

INITIAL SUBMITTAL OF ADMINISTRATIVE JPMS

FOR THE BRAIDWOOD INITIAL EXAMINATION - OCTOBER 2000

Facility: <u>Braidwood Unit 1 and 2</u>		Date of Examination: <u>10/23/00</u>
Examination Level (circle one): RO		Operating Test Number: <u>1</u>
Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A.1	Conduct of Operations / Plant Parameter Verification	JPM (Replacement/ New) KA 2.1.33 3.4/4.0
	Conduct of Operations / Manual Entry of a Late Log Entry	JPM (N-142) KA 2.1.18 2.9/3.0
A.2	Equipment Control / Perform a QPTR Surveillance	JPM (N-102 Modified) – KA 2.2.12 3.0/3.4
A.3	Radiation Control / Entry and Exit from a RCA	JPM (N-144) KA 2.3.1 2.6/3.0 Evaluated while performing JPM B.2.a
A.4	Emergency Plan / Emergency Plan Directions	2. a. K/A 2.4.39 3.3/3.1 Emergency Exposures
		2. b. K/A 2.4.29 2.6/4.0 Emergency facilities

Facility: <u>Braidwood Unit 1 and 2</u>		Date of Examination: <u>10/23/00</u>
Examination Level (circle one): SRO		Operating Test Number: <u>1</u>
Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A.1	Conduct of Operations / Plant Parameter Verification	JPM (Replacement/ New) KA 2.1.33 3.4/4.0
	Conduct of Operations / Manual Entry of a Late Log Entry	JPM (N-142) KA 2.1.18 2.9/3.0
A.2	Equipment Control / Perform a QPTR Surveillance	JPM (N-102 Modified) – KA 2.2.12 3.0/3.4
A.3	Radiation Control / Entry and Exit from a RCA	JPM (N-144) KA 2.3.1 2.6/3.0 Evaluated while performing JPM B.2.a
A.4	Emergency Plan / GSEP Classification	JPM (New) – KA 2.4.41 2.3/4.1

ADMINISTRATIVE WALKTHROUGH
JOB PERFORMANCE MEASURE

TASK TITLE: Area Temperature Monitoring Surveillance

JPM No.: NEW (RO/SRO)

REV: 0

Task Number: AM-018

K&A No.: 2.1.33

K&A IMP: 3.4/4.0

CANDIDATE: _____ DATE: _____

EVALUATOR: _____ DATE: _____

The Candidate: PASSED _____ this JPM.

TIME STARTED: _____

FAILED _____

TIME FINISHED: _____

CRITICAL ELEMENTS: (*) 5

JPM TIME: _____

CRITICAL TIME: NA

APPROX COMPLETION TIME 12 MINUTES

EVALUATION METHOD:

LOCATION:

_____ PERFORM
_____ SIMULATE

_____ IN PLANT
_____ SIMULATOR

GENERAL REFERENCES:

1. OBwOS TRM 3.7.d.1 U0, U1, U2 All Modes/ At All Times Area Temperature Monitoring Shiftly Surveillance (Rev. 0)

MATERIALS:

1. OBwOS TRM 3.7.d.1 U0, U1, U2 All Modes/ At All Times Area Temperature Monitoring Shiftly Surveillance

TASK STANDARDS:

Perform Actions required to:

1. Review recorded temperatures on data sheet.
2. Determine Tech Specs are not Satisfied.

TASK CONDITIONS:

1. You are the Unit 1 Admin NSO.
2. Unit 1 is in MODE 1.

INITIATING CUES:

1. Surveillance OBwOS TRM 3.7.d.1 "U0, U1, U2 All Modes/ At All Times Area Temperature Monitoring Shiftly Surveillance" has been completed by the Rounds NLO.
2. You have been directed to review surveillance OBwOS TRM 3.7.d.1.

PERFORMANCE CHECKLIST

STANDARDS

SAT UN
SAT SAT N/A

RECORD START TIME _____

1. Review OBwOS TRM 3.7.d.1 Reviews OBwOS TRM 3.7.d.1

NOTE

In order to verify the OPERABILITY of equipment or systems within specific areas the Shift Manager or designee may elect to perform a partial surveillance provided all applicable PREREQUISITES, PRECAUTIONS, and LIMITATIONS and ACTIONS are observed

2. Verify all applicable PREREQUISITES, PRECAUTIONS, and LIMITATIONS and ACTIONS satisfactorily addressed. N/A

3. Record the Start Time on each Data Sheet as it is performed. Determines time is filled in on sheet D-2.

4. Record the certified portable temperature monitoring instrument ID number on the Data Sheet before being performed. Determines ID number filled in.

NOTE

If an installed instrument is not available, the certified portable temperature monitoring instrument may be used to obtain the required readings. The reason for using the portable instrument in lieu of the installed instrument shall be recorded in the comments section of the data sheet.

NOTE

Per commitment 456-402-83-00701, anytime an EDG room ambient temperature exceeds 122F, the Control Cabinet internal temperature must be verified less than 132F. This temperature is read with the portable instrument by placing the probe into the air stream at the cabinet air exhaust grilles on BOTH sides of the cabinet.

