

Constellation Energy Group OPERATOR JOB PERFORMANCE MEASURE

Title: Perform N1-ST-D0 DAILY CHECKS (Partial)

Revision: NRC 2006

Task Number:

Approvals:

2/23/2007 General Supervisor

Operations Training (Designee)

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NA EXAM SECURITY Date General Supervisor Operations (Designee)

NA EXAM SECURITY	_/
Configuration Control	Date

Performer:	(RO/SRO)
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Trainer/Evaluator:

Evaluation Method:	Х	Perform	Simulate
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Evaluation Location: _____ Plant ____X___Simulator or other location

Expected Completion Time:	20 min	Time Critical Task:	NO	Alternate Path Task: NO
Expected Completion Time.	20 11111	Time Onlical Task.		Allemate Fath Fash, NO

Start Time: Stop Time: Completion Time:

Fail JPM Overall Rating: Pass

NOTE: A JPM overall rating of fail shall be given if any critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature:

Date:____

Recommended Start Location: (Completion time based on the start location)

If actual readings are to be taken, Simulator must be setup and used, otherwise perform in other designated area.

Simulator Set-up:

IC-238 contains setup conditions for Admin JPMs 1. TURN OFF PI MONITOR. JPM readings are taken with simulator in FREEZE.

Establish 70% reactor power, 40 mlb/hr total recirc flow, align Feedwater Level Column to 12, and override reactor water level and hotwell level instruments as necessary to read those indicated in the Attachment. Override both hotwell indication to 55 inches and activate crywolf for alarms H2-2-7 and 3-7 for low level.

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SM / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SM / CSO permission.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

- 1. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
- 2. During Evaluated JPM:
 - Self checking shall be demonstrated.
- 3. During Training JPM:
 - Self checking shall be demonstrated.
 - Peer checking shall be demonstrated.

References:

- 1. GAP-OPS-01; 3.10.
- 2. N1-ST-DO; 6.0, 7.0 and 8.0.
- 3. 2.1.18 (2.9) Ability to make accurate / clear and concise logs / records / status boards / and reports.

Tools and Equipment:

1. None

Task Standard:

Control room readings are taken. Out of spec readings are identified to SRO and inoperable equipment is identified by the candidate.

Initial Conditions:

- 1. The plant is operating at 75% power.
- 2. Surveillance test N1-ST-DO, DAILY CHECKS, is in progress
- 3. ALL computer point readings are consistent with control room panel instrument readings.
- 4. Ask the operator for any questions.

Initiating cue:

"(Operator's name), obtain the instrument readings needed from control room panels to complete N1-ST-DO, DAILY CHECKS Attachment 1 sections 6.0, 7.0 and 8.0 only. When completed, report findings and provide completed sections to SRO".

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. <i>Evaluator Acknowledge repeat back providing correction if necessary</i>	Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat
RECORD START TIME		
 Obtain a copy of the reference procedure and review/utilize the correct section. 	N-ST-DO obtained. - Section 6.0, 7.0 and 8.0 referenced.	Sat/Unsat
	NOTE: Completed N1-ST-DO is provided as an Attachment 2 to this JPM.	
 •Records section 6.0 Reactor Recirc Pump Inlet Temperature readings 	Records Reactor Recirc Pump Inlet Temperature readings.	Sat/Unsat
 Compares reading and determines readings within 15°F 	Compares reading and determines readings within 15°F of each other.	Pass/Fail
	Checks YES block in Section 6.0, indicating the maximum difference in loop temperatures is < 15°F.	Pass/Fail

⊃e	rformance Steps	Standard	Grade
 Records section 7.0 readings. 		Recorded Section 7.0 "Low-Low Level alarm" and "Feedwater Level Column selected to" checks agree with Attachment 1 without error.	Pass/Fail
		Recorded Section 7.0 instrument readings agree with Attachment 1 within \pm 1 inch.	Pass/Fail
		Record Total Recirc Flow per step 7.1.2 for GEMAC variance check.	Sat/Unsat
5.	•Compares YARWAY Ch11 - Ch12 (RPS Level Column) instrument readings to guide	Determines YARWAY (RPS Level Column) instrument readings differ by 5" which is above the guide value of 4".	Sat/Unsat
	values.	Determines YARWAY (RPS Level Column) instruments OPERABLE.	Pass/Fail
		Indicates an ACR is required to have the calibration checked.	Sat/Unsat
6.		Determines GEMAC variance is 6".	Sat/Unsat
variance check per Section 7.1.	Compares GEMAC variance to total recirc flow and determines on line between ALERT RANGE and INOP.	Sat/Unsat	
		Determines that GEMAC 11 or GEMAC 12 must be declared inoperable.	Pass/Fail
		Reports out of specification readings to SRO.	Pass/Fail
7.	•Records section 8.0	Records Condensate readings	Sat/Unsat
	Condensate readings	Determines Hotwell level is below 57 inches (Tech Spec Minimum)	Pass/Fail
		Informs SRO Hotwell level is below 57 inches (Tech Spec Minimum).	Pass/Fail
		<ref 2=""> is TS 3.1.8, HPCI is inoperable.</ref>	Pass/Fail
8.	Provides completed sections to SRO. Informs of out of spec readings.	SRO informed of out of spec readings.	Sat/Unsat

End of JPM

TERMINATING CUE: Control room readings are taken. Out of spec readings are identified to SRO and inoperable equipment is identified by the candidate.

RECORD STOP TIME_____

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- 1. The plant is operating at 75% power.
- 2. Surveillance test N1-ST-DO, DAILY CHECKS, is in progress
- 3. ALL computer point readings are consistent with control room panel instrument readings.
- 4. Ask the operator for any questions.

Initiating cue:

"(Operator's name), obtain the instrument readings needed from control room panels to complete **N1-ST-DO**, **DAILY CHECKS Attachment 1 sections 6.0**, **7.0 and 8.0 only.** When completed, report findings and provide completed sections to SRO".

Setup Attachment

Panel Meter		Override Value Settings	Meter Reading Obtained
E-Panel Vessel Level Indicator (E Panel ID	959D)	70.5	73 inches
K-Panel Vessel Level Indicator (K Panel: 3	6-96 ID59C)	75	76 inches
K-Panel Flange Level Indicator (K Panel: to right of 36-96)		None	Below -3 ft
Reactor Vessel Level Recorder (F Panel	72.5	74 inches	
Wide Range Level Indicator (F Panel: 36	-94)	7.2	6 ft
	Ch 11	Ch 12	11 12
GEMAC Level Column <i>(F Panel: 36-76A,</i> 77.5 36-77A)		69.5	79-80; 73
RPS Level Column <ref 1=""> <i>(F Panel: 36-09, 36-10)</i></ref>	76	72	76; 72

ATTACHMENT 1 (Cont)

ANSWER KEY. DO NOT PROVIDE TO APPLICANT

6.0 Reactor Recirc Pump Inlet Temperature

•	Maximum difference in loop temperatures < 15°F	YES	No
•	RRP 15 Inlet Temp	520	_°F
•	RRP 14 Inlet Temp	530	_°F
•	RRP 13 Inlet Temp	520	_°F
•	RRP 12 Inlet Temp	525	_°F
•	RRP 11 Inlet Temp	520	_°F

(T/S) 7.0 Control Room Reactor Water Level Checks

• Low-Low Level Alarms IF YES, provide reason in Remarks

🗆 YES 🔳 NO

• Feedwater Level Column selected to (E Panel)

□ 1	1	12

E-Panel Vessel Level Indicator	(E Panel)		73	inches
K-Panel Vessel Level Indicator	(K Panel: 3	6-96)	76	inches
K-Panel Flange Level Indicator 36-96)	(K Panel: t	o right of	< -3	feet
Reactor Vessel Level Recorder	(F Panel: 36-98)		74	inches
Wide Range Level Indicator	(F Panel: 36-94)		6	feet
		Ch 11	Ch 12	Guide Value*
GEMAC Level Column (F Panel: 36-76A, 36-77A)		79	73	**
RPS Level Column <ref 1=""> (F I 09, 36-10)</ref>	Panel: 36-	77	72	4 in***

* If reading difference is greater than the guide valve, review previous readings for the instrument(s). If a single reading is the cause for the recorded value being greater than the guide value, verify that reading. If reading difference is still greater than guide value, consider the indicator OPERABLE and generate an ACR to have the calibration checked. If reading difference is grossly greater than guide value, consider the indicator INOPERABLE, enter applicable Tech Spec action and generate an ACR.

** See Section 7.1

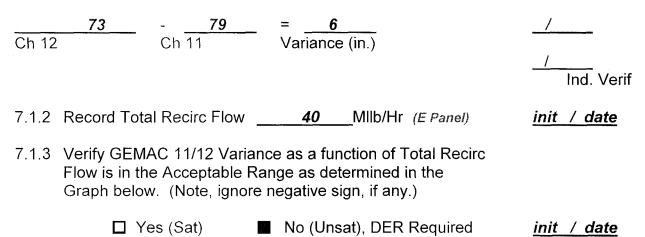
^{***} If the difference between Yarway indicators LI-36-09 and LI-36-10 is 6" or greater, THEN declare the following instruments inoperable and initiate the required Technical Specification actions (ESA for DER 1-2001-3027):

LT-36-03C, LT-36-03D LT-36-04C, LT-36-04D LT-36-21B, LT-36-21D

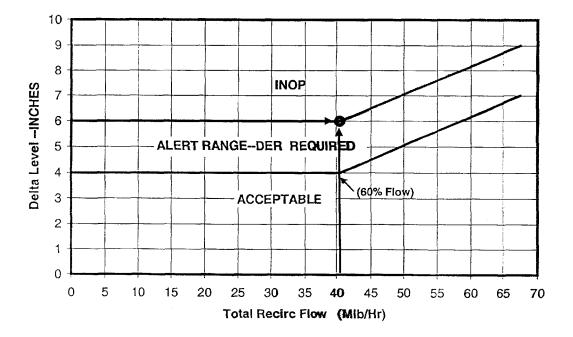
ATTACHMENT 1 (Cont)

ANSWER KEY. DO NOT PROVIDE TO APPLICANT

- 7.1 GEMAC Variance Check
- 7.1.1 Calculate Variance Between Ch 12 and Ch 11 GEMAC Level Recorders.



