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Braidwood Generating Station
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ComEd

October 8, 1999

Mr. James Dyer
Regional Administrator
U.S. Nuclear Regulatory Commission
Region III
801 Warrenville Road
Lisle, IL 60532-4351

Subject: Submittal of Requested Information for Administration Portion of Operating Test for Mr. Blair Vakili

Reference:
1) Letter from Timothy J. Tulon (ComEd) to James Dyer (U.S. NRC), "Re-examination of the Administrative Job Performance Measure (JPM) section of the Reactor Operator (RO) exam for Mr. Blair Vakili" (RA-99-047), dated September 14, 1999.

2) Letter from Timothy J. Tulon (ComEd) to James Dyer (U.S. NRC), "Waiver of the training requirements successfully completed by Mr. Blair Vakili" (RA-99-048), dated September 14, 1999.

3) Letter from David E. Hills (U.S. NRC) to Oliver D. Kingsley (ComEd) associated with the re-examination of the Administration JPM section of the RO exam for Mr. Blair Vakili, dated September 23, 1999.

The correspondence identified in Reference 1 documented Braidwood Station's request for a re-examination of the Administrative Job Performance Measure (JPM) section of the Reactor Operator (RO) exam to be administered for Mr. Blair Vakili.

The Reference 3 letter communicated information associated with the re-take examination and documented a request for information necessary to support the re-examination. Currently the re-examination is scheduled to be administered during the week of November 8, 1999, at Braidwood Station.

The following examination materials are being transmitted with this letter:

1) Administrative Walkthrough Job Performance Measures Sample Plan;
2) Administrative Walkthrough Topic Job Performance Measures;
3) Completed Checklists ES-201-2 and ES-301-3; and
4) Examination Security Agreements (ES-201-3).

OCT 12 1999

These materials were developed in accordance with NUREG 1021, Revision 8, "Operator Licensing Examination Standards for Power Reactors." They are being submitted for review, comment, and approval prior to the examination date. Supporting reference materials are attached to each individual examination item.

In addition to the material stated above, the following information was also asked to be provided prior to the examination: preliminary reactor operator license re-application, medical certification, and waiver requests (if any). The Reference 2 letter included a request for a waiver of the training requirements successfully completed by Mr. Vakili. This letter also requested that the validity of Mr. Vakili's medical data in support of NRC Form 396 be extended. A preliminary RO license re-application is being provided with this submittal on NRC Form 398 as required by 10 CFR 55.35, "Re-applications."

Please ensure that these materials are withheld from public disclosure until after the examinations are complete. If you have any questions concerning this letter, please contact Mr. T.W. Simpkin at (815) 458-2801 extension 2980.

Sincerely,

GK Schwartz for

Timothy J. Tulon
Site Vice President
Braidwood Station

TJT/99035tjt.doc

cc: NRC Region III, Chief, Operations Branch

Enclosures: Administrative Walkthrough Job Performance Measures Sample Plan
Administrative Walkthrough Topic Job Performance Measures
Completed Checklists:
ES-201-2
ES-301-3
Examination Security Agreements (ES-201-3)
NRC Form 398

Facility: Braidwood Units 1+2 Date of Examination: 11/8-11/9/99

Item	Task Description	Initials a	b*	c
1. WRITTEN	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.			
	b. Assess whether the outline was systematically prepared and whether all knowledge and ability categories are appropriately sampled.		N/A	
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.			
	d. Assess whether the repetition from previous examination outlines is excessive.			
2. SIM	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, and major transients.		N/A	
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity; ensure each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s)*, and scenarios will not be repeated over successive days.		N/A	
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.			
3. W/T	a. Verify that: (1) the outline(s) contain(s) the required number of control room and in-plant tasks, (2) no more than 30% of the test material is repeated from the last NRC examination, (3)* no tasks are duplicated from the applicants' audit test(s), and (4) no more than 80% of any operating test is taken directly from the licensee's exam banks.	✓	✓	✓
	b. Verify that: (1) the tasks are distributed among the safety function groupings as specified in ES-301, (2) one task is conducted in a low-power or shutdown condition, (3) 40% of the tasks require the applicant to implement an alternate path procedure, (4) one in-plant task tests the applicant's response to an emergency or abnormal condition, and (5) the in-plant walk-through requires the applicant to enter the RCA.		N/A	
	c. Verify that the required administrative topics are covered, with emphasis on performance-based activities.	✓	✓	✓
	d. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on successive days.		N/A	
4. GENERAL	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	✓	✓	✓
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	✓	✓	✓
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	✓	✓	✓
	d. Check for duplication and overlap among exam sections.		N/A	
	e. Check the entire exam for balance of coverage.	✓	✓	✓
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	✓	✓	✓