PERFORMANCE CHECKLIST

STANDARDS

SAT UN
SAT N/A

*5. Record the area temperatures listed on the Data Sheets. The readings are obtained either from installed instrumentation or using the certified portable temperature monitoring instrument as listed on the Data Sheet.

- Reviews area temperatures
- Determines 1A DG Room temperature is greater than 122°F.
- Contact NLO for resolution of EDG Control Cabinet exhaust temperatures.
- Inform SRO of out of spec reading.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CUE: When contacted as the NLO report Left side of cabinet is 129°F and the right side of the cabinet is 133°F

When contacted as the SRO, state that you will reference Tech Specs.

- Determines Div 11 Misc Ele Equip Room temperature needs to be reported to System Engineering.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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CUE: SRO will contact System Engineering

- Circles reading per Limitations & Actions or contacts NLO for resolution.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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CUE: This completes the JPM.

RECORD STOP TIME _____

COMMENTS:

TASK CONDITIONS:

1. You are the Unit 1 Admin NSO.
2. Unit 1 is in MODE 1.

INITIATING CUES:

1. Surveillance OBwOS TRM 3.7.d.1 "U0, U1, U2 All Modes/ At All Times Area Temperature Monitoring Shiftly Surveillance" has been completed by the Rounds NLO.
2. You have been directed to review surveillance OBwOS TRM 3.7.d.1.

U0, U1 AND U2
ALL MODES/AT ALL TIMES
AREA TEMPERATURE MONITORING
SHIFTLY SURVEILLANCE

A. STATEMENT OF APPLICABILITY

This procedure outlines the steps necessary to verify the temperature in the areas shown in Tech Spec Table 3.7-6 (TRM Table T3.7.d-1) that do not indicate in the Main Control Room are within limits once per shift and is applicable whenever the equipment in the affected area is required OPERABLE.

B. REFERENCES

1. Tech Spec LCO 3.7.12 (TRM TLCO 3.7.d).
2. Tech Spec Surveillance Requirement 4.7.12 (TRM TSR 3.7.d.1), Table 3.7-6 (TRM Table T3.7.d-1), Items 1 - 6, 8 - 11, and 13.
3. Station Procedures:
 - a. BwAP 335-1T2, Unit Supervisor Turnover Log.
 - b. OBwOS 0.1-0 (OBwOSR 0.1-0), Unit Common All Modes/At All Times Shiftly and Daily Operating Surveillance.
 - c. BwOS 7.12-1a (BwOL TRM 3.7.d), LCOAR - Plant Systems - Area Temperature Monitoring.
4. Station Commitments:
 - a. 456-402-83-07001, Ensure EDG Control Cabinet temperature limits are not exceeded.
 - b. 456-200-87-37601, Limitations and Actions governing Tech Spec 4.0.2 (I.T.S. SR 3.0.2) compliance.
 - c. 456-200-88-15503, Require supervisory notification of incomplete data.

C. PREREQUISITES

A certified portable temperature monitoring instrument is required for portions of this surveillance.

D. PRECAUTIONS

None.

E. LIMITATIONS AND ACTIONS

1. As stated in Tech Spec LCO 3.7.12 (TRM TLCO 3.7.d).
2. In the event the Acceptance Criteria is not met during the performance of this surveillance, IMMEDIATELY notify the Shift Manager or designee as it may be necessary to initiate LCOAR(s) 1BwOS 7.12-1a (1BwOL TRM 3.7.d) and/or 2BwOS 7.12-1a (2BwOL TRM 3.7.d), as applicable.
- * 3. The following criteria shall apply for this Shiftly Surveillance:
 - a. Each shift shall complete all required data within each shift column within the following time intervals:

SHIFT ONE:	2300 TO 0600
SHIFT TWO:	0700 TO 1400
SHIFT THREE:	1500 TO 2200
 - b. In the event a reading cannot be taken by the above specified times, IMMEDIATELY notify the Shift Manager or designee to evaluate the impact on Specification 4.0.2 (I.T.S. SR 3.0.2).
 - c. Any reading that will not be completed by the end of each shift shall be recorded in the Unit Supervisor Turnover Log (BwAP 335-1T2) with the required completion time based on the Unit Supervisor evaluation of the previous two performances against Tech Spec 4.0.2 (I.T.S. SR 3.0.2) (utilizing the START/COMPLETE times of this surveillance and those listed on the Data Package Cover Sheet for OBWOS 0.1-0 (OBWOSR 0.1-0)).
 - d. IMMEDIATELY initiate LCOAR(s) 1BwOS 7.12-1a (1BwOL TRM 3.7.d) and/or 2BwOS 7.12-1a (2BwOL TRM 3.7.d) as applicable for any reading that does not meet the requirements of Tech Spec 4.0.2 (I.T.S. SR 3.0.2) if the equipment in the affected area(s) is required OPERABLE.
4. This surveillance should normally be conducted at the beginning of each shift.
5. The readings do not have to be taken in sequence.
6. Data taken which does not meet Acceptance Criteria shall be circled.
7. First/Second shift Operators shall submit this surveillance to the NSO and Unit Supervisor for review only in accordance with OBWOS 0.1-0 (OBWOSR 0.1-0) when the surveillance for these shifts is complete and in all cases at or before 0500/1400. The NSO and Unit Supervisor shall review for correctness/completeness prior to signing the Data Package Cover Sheet.
8. Third shift Operators shall submit this surveillance to the NSO and Unit Supervisor for review and attachment to OBWOS 0.1-0 (OBWOSR 0.1-0) when the surveillance for this shift is complete and in all cases at or before 2200. The NSO and Unit Supervisor shall review for correctness/completeness prior to signing the Data Package Cover Sheet.

