

FINAL AS-ADMINISTERED ADMINISTRATIVE JPMS

FOR THE DRESDEN INITIAL EXAMINATION THE WEEKS OF FEBRUARY 5 AND 12, 2001

**LICENSED OPERATOR REQUAL
JOB PERFORMANCE MEASURE
A.1.a-RO Rev. 01 (01/01)**

Examinee Information

Examinee's Name : _____ Date : _____

Time Started : _____ Time Completed : _____

Evaluator Name : _____

JPM Information

Standard Faulted Alternate Path Time Critical

Task Title : Perform APRM Gain Verification
Task Number: 215L003
Procedure : DOS 0500-06
Procedure Rev : 18

Task Standards : Determine if ARPRM AGAFs are within tolerances as required by Tech Specs per DOS 0500-06.

Validated Time : _____ Time Critical: No

Evaluation Method : Perform Evaluation Location : In-Plant

K & A Number : 2.1.19 K & A Rating : 3.0 / 3.0

Exam Results

- | | | | | | |
|----|--|-----|-------|----|-------|
| 1. | Did the examinee complete all the critical steps? | Yes | _____ | No | _____ |
| 2. | Was the JPM completed within the validated time? | Yes | _____ | No | _____ |
| 3. | Did the examinee pass the JPM? | Yes | _____ | No | _____ |
| 4. | Is remediation recommended (req'd. if # 3 marked No) | Yes | _____ | No | _____ |

5. List below any weaknesses noted :

6. List below remediation recommended by the evaluator :

**LICENSED OPERATOR REQUAL
JOB PERFORMANCE MEASURE
A.1.a-RO Rev. 01 (01/01)**

Initial Conditions

None

Remotes/Alarms Required

None

Malfunction Required

None

Task Conditions (Read to Examinee)

1. Unit 2 is operating at about 95% reactor power.
2. All APRMs are operable.
3. The POWERPLEX Computer is unavailable.
4. Process Computer point T206 (1st stage turbine pressure) is not valid.
5. 1st stage turbine pressure is 850 psig on Panel 902-7.
6. The Nominal AGAF is 1.00.

Initiating Cues (Read to Examinee)

Note: Provide the examinee with a blank copy of DATA SHEET 1 from DOS 0500-06.

1. You are the Nuclear Station Operator (NSO) on dayshift, _____.
2. The Unit 2 Unit Supervisor has directed you to perform DOS 0500-06, APRM Gain Adjustment Factor Verification.
3. Inform the Unit Supervisor when DATA SHEET 1 is ready for review.

**LICENSED OPERATOR REQUAL
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PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
Note: Process computer OD-9 option 1 printout should be provided after examinee demonstrates how to obtain the printout.				
* 1. On DATA SHEET 1, record APRM readings from Program OD-03, POWERPLEX Core Thermal Power OR OD-09 option 1 or 2, Process Computer Thermal Power.	OD-09 option 1 or 2 printed out and APRM readings recorded on DATA SHEET 1.	_____	_____	_____
2. Obtain AGAFs and CTP from the OD-09 option 1 or 2 per DOP-9900-09, Process Computer Thermal Power (OD-9).	AGAFs AND CTP readings recorded on DATA SHEET 1.	_____	_____	_____
3. Calculate percent CTP (CTP%) using the formula from DOS 0500-06, step I.2.e., and record on DATA SHEET 1.	Percent CTP (CTP%) calculated and recorded on DATA SHEET 1. "93.5" recorded.	_____	_____	_____
4. On DATA SHEET 1, record 1 st stage turbine pressure from indication on Panel 902-7.	1 st stage turbine pressure from indication on Panel 902-7 recorded as "850 psig" on DATA SHEET 1.	_____	_____	_____
Note: Graph of 1 st Stage Turbine Pressure vs Core Thermal Power is found as Operator Aid #1 in yellow notebook labeled "Unit 2 - Appendix A - NSO Daily Surveillance Log."				
* 5. Using the 1 st stage turbine pressure reading and the graph of 1 st Stage Turbine Pressure vs Core Thermal Power, record whether CTP falls within allowable range (Yes or No).	1 st stage turbine pressure reading and graph of 1 st Stage Turbine Pressure vs Core Thermal Power used to verify that CTP falls within allowable range. "Yes" recorded on DATA SHEET 1..	_____	_____	_____
6. IF CTP falls outside the allowable range, THEN notify the Unit Supervisor of a potential problem with the CTP data AND to contact a QNE for further review of the data.	CTP does not fall outside the allowable range. "N/A" recorded on DATA SHEET 1.	_____	_____	_____
7. Record nominal AGAF from Unit Status Sheet on DATA SHEET 1.	Nominal AGAF from Unit Status Sheet recorded as "1.00" on DATA SHEET 1.	_____	_____	_____

**LICENSED OPERATOR REQUAL
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PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
* 8. Obtain AGAF limit from Table 1 using CTP% (round CTP% up).	AGAF limit obtained from Table 1 using CTP%. Obtained 0.021 by rounding 93.5 up to 94. Recorded "0.021" on DATA SHEET 1.	_____	_____	_____
* 9. Calculate the adjusted high AGAF limit using the formula from DOS 0500-06, step I.5., and record on DATA SHEET 1.	Adjusted high AGAF limit calculated and recorded as "1.021" on DATA SHEET 1.	_____	_____	_____
* 10. Calculate the adjusted low AGAF limit using the formula from DOS 0500-06, step I.6., and record on DATA SHEET 1.	Adjusted low AGAF limit calculated and recorded as "0.979" on DATA SHEET 1.	_____	_____	_____
11. For each operable APRM, IF the AGAF is less than or equal to the adjusted high AGAF limit AND greater than or equal to the adjusted low AGAF limit, THEN check (✓) the AGAF value on DATA SHEET 1.	All AGAF values checked (✓) on DATA SHEET 1.	_____	_____	_____
12. The Nuclear Station Operator shall initial DATA SHEET 1.	DATA SHEET 1 initialed.	_____	_____	_____
13. Notify the Unit Supervisor to initial DATA SHEET 1.	Unit Supervisor notified.	_____	_____	_____
CUE: Acknowledge notification.				
	END			

