

NO.: 1 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 291002K1.19 TAXONOMY NO.: 3.1
LESSON PLANS: 1-1 GF-COMP-07.22

CATEGORY: LOW
SYSTEMS:

QUESTION :

Most of the electrons collected in a fission chamber are released as the result of ionizations caused directly by:

- a. fission fragments
- b. fission gammas
- c. fission betas
- d. fissionable materials

ANSWER : A
Source:

Direct NRC Bank QID B213

NO.: 2 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 291006K1.04 TAXONOMY NO.: 2.8
LESSON PLANS: 1-2 GF-COMP-03.09
:
CATEGORY: HI
SYSTEMS:

QUESTION :

Refer to Attachment 1.

All valves are identical and are initially 50% open. To raise the temperature at Point 1, the Operator can adjust valve _____ in the _____ direction.

- a. A, shut
- b. B, open
- c. C, shut
- d. D, open

ANSWER : B
Source:

Direct NRC GF Bank QID B2431

NO.: 3 REV.: 4 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 292001K1.03 TAXONOMY NO.: 2.7
LESSON PLANS: 1-3 GF-THEORY-01.32
:
CATEGORY: LOW
SYSTEMS:

QUESTION :

A thermal neutron is a neutron that:

- a. was born greater than 10^{-14} seconds after the fission event
- b. is a product of a thermal fission reaction
- c. was released by the decay of fission fragments
- d. is at the same energy level as the surrounding atoms

ANSWER : D

Source:

Direct from NRC GF Bank QID B945 with minor grammar changes

NO.: 4 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 292002K1.14 TAXONOMY NO.: 2.9
LESSON PLANS: 1-4 GF-THEORY-02.09

CATEGORY: HI
SYSTEMS:

QUESTION :

Plant conditions are as follows:

- Core refueling has just been completed
- 250 fuel bundles and 24 control rods were replaced
- All control rods are still inserted.

WHICH ONE of the following describes how the current shutdown margin (SDM) compared to the SDM just prior to fuel movements?

- a. Current SDM is greater due to the addition of new fuel bundles
- b. Current SDM is greater due to the addition of new control rods
- c. Current SDM is smaller due to the addition of new control rods
- d. Current SDM is smaller due to the addition of new fuel bundles

ANSWER : D

Source:

New

NO.: 5 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 292003K1.06 TAXONOMY NO.: 3.7
LESSON PLANS: 1-5 GF-THEORY-03.06

CATEGORY: LOW
SYSTEMS:

QUESTION :

WHICH ONE of the following is the reason that delayed neutrons are so effective at controlling the rate of reactor power changes?

- a. Delayed neutrons make up a larger fraction of the fission neutrons in the core compared to prompt neutrons
- b. Delayed neutrons have a long generation time compared to prompt neutrons
- c. Delayed neutrons produce a larger amount of fast neutrons than prompt neutrons
- d. Delayed neutrons are born at a higher kinetic energy than prompt neutrons

ANSWER : B
Source:

Direct from NRC Bank QID B1751 with minor changes ("lifetime" to "generation time" in "B" and grammar)

NO.: 6 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
 DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
 TASK NUMBER: SKA NO.: 292005K1.01 TAXONOMY NO.: 3.3
 LESSON PLANS: 1-6 GF-THEORY-05.01
 :
 CATEGORY: HI
 SYSTEMS:

QUESTION :

Rod position indication shows that a control rod is at position 22. If the control rod is then moved to position 12, it is being:

- a. inserted 30 inches
- b. withdrawn 30 inches
- c. inserted 60 inches
- d. withdrawn 60 inches

ANSWER : A
 Source:

Direct NRC GF Bank QID 3054

NO.: 7 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 292008K1.30 TAXONOMY NO.: 3.5
LESSON PLANS: 1-7 GF-THEORY-08.31
:
CATEGORY: HI
SYSTEMS:

QUESTION :

The reactor has been shut down for a refueling outage for 4 days following operation at rated power for 1 year.

WHICH ONE of the following describes the fraction of rated thermal power currently being produced by decay heat?

- a. Greater than 10%
- b. Greater than 5% but less than 10%
- c. Greater than 1% but less than 5%
- d. Less than 1%

ANSWER : D
Source:

New

Heat output drops below 1% after 1 hour

NO.: 8 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 03/12/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 293008K1.31 TAXONOMY NO.: 3.0
LESSON PLANS: 1-8
:
CATEGORY: LOW
SYSTEMS:

QUESTION :

Core orificing is used in the reactor core because the orifices:

- a. counteract the buoyant force of the bubbles accelerating flow in the high powered bundles.
- b. improve the distribution of core flow to offset the effect of increasing quality on bundle flow.
- c. increase core DP so that minor crud buildup on fuel bundles will not adversely affect core flow.
- d. decrease flow during periods of natural circulation to increase the void coefficient

ANSWER : B

Source:

Direct NRC Bank QID B291

NO.: 10 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 201003K4.06 TAXONOMY NO.: 2.6
LESSON PLANS: 2-2 NLSRO0060.06
:
CATEGORY: LOW
SYSTEMS: CRDM

QUESTION :

WHICH ONE of the following describes the method used to uncouple a control rod blade from the index tube?

- a. Lift the control rod handle from above the vessel using the aux hoist while giving the control rod a withdraw signal
- b. Lift the "D" ring at the bottom of the control rod using the golf club tool while giving the rod an insert signal.
- c. Raise the piston tube from below the vessel using the uncoupling tool while giving the rod an insert signal
- d. Raise the piston tube from below the vessel using the uncoupling tool while giving the rod a withdraw signal

ANSWER : D

- a- Wrong handle
- b- Wrong motion direction
- c- Wrong motion direction
- d- correct

Ref:
M-C-747-011

Source:
New

NO.: 13 REV.: 6 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2900022.2.32 TAXONOMY NO.: 3.3
LESSON PLANS: 2-5 NLSRO0021.09
:
CATEGORY: HI
SYSTEMS: RPV

QUESTION :

Plant conditions are as follows:

- Control cell 34-39 is being re-assembled
- The fuel support piece (FSP) was approximately 2 degrees rotated and one FSP finger is sitting on the anti-rotation pin.
- The FSP and blade were released

WHICH ONE of the following will provide indication of the mis-alignment?

- a. The blade handle for 34-39 will be visible below the top of the fuel support before the double blade guide is lowered
- b. The double blade guide will NOT release from the grapple due to grapple zone interlocks
- c. The four bundles in cell 34-39 will show high seating during core verification seating pass
- d. The guide tube will show similar rotation on subsequent in-vessel visual inspection

ANSWER : C

- a. If the FSP is seated far enough to reach the pin, it is aligned with the rod enough to allow stroking
- b. The grapple will release because the blade guide will still be low enough to satisfy grapple interlocks
- c. Correct. Plant experience
- d. The guide tube is installed first, and must be oriented correctly or the pin will not be visible

Ref: M-C-797-020 Source: New

NO.: 11 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 202001K1.18 TAXONOMY NO.: 3.3
LESSON PLANS: 2-3 NLSRO0030.06

CATEGORY: HI
SYSTEMS: RECIRC

QUESTION :

Limerick Unit 2 plant conditions are as follows:

- OPCON 5
- 2A RHR Loop is in Shutdown Cooling mode

Some plastic FME caps have been spotted lying on the core baffle plate next to Jet Pump #10.

WHICH ONE of the following describes the component that the caps are likely to be drawn into if they become entrained by flow?

- a. The north recirc suction nozzle
- b. The south recirc suction nozzle
- c. The east jet pump suction nozzles
- d. The west jet pump suction nozzles

ANSWER : B

A, C, D- incorrect. The baffle plate is 12 feet below the jet pump nozzles and at the same elevation as the RHR suction. In SDC mode, flow is into the B recirc loop piping at azimuth 180 (south)

Source:

New

NO.: 20 REV.: 1 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 288000K4.02 TAXONOMY NO.: 3.8
LESSON PLANS: 2-12 NLSRO0200.05 NLSRO0200.06

CATEGORY: HI
SYSTEMS: REHVAC

QUESTION :

Limerick plant conditions are as follows:

- Irradiated component movement is in progress in the Unit 2 spent fuel pool
- Refuel floor secondary containment integrity is established
- Unit 2 Refuel Floor HVAC is in service

Movement of an irradiated component near the water surface results in the "A", "B", and "D" channels of refuel floor exhaust rad monitors to read between 2.5 and 4.0 mr/hr for 30 seconds.

WHICH ONE of the following describes the expected status of unit Unit 1 a Unit 2 Refuel Floor HVAC five minutes later based on automatic actions and the above conditions?

<u>UNIT 1 RF HVAC</u>	<u>UNIT 2 RF HVAC</u>
a. Running	Running
b. Running	Isolated
c. Isolated	Running
d. Isolated	Isolated

ANSWER : D

A, B, C- Incorrect. The setpoint is 2.0 mr/hr. Only the Div 1 trip system actuates (Ch A and B), which is sufficient to trip hvac and start SGTS. Limerick common refuel floor logic is intertied. A trip on either unit trips the same division on the other unit.

Source:

New

NO.: 14 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 290001K3.01 TAXONOMY NO.: 4.4
LESSON PLANS: 2-6 NLSRO0190.05
:
CATEGORY: LOW
SYSTEMS: RFHVAC

QUESTION :

Limerick plant conditions are as follows:

- Irradiated component movement is in progress in the Unit 1 spent fuel pool
- Unit 1 Refuel Floor HVAC is running

WHICH ONE of the following describes the expected refuel floor pressure and the reason for maintaining that value?

<u>Expected Pressure</u>	<u>Reason</u>
a. Less than atmospheric	Prevent unmonitored release
b. Less than atmospheric	Reduce activity released
c. Greater than atmospheric	Prevent unmonitored release
d. Greater than atmospheric	Reduce activity released

ANSWER : A

B, C, D- Incorrect. Pressure is $-.25''$ and under normal conditions there is no reduction in activity released from the refuel floor. Negative pressure only ensures that all releases are via the South Stack which is monitored.

Source:

New

NO.: 16 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
 DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
 TASK NUMBER: SKA NO.: 215004A4.06 TAXONOMY NO.: 3.1
 LESSON PLANS: 2-8 NLSRO0080.03 NLSRO0240.02
 :
 CATEGORY: HI
 SYSTEMS: SRM

QUESTION :

Limerick Unit 1 plant conditions are as follows:

- Control rod stroking is in progress following core verification
- Rod 14-15 is at position 12 and being continuously withdrawn

The "SRM DOWNSCALE" alarm (107 G4) is received with "A" and "B" SRM indicating 1 cps.

WHICH ONE of the following describes the resulting ability to continue rod withdrawal and return the rod to fully inserted by notch insertion?

<u>Notch Withdrawal</u>	<u>Notch Insert</u>
a. Blocked	Blocked
b. Blocked	Permitted
c. Permitted	Blocked
d. Permitted	Permitted

ANSWER : B

SRM DNSCL is a withdraw block. Only the RWM enforces insert blocks.

Source:

New

NO.: 18 REV.: 0 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 233000K4.06 TAXONOMY NO.: 3.2
LESSON PLANS: 2-10 NLSRO0750.07B
:
CATEGORY: LOW
SYSTEMS: FPCC

QUESTION :

Limerick Unit 2 plant conditions are as follows:

- Shuffle part 1 in progress
- Spent fuel pool gates are removed

An unisolable leak occurs in "2B" Recirc loop, and a loss of power to the overhead crane prevents installation of the fuel pool gates.

WHICH ONE of the following describes the lowest water level reached in the spent fuel pool prior to any boiloff and the reason?

- a. below the top of the spent fuel due to the elevation of the transfer canal
- b. below the top of the spent fuel due to the elevation of the siphon breakers
- c. above the top of the spent fuel due to the elevation of the siphon breakers
- d. above the top of the spent fuel due to the elevation of the transfer canal

ANSWER : D

A, B, C-Incorrect. Fuel pool is designed to maintain fuel covered. The transfer canal curb wall is above the fuel. Level stops dropping.

Ref: M-53

Source:

New

NO.: 21 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2720002.2.26 TAXONOMY NO.: 3.7
LESSON PLANS: 2-13 NLSRO1840.03
:
CATEGORY: HI
SYSTEMS: TS

QUESTION :

Limerick Unit 1 plant conditions are as follows:

- Fuel bundles are being moved in the spent fuel pool to support re-racking
- RIS33-1M-1K600, Plug Laydown Area ARM is INOPERABLE

During the work, RIS30-1M-1K600, Steam Separator ARM is taken out of service.

