

L-24-1 NRC EXAM SECURITY

RO Question # 1

Given the following:

- Unit 3 experiences a unit trip from 100% power.
- 3-EOP-ES-0.1, Reactor Trip Response, is in progress.
- Step “Check Pressure – STABLE AT OR TRENDING TO 2235 PSIG”, is in progress.
- PZR level is 18% and lowering.
- PZR pressure is 1900 psig and lowering.
- PCV-3-455A, PZR Spray valve, will NOT CLOSE.

Which one of the following completes the statement below?

IAW 3-EOP-ES-0.1, Reactor Trip Response, the Unit 3 RO is NEXT required to (1).

Normal Letdown (2) expected to be in service.

- A. (1) stop the RCP supplying the failed Spray Valve
(2) is NOT
- B. (1) stop the RCP supplying the failed Spray Valve
(2) is
- C. (1) ensure PZR heaters are ON
(2) is NOT
- D. (1) ensure PZR heaters are ON
(2) is

L-24-1 NRC EXAM SECURITY

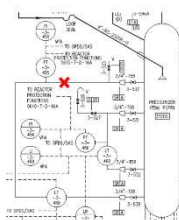
RO Question # 2

Given the following:

- Unit 3 is at 18% power.
- PT-3-456, PZR Pressure, is OOS due to a failure.
- The actions of 3-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels, are complete.
- PZR level control selector switch is on position 1 (CH. 1 & 2.)

Subsequently:

- A line shears as indicated with and 'X' below:



ALSO PROVIDED AS A REFERENCE IN LARGER FORMAT

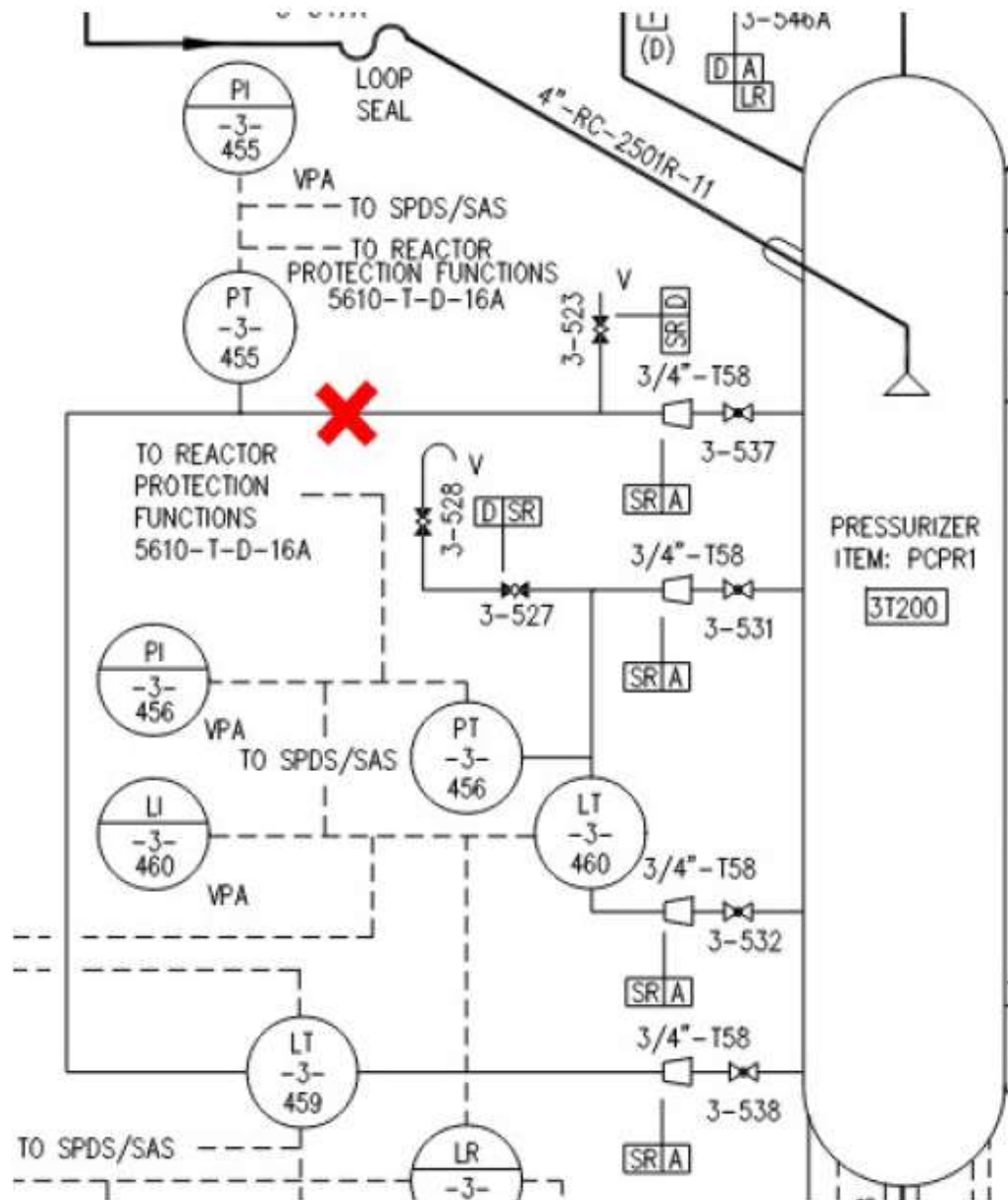
Which one of the following completes the statements below?

As a result of the break charging flow is expected to (1).

The reactor (2) expected to trip IMMEDIATELY.

- A. (1) rise
(2) is NOT
- B. (1) rise
(2) is
- C. (1) lower
(2) is NOT
- D. (1) lower
(2) is

L-24-1 NRC EXAM SECURITY



L-24-1 NRC EXAM SECURITY

RO Question # 3

Given the following:

- Unit 3 experiences a Small Break LOCA.
- RCS pressure is 1450 psig.
- Containment temperature is 175°F
- 3-EOP-E-0, Reactor Trip or Safety Injection, is in progress.

Which one of the following completes the statements below?

FI-3-943, SI Cold Leg Flow, indicating 0 gpm (1) expected.

IAW 3-EOP-E-0, Reactor Trip or Safety Injection, ATT 3, Prompt Action Verifications, the Unit 4 HHSI Pumps suction source (2) required to be realigned to the Unit 3 RWST.

- A. (1) is NOT
(2) is
- B. (1) is NOT
(2) is NOT
- C. (1) is
(2) is
- D. (1) is
(2) is NOT

L-24-1 NRC EXAM SECURITY

RO Question # 4

Given the following:

- Unit 3 experiences a LOCA.
- HHSI flow is 950 gpm.
- RHR flow is 1500 gpm.
- 3-EOP-E-1, Loss of Reactor or Secondary Coolant, in progress.
- All SG pressures are 700 psig and lowering slowly.

Which one of the following completes the statements below?

SGs (1) currently acting as a heat sink.

IAW with 3-EOP-E-1, the SI signal will be reset in order to (2).

- A. (1) are
(2) re-start the charging pumps
- B. (1) are
(2) re-open CV-3-2803, Instrument Air Containment Isolation
- C. (1) are NOT
(2) re-start the charging pumps
- D. (1) are NOT
(2) re-open CV-3-2803, Instrument Air Containment Isolation

L-24-1 NRC EXAM SECURITY

RO Question # 5

Given the following:

- Unit 4 is at 38% power and stable.
- 4C Loop RCS Flow Meters are: 86%, 89%, and 91%.
- 4C RCP motor frame vibration is 3 mils.
- 4C RCP Oil Reservoir level $\frac{1}{2}$ " below normal.

IAW 4-ARP-097.CR.B, Control Room Response - Panel B, and 4-ONOP-041.1, Reactor Coolant Pump Off-Normal, Which one of the following identifies the required crew response?

- A. Not required to trip 4C RCP or Reactor or reduce load.
- B. A Reactor trip and 4C RCP trip are required.
- C. A Reactor trip is required and 4C RCP trip is NOT required.
- D. A Fast Load Reduction is required.

L-24-1 NRC EXAM SECURITY

RO Question # 6

Given the following:

Time 1400:

- Unit 3 is at 100% power.
- 3B Charging Pump is OOS.
- Charging pump 3A is running with abnormal noise, flow oscillations and high vibrations.

Time 1410:

- ANN A 5/1, CHARGING PUMP A TRIP, alarms.
- ANN A 6/5, RCP LABYRINTH SEAL LO DP, alarms.
- 3C Charging Pump will NOT start.
- 3-ONOP-047.1, Loss of Charging Flow in Modes 1 Through 4, is entered.

Which one of the following completes the statements below?

IAW 3-ONOP-047.1, a plant shutdown using 3-GOP-100, Fast Load Reduction, ____ (1) ____ required.

If 3-ONOP-047.1, 3-EOP-E-0 Transition Criteria is met, once the reactor is tripped, the crew ____ (2) ____ required to initiate SI and Phase A.

- A. (1) is
(2) is NOT
- B. (1) is
(2) is
- C. (1) is NOT
(2) is NOT
- D. (1) is NOT
(2) is

L-24-1 NRC EXAM SECURITY

RO Question # 7

Given the following:

- Unit 3 is in MODE 3.
- Unit 4 is in MODE 1.

Subsequently:

- 3B HHSI Pump, becomes inoperable.

Which one of the following completes the statements below?

Unit 3 (1) in a Tech Spec action statement for LCO TS 3.5.2 ECCS - Operating.

Unit 4 (2) in a Tech Spec action statement for LCO TS 3.5.2 ECCS - Operating.

- A. (1) is
(2) is
- B. (1) is
(2) is NOT
- C. (1) is NOT
(2) is
- D. (1) is NOT
(2) is NOT

L-24-1 NRC EXAM SECURITY

RO Question # 8

Given the following:

- Unit 4 is at 80% power.

Subsequently:

- 4B Steam Generator Feed Pumps breaker trips.
- PC-4-444J, Pressurizer Pressure Controller, does not respond in automatic.

Which one of the following completes the sentences below?

IAW 4-ONOP-041.5 Pressurizer Pressure Control Malfunction, PC-4-444J's output is required to be INITIALLY (1) .

PORV (2) may be operated by controller PC-4-444J.

- A. (1) raised
(2) PCV-4-455C
- B. (1) raised
(2) PCV-4-456
- C. (1) lowered
(2) PCV-4-456
- D. (1) lowered
(2) PCV-4-455C

L-24-1 NRC EXAM SECURITY

RO Question # 9

Given the following:

- Unit 3 is at 60% power.

Subsequently:

- Unit 3 experiences a transient that requires the crew to manually trip the reactor.
- The RPS system fails to trip the reactor.
- 3-EOP-FR-S.1, Response to Nuclear Power Generation/ATWS, is in progress.
- All SG Narrow Range levels are off-scale low.

Which one of the following completes the statements below?

The AMSAC system ____ (1) ____ expected to generate a turbine trip signal.

If turbine stop and control valves cannot be verified closed after MANUALLY tripping the turbine, 3-EOP-FR-S.1 NEXT requires operators to MANUALLY CLOSE the ____ (2) ____.

- A. (1) is NOT
(2) Turbine Control Valves
- B. (1) is NOT
(2) MSIVs
- C. (1) is
(2) Turbine Control Valves
- D. (1) is
(2) MSIVs

L-24-1 NRC EXAM SECURITY

RO Question # 10

Given the following:

- A Steam Generator Tube Rupture occurred on 3B SG.
- 3-EOP-E-3, Steam Generator Tube Rupture, is in progress.
- Depressurization of the RCS is about to commence.