OD-9. CORE THERMAL POWER AND APRM CALIBRATION. XX-XX-XX XX:XX:XX DRESDEN UNIT 2

	GMWE	CMWT	WT	WTHB	WTSUB	WD	WTFLAG	IREC	IEQL
	779.88	2362.75	85.51	75.77	88.35	30.03	2.00	0.	0
	PR	RWL	DPC-M	WFW	HFW	HD	DHS	CAEQ	CAQA
	1011.05	30.28	11.76	9.45	317.39	516.44	24.16	0.1128	0.1152
	1-A	2-C	3-E	4-B	5-D	6-F			
RAP	92.51	94.98	95.08	92.39	94.93	94.88			
AGAF	1.011	0.984	0.983	1.012	0.984	0.985			

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.1.b-RO Rev. 01 (01/01)**

Examinee Information

Examinee's Name : _____ Date : _____

Time Started : _____ Time Completed : _____

Evaluator Name : _____

JPM Information

Standard Faulted Alternate Path Time Critical

Task Title : Calculate Drywell Leak Rate
Task Number: 268L002
Procedure : DOP 2000-24
Procedure Rev : 08

Task Standards : Calculate the reactor coolant system leakage and verify it is within tech spec limitations IAW daily checklist sheets in Appendix A of the unit operators round.

Validated Time : _____ Time Critical: No

Evaluation Method : Perform Evaluation Location : In-Plant

K & A Number : 2.1.20 K & A Rating : 4.3 / 4.2

Exam Results

- | | | | | | |
|----|--|-----|-------|----|-------|
| 1. | Did the examinee complete all the critical steps? | Yes | _____ | No | _____ |
| 2. | Was the JPM completed within the validated time? | Yes | _____ | No | _____ |
| 3. | Did the examinee pass the JPM? | Yes | _____ | No | _____ |
| 4. | Is remediation recommended (req'd. if # 3 marked No) | Yes | _____ | No | _____ |

5. List below any weaknesses noted :

6. List below remediation recommended by the evaluator :

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.1.b-RO Rev. 01 (01/01)**

Initial Conditions

None

Remotes/Alarms Required

None

Malfunction Required

None

Task Conditions (Read to Examinee)

1. Unit 2 is operating at rated power.
2. There is no inoperable or out of service equipment.

Initiating Cues (Read to Examinee)

Note: Provide marked up copy of MODE 1, 2, AND 3 REACTOR COOLANT LEAKAGE LOG to the examinee.

1. It is Saturday and you are the Unit 2 NSO on dayshift.
2. At 1200 the Drywell Sumps were pumped.
3. Complete the MODE 1, 2, AND 3 REACTOR COOLANT LEAKAGE LOG for 1200 and determine if the Appendix A Surveillance Acceptance Criteria have been met.
4. Inform the Unit Supervisor when complete.

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.1.b-RO Rev. 01 (01/01)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
1. Record time in time column.	Time recorded in time column as 1200.	_____	_____	_____
2. Record Integrator Reading for Floor Drain Leakage (FDL).	Recorded "672" as Integrator Reading for Floor Drain Leakage (FDL).	_____	_____	_____
CUE: (After examinee has located location of integrator reading) "The Floor Drain Leakage integrator reading is 672."				
* 3. Calculate GPM and record for Floor Drain Leakage.	GPM calculated as "2.8" and recorded for Floor Drain Leakage.	_____	_____	_____
* 4. Check if Floor Drain Leakage meets acceptance criteria.	Acceptance Criteria (AC) NOT checked for Floor Drain Leakage.	_____	_____	_____
Note: Examinee may notify Unit Supervisor at this step.				
CUE: (If Unit Supervisor notified) Acknowledge report and direct that remainder of log be completed.				
5. Record Integrator Reading for Equipment Drain Leakage (EDL).	Recorded "408" as Integrator Reading for Equipment Drain Leakage (EDL)..	_____	_____	_____
CUE: (After examinee has located location of integrator reading) "The Equipment Drain Leakage integrator reading is 408."				
* 6. Calculate GPM and record for Equipment Drain Leakage.	GPM calculated as "1.7" and recorded for Equipment Drain Leakage.	_____	_____	_____
* 7. Calculate Total FDL and EDL.	Calculated total FDL and EDL as 4.5.	_____	_____	_____
8. Notify Unit Supervisor that log is complete.	Unit Supervisor notified that FDL did not meet Acceptance Criteria (if not done previously) and log is complete.	_____	_____	_____
CUE: Acknowledge report.				
	END			

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.2-RO Rev. 01 (01/01)**

Examinee Information

Examinee's Name : _____ Date : _____

Time Started : _____ Time Completed : _____

Evaluator Name : _____

JPM Information

Standard Faulted Alternate Path Time Critical

Task Title : Verify a Safety Tagout
Task Number: 29900LP003
Procedure : OP-AA-101-201
Procedure Rev : 02

Task Standards : Verify a Safety Tagout IAW OP-AA-101-201.

