

**U.S. Nuclear Regulatory Commission
Site-Specific
Written Examination**

Applicant Information

Name: RO MASTER	Region: III
Date: 11/20/2000	Facility/Unit: LaSalle Co Station / U1&U2
License Level: RO	Reactor Type: GE
Start Time: 0815	Finish Time:

Instructions

Use the answer sheets provided to document your answers. Staple this cover sheet on top of the answer sheets. The passing grade requires a final grade of at least 80.00 percent. Examination papers will be collected five hours after the examination starts.

Applicant Certification

All work done on this examination is my own. I have neither given nor received aid.

Applicant's Signature

Results

Examination Value	_____ 100.0 _____	Points
Applicant's Score	_____	Points
Applicant's Grade	_____	Percent

ANSWER SHEET

Multiple Choice (Circle or X your choice)

If you change your answer, write your selection in the blank.

MULTIPLE CHOICE

- | | |
|------------------|------------------|
| 001 a b c d ____ | 020 a b c d ____ |
| 002 a b c d ____ | 021 a b c d ____ |
| 003 a b c d ____ | 022 a b c d ____ |
| 004 a b c d ____ | 023 a b c d ____ |
| 005 a b c d ____ | 024 a b c d ____ |
| 006 a b c d ____ | 025 a b c d ____ |
| 007 a b c d ____ | 026 a b c d ____ |
| 008 a b c d ____ | 027 a b c d ____ |
| 009 a b c d ____ | 028 a b c d ____ |
| 010 a b c d ____ | 029 a b c d ____ |
| 011 a b c d ____ | 030 a b c d ____ |
| 012 a b c d ____ | 031 a b c d ____ |
| 013 a b c d ____ | 032 a b c d ____ |
| 014 a b c d ____ | 033 a b c d ____ |
| 015 a b c d ____ | 034 a b c d ____ |
| 016 a b c d ____ | 035 a b c d ____ |
| 017 a b c d ____ | 036 a b c d ____ |
| 018 a b c d ____ | 037 a b c d ____ |
| 019 a b c d ____ | 038 a b c d ____ |
| | 039 a b c d ____ |

ANSWER SHEET

Multiple Choice (Circle or X your choice)

If you change your answer, write your selection in the blank.

- | | |
|------------------|------------------|
| 040 a b c d ____ | 062 a b c d ____ |
| 041 a b c d ____ | 063 a b c d ____ |
| 042 a b c d ____ | 064 a b c d ____ |
| 043 a b c d ____ | 065 a b c d ____ |
| 044 a b c d ____ | 066 a b c d ____ |
| 045 a b c d ____ | 067 a b c d ____ |
| 046 a b c d ____ | 068 a b c d ____ |
| 047 a b c d ____ | 069 a b c d ____ |
| 048 a b c d ____ | 070 a b c d ____ |
| 049 a b c d ____ | 071 a b c d ____ |
| 050 a b c d ____ | 072 a b c d ____ |
| 051 a b c d ____ | 073 a b c d ____ |
| 052 a b c d ____ | 074 a b c d ____ |
| 053 a b c d ____ | 075 a b c d ____ |
| 054 a b c d ____ | 076 a b c d ____ |
| 055 a b c d ____ | 077 a b c d ____ |
| 056 a b c d ____ | 078 a b c d ____ |
| 057 a b c d ____ | 079 a b c d ____ |
| 058 a b c d ____ | 080 a b c d ____ |
| 059 a b c d ____ | 081 a b c d ____ |
| 060 a b c d ____ | 082 a b c d ____ |
| 061 a b c d ____ | 083 a b c d ____ |

ANSWER SHEET

Multiple Choice (Circle or X your choice)

If you change your answer, write your selection in the blank.

084 a b c d ____

085 a b c d ____

086 a b c d ____

087 a b c d ____

088 a b c d ____

089 a b c d ____

090 a b c d ____

091 a b c d ____

092 a b c d ____

093 a b c d ____

094 a b c d ____

095 a b c d ____

096 a b c d ____

097 a b c d ____

098 a b c d ____

099 a b c d ____

100 a b c d ____

(***** END OF EXAMINATION *****)

1. **[Read Verbatim]** Cheating on any part of the examination will result in a denial of your application and/or action against your license.
2. **[Read Verbatim]** After you complete the examination, sign the statement on the cover sheet indicating that the work is your own and you have not received or given assistance in completing the examination.
3. To pass the examination, you must achieve a grade of 80.00 percent or greater; grades will not be rounded up to achieve a passing score. Every question is worth one point.
4. For an initial examination, the time limit for completing the examination is five hours.
5. You may bring pens, pencils, and calculators into the examination room. Use black ink to ensure legible copies; dark pencil should be used only if necessary to facilitate machine grading.
6. Print your name in the blank provided on the examination cover sheet and the answer sheet. You may be asked to provide the examiner with some form of positive identification.
7. Mark your answers on the answer sheet provided and do not leave any question blank. If you are using ink and decide to change your original answer, draw a single line through the error, enter the desired answer, and initial the change.
8. If you have any questions concerning the intent or the initial conditions of a question, do *not* hesitate asking them before answering the question. Ask questions of the NRC examiner or the designated facility instructor *only*. When answering a question, do *not* make assumptions regarding conditions that are not specified in the question unless they occur as a consequence of other conditions that are stated in the question. For example, you should not assume that any alarm has activated unless the question so states or the alarm is expected to activate as a result of the conditions that are stated in the question.
9. Restroom trips are permitted, but only one applicant at a time will be allowed to leave. Avoid all contact with anyone outside the examination room to eliminate even the appearance or possibility of cheating.
10. When you complete the examination, assemble a package including the examination questions, examination aids, answer sheets, and scrap paper and give it to the NRC examiner or proctor. Remember to sign the statement on the examination cover sheet indicating that the work is your own and that you have neither given nor received assistance in completing the examination.
10. After you have turned in your examination, leave the examination area as defined by the proctor or NRC examiner. If you are found in this area while the examination is still in progress, your license may be denied.
11. Do you have any questions?

QUESTION: 001 (1.00)

Unit 2 is shutdown with the current conditions:

- 'A' RR pump running.
- All 'B' RR pump breakers are open.
- The total of 'A' loop indicated jet pump flows is 23 Mlb/hr.
- The total of 'B' loop indicated jet pump flows is 1.2 Mlb/hr.

Which of the following values should the total core flow recorder on 2H13-P603 indicate?

- a. 24.2 Mlb/hr
- b. 23.0 Mlb/hr
- c. 21.8 Mlb/hr
- d. 12.1 Mlb/hr

QUESTION: 002 (1.00)

Which of the following nuclear boiler instrumentation indication becomes SIGNIFICANTLY MORE accurate as forced core flow circulation is reduced?

- a. Narrow Range Reactor Water Level
- b. Fuel Zone Reactor Water Level
- c. Total Core Flow
- d. Individual Jet Pump Flow

QUESTION: 003 (1.00)

Unit 1 is at rated power with a normal electrical lineup. If Bus 141Y voltage drops to 65% of its normal voltage . . .

- a. the SAT feed to 141Y will trip and the UAT feed will automatically close to restore voltage to all loads on the bus.
- b. the UAT feed to 141Y will trip and the SAT feed will automatically close to restore voltage to all loads on the bus.
- c. the SAT feed to 141Y will trip and the 0 DG will start and pick up the bus to restore voltage to essential equipment.
- d. the UAT feed to 141Y will trip and the 0 DG will start and pick up the bus to restore voltage to essential equipment.

QUESTION: 004 (1.00)

A loss of all Unit 1 125 DC battery chargers has occurred. ASSUME equal loads of 25 amps are being supplied by each divisional battery. Which of the following lists the expected relationship between the Unit 1 batteries' voltages?

- a. Div 1 and Div 2 battery voltages approximately equal and greater than Div 3 battery voltage because of the smaller capacity of the Div 3 battery.
- b. Div 2 and Div 3 battery voltages approximately equal and greater than Div 1 battery voltage because of the smaller capacity of the Div 1 battery.
- c. Div 1 and Div 3 battery voltages approximately equal and greater than Div 2 battery voltage because of the smaller capacity of the Div 2 battery.
- d. All battery voltages approximately equal because the capacity of the batteries are very close.

QUESTION: 005 (1.00)

Unit 2 is starting up. The turbine load is at 35% of rated capacity. A short in the bypass jack causes the turbine bypass valves to sequentially open until all five bypass valves are open. The turbine control valves throttle as designed reducing first stage pressure to 75 psig. Which of the following describes the INITIAL plant response if a manual turbine trip were initiated at this time?

- a. RPS will initiate a scram due to the turbine stop valves closing.
- b. RPS will initiate a scram due to a collapse of the core voids.
- c. PCIS will initiate an isolation due to elevated steam line flow.
- d. PCIS will initiate an isolation due to reduced steam line pressure.

QUESTION: 006 (1.00)

The plant is operating at 100% power, when a spurious signal causes a scram signal on RPS channel 'A' ONLY. Which of the following responses correctly completes the following:

The 'A' scram pilot solenoid valves (117's) are:

The 'B' scram pilot solenoid valves (118's) are:

- | | |
|-----------------|--------------|
| a. Energized | Energized |
| b. Energized | DE-energized |
| c. DE-energized | Energized |
| d. DE-energized | DE-energized |

QUESTION: 007 (1.00)

Unit 1 initial conditions are as follows:

- Rx power: 28 %
- T-G Load: 365 MWe
- Load Set 390 MWe
- Bypass position: 0 %

The operator withdraws a control rod which increases Rx power to 29 %. Which of the following describe the expected response of the Turbine EHC Control System?

- a. The Bypass Valves will open by whatever amount is required to maintain RX pressure.
- b. The Turbine Control Valves will open by whatever amount is required to maintain RX pressure.
- c. The Turbine Stop Valves will open by whatever amount is required to maintain RX pressure.
- d. The Turbine Intercept Valves will open by whatever amount is required to maintain RX pressure.

QUESTION: 008 (1.00)

Unit 1 reactor is operating at 100% power with the following conditions:

- The turbine throttle pressure signal to the selected EHC pressure regulator fails low (sends 0 psig signal).
- All other equipment functions as designed.
- No operator actions are taken

Which of the following describes the reactor power/pressure response?

- a. Increases until scram conditions met.
- b. Increases and stabilizes at slightly higher value.
- c. Decreases until isolation conditions met.
- d. Decreases and stabilizes at slightly lower value.

QUESTION: 009 (1.00)

Unit 2 is in Condition 4.

- Reactor water level is being controlled between 70 and 90 inches.
- A plant operator discovered a leak on reactor water cleanup suction line.
- The leak was stopped by closing the RWCU inboard and outboard isolation valves (2G33-F001 and 2G33-F004).
- Reactor water level is increasing due to CRD cooling flow.
- A RHR is running in the shutdown cooling mode.

Which of the following flow paths could be utilized to drain the vessel to MAINTAIN the desired reactor water level?

- a. Main Steam Line drains (2B21-F016 and 2B21-F019) to the main condenser.
- b. Reverse flow from the RT return header to the main condenser via the RWCU blowdown valve (2G33-F033).
- c. A RHR Vent Downstream/ Upstream Valves (2E12-F073A and 2E12- F074A) to the suppression pool.
- d. Safety Relief Valves (2B21-F013H/K/P) to the suppression pool.