Which one of the following completes the statement below?

IAW 3-EOP-E-3, 3B SG Steam Dump to Atmosphere Controller is required to be maintained in (1) to (2).

- A. (1) Manual
(2) minimize radioactive releases to atmosphere
- B. (1) Manual
(2) reduce break flow into the ruptured S/G
- C. (1) AUTO
(2) minimize radioactive releases to atmosphere
- D. (1) AUTO
(2) reduce break flow into the ruptured S/G

L-24-1 NRC EXAM SECURITY

RO Question # 11

Given the following:

- Unit 3 has experienced a reactor trip and safety injection.
- The crew has entered 3-EOP-E-2, Faulted Steam Generator Isolation.
- The 3A S/G is faulted and its wide range level is 25% and lowering.
- Containment temperature is at 175°F and lowering after peaking at 180°F.

Which one of the following is correct?

IAW 3-EOP-E-2, the crew is expected to stabilize hot leg temperatures using the Steam Dumps to (1).

IAW 3-EOP-E-2, the crew (2) required to stabilize Thot temperatures at this time.

- A. (1) Atmosphere
(2) is
- B. (1) Atmosphere
(2) is NOT
- C. (1) Condenser
(2) is
- D. (1) Condenser
(2) is NOT

L-24-1 NRC EXAM SECURITY

RO Question # 12

Given the following:

- Unit 3 Reactor Startup is in progress IAW 3-GOP-301, Hot Standby to Power Operations.
- Reactor Power 4%.
- 3B SGFP is operating, feeding the steam generators.
- 3A SGFP is OOS.

Subsequently:

- 3B SGFP trips for an unknown reason.
- The RO MANUALLY opens the reactor trip breakers.

Which one of the following identifies the expected plant response?

IAW 3-GOP-301 and 0-ADM-211, Emergency and Off-Normal Operating Procedure Usage, the crew (1) required to enter 3-EOP-E-0, Reactor Trip Response or Safety Injection.

AFW pumps are expected to AUTOMATICALLY start due to (2).

- A. (1) is NOT
(2) an AMSAC actuation signal
- B. (1) is NOT
(2) a Feedwater Pump breaker open signal
- C. (1) is
(2) an AMSAC actuation signal
- D. (1) is
(2) a Feedwater Pump breaker open signal

L-24-1 NRC EXAM SECURITY

RO Question # 13

Given the following:

- Both units are at 100% power.

Subsequently:

- Unit 3 and Unit 4 experience a LOOP.
- 3A, 3B, 4A and 4B 4kV buses are energized by the EDGs.
- ANN H1/2, SFP HI TEMP, alarms.

Which one of the following completes the statements below?

IAW 3-ONOP-033.1, Spent Fuel Pit (SFP) Cooling System Malfunction, the crew is required to start (1) Spent Fuel Pump(s).

Power to the 3B Spent Fuel Pump is NORMALLY supplied by (2).

- A. (1) ONLY one
(2) Unit 3
- B. (1) ONLY one
(2) Unit 4
- C. (1) BOTH 3A and 3B
(2) Unit 3
- D. (1) BOTH 3A and 3B
(2) Unit 4

L-24-1 NRC EXAM SECURITY

RO Question # 14

Given the following:

- Unit 3 is at 100%.
- TCV-3-144, L/D Temp Controller, is in MANUAL.
- 3C ICW Pump is OOS.

Subsequently:

- 3A ICW Pump trips and will not start.
- 3-ONOP-019, Intake Cooling Water Malfunction, is in progress.

Which one of the following completes the statements below?

RCS boron concentration is expected to (1) due to the impact on the CVCS demineralizers.

IAW 3-ONOP-019, the crew is required to evaluate ICW system flow (2) to determine if adjusting 3-50-401, TPCW HX Outlet Combined ICW Isol Valve, is required.

- A. (1) rise
(2) on VPA
- B. (1) rise
(2) LOCALLY
- C. (1) lower
(2) on VPA
- D. (1) lower
(2) LOCALLY

L-24-1 NRC EXAM SECURITY

RO Question # 15

Given the following:

- Unit 3 is in Mode 4.
- 3A RHR Train is in service.
- Instrument Air pressure is 60 psig and lowering due to an unisolable leak.

Which one of the following completes the statements below?

FCV-3-605, RHR Bypass flow control valve is expected to (1).

IAW 3-ONOP-013, Loss of Instrument Air, when instrument air is lost the crew is expected to control RCS temperature by (2).

- A. (1) open
(2) throttling 3-754A, RHR Pump A Disch Isol
- B. (1) open
(2) starting and stopping 3A RHR Pump as needed
- C. (1) close
(2) throttling 3-754A, RHR Pump A Disch Isol
- D. (1) close
(2) starting and stopping 3A RHR Pump as needed

L-24-1 NRC EXAM SECURITY

RO Question # 16

Given the following:

- 3A EDG is paralleled to the 3A 4kV Bus.
- Unit 3 Startup Transformer is supplying the 4kV busses.
- 3A EDG indicates 800 kVAR in the LAG.
- Switchyard Voltage is 240.1 kV.

Subsequently:

- A grid disturbance causes switchyard voltage to rise to 241.2 kV.

Which one of the following completes the statements below?

IAW 3-OSP-023.1, 3A EDG Operability Test, in order to return the 3A EDG reactive load to the initial value of 800 kVAR in the LAG, the RO is required to manipulate the (1) switch in the (2) direction.

- A. (1) speed changer
(2) LOWER
- B. (1) speed changer
(2) RAISE
- C. (1) voltage regulator
(2) LOWER
- D. (1) voltage regulator
(2) RAISE

L-24-1 NRC EXAM SECURITY

RO Question # 17

Given the following:

- Unit 4 experiences a Safety Injection.
- 4-EOP-ECA-1.2, LOCA Outside Containment, has been entered.

Which one of the following completes the following statement?

IAW 4-EOP-ECA-1.2, the crew is FIRST required to verify that (1) are CLOSED.

IAW 4-EOP-ECA-1.2, isolation of the LOCA outside containment can be verified based on (2).

- A. (1) MOV-4-750 and MOV-4-751, RHR Suction Valves
(2) rising RCS pressure
- B. (1) MOV-4-750 and MOV-4-751, RHR Suction Valves
(2) lowering Auxiliary Building radiation
- C. (1) MOV-4-843A and MOV-4-843B, HHSI to Cold
(2) rising RCS pressure
- D. (1) MOV-4-843A and MOV-4-843B, HHSI to Cold
(2) lowering Auxiliary Building radiation

L-24-1 NRC EXAM SECURITY

RO Question # 18

Given the following:

- 3-EOP-ECA-1.2, LOCA Outside Containment, is in progress.

Subsequently:

- The crew transitions to 3-EOP-ECA-1.1, Loss of Emergency Coolant Recirculation.

Which of the following identifies the effect that a transition to 3-EOP-ECA-1.1, Loss of Emergency Coolant Recirculation, has on mitigating the accident?

- A. Lowers total injection flow to minimize Refueling Water Storage Tank depletion.
- B. Raises the injection flow rate to maintain Reactor Coolant System heat removal.
- C. Transfers borated water from the HUTs to the Refueling Water Storage Tank to extend ECCS pump availability.
- D. Stabilizes Reactor Coolant System pressure to prevent the Safety Injection Accumulators from discharging out the break.

L-24-1 NRC EXAM SECURITY

RO Question # 19

Given the following:

- Unit 3 is at 75% power during a plant startup.
- A rod withdrawal of 3 steps is initiated in manual.
- ANN B 9/2, AXIAL FLUX TILT alarms.
- Rod withdrawal is stopped.
- ANN B 9/3, SHUTDOWN ROD OFF TOP/ DEVIATION alarms.
- Tavg rises 0.2°F and stabilizes.

Which one of the following completes the statements below?

The crew (1) required to perform 3-ONOP-028.3, Dropped RCCA.

ANN B9/2 AXIAL FLUX TILT alarm was expected to be triggered due to exceeding a MAXIMUM delta between (2) .

- A. (1) is
(2) two PR channels
- B. (1) is
(2) upper and lower detectors on any PR channel
- C. (1) is NOT
(2) any two PR channels
- D. (1) is NOT
(2) upper and lower detectors on any PR channel

L-24-1 NRC EXAM SECURITY

RO Question # 20

Given the following:

- New fuel receipt is in progress on Unit 3.
- SF-1A, Control Room Air Supply Fan, is OOS.

Subsequently:

- The Fuel Handling Supervisor reports that a fuel assembly is dropped on top of spent fuel storage racks in the SFP.

Which one of the following completes the statements below?

IAW 3-ONOP-033.3, Accidents Involving New or Spent Fuel, the CREVS Compensatory Filter Train (1) required to be place in service.

IAW 0-NOP-025, Control Room Ventilation System, placing CREVS Compensatory Filter Train in service (2) require equipment manipulation(s) LOCALLY.

- A. (1) is
(2) does
- B. (1) is
(2) does NOT
- C. (1) is NOT
(2) does
- D. (1) is NOT
(2) does NOT

L-24-1 NRC EXAM SECURITY

RO Question # 21

Given the following:

- Unit 3 is at 100% power.
- The crew enters 3-ONOP-071.02, Steam Generator Tube Leak
- Pressurizer level is at 32% and slowly lowering.

Which one of the following completes the statements below?

IAW 3-ONOP-071.02, Steam Generator Tube Leak, the crew is required to NEXT (1).

If PZR level continues to lower, the PZR level at which a reactor trip is FIRST required exclusively due to PZR level is (2).

- A. (1) raise charging flow
(2) 14%
- B. (1) raise charging flow
(2) 7%
- C. (1) isolate letdown flow
(2) 14%
- D. (1) isolate letdown flow
(2) 7%

L-24-1 NRC EXAM SECURITY

RO Question # 22

Given the following:

- An alarm is received on Fire Alarm Operator Workstation C41.
- Alarming detectors are identified as:
 - DET108-11, DET108-12 (Train A Inverter Room)
 - DET108-21, DET108-22 (Train A Inverter Room)

Which one of the following completes the statements below?

IAW 0-ONOP-016.8, Response to a Fire/Smoke Detection System Alarm, immediate operator actions the crew will (1).

The Inverter Room fire suppression is expected to actuate (2) the receipt of the local fire alarms.

- A. (1) Acknowledge and reset the alarms
(2) 60 seconds after
- B. (1) Acknowledge and reset the alarms
(2) concurrently with
- C. (1) Acknowledge but will NOT reset fire alarms
(2) 60 seconds after
- D. (1) Acknowledge but will NOT reset fire alarms
(2) concurrently with

L-24-1 NRC EXAM SECURITY

RO Question # 23

Given the following:

- Unit 3 is in MODE 1.
- A containment entry is in progress.

Subsequently:

- The personnel hatch fails to open and the workers exit through the escape hatch.
- Neither escape hatch door will close.

Which one of the following completes the statements below?

IAW Tech Specs and 3-ONOP-053, Loss of Containment Integrity, the crew is required to verify a door is closed in the affected air lock within a MAXIMUM of _____ or be in at least HOT STANDBY within the next 6 hours.