Validated Time : 10 minutes Time Critical: No

Evaluation Method : Perform Evaluation Location : Simulator

K & A Number : 2.2.13 K & A Rating : 3.6 / 3.8

Exam Results

- | | | | | | |
|----|--|-----|-------|----|-------|
| 1. | Did the examinee complete all the critical steps? | Yes | _____ | No | _____ |
| 2. | Was the JPM completed within the validated time? | Yes | _____ | No | _____ |
| 3. | Did the examinee pass the JPM? | Yes | _____ | No | _____ |
| 4. | Is remediation recommended (req'd. if # 3 marked No) | Yes | _____ | No | _____ |
| 5. | List below any weaknesses noted : | | | | |

6. List below remediation recommended by the evaluator :
- _____

DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.2-RO Rev. 01 (01/01)

Initial Conditions

1. Any IC.
2. OOS cards placed on the 902-3 Panel for the following components:
 - a. 2B CORE SPRAY PP BUS 24-1
 - b. PP SUCT VLV MO 2-1402-3B MC 29-4
 - c. 2B MIN FLOW VLV MO 2-1402-38B MC 29-4
 - d. FLOW TEST VLV MO 2-1401-4B MCC 29-4
 - e. PP DISCH VLV MO 2-1401-24B MCC 29-1
 - f. PP DISCH VLV MO 2-1401-25B MCC 29-1 THROT

Remotes/Alarms Required

None

Malfunction Required

None

Task Conditions (Read to Examinee)

An OOS has been hung by the Unit 2 NSO for the Unit 2 Division 2 Core Spray subsystem.

Initiating Cues (Read to Examinee)

Note: Provide the examinee with a printed copy of OOS 99002784.

1. You are the Unit 2 Aux NSO.
2. The Unit 2 Supervisor has directed you to verify the control room portion of OOS 990027824 for Division 2 Core Spray .
3. Inform the Unit 2 Supervisor when the verification is complete.

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.2-RO Rev. 01 (01/01)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
Note: 2B Core Spray Pump control switch is NOT in the correct position. It is in the AUTO position, rather than PTL.				
* 1. Verify OOS card and position of 2B CORE SPRAY PP BUS 24-1.	OOS card is correct per OOS 990027824. Determines that 2B CORE SPRAY PP BUS 24-1 control switch is NOT in correct position	_____	_____	_____
* 2. Notifies Unit 2 Supervisor that 2B Core Spray Pump control switch is not in correct position.	Unit 2 Supervisor notified that 2B Core Spray pump control switch is not in correct position.	_____	_____	_____
CUE: Acknowledge report. Direct examinee to place 2B Core Spray Pump control switch in proper position and continue with OOS verification.				
* 3. Places 2B Core Spray Pump control switch in PTL.	2B Core Spray Pump control switch placed in PTL.	_____	_____	_____
Note: The PP SUCT VLV MO 2-1402-3B MC 29-4 control switch position is labeled MANUAL BYPASS. This is equivalent to PTL. The Dresden OOS software currently does not provide for a Manual Bypass position.				
4. Verify OOS card and position of PP SUCT VLV MO 2-1402-3B MC 29-4.	PP SUCT VLV MO 2-1402-3B MC 29-4 OOS card and position verified correct per OOS 990027824. "Hung IV" column initialed.	_____	_____	_____
Note: The 2B MIN FLOW VLV MO 2-1402-38B MC 29-4 control switch position is labeled AUTO. This is equivalent to the "NAC" position.				
5. Verify OOS card and position of 2B MIN FLOW VLV MO 2-1402-38B MC 29-4.	2B MIN FLOW VLV MO 2-1402-38B MC 29-4 OOS card and position verified correct per OOS 990027824. "Hung IV" column initialed.	_____	_____	_____

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.2-RO Rev. 01 (01/01)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
6. Verify OOS card and position of FLOW TEST VLV MO 2-1401-4B MCC 29-4.	FLOW TEST VLV MO 2-1401-4B MCC 29-4 card and position verified correct per OOS 990027824. "Hung IV" column initialed.	_____	_____	_____
Note: PP DISCH VLV MO 2-1401-24B is NOT in the correct position. It is open rather than closed.				
* 7. Verify OOS card and position of PP DISCH VLV MO 2-1401-24B MCC 29-1.	OOS card is correct per OOS 990027824. Determines that 2B CORE SPRAY PP BUS 24-1 valve is NOT in correct position.	_____	_____	_____
* 8. Notifies Unit 2 Supervisor that 2-1401-24B valve is not in correct position.	Unit 2 Supervisor notified that is 2-1401-24B valve is not in correct position.	_____	_____	_____
CUE: Acknowledge report. Direct examinee to place the 2-1401-24B valve in proper position and continue with OOS verification.				
* 5. Places 2-1401-24B valve in close position.	2-1401-24B control switch placed in close until Red close light illuminated.	_____	_____	_____
8. Verify OOS card and position of PP DISCH VLV MO 2-1401-25B MCC 29-1 THROT.	PP DISCH VLV MO 2-1401-25B MCC 29-1 THROT OOS card and position verified per OOS 990027824.	_____	_____	_____
7. Report completion of verification to Unit 2 Supervisor.	Completion verbally reported to Unit 2 Supervisor.	_____	_____	_____
CUE: Acknowledge report.				
	END			

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.3-RO Rev. 00 (12/00)**

Examinee Information

Examinee's Name : _____ Date : _____

Time Started : _____ Time Completed : _____

Evaluator Name : _____

JPM Information

Standard Faulted Alternate Path Time Critical

Task Title : NCAD Flow Meter Correction
Task Number: 295L103
Procedure : DEOP 0500-04
Procedure Rev : 09

Task Standards : Correct the NCAD flow meter reading IAW DEOP 0500-04.