If results are in ALERT range, generate DER for Engineering Evaluation. If results are in INOP range, declare GEMAC 11 and/or 12 INOP.



GEMAC LEVEL COLUMN 11 / 12 VARIANCE

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Constellation Energy Group OPERATOR JOB PERFORMANCE MEASURE

Title: Determine Plant Impa	tle: Determine Plant Impact of Mispositioned Liquid Poison Components						
Task Number:							
Approvals: General Supervisor Operations Training (Designe	/2/2 Date ee)	3/2007	Gener	AM SECURITY al Supervisor tions (Designee)	/ Date		
NA EXAM SECURITY Configuration Control	/ Date						
Performer:		(RO)					
Trainer/Evaluator:							
Evaluation Method: X	_ Perform		_ Simul	ate			
Evaluation Location:	Plant	X	_ Simul	ator or other location			
Expected Completion Time:	15 min Time (Critical Task:	NO	Alternate Path Task	:: NO		
Start Time:	Stop Time:		Comp	etion Time:			
JPM Overall Rating:	Pass	Fail					

<u>NOTE</u>: A JPM overall rating of fail shall be given if <u>any</u> critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature:_____

Date:_____

Recommended Start Location: (Completion time based on the start location)

Simulator or other designated location with prints and procedures available

Simulator Set-up (if required):

NA

Directions to the Instructor/Evaluator:

Prior to performance of this JPM, obtain SM / CSO general permission to open equipment cabinets and inspection covers. If opening the equipment cabinet or inspection cover will affect Tech. Spec. Operability, operational status, or the effects are unknown, obtain specific SM / CSO permission.

Directions to Operators: Read Before <u>Every</u> JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

- 1. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
- 2. During Evaluated JPM:
 - Self checking shall be demonstrated.
- 3. During Training JPM:
 - Self checking shall be demonstrated.
 - Peer checking shall be demonstrated.

References:

- 1. P&ID C-18019-C
- 2. N1-OP-12, Attchment2
- 3. Tech Spec 3.1.2

Tools and Equipment:

1. None

Task Standard: Determines both Liquid Poison subsystems are inoperable and one must be restored within one hour or an orderly shutdown is required.

Initial Conditions:

- 0000 The plant is in operating at 100% power.
- 0000 Liquid Poison System 11 is in normal standby lineup
- 0030 Clearance is being applied to Liquid Poison Pump 12 for corrective maintenance on the pump as indicated on Attachment 1.
- 0100 As-found component lineup is reported with component lineup indicated on Attachment 2.

Initiating cue:

"(Operator's name), determine the correctness of the resulting component lineup and the plant impact and consequences of the as-found configuration. Document any findings on JPM scorecard."

Performance Steps	Standard	Grade
 Provide repeat back of initiating cue. Evaluator Acknowledge repeat back providing correction if necessary. RECORD START TIME 	Proper communications used for repeat back (GAP-OPS-01/ CNG-HU-1.01-1001)	Sat/Unsat
2. Reviews JPM Attachment 1to determine intended equipment lineup.	 Reviews Attachment 1 and P&ID C- 18019-C 	Sat/Unsat
	 Determines LP Pump 12 power supply, suction and discharge paths are to be isolated. 	Sat/Unsat
3. Reviews JPM Attachment 2 to determine the as found configuration of Liquid Poison Pump 11 and 12 system components.	 Reviews Attachment 2 and identifies the following incorrectly positioned components and consequences. 41-11 LP-2 BV-LP PUMP 12 SUCTION FROM LP TANK is open and should be tagged closed. 	Pass/Fail

Performance Steps	Standard	Grade
	 With LP Pump 12 drain 42-1 704 open, the boron tank is draining due to improper line 	
	41-07 LP-3 BV-LP PUMP 1 SUCTION FROM LP TANK closed but should be open.	
	 Determines that with 41-07 of LP Pump 11 is inoperable because of loss of suction p 	
	41-06 LP-19 BV-LP PUMP 1 SUCTION FROM TEST TAN open but should be locked cl	IK is
	 Determines that with 41-06 of LP Pump 11 is incorrectly line to the test tank. 	•
 Determines cumulative effect of as- found component lineup. 	 Determines both systems of Lique Poison are not operable. 	uid Pass/Fail
 Identifies tag applied to incorrect component. Informs Control Room per GAP-OPS-01. 	Notifies CRS of improperly posit components and incorrect applie of red clearance tag.	
 Determines Tech Spec LCO conditions for liquid Poison are exceeded. 	 Determines that these conditions result in Tech Spec entry for the Liquid Poison system. 	

Performance Steps	 Standard	Grade
 7. Refers to LCO 3.1.2 NOTE: If a single pump was inoperable 7 days would be allowed to restore the inoperable pump. Since both are inoperable, specification e applies and an orderly shutdown must be initiated within one hour. 	Identifies LCO 3.1.2 Specification b. applies because the redundant component is also inoperable.	Sat/Unsat
 Determines that one subsystem must be restored to operable. 	Identifies the requirement to restore one of the redundant components to OPERABLE within one hour or an orderly shutdown is required	Pass/Fail

End of JPM

Terminating Cue: Determines both Liquid Poison subsystems are inoperable and one must be restored within one hour or an orderly shutdown is required.

RECORD STOP TIME

JPM 2 Scorecard For Applicant Use. KEY DO NOT PROVIDE TO

CANDIDATE

Determine the correctness of the resulting component lineup and the plant impact and consequences of the as-found configuration.

Findings	 Impact on plant operation/consequences
41-11 LP-2 BV-LP PUMP 12 SUCTION FROM LP TANK is open and should be	With LP Pump 12 drain 42-12 LP-704 open, the boron tank is draining due to improper
tagged closed.	lineup.
41-07 LP-3 BV-LP PUMP 11 SUCTION	Determines that with 41-07 closed LP Pump
FROM LP TANK is closed but should be open.	11 is inoperable because of loss of suction path
41-06 LP-19 BV-LP PUMP 11 SUCTION FROM TEST TANK is open but should	Determines that with 41-06 open LP Pump 11 is incorrectly lined up to the test tank.
be locked closed.	
Determines both systems of Liquid	Identifies the requirement to restore one of the
Poison are not operable and Tech Spec entry is required (TS 3.1.2).	redundant components to OPERABLE within one hour or an orderly shutdown is required

0000 The plant is operating at 100% power.

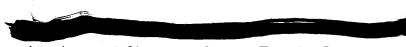
0000 Liquid Poison System 11 is in normal standby lineup

- 0030 Clearance is being applied to Liquid Poison Pump 12 for corrective maintenance on the pump as indicated on JPM Attachment 1.
- 0100 As-found component lineup is reported with component lineup indicated on JPM Attachment 2.

Initiating cue:

"(Operator's name), determine the correctness of the resulting component lineup and the plant impact and consequences of the as-found configuration. Document any findings on JPM scorecard." JPM 2 Scorecard For Applicant Use

Determine the correctness of the resulting component lineup and the plant impact and consequences of the as-found configuration.						
Findings	Impact on plant operation/consequences					



Attachment 1 Clearance Section Tags To Be Applied	
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Tagged Component	Description	Location	Тад Туре	Pl Seq	Place Verif	Tagged Position	Restoration Position
42-38 CLOSE FUSES	LIQUID POISON PUMP 12	PB17B	Danger	1		INSTALLED IN OFF POS	INSTALLED IN ON POS
42-38 MTR BKR	LIQUID POISON PUMP 12	PB17B	Danger	2		DISC	CONN
42-38 TRIP FUSES	LIQUID POISON PUMP 12	PB17B	Danger	3		INSTALLED IN OFF POS	INSTALLED IN ON POS
41-11 LP-2	BV-LP PUMP 12 SUCTION FROM LP TANK	RB 298 S	Danger	4		CLOSED	OPEN
41-18 LP-18	BV-LP PUMP 12 SUCTION FROM TEST TANK	RB 298 S	Danger	4		CLOSED	CLOSED
42-02 LP-20	BV-LP PUMP 12 DISCHARGE TEST	RB 298 S	Danger	4		CLOSED	CLOSED
42-04 LP-4	BV-LP PUMP 12 DISCHARGE	RB 298 S	Danger	4		CLOSED	OPEN AND LOCKED
42-12 LP-704	DRAIN LP PUMP 12 TO 55 GAL DRUM	RB 298 S	Danger	5		OPEN	CLOSED

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Attachment 2 As Found Component Positions

Component	Description	Location	As Found Position
42-38 CLOSE FUSES	LIQUID POISON PUMP 12	PB17B	INSTALLED IN OFF POS
42-38 MTR BKR	LIQUID POISON PUMP 12	PB17B	DISC
42-38 TRIP FUSES	LIQUID POISON PUMP 12	PB17B	INSTALLED IN OFF POS
41-11 LP-2	BV-LP PUMP 12 SUCTION FROM LP TANK	RB 298 S	OPEN
41-18 LP-18	BV-LP PUMP 12 SUCTION FROM TEST TANK	RB 298 S	CLOSED
42-02 LP-20	BV-LP PUMP 12 DISCHARGE TEST	RB 298 S	CLOSED
42-04 LP-4	BV-LP PUMP 12 DISCHARGE	RB 298 S	CLOSED
42-12 LP-704	DRAIN LP PUMP 12 TO 55 GAL DRUM	RB 298 S	OPEN