- A. 15 minutes
- B. 30 minutes
- C. 45 minutes
- D. 60 minutes

L-24-1 NRC EXAM SECURITY

RO Question # 24

Given the following:

- Unit 3 experiences a safety injection from 100% power.
- The crew transitions to 3-EOP-ES-1.1, SI Termination.
- The RO reports that MOV-3-716B, RCP CCW Inlet, is CLOSED and will NOT RE-OPEN, MANUALLY or LOCALLY.
- RCP Stator Temperatures are as follows:
 - 3A=268°F
 - 3B=258°F
 - 3C=228°F

Which one of the following completes the statements below?

IAW 3-EOP-ES-1.1, SI Termination, the RO is required to _____.

- A. secure ONLY 3A
- B. secure ONLY 3B
- C. secure ONLY 3A AND 3B RCPs
- D. secure all RCPs

L-24-1 NRC EXAM SECURITY

RO Question # 25

Given the following:

- Unit 3 experiences a Safety Injection from 100% power.
- ANN H1/5, CHRMS HIGH RADIATION, alarms.

Which one of the following completes the statements below?

IAW ARP H1/5, CHRMS HIGH RADIATION, the crew is required to check (1) .

A CHRMS reading 1.4×10^4 R/Hr (2) require the crew to use Adverse Containment values.

- A. (1) PRMS for increased radiation levels in containment
(2) will
- B. (1) PRMS for increased radiation levels in containment
(2) will NOT
- C. (1) ARMS for increased radiation levels in containment
(2) will
- D. (1) ARMS for increased radiation levels in containment
(2) will NOT

L-24-1 NRC EXAM SECURITY

RO Question # 26

Given the following:

- 4-EOP-ES-0.2, Natural Circulation Cooldown, is in progress.
- RCS Cold Leg temperatures are 285°F.
- 4A RCP CBO flow is 4.8 gpm.
- 4A RCP CBO flow temperature is 244°F.

Which one of the following correctly completes the statements below?
(ANSWER the following statements independently of each other.)

Assuming all required RCP support conditions are met, IAW 4-EOP-ES-0.2, Natural Circulation Cooldown, the RO is expected to prioritize starting (1).

The given CBO parameters for 4A RCP (2) satisfy the RCP start requirements.

- A. (1) 4B RCP
(2) do NOT
- B. (1) 4B RCP
(2) do
- C. (1) 4C RCP
(2) do NOT
- D. (1) 4C RCP
(2) do

L-24-1 NRC EXAM SECURITY

RO Question # 27

Given the following:

- Plant heatup is in progress on Unit 3.
- RCPs are to be started IAW 3-NOP-041.01A, 3A Reactor Coolant Pump Operations.

Which one of the following completes the statements below?

IAW 3-NOP-041.01A, the RO is required to start the oil lift pump AT LEAST (1) minute(s) before starting the RCP.

If oil lift pressure reaches 655 psig, the RCP Oil Pressure permissive interlock (2) been met.

- A. (1) one
(2) has NOT
- B. (1) one
(2) has
- C. (1) two
(2) has NOT
- D. (1) two
(2) has

L-24-1 NRC EXAM SECURITY

RO Question # 28

Given the following:

- Unit 3 experienced a steam generator tube rupture concurrently with a LOOP.
- Operators terminated safety injection.
- Letdown is NOT in service.
- Step 27, "Control RCS Pressure and Charging Flow to Minimize RCS-To-Secondary Leakage", is in progress.
- Ruptured steam generator's narrow-range level indicates 89% and rising.
- Pressurizer level is 81% and slowly rising.

Which one of the following completes the statement below?

IAW with 3-EOP-E-3, Steam Generator Tube Rupture, the crew (1) required to reduce charging flow.

IAW with 3-EOP-E-3, Steam Generator Tube Rupture, the crew is required to depressurize the RCS using (2) .

- A. (1) is
(2) PORVs
- B. (1) is
(2) Aux Spray
- C. (1) is NOT
(2) PORVs
- D. (1) is NOT
(2) Aux Spray

L-24-1 NRC EXAM SECURITY

RO Question # 29

Given the following:

- A pressurizer bubble is being drawn IAW 3-NOP-041.02, Pressurizer Operation.
- Both PORV control switches are in AUTO.
- Overpressure Mitigation System (OMS) switch is in LOW PRESSURE OPS.
- PRZ heaters are energized.
- ATT. 9 of 3-GOP-305, Defeat of MOV-3-750/751 Autoclosure Interlock, has NOT been implemented.

Subsequently:

- PT-3-403, fails high.
- ANN A3/3, OMS CONTROL ACTIVATED, alarms.

Which one of the following completes the statements below?

RHR is lost due to the AUTOMATIC isolation of (1).

IAW ARP for ANN A3/3, OMS CONTROL ACTIVATED, the RO is required to MANUALLY CLOSE (2), PZR Relief Valve.

- A. (1) MOV-3-750
(2) PCV-3-456
- B. (1) MOV-3-750
(2) PCV-3-455
- C. (1) MOV-3-751
(2) PCV-3-456
- D. (1) MOV-3-751
(2) PCV-3-455

L-24-1 NRC EXAM SECURITY

RO Question # 30

Given the following:

- Unit 3 is in MODE 4.
- RCS Cooldown is in progress.

Which one of the following completes the statements below?

In order to raise cooldown rate the RO is required to (1) demand on HCV-3-758, RHR Hx Outlet Flow Valve, from (2).

- A. (1) raise
(2) VPA
- B. (1) raise
(2) VPB
- C. (1) lower
(2) VPA
- D. (1) lower
(2) VPB

L-24-1 NRC EXAM SECURITY

RO Question # 31

Given the following:

- Both Units are at 100%
- The following RWST parameters are noted:

	Unit 4 RWST
Volume:	320,500 gal
Boron Conc:	2350 ppm

Which one of the following completes the statements below?

IAW Tech Specs Unit 4 (1) required to enter a Tech Spec action statement due to RWST's volume.

IAW Tech Specs Unit 4 (2) required to enter a Tech Spec action statement due to RWST's Boron Concentration.

- A. (1) is
(2) is NOT
- B. (1) is
(2) is
- C. (1) is NOT
(2) is NOT
- D. (1) is NOT
(2) is

L-24-1 NRC EXAM SECURITY

RO Question # 32

Given the following:

- Unit 3 is in MODE 4.
- A component starts leaking into the PRT.
- ANN A7/1, PRT HI/LO LEVEL HI PRESS/TEMP, is in alarm.
- PRT level is 87%.

Which one of the following completes the statement below?

The PRT HIGH level alarm (1) expected with current PRT level.

If the leakage increases, the PRT over pressure is expected to be relieved at a MAXIMUM pressure of (2) .

- A. (1) is
 (2) 85 psig
- B. (1) is
 (2) 100 psig
- C. (1) is NOT
 (2) 85 psig
- D. (1) is NOT
 (2) 100 psig

L-24-1 NRC EXAM SECURITY

RO Question # 33

Which one of the following completes the statements below?

IAW Tech Specs, RCS leakage through a PORV seat is (1) .

PRT volume (2) expected to be AUTOMATICALLY pumped down when level reaches 80%.

- A. (1) IDENTIFIED
 (2) is
- B. (1) IDENTIFIED
 (2) is NOT
- C. (1) UNIDENTIFIED
 (2) is
- D. (1) UNIDENTIFIED
 (2) is NOT

L-24-1 NRC EXAM SECURITY

RO Question # 34

Which one of the following identifies the power supply of the 4C CCW Pump?

- A. 4C 4KV Bus
- B. 4D 4KV Bus
- C. 4C 480V Load Center
- D. 4D 480V Load Center

L-24-1 NRC EXAM SECURITY

RO Question # 35

Given the following:

- Unit 3 is operating at 100% power.
- Abnormal RCS leakage has been detected.
- One of the pressurizer PORVs is suspected to have seat leakage.

Which one of the following completes the statements below?

The operator (1) able to identify which PORV by ONLY observing the acoustic monitors located on rack 3QR067.

If the PORV is declared inoperable due to excessive leakage, the crew is required to close the PORV Block valve within a MAXIMUM of (2).

- A. (1) is
(2) 1 hour
- B. (1) is
(2) 30 minutes
- C. (1) is NOT
(2) 1 hour
- D. (1) is NOT
(2) 30 minutes

L-24-1 NRC EXAM SECURITY

RO Question # 36

Given the following:

- Unit 3 is at 3% power.
- AFW testing is in progress.
- PRZ pressure control system is in AUTOMATIC.

Subsequently:

- The RO adjusts AFW train 2 AFW flow to the MAXIMUM.

Which one of the following completes the statements below?

As a response, PC-3-444J, PZR Pressure Control, demand is expected to (1).

If PZR pressure lowers to 2220 psig the PZR Sprays (2) expected to be CLOSED.

- A. (1) rise
(2) are
- B. (1) rise
(2) are NOT
- C. (1) lower
(2) are
- D. (1) lower
(2) are NOT

L-24-1 NRC EXAM SECURITY

RO Question # 37

Given the following:

- Unit 4 is at 2% power.
- Train 4B RPS testing is in progress.
- The 4B Reactor Trip Bypass Breaker is racked in and closed.

Subsequently:

- 125V DC Bus 4D01 is lost.

Which one of the following completes the statement below with respect to the Reactor Trip and Reactor Trip Bypass Breakers?

_____ is(are) expected to OPEN.

- A. ONLY the 4A Reactor Trip Breaker
- B. ONLY the 4B Reactor Trip Breaker
- C. The 4A Reactor Trip Breaker and 4B Reactor Trip Bypass Breakers
- D. The 4B Reactor Trip Breaker and 4B Reactor Trip Bypass Breakers

L-24-1 NRC EXAM SECURITY

RO Question # 38

Given the following:

- Unit 3 is at 100% power.

Subsequently:

- Multiple annunciators simultaneously alarm.
- The bottom two rows of Reactor Protection Logic Status Lights on 3C05 on VPB go DARK.

Which one of the following identifies the bus that has been lost?

- A. 3P06
- B. 3P07
- C. 3P08
- D. 3P09

L-24-1 NRC EXAM SECURITY

RO Question # 39

Given the following:

- 3-EOP-E-0, Reactor Trip or Safety Injection, is in progress.
- Safety Injection has been AUTOMATICALLY actuated.

Which one of the following complete the statement below?

IAW 3-EOP-E-0, in order to secure 3A EDG, the RO is required to _____.

- A. Take the 3A EDG to NORMAL STOP without first resetting SI
- B. Reset SI then take the 3A EDG to NORMAL STOP
- C. Take the 3A EDG to EMERGENCY STOP without first resetting SI
- D. Reset SI then take 3A EDG to EMERGENCY STOP

L-24-1 NRC EXAM SECURITY

RO Question # 40

Which one of the following completes the statements below?

The RO ____ (1) ____ able to monitor CCW flow rate to the Containment Spray Pump Seal Water Heat Exchangers from the Control Room.

ANN H7/5, CSP A/B COOLING WATER LO FLOW, directs to throttle the ____ (2) ____ valve of the heat exchanger.

- A. (1) is
(2) outlet
- B. (1) is
(2) inlet
- C. (1) is NOT
(2) outlet
- D. (1) is NOT
(2) inlet

L-24-1 NRC EXAM SECURITY

RO Question # 41

Given the following:

- Unit 3 experiences a LOCA from 100% power.

Which one of the following completes the statements below?

CCW flow through the RHR Heat Exchangers is (1) established.