WHICH ONE of the following describes the minimum actions required to allow continued spent fuel movements based on the above conditions?

- a. establish secondary containment integrity with SGTS running
- b. verify operability of the Fuel Pool Area Rad Monitor
- c. verify no movements will take place over spent fuel
- d. install temporary area rad monitor in place of an inop monitor

ANSWER : D

Ref:

LCO 3.3.7.1

A, B, C: incorrect. Movements of spent fuel, whether over fuel or not, require secondary containment AND two criticality monitors. A, B, and C are good actions, but inadequate for the situation.

Source:

New

NO.: 23 REV.: 1 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 215004K3.01 TAXONOMY NO.: 3.4
LESSON PLANS: 2-15 NLSRO0240.02D
:
CATEGORY: LOW
SYSTEMS: SRM

QUESTION :

Limerick Unit 1 plant conditions are as follows:

- OPCON 5
- Neutron monitoring RPS shorting links are installed
- Control rod scram timing is in progress

WHICH ONE of the following is the plant response to a single source range monitor channel failing upscale?

- a. Full scram and rod block
- b. Rod block and NO half scrams
- c. Half scram and rod block
- d. Half scram and NO rod block

ANSWER : B

With RPS shorting links installed, the neutron monitoring non-coincident scrams are disabled. SRM upscale is rod block only

Source:

New

NO.: 25 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 295034EK2.01 TAXONOMY NO.: 4.2
LESSON PLANS: 3-2 NLSRO0200.02
:
CATEGORY: HI
SYSTEMS: RFHVAC

QUESTION :

Limerick plant conditions are as follows:

- Shuffle part 2 in progress on Unit 2
- Unit 1 Refuel Floor HVAC in service

A bundle tie plate failure results in a radioactivity release to the refuel floor atmosphere and valid hi-hi rad trip of all Unit 1 exhaust rad monitors.

WHICH ONE of the following points will indicate the magnitude of the release five minutes later?

- a. North stack monitor
- b. South stack monitor
- c. Unit 1 refuel floor exhaust rad monitors
- d. Unit 2 refuel floor exhaust rad monitors

ANSWER : A

A- Correct

B,D, D - incorrect, under isolation conditions, SGTS exhausts to the north stack. Common misconception about the swapover of flowpaths from normal to isolation conditions is tested in this question. Unit 1 and Unit 2 HVAC rad monitors will not have flow past them following an isolation and are not valid indications.

Source:

New

NO.: 30 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.2.27 TAXONOMY NO.: 3.5
LESSON PLANS: 3-7 NLSRO0767.11
:
CATEGORY: LOW
SYSTEMS: FH

QUESTION :

WHICH ONE of the following is the expected indication on the Limerick Unit 1 fuel hoist mast position encoder prior to traversing the canal with a spent fuel bundle and a double blade guide per S97.0.M, REFUELING PLATFORM OPERATION?

	<u>Spent Fuel Bundle</u>	<u>Double Blade Guide</u>
a.	0	0
b.	0	-4
c.	-4	0
d.	-4	-4

ANSWER : B
Ref:
S97.0.M

Double blade guide is longer than a bundle and must be raised beyond normal up to -4 to clear the cattle chute

Source:

New

NO.: 38 REV.: 1 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.2.27 TAXONOMY NO.: 3.5
LESSON PLANS: 3-15 NLSRO0011.03
:
CATEGORY: HI
SYSTEMS: M-C

QUESTION :

Limerick Unit 1 plant conditions are as follows:

- Core verification is in progress
- One interior bundle was identified as high-seated
- One peripheral bundle was identified as low due to missing the support piece
- Plans include landing the grapple (without closing the grapple) on the high bundle to settle it and hoisting the low bundle to re-land it.

WHICH ONE of the following describes the requirement for a CCTAS to correct the high bundle and the low bundle per M-C-797-020, CORE VERIFICATION?

<u>High Bundle</u>	<u>Low Bundle</u>
a. Required	Required
b. NOT Required	Required
c. Required	NOT Required
d. NOT Required	NOT Required

ANSWER : B

The procedure permits landing the grapple (bumping) on the bundle to settle a high bundle without a CCTAS. The low bundle will require grappling, which requires a CCTAS.

Source:

New

NO.: 9 REV.: 1 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 201002A1.01 TAXONOMY NO.: 2.8
LESSON PLANS: 2-1 NLSRO0080.09A
:
CATEGORY: LOW
SYSTEMS: RMCS

QUESTION :

Peach Bottom Unit 2 plant conditions are as follows:

- Mode 5
- CRD SCRAM insertion timing per ST-R-003-485-2 is in progress
- Rod 22-49 has just been given a notch withdraw command

WHICH ONE of the following lists the expected CRD drive flow indication on FI-2-03-305 on the 20C005A panel?

Drive flow will indicate:

- a. 2 gpm, then 4 gpm
- b. 4 gpm, then 2 gpm
- c. 2 gpm during the entire movement
- d. 4 gpm during the entire movement

ANSWER : B

A-reversed

b-correct

c-incomplete

d-insert indications

Source:

New

NO.: 12 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 205000K2.01 TAXONOMY NO.: 3.1
LESSON PLANS: 2-4 NLSRO0655.05
:
CATEGORY: HI
SYSTEMS: 4KV RHR

QUESTION :

Peach Bottom Unit 2 plant conditions are as follows:

- MODE 5 with shuffle part 2 in progress
- 2A RHR loop is operating in Shutdown Cooling (SDC) mode
- All electrical distribution equipment is operable

A complete loss of voltage to 2SU Bus and 3SU Bus occurs.

WHICH ONE of the following describes the effect on SDC core circulation and High Pressure Service Water heat removal flow?