F. MAIN BODY

* NOTE *
* In order to verify the OPERABILITY of equipment or *
* systems within specific areas the Shift Manager or *
* designee may elect to perform a partial surveillance *
* provided all applicable PREREQUISITES, PRECAUTIONS, and *
* LIMITATIONS AND ACTIONS are observed. *

1. VERIFY all applicable PREREQUISITES, PRECAUTIONS, and LIMITATIONS AND ACTIONS satisfactorily addressed.
2. RECORD the START TIME on each Data Sheet as it is performed.
3. RECORD the certified portable temperature monitoring instrument ID Number on the Data Sheet being performed.

* NOTE *
* If an installed instrument is not available, the *
* certified portable temperature monitoring instrument may *
* be used to obtain the required reading(s). The reason *
* for using the portable instrument in lieu of the *
* installed instrument shall be recorded in the COMMENTS *
* section of the Data Sheet. *

* NOTE *
* Per commitment 456-402-83-00701, anytime an EDG room *
* ambient temperature exceeds 122°F, the Control Cabinet *
* internal temperature must be verified less than 132°F. *
* This temperature is read with the portable instrument by *
* placing the probe into the airstream at the cabinet air *
* exhaust grilles on BOTH sides of the cabinet. *

4. RECORD the Area Temperatures listed on the Data Sheets. The readings are obtained either from installed instrumentation or using the certified portable temperature monitoring instrument as listed on the Data Sheet.
5. RECORD the COMPLETION TIME on each Data Sheet when it is completed.
- * 6. When all readings that can be taken are complete, CERTIFY that all required Data has been taken and is within specified limits OR CERTIFY that the NSO and Unit Supervisor are PROMPTLY notified of any incomplete data or data that is above specified limits and INITIAL in the applicable space provided on each Data Sheet.

G. ACCEPTANCE CRITERIA

All Area Temperature readings have been taken and are verified within limits stated on the Data Sheets.

(Final)

U0, U1 AND U2
ALL MODES/AT ALL TIMES
AREA TEMPERATURE MONITORING
SHIFTLY SURVEILLANCE DATA SHEET

DATE OF PERFORMANCE: <i>Today</i>					
UNIT ONE TURB BLDG TEMPERATURES	INSTRUMENT & LOCATION	SHIFT			ACCEPTANCE CRITERIA
		1	2	3	
STARTING TIME FOR THIS DATA SHEET EACH SHIFT:	//////////////////// ////////////////////	0000			//////////////////// ////////////////////
PORTABLE INSTRUMENT ID NUMBER EACH SHIFT:	//////////////////// ////////////////////	1102			//////////////////// ////////////////////
Div 12 Misc Ele Equip Room	1TI-VE003 on 1VE01J	85°F			** ≤ 108°F
Div 12 ESF Switchgear Room	1TI-VX002 on 1VX02J	85°F			≤ 108°F
Div 12 Cable Spreading Room	1TI-VX003 on 1VX02J	86°F			≤ 108°F
Div 11 ESF Switchgear Room	1TI-VX001 on 1VX01J	86°F			≤ 108°F
1A Diesel Generator Oil Storage Room	1TI-VD047 on 1VD01JA	91°F			≤ 132°F
1A Diesel Generator Room	1TI-VD053 on 1VD01JA	125°F			\$\$
1B Diesel Generator Oil Storage Room	1TI-VD049 on 1VD01JB	92°F			≤ 132°F
1B Diesel Generator Room	1TI-VD063 on 1VD01JB	90°F			\$\$
Div 11 Misc Ele Equip Room	1TI-VE502 451' L-9	63°F			** ≤ 108°F
Div 12 Battery Room	Hand-Held Pyrometer	86°F			** ≤ 108°F
Div 11 Battery Room	Hand-Held Pyrometer	85°F			** ≤ 108°F
ENDING TIME FOR THIS DATA SHEET EACH SHIFT:	//////////////////// ////////////////////	0020			//////////////////// ////////////////////
CERTIFY (BY INITIALLING IN SPACE PROVIDED) THAT ALL DATA IS ACTUALLY TAKEN AND WITHIN SPECIFIED LIMITS:					ALL DATA TAKEN & IN SPEC
* CERTIFY (BY INITIALLING IN SPACE PROVIDED) THE NSO AND UNIT SUPERVISOR NOTIFIED OF INCOMPLETE OR OUT OF SPEC DATA (RECORD "N/A" IF PREVIOUS STEP OK)					BOTH NSO AND UNIT SUPERVISOR NOTIFIED IF REQ'D
\$\$ The Tech Spec (TRM TSR) is satisfied IF either: a. Ambient room temperature is ≤ 122°F, OR, b. Ambient room temperature AND the EDG Control Cabinet Exhaust temperature (BOTH sides of cabinet) are ≤ 132°F. ** Administratively limited to ≥ 65°F to ensure that battery electrolyte temperature does not fall below 60°F. Contact System Engineering Electrical group to determine appropriate actions for room temperature below 65°F.					
COMMENTS:					