The total CCW header flow is able to be verified on a gauge on (2) .

- A. (1) expected to be AUTOMATICALLY
(2) VPA, Vertical Panel A
- B. (1) expected to be AUTOMATICALLY
(2) VPB, Vertical Panel B
- C. (1) required to be MANUALLY
(2) VPA, Vertical Panel A
- D. (1) required to be MANUALLY
(2) VPB, Vertical Panel B

L-24-1 NRC EXAM SECURITY

RO Question # 42

Given the following:

- Unit 3 is at 100% power.
- 3P07, Vital AC Bus is DE-ENERGIZED, due to a fault.

Subsequently:

- Unit 3 experiences a LOCA.
- Containment pressure is 25 psig and rising.
- 3A Containment Spray Pump, is OFF.
- 3B Containment Spray Pump, is RUNNING.
- MOV-3-880A, Containment Spray discharge valve, is OPEN.
- MOV-3-880B, Containment Spray discharge valve, is CLOSED.

Which one of the following completes the statements below?

A containment spray flow path currently (1) exist.

The failure of (2) is expected to be related to the loss of 3P07.

- A. (1) does
(2) 3A Containment Spray Pump
- B. (1) does
(2) MOV-3-880B
- C. (1) does NOT
(2) 3A Containment Spray Pump
- D. (1) does NOT
(2) MOV-3-880B

L-24-1 NRC EXAM SECURITY

RO Question # 43

Given the following:

- Operators are performing a reactor startup on Unit 4.
- The 4A Steam Dump to Atmosphere (SDTA) valve is 10% open and its controller is being operated in automatic when its setpoint begins to continuously drift below 1000 psig.

Which one of the following describes the effect of this setpoint drift?

The 4A SDTA valve is expected to _____.

- A. OPEN, dumping more steam and lowering Tavg to a MINIMUM of less than 543°F
- B. OPEN, dumping more steam and lowering Tavg to a MINIMUM of 543°F
- C. CLOSE and stop dumping steam. 4B and 4C SDTA valves are expected to respond in AUTOMATIC
- D. CLOSE and stop dumping steam. 4B and 4C SDTA valves are required to be operated MANUALLY

L-24-1 NRC EXAM SECURITY

RO Question # 44

Given the following:

- Unit 3 is at 65%.
- 3-GOP-301, Hot Standby to Power Operation, is in progress.
- 3A and 3B Steam Generator Feedwater Pumps are in service.

Subsequently:

- Steam Generator Feedwater Pump suction pressure lowers to 230 psig.

Which one of the following completes the statements below?

An AUTOMATIC turbine runback (1) expected.

AUTOMATIC opening of CV-3-2011, LP Heat Exchangers Bypass Valve, (2) expected.

- A. (1) is
(2) is NOT
- B. (1) is
(2) is
- C. (1) is NOT
(2) is NOT
- D. (1) is NOT
(2) is

L-24-1 NRC EXAM SECURITY

RO Question # 45

Given the following:

- Unit 3 is at 100% power.
- The A AFW Pump is OOS.
- AFW has been realigned to maintain 2 trains OPERABLE.

Subsequently:

- A transient results in a plant trip and automatic actuation of the AFW System.
- All AFW System flowrates indicate normal except Train 2 to C Steam Generator which indicates 50 gpm.
- The crew suspects leakage in the AFW System.

Based on the above stated conditions, which one of the following correctly describes possible leak location(s)?

- A. Downstream of the Train 2 AFW Flow Control Valve to the C Steam Generator.
- B. Between the B AFW Pump and the Train 2 AFW Flow Control Valve to the C Steam Generator, ONLY.
- C. Between the C AFW Pump and the Train 2 AFW Flow Control Valve to the C Steam Generator, ONLY.
- D. Between the B and C AFW Pumps and the Train 2 AFW Flow Control Valve to the C Steam Generator.

L-24-1 NRC EXAM SECURITY

RO Question # 46

Which one of the following completes the statements below?

At 100% power, MOV-3-1403, SG A Stm Supply To AFW Pumps, is NORMALLY powered by _____.

- A. 3D01 Vital DC Bus
- B. 3D23 Vital DC Bus
- C. 4D01 Vital DC Bus
- D. 4D23 Vital DC Bus

L-24-1 NRC EXAM SECURITY

RO Question # 47

Given the following:

- A Reactor Trip has occurred from 100% power.

Which one of the following completes the statements below?

20 seconds after the reactor trip, the generator output breakers
____(1)____ expected to be open.

Aside from DCS, the RO is expected to check 4A 4kV Bus is energized by
monitoring a gauge on ____ (2) ____.

- A. (1) are NOT
(2) VPA, Vertical Panel A
- B. (1) are NOT
(2) console
- C. (1) are
(2) VPA, Vertical Panel A
- D. (1) are
(2) console

L-24-1 NRC EXAM SECURITY

RO Question # 48

Given the following:

- Both Units are at 100% power.
- 3D01 Vital DC Bus DE-ENERGIZES.

Which one of the following completes the statements below?

3C 480V Load Center control power (1) expected to be lost.
3H 480V Load Center control power (2) expected to be lost.

- A. (1) is NOT
(2) is
- B. (1) is NOT
(2) is NOT
- C. (1) is
(2) is
- D. (1) is
(2) is NOT

L-24-1 NRC EXAM SECURITY

RO Question # 49

Given the following:

- Unit 3 at 100% power.

Subsequently:

- ANN F8/2, EDG A TROUBLE, alarms.
- ANN 1/10, LOW AIR PRESSURE, is locked in at the local panel.
- The left-side Air Receivers for the 3A EDG are at 195 psig.
- The right-side Air Receivers for the 3A EDG are at 205 psig.

Which one of the following completes the statement below?

IAW 3-OP-023, Emergency Diesel Generator, the 3A EDG (1) available to start and the right-side air receivers (2) be aligned to supply both the left-side and right-side set of Air Start Motors.

- A. (1) is
(2) are required to
- B. (1) is NOT
(2) are required to
- C. (1) is
(2) are NOT required to
- D. (1) is NOT
(2) are NOT required to

L-24-1 NRC EXAM SECURITY

RO Question # 50

Given the following:

- A loss of off-site power and SI has occurred on Unit 4.
- 4A EDG is powering the 4A 4KV Bus.
- 4A EDG is loaded to 2500 KW with essential loads.
- The RO is directed to load additional equipment in the following order:

One containment spray pump	212 KW
One battery charger	56 KW
One CRDM fan	48 KW
One computer room chiller	43 KW
One battery room ac	30 KW
One electrical equipment room A/C	25 KW

Which one of the following indicates the maximum number of components (if any) that may be started, in the order listed, before steady state loading limits on the 4A EDG are exceeded?

- A. 0
- B. 1
- C. 4
- D. 6

L-24-1 NRC EXAM SECURITY

RO Question # 51

Given the following:

- Unit 3 and 4 are at 100% power.
- Liquid release is in progress IAW 0-NOP-061.11C, Controlled Liquid Release from Monitor Tank A.

Subsequently:

- Annunciator H1/4, PRMS HI RADIATION, alarms.
- Annunciator H1/6, PRMS CHANNEL FAILURE, alarms.
- Unit 3 RCO reports no indications are available for Process Radiation Monitor R-18 due to no power.

Which one of the following describes the required initial required response?

- A. Enter the applicable TS Action Statement.
- B. Enter 3-ONOP-067, Radioactive Effluent Release.
- C. Direct Chemistry to sample effluent IAW ODCM.
- D. Direct Chemistry to sample effluent IAW 3-ARP-097.CR.H, H1/6.

L-24-1 NRC EXAM SECURITY

RO Question # 52

Given the following:

- Unit 3 is at 100% power with the 3C ICW Pump out of service.

Subsequently:

- A massive grass influx results in ICW/CCW and ICW/TPCW basket strainer clogging.
- CCW Heat Exchanger outlet temperature is currently 125°F and rising.
- ANN E 2/2, TURB BEARING HI TEMP, is in alarm.
- Turbine bearing drain temperatures are 176°F and slowly rising.
- ICW flow through in service TPCW HX is 6800 gpm.
- ICW flow through 3A, 3B, and 3C CCW Heat Exchangers are at 3000 gpm each.

Which one of the following describes the actions that are required to be taken IAW 3-ONOP-019, Intake Cooling Water Malfunction?

- A. Trip the reactor and turbine and enter 3-EOP-E-0, Reactor Trip or Safety Injection
- B. Reduce turbine load as necessary to return temperatures within bands and implement 3-ONOP-011, Screen Wash System/Intake Malfunction
- C. Increase cooling water flow to the turbine oil cooler and implement 3-ONOP-011, Screen Wash System/Intake Malfunction
- D. Enter into Technical Specifications 3.0.3 and commence a reactor shutdown per 3-GOP-100, Fast Load Reduction

L-24-1 NRC EXAM SECURITY

RO Question # 53

Which one of the following completes the statements below?

Instrument air pressure of (1) is the setpoint at which CV-4-1605, UNIT 4 Instrument Air Crosstie Isolation Control Valve, is expected to CLOSE.

IAW 0-ONOP-013, Loss of Instrument Air, if instrument air pressure can NOT be maintained above (2) as a MINIMUM it requires the reactor to be tripped.

- A. (1) 80 psig
(2) 60 psig
- B. (1) 80 psig
(2) 65 psig
- C. (1) 90 psig
(2) 60 psig
- D. (1) 90 psig
(2) 65 psig

L-24-1 NRC EXAM SECURITY

RO Question # 54

Which one of the following identifies the 3A S/G Blowdown Valve(s) that will automatically close on a Containment Phase A isolation signal?

Note:

CV-3-6275A is 3A S/G Blowdown Isolation Valve

MOV-3-1427 is 3A S/G Blowdown Sample Valve

FCV-3-6278A is 3A S/G Blowdown Flow Control Valve

- A. Only CV-3-6275A
- B. Only CV-3-6275A and MOV-3-1427
- C. Only CV-3-6275A and FCV-3-6278A
- D. CV-3-6275A, MOV-3-1427, and FCV-3-6278A

L-24-1 NRC EXAM SECURITY

RO Question # 55

Given the following:

- The crew is collapsing the PZR bubble IAW, 4-NOP-041.02, Pressurizer Operation.

Which one of the following completes the statements below?

IAW 4-NOP-041.02, in order to raise the PZR fill rate the crew is expected to _____.

- A. Raise the demand on HCV-4-142, RHR L/D to CVCS.
- B. Raise the demand of PCV-4-145, Low Pressure LTDN Controller.
- C. Lower the demand of HCV-4-142, RHR L/D to CVCS.
- D. Lower the demand of PCV-4-145, Low Pressure LTDN Controller.

L-24-1 NRC EXAM SECURITY

RO Question # 56

Given the following:

- Unit is at 90% power.
- Control Bank 'D' rods are at 195 steps.
- N-3-43, Power Range NI, fails HIGH.

Which one of the following completes the statements below?

ANN B6/3, POWER RANGE OVERPOWER ROD STOP, (1) expected to be in alarm.

If ANN B6/3 is in alarm, MANUAL control rod withdrawal (2) possible.

- A. (1) is NOT
(2) is
- B. (1) is NOT
(2) is NOT
- C. (1) is
(2) is
- D. (1) is
(2) is NOT

L-24-1 NRC EXAM SECURITY

RO Question # 57

Given the following:

- Unit 4 is at 50% power.
- PT-4-494, C SG Pressure Transmitter Channel II, fails high.
- 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels, is in progress.

Which one of the following completes the statements below?

IAW 4-ONOP-049.1, the crew is required to place PT-4-494 in tripped condition by (1) .

If once 4-ONOP-049.1 is completed, PT-4-495, C SG Pressure Transmitter Channel III, fails low, an AUTOMATIC Safety Injection (1) expected to occur.

- A. (1) removing a fuse
(2) is
- B. (1) removing a fuse
(2) is NOT
- C. (1) manipulating a switch
(2) is
- D. (1) manipulating a switch
(2) is NOT

L-24-1 NRC EXAM SECURITY

RO Question # 58

Which one of the following completes the statement below?

___(1)___ is added to containment spray from baskets on containment floor to ___(2)___ pH in the containment sump to promote iodine hydrolysis during a large break LOCA.

- A. (1) Sodium Tetraborate Decahydrate
(2) lower
- B. (1) Hydrazine
(2) lower
- C. (1) Sodium Tetraborate Decahydrate
(2) raise
- D. (1) Hydrazine
(2) raise

L-24-1 NRC EXAM SECURITY

RO Question # 59

Given the following:

- Unit 3 is at 100%.
- Unit 4 is in MODE 5.

Subsequently:

- The RO reports Switchyard Voltage is 235.5 kV and slowly lowering.

Which one of the following completes the statements below?

Main generator voltage is expected to be AUTOMATICALLY controlled by the (1) regulation circuitry.

IAW Tech Specs TS 3.8 ELECTRICAL POWER SYSTEMS, a MINIMUM of (2) qualified circuit(s) between the offsite transmission network and the unit onsite Class 1E AC Electrical Power Distribution System, are required to be OPERABLE.

- A. (1) DC
(2) one
- B. (1) DC
(2) two
- C. (1) AC
(2) one
- D. (1) AC
(2) two

L-24-1 NRC EXAM SECURITY

RO Question # 60

Given the following:

- Unit 3 is at 70%.
- 3A and 3B Condensate Pumps are running.
- 3C Condensate Pump breaker is racked out after failing to CLOSE.

Subsequently:

- 3A Condensate Pump Trips.

Which one of the following identifies the expected plant/crew response?

- A. The crew is required to perform a MANUAL runback to AT LEAST 50%
- B. The crew is required to perform a MANUAL runback to AT LEAST 60%
- C. An AUTOMATIC Runback starts due to tripping of 3A Main Feed Pump
- D. An AUTOMATIC Runback starts due to tripping of 3B Main Feed Pump

L-24-1 NRC EXAM SECURITY

RO Question # 61

While lowering the level of a CVCS HUT, the space above the water is NORMALLY filled from the _____ .

- A. Gas House, using N2
- B. Gas House, using H2
- C. Dewar
- D. Gas Decay Tanks

L-24-1 NRC EXAM SECURITY

RO Question # 62

Given the following:

- Unit 3 Spent Fuel assemblies are being off-loaded to dry storage.

Subsequently:

- ANN H1/1, SFP LO LEVEL, alarms.
- ANN, X4/1, ARMS HI RADIATION, alarms due to RI-3-1421B Unit 3 Spent Fuel Pit North Wall being in alarm.
- 3-ONOP-033.1, Spent Fuel Pit (SFP) Cooling System Malfunction, is in progress.
- SFP temperature is 142°F and rising.
- SFP level is 55' and lowering.

Which one of the following completes the statement below?

IAW 3-ONOP-033.1, Spent Fuel Pit (SFP) Cooling System Malfunction, the crew (1) required to remove the SFP demin from Service.

IAW 3-ONOP-033.1, Spent Fuel Pit (SFP) Cooling System Malfunction, the crew is required to ensure the SFP exhaust fan is (2).

- A. (1) is
(2) ON
- B. (1) is
(2) SECURED
- C. (1) is NOT
(2) ON
- D. (1) is NOT
(2) SECURED

L-24-1 NRC EXAM SECURITY

RO Question # 63

Given the following:

- Unit 4 is at 80% power.
- Waterfall heights in the intake wells are as follows:
 - 4A1 - 3.1' and slowly rising
 - 4A2 - 2.1' and slowly rising
 - 4B1 - 2.4' and slowly rising
 - 4B2 - 3.6' and slowly rising

Which one of the following completes the statement below?

IAW 4-ONOP-011, Screen Wash System/Intake Malfunction, as a MINIMUM the crew is required to _____.

- A. trip the reactor and then trip the 4A1 and 4B2 CWP's.
- B. trip the 4A1 and 4B2 CWP's, reactor trip is NOT required.
- C. trip the 4B2 CWP (only).
- D. trip the 4B2 CWP, perform a plant shutdown using 4-GOP-100 (Fast Load Reduction), and then trip the 4A1 CWP.

L-24-1 NRC EXAM SECURITY

RO Question # 64

Given the following:

- Both Units are in Mode 1.
- The crew has just returned from 3 days off.
- There are 4 ROs in the Control Room.
- One of the ROs becomes ill and must be transported to the hospital.

Which one of the following completes the statements below?

Current RO On-Site staffing (1) meet the MINIMUM Tech Spec and 10 CFR 50.54(m)(2)(i) requirement for On-Site Staffing of Nuclear Power Units by Operators and Senior Operators.

IAW AD-AA-101-1004, Work Hour Controls, and assuming no waivers, the MAXIMUM number of hours that a Reactor Operator is allowed to work in 24 hours is (2).

- A. (1) does NOT
(2) 12
- B. (1) does NOT
(2) 16
- C. (1) does
(2) 12
- D. (1) does
(2) 16

L-24-1 NRC EXAM SECURITY

RO Question # 65

Given:

- Unit 3 was at 100%.

Subsequently:

- At 1300 the reactor tripped due to a break outside containment.
- At 1320 the crew enters 3-EOP-ECA-1.1, Loss of Emergency Coolant Recirculation.
- At 1330 the current conditions are:
 - RWST level is 78,000 gallons.
 - CET Subcooling is 35°F.
 - The crew is establishing MINIMUM SI flow to remove decay heat.

Which one of the following completes the statements below?

Which one of the following is the required MINIMUM Safety Injection (SI) flow?

IAW 3-EOP-ECA-1.1, the MINIMUM required SI flow to remove decay heat is (1).

IAW 3-EOP-ECA-1.1, if Unit 3 RWST level lowers to 45,000 gallons the running Charging Pumps aligned to the RWST (2) required to be secured.

REFERENCE PROVIDED

- A. (1) 325 gpm
(2) are
- B. (1) 325 gpm
(2) are NOT
- C. (1) 340 gpm
(2) are
- D. (1) 340 gpm
(2) are NOT

L-24-1 NRC EXAM SECURITY

RO Question # 66

Given the following:

- 0-OSP-040.19, LOW POWER PHYSICS TESTING, is in progress on Unit 3.
- The crew is preparing to dilute the RCS.

Which one of the following complete the statements below?

IAW OP-AA-100-1000, Conduct of Operations, the Operator at the Controls (OATC) (1) allowed to be the operator primarily responsible performance of 0-OSP-040.19.

IAW OP-AA-100-1000, Conduct of Operations, the Operator at the Controls (OATC) (2) allowed to provide peer checks to the operator primarily responsible performance of 0-OSP-040.19.

- A. (1) is
(2) is
- B. (1) is
(2) is NOT
- C. (1) is NOT
(2) is
- D. (1) is NOT
(2) is NOT

L-24-1 NRC EXAM SECURITY

RO Question # 67

Given the following:

- Unit 3 Tave is 365°F.
- A Plant cooldown is in progress.
- 3C ICW Pump is declared INOPERABLE.

Which one of the following completes the statements below?

Unit 3 (1) required to enter a CONDITION for TS LCO 3.7.8 ICW System.

Subsequently, with a Tave of 250°F, LCO 3.7.8 ICW System (2) applicable.

- A. (1) is
(2) continues to be
- B. (1) is
(2) is NO longer
- C. (1) is NOT
(2) continues to be
- D. (1) is NOT
(2) is NO longer

L-24-1 NRC EXAM SECURITY

RO Question # 68

Given the following:

- Unit 4 is at 100% power.
- ANN X4/1, ARMS HI RADIATION, alarms.

Which one of the following completes the statements below?

The RO will check the alarming channel by inspection of a panel on the (1) side of the Control Room.

IAW 0-ONOP-066, ARMS High Radiation, once the alarming channel is identified the RO will NEXT press the (2).

- A. (1) Unit 4
(2) ALARM ACK pushbutton to silence the alarm
- B. (1) Unit 4
(2) HIGH Alarm pushbutton to read alarm setpoint
- C. (1) Unit 3
(2) ALARM ACK pushbutton to silence the alarm
- D. (1) Unit 3
(2) HIGH Alarm pushbutton to read alarm setpoint

L-24-1 NRC EXAM SECURITY

RO Question # 69

IAW 0-ADM-211, Emergency and Off-Normal Operating Procedure Usage, a crew brief is expected to take place prior to transitioning to WHICH ONE of the following procedures?

- A. 3-EOP-ES-1.3, Transfer to Cold Leg Recirculation
- B. 3-EOP-FR-P.1, Response to Imminent Pressurized Thermal Shock Condition
- C. 3-EOP-ES-1.2, Post LOCA Cooldown and Depressurization
- D. 3-EOP-E-3, Steam Generator Tube Rupture

L-24-1 NRC EXAM SECURITY

RO Question # 70

Which one of the following completes the statements below?

The MAXIMUM Sm-149 concentration following a reactor trip (1) dependent on the steady state reactor power prior to trip.

After Sm-149 reaches its post-trip MAXIMUM concentration, its concentration (2) expected to decay to zero in less than 2 weeks.

- A. (1) is
(2) is
- B. (1) is
(2) is NOT
- C. (1) is NOT
(2) is
- D. (1) is NOT
(2) is NOT

L-24-1 NRC EXAM SECURITY

RO Question # 71

Which one of the following completes the statement below?

A function performed by burnable poisons (1) to establish a more positive moderator temperature coefficient.

A function performed by burnable poisons (2) to allow higher fuel enrichment of initial core load.

- A. (1) is
(2) is
- B. (1) is
(2) is NOT
- C. (1) is NOT
(2) is
- D. (1) is NOT
(2) is NOT

L-24-1 NRC EXAM SECURITY

RO Question # 72

Given the following:

- Unit 3 reactor was just declared critical during a startup.

Which one of the following completes the statement below?

While progressing toward $10E-8$ amps, 3-GOP-301 Hot Standby to Power Operation, (1) provide applicable guidance that SUR should NOT be permitted to exceed a steady state value of 0.5 dpm.

While stabilizing at to $10E-8$ amps, the RO is required to monitor startup rate on (2) NIs.

- A. (1) does
(2) Source Range
- B. (1) does
(2) Intermediate Range
- C. (1) does NOT
(2) Source Range
- D. (1) does NOT
(2) Intermediate Range

L-24-1 NRC EXAM SECURITY

RO Question # 73

Given the following:

- Unit 3 is at 100% power.
- All SG level controls are selected to the BLUE channel.

Subsequently:

- BLUE channel, PT-3-475, 3A SG Pressure, drifts LOW.

Which one of the following completes the statements below?

Figure A (1) identify the expected SG level control system response.

Unit 3 (2) required to enter a TS action statement.