Component	Description	Location	As Found Position
42-39 CLOSE FUSES	LIQUID POISON PUMP 11	PB16B	INSTALLED IN ON POS
42-39 MTR BKR	LIQUID POISON PUMP 11	PB16B	CONN
42-39 TRIP FUSES	LIQUID POISON PUMP 11	PB16B	INSTALLED IN ON POS
41-07 LP-3	BV-LP PUMP 11 SUCTION FROM LP TANK	RB 298 S	CLOSED
41-06 LP-19	BV-LP PUMP 11 SUCTION FROM TEST TANK	RB 298 S	OPEN
42-01 LP-21	BV-LP PUMP 11 DISCHARGE TEST	RB 298 S	CLOSED
42-03 LP-5	BV-LP PUMP 11 DISCHARGE	RB 298 S	OPEN
42-11 LP-703	DRAIN LP PUMP 11TO 55 GAL DRUM	RB 298 S	CLOSED

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Constellation Energy Group OPERATOR JOB PERFORMANCE MEASURE

	Title: N1-EOP-3.1 RPS Jump	er Operation Ele	ctrical Print Rea	iding	Revision: NRC 2006
	Task Number: N/A				
(Approvals: General Supervisor Date Operations Training (Designee)	2/23 /200 Date	Genera	XAMINATION SI al Supervisor ions (Designee)	ECURITY
	NA EXAMINATION SECURITY	Y Date			
	Performer:	(RO)			
	Trainer/Evaluator:				
	Evaluation Method: X	_Perform	. <u></u>	Simulate	
	Evaluation Location:	Plant	X	_ Simulator or	other location
	Expected Completion Time: NO	20 min	Time Critical	Task: NO	Alternate Path Task:
	Start Time:	Stop Time:		Completion T	ime:
	JPM Overall Rating:	Pass	Fail		
	NOTE: A JPM overall rating grade of unsat or in				

Comments:

Evaluator Signature: _____ Date: _____

Recommended Start Location: (Completion time based on the start location)

For NRC Exam 2006, This Admin JPM is performed in Simulator.

Simulator Set-up: None

Directions to the Instructor/Evaluator:

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore it should not be requested.

Read Before Each <u>Training</u> JPM Performance:

During this Training JPM, applicable methods of verification are expected to be used. Therefore, either another individual or I will act as the additional / concurrent verifier.

Notes to Instructor / Evaluator:

- Critical steps are identified as **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
 During Evaluated JPM:
 - Self-verification shall be demonstrated.
- 3. During Training JPM:
 - Self-verification shall be demonstrated.
 - No other verification shall be demonstrated.

References:

- 1. Drawing C-19859-C Sheet 4 and 7
- 2. N1-EOP-3.1, Alternate Control Rod Insertion
- 3. K/A 2.1.24 (2.8) Ability to obtain and interpret station electrical and mechanical drawings.

Tools and Equipment:

1. None.

Task Standard: Relays and contacts used to install RPS jumpers and reset scram signal are identified on station electrical drawings and operation is explained.

- The plant is experiencing a failure to scram.
 N1-EOP-3 has been entered.
- 3. EOP Director directs execution of EOP-3.1.
- 4. Repeated manual scrams will be attempted.
- 5. Ask the operator for any questions.

Initiating cue: "(Operator's name), Using station procedures and drawings, explain the effect of installing the RPS jumpers for RPS Channel 12 on RPS Channel 12 circuits, including identifying the signals defeated when jumpers are installed AND electrical component (relays, contacts and switches) operation necessary to reset the RPS Channel 12 scram logic."

Pe	rformance Steps	Standard	Grade
	1. Provide repeat back of initiating cue. Evaluator Acknowledge repeat back providing correction if necessary	Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat
RE	CORD START TIME		
1.	Obtain a copy of the necessary procedures and drawings	 Obtains the following documents, as needed: N1-EOP-3.1 Drawing Index, if needed Drawing C-19859-C Sheet 7 	Sat/Unsat/NA Sat/Unsat/NA Pass/Fail
2.	Using C-19859-C Sheet 7, locates trip circuits and jumpers.	 Locates SCRAM BYPASS jumper (EOP jumper 12) at drawing coordinate A-1 to A-5, in REACTOR TRIP #1 circuit. 	Pass/Fail
		 Locates SCRAM BYPASS jumper (EOP jumper 13) at drawing coordinate B-1 to B-5, in REACTOR TRIP #2 circuit. 	Pass/Fail
3.	Using C-19859-C Sheet 7, identifies the signals defeated when jumpers are installed.	 Identifies that ALL AUTOMATIC scram signal relay trip contacts are bypassed when jumper is installed. NOTE: The manual scram circuit is not bypassed by the jumpers. 	Pass/Fail

	ndard	Grade
Using C-19859-C Sheet 7, describes electrical component operation necessary to reset the scram.	 Indicates when jumper is installed in REACTOR TRIP #1 circuit, relay 12K51A (coordinate B-5) energizes and closes the following contacts: 12K51A L1-T1 for GROUP 1 (coordinate D-2) 12K51A L2-T2 for GROUP 2 (coordinate E-2) 12K51A L3-T3 for GROUP 3 (coordinate F-2) 12K51A L4-T4 for GROUP 4 (coordinate G-2) 12K51A 7-8 for Backup Scram circuitry (coordinate H-2) 	Pass/Fail
	 Indicates when jumper is installed in REACTOR TRIP #2 circuit, relay 12K52A (coordinate C-5) energizes and closes the following contacts: 12K52A L1-T1 for GROUP 1 (coordinate D-2) 12K52A L2-T2 for GROUP 2 (coordinate E-2) 12K52A L3-T3 for GROUP 3 (coordinate F-2) 12K52A L4-T4 for GROUP 4 (coordinate G-2) 12K52A 7-8 for Backup Scram circuitry (coordinate H-2) 	Pass/Fail
	Indicates that depressing switch 1S3, RESET REACTOR TRIP (SCRAM) pushbutton (coordinate C- 4), closes its 1S3 7-8 contact and energizes relay 12K53 (coordinate C-5) (while reset button is depressed).	Sat/Unsat

Performance Steps	Standard	Grade
	 Indicates that Relay 12K53 energizing closes its 7-8 contact (coordinate D-4) and energizes relay 12K55 and 12K56 (coordinate D-5) in REACTOR MANUAL SCRAM circuit 	Sat/Unsat
	 Indicates that Relay 12K55 energizing and closes the following contacts: 12K55 L1-T1 for GROUP 1 (coordinate D-2) 12K55 L2-T2 for GROUP 2 (coordinate E-2) 12K55 L3-T3 for GROUP 3 (coordinate F-2) 12K55 L4-T4 for GROUP 4 (coordinate G-2) 12K55 7-8 for Backup Scram circuitry (coordinate H-2) 	Pass/Fail
	 Indicates that Relay 12K56 provides a seal-in to keep 12K55 energized when 12K53 drops out after the scram reset pushbutton is released. 	Sat/Unsat
	 Indicates that when all three contacts in the four GROUP 1 through 4 circuits for 12K51A, 12K52A and 12K55 are closed the scram is reset (for channel 12). Four white lights on F and M panels are ON and the scram pilot solenoids are energized for RPS Channel 12. 	Pass/Fail
10. Reports JPM con		Sat/Uns

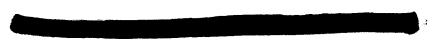
Standard

Grade

TERMINATING CUE: Relays and contacts used to install RPS jumpers and reset scram signal are identified on station electrical drawings and operation is explained.

RECORD STOP TIME_____

Performance Steps



- 1. The plant is experiencing a failure to scram.
- 2. N1-EOP-3 has been entered.
- 3. EOP Director directs execution of EOP-3.1.
- 4. Repeated manual scrams will be attempted.
- 5. Ask the operator for any questions.

Initiating cue: "(Operator's name), Using station procedures and drawings, explain the effect of installing the RPS jumpers for RPS Channel 12 on RPS Channel 12 circuits, including identifying the signals defeated when jumpers are installed AND electrical component operation necessary to reset the RPS Channel 12 scram logic."



Constellation Energy Group OPERATOR JOB PERFORMANCE MEASURE

Title: Radiological Requireme High Radiation Areas	ents Related to Entry Int	0	Revision	: NRC 2006
Task Number: N/A				
Approvals:	2/23/2007	<u>NA EX</u>	AMINATION SECURITY	
General Supervisor Operations Training (Designee)	Date)		Supervisor ons (Designee)	Date
NA EXAMINATION SECURIT Configuration Control Performer:	Date			
Trainer/Evaluator:				
Evaluation Method: X	Perform		Simulate	
Evaluation Location:	_ Plant	X	Simulator or other loc	ation
Expected Completion Time: 10	minutes Time Critical	Fask: NO	Alternate Path T	ask: NO
Start Time:	Stop Time:		Completion Time:	
JPM Overall Rating:	Pass Fail			

NOTE: A JPM overall rating of fail shall be given if <u>any</u> critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature:_____

Date:_____

Recommended Start Location: (Completion time based on the start location)

Simulator or other designated location.

Simulator Set-up:

N/A

Directions to the Instructor/Evaluator: RWPs and survey maps are to be provided.

Directions to Operators:

Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

- 1. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
- 2. During Evaluated JPM:
- Self checking shall be demonstrated.
- 3. During Training JPM:
 - Self checking shall be demonstrated.
 - Peer checking shall be demonstrated.

References:

- 1. GAP-RPP-01; 3.5.
- 2. GAP-RPP-02; 3.3.
- 3. GAP-RPP-08; 3.2.
- 4. GAP-RPP-07; 3.2.5
- 5. K/A 2.3.10 (2.9) Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure.

Tools and Equipment:

1. None.

Task Standard: Radiological requirements related to the entry into Contaminated High radiation Area are evaluated and recorded.

- 1. Unit 1 is operating at 100% power.
- 2. Entry into SHUTDOWN COOLING ROOM is required to hang clearance on BV 38-03 SDC Pump 11 suction handwheel.
- 3. Current exposure is 1800 mrem TEDE.
- 4. RWP and survey map are provided.
- 5. Ask the operator for any questions.

Initiating cue:

"(Operator's name), you will be performing an entry into the SHUTDOWN COOLING ROOM to hang clearance on BV 38-03 SDC Pump 11 suction handwheel. RWP and survey maps are provided. Address the radiological aspects of performing this job and record findings on scorecard."

Pe	rformance Steps	St	andard	Grade
1.	Provide repeat back of initiating cue. Evaluator Acknowledge repeat back providing correction if necessary		oper communications used for repeat ack (GAP-OPS-O1)	Sat/Unsat
RE	CORD START TIME	JF	OTE: A score card is attached to this PM identifying the items for the erformer to identify.	
2.	Classify the area.		Determines the area is a HIGH RADIATION AREA.	Pass/Fail
3.	Determine highest on contact and general area dose rates and location, based on survey map		Determines highest on contact dose rate to be 500 mrem/hr at 12 SDC pump.	Pass/Fail
			Determines highest general area dose rate to be 100 mrem/hr near BV 38-03, 12 SDC Pump and 11 SDC Heat Exchanger.	Pass/Fail
4.	Determines highest contamination levels in the room		Determines highest contamination level to be 8000 dpm/100 cm ² at 12 SDC Pump, smear location #7.	Pass/Fail
5.	Determine RWP and Task Number required for entry.		Determines RWP 106001 Task 2 is correct for the job.	Pass/Fail
6.	Determines insufficient delta exposure to enter without additional approval.		Determine within delta exposure of 300 mrem and additional approvals required prior to performing the inspection. (GAP-RPP-08 3.2.2, minimum delta exposure of 300 mRem needed to enter HRA). Admin limit of 2000 mr, from GAP-RPP-07. 2000 - 1800 = 200 mrem delta	Pass/Fail

300 mrem delta is required.

Grade

End of JPM

Performance Steps

1

TERMINATING CUE: Radiological requirements related to the entry into Contaminated High radiation Area are evaluated and recorded.

Standard

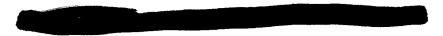
RECORD STOP TIME_____

- 1. Unit 1 is operating at 100% power.
- 2. Entry into SHUTDOWN COOLING ROOM is required to hang clearance on BV 38-03 SDC Pump 11 suction handwheel.
- 3. Current exposure is 1800 mrem TEDE.
- 4. RWP and survey map are provided.
- 5. Ask the operator for any questions.

Initiating cue:

"(Operator's name), you will be performing an entry into the SHUTDOWN COOLING ROOM to hang clearance on BV 38-03 SDC Pump 11 suction handwheel. RWP and survey maps are provided. Address the radiological aspects of performing this job and record findings on scorecard."

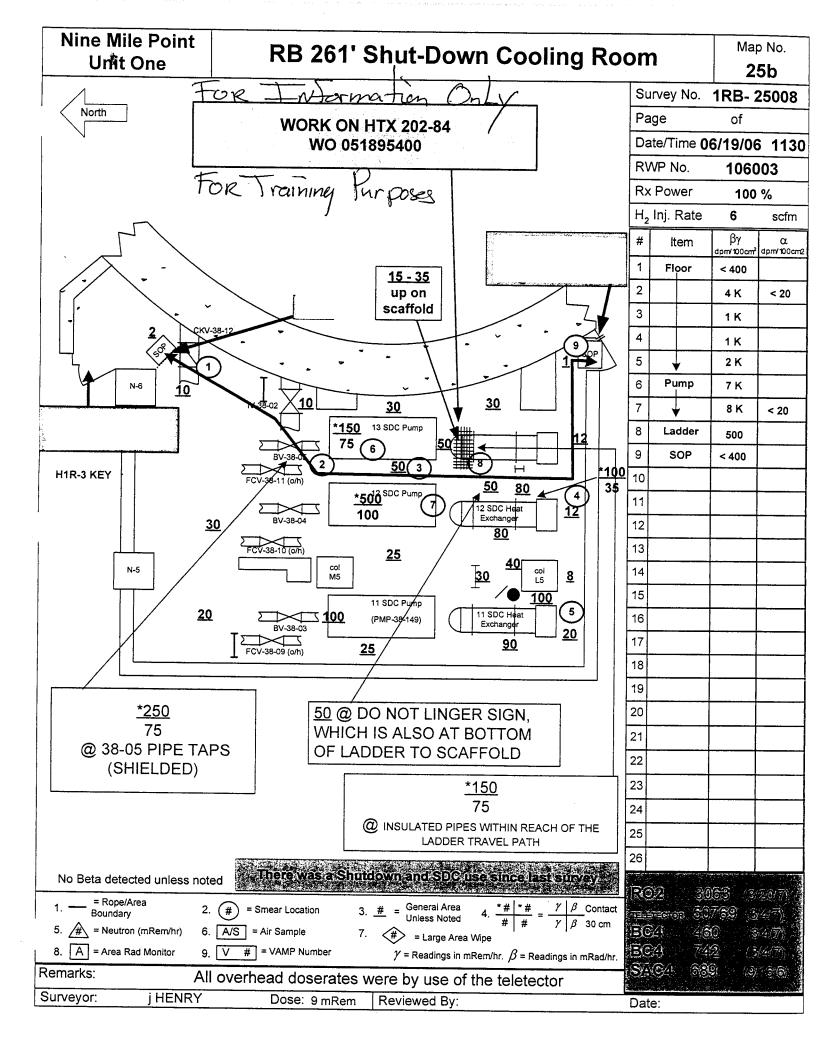
Answer the following when performing this task:			
Classify the area (check one):	 Radiation Area High Radiation Area Locked High Radiation Area Very High Radiation Area 		
2.			
Designate the highest on contact dose rate in the area and the location AND the highest general area dose rate and location:			
3.			
Designate the highest contamination levels in the room and location:			
4.			
Designate the RWP and task number required to be used:			
5.			
Evaluate delta exposure for entry into the area (check one):			
 Acceptable Additional approval(s) requir 	ed		



NOTE: THIS IS THE EXAMINER SCORECARD. DO NOT PROVIDE TO THE CANDIDATE.

Answer the following when performing this task:		
1. Pass/Fail		
Classify the area (check one):	 □ Radiation Area ✓ High Radiation Area □ Locked High Radiation Area □ Very High Radiation Area 	
2. Pass/Fail		
Designate the highest on contact dose rate in the area and the location AND the highest general area dose rate and location: 500 mrem/hr on contact at 12 SDC Pump 100 mrem/hr near BV 38-03 and 11 SDC Pump, 12 SDC Pump and 11 SDC Heat Exchanger (east side of HX).		
3. Pass/Fail Designate the highest contamination levels in the room and location:		
8,000 dpm/100cm2 at 12 SDC Pump at smear location #7		
4. Pass/Fail		
Designate the RWP and task number required to be used:		
RWP # 106001 Task 2 (because task is in Contaminated High Radiation Area)		
5. Pass/Fail		
Evaluate delta exposure for entry into the area: (check one):		
□ Acceptable ✓ Additional approval(s) required		

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Radiation Work Permit: 106001

Perform Minor Maintenance in High Radiation Areas. Low Radiological Risk.

High Radiation A	ntenance and Si reas.	urveillances in	
SK: 1	High Radi	ation Area (HRA)	
***	******** Low R	isk Activity *********	
Dose Alarm	50 mRem	Dose Rate Alarm	500 mRem/Hr
Backoff Dose	40 mRem		
Protective Clothing Re	quirements:	No Protective Clothing Require	d.
Protection		is required on this RWP, Contac nents.	et Radiation
Instructions:			
approved work, approval, no wat for any changes 4) If High Radiat RCA Entry	not to be opened, ter or oil vacuumir to these instructio tion Area is within	Inits are radiological engineering not to be relocated to another w ng. All direct users must recieve a ons. a High Noise Area a PEA MUST or dosimeter alarms and contact	ork area without RP a pre-job brief. Contact RP be used. Obtain PEA prior
ALARA Review Numbe	er:		
ALARA Review Numbe	er:		
······	er:		
Survey Data:	2 - 200mRem/h 2 - 250mRem/h	r Ir	
Survey Data: Radiation Levels: Turbine Building HRAs Reactor Building HRAs Rad Waste Buiding HRAs	2 - 200mRem/h 2 - 250mRem/h 2 - 600mRem/h	r Ir Ir	
Survey Data: Radiation Levels: Turbine Building HRAs Reactor Building HRAs Rad Waste Buiding HRAs Off Gas Building HRAs	2 - 200mRem/h 2 - 250mRem/h 2 - 600mRem/h 2 - 120mRem/h	r Ir Ir	

Page 2 of 2

Radiation Work Permit: 106001

Perform Minor Maintenance in High Radiation Areas. Low Radiological Risk.

Inspections, M Contaminated				
ASK: 2	Hig	gh Radiati	ion Area (HRA)	
	*****	Low Ris	k Activity *********	
Dose Alarm	50 ml	Rem	Dose Rate Alarm	500 mRem/Hr
Backoff Dose	40 mł	Rem		
Coveralls (Radiation F requiremen Leather glo Leather glo underneath them. Instructions: 1) RPS appro 2) Pre-job bri 3) HEPA Vac approved wor approved wor approved, no for any chang 4) If High Rad RCA Entry. 5) Leave area	on Liners, R 1), TLD, Ele Protection Te its as work le its as work le ives may be ives are work water are work water or oil water diation Area a if radiation	ubber Glov ctronic Dos ech. may ch ocations an worn instea n, SURGEO vey required. W tilation Unit opened, no vacuuming. instructions is within a l	hange protective clothing, ro nd conditions change. ad of rubber gloves for safe ON gloves or RUBBER MU d for system breech. Vork crew will provide work ts are radiological engineer of to be relocated to anothe All direct users must recients.	ubbers (1) espirator, or other ety reasons. When ST be worn string instruments: To be used on r work area without RP ve a pre-job brief. Contact RP
ALARA Review Nur	nber:			
Survey Data:				
Radiation Levels:				
Turbine Building HRAs Reactor Building HRAs Rad Waste Buiding HRA Off Gas Building HRAs	2 - 250 As 2 - 60	0mRem/hr 0mRem/hr 0mRem/hr 0mRem/hr		
Contamination Levels:	<400 -	- 10,000 dpm	n/100cm2	
Airborne Levels:	<0.3	DAC		

and the second second

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Constellation Energy Group OPERATOR JOB PERFORMANCE MEASURE

Title: Assess Reportability Re	equirements		Revision: NRC 2006	
Task Number: NA				
Approvals:	2/23/2007		XAMINATION SECURITY	
Gereral Supervisor Operations Training (Designee)	Date		al Supervisor Date tions (Designee)	
NA EXAMINATION SECURIT	Y Date			
Performer:		(SRO))	
Trainer/Evaluator:				
Evaluation Method: <u>X</u>	_Perform		Simulate	
Evaluation Location:	_Plant	<u>X</u>	Simulator or other location	
Expected Completion Time:	25 min Time Critic	al Task:	NO Alternate Path Task: NO	
Start Time:	Stop Time:		Completion Time:	
JPM Overall Rating:	Pass Fai	١		

NOTE: A JPM overall rating of fail shall be given if <u>any</u> critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature:_____

Date:_____

Recommended Start Location: (Completion time based on the start location)

Simulator or other designated area.

Simulator Set-up:

N/A

Directions to the Instructor/Evaluator: None

Directions to Operators: Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

- 1. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
- 2. During Evaluated JPM:
 - Self checking shall be demonstrated.
- 3. During Training JPM:
 - Self checking shall be demonstrated.
 - Peer checking shall be demonstrated.

References:

- 1. NIP-IRG-01
- 2. 10CFR50.72
- 3. NUREG 1022 Rev 2, Section 3.2.6
- 4. EAL Matrix
- 5. CR NM-2006-4134 Plant Event Unit 2 Log Entry 9/5/06 1130

Tools and Equipment:

1. None

Task Standard:

Determine notification requirements.

Initial Conditions:

- The plant is operating at 100% power.
- Containment purge is in progress
- Maintenance is using an approved work order (WO) to perform a maintenance activity on containment purge isolation logic
- WO identifies that the activity has the potential to cause containment purge isolation, due to the possibility of causing an electrical short.
- While the WO is being performed, the worker does create an electrical short and an automatic isolation of the containment purge system occurs. No other systems are affected.
- After conditions are stabilized, Drywell Floor Drain leakage rate rises to 12 gpm.
- Drywell pressure stabilizes below the scram setpoint
- Actions to comply with Tech Specs as a result of the leakage are initiated and N1-OP-43C, Plant Shutdown is being implemented.
- Reactor power is now at 50%.
- Drywell Floor Drain leak rate is at 1gpm and Tech Spec LCO is exited.
- After conditions are stabilized, a spurious MSIV isolation occurs and the reactor automatically scrams
- All rods fully insert
- Emergency Condensers are manually placed in service to control RPV pressure 600 to 800 psig
- Feedwater shift to HPCI mode and RPV level is being maintained 53 inches to 95 inches.
- Plant conditions are stabilized and a normal cool down occurs.

Initiating cue:

"(Operator's name), identify the applicable verbal notification requirements, the reason that they apply and the associated time limitations for reporting under that category".

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. Evaluator Acknowledge repeat back providing correction	Proper communications used for repeat back (GAP-OPS-O1)	Sat/Unsat

RECORD START TIME

if necessary

- Obtain a copy of the any of the reference documents related to regulatory notifications. These are likely to include the following:
 - □ NIP-IRG-01
 - 10CFR50.72 and 73
 - NUREG1022
 - EAL Matrix

Note: Invalid isolation during maintenance is illustrated in NUREG 1022, Rev 2, section 3.2.6 System Actuation on page 52, example 7.

Reference materials obtained.

Pe	rformance Steps	Ste	Indard	Grade
	Locate and identify applicability of 50.72 (b)(3)(iv)(B)(2).		Determines actuation of isolation logic is not reportable under 50.72 (b)(3)(iv)(B)(2) because the actuation is not due to a valid signal.	Pass/Fail
	LER is not a verbal reporting requirement.		LER is required under 50.73 (b)(2)(iv). Identification of this requirement is not required.	Sat/Unsat/NA
4.	Locate and identify applicability of 50.72(a)(1)(i). Declaration of an Emergency Class.		Identifies leak rate above 10 gpm requires EAL 2.1.1 UNUSUAL EVENT must be declared.	Pass/Fail
			Identify reportability per 50.72(a)(1)(i) and (a)(3), within 15 minutes of declaration, immediately after notifying State and local agencies and not later than one hour after the time of declaration.	
5.	Locate and identify applicability of $50.72(b)(2)(i)$. Non-emergency four hour report. Initiation of a plant shutdown required by Tech Specs. (If not already reported with the $50.72(a)(1)(i)$.		Refer to Tech Spec 3.2.5.a.1 and determines that with specification not being met, the required action to comply with Tech Spec is to be cold shutdown within 24 hours. The plant shutdown being performed is required by Tech Specs.	Sat/Unsat
			Identify reportability per 50.72(b)(2)(i) within four hours, if not already reported.	Pass/Fail
6.	Locate and identify applicability of 50.72(b)(2)(iv)(B) Non- emergency four hour report. Actuation of RPS when the reactor is critical.		Identify reportability per 50.72(b)(2)(iv)(B) within 4 hours, if not already reported.	Pass/Fail
7.	Locate and identify applicability of 50.72(b)(3)(iv)(B)(5) Non- emergency eight hour report. Event or condition results in valid actuation of BWR isolation condenser system and feedwater coolant injection.		Identify reportability per 50.72(b)(3)(iv)(B)(5) within 8 hours, if not already reported.	Pass/Fail

End of JPM

TERMINATING CUE: Determine notification requirements.

RECORD STOP TIME_____

Applicant Cue Sheet

Initial Conditions:

- The plant is operating at 100% power.
- Containment purge is in progress
- Maintenance is using an approved work order (WO) to perform a maintenance activity on containment purge isolation logic
- WO identifies that the activity has the potential to cause containment purge isolation, due to the possibility of causing an electrical short.
- While the WO is being performed, the worker does create an electrical short and an automatic isolation of the containment purge system occurs. No other systems are affected.
- After conditions are stabilized, Drywell Floor Drain leakage rate rises to 12 gpm.
- Drywell pressure stabilizes below the scram setpoint
- Actions to comply with Tech Specs as a result of the leakage are initiated and N1-OP-43C, Plant Shutdown is being implemented.
- Reactor power is now at 50%.
- Drywell Floor Drain leak rate is at 1gpm and Tech Spec LCO is exited.
- After conditions are stabilized, a spurious MSIV isolation occurs and the reactor automatically scrams
- All rods fully insert
- Emergency Condensers are manually placed in service to control RPV pressure 600 to 800 psig
- Feedwater shift to HPCI mode and RPV level is being maintained 53 inches to 95 inches.
- Plant conditions are stabilized and a normal cool down occurs.

Initiating cue:

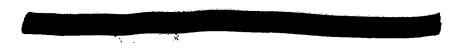
"(Operator's name), identify the applicable verbal reportability requirements, the reason that they apply and the associated time limitations for reporting under that category".

Attachment 1

JPM Scorecard KEY

Identify the applicable verbal reportability requirements, the reason that they apply and the associated time limitations for reporting under that category

Reportability Requirement	Time Limit	Reason (Event) Category Applies
50.72 (b)(3)(iv)(B)(2). General containment isolation signals.	NOT REPORTABLE	Containment Purge Isolation during maintenance activity. Also, only affects one system.
50.72(a)(1)(i) and (a)(3). Declaration of an Emergency Class	Within 15 minutes of declaration, immediately after notifying state and local agencies and not later than one hour after the time of declaration	Declaration of UE 2.1.1
50.72(b)(2)(i). Initiation of a plant shutdown required by Tech Specs	Within 4 hours, if not previously reported.	Initiation of a plant shutdown required by Tech Specs 3.2.5.a.1. Unidentified leakage is above 5 gpm.
50.72(b)(2)(iv)(B). Actuation of RPS when the reactor is critical.	Within 4 hours, if not previously reported.	Automatic reactor trip when the reactor is critical.
50.72(b)(3)(iv)(B)(5). Event or condition results in valid actuation of BWR isolation condenser system and feedwater coolant injection.	Within 8 hours, if not previously reported.	Manual initiation of Emergency Condensers to control pressure. Intentional manual actions are valid initiations. Also, the HPCI mode (feedwater coolant injection) is actuated.



Attachment 2

JPM Scorecard For Applicant Use

Identify the applicable verbal reportability requirements, the reason that they apply and the associated time limitations for reporting under that category

Reportability Requirement	Time Limit	Reason (Event) Category Applies
Roquitomont		

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Constellation Energy Group OPERATOR JOB PERFORMANCE MEASURE

	Title:	Review Reactivity Mane	euver Request ar	nd Classi	fy React	tivity Eve	ents Revision: NR	RC 2006
	Task N	umber: NA						
(Approv	743-	2/03/200	2			TION SECURITY	
		al Supervisof ions Training (Designee)	Date			ll Superv ons (De		Date
		KAMINATION SECURIT	/ Date					
	Perfor	mer:			(SRO)			
	Traine	r/Evaluator:	<u>_</u>		_			
	Evalua	ation Method: <u>X</u>	_Perform			Simul	ate	
	Evalua	ation Location:	_Plant		<u>X</u>	Simul	ator or other location	n
	Expec	ted Completion Time:	20 min Time (Critical 7	Task:	NO	Alternate Path Tas	k: NO
	Start T	-ime:	Stop Time:		_	Compl	etion Time:	
	JPM C	overall Rating:	Pass	Fail				

NOTE: A JPM overall rating of fail shall be given if <u>any</u> critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature:_____

Date:_____

Recommended Start Location: (Completion time based on the start location)

Simulator or other designated area.

Simulator Set-up:

N/A

Directions to the Instructor/Evaluator:

Applicant is to be provided with 3D Monicore printout data and RMR for review and approval. A 5 Loop Power to Flow Map is also required.

Directions to Operators: Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

- 1. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
- 2. During Evaluated JPM:
 - Self checking shall be demonstrated.
- 3. During Training JPM:
 - Self checking shall be demonstrated.
 - Peer checking shall be demonstrated.

References:

1. GAP-OPS-05

Tools and Equipment:

1. None

Task Standard:

Identify approval of RMR would result in operation outside acceptable area of the Power/Flow map. Applicant does not approve the RMR. Identifies and initiates actions for Reactivity Events.

Initial Conditions:

PART 1

- The plant is operating at rated power.
- An intended plant maneuver to raise rod line is being planned.
- A Reactivity Maneuver request is provided for review.

Initiating cue:

PART 1

"(Operator's name), review and approve the RMR and initiate any required actions. Document and explain findings and conclusions on scorecard provided".

PART 2 (After actions are complete for RMR)

The following events occur:

- Loud abnormal noises are reported from the Main Turbine.
- Power is rapidly reduced to 75% with Recirc Flow.
- After power is reduced to 75% the Main Turbine automatically trips.
- EOPs are entered and implemented.
- ERVs actuate.
- Turbine Bypass Valves were observed to remain closed throughout the transient.
- Control Rod 18-19 is at position 04.
- All other control rods are at position 02.

PART 2

"(Operator's name), based on the plant events that occur identify any internal classification and administrative actions related to the events. Document findings and conclusions on scorecard provided".

Performance Steps	Sta	ndard	Grade
1. Provide repeat back of initiating cue. Evaluator Acknowledge repeat back providing correction if necessary		per communications used for repeat k (GAP-OPS-O1)	Sat/Unsat
RECORD START TIME			
•2. Obtain a copy of the any of the reference documents.		Reference materials obtained.	
PART 1			
•3. Reviews RMR and supporting 3D Monicore predictor case.		Determines predicted results cause operation outside ELLLA Operating Limit (PFR Line) of Power Flow Map. (PFR is > 1.0)	Pass/Fail
		Does NOT approve the RMR based on failure to maintain plant operation within allowable regions of the power to flow map. (PFR is > 1.0)	Pass/Fail
NRC SRO ADM	IN JF	PM 2 3 October 2006	

Performance Steps	Standard	Grade
PART 2		
 4. Refer to GAP-OPS-05 section 3.13 to classify reactivity event severity levels. 	 Identifies the emergency power reduction OR unplanned scram as Severity Level 4 (4-1 Rapid Downpower ≥ 0.5% RTP or shutdown due to emergent issues) OR 4-9 Unplanned Reactor Scram While Critical. 	Pass/Fail
	 May also identify other SL-4 events, such as 4-11, with rods at 02 and 04, following the scram. 	Sat/Unsat
	 Identifies the Main Turbine Trip with Bypass Valve failure to operate as Severity Level 2 (2-1 Main Turbine Trip With Bypass System failure). 	Pass/Fail
	NOTE: SL-1 (ATWS) would not apply, with rods at 04 and 02 after the scram. All rods not inserted to at least 04 requires entry into EOP-3, Failure to Scram.	
	Identifies CR (DER) is required for severity level 1,2,3 and 4 events.	Sat/Unsat
13. Report completion.	Reports completion.	Sat/Unsat

TERMINATING CUE: Identify approval of RMR would result in operation outside acceptable area of the Power/Flow map. Applicant does not approve the RMR. Identifies and initiates actions for Reactivity Events.

RECORD STOP TIME

Applicant Cue Sheet

Initial Conditions:

PART 1

- The plant is operating at rated power.
- An intended plant maneuver to raise rod line is being planned.
- A Reactivity Maneuver request is provided for review.

Initiating cue:

PART 1

"(Operator's name), review and approve the RMR and initiate any required actions. Document and explain findings and conclusions on scorecard provided".

PART 2 (After actions are complete for RMR)

The following events occur:

- Loud abnormal noises are reported from the Main Turbine.
- Power is rapidly reduced to 75% with Recirc Flow.
- After power is reduced to 75% the Main Turbine automatically trips.
- EOPs are entered and implemented.
- ERVs actuate.
- Turbine Bypass Valves were observed to remain closed throughout the transient.
- Control Rod 18-19 is at position 04.
- All other control rods are at position 02.

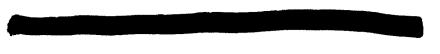
PART 2

"(Operator's name), based on the plant events that occur identify any internal classification and administrative actions related to the events. Document findings and conclusions on scorecard provided".

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JPM Scorecard KEY

Document any findings and conclusions for PART 1 and PART 2 events.				
ACTIONS		Explanation		
Determines predicted results cause operation outside ELLLA Operating Limit (PFR Line > 1.0) of Power Flow Map.		100% power and 83.9% core flow (112.3% rod line) results in operation above ELLLA. (PFR >1.0)		
Does NOT approve the RMR based on failure to maintain plant operation within allowable regions of the power to flow map.		GAP-OPS-05 Attachment 1 Item 2 evaluates the RMR for maintaining operation within allowable regions of the power to flow map. Since this maneuver does not accomplish this, the RMR should not be approved.		
Identifies the emergency power reduction or unplanned scram as Severity Level 4.		GAP-OPS-05 section 3.13 SL 4. Example 4-1 Rapid Downpower ≥ 0.5% RTP or shutdown due to emergent issues OR 4-9 Unplanned Reactor Scram While Critical.		
Identifies the Main Turbine Trip with Bypass Valve failure to operate as Severity Level 2		GAP-OPS-05 section 3.13 Example 2-1 Main Turbine Trip With Bypass System failure.		
NOTE: SL-1 (ATWS) would not apply, with rods at 04 and 02 after the scram. All rods not inserted to at least 04 requires entry into EOP-3, Failure to Scram.				
Identifies CR (DER) is required for severity level 1,2,3 and 4 events.		GAP-OP-05 section 3.13.2		



Attachment 2

JPM Scorecard For Applicant Use

Document any findings and conclusions for PART 1 and PART 2 events.					
Actions		Explanation			

CONSTELLATION ENERGY GROUP

OPERATOR JOB PERFORMANCE MEASURE

Title: Emergency Classification With PARs

Task Number: N/A

	Approvals:	
\langle	(at) 5	2/23/2007
	General Supervisor	Date /

Operations Training (Designee)

NA EXAMINATION SECURITY Configuration Control Date General Supervisor Operations (Designee)

NA EXAMINATION SECURITY

Date

Revision: NRC 2006

Performer:	(SRO	
Trainer/Evaluator:		
Evaluation Method: X	Perform	Simulate
Evaluation Location:	_ PlantX	Simulator or other location
Expected Completion Time:	20 min Time Critical Task:	YES Alternate Path Task: NO
Start Time:	Stop Time:	Completion Time:
JPM Overall Rating:	Pass Fail	

NOTE: A JPM overall rating of fail shall be given if <u>any</u> critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluators Signature:_____

Date:_____

Recommended Start Location: (Completion time based on the start location) Any appropriate location with proper references.

Simulator Set-up (if required): None

Directions to the Instructor/Evaluator:

Candidate is to be provided with blank SM/ED Emergency Plan packet (obtained from control room or simulator) that would be used by SM/ED during actual emergency plan implementation.

Directions to Operators: Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

- 1. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
- 2. During Evaluated JPM:
 - Self checking shall be demonstrated.
- 3. During Training JPM:
 - Self checking shall be demonstrated.
 - Peer checking shall be demonstrated.

References:

- 1. EPIP-EPP-08, Offsite Dose Assessment And Protective Action Recommendations
- 2. EPIP-EPP-20, Emergency Notifications
- 3. EAL Matrix

Tools and Equipment:

- 1. EAL Matrix
- 2. SM/ED Emergency Plan Packet

Task Standard:

Given a set of plant conditions, classify the emergency (within 15 min.), and complete the Part 1 Notification Fact sheet including PARs (within 15 min.)

Initial Conditions:

- 1. The plant is under accident conditions.
- 2. A Site Area Emergency has been declared based on plant conditions.
- 3. An Exclusion Area Evacuation has been directed and is in progress.
- 4. The Chemistry Technician has reported the following release data:
 - Dose assessment for ground level release rate is 58 Curies per second (Ci/second)
 - Dose assessment for elevated level release rate is 502 Ci/second
 - Wind speed is 8 mph
 - Wind direction is from the East South East (150°)
 - Pascal Stability Class is E

Initiating Cues:

"(Operator's name), Take the required actions as the Emergency Director."

Perfo	rmance Steps	 Standard	Grade
Evalı	uator Note: Inform the Candidate that this is a Time-Critical task		
1.	Provide repeat back of initiating cue. Evaluator Acknowledge repeat back providing correction if necessary.	Proper communications used for repeat back (GAP-OPS-O1/Operations Manual)	Sat/Unsat
	ORD TASK 1 TICAL START TIME		
2.	Obtain a copy of the reference procedure and review/utilize the correct section of the procedure.	The candidate may reference any/all of the following: EAL Matrix obtained. Section 5.0 EPIP-EPP-08 Att. 1 EPIP-EPP-18 EPIP-EPP-20 Att. 1A	Sat/Unsat
3.	Using given plant data and EPIP-EPP-08 Attachment 1 Table 1.1 and Table 1.2, determine that a General Emergency	General Emergency is declared, within 15 minutes of recorded start time for Task 1.	Pass/Fail
	exists based upon calculated total release (ground release + elevated release).	From EPP-08 Attachment 1	
		58/83 + 502/1250 = 1.1003 (General Emergency Exists if above 1.0)	

RECORD TASK 1 CRITICAL STOP/ TASK 2 CRITICAL START TIME _____

- 4. Review meteorological data and EPIP-EPP-08 and/or EPIP-EPP-20 to determine PAR's.
- PAR's made and indicated on Part I Notification Fact Sheet to evacuate and implement KI plan for ERPA's 1, 2, 3, 26, and 27 and shelter all remaining ERPA's, within 15 minutes of recorded start time for Task 2.

Pass/Fail

RECORD TASK 2 CRITICAL STOP TIME

Terminating Cue: The event is classified as a General Emergency and PAR's are made.

RECORD STOP TIME

Initial Conditions:

- 1. The plant is under accident conditions.
- 2. A Site Area Emergency has been declared based on plant conditions.
- 3. An Exclusion Area Evacuation has been directed and is in progress.
- 4. The Chemistry Technician has reported the following release data:
 - Dose assessment for ground level release rate is 58 Curies per second (Ci/second)
 - Dose assessment for elevated level release rate is 502 Ci/second.
 - Wind speed is 8 mph
 - Wind direction is from the East South East (150°)
 - Pascal Stability Class is E

Initiating Cues:

"(Operator's name), Take the required actions as the Emergency Director."

Constellation Energy Group OPERATOR JOB PERFORMANCE MEASURE

Title: Determine Thermal Limits with Inoperable Pressure Regulator Revision: NRC 2006

Task Number: NA

Approvals 2/23/2007 General Supervisor Date

Date

Operations Training (Designee)

NA EXAMINATION SECURITY

Configuration Control

NA EXAMINATION SECURITY General Supervisor Operations (Designee)

Date

	((SRO)		
_Perform			Simul	ate
_ Plant	>	<	Simul	ator or other location
25 min Time	Critical Ta	ask:	NO	Alternate Path Task: NO
Stop Time:			Comp	letion Time:
Pass	Fail			
	_ Perform _ Plant 25 min Time Stop Time:	Perform Plant 25 min Time Critical Ta Stop Time:	Perform PlantX 25 min Time Critical Task: Stop Time:	Perform Simul PlantX Simul 25 min Time Critical Task: NO Stop Time: Comp

NOTE: A JPM overall rating of fail shall be given if <u>any</u> critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature:____

Date:____

Recommended Start Location: (Completion time based on the start location)

Simulator or other designated area.

Simulator Set-up:

N/A

Directions to the Instructor/Evaluator:

Applicant is to be provided with N1-RESP-1 for recording data. Applicant must have access to Core Operating Limits Report, Tech Specs, 3D Monicore printout data and N1-OP-31

Directions to Operators: Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

- 1. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
- 2. During Evaluated JPM:
 - Self checking shall be demonstrated.
- 3. During Training JPM:
 - Self checking shall be demonstrated.
 - Peer checking shall be demonstrated.

References:

- 1. Core Operating Limits Report (COLR)
- 2. N1-RESP-1 Daily Thermal Limit Surveillance
- 3. Tech Spec 3.1.7
- 4. N1-OP-31, H.5.0 and H.3.0

Tools and Equipment:

1. None

Task Standard:

Determine and evaluate adjusted thermal limits with an inoperable pressure regulator. Identify COLR MCPR limit is exceeded and Tech Spec 3.1.7 actions required.Initial Conditions:

- The plant is operating at power
- Current core thermal power and flow are indicated on 3D Monicore printout
- The Mechanical Pressure Regulator is out of service for repairs
- MPR linkage is disconnected at the Front Standard

Initiating cue:

"(Operator's name), using the 3D Monicore printout provided complete N1-RESP-1, Daily Thermal Limit Surveillance section 9.2, up to and including step 9.2.13".

Performance Steps	Sta	ndard	Grade
1. Provide repeat back of initiating cue. Evaluator Acknowledge repeat back providing correction if necessary		oper communications used for repeat ok (GAP-OPS-O1)	Sat/Unsat
RECORD START TIME			
•2. Obtain a copy of the any of the reference documents.		Reference materials obtained.	
•3. Candidate may reference N1-OP- 31, H.3.0.		Refers to N1-OP-31, H.3.0 for direction for operation with one pressure regulator inoperable.	Sat/Unsat/NA
		 Refer to Core Operating Limits Report for applicable MFLPD and MFLCPR thermal limit restrictions. 	Sat/Unsat
		 IF unable to meet COLR therma limit restrictions, THEN perform the following: 	1
		 Enter applicable Tech Spec (3.1.7) 	Pass/Fail
		Notify Reactor Engineering to obtain direction to achieve compliance with applicable thermal limit restrictions.	Pass/Fail
 Record data in N1-RESP-1 by obtaining information from 3D Monicore printout. 		Records Core Thermal Power in step 9.2.2 as 1591 MWth and 86.0%.	Sat/Unsat
		Records Total Core Flow in step 9.2.3 as 48.023 Mlbm/hr and 71.1%	Sat/Unsat
		Records step 9.2.4 as NA, since all RRPs are operating.	Sat/Unsat

	rformanco Stone	C+-	andard	Crode
Lre	erformance Steps	012		Grade
			Records MAPRAT and location in step 9.2.5 as 0.775 and 41-38	Sat/Unsat
			Records step 9.2.6 as NA, since all RRPs are operating.	
5.	value for step 9.2.6.1, with pressure regulator out of service		Determines adjusted value to be 1.809, from COLR Section 2.1 and Figure 2b, as follows:	Pass/Fail
	and thermal power between 45% and 90% from the COLR.		For 70% ≤ P < 90% MCPR Limit = (Rated OLMCPR)/FRTP	
			Rated OLMCPR= MCPRlim*Kf = 1.53*1.017 = 1.556	
			= 1.556/.860 = 1.809	
			Enters 1.809 as "Adjusted MCPR limit" value for step 9.2.6.1	Sat/Unsat
6.	Determine "Actual MCPR Value" from 3D Monicore printout.		Determines actual MCPR value to be 1.753, from printout.	Pass/Fail
			Enters 1.753 as "Actual MCPR Value" for step 9.2.6.1	Sat/Unsat
7.	Determines COLR thermal limit restriction for MCPR is not met.		Evaluates actual MCPR value to be less than adjusted limit and that the MCPR thermal limit is NOT met.	Pass/Fail
8.	Enter Tech Spec 3.1.7.c		Recognize entry into Tech Spec 3.1.7 specification c.	Pass/Fail
			Identifies "action shall be initiated within 15 minutes to restore operation to the prescribed limit. If all operating MCPRs are not returned within 2 hours, reactor power reductions shall be initiated at a rate not less than 10% per hour until MCPR is within the prescribed limit".	Sat/Unsat
			Notifies Reactor Engineering to obtain direction to achieve compliance with applicable limits. (OP-31 H.3.2.2)	Sat/Unsat
9.	Record data in N1-RESP-1 by obtaining information from 3D Monicore printout.		Records MFLCPR and location in step 9.2.7 as 1.032 and 29-14.	Sat/Unsat
	monicore printoat.		Records step 9.2.8 as NA, since all RRPs are operating.	
			Records Power to Flow Ratio (PFR) step 9.2.9 as 0.933.	Sat/Unsat

Performance Steps	Ste	andard	Grade
10. Determine "Adjusted LHGR limit" value for step 9.2.10, with pressure regulator out of service and thermal power between 45%		Determines adjusted value to be 0.860, from COLR Section 3.1 and Figure 3, as follows:	Pass/Fail
and 90% from the COLR.		For 70% ≤ P < 90% MFLPD Limit = FRTP	
		= 1591/1850 = 0.8600	
		Enters 0.860 as "Adjusted LHGR limit" value for step 9.2.10.	Sat/Unsat
11. Determine "Actual MFLPD Value" from 3D Monicore printout.		Determines actual MFLPD value to be 0.735, from printout.	Pass/Fail
		Enters 0.735 as "Actual MFLPD Value" for step 9.2.10	Sat/Unsat
12. Determines COLR thermal limit restriction for MCPR is met.		Evaluates actual MFLPD value to be less than adjusted limit and that the MFLPD thermal limit is met.	Pass/Fail
		Records MFLPD and location in step 9.2.11 as 0.735 and 41-38.	Sat/Unsat
		Records FPAPDR in step 9.2.12 as 0.855 from printout.	Sat/Unsat
		Records step 9.2.13 as NA, since FPAPDR is < 1.0.	Sat/Unsat
13. Report completion.		Reports completion.	Sat/Unsat

TERMINATING CUE: Determine and evaluate adjusted thermal limits with an inoperable pressure regulator. Identify COLR MCPR limit is exceeded and Tech Spec 3.1.7 actions required.

RECORD STOP TIME_____

- **1**

Applicant Cue Sheet

Initial Conditions:

- The plant is operating at power
- Current core thermal power and flow are indicated on 3D Monicore printout
- The Mechanical Pressure Regulator is out of service for repairs
- MPR linkage is disconnected at the Front Standard

Initiating cue:

"(Operator's name), using the 3D Monicore printout provided complete N1-RESP-1, Daily Thermal Limit Surveillance section 9.2, up to and including step 9.2.13".