QUESTION: 010 (1.00)

Which of the following interlocks is designed to reduce reactor power in response to a trip of an operating feedwater pump from 100% power?

- a. Low RR Pump NPSH Runback
- b. Low Feed Flow Downshift
- c. Loss of Feed Flow Runback
- d. Low Reactor Water Level Downshift

QUESTION: 011 (1.00)

Unit 1 is at rated conditions. Nitrogen makeup is aligned to the drywell with the pressure controller in automatic set for +0.2 psig. The controller fails such that the regulating valve slowly opens fully. With NO operator action, which of the following will be the first to terminate the nitrogen flow to the drywell?

- a. High nitrogen flow isolation of the makeup regulating valve.
- b. Low temperature outlet isolation of the makeup regulating valve.
- c. High drywell pressure isolation of the nitrogen makeup flowpath.
- d. Excess flow check valve closure in the nitrogen makeup flowpath.

QUESTION: 012 (1.00)

Following a loss of primary containment cooling, the crew is preparing to perform non-emergency containment venting to control drywell pressure. While venting the drywell in this condition, the operator is directed to monitor the Standby Gas Treatment or Stack WRGM to . . .

- a. maintain sufficient dilution flow.
- b. stay below the toxic gas release limits.
- c. maintain sufficient stack flow.
- d. stay below radiation release limits.

QUESTION: 013 (1.00)

Unit 1 was operating at 100% power when the 16A High Pressure Heater Normal Drain Valve failed closed. In responding to this failure, the operators were directed to refer to LOA-RR-101, as well as several other procedures. Assume proper operator actions and no additional equipment problems. The guidance in LOA-RR-101 likely applied to this event when the change in Heater Drain flow led to. . .

- a. a reduction in reactor recirc flow because of RPV level fluctuations.
- b. a reduction in reactor recirc flow because of feedwater flow fluctuations.
- c. entry into core instability region because of increased flow control line.
- d. entry into core instability region because of recirc pump cavitation.

QUESTION: 014 (1.00)

During an ATWS, the Emergency Operating Procedures direct the operator NOT to depressurize until the reactor is shutdown without boron injection or the cold shutdown weight of boron has been injected. The reason for this requirement is. . .

- a. Positive reactivity will be added due to the water in the reactor being cooler and more dense.
- b. Core flow may become restricted due to the cooler water causing the boron to come out of solution and deposit on core surfaces.
- c. Higher reactor pressure helps mixing of the boron due to the higher steaming rates and minimizes the time to complete the shutdown.
- d. Lowering reactor pressure would cause the water in the reactor to "swell", thus lowering the boiling boundary and increase the chance to damage fuel.

QUESTION: 015 (1.00)

During performance of LGA-NB-01, Alternate Rod Insert, Single Rod Insertion, the operator is directed to place the MODE SELECT switch in BYP for the Rod Worth Minimizer. The above action bypasses . . .

- a. Nuclear Instrumentation rod blocks to allow all rod motion.
- b. Rod insert blocks to allow inward rod motion.
- c. The settle function to speed the rate of rod insertion.
- d. The single notch function to speed the rate of rod insertion.

QUESTION: 016 (1.00)

A severe fire with thick smoke forced an immediate evacuation of the control room. The reactor was not scrammed prior to exiting. Which of the following is the PREFERRED method of scramming the reactor from outside of the control room?

- a. Open and reclose the IRM supply breakers at the DC distribution panels.
- b. Open and reclose the RPS output breakers at the RPS distribution panel.
- c. Activate the ARI system in the Auxiliary Equipment Room.
- d. Vent the scram air header in the Reactor Building.

QUESTION: 017 (1.00)

A failure of the RHR heat exchanger has resulted in an offsite release above the alarm setpoint. With NO operator action, the SPDS RADIATION RELEASE box letters will . . .

- a. change from green to red.
- b. change from green to yellow.
- c. change from cyan to red.
- d. change from cyan to yellow.

QUESTION: 018 (1.00)

Unit 1 has been operating with a known leaking fuel assembly. An increase in the assembly leakage rate results in an Off Gas System automatic isolation. Which of the following describes the purpose of the isolation and the initial plant response without operator action?

- a. Prevent explosions due to ignitable concentrations of hydrogen; main generator output will decrease.
- b. Prevent explosions due to ignitable concentrations of hydrogen; main generator output will increase.
- c. Prevent radiation release to the environs in excess of short-term limits; main generator output will decrease.
- d. Prevent radiation release to the environs in excess of short-term limits; main generator output will increase.

QUESTION: 019 (1.00)

Unit 1 is at 80% power. A Group II isolation was caused by an invalid signal. The Unit Supervisor directs a 10% power reduction to reduce the containment heat load. Which of the following describes the method(s), if any, AVAILABLE to the Unit NSO to reduce reactor power by only 10%?

- a. Control rod insertion only.
- b. Flow control valve closure only.
- c. Both flow control valve closure and control rod insertion.
- d. Neither method is available.

QUESTION: 020 (1.00)

Unit 2 was at 100% power. Group 1 AND Group 10 isolations were caused by an instrument failure. The failure requires extended operation while aligned to the backup instrument air supply. The operators should monitor . . .

- a. Drywell pressure because instrument air is less dense than nitrogen and drywell pressure may go negative.
- b. Drywell oxygen concentration because use of drywell pneumatics or leaks in drywell pneumatic piping could raise oxygen levels.
- c. IN Receiver pressure because low receiver pressure would be a predictor of inboard MSIV closure.
- d. Bottle bank pressures because the bottles may depressurize due to leaks in 100 psig header piping.

QUESTION: 021 (1.00)

Unit 2 is in Condition 4 with the following conditions:

- Reactor water level is 40 inches on the Narrow Range.
- Reactor Recirculation pumps are off.
- A loss of shutdown cooling has occurred due to an erroneous signal.

The Unit Supervisor should direct the NSO to raise reactor water level to +75 inches on the Shutdown Range to . . .

- a. Utilize the most accurate level indication to assist in trouble shooting.
- b. Lower the bulk temperature of the vessel to prevent inadvertent mode change.
- c. Limit temperature stratification by inducing natural circulation.
- d. Provide additional inventory in anticipation of steam production.

QUESTION: 022 (1.00)

During Unit-2 core reload, a fuel bundle was inadvertently dropped while attempting to place it in the core. Bubbles were observed rising from the area of the dropped bundle. Alarms were received for:

- Div I and II Fuel Pool Ventilation Radiation (PRM reading 23 mr/hr)
- Refuel Floor Area High Radiation (ARM reading 1200 mr/hr)
- Reactor Building Overhead Crane Area Radiation Monitor (reading 250 mr/hr)

The operators should verify the . . .

- a. Control Room Ventilation System automatically shifts to "purge" and VC/VE Emergency Makeup train starts.
- b. Reactor Building Overhead Crane down motion stopped and automatically moves to South end of the refuel floor.
- c. Fuel grapple automatically retracts to the "full up" position and Refuel Bridge moves to South end of refuel floor.
- d. Reactor Building Ventilation System isolates and Standby Gas Treatment System auto starts.

QUESTION: 023 (1.00)

Unit One is in Condition 3 with the following conditions:

- Reactor water level is 68".
- Reactor pressure is 645 psig and increasing very slowly.

A rupture in the drywell has depressurized all low pressure IN piping and accumulators. The operator should control reactor pressure by . . .

- a. Cycling SRVs using the hand switches on 1H13-P601.
- b. Cycling Main Steam Line drain valves on 1H13-P601.
- c. Controlling Main Turbine Bypass Valves using the bypass jack.
- d. Placing Reactor Core Isolation Cooling in pressure control mode.

QUESTION: 024 (1.00)

Which of the following conditions could be expected to cause RHR system damage?

Provide LGA Fig V

	Suppression Chamber Pressure (psig)	Suppression Pool Temperature (°F)
a.	0	195
b.	5	210
c.	10	230
d.	15	240

QUESTION: 025 (1.00)

Unit 1 has just scrammed due to a large LOCA. Drywell Temperature has risen to 350°F. What are the concerns, if any?

- a. Core flow instrumentation is no longer reliable.
- b. Drywell temperature instrumentation is no longer reliable.
- c. The MSIVs may not function.
- d. The SRVs may not function.

QUESTION: 026 (1.00)

With Unit 2 operating at 100% power, an unisolable break at an ECCS pump suppression pool suction penetration caused suppression pool level to drop rapidly. Under these conditions, the actions directed by the Emergency Operating Procedures would primarily address which of the following issues?

- a. The loss of ECCS pump suction inventory which could threaten the ability to maintain adequate Rx core cooling.
- b. The flooding of the secondary containment spaces which could fail needed safety related equipment.
- c. The loss of steam condensation capability which could challenge the primary containment pressure limit.
- d. The decrease in radioactive gas condensation and scrubbing which could result in elevated radiation releases.

QUESTION: 027 (1.00)

Unit 2 was at rated conditions. The operators noted Main Steam Line Tunnel temperature had increased to 165 F. The crew:

- Scrammed the reactor
- Closed all MSIVs and MSL drains.
- Closed the Feedwater Line Outboard Isolation Valves
- Started RCIC in level control mode.

The STA reports that tunnel temperature is NOT decreasing. The Radwaste operator reports that the Aux. Bldg Floor Drain Sump ODA01 is pumping down continuously. Which of the following actions should be taken?

- a. Cooldown at greater than 100 F/hr to reduce pressure boundary leakage.
- b. Reset the reactor scram to stop potential leakage into the Steam Tunnel.
- c. Shutdown and isolate RCIC to stop potential leakage into the Steam Tunnel.
- d. Shutdown and isolate RWCU to stop potential leakage into the Steam Tunnel.

QUESTION: 028 (1.00)

Why do radiation levels in the Secondary Containment in excess of Maximum Normal Radiation Levels require a GSEP Unusual Event be declared? The radiation level would. . .

- a. be indicative of a primary system leaking.
- b. be indicative of a secondary system leaking.
- c. impede plant operations.
- d. impede system operation.

QUESTION: 029 (1.00)

Unit 1 is starting up with the following conditions:

- Drywell inerting is in progress.
- Drywell pressure is 0.3 psig.

The 'DIV 2 RB VENT RAD HI-HI' alarm energizes due to both Division 2 Reactor Building Ventilation Radiation trip units reaching their trip setpoint. What would the automatic response of Primary Containment Vent and Purge Valves be, if any? (Consider ONLY the actions associated with this alarm.)

- a. Neither the Inboard nor the Outboard Isolation Valves close.
- b. Inboard Isolation Valves close.
- c. Outboard Isolation Valves close.
- d. Inboard and Outboard Isolation Valves close.

QUESTION: 030 (1.00)

Given a constant input of contaminated water to the Unit 1 RB Northeast Floor Drain Sump (1RE07) AND a failure of both associated sump pumps, contamination/radiation levels in the room will

- a. increase because the sump will eventually overflow to the room floor.
- b. increase because the sump will eventually overflow to the RBEDT which has minimal shielding.
- c. not be affected because the sump will overflow to the RB raceway sumps before top of 1RE07 sump is reached.
- d. not be affected because the sump is sealed and excess input will backup to the source.

QUESTION: 031 (1.00)

Unit 2 is experiencing an ATWS.