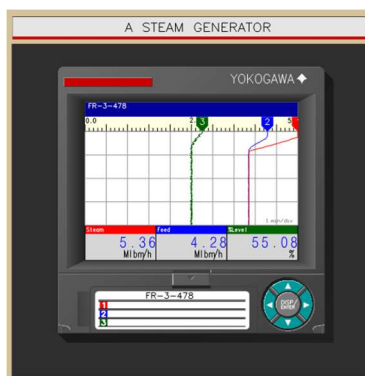
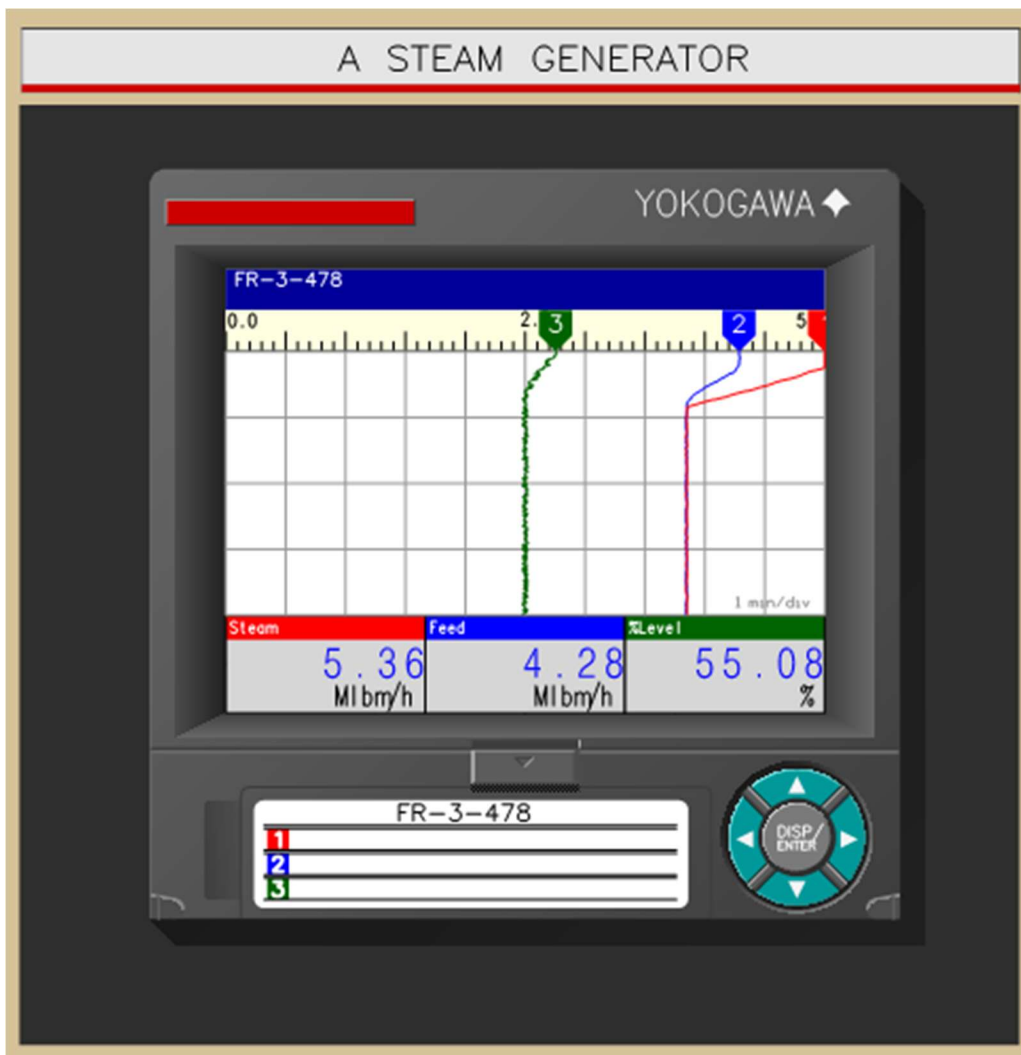


Figure A:

ALSO PROVIDED IN LARGER FORMAT ON THE NEXT PAGE

- A. (1) does NOT
(2) is
- B. (1) does NOT
(2) is NOT
- C. (1) does
(2) is
- D. (1) does
(2) is NOT

L-24-1 NRC EXAM SECURITY



L-24-1 NRC EXAM SECURITY

RO Question # 74

Unit 3 is maintained at 2,000 psia with a pressurizer temperature of 636°F. A pressurizer relief safety valve is leaking to a collection tank which is being held at 10 psig.

Which one of the following completes the statements below?

With dry saturated steam in the pressurizer vapor space, the fluid just downstream of the relief valve is expected to be (1) at (2).

- A. (1) saturated
(2) 193°F
- B. (1) saturated
(2) 240°F
- C. (1) superheated
(2) 193°F
- D. (1) superheated
(2) 240°F

L-24-1 NRC EXAM SECURITY

RO Question # 75

Which one of the following completes the statements below?

Tech Spec 3.2.1, Heat Flux Hot Channel Factor FQ(Z), (1) APPLICABLE for all power levels in MODE 1.

When the Heat Flux Hot Channel Factor FQ(Z) is not within the limits specified in the COLR, power must be reduced within a MAXIMUM of (2).

- A. (1) is
(2) 15 minutes
- B. (1) is
(2) 1 hour
- C. (1) is NOT
(2) 15 minutes
- D. (1) is NOT
(2) 1 hour

L-24-1 NRC EXAM SECURITY

SRO Question # 76

Given the following:

- Unit 3 experiences a LOCA.

Subsequently:

- The crew is transitioning out of 3-EOP-E-0, Reactor Trip Response or Safety Injection.
- RHR flow is 1900 gpm.
- Lowest RCS Tcold is 276°F and lowering.
- PZR is off scale low.
- RVLMS indicates 20%.
- Containment pressure had peaked at 22 psig and is now 18 psig.
- 3A and 3B Containment spray Pumps will NOT start.

Which one of the following completes the statements below?

The crew is required to NEXT enter (1), which is expected to be exited after (2).

- A. (1) 3-EOP-FR-Z.1, Response to High Containment Pressure
(2) Step 3 RNO
- B. (1) 3-EOP-FR-Z.1, Response to High Containment Pressure
(2) completion of Section 3.0 following Step 7
- C. (1) 3-EOP-FR-P.1, Response to Imminent Pressurized Thermal Shock Condition
(2) Step 1 RNO
- D. (1) 3-EOP-FR-P.1, Response to Imminent Pressurized Thermal Shock Condition
(2) completion of Section 3.0 following Step 24

L-24-1 NRC EXAM SECURITY

SRO Question # 77

Given the following:

- Unit 3 is at 100% power.
- 3C CCW Pump is on ECO waiting on parts.
- Today is January 1st.

Subsequently:

- At 00:00 3A CCW Pump is declared INOPERABLE.
- 3A CCW Pump Breaker, remains racked in.
- At 01:00 3B CCW Pump is declared INOPERABLE.
- At 01:45 plant shutdown starts.
- At 02:00 3A CCW Pump is OPERABLE.

Which one of the following completes the statements below?

At 01:45, Tech Specs required Unit 3 to be in MODE 3 by (1) on January 1st at the latest.

At 02:00, after the 3A CCW Pump was declared OPERABLE, the LATEST that 3B CCW Pump can be restored to OPERABLE before exceeding the COMPLETION TIME is January 4th at (2) .

REFERENCE PROVIDED

- A. (1) 08:00
 (2) 00:00
- B. (1) 08:00
 (2) 01:00
- C. (1) 09:00
 (2) 00:00
- D. (1) 09:00
 (2) 01:00

L-24-1 NRC EXAM SECURITY

SRO Question # 78

Given the following:

- Unit 3 experiences a loss of all AC power.
- 3-EOP-ECA-0.0, Loss of All AC Power, is in progress.
- The RO is verifying proper AFW flow.
- NO AFW Pumps are running.
- ALL SG NR Levels are off-scale LOW.

Which one of the following completes the statements below?

The US is required to perform _____.

- A. 3-EOP-FR-H.1, Loss of Secondary Heat Sink, while continuing with 3-EOP-ECA-0.0
- B. 3-EOP-FR-H.1, Loss of Secondary Heat sink, and when a Feedwater Source is restored continue with 3-EOP-ECA-0.0
- C. 3-ONOP-075, Auxiliary Feedwater System Malfunction, while continuing with 3-EOP-ECA-0.0
- D. 3-ONOP-075, Auxiliary Feedwater System Malfunction, and when a Feedwater Source is restored continue with 3-EOP-ECA-0.0

L-24-1 NRC EXAM SECURITY

SRO Question # 79

Given the following:

- Unit 3 is operating at 100% power.
- PZR Level instrument LT-3-460 is failed HIGH and has been removed from service.

Which one of the following completes the statement below?

IAW LI-AA-102-1001, Regulatory Reporting, a subsequent DE-ENERGIZATION of (1) will require the Shift Manager to notify the NRC Operations Center, within a MAXIMUM of (2).

REFERENCE PROVIDED

- A. (1) 3P07, Vital AC panel
(2) 4 Hour
- B. (1) 3P07, Vital AC panel
(2) 8 Hours
- C. (1) 3P06, Vital AC panel
(2) 4 Hours
- D. (1) 3P06, Vital AC panel
(2) 8 Hour

L-24-1 NRC EXAM SECURITY

SRO Question # 80

Given the following:

- Unit 3 is offline with Tave at 190°F.
- Unit 4 has tripped from 100% power.
- The following indications are observed in the control room:
 - The left half of all alarming annunciators on Unit 4 are DARK
 - Annunciator G4/1 ANNUNCIATOR POWER FAILURE is LIT
 - MOV-4-1403 STM TO AFW PUMPS position indicating lights are DARK
 - B AFW Trip and Throttle Valve position indicating lights are DARK
- The crew has completed 4-EOP-E-0, Reactor Trip or Safety Injection, and has now stabilized the plant using 4-EOP-ES-0.1, Reactor Trip Response.

Which one of the following (1) identifies the applicable procedure for this event and (2) identifies the MAXIMUM Tech Spec completion time for DC bus restoration, assuming no RICT?

REFERENCE PROVIDED

- A. (1) 4-ONOP-003.5, Loss of DC Busses 4D23 and 4D23A.
(2) 24 hours.
- B. (1) 4-ONOP-003.4, Loss of DC Bus 4D01 and 4D01A.
(2) 24 hours.
- C. (1) 4-ONOP-003.5, Loss of DC Busses 4D23 and 4D23A.
(2) 2 hours.
- D. (1) 4-ONOP-003.4, Loss of DC Bus 4D01 and 4D01A.
(2) 2 hours.

L-24-1 NRC EXAM SECURITY

SRO Question # 81

Given the following:

- Unit 3 trips from 100% power.
- The crew transitions from 3-EOP-ES-0.1, Reactor Trip Response, to 3-EOP-FR-H.1, Response to Loss of Secondary Heat Sink.
- RCS bleed and feed is established.

Subsequently:

- PRT pressure rises past the pressure relieve setpoint and then lowers.
- The BOP establishes flow from the A Standby SG Feed Pump.
- SG Narrow Range levels are as follows:
 - 3A SG 10%
 - 3B SG 22%
 - 3C SG 18%

Which one of the following completes the statements below?

Containment pressure (1) expected to rise.