<u>RHR Core Circulation</u>	<u>HPSW Flow</u>
a. Maintained throughout the transient	Maintained throughout the transient
b. Maintained throughout the transient	Interrupted but can be restored
c. Interrupted but can be restored	Maintained throughout the transient
d. Interrupted but can be restored	Interrupted but can be restored

ANSWER : D

A, B, C - Incorrect. Loss of 2SU and 3SU will de-energize all 4KV busses. SDC and HPSW pumps will trip and be able to be re-started after the DGs re-energize the busses. There are no auto starts.
D-correct

Source:

New

NO.: 15 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2150032.1.12 TAXONOMY NO.: 4.0
LESSON PLANS: 2-7 NLSRO1820.08B

CATEGORY: HI
SYSTEMS: WRNM TS

QUESTION :

Peach Bottom Unit 3 plant conditions are as follows:

- MODE 5
- "C", "D", "E", and "F" Wide Range Neutron Monitors (WRNM) are the only OPERABLE nuclear instruments
- Spiral offload of "A" quadrant is in progress
- The outer ring of fuel for quadrant "A" is removed, such that the fueled region of quadrant "A" is NOT connected to the rest of the core

WHICH ONE of the following lists the maximum additional WRNMs that all may be taken out of service with fuel movement continuing in "A" quadrant

- a. "E" WRNM
- b. "D" and "F" WRNMs
- c. "D", "E", and "F" WRNMs
- d. "C", "D", "E", and "F" WRNMs

ANSWER : C
LCO 3.3.1.2

A, B, D - Incorrect. The maximum WRNMs that can be taken out of service is the three in the non-offload quadrants. With connectivity broken with the other quadrants, 3.3.1.2 only requires 1 WRNM to be operable in the core alt quad.

Source:

New

NO.: 17 REV.: 4 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 234000A3.01 TAXONOMY NO.: 3.6
LESSON PLANS: 2-9 NLSRO0766.07
:
CATEGORY: LOW
SYSTEMS: FH

QUESTION :

Peach Bottom Unit 3 plant conditions are as follows:

- Shuffle part 2 in progress
- A fuel bundle is being moved to the core in semi-automatic mode

The Refuel Platform Operator has touched AUTO STOP on the hoist screen.

WHICH ONE of the following describes the expected bridge response based on the above conditions?

- a. Bridge, trolley, and mast motion stop immediately.
- b. Bridge motion stops immediately; mast and trolley motion stop when at NORMAL UP and aligned with the cattle chute.
- c. Bridge, trolley, and mast motion stop when aligned with the cattle chute at NORMAL UP and entering the core area.
- d. Bridge, trolley, and mast motion stop when aligned over the target location with the bundle 6 inches above the top guide.

ANSWER : A

Source:

New

NO.: 19 REV.: 5 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 234000K6.04 TAXONOMY NO.: 3.7
LESSON PLANS: 2-11 NLSRO0021.10
:
CATEGORY: HI
SYSTEMS: FH

QUESTION :

Peach Bottom Unit 2 conditions are as follows:

- A double blade guide is suspended from the main hoist
- The NES combination grapple with a control rod blade (CRB) and fuel support piece (FSP) is suspended from the frame-mounted aux hoist

The bridge air system has just depressurized to zero psig due to a broken fitting at the backup hose connection (V-9).

WHICH ONE of the following describes the ability to complete the move and release the double blade guide and the CRB/FSP combination to the spent fuel pool.

Double Blade GuideCRB/FSP Combo

- | | |
|-----------------------------|--------------------------|
| a. Can be manually released | Can be manually released |
| b. Can be manually released | Cannot be released |
| c. Cannot be released | Can be manually released |
| d. Cannot be released | Cannot be released |

ANSWER : A

The NES combined grapple has a manual interlock release feature (actuated by reach rods) to address a malfunction of the air actuation system. The main hoist has manual hook eyes on the grapple faces.

The location of the air break is chosen to eliminate consideration of using a service air connection from the plant; a feature that is part of the bridge.

Source:

New

NO.: 22 REV.: 6 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 234000K5.02 TAXONOMY NO.: 3.7
LESSON PLANS: 2-14 NLSRO0762.07
:
CATEGORY: LOW
SYSTEMS: FH

QUESTION :

Peach Bottom Unit 3 plant conditions are as follows:

- A fuel bundle is partially inserted in its core location
- The bridge operator needs to adjust the bridge position slightly

WHICH ONE of the following describes the maximum permitted bridge or trolley motion permitted by interlocks, and the required action if this maximum is exceeded?

- a. 12 inches; Re-align using TRAVEL OVERRIDE and Traverse System Joystick
- b. 12 inches; Re-align using Bridge and Trolley Master Joysticks
- c. 3 inches; Re-align using TRAVEL OVERRIDE and Traverse System Joystick
- d. 3 inches; Re-align using Bridge and Trolley Master Joysticks

ANSWER : C

3" max motion interlock with grapple closed and lowered from normal up. If any axis moves 3", all motion on that axis is locked out until travel override is used. With the bundle partly inserted, the traverse system joystick (small jog joystick) must be used.

12" distractor based on grapple zone interlock elevation
master joystick distractor based on normal method of movement.

Source:

New

NO.: 24 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 295031EK2.05 TAXONOMY NO.: 4.3
LESSON PLANS: 3-1 NLSRO0750.09
:
CATEGORY: HI
SYSTEMS: ON

QUESTION :

Peach Bottom Unit 3 conditions are as follows:

- OPCON 5
- "3A" Loop of RHR is operating in shutdown cooling Alternate Decay Heat Removal (ADHR) mode

A leak through a main steam line plug and open SRV flange results in a loss of reactor cavity level of 6 inches per minute

WHICH ONE of the following describes the highest cavity or vessel level where RHR ADHR circulation will initially be lost?

- a. below the skimmer surge tank weirs
- b. the level of the RPV flange
- c. the shutdown cooling PCIS setpoint
- d. the shutdown cooling vessel return elevation

ANSWER : A

A-correct. In ADHR mode, the RHR pump draws from the FPCC skimmer surge tank suction and is isolated from the normal SDC suction. After level drops below the SST weir, the RHR pump will empty the SST and ADHR suction piping, causing a loss of ADHR flow.

Source:

New

NO.: 26 REV.: 5 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 295023AK1.03 TAXONOMY NO.: 4.0
LESSON PLANS: 3-3 NLSRO1550.01
:
CATEGORY: HI
SYSTEMS: ON

QUESTION :

Peach Bottom Unit 2 plant conditions are as follows:

- Shuffle part 2 in progress
- A bundle is being lowered into location 23-26 NW
- Mast indication is +530 and increasing

The Reactor Operator has contacted the Fuel Handling Director and reported that the "H" WRNM counts have increased from 15 cps to 30 cps and have stopped rising.

WHICH ONE of the following describes reactor status and required actions per FH-6C, CORE COMPONENT MOVEMENT - CORE TRANSFER?

<u>Status</u>	<u>Required Actions</u>
a. Supercritical	Evacuate the refuel floor
b. Supercritical	Raise bundle to clear the top guide
c. Subcritical	Raise bundle to clear the top guide
d. Subcritical	Stop lowering until WRNMs are verified stable

ANSWER : D
Ref: FH-6C

A,B- Incorrect. Counts are stable and do not indicate criticality
c- With less than 2 doublings, the action is to evaluate.

Source:
New

NO.: 27 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 295023AK3.01 TAXONOMY NO.: 4.3
LESSON PLANS: 3-4 NLSRO1550.01

CATEGORY: LOW
SYSTEMS: ON

QUESTION :

Peach Bottom Unit 3 plant conditions are as follows:

- An irradiated bundle is being removed from the core
- The main hoist is raised to NORMAL UP

The bail handle fails on the bundle, allowing the bundle to drop onto the core. Bubbles are seen rising from the impact area and broken fuel pins are visible on core.

WHICH ONE of the following describes the required actions per ON-124,,
FUEL FLOOR AND FUEL HANDLING PROBLEMS and the reason?

- a. Grapple and lift the bundle to prevent inadvertent criticality
- b. Monitor normal HVAC rad monitors. Evacuate the area if alarm occurs to reduce exposure to fission gases
- c. Evacuate the refuel floor and drywell to reduce dose due to fission product release
- d. Evacuate the drywell to reduce exposure to flux from anticipated criticality

ANSWER : C
Ref: ON-124

Source:

New

NO.: 29 REV.: 4 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.1.12 TAXONOMY NO.: 4.0
LESSON PLANS: 3-6 NLSRO1841.09
:
CATEGORY: HI
SYSTEMS: TS

QUESTION :

Peach Bottom Unit 2 plant conditions are as follows:

- Mode 5
- Fuel Pool Gates are installed
- Cavity level is 439 inches

The "2D" RHR pump has been secured after 3 days of operation to support jet pump work. The "2D" RHR pump is the only operable RHR pump.

WHICH ONE of the following describes the required actions based on the above conditions?

- a. Verify fuel pool gates are removed once per 12 hours
- b. Restart "2D" RHR pump within 2 hours
- c. Verify one alternate heat removal method is available within 1 hour and restart 2D RHR within 2 hours
- d. Verify two alternate heat removal methods are available within 1 hour and restart 2D RHR within 12 hours

ANSWER : C

Ref:

LCO 3.9.8

Source:

Direct LGS bank

NO.: 34 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 234000K5.05 TAXONOMY NO.: 3.7
LESSON PLANS: 3-11 NLSRO0767.11
:
CATEGORY: HI
SYSTEMS: FH

QUESTION :

Peach Bottom Unit 3 plant conditions are as follows:

- Shuffle part 2 in progress
- CCTAS Step 121 is being executed per Attachment 2
- The bundle was lowered into the core until the SLACK CABLE lamp was received
- The FHD is assessing whether to direct the grapple to be released
- Hoist screen data, mast camera view, and mast orientation are provided on Attachment 2

WHICH ONE of the following is the status of bundle orientation and hoist indication?

<u>Bundle Orientation</u>	<u>Hoist Indication</u>
a. Correct	Normal
b. Correct	Abnormal
c. NOT Correct	Normal
d. NOT Correct	Abnormal

ANSWER : D

A, B, C - Incorrect.

Orientation - The mast camera view shows the channel fastener. With the mast rotated as shown, the bundle is oriented SW (the camera faces in the same direction as the operator). The CCTAS calls for NW orientation. The image is captured from actual mast camera footage. SW

Hoist - Bundle seated is at 549 to 551 inches down. The cable is shown slack with the bundle 20 inches above the fuel support (530).

Source:

N

NO.: 35 REV.: 5 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 234000K4.03 TAXONOMY NO.: 4.2
LESSON PLANS: 3-12 NLSRO0762.09
:
CATEGORY: LOW
SYSTEMS: FH

QUESTION :

Peach Bottom Unit 3 plant conditions are as follows:

- Shuffle part 1 in progress
- A control rod blade and fuel support combination is being raised on the frame mounted aux hoist by depressing RAISE and HOIST LIMIT override
- The jib arm tool is being used

WHICH ONE of the following describes the operation of the equipment to prevent inadvertently hoisting the blade and support out of the water, with the hoist set up per M-C-741-301, CONTROL ROD BLADE, FSP, AND CONTROL ROD GUIDE TUBE, REMOVAL AND INSTALLATION for use with the jib , a tool?

- a. The hoist jam block will contact the frame and cause an overload trip of the motor when the blade is 6 feet 10 inches from the surface
- b. The hoist jam block will contact a switch and de-energize the RAISE function when the blade is 6 feet 10 inches from the surface
- c. The hoist jam block will contact the frame and cause an overload trip of the motor when the blade is 5 feet 6 inches from the surface
- d. The hoist jam block will contact a switch and de-energize the RAISE function when the blade is 5 feet 6 inches from the surface

ANSWER : B

Jam block is set per the procedure to contact a whisker switch with the CRB no closer than 6 feet to the surface.

Source:

New

NO.: 36 REV.: 1 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 234000A2.03 TAXONOMY NO.: 3.1
LESSON PLANS: 3-13 NLSRO0655.05
:
CATEGORY: HI
SYSTEMS: FH

QUESTION :

Peach Bottom Unit 2 plant conditions are as follows:

- Shuffle part 1 in progress
- A fuel bundle is over the fuel pool in transit to the core in automatic (X, Y, Z) mode
- During the transfer, power is lost to the bridge and PLC for one minute and is restored

WHICH ONE of the following describes the resulting spent fuel pool gate status enforced and the mast NORMAL UP limit enforced per SO 18.1.A-3, OPERATION OF THE REFUELING PLATFORM?

