TASK CONDITIONS:

1. You are the Unit 1 NSO.
2. Unit 1 is at full power, all systems and controls are in automatic.

INITIATING CUES:

1. You have been directed to perform 1BwOSR 3.1.4.2, Unit One Movable Control Assemblies Surveillance in the preferred order specified in surveillance.
2. ARO position is to remain the same.
3. System Engineering has determined that performance of BwVS 500-2, Checkout of the Bank Overlap Unit and System Verification is **not** required.
4. Support is available for removing Rod J-13 from double gripper hold, but will be delayed until just prior to performance of SD Bank B per the note.
5. Inform the Shift Manager of your results.

TASK TITLE: **Perform Movable Control Assemblies Surveillance**

JPM No.: **SIM 111**
TPO No.: 4C.GP-04
TASK No.: R-RD-004, Perform Critical Control Rod Position Surveillance

REV: NRC 09-1
K&A No.: 001000A4.03
K&A IMP: 4.0/3.7

EXAMINEE:_____ RO SRO (Circle One)

EVALUATOR:_____ DATE:_____

The Examinee: PASSED _____ this JPM. TIME STARTED:

FAILED _____ TIME FINISHED:

CRITICAL ELEMENTS: **(*) 3, 4, 5** JPM TIME:_____ MINUTES

CRITICAL TIME: **NA** APPROX COMPLETION TIME: **30** MINUTES

EVALUATION METHOD:
_**X**_ PERFORM
___ SIMULATE

LOCATION:
___ IN PLANT
_**X**_ SIMULATOR

GENERAL REFERENCES:

1. Tech Spec 3.1.4
2. 1BwOSR 3.1.4.2, Rev.17, Unit One Movable Control Assemblies Surveillance.

MATERIALS:

1. 1BwOSR 3.1.4.2, Unit One Movable Control Assemblies Surveillance.
   Ensure cover sheet is signed and due/late dates are modified.

2. Requires Reactivity Manager.

TASK STANDARDS:

1. Perform the required actions of 1BwOSR 3.1.4.2, Movable Control Assemblies Surveillance.

TASK CONDITIONS:

1. You are the Unit 1 NSO.
2. Unit 1 is at full power, all systems and controls are in automatic.

INITIATING CUES:

1. You have been directed to perform 1BwOSR 3.1.4.2, Unit One Movable Control Assemblies Surveillance.
2. ARO position is to remain the same.
3. System Engineering has determined that performance of BwVS 500-2, Checkout of the Bank Overlap Unit and System Verification is **not** required.
4. Support is available for removing Rod J-13 from double gripper hold, but will be delayed until just prior to performance of SD Bank B per the note.
5. Inform the Shift Manager of your results.

RECORD START TIME

PERFORMANCE STEP	STANDARD	Circle applicable
1. Refer to 1BwOSR 3.1.4.2. **(CUE: Provide student with the marked up copy with cover sheet.)** **(CUE: Visual inspection of all U1 Rod Drive cabinets is complete and satisfactory. All other prerequisites are met.)**	Refer to 1BwOSR 3.1.4.2. o Signs cover sheet • Verify all applicable prerequisites, precautions limitations and actions are addressed. o Places dots on expected alarms listed in limitations and actions and pre-reviews BwAR's. o 1-10-A6 o 1-10-B6 o 1-12-C1 o 1-10-A7	SAT UNSAT N/A **Comments:**
2. Transfer Rod Control to Manual and Verify Tave is matched to Tref. **(CUE: When examinee gets to step 2.3.a.1), tell them that performance of BwOP RD-7 will be delayed until SD bank B is to be tested.**	o Informs US that rod control will be placed in manual. • Transfer rod control to MANUAL. o Verifies rod speed at 48 stps/min • VERIFY/MAINTAIN Tave matched to Tref.	SAT UNSAT N/A **Comments:**
***3. Selects "SBE" bank select and records SD bank E position** **Cue: When necessary acknowledge alarms as US and verify SER pt 2153 is in alarm.**	Perform the Rod Movement Verification as follows: o Examinee reads note that as long as SB Rods are above 224 by bank demand /DRPI >222 Rod Insertion limits are met. o Examinee reads note for preferred order on SD banks. • Places rod bank select switch in "SBE" Position. • Examinee Records initial group step counter as found readings and DRPI readings for CBA on Table 2. o Reads note concerning ROD DEV POWER RNG TILT alarm.	SAT UNSAT N/A **Comments:**

PERFORMANCE STEP	STANDARD	Circle applicable
***4 Withdraws SBE rods to 231 steps**	• Withdraws SBE rods to 231 on the Group Step Counters. • Verifies DRPI indicates ≥ 222 steps for SBE.	SAT UNSAT N/A **Comments:**
****ALTERNATE PATH START****		
***5 Inserts SBE rods to 10-15 steps** **Cue: (SRO only)(If necessary) ask as US what TS is required to be entered.**	• Attempts to insert SBE 10-15 steps as indicated on the group step counter(s) • Identifies failure of rod H4 to move. o Records position of SBE rods o Checks "N" block on data sheet D-2 • Immediately Reports Failure of rod H4 to SM or designee (US is acceptable) • (SRO only) Recognizes 3.1.4 condition A is applicable.	SAT UNSAT N/A **Comments:**

(CUE:) THIS COMPLETES THIS JPM.

RECORD STOP TIME _____

COMMENTS:

SIMULATOR SETUP INSTRUCTIONS

JPM NO: SIM-111

REQUIRED SIMULATOR MODE(S): 100% power steady state

MALFUNCTION #'S:

RD05H04 Stuck rod on Shutdown Bank E H4 (current rod height)

COMMENTS: