

Exelon Nuclear

Job Performance Measure

**Review Completed APRM Flow Biased High Flux (Heat Balance)
Calibration Check QCOS 0700-06
(Partial for step H.4.)**

JPM Number: 2014 ILT NRC JPM SRO Admin 3

Revision Number: 00

Date: 10/24/2013

Developed By: _____
Instructor Date

Validated By: _____
SME or Instructor Date

Reviewed By: _____
Operations Representative Date

Approved By: _____
Training Department Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 9 and 13 below.

- _____ 1. Task description and number, JPM description and number are identified.
- _____ 2. Knowledge and Abilities (K/A) references are included.
- _____ 3. Performance location specified. (in-plant, control room, simulator, or other)
- _____ 4. Initial setup conditions are identified.
- _____ 5. Initiating cue (and terminating cue if required) are properly identified.
- _____ 6. Task standards identified and verified by SME review.
- _____ 7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).
- _____ 8. If an alternate path is used, the task standard contains criteria for successful completion.
- _____ 9. Verify the procedure(s) referenced by this JPM reflects the current revision:
 Procedure QCOS 0700-06 Rev: 29
 Procedure _____ Rev: _____
 Procedure _____ Rev: _____
- _____ 10. Verify cues both verbal and visual are free of conflict.
- _____ 11. Verify performance time is accurate
- _____ 12. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- _____ 13. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

SME / Instructor	Date
SME / Instructor	Date
SME / Instructor	Date

Revision Record (Summary)

Revision 00, Renamed JPM to 2014 ILT NRC JPM SRO Admin 3. Restarted numbering accordingly.

Previous revisions were:

Revision 00, This JPM is being developed for SRO testing during the Annual License Operator Requal cycle.

Revision 01, Revised objective tie.

Revision 02, JPM revised to current template and current procedure.

INITIAL CONDITIONS

- You are the Unit 2 Supervisor.
- Unit 2 has been operating at a stable power level for the entire shift.
- Rated Drive Flow from QCGP 4-1 Attachment A is 33.34 Mlb/hr.
- The current OD-5 shows WD as 32.44 Mlb/hr.
- APRM flow bias calibration check has just been completed by the ANSO and is ready for your review.
- This JPM is NOT time critical.

INITIATING CUE

QCOS 0700-06, APRM Flow Biased Calibration Check for Unit 2 (Partial for step H.4.) has been submitted for your review. Perform the review.

Provide examinee with:

Copy of QCOS 0700-06, APRM Flow Bias High Flux (Heat Balance) Calibration Test filled out as a U-2 partial test for the APRM Flow Bias Calibration Check portion only.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.
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Information For Evaluator's Use:

Copy of QCOS 0700-06, APRM Flow Bias High Flux (Heat Balance) Calibration Test filled out as a U-2 partial test for the APRM Flow Bias Calibration Check portion only.

D.2, H.1, H.2, & H.3 are marked N/A.

H.4.a. is initialed off.

H.4.b. entered as 33.34Mlb/hr.

H.4.c. entered as 32.44Mlb/hr.

H.4.d. entered as .973 & 97.3 respectively.

H.4.e. substeps (b) are recorded as follows #1=97.0, #2=96.5, #3=97.0, #4=97.0, #5=98.0, #6=97.5. All other substeps are initialed.

Step H.4.f. has been inappropriately signed off that each APRM is less than or equal to the percent drive flow recorded in step H.4.d. The verified block is also signed off.

H.4.g. is marked N/A as part of the error carried forward from step H.4.f.

H.5. is marked N/A.

H.6.a. N/A is checked and "None" entered under comments section.

H.6.b. is signed off by the performer of the surveillance.

UNSAT requires written comments on respective step.

- * Denotes critical steps.
- Denotes critical elements of a critical step.

Number any comments in the “Comment Number” column on the following pages. Then annotate that comment in the “Comments” section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

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SRO Admin 3 QCOS
0700-06, Rev 029, AI

JPM Start Time: _____

<u>STEP</u>	<u>ELEMENT</u>	<u>STANDARD</u>	SAT	UNSAT	Comment Number
EVALUATOR NOTE: Examinee may indicate that they would point out the errors in the surveillance to the performing RO and have them recheck the numbers and make corrections as necessary. Steps with problems are listed below.					
*H.4.e(5)(b)	●Checks surveillance for errors, accuracy, and performance acceptance criteria met.●	Identifies the value entered for APRM #5 (98%) is above the percent drive flow calculated in step H.4.d. (97.3%)	—	—	—
EVALUATOR NOTE: If examinee stops after pointing out the first error, prompt them as Shift Manager to continue the review to identify if there are any other errors.					
*H.4.e(6)(b)	●Checks surveillance for errors, accuracy, and performance acceptance criteria met.●	Identifies the value entered for APRM #6 (97.5%) is above the percent drive flow calculated in step H.4.d. (97.3%)	—	—	—
*H.4.f.	●Checks surveillance for errors, accuracy, and performance acceptance criteria met. ●	Identifies that APRM readings are higher than percent of calculated drive flow and step H.4.f. is incorrectly signed off.	—	—	—
H.4.g.	Checks surveillance for errors, accuracy, and performance acceptance criteria met.	Identifies that step H.4.g.is incorrectly marked N/A . APRM flows are NOT within acceptance criteria.	—	—	—
CUE:	If the candidate identifies that H.4.g must be completed but does not perform step H.4.g, ask the candidate what actions must be done in step H.4.g.				

<u>STEP</u>	<u>ELEMENT</u>	<u>STANDARD</u>	SAT	UNSAT	Comment Number
*H.4.g.(1) / F.5	IF the % Flow of any APRM meter is greater than % Drive Flow, ●THEN APRMs must be declared inoperable● and the following actions taken: a. Notify Unit Supervisor. b. Hold power constant. ●c. Refer to Technical Specification 3.3.1.1 for inoperable APRM flow biased neutron flux – high actions. ● d. Refer to Technical Requirements Manual Section 3.3.a for less conservative trip setpoint APRM flow biased neutron flux - high actions.	Refers to Limitations and Actions step F.5 and takes the following actions: -Declares APRMs 5 and 6 INOPERABLE -Directs NSO to hold power constant. -Refers to TS 3.3.1.1 and enters Condition A. -Refers to TRM 3.3.a., and determines no actions are required.	—	—	—
H.4.g.(2)	Takes actions of Step H.4.g.(2).	Contacts IMs to perform QCIPM 0200-11, 0200-25, 0200-26, 0200-27 within 12 hours.	—	—	—
H.4.g.(3)	Takes actions of step H.4.g.(3).	Notifies QNE.	—	—	—
EVALUATOR NOTE: The examinee should inform you that the Acceptance Criteria is NOT met and the surveillance is NOT approved. The task is complete.					

JPM Stop Time: _____

JPM SUMMARY

Operator's Name: _____ **Job Title:** EO RO SRO FS
 STA/IA SRO Cert

JPM Title: Review Completed APRM Flow Biased High Flux (Heat Balance) Calibration
Check QCOS 0700-06 (Partial for step H.4.)

JPM Number: SRO-002-I **Revision Number:** 02

Task Number and Title:

S-OPDT-K06 (Freq: LIC=A) Given a degraded or nonconforming condition that may impact the operability of a specific SSC described in Tech Specs, using P&ID/C&IDs, E-prints and Tech Specs, if necessary, PERFORM an immediate Operability Determination and DETERMINE if the SSC meets Tech Spec operability requirements in accordance with the Operability Determination procedures, OP-AA-108-115 and OP-AA-108-115-1002.

K/A Number and Importance: **K/A:** 2.2.42 **Rating:** 4.6 (SRO)

Ability to recognize system parameters that are entry-level conditions for Technical Specifications.

Suggested Testing Environment: Simulator

Alternate Path: Yes No SRO Only: Yes No Time Critical: Yes No

Reference(s): QCOS 0700-06, Rev. 29, APRM FLOW BIAS HIGH FLUX (HEAT BALANCE) CALIBRATION TEST

Actual Testing Environment: Simulator Control Room In-Plant Other

Testing Method: Simulate Perform

Estimated Time to Complete: 9.5 minutes **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? Yes No

The operator's performance was evaluated against standards contained within this JPM and has been determined to be: Satisfactory Unsatisfactory

Comments: _____

Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ **Date:** _____

[If this page is an odd numbered page, a blank page is automatically generated after this page to keep the student cue sheet separate from this page]

INITIAL CONDITIONS

- You are the Unit 2 Supervisor.
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- Rated Drive Flow from QCGP 4-1 Attachment A is 33.34 Mlb/hr.
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INITIATING CUE

QCOS 0700-06, APRM Flow Biased Calibration Check for Unit 2 (Partial for step H.4.) has been submitted for your review. Perform the review.