	Printed Name / Signature	Date
a. Author	William J. Spahr	10-5-99
b. Facility Reviewer(*)	David M Hoots	10-6-99
c. Chief Examiner	Dell R. McNeil ⇔ Dell R. McNeil	10/19/99
d. NRC Supervisor	David E. Hills / David E. Hills	10/20/99

(*) Not applicable for NRC-developed examinations.

Facility: Braidwood Units 1+2 Date of Examination: 11/8-11/9/99 Operating Test Number: NRC 1999302

	1. GENERAL CRITERIA	Initials a	b	c
a.	The operating test conforms with the previously approved outline; changes are consistent with sampling requirements (e.g., 10 CFR 55.45, operational importance, safety function distribution).	✓	✓	✓
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.		N/A	
c.	The operating test shall not duplicate items from the applicants' audit test(s)(see Section D.1.a).	✓	✓	✓
d.	Overlap with the written examination and between operating test categories is within acceptable limits.		N/A	
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	✓	✓	✓
	2. WALK-THROUGH (CATEGORY A & B) CRITERIA	--	--	--
a.	Each JPM includes the following, as applicable: · initial conditions · initiating cues · references and tools, including associated procedures · validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee · specific performance criteria that include: - detailed expected actions with exact criteria and nomenclature - system response and other examiner cues - statements describing important observations to be made by the applicant - criteria for successful completion of the task - identification of critical steps and their associated performance standards - restrictions on the sequence of steps, if applicable	✓	✓	✓
b.	The prescripted questions in Category A are predominantly open reference and meet the criteria in Attachment 1 of ES-301.		N/A	
c.	Repetition from operating tests used during the previous licensing examination is within acceptable limits (30% for the walk-through) and do not compromise test integrity.	✓	✓	✓
d.	At least 20 percent of the JPMs on each test are new or significantly modified.	✓	✓	✓
	3. SIMULATOR (CATEGORY C) CRITERIA	--	--	--
a.	The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.	N/A		

	Printed Name / Signature	Date
a. Author	William J. Spahr	10-5-99
b. Facility Reviewer(*)	David M Hoots	10.6.99
c. NRC Chief Examiner (*)	Dell R. McNeil / Dell R. McNeil	10/19/99
d. NRC Supervisor (*)	David E. Hills / David E Hills	10/20/99

(*) The facility signature is not applicable for NRC-developed tests; two independent NRC reviews are required.

Facility: Braidwood Units 1&2		Date of Examination: 11/9/99
Examination Level: RO		Operating Test Number: 1
Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A1	Conduct of Operations / Reactivity Calculation	1. JPM – Perform Shutdown Margin Calculation K/A 2.1.7 3.7/4.4 2.1.19 3.0/3.0
	Conduct of Operations – Key Control	1. JPM – Obtain key for 2A Diesel Generator Monthly Surveillance K/A 2.1.18 2.9/3.0
A2	Equipment Control / Surveillance	1. JPM – Perform Offsite AC Power Availability Weekly Surveillance K/A 2.2.12 3.0/3.4
A.3	Radiation Control / Radiation Monitor	JPM – Locally Start the Component Cooling Heat Exchanger Rad Monitor 2PR09J K/A 073A4.02 3.7/3.7 2.3.10 2.9/3.3
A.4	Emergency Plan / NARS Form	JPM – Transmit NARS Form Information K/A 2.4.43 2.8/3.5

JOB PERFORMANCE MEASURE

TASK TITLE: **Perform Shutdown Margin Calculation**

JPM No.: **N-45** REV: 7

TPO No.: IV.C.GP-03 K&A No.: 2.1.7
2.1.19

TASK No.: RK-005 K&A IMP: 3.7/4.4
3.0/3.0

TRAINEE:_____

EVALUATOR:_____ DATE:_____

The Trainee: PASSED _____ this JPM. TIME STARTED: _____
(circle)
FAILED _____ TIME FINISHED: _____

CRITICAL ELEMENTS: **(*)2,3,4,5,6** JPM TIME:_____ MINUTES

CRITICAL TIME: **NA** APPROX COMPLETION TIME **16** MINUTES

EVALUATION METHOD:
__X__ PERFORM
_____ SIMULATE

LOCATION:
_____ IN PLANT
__X__ SIMULATOR

GENERAL REFERENCES:

1. 1BwOSR 3.1.1.1-2 Rev. 0, Unit One Shutdown Margin Surveillance During Operation.
2. BwCB-(Various), Braidwood Curve Book, Unit 1.