U0, U1 AND U2
ALL MODES/AT ALL TIMES
AREA TEMPERATURE MONITORING
SHIFTLY SURVEILLANCE DATA SHEET

DATE OF PERFORMANCE: <i>Today</i>					
UNIT ONE AUX BLDG TEMPERATURES	INSTRUMENT & LOCATION	SHIFT			ACCEPTANCE CRITERIA
		1	2	3	
STARTING TIME FOR THIS DATA SHEET EACH SHIFT:	///////////////// ////////////////	2310			///////////////// ////////////////
PORTABLE INSTRUMENT ID NUMBER EACH SHIFT:	///////////////// ////////////////	N/A			///////////////// ////////////////
1B Safety Injection Pump Cubicle	1TI-VA078	98			≤ 130°F
1B Cent Charging Pump Cubicle	1TI-VA076	97			≤ 122°F
1A Cent Charging Pump Cubicle	1TI-VA075	97			≤ 122°F
1A Safety Injection Pump Cubicle	1TI-VA077	97			≤ 130°F
1A Residual Heat Removal Pump Cubicle	1TI-VA079	96			≤ 130°F
1A Containment Spray Pump Cubicle	1TI-VA081	85			≤ 130°F
1B Residual Heat Removal Pump Cubicle	1TI-VA080	88			≤ 130°F
1B Containment Spray Pump Cubicle	1TI-VA082	85			≤ 130°F
Lower Cable Spreading Room Train 0A (1Z2)	0TI-VC618 439' L-13	89			≤ 108°F @
ENDING TIME FOR THIS DATA SHEET EACH SHIFT:	///////////////// ////////////////	2320			///////////////// ////////////////
CERTIFY (BY INITIALLING IN SPACE PROVIDED) THAT ALL DATA IS ACTUALLY TAKEN AND WITHIN SPECIFIED LIMITS:		<i>✓</i>			ALL DATA TAKEN & IN SPEC
* CERTIFY (BY INITIALLING IN SPACE PROVIDED) THE NSO AND UNIT SUPERVISOR NOTIFIED OF INCOMPLETE OR OUT OF SPEC DATA (RECORD "N/A" IF PREVIOUS STEP OK)		N/A			BOTH NSO AND UNIT SUPERVISOR NOTIFIED IF REQ'D
@ If temperature in room 1Z2 is ≥ 105°F, MONITOR temperature in rooms 1Z3 and 1Z4 with a Hand-Held Pyrometer. RECORD results in the comments section.					
COMMENTS:					

U0, U1 AND U2
ALL MODES/AT ALL TIMES
AREA TEMPERATURE MONITORING
SHIFTLY SURVEILLANCE DATA SHEET

DATE OF PERFORMANCE: <i>Today</i>					
UNIT TWO TURB BLDG TEMPERATURES	INSTRUMENT & LOCATION	SHIFT			ACCEPTANCE CRITERIA
		1	2	3	
STARTING TIME FOR THIS DATA SHEET EACH SHIFT:	//////	2300			//////
PORTABLE INSTRUMENT ID NUMBER EACH SHIFT:	//////	17102			//////
Div 22 Misc Ele Equip	2TI-VE003 on 2VE01J	85			** ≤ 108°F
Div 22 ESF Switchgear Room	2TI-VX002 on 2VX02J	85			≤ 108°F
Div 22 Cable Spreading Room	2TI-VX003 on 2VX02J	86			≤ 108°F
Div 21 ESF Switchgear Room	2TI-VX001 on 2VX01J	86			≤ 108°F
2A Diesel Generator Oil Storage Room	2TI-VD047 on 2VD01JA	89			≤ 132°F
2A Diesel Generator Room	2TI-VD053 on 2VD01JA	91			\$\$
2B Diesel Generator Oil Storage Room	2TI-VD049 on 2VD01JB	92			≤ 132°F
2B Diesel Generator Room	2TI-VD063 on 2VD01JB	90			\$\$
Div 21 Misc Ele Equip	2TI-VE502 451' L-27	82			** ≤ 108°F
Div 21 Battery Room	Hand-Held Pyrometer	83			** ≤ 108°F
Div 22 Battery Room	Hand-Held Pyrometer	82			** ≤ 108°F
ENDING TIME FOR THIS DATA SHEET EACH SHIFT:	//////	2310			//////
CERTIFY (BY INITIALLING IN SPACE PROVIDED) THAT ALL DATA IS ACTUALLY TAKEN AND WITHIN SPECIFIED LIMITS:				9	ALL DATA TAKEN & IN SPEC
* CERTIFY (BY INITIALLING IN SPACE PROVIDED) THE NSO AND UNIT SUPERVISOR NOTIFIED OF INCOMPLETE OR OUT OF SPEC DATA (RECORD "N/A" IF PREVIOUS STEP OK)				N/A	BOTH NSO AND UNIT SUPERVISOR NOTIFIED IF REQ'D
<p>\$\$ The Tech Spec (TRM TSR) is satisfied IF either:</p> <p>a. Ambient room temperature is ≤ 122°F, OR,</p> <p>b. Ambient room temperature AND the EDG Control Cabinet Exhaust temperature (BOTH sides of cabinet) are ≤ 132°F.</p> <p>** Administratively limited to ≥ 65°F to ensure that battery electrolyte temperature does not fall below 60°F. Contact System Engineering Electrical group to determine appropriate actions for room temperature</p>					
COMMENTS:					