Validated Time : N/A Time Critical: No

Evaluation Method : Simulate Evaluation Location : In-Plant

K & A Number : 2.3.9 K & A Rating : 2.5 / 3.4

Exam Results

- | | | | | | |
|----|--|-----|-------|----|-------|
| 1. | Did the examinee complete all the critical steps? | Yes | _____ | No | _____ |
| 2. | Was the JPM completed within the validated time? | Yes | _____ | No | _____ |
| 3. | Did the examinee pass the JPM? | Yes | _____ | No | _____ |
| 4. | Is remediation recommended (req'd. if # 3 marked No) | Yes | _____ | No | _____ |

5. List below any weaknesses noted :

6. List below remediation recommended by the evaluator :

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.3-RO Rev. 00 (12/00)**

Initial Conditions

None

Remotes/Alarms Required

None

Malfunction Required

None

Task Conditions (Read to Examinee)

1. A LOCA has occurred on Unit 2.
2. DEOP 0500-04, Attachment 2, is in progress due high hydrogen in the drywell.
3. Nitrogen makeup is unavailable.

Initiating Cues (Read to Examinee)

Note: Provide the examinee with a blank copy of DEOP 0500-04, Attachment 10.

1. The NCAD bypass is being aligned on Unit 2 to purge the drywell with nitrogen.
2. Valve 2-8599-769, U2 N2 BYPASS SUPPLY TO N2 NORM MU STOP VLV has been opened.
3. The Unit Supervisor has directed you to perform Attachment 10 NCAD Flow Meter Correction to set flowrate.
4. Valve 2/3-8505-500, U 2/3 N2 MU HEADER OUTLET ISOL VLV TO U2 AND U3 has just been closed.
5. Inform the Unit Supervisor when the indicated flowrate (Q) has been determined.

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.3-RO Rev. 00 (12/00)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
* 1. Record pressure indicated on PI 2/3-8541-8003, NITROGEN PRIMARY STORAGE TANK.	Records 135 for PI 2/3-8541-8003 pressure reading.	_____	_____	_____
CUE: After pressure gauge is located, "pressure is 135 psig."				
* 2. Record temperature indicated on TI 2/3-8541-33, 2/3 N2 VAPORIZER OUTLET TEMP.	Records 50 for TI 2/3-8541-33 temperature reading.	_____	_____	_____
CUE: After temperature indicator is located, "temperature is 50°F."				
* 3. Using Table 1, NCAD FLOWMETER CORRECTION determine the indicated flowrate (Q) to be read on FI 2/3-8541-34, 2/3 N2 VAPORIZER OUTLET FLOW for system flow rate of 35 scfm.	Determines flowrate of 35 scfm using Table 1, NCAD FLOWMETER CORRECTION.	_____	_____	_____
4. Notify Unit Supervisor that indicated flowrate (Q) has been determined.	Unit Supervisor notified that indicated flowrate (Q) is 35 scfm.	_____	_____	_____
CUE: Acknowledge report.				
	END			

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.4-RO Rev. 01 (01/01)**

Examinee Information

Examinee's Name : _____ Date : _____

Time Started : _____ Time Completed : _____

Evaluator Name : _____

JPM Information

Standard Faulted Alternate Path Time Critical

Task Title : Respond to a Fire Alarm
Task Number: 295L009
Procedure : DOA 0010-10
Procedure Rev : 05

Task Standards : Respond to a fire/explosion IAW DOA 0010-10.

Validated Time : N/A Time Critical: No

Evaluation Method : Simulate Evaluation Location : Simulator

K & A Number : 2.4.27 K & A Rating : 3.0 / 3.5

Exam Results

- | | | | | | |
|----|--|-----|-------|----|-------|
| 1. | Did the examinee complete all the critical steps? | Yes | _____ | No | _____ |
| 2. | Was the JPM completed within the validated time? | Yes | _____ | No | _____ |
| 3. | Did the examinee pass the JPM? | Yes | _____ | No | _____ |
| 4. | Is remediation recommended (req'd. if # 3 marked No) | Yes | _____ | No | _____ |

5. List below any weaknesses noted :

6. List below remediation recommended by the evaluator :

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.4-RO Rev. 01 (01/01)**

Initial Conditions

None

Remotes/Alarms Required

Note: Ensure that the simulator fire alarm is de-energized to prevent alerting other examinees.

None

Malfunction Required

None

Task Conditions (Read to Examinee)

1. Unit 2 is operating at rated power.
2. There is no inoperable or out of service equipment.

Initiating Cues (Read to Examinee)

1. You are the Unit 2 NSO.
2. DOS 6600-01, Diesel Generator Surveillance Tests, was completed for the Unit 2 D/G about 30 minutes ago.
3. An XL3 alarm for Device 23-23 has just been received.

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.4-RO Rev. 01 (01/01)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
Note: PRIOR to starting this JPM ensure that the simulator FIRE ALARM is DE-ENERGIZED to prevent alerting other examinees..				
1. Inform the Operations Supervisor.	Unit Supervisor notified.	___	___	___
CUE: Acknowledge report.				
* 2. Dispatch an Operator to determine cause of alarm.	NLO dispatched to U2 D/G room to investigate fire alarm.	___	___	___
CUE: NLO reports "Smoke coming from U2 D/G Room and the fire suppression alarm is ringing.				
* 3. IF fire exists, THEN ENTER DOA 0010-10 to assemble the Fire Brigade.	Entering DOA 0010-10 announced.	___	___	___
Note: Steps 4 – 7 are the DOA 0010-10 immediate actions.				
Note: Fire alarm in simulator is not energized and will not actually sound. Use cue following this step.				
* 4. Initiate the Plant Fire Siren. a. Verify FIRE/EVAC ALARM ENABLE control switch is in NORMAL. b. Depress and release FIRE ALARM pushbutton. c. Observe audible ALTERNATING TONE for 10 seconds.	Plant fire siren initiated: a. FIRE/EVAC ALARM ENABLE control switch verified in NORMAL. b. FIRE ALARM pushbutton depressed and released. c. Audible ALTERNATING TONE observed for 10 seconds.	___	___	___
CUE: "The fire alarm is sounding" "TEN seconds have elapsed." "The fire alarm has stopped."				
* 5. Announce fire location on Plant Public Address System (repeat announcement).	Fire location (U2 D/G Room) announced on Plant PA System and announcement repeated.	___	___	___
* 6. Announce fire location on Plant Radio System (Channel FM-1) (repeat announcement).	Fire location (U2 D/G Room) announced on Plant Radio System (Channel FM-1) and announcement repeated.	___	___	___