- RMCS has tripped.
- Actions were taken to rescrum the reactor.

Which of the following can be utilized to determine if ALL control rods were inserted?

- a. Full Core Display AND Rod Worth Minimizer CRT
- b. Four-Rod Display AND Full Core Display
- c. Rod Sequence Control Display AND Rod Worth Minimizer CRT
- d. Rod Sequence Control Display AND Four-Rod Display

QUESTION: 032 (1.00)

The Shift Manager is filling out a NARS due to a High Off-site Release from the Unit 2 Reactor Building and has requested you to determine wind speed and wind direction. Which of the following describes the control room panel(s) where the information must be obtained?

- a. 1PM10J for both parameters.
- b. 2PM10J for both parameters.
- c. 1PM10J or 2PM10J for both parameters.
- d. 1PM10J for Wind Direction and 2PM10J for Wind Speed.

QUESTION: 033 (1.00)

A transient has occurred causing Unit 2 reactor fuel failure.

- The crew closed the MSIVs and MSL drains due to elevated steam line radiation ten minutes ago.
- Groups II, IV, VII, and X isolations initiated and were verified to be complete ten minutes ago.
- The STA reports that the SBT WRGM value has increased in the last ten minutes to $7E6 \mu\text{Ci/sec}$.

The most likely source of the increasing release rate is leakage FROM the . . .

- a. Reactor Coolant Pressure Boundary TO the Primary Containment.
- b. Primary Containment TO the Secondary Containment.
- c. Reactor Coolant Pressure Boundary TO Primary Containment Cooling System.
- d. Secondary Containment TO the Auxiliary Building.

QUESTION: 034 (1.00)

The procedure for Operation of the Post-LOCA Combustible Gas Control System provides a precaution that "during a LOCA Environment, flows may be increased up to 200 scfm." Which of the following is the reason for this restriction on system flow?

- a. Higher flow rates may result in excessive reaction chamber shell temperatures and an automatic shutdown of the HG System.
- b. The electric heaters are sized to produce the temperatures necessary for recombination only at flow rates of 200 scfm or less.
- c. Higher flow rates entrains moisture droplets in the gas steam, reducing the amount of hydrogen recombination that occurs.
- d. The residence time of the gases in the reaction chamber may not be sufficient to provide proper recombination of the hydrogen.

QUESTION: 035 (1.00)

Which of the following identifies the individual(s) and location to which they should be dispatched in response to a Unit 1 Red NON-CO2 fire panel alarm?

- | | Individual(s) | Location |
|----|---------------|----------------------------|
| a. | fire brigade | affected area |
| b. | operator | Turbine Building Fire Cage |
| c. | operator | affected area |
| d. | fire brigade | Turbine Building Fire Cage |

QUESTION: 036 (1.00)

Which of the following Unit 2 fire alarms would indicate that a Halon system had an initiation signal present?

- a. H2 Seal Oil Unit Deluge Trouble
- b. MPT 2E Deluge Trouble
- c. QA Archives Room Deluge Trouble
- d. Turb Brg Area Deluge Trouble

QUESTION: 037 (1.00)

Following a reactor scram, the pressure equalization valves associated with the CRD Hydraulic system function to . . .

- a. repressurize the scram discharge volume to minimize introduction of air and foreign materials into the system.
- b. equalize pressure between the scram supply header and the cooling water header to ensure cooling flow is not lost during a scram.
- c. equalize pressure between the drive water header and scram discharge volume to prevent inadvertent rod movement.
- d. repressurize the CRD HCU exhaust header to prevent excessively high control rod velocity during subsequent normal rod movement.

QUESTION: 038 (1.00)

Given that a Backup Subloop is available, which of the following conditions will cause the reactor recirc hydraulic system to be shutdown with the FCV hydraulically locked in position?

- a. Loss of Control Signal to the Servo Controller
- b. Loss of pump outlet pressure
- c. Loss of DC power
- d. Low Low Reservoir Level

QUESTION: 039 (1.00)

Unit 2 is at rated conditions when an electrician inadvertently disconnects the 2A TDRFP discharge valve open limit switch causing alarm 2H13-P603-A410, 2A/2B TDRFP NOT READY, to annunciate in the control room. Which of the following describes the response of the RR FCVs to this event?

- a. ONLY the 'A' RR FCV will run back to minimum position.
- b. ONLY the 'B' RR FCV will run back to minimum position.
- c. Both 'A' and 'B' RR FCVs will run back to minimum position.
- d. Both 'A' and 'B' RR FCVs will remain at their present position.

QUESTION: 040 (1.00)

Immediately following exercising of a 1A RHR system valve for post maintenance testing, a low pressure alarm was received for the 1A RHR system. With respect to the 1A RHR system, which of the following actions is appropriate?

- a. The crew should wait until the water leg pump restores system pressure and should make an entry in the unit log that the alarm was received and subsequently cleared.
- b. The crew should verify the water leg pump restores system pressure and should send an operator to check the high point vent to verify piping filled and vented.
- c. The crew should verify the 1A RHR pump is still operable by running it per the applicable portions of the quarterly surveillance.
- d. The crew should lineup the CY fill system to the 1A RHR injection line piping and keep the system in this configuration until the water leg pump can be repaired.

QUESTION: 041 (1.00)

Unit 1 experienced a LOCA including the following:

- Drywell pressure reached 5 psig.
- The operator opened 1E12-F027B, B RHR SP Spray Isol.
- The operator throttled 1E12-F024B, B RHR Test to SP Vlv until flow indicated 6000 gpm.
- Several minutes later Annunciator 1H13-P601- B405, DIV 2 RHR INJ VLV LO RX PRESS PERMISSIVE is received.

Which of the following statements describes the response of the RHR valves following receipt of the alarm?

- | | 1E12-F024B
B RHR Test to SP Vlv | 1E12-F027B
B RHR SP Spray Isol |
|----|------------------------------------|-----------------------------------|
| a. | Closes | Closes |
| b. | Remains Open | Closes |
| c. | Closes | Remains Open |
| d. | Remains Open | Remains Open |

QUESTION: 042 (1.00)

Regarding the Reactor Water Cleanup system, what automatic actions take place when reactor water level drops to 60 inches?

- a. Two suction line valves close
- b. Two discharge line valves close
- c. Two suction line AND two discharge line valves close
- d. One suction line AND one discharge line valve close

QUESTION: 043 (1.00)

135Y-2 has tripped. Which of the following valves are affected?

- a. 'C' RHR Minimum Flow Valve
- b. HPCS Injection Valve
- c. LPCS Injection Valve
- d. RCIC Minimum Flow Valve

QUESTION: 044 (1.00)

Unit 1 was operating at 100% reactor power when a LOCA occurred resulting in the following:

- The reactor has scrambled
- RPV pressure is 480 psig
- RPV level is 140 inches
- HPCS and RCIC are injecting to the RPV

Based on these conditions, the LPCS pump is _____ (1) _____ and the LPCS injection line check valve is _____ (2) _____.

- a. (1) not running (2) closed
- b. (1) not running (2) open
- c. (1) running (2) closed
- d. (1) running (2) open

QUESTION: 045 (1.00)

Unit 2 has scrambled due to a LOCA. HPCS initiated on Level 2 and re-filled the RPV to a level above Level 8. Level subsequently decreased to -25 inches and is stable. Which of the following describes the action(s) the operator must take to re-establish HPCS flow to the RPV?

- a. Arm and depress the HPCS System Manual Initiation Pushbutton.
- b. Shutdown the HPCS Pump, then restart it and open the injection valve.
- c. Depress the HPCS High Water Level Reset pushbutton, then open the Injection Valve.
- d. Take the Injection Valve to close to break the seal in, then take the switch to open.

QUESTION: 046 (1.00)

Unit 2 is shutdown with the following conditions:

- SBLC has been initiated.

Which of the following describes how SBLC will respond to a loss of Instrument Air?

- a. Remote tank level indication would be lost.
- b. Remote flow indication would be lost.
- c. The pulsation dampers would fail open.
- d. The tank heaters would fail to energize.

QUESTION: 047 (1.00)

A manufacturing defect caused a flow path between the outer tube of the SBLC injection line and the bottom head area.
Provide Figure 28-08 w/o labels.

Which of the following describes the consequences of this failure?

- a. RWCU Bottom Head Drain Flow indication would be inaccurate.
- b. CRD Drive Water flow indication would fail downscale.
- c. SBLC solution will not inject into the proper vessel area.
- d. HPCS Line Break detection would be unavailable.

QUESTION: 048 (1.00)

Unit 2 is operating at 35% reactor power with the following conditions:

- MSV-1 slowly drifted close.
- CV-1 RETS pressure is 0 psig.
- All others valves remain in their normal position.

Which one of the following describes the effect of these conditions on the RPS logic?

- a. Neither a ½ scram, nor a full scram will be received.
- b. A ½ scram on 'A' RPS channel is received.
- c. A ½ scram on 'B' RPS channel is received.
- d. A full scram is received.

QUESTION: 049 (1.00)

Unit 2 is starting up. Which of the following would occur if the 'A' IRM were to fail upscale? RPS will generate. . .

- a. a half scram due to the shorting links being installed.
- b. a full scram due to the shorting links being installed.
- c. a half scram due to the shorting links being removed.
- d. a full scram due to the shorting links being removed.

QUESTION: 050 (1.00)

Unit 2 is at rated conditions. A control rod is at its withdraw limit at position 46. The control rod has a complete failure of its collet fingers. Which of the following will FIRST indicate the condition to the operators?

- a. The CRD OVERTRAVEL alarm will annunciate.
- b. The ROD OUT BLOCK alarm will annunciate.
- c. The associated ROD DRIFT light will illuminate.
- d. The associated FULL-OUT light will illuminate.

QUESTION: 051 (1.00)

Which of the following identifies the APRM channel and its power supply that can provide a reference power input to the 'A' RBM?

	APRM Channel	Power Supply
a.	A	A RPS
b.	E	A RPS
c.	A	111Y
d.	E	111Y

QUESTION: 052 (1.00)

What is the power supply to the A and B channels of the Rod Block Monitoring (RBM) system?

- a. Channel A from RPS Bus A and Channel B from RPS Bus B.
- b. Channel A from RPS Bus B and Channel B from RPS Bus A.
- c. Channel A from Bus 111Y and Channel B from Bus 112Y.
- d. Channel A from Bus 112Y and Channel B from Bus 111Y.

QUESTION: 053 (1.00)

Unit 1 is starting up with the following conditions:

- The Reactor Operator has just stopped withdrawing control rods and determined that the reactor is critical.
- The 'A' IRM / 'C' IRM RECORDER is accidentally de-energized.

Which of the following describes how the 'A' and 'C' IRM alarms and trips are affected by this failure and the actions, if any, which are required? The 'A' and 'C' IRM alarms and trips are . . .

- a. Functional; The startup can continue without further action.
- b. Non-functional; A manual scram must be inserted.
- c. Functional; Stop power changes until cause determined.
- d. Non-functional; A half scram must be inserted.

QUESTION: 054 (1.00)

Unit 1 is in Operational Condition 3. An explosion occurs in the 1A 24/48 VDC battery that results in a loss of power to the distribution panel. Which of the following Technical Specifications LCOs is affected?

- a. 3.3.1 Reactor Protection System Instrumentation
- b. 3.3.5 Reactor Core Isolation Cooling System Actuation Instrumentation
- c. 3.8.2.3 D.C. Distribution (Operating)
- d. 3.8.2.4 D.C. Distribution (Shutdown)

QUESTION: 055 (1.00)

During a reactor startup, the NSO can more closely monitor the SRMs by. . .

- a. changing the recorder speed.
- b. changing the indicated range.
- c. adjusting the discriminator voltage.
- d. selecting the process computer screen.

QUESTION: 056 (1.00)

Unit 2 is shutting down. An NSO is driving a control rod from 48 to 00. The NSO should expect the B LPRM meters to noticeably decrease as the rod passes through positions _____.

- a. 08 to 04
- b. 16 to 20
- c. 32 to 28
- d. 44 to 40

QUESTION: 057 (1.00)

Unit 2 is at 100% power with the following conditions:

- **B** Narrow Range is selected for RWLC.
- Power is lost to the 'C' Narrow Range.

Reactor water level will

- a. increase until two narrow range instruments reach Level 8.
- b. decrease until restored by HPCS and RCIC.
- c. remain stable and part of the Level 8 logic will be made up.
- d. remain stable and part of the Level 8 logic will NOT function.

QUESTION: 058 (1.00)

Unit 1 is scrammed with the following conditions:

- Feedwater flow has been lost.
- Drywell pressure is 2.5 psig.
- Reactor water level is stable.
- Wide Range Level instruments are indicating 120 inches.
- Fuel Zone Level instruments are indicating 194 inches.
- Reactor pressure is 510 psig and decreasing at 220 psig/hr.
- 'A' and 'B' RHR are aligned for containment cooling.

When possible, 'A' and 'B' RHR should be . . .

- a. aligned for LPCI injection because adequate core cooling is NOT assured.
- b. aligned for LPCI injection because initiation conditions have been met.
- c. left in containment cooling because adequate core cooling is assured.
- d. left in containment cooling because initiation conditions have NOT been met.

QUESTION: 059 (1.00)

When the ADS system 9 minute timer times out, automatic initiation of ADS can occur without the...

- a. Level 1 low water level signal.
- b. ECCS pressure permissive.
- c. high drywell pressure signal.
- d. confirmatory low water level permissive.

QUESTION: 060 (1.00)

Unit 2 has suffered a major accident with the following conditions:

- Containment pressure is 12 psig.
- HG system is in operation.
- Instrument air pressure in the reactor building has been lost.
- The STA reports that pressure spiked to 16 psig in the containment and then returned to 12 psig.
- Reactor building area radiation monitor values are now increasing.

Which of the following describes the probable cause for the increasing area radiation monitor values? The pressure spike caused the . . .

- a. BP 70 blowout panel to rupture.
- b. Hydrogen recombiner loop seal to be lost.
- c. Primary Containment Vent and Purge ductwork to rupture.
- d. Suppression Chamber manway seal to be lost.

QUESTION: 061 (1.00)

Unit 2 is in STARTUP with the following conditions:

- Reactor pressure is 150 psig.
- RWCU blowdown is open 25% to maintain level during the heatup.

An RBCCW valve failure causes a loss of RBCCW flow to the non regenerative heat exchanger. Which one of the following describes the resultant response of the valves listed?

	RWCU Inboard Isolation Valve 2G33-F001	RWCU Outboard Isolation Valve 2G33-F004	RWCU Blowdown Header Control Valve 2G33-F033
a.	Remains Open	Remains Open	Closes
b.	Remains Open	Closes	Remains Open
c.	Closes	Remains Open	Closes
d.	Closes	Closes	Remains Open

QUESTION: 062 (1.00)

Unit 2 has experienced a LOCA with the following conditions:

- Reactor pressure is 175 psig.
- The condenser hotwell is empty.
- HPCS is OOS.
- RCIC and 'C' RHR are maintaining reactor water level at 36 inches.
- 'A' RHR is supplying Drywell and Suppression Chamber sprays.
- 'B' RHR is in Suppression Pool cooling.

Which of the following describe the primary concern if 241Y were lost?

- a. Reactor water level due to insufficient makeup.
- b. Suppression chamber pressure due to a bypass path.
- c. Drywell pressure due to the inability to re-establish drywell spray.
- d. Reactor pressure due to the loss of steam loads.

QUESTION: 063 (1.00)

Unit 1 is scrammed due to a LOCA with the following conditions:

- Containment pressure 5 psig
- Reactor pressure 250 psig
- '1A' RHR is aligned for Suppression Chamber Spray and Suppression Pool Cooling
- A grid transient causes a loss of off-site power.

How will the RHR Test To Suppression Pool valve and the Suppression Chamber Spray Isolation valve respond if 141Y is re-energized?

	RHR Test To Suppression Chamber Spray Valve 1E12-F024A	Suppression Pool Isolation Valve 1E12-F027A
a.	Closes	Closes
b.	Remains Open	Closes
c.	Closes	Remains Open
d.	Remains Open	Remains Open

QUESTION: 064 (1.00)

RHR loop A has automatically initiated in the LPCI mode on a high drywell pressure condition. It is injecting to the core through 1E12-F042A (RHR loop A injection valve). Which one of the following describes the response when the 1E12-F027A control switch is placed in the OPEN position?

- | | A RHR
Suppression Chamber Spray
Isolation Valve
1E12-F027A | A RHR
Injection
Valve
1E12-F042A |
|----|---|---|
| a. | OPENS | Remains OPEN |
| b. | Remains CLOSED | Remains OPEN |
| c. | OPENS when
1E12-F042A gets full CLOSED | CLOSES |
| d. | OPENS | CLOSES when 1E12-F027A gets full OPEN |

QUESTION: 065 (1.00)

Which of the following describes the expected change in skimmer surge tank level if the first fuel pool cooling pump is started with the discharge valve full open AND the wier gate set at its highest position? Skimmer surge tank level . . .

- a. increases until the tank overflows.
- b. increases and then returns to the level that existed prior to starting the pump.
- c. decreases and then increases to the level that existed prior to starting the pump.
- d. decreases until the pump trips on low suction pressure.

QUESTION: 066 (1.00)

With the plant operating at power what effect, if any, would depressing the B Manual Isolation pushbutton, located on 1(2)H13P601, have on PCIS Group 1 valves?

- a. Inboard MSIVs Close
- b. Outboard MSIVs Close
- c. One MSL Drain Valve Closes
- d. No Valves reposition as only half the logic is tripped.

QUESTION: 067 (1.00)

Unit 2 is shutdown with the following conditions:

- Reactor pressure 1000 psig
- MSIVs are closed.
- MDRFP is in single element control.
- Reactor water level is approximately 45" on the Narrow Range.

Which of the following describes the expected response if an SRV were opened? Reactor water level will . . .

- a. increase causing a trip of the MDRFP.
- b. increase slightly and then return to near the original level.
- c. decrease slightly and then return to near the original level.
- d. decrease causing a Reactor scram.

QUESTION: 068 (1.00)

Unit 2 is in Run with the following conditions:

- Reactor power - 30%
- LOAD SELECT - 40%

If reactor power were increased by 20%, which of the following would occur?

	Turbine Control Valves	Turbine Bypass Valves
a.	Would open further	Remain closed
b.	Would open further	Would open
c.	Remain at their present position	Remain closed
d.	Remain at their present position	Would open

QUESTION: 069 (1.00)

Which of the following identifies the expected positions of the turbine control valves (TCVs), intermediate control valves (ICVs), and extraction steam dump valves (ESDV) following a turbine trip?

	TCVs	ICVs	ESDVs
a.	Closed	Closed	Closed
b.	Closed	Closed	Open
c.	Closed	Open	Closed
d.	Open	Closed	Closed

QUESTION: 070 (1.00)

Unit 2 is at 20% Reactor Power conducting a normal Unit Startup.

- The MDRFP is not running.
- One Turbine Driven Reactor Feedwater Pump (TDRFP) is in automatic controlling reactor water level.
- The main turbine is on the line with all of the turbine bypass valves closed.
- The main turbine unexpectedly trips.

The TDRFP High Pressure control valve will

- a. CLOSE due to the increasing reactor pressure.
- b. OPEN due to the loss of low pressure steam supply.
- c. OPEN due to the increased steam flow through the bypass valves.
- d. CLOSE due to the decreased low pressure steam flow without the main turbine running.

QUESTION: 071 (1.00)

Unit 1 is at rated conditions. The high high level switch for the 11C heater fails in the tripped condition. In fifteen seconds the running feed pump will be MUCH lower.

- a. differential pressure
- b. speed
- c. suction pressure
- d. suction temperature

QUESTION: 072 (1.00)

Unit 2 is at 100% power with the following conditions:

- Both TDRFPs in 3 element control
- Level setpoint at 36 inches.

If the selected level input channel slowly fails downscale, the RPV water level will . . .

- a. decrease, and the reactor will scram on low water level.
- b. increase, the Main Turbine will trip, and the reactor will scram due to the turbine trip.
- c. increase until feedflow/steamflow error signal compensates for the reactor water level error.
- d. decrease and reactor water level will be maintained above the scram setpoint due to the combined effects of Recirculation Pump downshift, setpoint setdown and dynamic compensator.

QUESTION: 073 (1.00)

A trainee is synchronizing the '0' DG to bus 141Y. While synchronizing the generator the following indications are present:

- The incoming voltage is slightly HIGHER than the running voltage.
- The synchroscope is rotating slowly (45 seconds beat) in the FAST (clockwise) direction.

The trainee turns the '0' DG output breaker to the close position when the synchroscope is at the 3 o'clock position. Which of the following describe the expected breaker response? The '0' DG output breaker will . . .

- a. close and then trip due to overspeed as the DG shifts pole alignment.
- b. close and then trip due to overcurrent as the DG shifts pole alignment.
- c. remain open due to the sync-check relay sensing excessive phase differential.
- d. remain open due to the sync-check relay sensing excessive voltage differential.

QUESTION: 074 (1.00)

The station is experiencing a station blackout. Which of the following is energizing the U-1 process computer?

- a. 111Y
- b. 211Y
- c. 121Y
- d. 221Y

QUESTION: 075 (1.00)

Unit 1 is at rated conditions. A fire in the TSC UPS caused it to de-energize. Which of the following describe the effect this will have on TDRFP operation? The TDRFP's . . .

- a. flow instrumentation will fail low resulting in a level transient.
- b. remote trip will not function requiring a local manual trip.
- c. vibration instrumentation will de-energize tripping the TDRFPs.
- d. speed control will transfer to its redundant power supply.

QUESTION: 076 (1.00)

LOP-VX-01, "Switchgear Heat Removal System Startup" has a precaution which states in part that "the Battery Exhaust Fans should be operated continuously." Which of the following describes the reason for this precaution?

- a. Exhaust fan operation ensures that the room temperature is maintained above 50°F, even during winter months.
- b. Operation of the exhaust fans prevents the buildup of hydrogen gas which is generated as the batteries are charged.
- c. Without fan operation, room temperature would exceed 104°F due to the heat load generated by the switchgear.
- d. The RPS MG Set cooling requirements cannot be met without continuous operation of the battery exhaust fans.

QUESTION: 077 (1.00)

The 1A DG Cooling Water pump tripped while the 1A DG was running under load for a surveillance. Assuming no operator action, which of the following describes the expected impact on continued 1A DG operation?

- a. The 1A DG will trip on high cooling water temperature.
- b. The pump trip will directly actuate the DG lockout which will trip the 1A DG.
- c. The 1A DG will continue to heat up and eventually fail with possible damage due to lack of cooling.
- d. The 1A DG governor will runback the load limiter to 10%, which is within the DG's cooling capacity.

QUESTION: 078 (1.00)

The '0' Diesel Generator is paralleled to the SAT and Bus 141Y and loaded as follows:

- 1,000 KW
- 200 KVARs

Assuming the load on the system was constant, how would Real load (KW) and Reactive load (KVARs) be expected to respond if the '0' Diesel Generator Voltage control switch was momentarily placed in the 'Raise' position?

	Real Load (KW)	Reactive load (KVARs)
a.	Increase	Increase
b.	Increase	Decrease
c.	Remain approximately the same	Increase
d.	Remain approximately the same	Decrease

QUESTION: 079 (1.00)

Unit 2 was at rated conditions. The flow switch for the OG 2nd Stage Steam Flow failed resulting in an OG isolation. The NSO verified the isolation signal was invalid. Which of the following describes the action necessary to re-open the valves that closed?

- a. De-energize the valve's motor operator and open the valves manually.
- b. Place the control switches for the affected valves in the OPEN position.
- c. Turn the Low-Flow keylock bypass switch to BYPASS.
- d. Place the control switches for the affected valves in the BYPASS position.

QUESTION: 080 (1.00)

Unit 1 is at rated condition. Which of the following describe the listed valve's position if BOTH Unit 1 OG Post Treatment PRMs go downscale?

	Off Gas Air Ejector Suction Valves (1N62-F300A and B)	Off Gas Discharge Valve (1N62-F057)
a.	Open	Open
b.	Closed	Open
c.	Open	Closed
d.	Closed	Closed

QUESTION: 081 (1.00)

Automatic fire suppression is delayed from activation in the DG rooms to . . .

- a. allow the fire brigade time to extinguish the fire without having to secure the DG.
- b. allow personnel in the DG room time to exit prior to activation.
- c. ensure that a signal spike would not cause unneeded loss of the DG.
- d. ensure that a signal spike would not cause unneeded activation.

QUESTION: 082 (1.00)

Unit 2 is in Run with the following conditions:

- Reactor Building Exhaust Air Flow has increased.
- Reactor Building to Outside Differential Pressure is 1"WC and getting more negative. (the pointer is moving toward the bottom of the meter).
- '2A' and '2B' VR Supply fans are running.
- '2A' and '2B' VR Exhaust fans are running.

Which of the following identifies the potential cause of this event? Loss of Instrument Air pressure to the . . .

- a. Supply Duct Isolation Dampers
- b. Exhaust Duct Isolation Dampers
- c. Exhaust Air Flow Control Dampers
- d. Supply Fan Check Dampers

QUESTION: 083 (1.00)

During a loss of feedwater heating transient MFLCPR exceeds a value of 1.003. The number of fuel clad failures will . . .

- a. Increase significantly and reactor power must be reduced within the next fifteen minutes.
- b. Increase significantly and all control rods must be inserted within the next 2 hours.
- c. Remain relatively stable and reactor power must be reduced within the next fifteen minutes.
- d. Remain relatively stable and all control rods must be inserted within the next 2 hours.

QUESTION: 084 (1.00)

Unit 1 is in Run with the following conditions:

- The plant is operating at 40% power
- The Jet Pump operability surveillance indicates that one jet pump has failed
- Technical Specifications require the plant to be in hot shutdown within 12 hours

Which of the following describes why such a severe restriction is placed on continued operation for the given conditions?

- a. A jet pump failure at this low power level will significantly affect the core flows and result in unacceptable thermal limits (MCPR).
- b. A jet pump failure may limit reactor water level restoration capability during the reflood portion of a Loss Of Coolant Accident.
- c. A jet pump failure combined with the flow restricting orifices may adversely affect core flow to the higher power fuel bundles.
- d. A jet pump failure results in less conservative protective action setpoints for instrumentation using recirculation loop flow as an input signal.

QUESTION: 085 (1.00)

The Control Room Ventilation System is aligned for normal operations (not in purge) and smoke is detected in the RETURN AIR supply duct. Which of the following describes the response of the VC System?

- a. The Emergency Make Up Train automatically comes on line and the Minimum Outside Air Damper remains open.
- b. The Emergency Make Up Train automatically comes on line and the Outside Air Supply isolates.
- c. The VC Charcoal Filter is automatically placed on line and the Minimum Outside Air Damper remains open.
- d. The VC Charcoal Filter is automatically placed on line and the Minimum Outside Air Damper closes.

QUESTION: 086 (1.00)

Excess control room intake radiation levels will . . .

- a. automatically places the EMU train AND the charcoal filter in service to maintain control room habitability.
- b. automatically places the EMU train in service and require the operator to manually place the charcoal filter in service to maintain control room habitability.
- c. automatically places the charcoal filter in service and require the operator to manually place EMU train in service to maintain control room habitability.
- d. require the operator to manually place the EMU train AND charcoal filter in service to maintain control room habitability.

QUESTION: 087 (1.00)

A transient has resulted in a loss of power to the in-service station air dryer, OSA02D. Which of the following describes the air dryer's response to the loss of power?

- a. both towers will be placed in service.
- b. both towers will be isolated.
- c. the towers will remain in the condition they were in when power was lost.
- d. the tower bypass automatically opens.

QUESTION: 088 (1.00)

Unit 1 is in Run with the following conditions:

Provide Tech Spec pages 1-19 to 1-22

- SBLC tank volume 4800 gal
- SBLC tank concentration 13%
- SBLC tank temperature 70°F

Which of the following describes the status of the system?

- a. A one hour LCO is in effect.
- b. An eight hour LCO is in effect.
- c. A seven day LCO is in effect.
- d. Technical Specifications requirements are satisfied.

QUESTION: 089 (1.00)

Unit 2 is in STARTUP with the following conditions:

- It has been 24 hours following a scram from an extended full-power run.
- Reactor temperature is 138°F.
- Source range counts have been allowed to stabilize at 30,000 cps while the second verifier checks rod positions.

You notice that source range counts begin to SLOWLY increase above 30,000 cps. The increasing counts are . . .

- a. Expected, the startup should continue.
- b. Expected, rod withdrawal is prohibited until count rate stabilizes.
- c. Unexpected, rods should be inserted to stabilize the count rate.
- d. Unexpected, Shift Manager permission is required to continue the startup.

QUESTION: 090 (1.00)

You are getting ready to perform a task and have just copied the procedure you are going to use from the Work Execution Center. You are . . .

- a. allowed to proceed as long as the copy is the same revision as the one listed in the procedure index on the Intranet.
- b. allowed to proceed as the copy you have should be the current revision.
- c. required to compare the procedure revision with the one in the Control Room BEFORE proceeding.
- d. required to compare the procedure revision with the one listed in EWCS BEFORE proceeding.

QUESTION: 091 (1.00)

The Plant Supervisor has ordered you to perform a RCIC operability test following maintenance using LOS-RI-Q3, Reactor Core Isolation Cooling (RCIC) System Pump Operability and Valve Inservice Tests In Conditions 1, 2, and 3. During the RCIC pump run, this surveillance would require the performance of ?

- a. Chemistry analysis on the Suppression Pool water.
- b. Suppression Pool Temperature Monitoring Checks.
- c. RCIC Monthly Valve Operability on the RCIC Exhaust Rupture Diaphragm.
- d. Remote Shutdown Panel Post Accident Instrumentation Operability Checks.

QUESTION: 092 (1.00)

Unit 1 is in a refueling outage. A single fuel bundle is being loaded into the core. The signal-to-noise ratio is 15 to 1. The MINIMUM count rate to verify the required SRMs operable is ____ counts per second.

- a. 0.7
- b. 1.0
- c. 2.0
- d. 3.0

QUESTION: 093 (1.00)

Which of the following describe the required communication between the Control Room and the Refueling Bridge during core alterations?

- a. Dialed Telephone
- b. PA System (speaker phone)
- c. Sound Powered Phones
- d. Station Radio (operator frequency)

QUESTION: 094 (1.00)

Regarding station Out Of Services, which situation would utilize a Dual Function Checklist? Performing . . .

- a. both HANG and LIFT steps on the same checklist.
- b. both HANG and VERIFY steps on the same checklist.
- c. the LIFT and the normal Mechanical Lineup using a common checklist.
- d. the VERIFY and the normal Mechanical Lineup using a common checklist.

QUESTION: 095 (1.00)

Which of the following must be in service prior to performing a containment purge when the unit is at power?

- a. MCR AND AEER Emergency Makeup Trains
- b. ONLY the MCR Emergency Makeup Train
- c. MCR AND AEER Recirculation Charcoal Filter Units
- d. ONLY the MCR Recirculation Charcoal Filter Unit

QUESTION: 096 (1.00)

You have been directed to independently verify the closed position of a system drain valve. To complete the task you will have to spend approximately 10 minutes in the general area of the valve. The dose rate in the general area of the valve is 50 mRem/hr. Which of the following is the correct approach to fulfilling this task?

- a. Have Shift Manager approve using process parameters as a verification since estimated dose will likely exceed 15 mRem.
- b. Have Shift Manager waive the independent verification since estimated dose will likely exceed 5 mRem.
- c. Perform the independent verification since total individual dose is expected to be less than 15 mRem.
- d. Perform the independent verification after installing shielding to reduce your dose to less than 5 mRem.

QUESTION: 097 (1.00)

Unit one Radwaste Discharge Tank 1WF05T is being discharged to the lake blowdown line. While hanging an outage for service water, the inlet and outlet valves for the liquid Radwaste PRM are mistakenly closed. Which of the following describes actions that will occur due to this valve operation?

- a. The Lake Blowdown Flow Control Valve CLOSES AND the Radwaste Discharge Pump TRIPS.
- b. The Radwaste Discharge Line Isolation Stop Valve CLOSES AND the Radwaste Discharge Recirculation Valve OPENS.
- c. The Lake Blowdown Flow Control Valve CLOSES AND the Radwaste Discharge Recirculation Valve OPENS.
- d. The Radwaste Discharge Line Isolation Stop Valve CLOSES AND the Radwaste Discharge Pump TRIPS.

QUESTION: 098 (1.00)

Unit 2 is shutdown with the following conditions:

- A large LOCA has occurred.
- Containment pressure quickly exceeded the Pressure Suppression Pressure Limit.

Which of the following describes the sequence of steps to be attempted to mitigate the containment pressure increase?

- a. Align VQ for venting the Drywell IAW LGA-VQ-02; Align RHR for Suppression Chamber Spray IAW LGA-RH-101; Align RHR for Drywell Spray IAW LGA-RH-101; Initiate ADS IAW LGA-04.
- b. Align RHR for Suppression Chamber Spray IAW LGA-RH-101; Align RHR for Drywell Spray IAW LGA-RH-101; Initiate ADS IAW LGA-04; Align VQ for venting the Drywell IAW LGA-VQ-02.
- c. Align VQ for venting the Drywell IAW LGA-VQ-02; Align RHR for Drywell Spray IAW LGA-RH-101; Align RHR for Suppression Chamber Spray IAW LGA-RH-101; Initiate ADS IAW LGA-04.
- d. Align RHR for Drywell Spray IAW LGA-RH-101; Align RHR for Suppression Chamber Spray IAW LGA-RH-101; Initiate ADS IAW LGA-04; Align VQ for venting the Drywell IAW LGA-VQ-02.