U0, U1 AND U2
ALL MODES/AT ALL TIMES
AREA TEMPERATURE MONITORING
SHIFTLY SURVEILLANCE DATA SHEET

DATE OF PERFORMANCE: <i>Today</i>					
UNIT TWO AUX BLDG TEMPERATURES	INSTRUMENT & LOCATION	SHIFT			ACCEPTANCE CRITERIA
		1	2	3	
STARTING TIME FOR THIS DATA SHEET EACH SHIFT:	////////////////////	2330			////////////////////
PORTABLE INSTRUMENT ID NUMBER EACH SHIFT:	////////////////////	N/A			////////////////////
2B Safety Injection Pump Cubicle	2TI-VA078	94			≤ 130°F
2B Cent Charging Pump Cubicle	2TI-VA076	93			≤ 122°F
2A Cent Charging Pump Cubicle	2TI-VA075	94			≤ 122°F
2A Safety Injection Pump Cubicle	2TI-VA077	92			≤ 130°F
2A Residual Heat Removal Pump Cubicle	2TI-VA079	88			≤ 130°F
2A Containment Spray Pump Cubicle	2TI-VA081	89			≤ 130°F
2B Residual Heat Removal Pump Cubicle	2TI-VA080	92			≤ 130°F
2B Containment Spray Pump Cubicle	2TI-VA082	91			≤ 130°F
Lower Cable Spreading Room Train 0B (2Z2)	OTI-VC619 439' L-23.5	87			≤ 108°F @
Upper Cable Spreading Room Train 0A (1EE1)	OTI-VC620 463' Q-16	80			≤ 90°F #
Upper Cable Spreading Room Train 0B (2EE1)	OTI-VC621 463' Q-20	80			≤ 90°F #
ENDING TIME FOR THIS DATA SHEET EACH SHIFT:	////////////////////	2340			////////////////////
CERTIFY (BY INITIALLING IN SPACE PROVIDED) THAT ALL DATA IS ACTUALLY TAKEN AND WITHIN SPECIFIED LIMITS:		/			ALL DATA TAKEN & IN SPEC
* CERTIFY (BY INITIALLING IN SPACE PROVIDED) THE NSO AND UNIT SUPERVISOR NOTIFIED OF INCOMPLETE OR OUT OF SPEC DATA (RECORD "N/A" IF PREVIOUS STEP OK)		N/A			BOTH NSO AND UNIT SUPERVISOR NOTIFIED IF REQ'D
# If temperature in room 1EE1 or 2EE1 is > 87°F, MONITOR temperature in rooms 1EE2, 1EE3, and 1EE4 OR 2EE2, 2EE3 and 2EE4 with a Hand-Held Pyrometer for the associated Upper Cable Spreading Room train. RECORD results in the comments section.					
@ If temperature in room or 2Z2 is > 105°F, MONITOR temperature in rooms 2Z3 and 2Z4 with a Hand-HeId Pyrometer. RECORD results in the comments section.					
COMMENTS:					

(Final)

JOB PERFORMANCE MEASURE

TASK TITLE: Demonstrate the Ability to Make Log Entries

JPM No.: N-142

REV: 2

Task No.: AM-006

K&A No.: 2.1.18

K&A IMP: 2.9/3.0

CANDIDATE: _____ DATE: _____

EVALUATOR: _____ DATE: _____

The Candidate: PASSED _____ this JPM.

TIME STARTED: _____

FAILED _____

TIME FINISHED: _____

CRITICAL ELEMENTS: (*)1,2,3

JPM TIME: _____

CRITICAL TIME: NA

APPROX COMPLETION TIME 5 MINUTES

EVALUATION METHOD:

LOCATION:

PERFORM
 SIMULATE

IN PLANT
 SIMULATOR

GENERAL REFERENCES:

1. OP-AA-101-402, "Operating Records"
2. Operations Memo 1-92 "Braidwood Operating Department Memorandum"

MATERIALS:

1. Printed copy of RO/Field Supervisor log sheet

TASK STANDARDS:

Perform Actions required to:

1. Make a proper log entry.
2. Correct a log Entry.
3. Make a late entry.

TASK CONDITIONS:

1. You are the Unit 1 NSO.
2. The Unit is at steady state power.
3. The log sheet has been printed out for turnover.
4. All PC computer networks are infected with a virus and are inoperable.

INITIATING CUES:

1. At 1414 you receive a report from Admin NSO J.B. "1BwOSR 3.7.5.3-1, Unit One Motor Driven Auxiliary Feedwater Pump Quarterly Surveillance is completed satisfactorily".

PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

RECORD START TIME _____

- | | | | | |
|---|--|---------------------------------|---------------------------------|---------------------------------|
| <p>*1. Provide the candidate with a sample logsheet.</p> | <ul style="list-style-type: none"> • Log the time and event in black ink. <input type="checkbox"/> • Ensure entry is legible, accurate, complete and understandable. • Initials entry and includes initials of person performing the task (J.B.). | <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> |
| <p>*2. Cue: Time is 1420. Unit Supervisor informs you that there is an error in the log entry <u>that you made</u> regarding the 1A AFW Pump at 0930. The surveillance completed was 1BwOSR 3.3.2.3 <u>NOT</u> 1BwOL 3.6.3.</p> | <ul style="list-style-type: none"> • Draw a single line through the erroneous entry and insert corrected information. • Initial and date the correction. | <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> |
| <p>*3. Cue: Time is 1430. You have identified that no log entry was made when you secured the 1D CD/CB pump at 1409. The entry is required.</p> | <ul style="list-style-type: none"> • Make entry into log. • Annotate as late entry • Include time and date entry was made. • Enters own initials | <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> |

CUE: THIS COMPLETES THIS JPM.

RECORD STOP TIME _____

COMMENTS:

TASK CONDITIONS:

1. You are the Unit 1 NSO.
2. The Unit is at steady state power.
3. The log sheet has been printed out for turnover.
4. All PC computer networks are infected with a virus and are inoperable.

INITIATING CUES:

1. At 1414 you receive a report from Admin NSO J.B. "1BwOSR 3.7.5.3-1, Unit One Motor Driven Auxiliary Feedwater Pump Quarterly Surveillance is completed satisfactorily".

KEY

Commonwealth Edison Company
STATION No. 20 BRAIDWOOD

KEY

UNIT 1

SUBJECT _____ 19 _____

BOOK	PAGE No.
No. 110	04

0759 Ramped down 1mw to maintain calorimetric power at 100% ✓

0857 Added 6 gallons of Boron to RCS for temperature control per
BwOP CV-6. ✓

0859 Commenced surveillance 1BwOSR 3.3.2.3 for the 1A AF pump. ✓

0924 At sample time 0800 chemistry reports RCS Boron concentration
at 995.11 ppm ✓

0930 Completed surveillance ^{1BwOSR 3.3.2.3} ~~1BwOP 3.6.3~~ ✓ Today's date ✓

1037 Enter 1BwOL 3.4.15 for 1PRIID shutdown for filter change ✓

1043 Exited 1BwOL 3.4.15 for 1PRIID shutdown for filter change. ✓

1151 Added 6 gallons of Boron to RCS for temperature control
per BwOP CV-6. ✓

1407 Added 6 gallons of Boron to RCS for temperature control
per BwOP CV-6. ✓

1414 Completed 1BwOSR 3.7.5.3-1 "Unit I Motor Driven Auxiliary Feedwater
Pump Quarterly Surveillance" SAT. J.B./Initial

Today's date
1430 (Late Entry) 1409 Secured 1D CD/CB pump ✓

KEY

KEY

JOB PERFORMANCE MEASURE

TASK TITLE: Perform a QPTR Calculation

JPM No.: N-102

REV: 9

TPO No.:

K&A No.: 2.2.12

TASK No.: RK 003

K&A IMP: 3.0/3.4

TRAINEE: _____

DATE: _____

EVALUATOR: _____

DATE: _____

The Trainee: PASSED _____ this JPM.

TIME STARTED: _____

FAILED _____

TIME FINISHED: _____

CRITICAL ELEMENTS: (*) 5,6,7

JPM TIME: _____

CRITICAL TIME: NA

APPROX COMPLETION TIME 15 MINUTES

EVALUATION METHOD:

LOCATION:

 PERFORM
 X SIMULATE

 IN PLANT
 X SIMULATOR

GENERAL REFERENCES:

1BwOSR 3.2.4.1 "U1 Qúadrant Power Tilt Ratio (QPTR) Calculation, Rev. 1

MATERIALS:

1. Blank copy of 1BwOSR 3.2.4.1.

TASK STANDARDS:

1. Complete QPTR surveillance (1BwOSR 3.2.4.1) using Plant Computer.
2. Notes and reports failure to meet acceptance criteria.

TASK CONDITIONS:

You are the Unit NSO.
Unit 1 is at 100% power.

INITIATING CUES:

The Unit Supervisor directs you to perform the weekly QPTR calculation using 1BwOSR 3.2.4.1, using the computer points.

PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

RECORD START TIME _____

- | | | | | | |
|----|--|---------------------------------|--------------------------|--------------------------|--------------------------|
| 1. | Refer to 1BwOSR 3.2.4.1, "Quadrant Power Tilt Ratio (QPTR) Calculation". | Locate and Open 1BwOSR 3.2.4.1. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|----|--|---------------------------------|--------------------------|--------------------------|--------------------------|

CUE: All Prerequisites and Precautions are met.

- | | | | | | |
|----|--|--|--------------------------|--------------------------|--------------------------|
| 2. | Indicate the applicability of this surveillance on the appropriate Data Sheet. | On 1BwOSR 3.2.4.1 Data Sheet for Computer Points, mark block for "7 Days". | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|----|--|--|--------------------------|--------------------------|--------------------------|

- | | | | | | |
|----|-----------------------|--|--------------------------|--------------------------|--------------------------|
| 3. | Record date and time. | Records current date & time on Data Sheet. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|----|-----------------------|--|--------------------------|--------------------------|--------------------------|

NOTE

With one Power Range Channel Inoperable and Thermal Power is >50% but <75%, the QPTR may be calculated using the three operable channels. With one Power Range Channel input to QPTR Inoperable with Thermal Power >75%, the QPTR shall be calculated using the three operable channels taking data when directed by System Engineering during performance of BWVSR 3.2.4.2. Record N/A for the Inoperable Power Range Channel data.