**DRESDEN OPERATOR LICENSING EXAMINATION
 JOB PERFORMANCE MEASURE
 A.4-RO Rev. 01 (01/01)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
* 7. Announce fire location on Plant Radio System (OPS Channel) (repeat announcement).	Fire location (U2 D/G Room) announced on Plant Radio System (Radio System) and announcement repeated.	_____	_____	_____
CUE: Acknowledge report.				
	END			

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.1.a-SRO Rev. 01 (01/01)**

Examinee Information

Examinee's Name : _____ Date : _____

Time Started : _____ Time Completed : _____

Evaluator Name : _____

JPM Information

Standard Faulted Alternate Path Time Critical

Task Title : Determine Reportability Requirements
Task Number: 299L001
Procedure : Reportability Manual, SAF 1.7
Procedure Rev : 3

Task Standards : Given a plant in an off-normal condition, determine reportability requirements IAW the Reportability Manual.

Validated Time : N/A Time Critical: Yes

Evaluation Method : Perform Evaluation Location : In-Plant

K & A Number : 2.1.33 K & A Rating : 3.4 / 4.0

Exam Results

- | | | | | | |
|----|--|-----|-------|----|-------|
| 1. | Did the examinee complete all the critical steps? | Yes | _____ | No | _____ |
| 2. | Was the JPM completed within the validated time? | Yes | _____ | No | _____ |
| 3. | Did the examinee pass the JPM? | Yes | _____ | No | _____ |
| 4. | Is remediation recommended (req'd. if # 3 marked No) | Yes | _____ | No | _____ |

5. List below any weaknesses noted :

6. List below remediation recommended by the evaluator :

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.1.a-SRO Rev. 01 (01/01)**

Initial Conditions

None

Remotes/Alarms Required

None

Malfunction Required

None

Task Conditions (Read to Examinee)

1. RFP 2B has been out of service for two days.
2. A loss of feedwater occurred on Unit 2 due to a Bus 21 overcurrent trip.
3. The reactor was manually scrammed three minutes ago due to decreasing water level.
4. HPCI automatically began injecting one minute ago after reactor water level decreased to -65 inches.
5. Reactor water level was restored using HPCI and is being maintained +8 to +48 inches.

Initiating Cues (Read to Examinee)

1. You are the Shift Manager.
2. Determine reportability requirements for the events on Unit 2.

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.1.a-SRO Rev. 01 (01/01)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
	Record start time: _____			
1. Obtain the Reportability Manual.	Reportability Manual obtained.	_____	_____	_____
2. Read Reportability Manual to determine event reportability requirements.	Reportability Manual read to determine reportability requirements.	_____	_____	_____
Note: The examinee may also determine that the event is reportable within 4 hours as an ESF Actuation IAW SAF 1.12; however, the one hour notification takes precedence.				
* 3. Determine that event requires notification of the NRC Operations Center via the Emergency Notification System (ENS), within one hour of the occurrence of any event that results or should have resulted in ECCS discharge into the reactor coolant system as a result of a valid signal (SAF 1.7)	Determined that event requires NRC Operations Center notification via the ENS within one hour.	_____	_____	_____
* TIME CRITICAL – JPM must be completed within 59 minutes.	Record End Time: _____ Elapsed Time: _____ minutes			
	END			

**LICENSED OPERATOR REQUAL
JOB PERFORMANCE MEASURE
A.1.b-SRO Rev. 01 (01/01)**

Examinee Information

Examinee's Name : _____ Date : _____

Time Started : _____ Time Completed : _____

Evaluator Name : _____

JPM Information

Standard Faulted Alternate Path Time Critical

Task Title : Review a Faulty APRM Surveillance
Task Number: 215L003
Procedure : DOS 0500-06
Procedure Rev : 18

Task Standards : Determine if APRM AGAFs are within tolerances as required by Tech Specs per DOS 0500-06.

Validated Time : N/A Time Critical: No

Evaluation Method : Simulate Evaluation Location : In-Plant

K & A Number : 2.1.12 K & A Rating : 2.9 / 4.0

Exam Results

- | | | | | | |
|----|--|-----|-------|----|-------|
| 1. | Did the examinee complete all the critical steps? | Yes | _____ | No | _____ |
| 2. | Was the JPM completed within the validated time? | Yes | _____ | No | _____ |
| 3. | Did the examinee pass the JPM? | Yes | _____ | No | _____ |
| 4. | Is remediation recommended (req'd. if # 3 marked No) | Yes | _____ | No | _____ |

5. List below any weaknesses noted :

6. List below remediation recommended by the evaluator :

**LICENSED OPERATOR REQUAL
JOB PERFORMANCE MEASURE
A.1.b-SRO Rev. 01 (01/01)**

Initial Conditions

None

Remotes/Alarms Required

None

Malfunction Required

None

Task Conditions (Read to Examinee)

1. Unit 2 is operating at about 95% reactor power.
2. All APRMs are operable.
3. The POWERPLEX Computer is unavailable.
4. Process Computer point T206 (1st stage turbine pressure) is not valid.

Initiating Cues (Read to Examinee)

Note: Provide the examinee with a marked up copy of DATA SHEET 1 from DOS 0500-06.

