

# Example 1

## Actual Questions with Plausible Distracters and Miss Rates

RO, B&W

KA

SYS026

A2.04

KA description

Ability to (a) predict the impacts of the failure of spray pump(s) or operations on the CSS; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations (CFR: 41.5 / 43.5 / 45.3 / 45.13)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%

Current conditions:

- Large Break LOCA occurs
- 1A RBS pump did NOT start

1) The RB Spray system \_\_(1)\_\_ perform its safety function.

1) EOP Enclosure 5.1 (ES Actuation) directs the RO to \_\_(2)\_\_.

Which ONE of the following completes the statements above?

- A. 1. can  
2. immediately start the 1A RBS pump
- B. 1. can  
2. notify the SRO to evaluate starting the 1A RBS Pump
- C. 1. can NOT  
2. immediately start the 1A RBS pump
- D. 1. can NOT  
2. notify the SRO to evaluate starting the 1A RBS pump

**B is correct**

**1 picked Distracter A**

**1 Picked Distracter D**

# **Example 2**

## **Actual Questions with Plausible Distracters and Miss Rates**

RO, B&W

KA

SYS073

A2.02

KA description

Ability to (a) predict the impacts of detector failure or operations on the PRM system; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations (CFR:41.5 / 43.5 / 45.3 / 45.13)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%
- 1A GWD tank release in progress
- 1RIA-38 OOS

Current conditions:

- Loss of power to RM-80 skid of 1RIA-37
- 1SA8/B9 RM PROCESS MONITOR RADIATION HIGH in alarm
- 1SA8/B10 RM PROCESS MONITOR FAULT in alarm

1GWD-4 (A GWD TANK DISCHARGE) will \_\_(1)\_\_\_.

The GWD tank release may \_\_(2)\_\_\_ in accordance with OP/1-2/A/1104/018 (GWD System).

Which ONE of the following completes the statements above?

- A.
  - 1. remain open
  - 2. continue as long as 1RIA-37 is re-energized within one hour
- B.
  - 1. automatically close
  - 2. be re-initiated as long as 1RIA-37 is re-energized within one hour
- C.
  - 1. remain open
  - 2. continue as long as two independent samples agree prior to restarting the release
- D.
  - 1. automatically close
  - 2. be re-initiated as long as two independent samples agree prior to restarting the release

D is correct

1 picked Distracter B

1 picked Distracter C

# **Example 3**

## **Actual Questions with Plausible Distracters and Miss Rates**

RO, W

KA

SYS033

A1.02

KA description

Ability to predict and/or monitor changes in parameters (to prevent exceeding design limits) associated with Spent Fuel Pool Cooling System operating the controls including radiation monitoring systems (CFR: 41.5 / 45.5)

Given the following events and conditions associated with the Unit 1 SFP:

- A Lo-Lo alarm is received for OAC point M1A0004 (SFP Level)
- The operators read (-)2.1 ft SFP level and steady on the main control board
- The operating KF pump has tripped
- An NEO reports a large leak in the auxiliary building but the leak has now slowed to a trickle

For the event described above, the leak must be associated with the KF pump \_\_\_\_ (1) \_\_\_\_ piping and \_\_\_\_ (2) \_\_\_\_ would be utilized to monitor increasing radiation levels associated with the loss of SFP level.



Which ONE (1) of the following completes the statement above?

- A. 1. discharge  
2. 1EMF-42 (U-1 Spent Fuel Bldg Vent)
- B. 1. discharge  
2. 1EMF-17 (Spent Fuel Bldg Refuel Brdg)
- C. 1. suction  
2. 1EMF-42 (U-1 Spent Fuel Bldg Vent)
- D. 1. suction  
2. 1EMF-17 (Spent Fuel Bldg Refuel Brdg)

**B is correct**

**5 picked Distracter A**

**1 picked Distracter C**

**5 picked Distracter D**

# **Example 4**

## **Actual Questions with Plausible Distracters and Miss Rates**

RO, W

KA

APE024

AK2.04

KA description

Knowledge of the interrelations between Emergency Boration and the Pumps (CFR 41.7/45.7)

Given the following conditions on Unit 1:

- \* An ATWS has occurred
- \* The crew has entered FR-S.1 (Response to Nuclear Generation/ATWS)
- \* During the initiation of emergency boration, the following indications are noted:

- Charging Flow = 47 GPM
- Letdown Flow = 75 GPM
- NC system pressure is 2300 PSIG
- 1A NV pump is ON with suction aligned to the VCT
- 1A and 1B BAT pumps are ON
- 1NV-265B (Boric Acid To NV Pumps) is open
- 1NV-244A (Chrg Line Cont Isol) is open
- 1NV-245B (Chrg Line Cont Isol) is open

In accordance with FR-S.1, the MINIMUM required emergency boration flow is \_\_\_\_ (1) \_\_\_\_ and if that flow is NOT met the Operator will \_\_\_\_ (2) \_\_\_\_ .

Which ONE (1) of the following completes the statement above?

- A. 1. 30 GPM  
2. increase charging flow
- B. 1. 60 GPM  
2. increase charging flow
- C. 1. 30 GPM  
2. align the NV pump suction to the FWST
- D. 1. 60 GPM  
2. align the NV pump suction to the FWST

**C is correct**

**2 picked Distracter A**

**4 picked Distracter B**

**2 picked Distracter D**

# Example 5

## Actual Questions with Plausible Distracters and Miss Rates

RO, W

KA

APE033

AA1.03

KA description

Ability to operate and / or monitor Manual restoration of power as it applies to the Loss of Intermediate Range Nuclear Instrumentation (CFR 41.7 / 45.5 / 45.6)

Given the following conditions on Unit 1:

- Unit is currently at 35% RTP
- A unit shutdown is in progress
- Intermediate Range Channel N35 fails
- N35 Level Trip Bypass switch has been placed in “BYPASS” in accordance
- with AP-16 (Malfunction of Nuclear Instrumentation)
- N35 Instrument Power fuses and Control Power fuses have been removed for Troubleshooting

Which ONE (1) of the following describes the actions required to prevent a Reactor Trip and the MINIMUM power level at which those actions must be performed if the unit shutdown is continued?

- A. N35 Control Power fuses ONLY must be installed or a Reactor Trip will occur when power decreases to less than 10% RTP.
- B. N35 Control Power fuses ONLY must be installed or a Reactor Trip will occur when power decreases to less than 25% RTP.
- C. N35 Control Power fuses AND Instrument Power fuses must be installed or a Reactor Trip will occur when power decreases to less than 10% RTP.
- D. N35 Control Power fuses AND Instrument Power fuses must be installed or a Reactor Trip will occur when power decreases to less than 25% RTP.

**A is correct**

**3 picked Distracter B**

**3 picked Distracter C**

**2 picked Distracter D**