOP TIME:

When the operator completes the performance portion of the JPM, then read the following:

THAT COMPLETES THIS PORTION OF THE JPM.

Ask any required follow-up questions and note the questions and answers in the JPM evaluation comments section.

When done with any required follow-up questions, then ask the JPM QUESTIONS.

READ THE JPM QUESTIONS VERBATIM. If the operator requests clarification, then note rephrasing.

When done with the JPM QUESTIONS, then read the following:

THAT COMPLETES THIS JPM.

Make sure your documentation on the next page is complete.

YES NO N/A

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| Were all of the critical steps performed correctly? | | | |
| <u>IF</u> the JPM was time critical, <u>THEN</u> was the JPM completed in the designated time? | | | |
| <u>IF</u> the JPM was NOT time critical, <u>THEN</u> was acceptable progress made in performing the task? | | | |
| Was the task standard met? | | | |

IF any of the above questions were answered with a NO response, THEN this JPM must be evaluated as UNSATISFACTORY.

THE TASK STANDARD FOR THIS JPM IS:

The actions required by E-O-07, steps 16 through 17 have been completed.

Job Performance Measure was:

SATISFACTORY _____ UNSATISFACTORY _____

EVALUATOR SIGNATURE: _____ DATE: _____

COMMENTS: