

PERFORM POWER RANGE DETECTOR POWER LEVEL
ADJUSTMENTS

K/A REFERENCE: 015 K5.03(2.3/2.6)
(NUREG-1122) 015 K5.19 (2.9/3.2)
015 A1.01 (3.5/3.9)
015 A3.04 (3.3/3.5)
015 A4.02 (3.9/3.9)

ALTERNATE PATH JPM _____ YES X NO

PERFORMANCE CHECKLIST:

SATISFACTORY - Properly performed critical step(s) and/or in sequence (if applicable)

UNSATISFACTORY - Improperly performed critical step(s) and/or out of sequence (if applicable)

X Procedure adequately addresses task elements.
Enter identifier here: 0-TS-RE-002, Rev. 3

_____ Other document adequately describes necessary task elements.
Enter identifier here: _____

X Task elements described as attached.

DESIRED MODE OF EVALUATION:

APPLICABLE EVALUATION SETTING:

SIMULATE/WALKTHROUGH X DISCUSSION _____ PERFORM X IN-PLANT _____ CONTROL ROOM X

VALIDATED TIME FOR COMPLETION: 15 MINUTES

NUCLEAR POWER BUSINESS UNIT
TRAINING JOB PERFORMANCE MEASURES

JPM P000.006COT
Revision 0 DRAFT
July 18, 2000

PERFORM POWER RANGE DETECTOR POWER LEVEL
ADJUSTMENTS

EXAMINEE _____ EVALUATOR _____

START TIME _____ FINISH TIME _____

PERFORMANCE ☐ SAT ☐ UNSAT

JOB TITLE: ☐ AOT ☒ COT ☐ SRO ☐ STA

TOOLS/EQUIPMENT/REFERENCES:

0-TS-RE-001, Rev. 2: Power Level Determination
0-TS-RE-002, Rev. 3: Power Range Detector Power Level Adjustment

TASK STANDARDS:

Properly adjust indicated power on power range drawer A for NI channel 41 within .75% of calculated reactor power.

SIMULATOR INFORMATION:

TIME	FAIL	COMPONENT	OPTION	VALUE	RAMP	DELAY	ACT	COND
--:--:--	IC-1	100%	Steady State					
Adjust NI channel 41 to read 99% without bringing in the power deviation annunciator. RTOP15 should be as close to 100% as possible with steady state conditions. ENSURE Tavg & RTO set up on Digital's.								

NOTE: If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

NOTE: Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

PERFORM POWER RANGE DETECTOR POWER LEVEL
ADJUSTMENTS

READ AND PROVIDE TO THE EXAMINEE

THIS SECTION IS READ ONCE FOR THE ENTIRE PACKAGE OF JPMS. IT IS NOT REQUIRED TO REVIEW THIS SECTION FOR EVERY JPM BEING PERFORMED IN THE PACKAGE. THE INITIAL CONDITIONS AND INITIATING CUE(S)/TASKS TO BE PERFORMED SHOULD BE READ AND THEN PROVIDED TO THE EXAMINEE.

After I read you the initial conditions and initiating cue(s)/task to be performed for this JPM and provide you a copy of the same, you may review and begin. Once you have completed the task, indicate completion by handing back this form to the evaluator unless otherwise told.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

For all two and three-way communications, make your report to me, the JPM evaluator. I will reply to your reports with the statement, "acknowledge." All actions in the plant are to be simulated and all actions in the simulator will be performed. Ensure you make it clear to me, the evaluator, of all actions you are taking so that credit may be given for completing each step of the task.

DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.

INITIAL CONDITIONS:

- You are Unit 1 Control Operator
- 0-TS-RE-001, "Power Level Determination", Section 5.2 was previously performed. RTOP15 was not within .75% of NIS power range indication on NI channel 41.
- This requires 0-TS-RE-002, "Power Range Detector Power Level Adjustment" to be performed.

INITIATING CUES (IF APPLICABLE):

The DSS/DOS directs you to perform Attachment A of 0-TS-RE-002, "Power Range Detector Power Level Adjustment." All prerequisites and initial conditions have been satisfied.

PERFORM POWER RANGE DETECTOR POWER LEVEL
ADJUSTMENTS

PERFORMANCE INFORMATION

NOTE: *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

START TIME	STEP/SEQUENCE/CRITICAL			SAT
	1	1	N	UNSAT

ELEMENT: Record reactor thermal output determined from 0-TS-RE-001, "Power Level Determination"

STANDARD: Ask for 0-TS-RE-001 to obtain reactor thermal output value. Put value in Step 1.0 of Attachment A.

CUE: When asked, Reactor Thermal output determined from 0-TS-RE-001 is 100% or whatever it is indicating on the simulator digital at the start of the JPM.

NOTE: *A copy of 0-TS-RE-001 is available and can be provided, if requested.*

COMMENTS:

STEP/SEQUENCE/CRITICAL			SAT
2	2	N	UNSAT

ELEMENT: Ensure control rod bank selector switch on 1C04 in manual.

STANDARD: Rod bank selector switch taken from auto to manual on 1C04. Initial Step 2.0 on Attachment A.

CUE: Rod bank selector in manual (or as indicated on simulator).

COMMENTS:

STEP/SEQUENCE/CRITICAL			SAT
3	3	N	UNSAT

ELEMENT: Record the as found power range drawer A indication.

STANDARD: Locate and obtain power range drawer A value, and record on Attachment A, Step 3.0 for channels N41.

CUE:

NOTE: *The other channels not needing adjustment should be marked N/A. This is applicable throughout the remainder of this attachment. It is not the intent of this JPM to perform adjustment on more than one channel, however good operational practice may lead to the examinee attempting to adjust all channels whether they require adjustment or not. Therefore, the examinee may need to be cued to stop after completing adjustment on one channel.*

COMMENTS:

PERFORM POWER RANGE DETECTOR POWER LEVEL
ADJUSTMENTS

PERFORMANCE INFORMATION

NOTE: *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

STEP/SEQUENCE/CRITICAL
4 4 N

SAT _____
UNSAT _____

ELEMENT: Unlock the Gain potentiometer on power range drawer B.

STANDARD: Locate Gain potentiometer on power range drawer B and rotate black knob to the left to unlock and initials Step 4.0 of Attachment A, for N41.

CUE:

COMMENTS:

STEP/SEQUENCE/CRITICAL
5 5 Y

SAT _____
UNSAT _____

ELEMENT: Adjust the indicated power on power range drawer A as close as possible to the reactor thermal output recorded in Step 1.0, using the gain potentiometer for N41.

STANDARD: Locate gain potentiometer on power range drawer A and adjusts within .75% of calculated reactor power for channel N41 and initials Step 5.0 of Attachment A.

CUE:

COMMENTS:

STEP/SEQUENCE/CRITICAL
6 6 N

SAT _____
UNSAT _____

ELEMENT: Lock the gain potentiometer on power range drawer B.

STANDARD: Locate and lock by turning black knob to the right on the gain potentiometer for N41 on power range drawer B. Initial completion in Step 6.0 of Attachment A.

CUE:

COMMENTS:

PERFORM POWER RANGE DETECTOR POWER LEVEL
ADJUSTMENTS

PERFORMANCE INFORMATION

NOTE: *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

STEP/SEQUENCE/CRITICAL
7 7 N

SAT _____
UNSAT _____

ELEMENT: Record the as left power range drawer A indication.

STANDARD: Examinee records as above in Step 7.0 of Attachment A.

CUE:

COMMENTS:

STEP/SEQUENCE/CRITICAL
8 8 N

SAT _____
UNSAT _____

ELEMENT: Ensure 1C04 alarms are clear.

STANDARD: Examinee checks that annunciators 1C04-1A 3-5, 3-5, 4-2, 4-3 and 4-5 are clear and initials Step 8.0 of Attachment A.

CUE: 1C04-1A alarms as above are clear (or as indicated in the simulator)

NOTE: *Examiner may also note the rod drop alarm is not lit on NI cabinet.*

COMMENTS:

STEP/SEQUENCE/CRITICAL
9 9 N

SAT _____
UNSAT _____

ELEMENT: Place the control rod bank selector switch on 1C-04 to automatic if desired.

STANDARD: Rod bank selector switch on 1C-04 returned to automatic from manual and Step 9.0 of Attachment A initialed.

CUE: If asked, it is desired to place the rod bank selector switch to automatic.

COMMENTS:

NUCLEAR POWER BUSINESS UNIT
TRAINING JOB PERFORMANCE MEASURES

JPM P000.006COT
Revision 0 DRAFT
July 18, 2000

PERFORM POWER RANGE DETECTOR POWER LEVEL
ADJUSTMENTS

PERFORMANCE INFORMATION

NOTE: *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

	STEP/SEQUENCE/CRITICAL	SAT
	10 10 N	UNSAT
ELEMENT:	Record the GAIN potentiometer setting for power range channel N41 on the logsheet in the Reactor Operating Data Book, Rod 14.	_____
STANDARD:	Examinee locates Rod 14 and finds the power range pot settings page.	_____
CUE:	This completes this JPM.	_____
COMMENTS:		_____

TERMINATION CUE: THIS COMPLETES THIS JPM.

COMPLETION TIME: _____