QUESTION: 099 (1.00)

A reactor scram has occurred and not all rods have inserted. Which of the following conditions would allow the SRO to make the determination that the "Reactor will remain shutdown under all conditions?"

- a. No more than one rod remains withdrawn in any 5 x 5 array.
- b. One control rod remains withdrawn at 48. ALL other rods are at 00.
- c. Power is in the source range and decreasing on ALL channels.
- d. The only rods which remain withdrawn are at position 04 or 02.

QUESTION: 100 (1.00)

Both Unit-1 and Unit-2 are at normal rated full power conditions. You were the off-going NSO on Unit-2. You were properly relieved. While sitting in your car you remember that you left your lunch box in the Service Building. You re-enter the protected area and as you approach the Service Building a passer-by informs you that a Site Emergency has been declared and the station is about to perform a site assembly. You then hear the Assembly Siren.

Based on the above information, you must . . .

- a. Assemble in the Operational Support Center.
- b. Assemble in the Service Building Trackway.
- c. Report immediately to the Unit-2 Control Room and offer your assistance.
- d. Return to your vehicle and wait at home to be called back as a relief crew member.

(***** END OF EXAMINATION *****)

REACTOR OPERATOR

Page 58

ANSWER: 001 (1.00)

c.

REFERENCE:

Rx Vessel Inst, LP-040, Rev 0, pg. 19

New

Objective: 040.00.05

Cognitive Level: 3

ANSWER: 006 (1.00)

c.

REFERENCE:

RPS, LP 49, Rev 0, pg. 13
Bank

Objective 049.00.14

Cognitive Level: 2

ANSWER: 011 (1.00)c.

REFERENCE:

LOA-PC-201, Rev 02, pg. 16

LOP-VQ-04, Rev 12, pg. 44

New

Objective 093.00.12

Cognitive Level: 1

ANSWER: 002 (1.00)

b.

REFERENCE:

Rx Vessel Instrumentation,
pg. 14

New

Objective: 040.00.05

Cognitive Level: 1

ANSWER: 007 (1.00)

b.

REFERENCE:

EHC Elec, LP 74, Rev 1, pg.
4 & 5

INPO Bank No. 762

Objective 074.00.05

Cognitive Level: 2

ANSWER: 012 (1.00)

d.

REFERENCE:

LOP-VQ-04, Rev 12 pg. 40

New

Objective 092.00.05

Cognitive Level: 1

ANSWER: 003 (1.00)

c.

REFERENCE:

LOR-1PM01J-A314 Rev 1

New

Objective: 005.00.10

Cognitive Level: 1

ANSWER: 008 (1.00)

b.

REFERENCE:

LOA-EH-101, Rev 4, pg. 13

EHC Elec, LP 74, Rev 1, pg.
29

New

Objective 074.00.21

Cognitive Level: 2

ANSWER: 013 (1.00)

c.

REFERENCE:

LOA-HD-101(201)

New

Objective 079.02.20

Cognitive Level: 2

ANSWER: 004 (1.00)

a.

REFERENCE:

DC, LP 06, Rev 1, pg. 25.

New

Objective 006.00.16

Cognitive Level: 2

ANSWER: 009 (1.00)

c.

REFERENCE:

LOP-RH-07, Rev 45, pg. 10

LOP-FC-09, Rev 10, pg. 4

New

Objective 027.00.03

Cognitive Level: 2

ANSWER: 014 (1.00)

a.

REFERENCE:

LP LGA010, pg. 14

LaSalle 9501 ILT Exam

Question No. 119

Objective 400.00.14

Cognitive Level: 1

ANSWER: 005 (1.00)

b.

REFERENCE

LOA-EH-201, Rev 4 pg. 14

New

Objective 049.00.10

Cognitive Level: 3

ANSWER: 010 (1.00)

c

REFERENCE:

RR Flow Control; LP 23, Rev
1, pg. 15

New

Objective 023.00.10

Cognitive Level: 1

ANSWER: 015 (1.00)

b.

REFERENCE:

LGA-NB-01 Rev 5 pg. 10

New

Objective 045.00.05

Cognitive Level: 1

ANSWER: 016 (1.00)
b.
REFERENCE:
LOA-RX-101; Rev 3, pg. 5
LaSalle 9501 ILT Exam
Question No. 87 Modified
Objective 049.02.20
Cognitive Level: 1

ANSWER: 017 (1.00)
a.
REFERENCE:
CX, LP 50, pg. 8
New
Objective 050.00.05
Cognitive Level: 1

ANSWER: 018 (1.00)
c.
REFERENCE:
LaSalle UFSAR Section
7.7.14.1.1.1.c
New
Objective 118.00.05
Cognitive Level: 2

ANSWER: 019 (1.00)
a.
REFERENCE:
RRFC, LP 23, Rev 1, pg. 32
New
Objective 023.00.16
Cognitive Level: 2

ANSWER: 020 (1.00)
b.
REFERENCE:
LOA-IN-201, Rev 1 pg. 12
New
Objective 090.00.05
Cognitive Level: 1

ANSWER: 021 (1.00)
c.
REFERENCE:
LOA-RH-101 Rev 3, pg. 7
New
Objective 049.00.18
Cognitive Level: 1

ANSWER: 022 (1.00)
d.
REFERENCE:
LOP-VG-01, Rev 8, pg. 2
LOA-FH-001, Rev 0., pg. 3,5
New
Objective 095.00.01
Cognitive Level: 1

ANSWER: 023 (1.00)b.
REFERENCE:
LGA-001 Rev 00
New
Objective 410.00.01
Cognitive Level: 3

ANSWER: 024 (1.00)
c.
REFERENCE:
LGA Figure V
New
Objective 413.00.04
Cognitive Level: 2

ANSWER: 025 (1.00)
d.
REFERENCE:
LP LGA-003, Rev 14, pg. 22
090.00.24 001 (modified)
Objective 400.00.14
Cognitive Level: 2
2.4.18 ..(KA's)

ANSWER: 026 (1.00)
c.
REFERENCE:
LGA-003 Rev 0
BWROG EPGs/SAGs
Appendix B
New
Objective 421.00.04
Cognitive Level: 2
295030K103 ..(KA's)

ANSWER: 027 (1.00)
d.
REFERENCE:
LGA-002 Rev 00
New
Objective 418.00.02
Cognitive Level: 3
295032A105 ..(KA's)

ANSWER: 028 (1.00)
a.
REFERENCE:
LZP-1200-1, Rev 23, pg. 38
New
Objective 400.00.14
Cognitive Level: 1
295033K305 ..(KA's)

ANSWER: 029 (1.00)
b.
REFERENCE:
LOR-1H13-P601-E204, Rev
0.
53.00.15 001 (bank)
Objective 091.00.08
Cognitive Level: 2
295034K206 ..(KA's)

ANSWER: 030 (1.00)

a.

REFERENCE:

LaSalle UFSAR Appendix J

LOR-1PM13J-A304 Rev 0

New

Objective 121.00.20

Cognitive Level: 2

295036K101 ..(KA's)

ANSWER: 034 (1.00)

d.

REFERENCE:

LOP-HG-02, Rev 8, pg. 2

094.00.20 002 (bank)

Objective 094.00.05

Cognitive Level: 1

500000A103 ..(KA's)

ANSWER: 038 (1.00)

c.

REFERENCE:

LOP-RR-03, Rev 8, pg. 5

New

Objective 023.00.16

Cognitive Level: 1

202002K202 ..(KA's)

ANSWER: 031 (1.00)

a.

REFERENCE:

LOA-RM-201 Rev 3, pg. 18,
19

New

Objective 047.00.06

Cognitive Level: 2

295037K214 ..(KA's)

ANSWER: 035 (1.00)

d.

REFERENCE:

LOA-FP-101, Rev 3, pg. 6 &
51

125.02.20 001 (modified)

Objective 125.00.20

Cognitive Level: 2

600000K304 ..(KA's)

ANSWER: 039 (1.00)

d.

REFERENCE:

LOR-1H13-P603-A410

New

Objective 023.00.14

Cognitive Level: 2

202002A207 ..(KA's)

ANSWER: 032 (1.00)

a.

REFERENCE:

LOS-AA-S101, Rev 4, pg. 16

New

Objective 721.02.20

Cognitive Level: 1

295038A102 ..(KA's)

ANSWER: 036 (1.00)

c.

REFERENCE:

LOA-FP-201, Rev 3 pg. 63,
81, 83, 84

New

Objective 125.00.01

Cognitive Level: 1

600000A108 ..(KA's)

ANSWER: 040 (1.00)

b.

REFERENCE:

LOS-RH-Q2, Rev 30, pg. 4

New

Objective 064.00.21

Cognitive Level: 1

203000A217 ..(KA's)

ANSWER: 033 (1.00)

b.

REFERENCE:

LOP-PC-03, Rev 12 pg. 15

New

Objective 427.00.01

Cognitive Level: 3

295038A204 ..(KA's)

ANSWER: 037 (1.00)

d.

REFERENCE:

LP-25, chapter 25, pp. 20,
section III.J.

25.00.05 006 (modified)

Objective 024.00.16

Cognitive Level: 1

201001K110 ..(KA's)

ANSWER: 041 (1.00)

b.

REFERENCE:

LOR-1H13-P601-B405

RHR System Lesson Plan pg.

29-31

New

Objective 064.00.14

Cognitive Level: 2

203000A402 ..(KA's)

ANSWER: 042 (1.00)

a.

REFERENCE:

LP-27 Section IV.A

New.

Objective 027.00.05

Cognitive Level: 1

204000A303 ..(KA's)

ANSWER: 046 (1.00)

a.

REFERENCE:

SBLC LP, pg. 5, 18

New

Objective 028.00.16

Cognitive Level: 1

211000K506 ..(KA's)

ANSWER: 050 (1.00)

c.

REFERENCE:

RMCS, LP No. 47, pg. 25

New

Objective 047.00.21

Cognitive Level: 1

214000K501 ..(KA's)

ANSWER: 043 (1.00)

c.

REFERENCE:

LPCS LP pg. 23

New

Objective 063.00.16

Cognitive Level:

1209001K202 ..(KA's)

ANSWER: 047 (1.00)

d.

REFERENCE:

SBLC LP pg. 18-19

New

Objective 028.00.18

Cognitive Level: 2

211000K302 ..(KA's)

ANSWER: 051 (1.00)b.

REFERENCE:

RBM LP pg. 32; APRM LP

pg. 22

New

Objective 045.00.16

Cognitive Level: 2

215002K203 ..(KA's)

ANSWER: 044 (1.00)

c.

REFERENCE:

LaSalle UFSAR Section
7.3.1.2.3.6

LaSalle Systems Description
Manual, Chapter 63, Low
Pressure Core Spray System
Modified

Objective 063.00.05

Cognitive Level: 2

209001A103 ..(KA's)

ANSWER: 048 (1.00)

b.

REFERENCE:

RPS LP pg. 23

LOS-TG-W1 Rev 30, pg. 13

LOS-RP-M5, Rev 2, pg. 14

New

Objective 049.00.10

Cognitive Level: 2

212000K110 ..(KA's)

ANSWER: 052 (1.00)

a.