1. You are the Unit 2 Unit Supervisor on dayshift, _____.
2. The Unit 2 NSO has just given you DATA SHEET 1 from DOS 0500-06, APRM Gain Adjustment Factor Verification, and informed you that it is ready for review.
3. 1st stage turbine pressure was 850 psig on Panel 902-7.
4. The Nominal AGAF is 1.00.
5. Inform the Shift Manager when the review of DOS 0500-06 is complete.

**LICENSED OPERATOR REQUAL
JOB PERFORMANCE MEASURE
A.1.b-SRO Rev. 01 (01/01)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
1. Review data collected.	RAP data for each APRM reviewed and determined to be correct.	_____	_____	_____
2. Review of data collected and hand calculation for CTP%.	CTP data and CTP% hand calculation reviewed and determined to be correct.	_____	_____	_____
3. Review of data collected for 1 st stage turbine pressure.	Recorded 1 st stage turbine pressure determined to be correct.	_____	_____	_____
4. Review of 1 st Stage Turbine Pressure vs CTP.	CTP determined to be within range of 1 st Stage Turbine Pressure vs CTP.	_____	_____	_____
5. Review of Nominal AGAF.	Recorded nominal AGAF determined to be correct.	_____	_____	_____
Note: Examinee may notify Shift Manager when errors are detected.				
* 6. Review of AGAF limit.	Recorded AGAF limit determined to be incorrect. Data sheet has 0.022 recorded. Correct value should be 0.021.	_____	_____	_____
CUE: (If Shift Manager notified at any point) Acknowledge report. Continue review of DATA SHEET 1 and determine if there are any other errors.				
* 7. Review of hand calculation for Adjusted High AGAF Limit.	Adjusted High AGAF Limit calculation determined to be incorrect. Data sheet has 1.022 recorded. Correct value is 1.021.	_____	_____	_____
* 8. Review of hand calculation for Adjusted Low AGAF Limit.	Adjusted Low AGAF Limit calculation determined to be incorrect. Data sheet has 0.978. Correct value is 0.979.	_____	_____	_____
* 9. Initial DATA SHEET 1 signifying concurrence and approval of the information.	DATA SHEET 1 is NOT initialed due to the errors with AGAF limit and APRMs 3-E and 6-F being outside limits.	_____	_____	_____

**LICENSED OPERATOR REQUAL
JOB PERFORMANCE MEASURE
A.1.b-SRO Rev. 01 (01/01)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
<p>* 10. Determine actions required for AGAFs outside limits using DOS 0500-06, Limitations and Actions.</p>	<p>Determines the following actions per DOS 0500-06:</p> <p>APRM #6 (AGAF greater than the adjusted AGAF limit) – within 2 hours have the Instrument Maintenance Department perform an APRM gain adjustment per DIS 0700-17. [reference TS Table 4.1.A-1, note (d)]</p> <p>APRM #3 (AGAF less than the adjusted low AGAF limit) – within 12 hours have the Instrument Maintenance Department perform an APRM gain adjustment per DIS 0700-17. [reference TS Table 4.1.A-1, note (d)]</p>	_____	_____	_____
<p>11. Notify Shift Manager that review of DATA SHEET 1 is complete.</p>	<p>Shift Manager notified that review of DATA SHEET 1 is complete. Shift Manager notified of errors with APRM #3 and APRM #6 calculations (if not previously notified).</p>	_____	_____	_____
<p>CUE: Acknowledge report.</p>	<p>END</p>			

OD-9. CORE THERMAL POWER AND APRM CALIBRATION. XX-XX-XX XX:XX:XX DRESDEN UNIT 2

	GMWE	CMWT	WT	WTHB	WTSUB	WD	WTFLAG	IREC	IEQL
	779.88	2362.75	85.51	75.77	88.35	30.03	2.00	0.	0
	PR	RWL	DPC-M	WFW	HFW	HD	DHS	CAEQ	CAQA
	1011.05	30.28	11.76	9.45	317.39	516.44	24.16	0.1128	0.1152
	1-A	2-C	3-E	4-B	5-D	6-F			
RAP	92.51	94.98	95.60	92.39	94.93	91.48			
AGAF	1.011	0.984	0.978	1.012	0.984	1.022			

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.2-SRO Rev. 01 (01/01)**

Examinee Information

Examinee's Name : _____ Date : _____

Time Started : _____ Time Completed : _____

Evaluator Name : _____

JPM Information

Standard Faulted Alternate Path Time Critical

Task Title : Verify a Safety Tagout
Task Number: 29900LP003
Procedure : OP-AA-101-201
Procedure Rev : 02

Task Standards : Verify a Safety Tagout IAW OP-AA-101-201.

Validated Time : 10 minutes Time Critical: No

Evaluation Method : Perform Evaluation Location : Simulator

K & A Number : 2.2.13 K & A Rating : 3.6 / 3.8

Exam Results

- | | | | | | |
|----|--|-----|-------|----|-------|
| 1. | Did the examinee complete all the critical steps? | Yes | _____ | No | _____ |
| 2. | Was the JPM completed within the validated time? | Yes | _____ | No | _____ |
| 3. | Did the examinee pass the JPM? | Yes | _____ | No | _____ |
| 4. | Is remediation recommended (req'd. if # 3 marked No) | Yes | _____ | No | _____ |

5. List below any weaknesses noted :

6. List below remediation recommended by the evaluator :

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.2-SRO Rev. 01 (01/01)**

Initial Conditions

1. Any IC.
2. OOS cards placed on the 902-3 Panel for the following components positioned as follows:
 - a. 2B CORE SPRAY PP BUS 24-1, control switch left in AUTO (incorrectly positioned)
 - b. PP SUCT VLV MO 2-1402-3B MC 29-4, control switch placed in MANUAL BYPASS
 - c. 2B MIN FLOW VLV MO 2-1402-38B MC 29-4, valve closed, control switch left in AUTO
 - d. FLOW TEST VLV MO 2-1401-4B MCC 29-4, control switch in Normal After Close.
 - e. PP DISCH VLV MO 2-1401-24B MCC 29-1, valve OPEN, control switch in mid-position.
 - f. PP DISCH VLV MO 2-1401-25B MCC 29-1 THROT, control switch in Normal After Close.