- | | | | | | |
|----|--|--|--------------------------|--------------------------|--------------------------|
| 4. | Record the OPERABILITY status and indicated Reactor Power from NIS drawer front panel Percent Full Power meters on the appropriate Data Sheet. | Completes applicable blocks of Data Sheet for N41, N42, N43 and N44:

• Channel operable - "Y" block checked

• Instrument reading - Actual values | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|----|--|--|--------------------------|--------------------------|--------------------------|

NOTE

Step F.5 and F.6 are independent of each other. Perform the applicable step. Step F.5 will use the process computer to determine the QPTR. Step F.6 will use installed NIS meters or DVMS to determine QPTR.

PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

* 5. Determine the QPTR using process computer points as follows:

- Record present computer point reading.
- Divide the sum of the computer points by the number of the operable channels to obtain the average computer point reading.
- Divide the Computer Point Reading by the Average Computer Point Reading to determine the Quadrant Power Tilt Ratio.

Obtain readings from Process Computer by locating appropriate points:

- N0041 AND N0042
- N0043 AND N0044
- N0045 AND N0046
- N0047 AND N0048

AND

Records values in appropriate blanks on Data Sheet.

AND

Divides sum of computer points for Upper Detectors (A) by the total number of operable channels (4)

AND

Divides sum of computer points for Upper Detectors (B) by the total number of operable channels (4)

* 6. Determine QPTR.

Divide each computer point value by the calculated average for BOTH the Upper and Lower detectors

AND

Records QPTR value in appropriate blanks on Data Sheet.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

* 7. Evaluate Acceptance
Criteria.

Determines QPTR for N0048
does NOT meet Acceptance
Criteria (> 1.02)

AND

Notifies SM (to initiate
LOCAR 1BwOL 3.2.4.

CUE: Acknowledge report for
QPTR.

CUE: This completes this JPM.

RECORD STOP TIME _____

COMMENTS

TASK CONDITIONS:

You are the Unit NSO.

Unit 1 is at 100% power.

INITIATING CUES:

The Unit Supervisor directs you to perform the weekly QPTR calculation using 1BwOSR 3.2.4.1, using the computer points.

JOB PERFORMANCE MEASURE

TASK TITLE: RCA Entry/Exit

JPM No.: N-144

REV: 2

TPO No.:

K&A No.: 2.3.1

TASK No.: AM-027

K&A IMP: 2.6/3.0

CANDIDATE: _____ DATE: _____

EVALUATOR: _____ DATE: _____

The Candidate: PASSED _____ this JPM.

TIME STARTED: _____

FAILED _____

TIME FINISHED: _____

CRITICAL ELEMENTS: (*) 1,2,3

JPM TIME: _____

CRITICAL TIME: NA

APPROX COMPLETION TIME 5 MINUTES

EVALUATION METHOD:

LOCATION:

PERFORM
 SIMULATE

IN PLANT
 SIMULATOR

GENERAL REFERENCES:

1. BwRP 5000-7, Rev. 2, Unescorted Access to and Conduct in Radiologically Posted Areas

MATERIALS:

1. Braidwood Access Control
2. IPM-8 Personal Monitors

TASK STANDARDS:

1. Demonstrate proper method to enter and exit the RCA (Auxiliary Building).
2. Demonstrate proper conduct while inside the RCA (Auxiliary Building).

TASK CONDITIONS:

1. Plant is at any power level.
2. Entrance into the Aux. Building is required for NRC License Exam JPM N-89.

INITIATING CUES:

1. JPM is initiated which requires you to enter the Aux. Building.

NOTE: No Task Conditions or Initiating Cues need to be given. This JPM is to be evaluated during the performance of JPM N-89.

RECORD START TIME _____

Note to Evaluator: The candidate will be directed to enter the Auxiliary Building in order to perform a Local Emergency Boration JPM as part of the in plant walkthrough section of the operating test.

- | | | |
|--|--|---|
| <p>*1. Enter the Auxiliary Building for performance of JPM N-89.</p> | <p>Demonstrate ability to use the Braidwood Access Control System to gain authorization to enter the Auxiliary Building.</p> <ul style="list-style-type: none"> • Verify read and sign appropriate RWP. (as required) • Gain Authorized Access from the Braidwood Access Control System. • Verify proper dosimetry. • Ensure TLD and ED worn within palm length apart on trunk of body. • Successfully pass through the Auxiliary Building turnstile. | <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> |
| <p>*2. Perform proper radiological control techniques while in the Auxiliary Building.</p> | <ul style="list-style-type: none"> • Obey posted signs, survey maps and instructions. • Maintain exposure ALARA. | <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> |
| <p>*3. Exit the Auxiliary Building</p> | <ul style="list-style-type: none"> • Utilize personal monitor IPM-8 to exit Auxiliary Building • Utilize Braidwood Access Control System to log out of Auxiliary Building. • Return electronic dosimetry. | <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> |

RECORD STOP TIME: _____

COMMENTS: _____

ADMINISTRATIVE TOPICS

SECTION A.4 RO

Questions

REFERENCE USE: YES

Question No: 1

An Alert Emergency has been declared on Unit 1 due to a LOCA. Two operators were in containment at the time of the LOCA. Both operators are out of the direct path of the LOCA. One operator fell as he was running and hit his head. He is unconscious and bleeding profusely from the head and his left ear. The other operator states that the injured man will die if he does not get help immediately. The injured man is too heavy for the other operator to get out of containment by himself. When asked, you volunteered to perform the operation.