The crew is NEXT required to (2) .

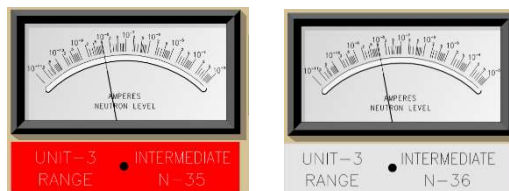
- A. (1) is
(2) remain in 3-EOP-FR-H.1, Response to Loss of Secondary Heat Sink
- B. (1) is
(2) transition to 3-EOP-ES-1.1, SI Termination
- C. (1) is NOT
(2) remain in 3-EOP-FR-H.1, Response to Loss of Secondary Heat Sink
- D. (1) is NOT
(2) transition to 3-EOP-ES-1.1, SI Termination

L-24-1 NRC EXAM SECURITY

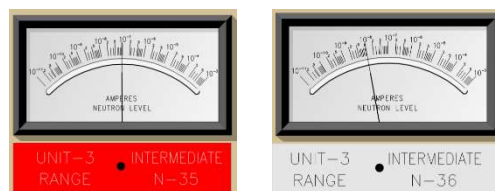
SRO Question # 82

Given the following:

- A reactor startup is in progress on Unit 3 IAW 3-GOP-301, Hot Standby to Power Operations.
- Power is stable.



Subsequently, with no rod motion, N-3-35 indication changed:



Which one of the following completes the statements below?

N-3-35 is (1).

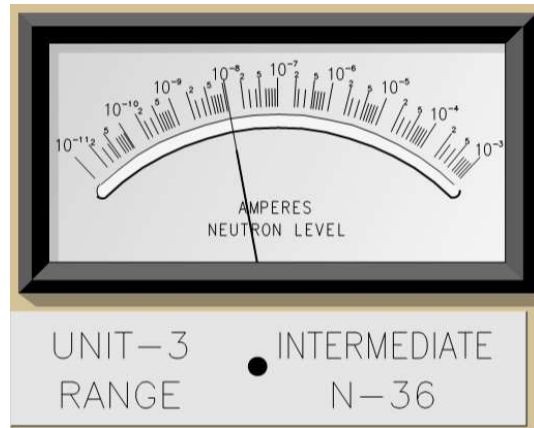
IAW with TS the crew (2) allowed to proceed with the startup to 100% power.

REFERENCE PROVIDED
PICTURES ALSO PROVIDED IN LARGER FORMAT ON THE NEXT PAGE

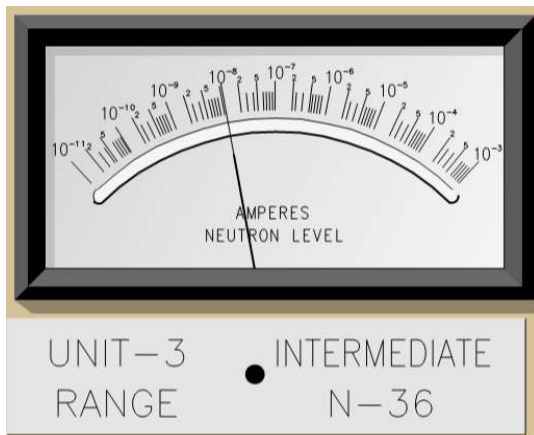
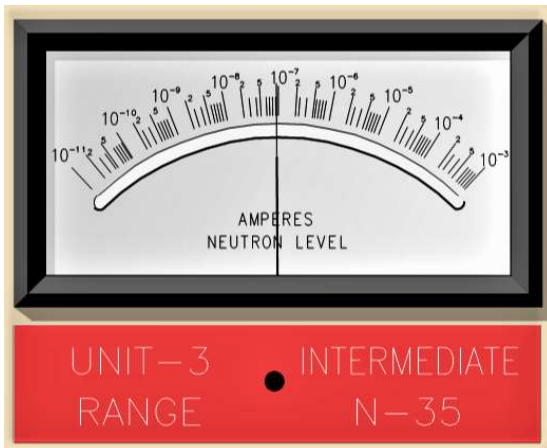
- A. (1) undercompensated
(2) is NOT
- B. (1) undercompensated
(2) is
- C. (1) overcompensated
(2) is NOT
- D. (1) overcompensated
(2) is

L-24-1 NRC EXAM SECURITY

BEFORE:



AFTER:



L-24-1 NRC EXAM SECURITY

SRO Question # 83

Given the following:

- Both Units are operating at 100% power.
- A liquid radioactive waste release is in progress.
- The following Control Room indications are received:
 - H1/6, PRMS CHANNEL FAILURE annunciator is received.
 - R-18 WARNING ALARM LIGHT is OFF.
 - R-18 Fail indicator is ON and its display is failed low.
 - The crew enters the applicable ONOP.

Which one of the following completes the statements below?

IAW OP-AA-100-1000, Conduct of Operations, the operators (1) required to obtain a peer check in order to secure the release.

In order to restart the release without performing maintenance on R-18, IAW ODCM, at least two independent samples are required to be analyzed prior to the release, and (2).

- A. (1) are
(2) and at least two technically qualified members of the facility staff independently verify the release rate calculations and discharge valve line-up prior to initiating the release
- B. (1) are
(2) and grab samples are required to be taken during the release at least once per 12 hours and these samples are analyzed for radioactivity within 24 hours
- C. (1) are NOT
(2) and at least two technically qualified members of the facility staff independently verify the release rate calculations and discharge valve line-up prior to initiating the release
- D. (1) are NOT
(2) and grab samples are required to be taken during the release at least once per 12 hours and these samples are analyzed for radioactivity within 24 hours

L-24-1 NRC EXAM SECURITY

SRO Question # 84

Given the following:

- At 1000 Waste Boron Panel ANN 5/2, PLANT STACK HI RADIATION, alarms.
- At 1001 RAD-6304A and RAD-6304B, Plant Vent Rad Monitor, indicate 1.65E-01 uci/cc and stable.

Which one of the following completes the statements below?

(Consider the following statements independent of each other. EC judgement is not to be used to elevate the EAL classification)

RCV-014, Tank Discharge Valve, (1) expected to AUTOMATICALLY close.

If the release continues up until 1033 the crew is required to declare a(n) (2) .

REFERENCE PROVIDED

- A. (1) is
(2) Unusual Event
- B. (1) is
(2) Alert
- C. (1) is NOT
(2) Unusual Event
- D. (1) is NOT
(2) Alert

L-24-1 NRC EXAM SECURITY

SRO Question # 85

Given the following:

- Unit 3 at 100% power.
- R-3-20, Reactor Coolant Letdown Monitor is in High Alarm.
- Chemistry reported Dose Equivalent I-131 has exceeded 100 $\mu\text{Ci/gm}$.
- A Unit 3 shutdown is in progress.

Which one of the choices below completes the following statements?

(EC judgement is not to be used to elevate the EAL classification)

IAW Tech Specs, as a MINIMUM, the average Reactor Coolant System temperature (1) required to be less than 350°F within a MAXIMUM of 6 hours.

IF the reactor coolant activity (dose equivalent iodine) stabilizes at 320 $\mu\text{Ci/gm}$ during the shutdown, THEN the highest required emergency classification is a/an (2).

REFERENCE PROVIDED

- A. (1) is NOT
(2) Alert
- B. (1) is NOT
(2) Unusual Event
- C. (1) is
(2) Alert
- D. (1) is
(2) Unusual Event

L-24-1 NRC EXAM SECURITY

SRO Question # 86

Given the following:

- Unit 4 experiences a spurious Safety Injection Actuation.

Which one of the following completes the statements below?

A MAXIMUM of (1) HHSI Pumps are expected to AUTOMATICALLY start.

The US is expected to transition from 4-EOP-E-0, Reactor Trip or Safety Injection, to (2).

- A. (1) 2
(2) 4-EOP-ES-0.1, Reactor Trip Response
- B. (1) 2
(2) 4-EOP-ES-1.1, SI Termination
- C. (1) 4
(2) 4-EOP-ES-0.1, Reactor Trip Response
- D. (1) 4
(2) 4-EOP-ES-1.1, SI Termination

L-24-1 NRC EXAM SECURITY

SRO Question # 87

Given the following:

- 3-EOP-ECA-2.1, Uncontrolled Depressurization of All Steam Generators, is in progress.
- All attempts to close MSIVs from the Control Room have failed.

Subsequently:

- The crew has reached the step in 3-EOP-ECA-2.1 just prior to verification of SI termination criteria.
- 3A MSIV indicates CLOSED on the main control board.
- 3A SG pressure is slowly rising.

Which one of the following completes the statements below?

IAW 3-EOP-ECA-2.1, the crew is required to transition to 3-EOP-E-2, Faulted Steam Generator Isolation, (1) based on indication of (2).

- A. (1) immediately
(2) rising SG pressure
- B. (1) immediately
(2) MSIV closure
- C. (1) following completion of SI termination in 3-EOP-ECA-2.1
(2) rising SG pressure
- D. (1) following completion of SI termination in 3-EOP-ECA-2.1
(2) MSIV closure

L-24-1 NRC EXAM SECURITY

SRO Question # 88

Given the following:

- 3-OSP-074.5, FW Control Valve and Bypass Valve Inservice Test, is in progress.
- FCV-3-488 Exercise Test Fast Close (SV-3-488A), was timed at 7.33 seconds

FCV-3-488 Exercise Test Fast Close (SV-3-488A)		
Stroke Timing Direction	Acceptable Range (seconds)	Required Action Range (seconds)
CLOSE	≥ 5.00 to ≤ 7.00	< 5.00 > 7.00

Which one of the following identifies the Unit Supervisor required action(s) IAW 3-OSP-074.5?

- A. stroke OPEN and after a MINIMUM of 2 minutes perform 2nd stroke
- B. stroke OPEN and after a MINIMUM of 3 minutes perform 2nd stroke
- C. double test frequency until the cause of deviation is determined and condition corrected.
- D. IMMEDIATELY declare the valve INOPERABLE

L-24-1 NRC EXAM SECURITY

SRO Question # 89

Given the following:

- Unit 3 experiences a loss of all AC power from 100% power.
- 3-EOP-ECA-0.0, Loss of All AC Power, is entered with the following:
 - Unit 4 EDGs are running loaded.
 - 3B 4kV Bus is on fire.
 - 3A EDG is locked out.
 - 3A Condensate Pump, red light is ON.
 - 3C RCP, red light is ON.

The US is expected to prioritize to (1).

After the action is completed with expected response, the US is required to NEXT direct performance of (2).

- A. (1) realign 3D 4kV Bus
(2) Attachment 6, 3A 4KV Bus Restoration
- B. (1) realign 3D 4kV Bus
(2) Attachment 1, 3A 4KV Bus Stripping
- C. (1) reset 3A EDG lockout
(2) Attachment 6, 3A 4KV Bus Restoration
- D. (1) reset 3A EDG lockout
(2) Attachment 1, 3A 4KV Bus Stripping

L-24-1 NRC EXAM SECURITY

SRO Question # 90

Given the following:

- Unit 4 is in a refueling outage.
- ANN X1/2 DC LC 3A GROUND, is to be defeated for a clearance order on equipment required to be OPERABLE for the current plant conditions.

IAW 0-ADM-219, Annunciator Response Procedure Usage, which one of the choices below completes the following:

0-OSP-200.5, Attachment 1, Defeated/Out-Of-Service Annunciator Checklist, (1) retained in the Equipment Out of Service Index.