Remotes/Alarms Required

None

Malfunction Required

None

Task Conditions (Read to Examinee)

An OOS has been hung by the Unit 2 NSO for the Unit 2 Division 2 Core Spray subsystem.

Initiating Cues (Read to Examinee)

Note: Provide the examinee with a printed copy of OOS 99002784.

1. You are the Unit 2 Aux NSO.
2. The Unit 2 Supervisor has directed you to verify the control room portion of OOS 990027824 for Division 2 Core Spray .
3. Inform the Unit 2 Supervisor when the verification is complete.

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.2-SRO Rev. 01 (01/01)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
Note: 2B Core Spray Pump control switch is NOT in the correct position. It is in the AUTO position, rather than PTL.				
* 1. Verify OOS card and position of 2B CORE SPRAY PP BUS 24-1.	OOS card is correct per OOS 990027824. Determines that 2B CORE SPRAY PP BUS 24-1 control switch is NOT in correct position	_____	_____	_____
* 2. Notifies Unit 2 Supervisor that 2B Core Spray Pump control switch is not in correct position.	Unit 2 Supervisor notified that 2B Core Spray pump control switch is not in correct position.	_____	_____	_____
CUE: Acknowledge report. Direct examinee to place 2B Core Spray Pump control switch in proper position and continue with OOS verification.				
* 3. Places 2B Core Spray Pump control switch in PTL.	2B Core Spray Pump control switch placed in PTL.	_____	_____	_____
Note: The PP SUCT VLV MO 2-1402-3B MC 29-4 control switch position is labeled MANUAL BYPASS. This is equivalent to PTL. The Dresden OOS software currently does not provide for a Manual Bypass position.				
4. Verify OOS card and position of PP SUCT VLV MO 2-1402-3B MC 29-4.	PP SUCT VLV MO 2-1402-3B MC 29-4 OOS card and position verified correct per OOS 990027824. "Hung IV" column initialed.	_____	_____	_____
Note: The 2B MIN FLOW VLV MO 2-1402-38B MC 29-4 control switch position is labeled AUTO. This is equivalent to the "NAC" position.				
5. Verify OOS card and position of 2B MIN FLOW VLV MO 2-1402-38B MC 29-4.	2B MIN FLOW VLV MO 2-1402-38B MC 29-4 OOS card and position verified correct per OOS 990027824. "Hung IV" column initialed.	_____	_____	_____

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.2-SRO Rev. 01 (01/01)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
6. Verify OOS card and position of FLOW TEST VLV MO 2-1401-4B MCC 29-4.	FLOW TEST VLV MO 2-1401-4B MCC 29-4 card and position verified correct per OOS 990027824. "Hung IV" column initialed.	_____	_____	_____
Note: PP DISCH VLV MO 2-1401-24B is NOT in the correct position. It is open rather than closed.				
* 7. Verify OOS card and position of PP DISCH VLV MO 2-1401-24B MCC 29-1.	OOS card is correct per OOS 990027824. Determines that 2B CORE SPRAY PP BUS 24-1 valve is NOT in correct position.	_____	_____	_____
* 8. Notifies Unit 2 Supervisor that 2-1401-24B valve is not in correct position.	Unit 2 Supervisor notified that is 2-1401-24B valve is not in correct position.	_____	_____	_____
CUE: Acknowledge report. Direct examinee to place the 2-1401-24B valve in proper position and continue with OOS verification.				
* 5. Places 2-1401-24B valve in close position.	2-1401-24B control switch placed in close until Red close light illuminated.	_____	_____	_____
8. Verify OOS card and position of PP DISCH VLV MO 2-1401-25B MCC 29-1 THROT.	PP DISCH VLV MO 2-1401-25B MCC 29-1 THROT OOS card and position verified per OOS 990027824.	_____	_____	_____
7. Report completion of verification to Unit 2 Supervisor.	Completion verbally reported to Unit 2 Supervisor.	_____	_____	_____
CUE: Acknowledge report.				
	END			

**DRESDEN OPERATOR LICENSING EXAMINATION
ADMINISTRATIVE TOPICS QUESTION
A.3.Q1-SRO Rev. 00 (12/00)**

Examinee Information

Examinee's Name : _____ **Date :** _____

Time Started : _____ **Time Completed :** _____

Evaluator Name : _____

ADMINSTRATIVE TOPICS QUESTION

Question Topic: Emergency Exposure Limits

References Used: Yes

References : *New Procedure*
EP-AA-113, Rev. 00, Protective Actions

Previous Procedures
EPIP 0100-01, Rev. 12, Acting Station Director Implementing Procedure
EPIP 0150-01, Rev. 07, Radiation Protection Director Implementing Procedure
EPIP 0165-01, Rev. 08, Operations Support Center Supervisor Implementing Procedure

K & A Number : 2.3.4 **K & A Rating :** 2.5 / 3.1

**DRESDEN OPERATOR LICENSING EXAMINATION
ADMINISTRATIVE TOPICS QUESTION
A.3.Q1-SRO Rev. 00 (12/00)**

QUESTION

You are the acting Station Director following a LOCA outside primary containment.

It is necessary to send two operators into the reactor building to align valves to prevent significant damage to the reactor recirculation pumps.

The dose rate in the area is 20 rem/hour.

What is the maximum stay time for this activity?