MATERIALS:

1. Copy of 1BwOSR 3.1.1.1-2 Rev. 0.
2. BwCB-(Various), Braidwood Curve Book, Unit 1.

TASK STANDARDS:

1. Perform the required actions of 1BwOSR 3.1.1.1-2 Rev. 0, Unit One Shutdown Margin surveillance During Operation (within 1 hour).
2. Calculate Shutdown Margin within ± 50 pcm of actual.

TASK CONDITIONS:

1. You are the Unit NSO.
2. All Control systems are in Automatic except rods, which are in manual.

INITIATING CUES:

1. It has been determined that rod M-4 is inoperable and is not movable as the result of excessive friction.
2. The Unit Supervisor has directed you to perform 1BwOSR 3.1.1.1-2 Unit One Shutdown Margin Surveillance During Operation, per LCOAR 1BwOL 3.1.4.
3. Station Nuclear Engineer has been informed.

SIMULATOR SETUP INSTRUCTIONS

JPM NO: N-45

REQUIRED SIMULATOR MODE(S): Reset Simulator to IC-21. 100% steady state.
Place Control Rods in Manual.

MALFUNCTION #'S: N/A

PERFORMANCE CHECKLIST		STANDARDS	SAT	UNSAT	N/A
RECORD START TIME _____					
1.	Refer to 1BwOSR 3.1.1.1-2	Locate and Open: 1BwOSR 3.1.1.1-2.	☐	☐	☐
* 2.	Document the "Present Conditions".	Record:	☐	☐	☐
		• Date and Time (Step F.1.a)			
(Cue):	**Chemistry reports that RCS Boron Concentration is 623 ppm (1 hr ago, no changes since)**	• Core Average Burnup from 1BwOS NR-1 (Step F.1.b)	☐	☐	☐
		• Determine the EFPH to MWD/MTU conversion factor from BwCB-1, Table 4-1. (Step F.1.c)	☐	☐	☐
		• Convert Burnup in EFPH to Burnup in MTU/MWD by MULTIPLYING the presesent Core EFPH by the EFPH to MTU/MWD conversion factor (Step F.1.d)	☐	☐	☐
		• Record the Core Average Temperature (Step F.1.e)	☐	☐	☐
		• Record the Power Level (Step F.1.f)	☐	☐	☐
		• Record the present Boron Concentration (Step F.1.g)	☐	☐	☐
* 3.	Determine total worth due to rods:	Total worth due to rods. Record:			
		• Control Bank Position	☐	☐	☐
		• Remaining worth of the Control Banks from BwCB-1 figure 2 or 2a based on recorded position in step F.2.a	☐	☐	☐
		• SUBTRACT the Control Bank remaining worth from the Control Bank total worth to obtain the total available worth due to Control Bank Position.	☐	☐	☐
		• Add the Shutdown Bank worth (from BWCB-1, Table 4-1) & the total available Control Bank worth (F.2.c) and record the total worth due to rod rods.	☐	☐	☐

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
* 4. Determine Actual reactivity Available due to Rods:	Actual reactivity available due to rods record:			
	• Number of immovable or untrippable control rods	☐	☐	☐
	• Highest stuck rod worth from BwCB-1, Table 4-1	☐	☐	☐
	• MULTIPLY the number of immovable or untrippable control rods by 2000pcm	☐	☐	☐
	• Total rod worth (F.2.d) minus worth of immovable or untrippable rods (F.3.c) minus the highest stuck rod worth (F.3.b) = actual reactivity available due to rods.	☐	☐	☐
* 5. Determine total worth due to rods:	Determine Power Defect for this power level from either Figure 17A or Table 2-1.	☐	☐	☐
* 6. Shutdown Margin Verification:	Verify Shutdown Margin:			
	• Add total corrected rod worth (F.3.d) to the Power Defect (F.4)	☐	☐	☐
	• Record the Shutdown Margin Limit for Modes 1 and 2 from the COLR	☐	☐	☐
	• Verify the available shutdown reactivity recorded is step (F.5.a) is greater than or equal to the minimum required Shutdown Margin Limit recorded in step (F.5.b)	☐	☐	☐

Note to evaluator: Must be within ± 50 pcm of step F.5.a on answer key.