The applicable portions of 0-OSP-200.5, Miscellaneous Tests and Operating Evolutions, for Defeated/Out-Of-Service Annunciators (2) required to be completed prior to defeating the annunciator.

- A. (1) is
(2) are NOT
- B. (1) is
(2) are
- C. (1) is NOT
(2) are NOT
- D. (1) is NOT
(2) are

L-24-1 NRC EXAM SECURITY

SRO Question # 91

Given the following:

- Unit 3 is at 100% power.

Subsequently:

- ANN B 9/3, SHUTDOWN ROD OFF TOP/DEVIATION, alarms.
- ANN B 2/2, POWER RANGE UPPER DET HI FLUX DEV/ AUTODEFEAT, alarms.
- ANN B 2/3, POWER RANGE LOWER DET HI FLUX DEV/ AUTODEFEAT, alarms.
- ANN B 7/1, NIS/RPI ROD DROP ROD STOP, alarms.
- ANN B6/4, POWER RANGE CHANNEL DEVIATION, alarms.
- ANN G5/1, POWER RANGE CHANNEL DEVIATION, alarms.
- Control Bank D, rod H-12, RPI indicates zero.

Which one of the following completes the statements below?

In order to address the plant conditions, the US is required to perform (1) NEXT.

IAW TS bases, violation of the AFD limits (2) invalidate the conclusions of the accident and transient analyses with regard to fuel cladding integrity.

- A. (1) 3-ONOP-028.1, RCC Misalignment
(2) does NOT
- B. (1) 3-ONOP-028.1, RCC Misalignment
(2) does
- C. (1) 3-ONOP-028.3, Dropped RCC
(2) does NOT
- D. (1) 3-ONOP-028.3, Dropped RCC
(2) does

L-24-1 NRC EXAM SECURITY

SRO Question # 92

Given the following:

- Unit 3 experiences a Safety Injection from 100% power.
- 3-EOP-E-1, Loss Of Reactor Or Secondary Coolant, step 17, "Check if RCS Cooldown and Depressurization is Required", is in progress.
- Both RHR Pumps are operating.
- Total RHR flow is 2000 gpm.
- Both Containment Spray pumps are operating.
- RWST is at 150,000 gallons and lowering.

Which one of the following completes the statements below?

The US is required to NEXT transition to (1) and the crew is expected to FIRST (2).

- A. (1) 3-EOP-ES-1.2, POST LOCA COOLDOWN AND DEPRESSURIZATION
(2) Secure a Containment Spray pump
- B. (1) 3-EOP-ES-1.2, POST LOCA COOLDOWN AND DEPRESSURIZATION
(2) Establish Charging Flow
- C. (1) 3-EOP-ES-1.3, TRANSFER TO COLD LEG RECIRCULATION
(2) Secure a Containment Spray pump
- D. (1) 3-EOP-ES-1.3, TRANSFER TO COLD LEG RECIRCULATION
(2) Establish Charging Flow

L-24-1 NRC EXAM SECURITY

SRO Question # 93

Given the following:

- Unit 4 is in MODE 6.
- The crew commenced rod unlatching.

Subsequently:

- After a seismic movement ANN I4/6, CNTMT SUMP HI LEVEL, alarms.
- Reactor Cavity water level is 56 feet and lowering.
- 4-ONOP-041.3, Excessive Reactor Coolant System Leakage, is in progress.

Which one of the following completes the statement below?

Closing the Containment Purge Isolation valves is required following a required transition to (1).

The US is required to direct the crew to (2).

- A. (1) 4-ONOP-033.2, Refueling Cavity Seal Failure
(2) monitor containment for airborne contamination
- B. (1) 4-ONOP-033.2, Refueling Cavity Seal Failure
(2) place PAHMS in service
- C. (1) 4-ONOP-041.8, Shutdown LOCA [MODE 5 OR 6]
(2) monitor containment for airborne contamination
- D. (1) 4-ONOP-041.8, Shutdown LOCA [MODE 5 OR 6]
(2) place PAHMS in service

L-24-1 NRC EXAM SECURITY

SRO Question # 94

Which one of the following completes the statements below?

IAW 0-EPIP-20101, Duties of Emergency Coordinator, the announcement of an emergency classification (1) require the use of Page Volume Boost.

IAW PTN EP, Turkey Point Plant Radiological Emergency Plan, as a MINIMUM the TSC is required to be activated for (2) or higher declaration classifications.

- A. (1) does NOT
(2) UNUSUAL EVENT
- B. (1) does NOT
(2) ALERT
- C. (1) does
(2) UNUSUAL EVENT
- D. (1) does
(2) ALERT

L-24-1 NRC EXAM SECURITY

SRO Question # 95

Given the following:

- Unit 3 is at the point of adding heat following a short planned outage to facilitate a maintenance activity.
- No rod motion has occurred over the last hour.
- Preparation is being performed for MODE 1 entry.

Subsequent Conditions:

- One RPI in one group is INOPERABLE.
- 3-ONOP-028.1, RCC Misalignment, has been completed at it was determined that no RCCs were misaligned.

Which one of the following completes the statements below based on the Subsequent Conditions stated above?

Tech Specs (1) restrict entry into MODE 1.

3-ONOP-028.2, RCC Position Indication Malfunction, (2) required to be performed.

REFERENCE PROVIDED

- A. (1) do
(2) is
- B. (1) do
(2) is NOT
- C. (1) do NOT
(2) is
- D. (1) do NOT
(2) is NOT

L-24-1 NRC EXAM SECURITY

SRO Question # 96

Which one of the following completes the statement below?

IAW AD-AA-100-1006, Procedure and Work Instruction Use And Adherence, steps that contain conditional statements (1) allowed to be marked N/A without supervisory approval.

IAW AD-AA-100-1006, Procedure and Work Instruction Use And Adherence, the use of N/A for non-conditional steps in Operations safety-related equipment procedures, is required to be approved by a MINIMUM of (2) SRO(s).

- A. (1) is
(2) 1
- B. (1) is
(2) 2
- C. (1) is NOT
(2) 1
- D. (1) is NOT
(2) 2

L-24-1 NRC EXAM SECURITY

SRO Question # 97

Given the following:

- Unit 3 is at 100% power.
- 3A EDG is declared INOPERABLE due to a required maintenance activity.

Which one of the following completes the statements below?

Tech Spec SR 3.8.1.1 requires the first offsite circuit verification to be performed within (1) at the latest and subsequent performances are required to be performed once every (2) at the latest.

- A. (1) 1 hour
(2) 8 hours
- B. (1) 1 hour
(2) 10 hours
- C. (1) 1.25 Hours
(2) 8 hours
- D. (1) 1.25 Hours
(2) 10 hours

L-24-1 NRC EXAM SECURITY

SRO Question # 98

Given the following:

- A core re-load is in progress on Unit 3.
- R-3-1407, Unit 3 Spent Fuel Pit Canal Area, highest reading in the last 24 hours has been 4 mr/HR.
- An irradiated fuel element is being moved from the Spent Fuel Pool to the upender.

Subsequently:

- At 08:00 a.m.;
 - The spent fuel element is dropped to the bottom of the canal.
 - RAD-6418, Spent Fuel Pool Vent SPING, reads $1.6E-1$ uCi/cc and rising.
 - R-3-1407, Unit 3 Spent Fuel Pit Canal Area, reads 5 R/HR.
- At 08:05 a.m., the EC makes an EAL declaration.

Which one of the following completes the statements below?

____(1)____ is the MOST immediate hazard released from the ruptured spent fuel element.

Radiation exposures in excess of regulatory limits are required to be authorized by the ____ (2) ____.

- A. (1) Gamma radiation from Cobalt and Nickel solids
(2) Recovery Manager
- B. (1) Gamma radiation from Cobalt and Nickel solids
(2) Emergency Coordinator
- C. (1) Gamma radiation from Iodine and Krypton gases
(2) Recovery Manager
- D. (1) Gamma radiation from Iodine and Krypton gases
(2) Emergency Coordinator

L-24-1 NRC EXAM SECURITY

SRO Question # 99

Given the following:

- A required annunciator must be defeated in accordance with 0-OSP-200.5, Miscellaneous Tests, Checks, and Operating Evolutions, Attachment 1.

Which one of the following completes the statements below?

The MAXIMUM time the annunciator may be defeated prior to performing a PCR to the ARP is, (1) .

The MAXIMUM time allowed for an out of service annunciator prior to performing a 10CFR50.59 applicability/screening review is, (2) .

- A. (1) 7 days
(2) 7 days
- B. (1) 7 days
(2) 60 days
- C. (1) 60 days
(2) 7 days
- D. (1) 60 days
(2) 60 days

L-24-1 NRC EXAM SECURITY

SRO Question # 100

Which one of the following completes the statements below regarding the delegation of SM/Emergency Coordinator responsibilities?

The decision to notify federal, State and Local authorities (1) allowed to be delegated.

The action to notify federal, State and Local authorities (2) allowed to be delegated.

- A. (1) is
 (2) is
- B. (1) is
 (2) is NOT
- C. (1) is NOT
 (2) is
- D. (1) is NOT
 (2) is NOT

L-24-1 NRC EXAM SECURITY

Question #	KEY
RO 01	B
RO 02	D
RO 03	A
RO 04	C
RO 05	C
RO 06	D
RO 07	D
RO 08	A
RO 09	D
RO 10	C
RO 11	B
RO 12	D
RO 13	B
RO 14	B
RO 15	D
RO 16	D
RO 17	A
RO 18	A
RO 19	D
RO 20	C
RO 21	B
RO 22	C
RO 23	D
RO 24	D
RO 25	D
RO 26	A
RO 27	D
RO 28	A
RO 29	A
RO 30	D
RO 31	D
RO 32	B
RO 33	B
RO 34	B
RO 35	C
RO 36	C
RO 37	B
RO 38	C
RO 39	B
RO 40	C

L-24-1 NRC EXAM SECURITY

RO 41	D
RO 42	C
RO 43	A
RO 44	D
RO 45	B
RO 46	C
RO 47	B
RO 48	D
RO 49	C
RO 50	C
RO 51	B
RO 52	A
RO 53	B
RO 54	B
RO 55	B
RO 56	D
RO 57	C
RO 58	C
RO 59	D
RO 60	C
RO 61	D
RO 62	A
RO 63	A
RO 64	D
RO 65	D
RO 66	C
RO 67	C
RO 68	D
RO 69	C
RO 70	B
RO 71	C
RO 72	B
RO 73	A
RO 74	B
RO 75	A
SRO 76	C
SRO 77	B
SRO 78	C
SRO 79	C
SRO 80	B D
SRO 81	A

L-24-1 NRC EXAM SECURITY

SRO 82	B
SRO 83	C
SRO 84	B
SRO 85	A
SRO 86	D
SRO 87	A
SRO 88	D
SRO 89	D
SRO 90	B
SRO 91	D
SRO 92	C
SRO 93	A
SRO 94	D
SRO 95	C
SRO 96	B
SRO 97	B
SRO 98	D
SRO 99	B
SRO 100	C

L-24-1 NRC Exam
Reference List

RO & SRO References

Steam Tables

3-EOP-ECA-1.1 Att.1

SRO Only References

EAL Tables

LI-AA-102-1001 Att.1

TS 3.1.7

TS 3.3.1

TS 3.4.16

TS 3.7.7

TS 3.8.4