	<u>Gate Status</u>	<u>Normal UP Limit</u>
a.	Installed	Refueling
b.	Installed	Cask Loading
c.	Removed	Refueling
d.	Removed	Cask Loading

ANSWER : A

On power restoration, the procedure cautions the operator that the system will default back to gate installed status and will not permit transit of the cattle chute until the status is re-input.

Source:

New

NO.: 37 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 234000A3.02 TAXONOMY NO.: 3.7
LESSON PLANS: 3-14 NLSRO0762.15
:
CATEGORY: HI
SYSTEMS: FH

QUESTION :

Peach Bottom Unit 2 plant conditions are as follows:

- Refueling platform operating mode is manual with the access level as "Refuel Platform Operator"
- Movement of fuel to the spent fuel cask is required

WHICH ONE of the following describes the required actions to allow fuel to be transferred to the cask per SO 18.1.A-2, OPERATION OF THE REFUELING PLATFORM?

- a. Direct the RPO to select CASK LOADING from the utilities menu and SELECT AUTO from the main or hoist screens
- b. Direct the RPO to select CASK LOADING from the utilities menu and leave the platform in manual mode
- c. Log on as FUEL HANDLING DIRECTOR, select CASK LOADING from the utilities menu, and select auto from the main or hoist screens
- d. Log on as FUEL HANDLING DIRECTOR, select CASK LOADING from the utilities menu, and leave the platform in manual mode

ANSWER : D

A,B,C - changing hoist limits requires FHD access level and valid password. The computer will not complete a move to a location in the cask. This move must be performed manually.

Source:

New

NO.: 28 REV.: 4 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.2.26 TAXONOMY NO.: 3.7
LESSON PLANS: 3-5 NLSRO0767.06
:
CATEGORY: HI
SYSTEMS: FH

QUESTION :

Limerick Unit 2 plant conditions are as follows:

- A double blade guide (DBG) has been positioned over the spent fuel racks on the first component transfer of the shift
- The Refuel Platform Operator reports that he is aligned for B-31/C-32
- The Spotter calls out that the DBG is actually over B-30/C-31 and the Fuel Handling Director (FHD) confirms that the DBG is over the wrong rack locations

WHICH ONE of the following describes the impact on Double Verification (DV) and the response per FH-105, CORE COMPONENT MOVEMENT - CORE TRANSFERS?

- a. Challenge to DV; Correct the position, continue transfers, monitor for multiple challenges
- b. Challenge to DV; Suspend transfers and initiate a Condition Report. Obtain NMD Mgmt approval prior to resuming transfers
- c. Failure of DV; Correct the position, continue transfers, monitor for multiple failures
- d. Failure of DV; Suspend transfers and initiate a Condition Report. Obtain NMD Mgmt approval prior to resuming transfers

ANSWER : A
Ref: FH-105

The procedure treats a mistake that is caught by verification as a "challenge" so long as the component is not actually misplaced. This is analagous to testing an interlock. Failure of DV occurs if both verifiers miss the error, and suspension of transfers is required. The procedure allows continuation of work after a challenge, but requires a CR for repeated challenges.

Source:

N

NO.: 39 REV.: 0 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.2.6 TAXONOMY NO.: 3.3
LESSON PLANS: 3-16 NLSRO1570.01
:
CATEGORY: HI
SYSTEMS: OM

QUESTION :

WHICH ONE of the following Limerick situations is addressed by processing a Temporary Change (TC) to a procedure per A-3, TEMPORARY CHANGES TO APPROVED PROCEDURES AND PARTIAL PROCEDURE USE?

- a. Only half the steps of a procedure need to be executed to support a unique evolution
- b. The "A" train of cooling water is incorrectly directed to be placed in service for the "A" and "B" equipment
- c. A procedure step lists the correct component but in the wrong location
- d. A procedure needs to have steps added to disable trips to allow it to serve as a test

ANSWER : B

A-Partial procedure use, not a TC

C-PPIS, not a TC

D-Change in intent and scope, not a TC

Source:

New

NO.: 41 REV.: 4 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.2.22 TAXONOMY NO.: 4.1
LESSON PLANS: 3-18 NLSRO1820.03
:
CATEGORY: LOW
SYSTEMS: TS

QUESTION :

Peach Bottom Unit 3 plant conditions are as follows:

- Loss of reactor vessel cavity level during shuffle part 1
- RPV water level drops to a minimum of - 175 inches and is restored with ECCS

WHICH ONE of the following describes whether a safety limit has been violated and whether fuel cladding failure is expected?

<u>Safety Limit</u>	<u>Cladding Failure</u>
a. Violated	Expected
b. Violated	NOT Expected
c. NOT violated	Expected
d. NOT violated	NOT expected

ANSWER : B

SL = TAF which is -172". PBAPS ITS points out that ACC exists until 2/3 core height (-226)

Source:

New

NO.: 40 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.2.22 TAXONOMY NO.: 4.0
LESSON PLANS: 3-17 NLSRO1820.08
:
CATEGORY: HI
SYSTEMS: TS GP

QUESTION :

Limerick Unit 2 plant conditions are as follows:

- OPCON 5 with the core in maintenance configuration
- LPRM replacement and CRDM exchanges are about to begin

The Fuel Handling Director has been informed that the "B" train of Standby Gas Treatment has been declared INOPERABLE.

WHICH ONE of the following describes the limitations, if any, on LPRM replacement and CRDM exchanges?

- a. LPRM exchanges may commence and continue indefinitely
CRDM exchanges may commence and continue indefinitely
- b. LPRM exchanges may commence and continue indefinitely
CRDM exchanges may NOT commence
- c. LPRM exchanges may commence and continue for 7 days
CRDM exchanges may commence and continue for 7 days
- d. LPRM exchanges may NOT commence
CRDM exchanges may NOT commence

ANSWER : B

A, C, D- incorrect. LPRM changeout is not an OPDRV, and is permitted
CRDM exchange is an OPDRV. Can not enter the specified
condition (OPDRV with head off and fuel in vessel) with a train inop.

Ref:

LCO 3.6.5.3

Source:

New

NO.: 44 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.4.10 TAXONOMY NO.: 3.1
LESSON PLANS: 3-21 NLSRO0750.12
:
CATEGORY: HI
SYSTEMS: ARC

QUESTION :

Limerick Unit 2 plant conditions are as follows:

- Shuffle part 1 in progress
- 10C222 alarm B-2, SEAL NO. 4 REACTOR WELL (BOTTOM SEAL) has alarmed
- No other seal alarms are present
- Seal pressure indicates 52 psig and steady

ARC-BOP-10C22 and associated procedures are provided.

WHICH ONE of the following describes the required actions:

- a. Adjust PCV-15-144C to 56.5 psig
- b. Adjust PCV-15-144D to 56.5 psig
- c. Place "C" regulator on backup bottle and adjust to 47 psig
- d. Place "D" regulator on backup bottle and adjust to 47 psig

ANSWER : B

A- wrong seal (upper)

C- wrong seal, no need for backup bottle; wrong pressure for Seal D

D- no need for backup bottle; wrong pressure for Seal D

Source:

New

NO.: 31 REV.: 7 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.2.20 TAXONOMY NO.: 3.3
LESSON PLANS: 3-8 NLSRO1571.05
:
CATEGORY: HI
SYSTEMS: OM

QUESTION :

Plant conditions are as follows:

- Troubleshooting on the refueling platform air accumulator auto drain trap is complete. The trap was constantly blowing air by.
- The clearance has been removed
- The air system will be returned to service with the trap manually isolated and instructions to manually unisolate and blowdown hourly.

WHICH ONE of the following is the method of documenting the position of the drain trap isolation valve per OP-AA-108-106, EQUIPMENT RETURN TO SERVICE?

- a. Danger Tag
- b. Information Tag
- c. Equipment Status Tag
- d. Equipment Trouble Tag

ANSWER : C

Ref: OP-AA-108-106

- A- Cannot operate hourly
- B- Part of clearance which has been removed.
- C- Correct for documenting abnormal position and condition
- D- For broken equipment (the trap itself would get the ETT, not the isolation)

Source:

New

NO.: 33 REV.: 4 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.1.20 TAXONOMY NO.: 4.2
LESSON PLANS: 3-10 NLSRO1570.01
:
CATEGORY: HI
SYSTEMS: OM

QUESTION :

Plant conditions are as follows:

- A partial test procedure involving bridge movement is being performed by the Refuel Platform Operator (RPO) and the Spotter
- The Spotter is reading the procedure, ensuring correct repeat back from the RPO, and marking the portion of procedure being used.

WHICH ONE of the following lists the required annotation for un-used steps and for steps are are executed per HU-AA-104-101, PROCEDURE USE AND ADHERENCE?

	<u>Un-Used Steps</u>	<u>Completed Steps</u>
a.	"C/M"	RPO Initials only
b.	"C/M"	RPO Initials/Spotter Initials
c.	"N/A"	RPO Initials only
d.	"N/A"	RPO Initials/Spotter Initials

ANSWER : D

A, B, C - Incorrect. The annotation "C/M" (condition met) is plausible because it is used for steps that are skipped but verified already to be met. It has a different meaning than "N/A". When using a remote operator and executing steps by verbal methods, the annotation is "Reader/Performer" with the reader marking the procedure.

Source:

New

NO.: 42 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.1.3 TAXONOMY NO.: 3.4
LESSON PLANS: 3-19 NLSRO1571.04
:
CATEGORY: HI
SYSTEMS: OM

QUESTION :

Plant conditions are as follows:

- Shift turnover is in progress in the MCR and on the Fuel Floor
- A refuel crew pre-evolution brief is required for special grapple testing involving fuel movement in the fuel pool only
- The Health Physics Technician is not on the refuel floor, but is on-site and available at all times

WHICH ONE of the following describes the individual responsible for conducting the refuel crew briefing, and the ability to commence fuel movements per Exhibit NOM-L-4.1: 13, FUEL HANDLING DIRECTOR SHIFT TURNOVER CHECKLIST?

- a. The Shift Manager conducts the briefing and fuel moves may commence
- b. The Shift Manager conducts the briefing, but fuel movements may NOT commence
- c. The Fuel Handling Director conducts the briefing, and fuel movements may commence
- d. The Fuel Handling Director conducts the briefing, but fuel movements may NOT commence

ANSWER : D

A, B, C -incorrect: the FHD is responsible to conduct the briefing, and continuous HP coverage is required ON THE FUEL FLOOR regardless of whether the work is in the fuel pool only

Source:

New

NO.: 43 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.1.18 TAXONOMY NO.: 3.0
LESSON PLANS: 3-20 NLSRO1570.01
:
CATEGORY: LOW
SYSTEMS: ADMIN

QUESTION :

Plant conditions are as follows:

- Control Rod Blade exchanges are in progress
- A control rod blade has been transferred to the CRB rack
- A section of loose duct tape has been sighted in the fuel pool adjacent to the CRB rack

WHICH ONE of the following describes whether the CRB and the tape (debris) are logged in the Fuel Pool Material Log per AG-CG-132, SPENT FUEL POOL INVENTORY / INSPECTION?

	<u>Log the CRB</u>	<u>Log the Debris</u>
a.	YES	YES
b.	YES	NO
c.	NO	YES
d.	NO	NO

ANSWER : D

A, B, C- Incorrect. Both are examples of situations tracked and controlled separately

Source:

New

NO.: 32 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.4.38 TAXONOMY NO.: 4.0
LESSON PLANS: 3-9 NLSRO1572.02
:
CATEGORY: LOW
SYSTEMS: ERP

QUESTION :

WHICH ONE of the following is the least severe emergency action level where a the refueling crew should expect an announcement to evacuate to an offsite assembly area?

- a. Unusual Event
- b. Alert
- c. Site Area Emergency
- d. General Emergency

ANSWER : C
Ref:

ERP-101
Source:

New

NO.: 45 REV.: 4 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.3.1 TAXONOMY NO.: 3.0
LESSON PLANS: 4-1 NLSRO1760.04
:
CATEGORY: LOW
SYSTEMS: HP

QUESTION :

Plant conditions are as follows:

- Shuffle part 1 in progress
- The female Refuel Platform Operator states that she is not feeling well and believes this condition is a result of her being pregnant
- The RPO was relieved and directed to exit the contamination area

WHICH ONE of the following describes the administrative exposure limits in effect for the RPO and when the limits are effective?