KEY

30 minutes (0.5 hour)

Per EPIP 0150-01, Attachment D, a dose limit of 10 rem is allowed for protecting valuable property. Therefore, the maximum stay time would be:

$$[10 \text{ rem}] / [20 \text{ rem/hour}] = 0.5 \text{ hour}$$

SCORE: _____

SAT: _____

UNSAT: _____

**DRESDEN OPERATOR LICENSING EXAMINATION
ADMINISTRATIVE TOPICS QUESTION
A.3.Q2-SRO Rev. 00 (12/00)**

Examinee Information

Examinee's Name : _____ **Date :** _____
Time Started : _____ **Time Completed :** _____
Evaluator Name : _____

ADMINISTRATIVE TOPICS QUESTION

Question Topic: High Radiation Area Entry Requirements
References Used: Yes
References : RP-AA-460, Rev. 1, Controls for High and Very High Radiation Areas
K & A Number : 2.3.1 **K & A Rating :** 2.6 / 3.0

**DRESDEN OPERATOR LICENSING EXAMINATION
ADMINISTRATIVE TOPICS QUESTION
A.3.Q2-SRO Rev. 00 (12/00)**

QUESTION

Unit 2 is operating at rated power.

There is a steam leak in the heater bay.

The Shift Manager has directed you to enter the heater bay to inspect the steam leak.

Electronic dosimetry is not available due to an RP computer system outage.

A current survey of the heater bay is not available; however, the most recent survey taken at rated power indicated general area dose rates of 150 - 200 mrem/hr.

What actions must be taken for you to enter the heater bay and inspect the steam leak?

KEY

1. Review and sign the appropriate RWP.
2. Review survey data for the area (following completion of an updated survey),
OR
Enter the area with a Radiation Protection Technician
3. Be equipped with a radiation monitoring device which continuously indicates the radiation dose rate in the area,
OR
Enter the area with a qualified representative of the RP Department with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area, and who performs periodic radiation surveillance at the frequency specified for the applicable RWP.

SCORE: _____

SAT: _____

UNSAT: _____

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.4-SRO Rev. 01 (01/01)**

Examinee Information

Examinee's Name : _____ Date : _____

Time Started : _____ Time Completed : _____

Evaluator Name : _____

JPM Information

Standard Faulted Alternate Path Time Critical

Task Title : Classify a GSEP Event and Determine PARS
Task Number: 295L160
Procedure : EPIP 0100-01
Procedure Rev : 12

Task Standards : Given a plant in an off normal condition, determine the GSEP classification IAW EPIP 200-01 and table 200-T1.

Validated Time : N/A Time Critical: Yes

Evaluation Method : Perform Evaluation Location : Simulator / In-Plant

K & A Number : 2.4.38 K & A Rating : 2.2 / 4.0

Exam Results

- | | | | | | |
|----|--|-----|-------|----|-------|
| 1. | Did the examinee complete all the critical steps? | Yes | _____ | No | _____ |
| 2. | Was the JPM completed within the validated time? | Yes | _____ | No | _____ |
| 3. | Did the examinee pass the JPM? | Yes | _____ | No | _____ |
| 4. | Is remediation recommended (req'd. if # 3 marked No) | Yes | _____ | No | _____ |

5. List below any weaknesses noted :

6. List below remediation recommended by the evaluator :

DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.4-SRO Rev. 01 (01/01)

Initial Conditions

None

Remotes/Alarms Required

None

Malfunction Required

None

Task Conditions (Read to Examinee)

1. A LOCA has occurred on Unit 2 resulting in the following conditions:
 - reactor water level decreased to -170 inches and is now steady
 - drywell temperature is 290°F and decreasing slowly
 - drywell pressure is 12 psig and decreasing
 - drywell radiation is 7500 rem/hour and rising slowly
2. Drywell spray is in progress.
3. An off-site release is in progress at the rate of 5.2E07 uCi/sec.
4. The Shift Manager is the ACTING STATION DIRECTOR.

Initiating Cues (Read to Examinee)

1. The Shift Manager has directed you to determine the GSEP classification of the event and determine the Protective Action Recommendations (PARS) required.
2. Notify the Shift Manager when:
 - the classification has been determined
 - the PARS have been determined.

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.4-SRO Rev. 01 (01/01)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	N/A
	Record start time: _____			
Note: WHEN examinee locates appropriate table in EPIP 0200-T1 (page 2 of 81), THEN provide attached copy of table.				
* 1. Determine an Emergency Classification level based on the Emergency Action Levels (EAL) listed in EPIP 0200-T1, Dresden Station Emergency Action Levels.	Determines Emergency Classification level to be GENERAL EMERGENCY based on EAL FG1.	_____	_____	_____
* TIME CRITICAL – EAL must be determined within 15 minutes.	Record End Time: _____ Elapsed Time: _____ minutes			
2. Notify the person with command and control of the results of the determination.	Notifies Shift Manager of the GENERAL EMERGENCY classification.	_____	_____	_____
CUE: Acknowledge report				
	Record start time: _____			
Note: WHEN examinee locates PARS Flowchart (EPIP 01501-01, Attachment 1), THEN provide attached copy of flowchart.				
* 3. Determine Protective Action Recommendations (PARS) per EPIP 0100-01, Attachment A, PARS Flowchart for Control Room.	PARS determined to be: (E) E) S) [9C, H, J&G] per EPIP 0100-01, Attachment A.	_____	_____	_____
* TIME CRITICAL – PARS must be determined within 15 minutes.	Record End Time: _____ Elapsed Time: _____ minutes			
4. Notify Shift Manager of PARS.	Shift Manager notified of PARS.	_____	_____	_____
CUE: Acknowledge report				
	END			

**DRESDEN OPERATOR LICENSING EXAMINATION
JOB PERFORMANCE MEASURE
A.4-SRO Rev. 01 (01/01)**