What are the radiation exposure limits that should apply to this action and what individual must approve this exposure? (List all limits TEDE, Lens to the Eye and Extremities)

Expected Answer:

Exposure Limits:

- 25 rem TEDE (Whole Body)
- 75 rem to lens of the eye
- 250 rem to extremities (and any organs and skin)

Note: May also state that Station Director can authorize >25 Rem TEDE but not required for answer

Approval: The Station Director (Person in Command & Control)

Actual Answer:

Candidate's response matched expected answer.

Sat ___ Unsat ___.

K/A: 2.4.29 2.6/4.0

Reference(s): BwZP 2000-13 " Emergency Personnel Dose Limits and Radiological Controls for Rescue and Recovery Operations", Rev. 0E1
BwZP 2000-13A1 "Emergency Exposure Approval Form Rev 0E1

**ADMINISTRATIVE TOPICS
SECTION A.4 RO**

REFERENCE USE: YES

Question No: 2

A Site Emergency has been declared and the Evacuation Alarm has been sounded. What are the areas of assembly for both Licensed and Non-Licensed Operators?

Expected Answer:

Control Room, Operation Support Center (OSC).

Actual Answer:

Candidate's response matched expected answer.

Sat ___ Unsat ___.

K/A: 2.4.29 2.6/4.0

Reference(s): BwZP 2000-10 "Assembly and Accountability of Personnel Rev 5.

**ADMINISTRATIVE TOPICS
SECTION A.4 RO
CANDIDATE QUESTION SHEET**

Question No: 1

An Alert Emergency has been declared on Unit 1. All equipment is functioning normally. A leak has the potential for affecting one train of ECCS equipment. A person will have to enter the 383' Penetration and operate the valve handwheel to isolate the leak. The primary exposure will be to the hands and lower forearms. When asked, you volunteered to perform the operation.

What are the radiation exposure limits that should apply to this action and what individual must approve this exposure? (List all limits TEDE, Lens to the Eye and Extremities).

Question No: 2

A Site Emergency has been declared and the Evacuation Alarm has been sounded. What are the areas of assembly for both Licensed and Non-Licensed Operators?

ADMINISTRATIVE WALKTHROUGH
JOB PERFORMANCE MEASURE

TASK TITLE: **GSEP Classification**

JPM No.: JPM-A-4 (SRO)

REV: 0

K&A No.: 2.4.41

TASK No.: ZP-006

K&A IMP: 2.3/4.1

CANDIDATE: _____ DATE: _____

EVALUATOR _____ DATE: _____

The Candidate: PASSED _____ this JPM. TIME STARTED: _____

FAILED _____ TIME FINISHED: _____

CRITICAL ELEMENTS: (*) 1 JPM TIME: _____

CRITICAL TIME: NA APPROX COMPLETION TIME 3 MINUTES

EVALUATION METHOD: LOCATION:
_____ PERFORM _____ IN PLANT
_____ SIMULATE _____ SIMULATOR

GENERAL REFERENCES:

1. BwZP 200-1, "Braidwood Emergency Action Levels" Rev.8

MATERIALS:

1. BwZP 200-1, "Braidwood Emergency Action Levels" Rev.8
2. Control Room Simulator following Operational Exam

TASK STANDARDS:

1. Classify events for appropriate GSEP conditions per BwZP 200-1.

TASK CONDITIONS:

1. You are the Unit Supervisor.
2. The Unit has sustained a major casualty.

INITIATING CUES:

1. The Shift Manager requests you classify the plant conditions for the appropriate GSEP condition per BwZP 200-1.

PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

*1. Classify Dynamic Scenario to determine appropriate GSEP Conditions.

Obtain copy of BwZP 200-1 and classify event to determine appropriate GSEP Conditions.

Dynamic Scenario's, Mark Applicable Scenario

◦ 00-1 - MG-3 General Emergency	00-1	MG-3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
◦ 00-2 - HU-2 Unusual Event	00-2	HU-2			
◦ 00-3 - MS-1 Site Emergency	00-3	MS-1			
◦ 00-4 - FA-1 Alert	00-4	FA-1			
◦ 00-5 - MA3/FA1 Alert	00-5	MA3/FA1			
◦ 00-6 - FA-1 Alert	00-6	FA-1			
◦ 00-7 - MA3/FA1 Alert	00-7	MA3/FA1			
◦ 00-8 - MS-3 Site Emergency	00-8	MS-3			
◦ 00-9 - FA-1 Alert	00-9	FA-1			
◦ Spare - FA-1 Alert	Spare	FA-1			

COMMENTS: