CATAWBA
2012
INITIAL LICENSE EXAMINATION

JOB PERFORMANCE MEASURE

ADMIN

RO A.1

APPLICANT _____

EXAMINER _____

CATAWBA
INITIAL LICENSE EXAMINATION
JOB PERFORMANCE MEASURE

Task	Calculate Reactor Vessel Head Venting Time					
Alternate Path	☐ YES	☐ NO	☒ N/A	**Time Critical**	☐ YES	☒ NO
Evaluation Location	☐ Simulator	☐ In-Plant	☒ Classroom	**Safety Function** ____		☒ N/A
Evaluation Method	☒ Perform	☐ Simulate		**Validation Time**	11 minutes	
JPM Type	☒ Bank	☐ New	☐ Modified			
K/A	GENERIC 2.1.7 (3.7/4.4) Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation.					
Standard	Reactor vessel head venting time calculated to be between 3 minutes, 18 seconds and 5 minutes, 36 seconds.					
References	EP/1/A/5000/FR-I.3 Response to Voids in Reactor Vessel, Enclosure 5 (rev 17)					

Applicant: Name_____ Docket #_____

Start Time _____ **End Time** _____ **Duration** _____

Performance Rating ☐ **Satisfactory** ☐ **Unsatisfactory**

Examiner _____ (Printed Name) _____ (Signature) _____ (Date)

Comments

READ TO OPERATOR

DIRECTION TO TRAINEE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

SIMULATOR SETUP

Insert the following malfunctions:

XMT-VV010 (TVV_5090 LOWER CNT AIR TEMP A MTR), VALUE=140
XMT-VV011 (TVV_5110 LOWER CNT AIR TEMP B MTR), VALUE=140
XMT-VV014 (1VVP5170 LOWER CNT AIR TEMP C MTR), VALUE=140
XMT-VV015 (1VVP5190 LOWER CNT AIR TEMP D MTR), VALUE=140
XMT-VX003 (XMI_5320 CNT TRN A H2 ANAL MTR), VALUE=1.5
XMT-VX004 (XMI_5330 CNT TRN B H2 ANAL MTR), VALUE=1.5
XMT-CNT009 (PNS_5090 CNT PRESS MTR (PI-937), VALUE=3.0
XMT-CNT008 (PNS_5060 CNT PRESS MTR (PI-936), VALUE=3.0
XMT-CNT007 (PNS_5050 CNT PRESS MTR (PI-935), VALUE=3.0
XMT-CNT006 (PNS_5040 CNT PRESS MTR (PI-934), VALUE=3.0
XMT-CNT011 (PNS_5380 CNT TRN B PRESS MTR), VALUE=3.0
XMT-CNT010 (PNS_5370 CNT TRN A PRESS MTR), VALUE=3.0
IND-NC023 (PNC_5120 LOOP B HOT LEG W/R PRESS MTR (PI-405), VALUE=1000
IND-NC024 (PNC_5140 LOOP C HOT LEG W/R PRESS MTR (PI-403), VALUE=1000

Take digital photographs of the gauges listed above or provide control board mimics from the instructor station.

INITIATING CUE:

A LOCA is in progress on Unit 1. Calculate and record the maximum reactor vessel head venting time per Enclosure 5 of EP/1/A/5000/FR-I.3 (Response to Voids in Reactor Vessel).

Start Time:_____

1	EP/1/A/5000/FR-I.3, Enclosure 5, Step 1	**CRITICAL STEP**

Calculate A where $A = 9500 \times \frac{(P + 14.7)}{14.7} \times \frac{492}{(T+460)}$

Where: P = Containment pressure (PSIG)
T = Lower Containment temperature (°F)

STANDARD

Calculate A

_____ SAT

_____ UNSAT

Determined containment pressure to be 3.0 psig to 3.2 psig based on pictures provided.

Determine Lower Containment Temperature to be 135 °F - 145 °F based on pictures provided

Using 3.0, 135 $A = 9500 \times \frac{(3.0 + 14.7)}{14.7} \times \frac{492}{(135+460)}$ = **9458.6**

Using 3.0, 145 $A = 9500 \times \frac{(3.0 + 14.7)}{14.7} \times \frac{492}{(145+460)}$ = **9302.3**

Using 3.2, 135 $A = 9500 \times \frac{(3.2 + 14.7)}{14.7} \times \frac{492}{(135+460)}$ = **9565.5**

Using 3.2, 145 $A = 9500 \times \frac{(3.2 + 14.7)}{14.7} \times \frac{492}{(145+460)}$ = **9407.4**

Using 3.1, 140 $A = 9500 \times \frac{(3.1 + 14.7)}{14.7} \times \frac{492}{(140+460)}$ = **9432.8**

(A = 9302 to 9566 is acceptable)

COMMENTS

2	EP/1/A/5000/FR-I.3, Enclosure 5, Step 2 Calculate B where B = (3 - H) X A Where H = Containment Hydrogen Concentration (%) **STANDARD** Determine H2 concentration from pictures provided to be between 1.25 and 1.75. Using bounding values of A (9302 to 9566): B = (3 – 1.25) X 9566 = **16740.5** B = (3 – 1.75) X 9302 = **11627.5** **Using middle value of 9483 B = (3-1.5) X 9483 =14224.5** **(B range of 11627 to 16741 is acceptable)** COMMENTS	**CRITICAL STEP** _____ SAT _____ UNSAT
3	EP/1/A/5000/FR-I.3, Enclosure 5, Step 3 Determine C from the curve for the current NC system pressure. STANDARD Determines NC pressure from pictures to be 950 psig to 1050 psig. Reads approximately 3250 SCFM from graph. (range of 3000-3500 SCFM is acceptable) COMMENTS	**CRITICAL STEP** _____ SAT _____ UNSAT

4	EP/1/A/5000/FR-I.3, Enclosure 5, Step 4 Calculate T T= B/C = Venting time in minutes STANDARD Using bounding values for B and C: T = 11627/ 3500 = 3.32 minutes T = 16741/ 3000 = 5.58 minutes **(3.3 – (3 minutes, 18 seconds) to 5.60 (5 minutes, 36 seconds) is acceptable)** **Using actual values: T = 14224/ 3250 = 4.37 minutes = 4 minutes, 23 seconds** COMMENTS	**CRITICAL STEP** _____ SAT _____ UNSAT

TIME STOP: _____

CANDIDATE CUE SHEET
(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

INITIATING CUE:

A LOCA is in progress on Unit 1. Calculate and record the maximum reactor vessel head venting time per Enclosure 5 of EP/1/A/5000/FR-I.3 (Response to Voids in Reactor Vessel).

CATAWBA
2012
INITIAL LICENSE EXAMINATION

JOB PERFORMANCE MEASURE

ADMIN

SRO A.1

APPLICANT: _____

EXAMINER: _____

CATAWBA
INITIAL LICENSE EXAMINATION
JOB PERFORMANCE MEASURE

Task: Determine if required shift manning is met.

Alternate Path: No

Facility JPM #: NSO-001

K/A Rating(s): G 2.1.5 (3.9) Ability to use procedures related to shift staffing, such as minimum crew complement , overtime limitations, etc.

Administrative Topic: Conduct of Ops

Task Standard: Determine shift manning is NOT met. Need one additional RO and one additional one 100% NLO.

Preferred Evaluation Location:

Control Room __X__ In-Plant _____

Preferred Evaluation Method:

Perform _X__ Simulate _____

Procedure References:

OMP 1-10 (Shift Manning and Overtime Requirements)

Validation Time: 25 Minutes **Time Critical:** No

==========

Applicant: **Name**_____ **Docket #**_____ Time Start: _____

Time Finish: _____

Performance Ratings:

SAT _____ UNSAT _____ Question Grade _____ Performance Time: _____

Examiner: _____ _____/_____
NAME SIGNATURE DATE

==========

COMMENTS

Tools / Equipment / Procedures Needed:

OMP 1-10 (Shift Manning and Overtime Requirements)

READ TO OPERATOR

DIRECTION TO CANDIDATE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

INITIATING CUE: NOTE: Use the following page to document your answer.

With both Units at 100 RTP, the following operators are available at the beginning of shift. No SPOC members are available for fire brigade duty. (Assume all individuals are clean shaven.)

Less than 100% qualified NLOs may NOT be used as one of the 3 required "Safe Shutdown NLOS".

Based on the given conditions, can all administrative required positions be filled? If not, what additional resources (by position) are required?

Qualifications and/or License held

Operator	Fire Brigade	Fire Brigade Captain	100% NLO	50% NLO	OSM	RO	SRO	STA
Auten, T	√		√					
Bailes, J	√		√					
Blair, H		√					√	
Burroughs, P				√				
Ellingwood, R		√					√	√
Grant, R	√			√				
Harbin, G							√	√
Hindman, T			√					
Horton, R	√			√				
Hunnicutt, W		√			√		√	
Huskey, H		√				√		
Jenkins, G	√			√				
Johnson, D							√	
Jones, T	√		√					
Larsen, D	√			√				
Lechner, R	√		√					
Odoms, T		√				√		
Rhyne, G		√				√		

START TIME: _____

EXAMINER NOTE: Required reference for this JPM is OMP 1-10 (Shift Manning and Overtime Requirements).	
Operator should answer the following questions: **QUESTION:** Can all administrative requirements per OMP 1-10 be met? **ANSWER:** No **QUESTION:** If not, what additional resources (by position) are required? **ANSWER:** Determine shift manning is NOT met. Need one additional RO and one 100% NLO. . COMMENTS:	**CRITICAL STEP** ___ SAT ___ UNSAT
This JPM is complete.	

STOP TIME: _____

CANDIDATE CUE SHEET

(To Be Returned To Examiner Upon Completion of Task)

INITIATING CUE:

With both Units at 100 RTP, the following operators are available at the beginning of shift. No SPOC members are available for fire brigade duty. (Assume all individuals are clean shaven.)

Less than 100% qualified NLOs may not be used as one of the 3 required "Safe Shutdown NLOS"

Based on the given conditions, can all administrative required positions be filled? If not, what additional resources (by position) are required?

	Qualifications and/or License held							
Operator	Fire Brigade	Fire Brigade Captain	100% NLO	50% NLO	OSM	RO	SRO	STA
Auten, T	√		√					
Bailes, J	√		√					
Blair, H		√					√	
Burroughs, P				√				
Ellingwood, R		√					√	√
Grant, R	√			√				
Harbin, G							√	√
Hindman, T			√					
Horton, R	√			√				
Hunnicutt, W		√			√		√	
Huskey, H		√				√		
Jenkins, G	√			√				
Johnson, D							√	
Jones, T	√		√					
Larsen, D	√			√				
Lechner, R	√		√					
Odoms, T		√				√		
Rhyne, G		√				√		

CATAWBA
2012
INITIAL LICENSE EXAMINATION

JOB PERFORMANCE MEASURE

ADMIN

RO A.2 / SRO A.2

APPLICANT: _____

EXAMINER: _____

CATAWBA
INITIAL LICENSE EXAMINATION
JOB PERFORMANCE MEASURE

Task: Develop Restoration for R&R 12-01543

Alternate Path: No

Facility JPM #: New

K/A Rating(s): Generic 2.2.13 (4.1/4.3) Knowledge of tagging and clearance procedures.

Task Standard: List component restoration positions and sequence per SOMP 02-01.

Preferred Evaluation Location: **Preferred Evaluation Method:**

Classroom __X__ In-Plant _____ Perform ___X___ Simulate_____

Procedure References:

SOMP 02-01 (Safety Tagging And Configuration Control)

Validation Time: 15 Minutes **Time Critical:** No

==========

Applicant: Name_____ Docket#_____ Time Start: _____

Time Finish: _____

Performance Ratings:

SAT _____ UNSAT _____ Question Grade _____ Performance Time: _____

Examiner: _____ _____/_____
NAME SIGNATURE DATE

==========

COMMENTS

_____

_____

_____

_____

Tools/Equipment/Procedures Needed:

Removal for R&R 12-01543
Mechanical Flow Diagram CN-1590-1.5
OP/1/A/6250/001 Enclosure 4.12 pages 2 and 8
SOMP 02-01 Attachment 13.8

READ TO OPERATOR

DIRECTION TO TRAINEE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

Initial Conditions:

The 1B Condensate Booster pump was tagged out per R&R 12-01543 to install additional rotating guards per W/O 01997535 task 01. The unit supervisor has been informed that the work is complete and a functional needs to be performed.

Initiating Cue:

The unit supervisor has directed you to prepare the Restoration for R&R 12-01543 per SOMP 02-01 Attachment 13.8. You are to list the component, restoration position, and sequence number on the cue sheet.

1CM97 (1B CONDENSATE BOOSTER PUMP DISCH BYPASS)

1MXB R01B (1B CONDENSATE BOOSTER PUMP DISCH ISOL MOTOR (1CM96))

1MXB F05C (1BCONDENSATE BOOSTER PUMP AUX LUBE OIL PUMP MOTOR)

1CM96 (1B CONDENSATE BOOSTER PUMP DISCH)

1TB11 (1B CONDENSATE BOOSTER PUMP MOTOR

1MC13/CM119/CS (CM BSTR PUMP 1B)

START TIME: _____

EXAMINER NOTE: Provide the initiating cue, a copy of the Removal for R&R 12-01543, a copy of OP/1/A/6250/001 Enclosure 4.12 pages 2 and 8, a copy of drawing CN-1590-1.5, and a copy of SOMP 02-01 Attachment 13.8.	
Answer Key: **Component** / **Position** / **Acceptable Sequences** **1CM-97** / **CLOSED** / **1 1 1** **1MXB R01B** / **ON** / **1 2 2** **1MXB F05C** / **ON** / **1 2 3** **1CM-96** / **OPEN** / **2 3 4** **1TB-11** / **Racked In or Racked In/Open** / **3 4 5** **1MC13/CM119/CS** / **AUTO** / **4 5 6** STANDARD: Applicant lists correct restoration positions and in one of the acceptable sequences. **EXAMINER NOTE: 1MXB R01B is the power supply for 1CM-96.** COMMENTS:	**CRITICAL STEP** ___ SAT ___ UNSAT
This JPM is complete.	

STOP TIME: _____

CANDIDATE CUE SHEET

(To Be Returned To Examiner Upon Completion Of Task)

Information sheet:

The 1B Condensate Booster pump was tagged out per R&R 12-01543 to install additional rotating guards per W/O 01997535 task 01. The unit supervisor has been informed that the work is complete and a functional needs to be performed.

Initiating Cue:

The unit supervisor has directed you to prepare the Restoration for R&R 12-01543 per SOMP 02-01 Attachment 13.8. You are to list the component, restoration position, and sequence number on the cue sheet.

CATAWBA
2012
INITIAL LICENSE EXAMINATION

JOB PERFORMANCE MEASURE

ADMIN

RO B / SRO B

APPLICANT _____

EXAMINER _____

CATAWBA
INITIAL LICENSE EXAMINATION
JOB PERFORMANCE MEASURE

Task	Using Data Book Figure 9 (Permissible Successive Attempts to Start Motors) determine the allowed starting time for NCP.					
Alternate Path	☐ YES	☐ NO	☒ N/A	**Time Critical**	☐ YES	☒ NO
Evaluation Location	☐ Simulator	☐ In-Plant	☒ Classroom	**Safety Function**	____	☒ N/A
Evaluation Method	☒ Perform	☐Simulate		**Validation Time**	10 minutes	
JPM Type	☒ Bank	☐ New	☐ Modified			
K/A	2.1.32 Ability to explain and apply all system limits and precautions (3.4/3.8)					
Standard	Determines 1B NCP can be started first at 1742.					
References	OP/1/A/6150/001 (Filling and Venting the Reactor Coolant System) rev 104 OP/1/A/6150/002A (Reactor Coolant Pump Operation) rev 066 Unit 1 Data book Figure 9 (Permissible Successive Attempts to Start Motors) rev 001					

Applicant Name_____ Docket #_____

Start Time _____ **End Time** _____ **Duration** _____

Performance Rating ☐ **Satisfactory** ☐ **Unsatisfactory**

Examiner _____ _____ _____
(Printed Name) (Signature) (Date)

Comments

READ TO OPERATOR

DIRECTION TO TRAINEE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

INITIAL CONDITIONS:

NC system venting is in progress per OP/1/A/6150/001 (Filling and Venting the Reactor Coolant System) Enclosure 4.2 (Reactor Coolant System Venting). At 1725 the crew reaches a step in Enclosure 4.2 which requires the start of either NCP 1A or NCP 1B. The OAC is not available.

INITIATING CUE:

Given the run history for these pumps today:

Pump	Start Time	Shutdown Time	Run Time
NCP 1A	1456	1456	20 seconds
NCP 1A	1535	1536	1 minute
NCP 1A	1650	1659	9 minutes
NCP 1B	1502	1502	20 seconds
NCP 1B	1602	1603	1 minute
NCP 1B	1704	1712	8 minutes

State which pump can be started the earliest and at what time it can be started?

START TIME: _____

1 Reviews the NCP start history. STANDARD Determines that 1A NCP has been started 3 times in a 2 hour period (requiring a 1 hour wait) and 1B NCP 2 times in a 2 hour period (requiring a 30 min wait). COMMENTS	**CRITICAL STEP** _____ SAT _____ UNSAT
2 Determines how much idle time is required prior to each pumps restart. STANDARD 1A must have 1 hour idle time following shutdown. 1B must have 30 minute idle time following shutdown. COMMENTS	**CRITICAL STEP** _____ SAT _____ UNSAT
3 Calculates earliest start time for each pump. STANDARD 1A NCP stopped at 1659 + 60 minutes = 1759 1B NCP stopped at 1712 + 30 minutes = 1742 **1B NCP can be started first at 1742.** COMMENTS	**CRITICAL STEP** _____ SAT _____ UNSAT

TIME STOP: _____

CANDIDATE CUE SHEET
(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

INITIAL CONDITIONS:

NC system venting is in progress per OP/1/A/6150/001 (Filling and Venting the Reactor Coolant System) Enclosure 4.2 (Reactor Coolant System Venting). At 1725 the crew reaches a step in Enclosure 4.2 which requires the start of either NCP 1A or NCP 1B. The OAC is not available.

INITIATING CUE:

Given the run history for these pumps today:

Pump	Start Time	Shutdown Time	Run Time
NCP 1A	1456	1456	20 seconds
NCP 1A	1535	1536	1 minute
NCP 1A	1650	1659	9 minutes
NCP 1B	1502	1502	20 seconds
NCP 1B	1602	1603	1 minute
NCP 1B	1704	1712	8 minutes

State which pump can be started the earliest and at what time it can be started?

CATAWBA
2012
INITIAL LICENSE EXAMINATION

JOB PERFORMANCE MEASURE

ADMIN

RO**C** / SRO**C**

APPLICANT: _____

EXAMINER: _____

CATAWBA
INITIAL LICENSE EXAMINATION
JOB PERFORMANCE MEASURE

Task: Determine the Radiation Protection requirements required to be met to enter and perform work in the Unit 1 KF Demineralizer Room.

Alternate Path: No

Facility JPM #: KF-062

K/A Rating(s): Generic: 2.3.4 (2.5/3.1) Knowledge of radiation exposure limits and contamination control, including permissible levels in excess of those authorized.

Task Standard: Determine entry requirements and which individuals are available to perform work in the Unit 1 KF Demineralizer Room.

Preferred Evaluation Location: **Preferred Evaluation Method:**

Control Room __X__ In-Plant _____ Perform _____ Simulate __X___

Procedure References:

NSD 507 (Radiation Protection)

Validation Time: 15 Minutes **Time Critical:** No

==========

Applicant: Name_____ Docket#_____ Time Start: _____

Time Finish: _____

Performance Ratings:

SAT _____ UNSAT _____ Question Grade _____ Performance Time: _____

Examiner: _____ _____/_____
NAME SIGNATURE DATE

==========

COMMENTS

Tools/Equipment/Procedures Needed:

RWP Dress Category Codes
Radiation Work Permit 3995T
Room 417 (KF Demineralizer) Survey Map
List of employee names and their current year to date dose (attached to initiating cue).

READ TO OPERATOR

DIRECTION TO TRAINEE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

Information sheet:

The Unit 1 Spent Fuel Pool has been losing level slowly over the last three days. The source of the leak has been determined to be 1KF-150 (KF Pre-Filters to KF Demin Drain). It has been decided that the valve seat for 1KF-150 needs to be flushed. To perform this flush, a pipe cap will have to be removed, tygon tubing installed for the flush, (at this time the KF Demineralizer will be briefly placed in service), then the tubing will be removed once the flush is complete, and the pipe cap will be reinstalled. The KF Demineralizer will be isolated and unisolated as needed by another crew of Operators.

Initiating Cue:

Work is to be done at 1KF-150 in Room 417. The job will take 1 hour and 45 minutes. The Operations Supervisor directs you to determine 1) the dress requirements for working in a contaminated area in Room 417 and 2) which of the following individuals, if any, are available to perform the task (using the supplied Room 417 Survey and RWP 1955) without exceeding the allowable Duke Power annual dose limit. Radiation Protection has waived all Electronic Dose Capture “Alert” and “Exclude” flags for workers listed below.

Name	Year to Date Dose	MREM received in last 15 days	Other Information
Justin Pitt	1925	0	No Other Information
Sue Mischke	1900	155	No Other Information
Sally Weaver	1875	50	Declared Pregnant
Mickey Abbott	1915	575	No Other Information

START TIME: _____

EXAMINER NOTE: Provide the initiating cue, RWP 1955, RWP Dress Category Codes and Training Survey of Room 417	
Operator answers the following questions. What are the dress requirements to perform this job? **<u>ANSWER</u>: RWP Dress Category "H", (Cloth hood, cloth coveralls, glove liners and rubber gloves, booties and shoe covers, no personal outer clothing. Secure gloves and booties (e.g., tape, Velcro straps, etc.) is the minimum allowable dress for room 417 conditions.** Which individuals can perform the task without exceeding without exceeding the Duke Power Administrative Dose Limits (no exclude or alert limit). **<u>ANSWER</u>:** **Justin Pitt – 1.75 hours X 50 MREM/Hr = 87.5 MREM** **87.5 MREM + 1925 MREM = 2012.5 MREM** **Not allowed to perform task** **Sue Mischke - 1.75 hours X 50 MREM/Hr = 87.5 MREM** **87.5 MREM + 1900 MREM = 1987.5 MREM** **Allowed to perform task** **Sally Weaver – NO TIME (Declared pregnant worker not allowed to exceed 50 MREM/month.)** **Not allowed to perform task** **Mickey Abbott - 1.75 hours X 50 MREM/Hr = 87.5 MREM** **87.5 MREM + 1915 MREM = 2002.5 MREM** **Not allowed to perform task** <u>STANDARD</u>: Determines the only worker allowed to perform the task is **Sue Mischke.** <u>COMMENTS</u>:	**CRITICAL STEP** ___ SAT ___ UNSAT
This JPM is complete.	

STOP TIME: _____

CANDIDATE CUE SHEET

(To Be Returned To Examiner Upon Completion Of Task)

Information sheet:

The Unit 1 Spent Fuel Pool has been losing level slowly over the last three days. The source of the leak has been determined to be 1KF-150 (KF Pre-Filters to KF Demin Drain). It has been decided that the valve seat for 1KF-150 needs to be flushed. To perform this flush, a pipe cap will have to be removed, tygon tubing installed for the flush, (at this time the KF Demineralizer will be briefly placed in service), then the tubing will be removed once the flush is complete, and the pipe cap will be reinstalled. The KF Demineralizer will be isolated and unisolated as needed by another crew of Operators.

Initiating Cue:

Work is to be done at 1KF-150 in Room 417. The job will take 1 hour and 15 minutes. The Operations Supervisor directs you to determine 1) the dress requirements for working in a contaminated area in Room 417 and 2) which of the following individuals, if any, are available to perform the task (using the supplied Room 417 Survey and RWP 1955) without exceeding the allowable Duke Power annual dose limit. Radiation Protection has waived all Electronic Dose Capture "Alert" and "Exclude" flags for workers listed below.

Name	Year to Date Dose	MREM received in last 15 days	Other Information
Justin Pitt	1925	0	No Other Information
Sue Mischke	1900	155	No Other Information
Sally Weaver	1875	50	Declared Pregnant
Mickey Abbott	1915	575	No Other Information

Document the minimum dress requirements: ____

Document who, if any, are available to perform the task:

Name	YES	NO
Justin Pitt		
Sue Mischke		
Sally Weaver		
Mickey Abbott		

CATAWBA
2012
INITIAL LICENSE EXAMINATION

JOB PERFORMANCE MEASURE

SRO D

APPLICANT _____

EXAMINER _____

CATAWBA
INITIAL LICENSE EXAMINATION
JOB PERFORMANCE MEASURE

Task	Upgrade to a higher emergency classification and complete an Emergency Notification Form.					
Alternate Path	☐ YES	☐ NO	☒ N/A	**Time Critical**	☒ YES	☐ NO
Evaluation Location	☐ Simulator	☐ In-Plant	☒ Classroom	**Safety Function** ____		☒ N/A
Evaluation Method	☒ Perform	☐Simulate		**Validation Time**	11 minutes	
JPM Type	☒ Bank	☐ New	☐ Modified	2003 NRC Exam		
K/A	2.4.41 Knowledge of the emergency action level thresholds and classifications (CFR: 43.5 / 45.11) 2.3/4.1					
Standard	Candidate classifies the event as an Alert within 15 minutes of starting the JPM, and correctly completes the follow-up notification form within 15 minutes of determining the classification.					
References	RP/0/A/5000/001 (Classification of Emergency) rev 027 RP/0/A/5000/003 (Alert) rev 045 RP/0/A/5000/006A (Notification of States and Counties from the Control Room) rev 025					

Applicant **Name**_____ **Docket #**_____

Start Time _____ **End Time** _____ **Duration** _____

Performance Rating ☐ **Satisfactory** ☐ **Unsatisfactory**

Examiner _____ _____ _____
(Printed Name) (Signature) (Date)

Comments

READ TO OPERATOR

DIRECTION TO TRAINEE:

I will explain the initial conditions, and state the task to be performed. All control room steps shall be performed for this JPM, including any required communications. I will provide initiating cues and reports on other actions when directed by you. Ensure you indicate to me when you understand your assigned task. To indicate that you have completed your assigned task return the handout sheet I provided you.

INITIAL CONDITIONS:

- **Unit 1 was shutdown three days ago and is now in Mode 5 with loops filled.**
- **Reactor Coolant temperature was 143° F.**
- **"A" train ND, KC and RN in service.**
- **1B ND pump is red tagged for repairs and unavailable.**
- An Unusual Event was declared at 0830 per 4.7.U.1 (Natural and Destructive Phenomena Affecting the Protected Area) when Security reported a tornado touched down on the southwest side of the Protected Area.
- At 0850, a loss of power occurred on Unit 1 ETA and ETB busses.
- **1A D/G failed to start.**

INITIATING CUE:

Current time is 0915.

Reactor Coolant temperature is currently at 181° F and increasing.

Based on the current plant conditions, determine the emergency classification and prepare the next Emergency Notification Form for transmittal.

This JPM is Time Critical.

START TIME: _____ (When initiating cue is read to candidate)

1 Compare actual plant conditions to the Emergency Action Levels listed, then declare the appropriate Emergency Class as indicated. STANDARD Candidate uses RP-01 and from the initial conditions, determines the unit is in an Alert based on Enclosure 4.4 page 2 of 3: 4.4.A.2 Inability to Maintain Plant In Cold Shutdown Operating Mode 5: (4.4.A.2-1 Total Loss of ND AND Uncontrolled reactor coolant temperature rise to greater than 180°F.) EXAMINER NOTE To meet the critical step, the candidate must make the declaration within 15 minutes of the START TIME recorded above. When candidate determines classification, record the time for this critical step. _____ EXAMINER NOTE If candidate correctly states 4.4.A.2 as the classification, provide the preprinted sheet for this classification, otherwise, provide a blank ENF. COMMENTS	**CRITICAL STEP** _____ SAT _____ UNSAT

2 Complete an Emergency Notification Form for the classification level determined. STANDARD Candidate refers to RP/0/A/5000/06A "Notification of States and Counties from the Control Room and completes the ENF per the guidelines in Enclosure 4.3 within 15 minutes of the time recorded in Step 1 of the JPM. Line 1: Actual Event checked, Message #2 *Line 2: Initial checked Line 3: Catawba Nuclear Station *Line 4: Alert checked and enters appropriate information from event number 4.4.A.2 Line 5: None checked *Line 6: None checked Line 7: N/A checked Line 8: Stable or Degrading Line 9: Not filled in (no data) *Line 10: Mark Declaration and enters date and time event is declared. *Line 11: Unit 1 Line 12: Enters 0% and time reactor shutdown (3 days ago) Lines 13-16: leaves these blank *Line 17: signs as Emergency Coordinator with date and time. EXAMINER CUE **If asked, state that "surveys are not yet available".** EXAMINER NOTE To meet the critical step, the candidate must complete an Emergency Notification Form and submit it for transmittal within 15 minutes of the time recorded in Step 1 of the JPM. When the candidate submits the form, record the time for this critical step. _____ COMMENTS	**CRITICAL STEP*** _____ SAT _____ UNSAT

TIME STOP: _____

CANDIDATE CUE SHEET
(TO BE RETURNED TO EXAMINER UPON COMPLETION OF TASK)

INITIAL CONDITIONS:

- **Unit 1 was shutdown three days ago and is now in Mode 5 with loops filled.**
- **Reactor Coolant temperature was 143° F.**
- **"A" train ND, KC and RN in service.**
- **1B ND pump is red tagged for repairs and unavailable.**
- An Unusual Event was declared at 0830 per 4.7.U.1 (Natural and Destructive Phenomena Affecting the Protected Area) when Security reported a tornado touched down on the southwest side of the Protected Area.
- At 0850, a loss of power occurred on Unit 1 ETA and ETB busses.
- **1A D/G failed to start.**

INITIATING CUE:

Current time is 0915.

Reactor Coolant temperature is currently at 181° F and increasing.

Based on the current plant conditions, determine the emergency classification and prepare the next Emergency Notification Form for transmittal.

This JPM is Time Critical.