(CUE:) THIS COMPLETES THIS JPM.

RECORD STOP TIME _____

COMMENTS:

TASK CONDITIONS:

1. You are the Unit NSO.
2. All control systems are in Automatic except rods which are in Manual.

INITIATING CUES:

1. It has been determined that rod M-4 is inoperable and is not movable as the result of excessive friction.

2. The Unit Supervisor has directed you to perform 1BwOSR 3.1.1.1-2 Unit One Shutdown Margin Surveillance During Operation, per LCOAR 1BwOL 3.1.4.

3. Station Nuclear Engineer has been informed

JOB PERFORMANCE MEASURE

TASK TITLE: **Perform Offsite AC Power Availability Weekly Surveillance**

JPM No.: **N-75 (Modified)** REV: 6

TPO No.: IV.C.AP-04 K&A No.: 2.2.12

TASK No.: AP-017 K&A IMP: 3.0/3.4

TRAINEE: _____

EVALUATOR: _____ DATE: _____

The Trainee: PASSED _____ this JPM. (circle)
FAILED _____

TIME STARTED: _____

TIME FINISHED: _____

CRITICAL ELEMENTS: **(*)4,8,10,11**

JPM TIME: _____ MINUTES

CRITICAL TIME: **NA**

APPROX COMPLETION TIME **17** MINUTES

EVALUATION METHOD:
__X__ PERFORM
_____ SIMULATE

LOCATION:
_____ IN PLANT
__X__ SIMULATOR

GENERAL REFERENCES:

1. 1BwOSR 3.8.1.1 Rev. 0. Unit One Offsite AC Power Availability Weekly Surveillance

MATERIALS:

Copy of 1BwOSR 3.8.1.1 Rev. 0. Unit One Offsite AC Power Availability Weekly Surveillance

TASK STANDARDS:

1. Complete Surveillance 1BwOSR 3.8.1.1 Rev. 0. Unit One Offsite AC Power Availability Weekly Surveillance.

TASK CONDITIONS:

1. You are an extra NSO.
2. Unit 1 is at 100% power.
3. Unit 2 is at 100% power.
4. Unit 2 4KV ESF buses are being supplied from Unit 2 SATs.
5. All Unit 2 Switchyard and 4KV breakers are available.

INITIATING CUES:

1. The 1A EDG has just been declared inoperable and the US has directed you to perform 1BwOSR 3.8.1.1 Rev. 0, Unit One Offsite AC Power Availability Weekly Surveillance, subsection F.1.0.

Simulator Setup:

Reset Simulator to IC 21.

Place Breaker Control switch 1424 in the Pull to Lock (PTL) position.

PERFORMANCE CHECKLIST **RECORD START TIME** _____	STANDARDS	SAT	UNSAT	N/A
1. Record Initial Data. (CUE: **All Prerequisites, Precautions, Limitations and Actions have been met.)**	On the Modes 1-4 Data Sheet, **RECORD:** Unit 1 Mode Unit 2 Mode	☐	☐	☐
2. Check 345 KV Transmission Line Status.	At 0PM03J, **OBSERVE:** AC amperes, MW, MVAR, and KV for All Lines.	☐	☐	☐
	On the Modes 1-4 Data Sheet, **CIRCLE:** "ENERGIZED" for each: • Line 0104 • Line 2001 • Line 2002 • Line 0103 • Line 2003 • Line 2004	☐	☐	☐
3. Indicate all closed and open switchyard breakers	Check status of all 345 KV Swyd breakers On the Data Sheet Drawing of the 345 KV SWYD, **INDICATE:** Closed breakers with 'X'	☐	☐	☐
*4. Trace paths for independent power sources to the unit 1 and 2 SATs.	On the Data Sheet Drawing of the 345 KV Swyd, **TRACE:** • Single path along the dashed lines from any energized offsite power source to the Unit 1 SAT banks.	☐	☐	☐
	• Second path along the dashed lines from a second independent energized offsite power source to the Unit 2 SAT banks. (Can't retrace any portion of the first path)	☐	☐	☐