Resp-1 JPM-3

						INGE I
CORE PAP	RAMETERS		3DM/P11		20-OCT-2006 11 20-OCT-2006 11	3:39 CALCULATED
POWER	MWT	1591.0			CASE ID FTFF1	
FLOW N	MLB/HR	48.023	CALC RESU	LTS	RESTART FMLD1	
FPAPDR	•	0.855			FIT - FULL CO	
	BTU/LB	28.31	Keff	1.0034		
	PSIa	1012.63	XE WORTH		LOAD LINE SUM	
	MWD/sT	26190.6	XE WORTH	1.01	CORE POWER	
	MWD/sT	9709.3	AVE VF	0.371	CORE FLOW	86.0%
MCPR	MD/SI	1.753	PFR			71.1%
T STEP H	HOTIDS	0.7	FFR	0.933	LOAD LINE	107.5%
			- 1 017 M	1 000 - 1 000	MAPRAT= 1.00	^
OPTION:				IANUAL FLOW		
0111011.	IND_AK			TIONS (NON-S		0
MFLCPR	LOC			MAPRAT LO		tog
0.887	29-14			0.775 41-3		
0.880	31-12			0.772 37-3		
0.879	33-14					23-20- 5
0.878	31-16			0.772 37-4 0.764 39-2		
0.868	27-18					
0.868	39-24			0.760 33-4		
	41-22			0.756 33-4		
	41-22 39-20			0.755 35-1		33-30- 5
	37-22			0.751 43-3		
	35-26			0.751 27-4		
0.001	55-26	0.715 33	-40-4	0.750 43-3	6-5 0.855	33-44- 7
	C-1	אדו.כיסק ה-אד	סס גא–את חס.זי	א העמטמ–ם העמ	=MULTIPLE C	
51	C=1	HEBCER DEM	DED M-MARK	AI F=PCKAI ~		ORE AVE AXIAL H REL PW LOC
L					00	
47					00	0.154 24 0.276 23
					02	0.574 22
43			36		06	0.737 21
L			50	P	08	0.840 20
39				1	10	0.928 19
				*	10	0.976 18
35		08	0	6	14	0.982 17
L			0		16	1.107 16
31					18	1.160 15
					20	1.178 14
27 (00 00		00	36	20	1.217 13
L				50	24	1.253 12
23					26	1.262 11
_					28	1.255 10
19		06	0	8	30	1.285 09
L			Ū	•••	32	1.293 08
15					34	1.271 07
			С		36	1.292 06
11			36		38	1.304 05
L					40	1.272 04
07					40	1.171 03
					44	0.928 02
03					46	0.285 01
L	L	L	L	L L		····· ···
02	06 10			34 38 42 4	6 50	

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PAGE

1

Constellation Energy Group OPERATOR JOB PERFORMANCE MEASURE

Title: Determine Actions for Service Water Radiation Monitor Low Flow Revision: NRC 2006

Task Number: NA

A	pprovals:	
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		april - Jave /
0	andral Suparvidar	' Data

General Supervisor Date Operations Training (Designee) <u>NA EXAMINATION SECURITY</u> General Supervisor

Operations (Designee)

Date

NA EXAMINATION SECURIT	Y Date		
Performer:	· · · · · · · · · · · · · · · · · · ·	_(SRO)	
Trainer/Evaluator:			
Evaluation Method: X	_ Perform		Simulate
Evaluation Location:	_Plant	Х	Simulator or other location
Expected Completion Time:	20 min Time Critical	Fask:	NO Alternate Path Task: NO
Start Time:	Stop Time:		Completion Time:
JPM Overall Rating:	Pass Fail		

NOTE: A JPM overall rating of fail shall be given if <u>any</u> critical step is graded as fail. Any grade of unsat or individual competency area unsat requires a comment.

Comments:

Evaluator Signature:_____

Date:_____

Recommended Start Location: (Completion time based on the start location)

Simulator or other designated area.

Simulator Set-up:

N/A

Directions to the Instructor/Evaluator: None

Directions to Operators: Read Before Every JPM Performance:

For the performance of this JPM, I will function as the SM, CSO, and Auxiliary Operators. Prior to providing direction to perform this task, I will provide you with the initial conditions and answer any questions. During task performance, I will identify the steps to be simulated, or discuss and provide cues as necessary.

With the exception of accessing panels, NO plant equipment will be physically manipulated. Repositioning of devices will be simulated by discussion and acknowledged by my cues.

Read Before Each Evaluated JPM Performance:

This evaluated JPM is a measure of your ability to perform this task independently. The Control Room Supervisor has determined that a verifier is not available and that additional / concurrent verification will not be provided; therefore, it should not be requested.

Read Before Each Training JPM Performance:

During this Training JPM, the use of applicable methods of verification and checking are expected. Therefore, either another individual or I will act as the independent verifier or peer checker.

Notes to Instructor / Evaluator:

- 1. Critical steps are identified in grading areas **Pass/Fail**. All steps are sequenced critical unless denoted by a "•".
- 2. During Evaluated JPM:
 - Self checking shall be demonstrated.
- 3. During Training JPM:
 - Self checking shall be demonstrated.
 - Peer checking shall be demonstrated.

References:

- 1. ARP H1; H1-4-5.
- 2. ODCM 3.6.14.a and TBL 3.6.14-1 Inst. 1B.
- 3. DER NM-2003-5168, ODCM Entry Due to SW RM Low Flow.
- 4. DER NM-2004-976, Unplanned LCO SW RM Low Flow.
- 5. K/A 2.3.11 (3.2) Ability to control radiation releases.
- 6. 2.4.45 (3.6) Ability to prioritize and interpret the significance of each annunciator or alarm.

Tools and Equipment:

1. None

Task Standard: Determine actions per ARP H1-4-5 and ODCM in response to service water radiation monitor low flow condition.

Initial Conditions:

- 1. The plant is operating at 100% power.
- 2. High wind conditions (20-25 mph with higher gusts) are present and are expected to continue for the next twelve (12) hours.
- 3. H1-4-5, LQ PROCESS RAD MON, has alarmed.
- 4. Computer Point F172, SERVICE WATER SKID FAILURE, is in alarm.
- 5. Operator reports an EQUIP FAIL Light is shown for the Service Water Discharge Monitor at the J Panel.
- 6. Chemistry reports alarm is caused by low sample flow. Flows are reading 0.98 gpm on the east side (TB) and 0.99 gpm on the west side (RB).
- 7. Sample flow cannot be adjusted.
- 8. Ask the operator for any questions.

Initiating cue:

"(Operator's name), determine the appropriate actions in response to these conditions."

Performance Steps	Standard	Grade
1. Provide repeat back of initiating cue. Evaluator Acknowledge repeat back providing correction if necessary	 Proper communications used for repeat back (GAP-OPS-O1) 	Sat/Unsat
RECORD START TIME		
 Obtain a copy of the reference procedure and review/utilize the correct section. 	 ARP H1-4-5 obtained. Operator Actions referenced. ODCM obtained. DLCO 3.6.14 referenced. TBL D3.6.14-1 referenced. 	Sat/Unsat
 Per ARP H1-4-5, if service water monitor alarm, and monitor EQUIP FAIL light is lit, then: 		
a. •Notify Radiation Protection Instrument Support for repair.	 Notifies Radiation Protection Instrument Support to initiate repairs. 	Sat/Unsat
b.•Initiate LCO sampling (Chemistry).	 Directs Chemistry to perform DLCO sampling per TBL D 3.6.14-1 Instrument1B action (d); twelve (12) hour grab samples to be collected/analyzed for SW effluent. 	Pass/Fail
 •Reference ODCM and takes appropriate actions. 	 Determines SW Radiation Monitor is inoperable. 	Pass/Fail
	 References ODCM DLCO 3.6.14.a and TABLE D 3.6.14-1 Instrument 1B and note (d) applies. 	Sat/Unsat
	 Determines less than the minimum number of radioactive liquid effluent monitoring channels for service water effluent and takes action 	Pass/Fail
NRC SRO ADM	IIN JPM 4 3 October 2006	

Performance Steps	<u> 3</u> [8	andard shown in TBL D 3.6.14-1.	Grade
		Determines action (d) applies. Effluent releases via this pathway can continue provided that at least once per twelve (12) hours grab samples are collected and analyzed SW effluent.	Pass/Fai
		Initiates CR for unplanned LCO entry.	Sat/Unsat

÷

End of JPM

TERMINATING CUE: SW Radiation Monitor flow adjusted and restored to operable status.

RECORD STOP TIME_____

Initial Conditions:

- 1. The plant is operating at 100% power.
- 2. High wind conditions (20-25 mph with higher gusts) are present and are expected to continue for the next twelve (12) hours.
- 3. H1-4-5, LQ PROCESS RAD MON, has alarmed.
- 4. Computer Point F172, SERVICE WATER SKID FAILURE, is in alarm.
- 5. Operator reports an EQUIP FAIL Light is shown for the Service Water Discharge Monitor at the J Panel.
- 6. Chemistry reports alarm is caused by low sample flow. Flows are reading 0.98 gpm on the east side (TB) and 0.99 gpm on the west side (RB).
- 7. Sample flow cannot be adjusted.
- 8. Ask the operator for any questions.

Initiating cue:

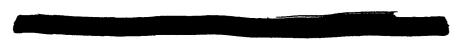
"(Operator's name), determine the appropriate actions in response to these conditions."



Attachment 1

JPM Scorecard KEY

Determine the appropriate	actions in response to these conditions.
Action	Required By (Document)
Direct Chemistry to initiate required LCO sampling	ARP H1-4-5
Determines SW Radiation Monitor is inoperable.	
Determines less than the minimum number of radioactive liquid effluent monitoring channels for service water effluent and takes action shown in TBL D 3.6.14-1.	ODCM DLCO 3.6.14 TABLE D 3.6.14-1.
Determines action identified in note (d) applies. Effluent releases via this pathway can continue provided that at least once per twelve (12) hours grab samples are collected and analyzed SW effluent.	ODCM DLCO 3.6.14 TABLE NOTE (d)



Attachment 2

JPM Scorecard For Applicant Use

Action	······································	Required By (Document)