- a. a limit of zero occupational dose is immediately in effect upon this verbal declaration
- b. a limit of zero occupational dose is in effect only after written declaration
- c. a limit of 0.4 rem or less for the remaining term is in effect immediately based on this verbal declaration
- d. a limit of 0.4 rem or less for the remaining term is in effect only after written declaration

ANSWER : D

LGS and PBAPS admin control is 0.4 rem for the entire term, with no planned entry into contamination or airborne areas. This limit is effective only after declaration, and the declaration must be made in writing.

Ref: HP-C-106

Source:

New

NO.: 46 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.3.2 TAXONOMY NO.: 2.9
LESSON PLANS: 4-2 NLSRO1760.04
:
CATEGORY: LOW
SYSTEMS: HP

QUESTION :

WHICH ONE of the following describes the final approval level required to exceed 3000 mrem annual dose, and the amount of the extension

<u>Approval Required</u>	<u>Amount of Extension</u>
a. Work Group Manager	500 mRem
b. Work Group Manager	1000 mRem
c. Plant Manager	500 mRem
d. Plant Manager	1000 mRem

ANSWER : C

A, B- Work Group manager approval is good for 2000-2500
Each extension is good for 500 mR

Per HP-C-106

Source:

New

NO.: 47 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.3.2 TAXONOMY NO.: 2.9
LESSON PLANS: 4-3 NLSRO1760.06

CATEGORY: LOW
SYSTEMS: HP

QUESTION :

Given the following information during a Health Physics briefing prior to entering the Refuel Floor:

- General area dose rates on the refueling bridge are from 2 mrem/hr to to 12 mrem/hr depending on location
- Smearable contamination on the refueling bridge is 2000 dpm/100cm2

WHICH ONE of the following lists the expected area posting for the refueling bridge per RP-AA-376, RADIOLOGICAL POSTINGS, LABELING, AND, MARKINGS?

- a. Radiation Area and Contaminated Area
- b. Radiation Area and Red Zone
- c. High Radiation Area and Contaminated Area
- d. High Radiation Area and Red Zone

ANSWER : A

B, C, D incorrect - high rad area starts at 100mrem/hr; red zone at 500K dpm/100cm2

Source:

New

NO.: 48 REV.: 1 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.3.4 TAXONOMY NO.: 3.1
LESSON PLANS: 4-4 NLSRO1760.06

CATEGORY: HI
SYSTEMS: HP

QUESTION :

Plant conditions are as follows:

- Entry to a High Radiation Area is required by a qualified radiation worker
- Current annual dose to the worker is 500 mrem
- General area radiation level in the work area is 500 mrem/hr

WHICH ONE of the following is the maximum permitted stay time prior to reaching the first dose control level per HP-C-106, DOSIMETRY PROGRAM?

- a. 3.0 hours
- b. 4.0 hours
- c. 5.0 hours
- d. 6.0 hours

ANSWER : A

- a - correct $(2000-500)/500 = 3$ hours
- b - incorrect based on work group extension to 2500
- c - incorrect based on plant manager extension to 3000
- d. - incorrect based on VP extension to 3500

Source:

New

NO.: 49 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.3.5 TAXONOMY NO.: 2.5
LESSON PLANS: 4-5 NLSRO1760.08
:
CATEGORY: LOW
SYSTEMS: HP

QUESTION :

WHICH ONE of the following is the maximum permitted background count rate on a frisker prior to use, and the minimum count rate above background that indicates the contamination limit has been reached?

<u>Max Background</u>	<u>Contamination Limit</u>
a. 100 cpm	100 cpm above background
b. 100 cpm	300 cpm above background
c. 300 cpm	100 cpm above background
d. 300 cpm	300 cpm above background

ANSWER : C
HP-CG-400-4

Source:

New

NO.: 50 REV.: 2 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 2.3.7 TAXONOMY NO.: 3.3
LESSON PLANS: 4-6 NLSRO1760.07
:
CATEGORY: LOW
SYSTEMS: HP

QUESTION :

WHICH ONE of the following describes the radiation work permit (RWP) activities required for entry to the power block and subsequent LPRM removal on the fuel floor?

- a. Proceed directly to the refuel floor control point and log in to the General RWP covering refuel floor work
- b. Log on to the Work Group RWP at the plant entrance. Proceed to the fuel floor control point and transfer to the Specific RWP covering fuel floor work
- c. Log on to the Work Group RWP and Specific RWP covering fuel floor work at the plant entrance and proceed to the fuel floor.
- d. Log on to the Work Group RWP at the plant entrance. Proceed to the fuel floor control point and additionally log on to the General RWP for fuel floor work

ANSWER : B

A, C, D- Wrong RWP type or sequence.

Must exit one RWP to set the new setpoints for the oncoming RWP and charge the dose against the correct work activity.

Source:

New

Information Format for Written Exam Questions

Page # 11

Position on Exam

Exam Bank No.

Not Used.

Not Used

NO.: 11 REV.: 3 TYPE: MC ENTERED BY: JMS DATE ENTERED: 04/07/02
DIFFICULTY: 0 POINT VALUE: 1.0 RESPONSE TIME: 0 DRAWING:
TASK NUMBER: SKA NO.: 202001K1.18 TAXONOMY NO.: 3.3
LESSON PLANS: 2-3 NLSRO0030.06
CATEGORY: HI
SYSTEMS: RECIRC

Outline ID Number

NRC K/A SRO Importance

Objective in LP.Obj format
This is Objective 6 from Lesson NLSRO 0030

Cognitive (HI or LOW)
LOW=Memory
HI= All Others

QUESTION :

Limerick Unit 2 plant cond

lows:

- OPCON 5
- 2A RHR Loop is in Shutdown Cooling mode

Some plastic FME caps have been spotted lying on the core baffle plate next to Jet Pump #10.

WHICH ONE of the following describes the component that the caps are likely to be drawn into if they become entrained by flow?

- The north recirc suction nozzle
- The south recirc suction nozzle
- The east jet pump suction nozzles
- The west jet pump suction nozzles

ANSWER : B

A, C, D- incorrect. The baffle plate is 12 feet below the jet pump nozzles and at the same elevation as the RHR suction. In SDC mode, flow is into the B recirc loop piping at azimuth 180 (south)

Source:

New

Explanation of correct and incorrect response

Source of the question (New, Modified, or Direct)