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
5. Verify two independent paths exist from offsite power sources to the Unit SAT banks. (Step 1.6)	On the Modes 1-4 Data Sheet, **VERIFY:** Two independent paths exist from the offsite power sources through the swyd to the UNIT SAT Banks.	☐	☐	☐
6. Verify Normal (Bus 4) and Alternate (Bus 14) power are energized.	At 0PM03J, On the Modes 1-4 Data sheet, **OBSERVE and RECORD STATUS:** • Bus alive lights lit for buses 4 and 14 • Bus Voltmeter indications for buses 4 and 14 • Place 'Xs' under 'ENERGIZED' in step 1.7 • Place 'Xs' under 'YES' in steps 1.8 and 1.9	☐	☐	☐
7. Determine status of Normal and Alternate Power SATs.	At 1PM01J and 1PM02J, On the Modes 1-4 Data Sheet, **OBSERVE and RECORD STATUS:** • X or Y winding AC MW and AC amperes indications for each SAT at each unit. • Place X in 'ENERGIZED' column.	☐	☐	☐

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
*8. Determine availability status of Normal and Alternate supply breakers to each unit 1 4160V ESF bus **CUE:** **2414 NAT** **2412 CLOSE** **2424 NAT** **2422 CLOSE** **CUE:** **Unit Supervisor acknowledges and is unsure of why the breaker is in PTL. Continue with the surveillance and he will investigate.**	On the Modes 1-4 Data Sheet, **OBSERVE and RECORD STATUS:** • ACB1412 (X in Closed box) • ACB1414 (X in Avail Box) • ACB2414 (X in Avail box) • ACB2412 (X in Closed box) • ACB1422 (X in Closed box) • ACB1424 (X in Not Avail box) • Notify US of breaker in PTL • ACB2424 (X in Avail box) • ACB2422 (X in Closed box)	☐	☐	☐
9. Determine supply configuration to the 4160V ESF buses **CUE:** **All normal ESF bus feed breakers indicate closed, all crosstie breakers are available on Unit 2.**	On the Modes 1-4 Data Sheet, **OBSERVE and RECORD STATUS:** • ESF BUS 141 (X in FROM SAT 142-1 box) • ESF Bus 142 (X in FROM SAT 142-2 box) • ESF BUS 241 (X in FROM SAT 242-1 box) • ESF BUS 242 (X in FROM SAT 242-2 box)	☐	☐	☐

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A	CWP
*10. Determine capabilities of Unit 1 and Unit 2 SATs to supply Unit 1 ESF buses.	After Reviewing the status of the sources and configuration, On the Modes 1-4 Data sheet, **RECORD STATUS:** • Unit 1 SAT capable of supplying bus 141 (X in 'YES' box in step 1.13) • Unit 2 SAT capable of supplying bus 141 (X in 'YES box in step 1.14) • Unit 1 SAT capable of supplying bus 142 (X in 'YES' box in step 1.15) • Unit 2 SAT capable of supplying bus 142 (X in 'NO' box in step 1.16)	☐	☐	☐	
*11 Notify Shift Manager.	Notifies Shift Manager on failure of acceptance criteria.	☐	☐	☐	

(CUE:) THIS COMPLETES THIS JPM.

RECORD STOP TIME _____

COMMENTS:

TASK CONDITIONS:

1. You are an extra NSO.
2. Unit 1 is at 100% power.
3. Unit 2 is at 100% power.
4. Unit 2 4KV ESF Buses are being supplied from Unit 2 SATs.
5. All Unit 2 switchyard and 4KV breakers are available.

INITIATING CUES:

1. The 1A EDG has just been declared inoperable and the US has directed you to perform 1BwOSR 3.8.1.1 Rev. 0, Unit One Offsite AC Power Availability Weekly Surveillance, subsection F.1.0.

2. All prerequisites are met.

JOB PERFORMANCE MEASURE

TASK TITLE: **Equipment Key Control 2A Diesel Generator**

JPM No.: **N-141 (New)** REV: 0

TPO No.: III.C.AM-18 K&A No.: 2.1.18

TASK No.: AM-022 K&A IMP: 2.9/3.0

TRAINEE: _____

EVALUATOR: _____ DATE: _____

The Trainee: PASSED _____ this JPM. TIME STARTED: _____
(circle)
FAILED _____ TIME FINISHED: _____

CRITICAL ELEMENTS: **(*)2,4,5** JPM TIME: _____ MINUTES

CRITICAL TIME: **NA** APPROX COMPLETION TIME **5** MINUTES

EVALUATION METHOD:
__X__ PERFORM
_____ SIMULATE

LOCATION:
__X__ IN PLANT
_____ SIMULATOR

GENERAL REFERENCES:

1. BwAP 330-5 "Operations Equipment Key Control". Rev 2.

MATERIALS:

Copy of BwAP 330-5 "Operations Equipment Key Control"

TASK STANDARDS:

1. Complete procedure BwAP 330-5 "Operations Equipment Key Control"

TASK CONDITIONS:

1. You are an extra NSO.
2. Unit 1 is at 100% power.
3. Unit 2 is at 100% power.
4. An Equipment Operator has been assigned to perform 2BwOSR 3.8.1.2-1 "Unit 2 2A Diesel Generator Operability Monthly and Semi-Annual Surveillance".
5. The Equipment Operator forgot to check out the 2A DG Mode Selector Switch Key.

INITIATING CUES:

1. The Shift Manager (John Neyhart) has directed you to check out the 2A DG Mode Selector Switch Key an take it the Equipment Operator performing 2BwOSR 3.8.1.2-1.

PERFORMANCE CHECKLIST **RECORD START TIME** _____		STANDARDS	SAT	UNSAT	N/A
1.	Reviews procedure	May not reference procedure BwAP 330-5 but is responsible for the steps contained in the procedure.	☐	☐	☐
*2.	Determine the location of the required key using the SM Key Inventory Log.	• Checks key location utilizing SM Key Inventory Log or cabinet key locator index. • Key #179	☐	☐	☐

Evaluators Note: Permission to obtain key was given during the initiating cue.

3.	Obtain permission from the SM (designee) to use the required key.	Permission obtained.	☐	☐	☐

Evaluators Note: Once the key log has been located, hand candidate a copy of BwAP 330-5A1.

*4.	Sign out the key in the Key Control Log.	Signs out key.	☐	☐	☐
*5.	Remove key from storage cabinet.	Key removed	☐	☐	☐

(CUE:) THIS COMPLETES THIS JPM.

Evaluators Note: Ensure that the key is returned to the exact location in which it was removed.

RECORD STOP TIME _____

COMMENTS:

TASK CONDITIONS:

1. You are an extra NSO.

2. Unit 1 is at 100% power.

3. Unit 2 is at 100% power.

4. An Equipment Operator has been assigned to perform 2BwOSR 3.8.1.2-1 "Unit 2 2A Diesel Generator Operability Monthly and Semi-Annual Surveillance".

5. The Equipment Operator forgot to check out the 2A DG Mode Selector Switch Key.

INITIATING CUES:

1. The Shift Manager (John Neyhart) has directed you to check out the 2A DG Mode Selector Switch Key an take it the Equipment Operator performing 2BwOSR 3.8.1.2-1

JOB PERFORMANCE MEASURE

TASK TITLE: **Perform Local Start of Component Cooling Heat Exchanger Outlet Radiation Monitor (2PR09J)**

JPM No.: **N-142 (New)** REV: 0

TPO No.: III.C.AR-03-A K&A No.: 073A4.02

TASK No.: CC-003 K&A IMP: 3.7/3.7

TRAINEE:_____

EVALUATOR:_____ DATE:_____

The Trainee: PASSED _____ this JPM. (circle) TIME STARTED: _____

FAILED _____ TIME FINISHED: _____

CRITICAL ELEMENTS: **(*)4,7** JPM TIME:_____ MINUTES

CRITICAL TIME: **NA** APPROX COMPLETION TIME **15** MINUTES

EVALUATION METHOD:

_____ PERFORM
__X__ SIMULATE

LOCATION:

__X__ IN PLANT
_____ SIMULATOR

GENERAL REFERENCES:

1. BwOP AR/PR-1 Rev. 7E1. "Startup of Skid Mounted Process Radiation Monitors"

MATERIALS:

Copy of BwOP AR/PR-1 Rev. 7E1. "Startup of Skid Mounted Process Radiation Monitors"

TASK STANDARDS:

1. Complete procedure BwOP AR/PR-1 Rev. 7E1. "Startup of Skid Mounted Process Radiation Monitors."

TASK CONDITIONS:

1. You are an extra NSO.
2. Unit 1 is at 100% power.
3. Unit 2 is at 100% power.
4. Maintenance has recently been performed on 2PR09J CC HX Outlet Radiation Monitor
5. An attempt was made to start 2PR09J from the Control Room and failed.
5. Further discussion/ investigation determined that there might be a problem with the alignment of the monitor.

INITIATING CUES:

1. The Unit Supervisor has directed you to start the 2PR09J locally per BwOP AR\PR-1 Startup of Skid Mounted Process Radiation Monitors. The Unit Supervisor has verified the Monitor Data Base as correct for 2PR09J.

PERFORMANCE CHECKLIST **RECORD START TIME** _____	STANDARDS	SAT	UNSAT	N/A
1. Reviews procedure **(CUE: All Prerequisites, Precautions, Limitations and Actions have been met.)**	Determines that Step 3 is the appropriate step to commence the local startup.	☐	☐	☐
2. Determine that step F.3.a is the appropriate step for the startup of 2PR09J	Determines that step F.3.a is the applicable step.	☐	☐	☐
3. Verify/Place the Hand/Off/Auto Sample Pump Control Switch in the OFF position. **(CUE: HAND/OFF/AUTO Switch is in the OFF position)**	Verifies switch in the off position.	☐	☐	☐
*4. Place the Local Main Power Disconnect Switch in the ON position. **(CUE: Disconnect switch is in the OFF position)** **(CUE:** Once candidate simulates placing the switch in the ON position: **Disconnect switch is in the ON position)**	Places the disconnect switch in the ON position for 2PR09J	☐	☐	☐
5. Check the following inside the RM-80 cabinets: a. Green "GO" LED is Flashing b. Red "NO GO" LED is Off c. Red "LOSS OF COUNTS" LED is Off **Cue: IMD has checked inside the RM-80 cabinet.** **a. Green "GO" LED is Flashing** **b. Red "NO GO" LED is Off** **c. Red "LOSS OF COUNTS" LED is Off**	Verifies that inside RM-80 cabinet indications are correct.	☐	☐	☐

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
6. Check that the MONITOR DATA BASE is correct.	Determines from initiating cue that Monitor Data Base is correct.	☐	☐	☐
*7. Verify/Place the HAND/OFF/AUTO Sample Pump Control Switch in the AUTO Position. **Cue: HAND/OFF/AUTO Sample Pump Control Switch is in the Auto position.**	Places the HAND/OFF/AUTO switch to the Auto position.	☐	☐	☐
8. Check if the Sample Pump is running **Cue: Indications are as you see them locally on the skid.** **Note to Evaluator:** Sample pump should be running and you will be able to see Amps, feel air circulation and feel vibration of the pump. **Cue: If asked as the Unit 2 NSO, report flow light is lit on 2PR09J.**	Verifies Sample Pump running. Determines that step F.3.7 is not required	☐	☐	☐
9. Check that the Instrument Available Light on the RM-80 door is ON. **Cue: Instrument Available Light is ON.**	Verifies Instrument Available Light on.	☐	☐	☐
10. Check that the monitor status is normal operating condition. **Cue: NSO reports that 2PR09J is operating properly.**	Contacts Control Room to verify 2PR09J in normal operating condition.	☐	☐	☐

(CUE:) THIS COMPLETES THIS JPM.

RECORD STOP TIME _____

COMMENTS:

TASK CONDITIONS:

1. You are an extra NSO.
2. Unit 1 is at 100% power.
3. Unit 2 is at 100% power.
4. Maintenance has recently been performed on 2PR09J CC HX Outlet Radiation Monitor
5. An attempt was made to start 2PR09J from the Control Room and failed.
6. Further discussion/ investigation determined that there might be a problem with the alignment of the monitor.

INITIATING CUES:

1. The Unit Supervisor has directed you to start the 2PR09J locally per BwOP AR\PR-1 Startup of Skid Mounted Process Radiation Monitors. The Unit Supervisor has verified the Monitor Data Base as correct for 2PR09J.

JOB PERFORMANCE MEASURE

TASK TITLE: **Offsite Notification (NARS Form Transmittal)**

JPM No.: **N-140 (New)** REV: 0

TPO No.: IV.F.ZP-02 K&A No.: 2.4.43

TASK No.: ZP.002 K&A IMP: 2.8/3.5

TRAINEE:_____

EVALUATOR:_____ DATE:_____

The Trainee: PASSED _____ this JPM. TIME STARTED: _____
(circle)
FAILED _____ TIME FINISHED: _____

CRITICAL ELEMENTS: **(*)2,4,5,6,7,8** JPM TIME:_____ MINUTES

CRITICAL TIME: **15 minutes** APPROX COMPLETION TIME **10** MINUTES

EVALUATION METHOD:
__X__ PERFORM
_____ SIMULATE

LOCATION:
_____ IN PLANT
__X__ SIMULATOR

GENERAL REFERENCES:

1. BwZP 1000-2 Offsite Notifications. Rev 9.
2. BwZP 1000-1A1 Unusual Event Checklist. Rev 7.
3. State of Illinois Nuclear Accident Reporting System Form

MATERIALS:

1. BwZP 1000-2 Offsite Notifications.
2. BwZP 1000-1A1 Unusual Event Checklist
3. State of Illinois Nuclear Accident Reporting System Form

TASK STANDARDS:

1. Transmit the completed NARS Form within 15 minutes of the initiating cue.
2. Transmit the completed NARS Form utilizing the GSEP phone (Code 20).

TASK CONDITIONS:

1. You are the Admin NSO.
2. Minimum Shift Manning is in effect in the Control Room.
3. Unit 1 has experienced a Reactor Trip.
4. While in EP-0 it was determined that there is Unidentified RCS Leakage in excess of 10 gpm.
5. An Unusual Event has just been declared.
6. A NARS form as been filled out and approved.
7. NARS Reporting System is operable.

INITIATING CUES:

1. The Shift Manager has directed you to transmit the NARS form per BWZP 1000-1A1, "Unusual Event Checklist".

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A

RECORD START TIME _____

Note to Evaluator: Critical Time (15 minutes) begins when the initiating cue is read to the candidate.

1.	Refer to BwZP 1000-1A1 Unusual Event Checklist	• Determine applicable step is B.3 • Determine that Code 20 must be used on the GSEP Phone	☐	☐	☐
*2.	Pick up the green NARS Phone, dial 20 and establish communications. (CUE:) **IDNS** **Electric Operations** **IEMA**	• Communications established. • Takes initial roll-call marking the appropriate boxes in the top left corner of the form.	☐	☐	☐
3.	Record the time and date the message was initiated.	Candidate records current time and date in block 12.	☐	☐	☐

Stop Critical time _____

NOTE to Evaluator: Critical Time of 15 minutes stops after the Initial Roll Call is made and the NARS information starts to be given in block 1.

*4.	Verbally transmit the NARS form information.	Transmit information from the NARS form over the GSEP Phone as indicated in steps 1 through 10.	☐	☐	☐
*5.	Fill in name, organization (ComEd) and outside line telephone number of the person transmitting the NARS form information.	o Fills in own name. o Fills in ComEd. • Fills in outside phone number.	☐	☐	☐
*6.	Record the date and time the message was transmitted by the person.	Fills in current date and time.	☐	☐	☐

PERFORMANCE CHECKLIST		STANDARDS	SAT	UNSAT	N/A
*7	Record the name and organization (IEMA) of the person receiving the NARS message. **Cue: Dave Barber (IEMA)**	Records Dave Barber in step 13.	☐	☐	☐
*8	Perform a completion roll-call marking the appropriate boxes. **Cue: Electric Operations** **IEMA** **IDNS**	Mark boxes in the bottom left corner of the form for Elect Ops, IEMA,IDNS.	☐	☐	☐

(CUE:) THIS COMPLETES THIS JPM.

RECORD STOP TIME _____

COMMENTS:

TASK CONDITIONS:

1. You are the Admin NSO.
2. Minimum Shift Manning is in effect in the Control Room.
3. Unit 1 has experienced a Reactor Trip.
4. While in EP-0 it was determined that there is Unidentified RCS Leakage in excess of 10 gpm.
5. An Unusual Event has just been declared.
6. A NARS form as been filled out and approved.
7. NARS Reporting System is operable

INITIATING CUES:

1. The Shift Manager has directed you to transmit the NARS form per BWZP 1000-1A1, "Unusual Event Checklist".