REFERENCE:

LP No. 45, Section V.C.
045.00.16 003 (bank)

Objective 045.00.16

Cognitive Level: 1

215002K201 ..(KA's)

ANSWER: 045 (1.00)

c.

REFERENCE:

HPCS Lesson Plan pg. 10
061.00.05 006 (bank)

Objective 061.00.05

Cognitive Level: 2

209002K407 ..(KA's)

ANSWER: 049 (1.00)

a.

REFERENCE:

RPS Lesson Plan pg. 26 & 35

New

Objective 049.00.14

Cognitive Level: 2

212000K402 ..(KA's)

ANSWER: 053 (1.00)

c.

REFERENCE:

IRM LP Fig 42-2

1E-1-4210AP

LOA-NR-101, Rev 1, pg. 9

New

Objective 042.00.21

Cognitive Level: 2

215003A207 ..(KA's)

ANSWER: 054 (1.00)

a.

REFERENCE:

Technical Specification 3.3.1
New

Objective 042.00.22

Cognitive Level: 2

2.2.22 ..(KA's)

ANSWER: 055 (1.00)

a.

REFERENCE:

LOP-NR-01, Rev 9, pg. 5
New

Objective 041.00.15

Cognitive Level: 1

215004A301 ..(KA's)

ANSWER: 056 (1.00)

c.

REFERENCE:

LPRM LP pg. 6 and Fig 43-6
New

Objective 043.00.14

Cognitive Level: 2

215005K504 ..(KA's)

ANSWER: 057 (1.00)

c.

REFERENCE:

NB Inst LP pg. 30

RWLC LP pg. 30

New

Objective 040.00.16

Cognitive Level: 2

216000K602 ..(KA's)

ANSWER: 058 (1.00)

c.

REFERENCE:

LPGP-PSTG-01S08, Rev. 1,
pg. 10

LGA-001, Rev 0

New

Objective 040.00.05

Cognitive Level: 3

216000A301 ..(KA's)

ANSWER: 059 (1.00)

c.

REFERENCE:

ADS LP pg. 10

062.00.05D 001 (modified)

Objective 062.00.01

Cognitive Level: 1

2.1.28 ..(KA's)

ANSWER: 060 (1.00)

b.

REFERENCE:

HG LP pg. 17

PC LP pg. 27

New

Objective 94.00.20

Cognitive Level: 2

223001K301 ..(KA's)

ANSWER: 061 (1.00)

b.

REFERENCE:

RWCU LP pg. 37

027.00.21 001 (Significantly
modified)

Objective 096.00.12

Cognitive Level: 2

223002K606 ..(KA's)

ANSWER: 062 (1.00)

b.

REFERENCE:

RH LP, Figure 64-05

T.S. 4.5.1.b pg. 3/45-4

New

Objective 064.00.21

Cognitive Level: 3

226001K301 ..(KA's)

ANSWER: 063 (1.00)

d.

REFERENCE:

RHR LP

New

Objective 064.00.05

Cognitive Level: 3

230000K105 ..(KA's)

ANSWER: 064 (1.00)

b.

REFERENCE:

RHR LP pg. 31

064.00.014 007 (modified)

Objective 064.00.15

Cognitive Level: 3

230000A110 ..(KA's)

ANSWER: 065 (1.00)

d.

REFERENCE:

FC LP pg. 46

New

Objective 029.00.05

Cognitive Level: 2

233000A101 ..(KA's)

ANSWER: 066 (1.00)

c.

REFERENCE:

PCIS LP pg. 22

091.00.05B.1 002 (modified)

Objective 091.00.05

Cognitive Level: 1

239001K402 ..(KA's)

ANSWER: 067 (1.00)

a.

REFERENCE:

LPGP-PSTG-01S04A Rev 1

New

Objective 070.02.20

Cognitive Level: 2

239002A105 ..(KA's)

ANSWER: 072 (1.00)

b.

REFERENCE:

RWLC LP pg. 26

031.00.16B 001 (modified)

Objective 031.00.05

Cognitive Level: 2

259002K307 ..(KA's)

ANSWER: 077 (1.00)

a.

REFERENCE:

LOP-DG-01 Rev 25 pg. 5

011.00.21 004 (slightly modified)

Objective 011.00.21

Cognitive Level: 2

264000K104 ..(KA's)

ANSWER: 068 (1.00)

b.

REFERENCE:

EH LP No. 74

New

Objective 074.00.05

Cognitive Level: 2

241000K108 ..(KA's)

ANSWER: 073 (1.00)

c.

REFERENCE:

DG LP No. 11, pg. 52

005.00.20 001 (modified)

Objective 001.00.07

Cognitive Level: 3

262001A405 ..(KA's)

ANSWER: 078 (1.00)

c.

REFERENCE:

DG LP pg. 75

New

Objective 011.00.14

Cognitive Level: 1

264000A401 ..(KA's)

ANSWER: 069 (1.00)

b.

REFERENCE:

Mn Turb LP No. 71, pg. 29

071.00.14 001 (modified)

Objective 071.00.10

Cognitive Level: 1

245000A407 ..(KA's)

ANSWER: 074 (1.00)

c.

REFERENCE:

UPS LP pg. 22

New

Objective 012.00.16

Cognitive Level: 2

262002K601 ..(KA's)

ANSWER: 079 (1.00)

b.

REFERENCE:

OG LP pg. 21

LOA-OG-101 Rev 1

New

Objective 080.00.12

Cognitive Level: 1

271000A401 ..(KA's)

ANSWER: 070 (1.00)b.

REFERENCE:

FW LP pg. 14

77.00.14 001 (modified)

Objective 077.00.05

Cognitive Level: 2

259001K503 ..(KA's)

ANSWER: 075 (1.00)

d.

REFERENCE:

TDRFP Speed Control LP,

pg. 25

New

Objective 078.00.16

Cognitive Level: 2

262002K102 ..(KA's)

ANSWER: 080 (1.00)

c.

REFERENCE:

PRM LP No. 80 pg. 18.

New

Objective 080.00.05

Cognitive Level: 1

271000A112 ..(KA's)

ANSWER: 071 (1.00)

c.

REFERENCE:

HD LP pg. 38 & 52

New

Objective 079.00.05

Cognitive Level: 2

259001A106 ..(KA's)

ANSWER: 076 (1.00)

b.

REFERENCE:

LOP-VX-01 Rev 7

119.00.20 001

Objective 006.00.05

Cognitive Level: 1

263000K501 ..(KA's)

ANSWER: 081 (1.00)

b.

REFERENCE:

FP LP pg. 44

New

Objective 125.00.05

Cognitive Level: 1

286000K302 ..(KA's)

ANSWER: 082 (1.00)
c.
REFERENCE:
VR LP pg. 9, 16, 17, 31
New
Objective 118.00.16
Cognitive Level: 2
288000K106 ..(KA's)

ANSWER: 087 (1.00)
~~d. by a.~~
REFERENCE:
IA/SA LP pg. 11
New
Objective 120.00.21
Cognitive Level: 1
300000A201 ..(KA's)

ANSWER: 091 (1.00)
b.
REFERENCE:
LOS-RI-Q3 Rev 31
INPO Q No. 821
Objective 032.00.20
Cognitive Level: 1
2.2.12 ..(KA's)

ANSWER: 083 (1.00)c.
REFERENCE:
Tech Spec 3.2.3
New
Objective 020.00.21 &
021.00.24
Cognitive Level: 2
290002A205 ..(KA's)

ANSWER: 088 (1.00)
d.
REFERENCE:
Technical Specifications LCO
3.1.5.
28.00.022 001 (Sig Modified)
Objective 028.00.22
Cognitive Level: 2
2.1.25 ..(KA's)

ANSWER: 092 (1.00)
d.
REFERENCE:
LFS-100-4, Rev 16, pg. 12
New
Objective 30.077
Cognitive Level: 1
2.2.28 ..(KA's)

ANSWER: 084 (1.00)
b.
REFERENCE:
LaSalle UFSAR, App
G.3.2.2.3
Hope Creek 2/98 NRC exam
Objective 020.00.01
Cognitive Level: 1
290002K401 ..(KA's)

ANSWER: 089 (1.00)
a.
REFERENCE:
Rx Theory LGP-1-1, Rev
62, pg. 7
Dresden 1998 NRC ILTExam
Objective 041.00.14
Cognitive Level: 2
2.1.7 ..(KA's)

ANSWER: 093 (1.00)
b.
REFERENCE:
LFP-600-2, Rev 8
New
Objective 030.00.20
Cognitive Level: 1
2.2.26 ..(KA's)

ANSWER: 085 (1.00)
c.
REFERENCE:
VC LP, pg. 4, 5
117.00.08 001
Objective 117.00.08
Cognitive Level: 1
290003K401 ..(KA's)

ANSWER: 090 (1.00)
b.
REFERENCE:
AD-AA-104-101, Rev 0, pg. 2
LAP-820-2T, Rev 20, pg. 4
New
Objective 769.00.01
Cognitive Level: 1
2.1.21 ..(KA's)

ANSWER: 094 (1.00)
a.
REFERENCE:
OP-AA-101-201, Rev 2, pg. 4
OOS Exam bank (Sig Mod)
Objective OOS Obj 3.1,
4.1, 5.1, 6.1, 7.1
Cognitive Level: 1
2.2.13 ..(KA's)

ANSWER: 086 (1.00)
b.
REFERENCE:
LOR-1PM13J-B401 Rev
New
Objective 117.00.15
Cognitive Level: 1
290003A202 ..(KA's)

ANSWER: 095 (1.00)
c.
REFERENCE:
LOP-VQ-04, Rev 12, Pg. 34
New
Objective 93.00.20
Cognitive Level: 2
2.3.9 ..(KA's)

ANSWER: 096 (1.00)

b.

REFERENCE:

AD-AA-104-103, Rev 2 pg. 7
& 9

Hope Creek 12/98 ILT NRC
exam (Significantly modified)

Objective:

Cognitive Level: 2

2.3.2 ..(KA's)

ANSWER: 100 (1.00)b.

REFERENCE:

LZP-1170-2, Revision 8,

Page 6 and 7, Step E.4

LOR Bank LZP-1170-2 006

(modified)

Objective 702.06

Cognitive Level: 2

2.4.12 ..(KA's)

ANSWER: 097 (1.00)

d.

REFERENCE:

LOP-WF-20 Rev 34 pg. 5

LOP-WF-20 001 (modified)

Objective 052.00.05

Cognitive Level: 1

2.3.11 ..(KA's)

ANSWER: 098 (1.00)

b.

REFERENCE:

LGA-003, Rev 0

New

Objective 400.00.18

Cognitive Level: 1

2.4.6 ..(KA's)

ANSWER: 099 (1.00)

b.

REFERENCE:

Tech Spec

Dresden 1998 Exam Q

Objective 400.00.15

Cognitive Level: 1

2.4.17 ..(KA's)

(***** END OF EXAMINATION *****)

ANSWER KEY

001 c	021 c	041 b	061 b	081 b
002 b	022 d	042 a	062 b	082 c
003 c	023 b	043 c	063 d	083 c
004 a	024 c	044 c	064 b	084 b
005 b	025 d	045 c	065 d	085 c
006 c	026 c	046 a	066 c	086 b
007 b	027 d	047 d	067 a	087 d a
008 b	028 a	048 b	068 b	088 d
009 c	029 b	049 a	069 b	089 a
010 c	030 a	050 c	070 b	090 b
011 c	031 a	051 b	071 c	091 b
012 d	032 a	052 a	072 b	092 d
013 c	033 b	053 c	073 c	093 b
014 a	034 d	054 a	074 c	094 a
015 b	035 d	055 a	075 d	095 c
016 b	036 c	056 c	076 b	096 b
017 a	037 d	057 c	077 a	097 d
018 c	038 c	058 c	078 c	098 b
019 a	039 d	059 c	079 b	099 b
020 b	040 b	060 b	080 c	100 b

(***** END OF EXAMINATION *****)

**U.S. Nuclear Regulatory Commission
Site-Specific
Written Examination**

Applicant Information

Name: SRO MASTER	Region: III
Date: 11/20/2000	Facility/Unit: LaSalle Co Station / U1&U2
License Level: SRO	Reactor Type: GE
Start Time: 0815	Finish Time:

Instructions

Use the answer sheets provided to document your answers. Staple this cover sheet on top of the answer sheets. The passing grade requires a final grade of at least 80.00 percent. Examination papers will be collected five hours after the examination starts.

Applicant Certification

All work done on this examination is my own. I have neither given nor received aid.

Applicant's Signature

Results

Examination Value	____ 100.0 ____	Points
Applicant's Score	_____	Points
Applicant's Grade	_____	Percent

ANSWER SHEET

Multiple Choice (Circle or X your choice)

If you change your answer, write your selection in the blank.

MULTIPLE CHOICE

001 a b c d ____

002 a b c d ____

003 a b c d ____

004 a b c d ____

005 a b c d ____

006 a b c d ____

007 a b c d ____

008 a b c d ____

009 a b c d ____

010 a b c d ____

011 a b c d ____

012 a b c d ____

013 a b c d ____

014 a b c d ____

015 a b c d ____

016 a b c d ____

017 a b c d ____

018 a b c d ____

019 a b c d ____

020 a b c d ____

021 a b c d ____

022 a b c d ____

023 a b c d ____

024 a b c d ____

025 a b c d ____

026 a b c d ____

027 a b c d ____

028 a b c d ____

029 a b c d ____

030 a b c d ____

031 a b c d ____

032 a b c d ____

033 a b c d ____

034 a b c d ____

035 a b c d ____

036 a b c d ____

037 a b c d ____

038 a b c d ____

039 a b c d ____

ANSWER SHEET

Multiple Choice (Circle or X your choice)

If you change your answer, write your selection in the blank.

- | | |
|------------------|------------------|
| 040 a b c d ____ | 062 a b c d ____ |
| 041 a b c d ____ | 063 a b c d ____ |
| 042 a b c d ____ | 064 a b c d ____ |
| 043 a b c d ____ | 065 a b c d ____ |
| 044 a b c d ____ | 066 a b c d ____ |
| 045 a b c d ____ | 067 a b c d ____ |
| 046 a b c d ____ | 068 a b c d ____ |
| 047 a b c d ____ | 069 a b c d ____ |
| 048 a b c d ____ | 070 a b c d ____ |
| 049 a b c d ____ | 071 a b c d ____ |
| 050 a b c d ____ | 072 a b c d ____ |
| 051 a b c d ____ | 073 a b c d ____ |
| 052 a b c d ____ | 074 a b c d ____ |
| 053 a b c d ____ | 075 a b c d ____ |
| 054 a b c d ____ | 076 a b c d ____ |
| 055 a b c d ____ | 077 a b c d ____ |
| 056 a b c d ____ | 078 a b c d ____ |
| 057 a b c d ____ | 079 a b c d ____ |
| 058 a b c d ____ | 080 a b c d ____ |
| 059 a b c d ____ | 081 a b c d ____ |
| 060 a b c d ____ | 082 a b c d ____ |
| 061 a b c d ____ | 083 a b c d ____ |

ANSWER SHEET

Multiple Choice (Circle or X your choice)

If you change your answer, write your selection in the blank.

084 a b c d ____

085 a b c d ____

086 a b c d ____

087 a b c d ____

088 a b c d ____

089 a b c d ____

090 a b c d ____

091 a b c d ____

092 a b c d ____

093 a b c d ____

094 a b c d ____

095 a b c d ____

096 a b c d ____

097 a b c d ____

098 a b c d ____

099 a b c d ____

100 a b c d ____

(***** END OF EXAMINATION *****)

1. **[Read Verbatim]** Cheating on any part of the examination will result in a denial of your application and/or action against your license.
2. **[Read Verbatim]** After you complete the examination, sign the statement on the cover sheet indicating that the work is your own and you have not received or given assistance in completing the examination.
3. To pass the examination, you must achieve a grade of 80.00 percent or greater; grades will not be rounded up to achieve a passing score. Every question is worth one point.
4. For an initial examination, the time limit for completing the examination is five hours.
5. You may bring pens, pencils, and calculators into the examination room. Use black ink to ensure legible copies; dark pencil should be used only if necessary to facilitate machine grading.
6. Print your name in the blank provided on the examination cover sheet and the answer sheet. You may be asked to provide the examiner with some form of positive identification.
7. Mark your answers on the answer sheet provided and do not leave any question blank. If you are using ink and decide to change your original answer, draw a single line through the error, enter the desired answer, and initial the change.
8. If you have any questions concerning the intent or the initial conditions of a question, do *not* hesitate asking them before answering the question. Ask questions of the NRC examiner or the designated facility instructor *only*. When answering a question, do *not* make assumptions regarding conditions that are not specified in the question unless they occur as a consequence of other conditions that are stated in the question. For example, you should not assume that any alarm has activated unless the question so states or the alarm is expected to activate as a result of the conditions that are stated in the question.
9. Restroom trips are permitted, but only one applicant at a time will be allowed to leave. Avoid all contact with anyone outside the examination room to eliminate even the appearance or possibility of cheating.
10. When you complete the examination, assemble a package including the examination questions, examination aids, answer sheets, and scrap paper and give it to the NRC examiner or proctor. Remember to sign the statement on the examination cover sheet indicating that the work is your own and that you have neither given nor received assistance in completing the examination.
10. After you have turned in your examination, leave the examination area as defined by the proctor or NRC examiner. If you are found in this area while the examination is still in progress, your license may be denied.
11. Do you have any questions?

QUESTION: 001 (1.00)

Unit 2 is shutdown with the current conditions:

- 'A' RR pump running.
- All 'B' RR pump breakers are open.
- The total of 'A' loop indicated jet pump flows is 23 Mlb/hr.
- The total of 'B' loop indicated jet pump flows is 1.2 Mlb/hr.

Which of the following values should the total core flow recorder on 2H13-P603 indicate?

- a. 24.2 Mlb/hr
- b. 23.0 Mlb/hr
- c. 21.8 Mlb/hr
- d. 12.1 Mlb/hr

QUESTION: 002 (1.00)

Which of the following nuclear boiler instrumentation indication becomes SIGNIFICANTLY MORE accurate as forced core flow circulation is reduced?

- a. Narrow Range Reactor Water Level
- b. Fuel Zone Reactor Water Level
- c. Total Core Flow
- d. Individual Jet Pump Flow

QUESTION: 003 (1.00)

Unit 1 is at rated power with a normal electrical lineup. If Bus 141Y voltage drops to 65% of its normal voltage . . .

- a. the SAT feed to 141Y will trip and the UAT feed will automatically close to restore voltage to all loads on the bus.
- b. the UAT feed to 141Y will trip and the SAT feed will automatically close to restore voltage to all loads on the bus.
- c. the SAT feed to 141Y will trip and the 0 DG will start and pick up the bus to restore voltage to essential equipment.
- d. the UAT feed to 141Y will trip and the 0 DG will start and pick up the bus to restore voltage to essential equipment.

QUESTION: 004 (1.00)

A loss of all Unit 1 125 DC battery chargers has occurred. ASSUME equal loads of 25 amps are being supplied by each divisional battery. Which of the following lists the expected relationship between the Unit 1 batteries' voltages?

- a. Div 1 and Div 2 battery voltages approximately equal and greater than Div 3 battery voltage because of the smaller capacity of the Div 3 battery.
- b. Div 2 and Div 3 battery voltages approximately equal and greater than Div 1 battery voltage because of the smaller capacity of the Div 1 battery.
- c. Div 1 and Div 3 battery voltages approximately equal and greater than Div 2 battery voltage because of the smaller capacity of the Div 2 battery.
- d. All battery voltages approximately equal because the capacity of the batteries are very close.

QUESTION: 005 (1.00)

Unit 2 is starting up. The turbine load is at 35% of rated capacity. A short in the bypass jack causes the turbine bypass valves to sequentially open until all five bypass valves are open. The turbine control valves throttle as designed reducing first stage pressure to 75 psig. Which of the following describes the INITIAL plant response if a manual turbine trip were initiated at this time?

- a. RPS will initiate a scram due to the turbine stop valves closing.
- b. RPS will initiate a scram due to a collapse of the core voids.
- c. PCIS will initiate an isolation due to elevated steam line flow.
- d. PCIS will initiate an isolation due to reduced steam line pressure.

QUESTION: 006 (1.00)

The plant is operating at 100% power, when a spurious signal causes a scram signal on RPS channel 'A' ONLY. Which of the following responses correctly completes the following:

The 'A' scram pilot solenoid valves (117's) are:

The 'B' scram pilot solenoid valves (118's) are:

- | | | |
|----|--------------|--------------|
| a. | Energized | Energized |
| b. | Energized | DE-energized |
| c. | DE-energized | Energized |
| d. | DE-energized | DE-energized |

QUESTION: 007 (1.00)

Unit 1 initial conditions are as follows:

- Rx power: 28 %
- T-G Load: 365 MWe
- Load Set 390 MWe
- Bypass position: 0 %

The operator withdraws a control rod which increases Rx power to 29 %. Which of the following describe the expected response of the Turbine EHC Control System?

- a. The Bypass Valves will open by whatever amount is required to maintain RX pressure.
- b. The Turbine Control Valves will open by whatever amount is required to maintain RX pressure.
- c. The Turbine Stop Valves will open by whatever amount is required to maintain RX pressure.
- d. The Turbine Intercept Valves will open by whatever amount is required to maintain RX pressure.

QUESTION: 008 (1.00)

Unit 1 reactor is operating at 100% power with the following conditions:

- The turbine throttle pressure signal to the selected EHC pressure regulator fails low (sends 0 psig signal).
- All other equipment functions as designed.
- No operator actions are taken

Which of the following describes the reactor power/pressure response?

- a. Increases until scram conditions met.
- b. Increases and stabilizes at slightly higher value.
- c. Decreases until isolation conditions met.
- d. Decreases and stabilizes at slightly lower value.

QUESTION: 009 (1.00)

Unit 2 is in Condition 4.

- Reactor water level is being controlled between 70 and 90 inches.
- A plant operator discovered a leak on reactor water cleanup suction line.
- The leak was stopped by closing the RWCU inboard and outboard isolation valves (2G33-F001 and 2G33-F004).
- Reactor water level is increasing due to CRD cooling flow.
- A RHR is running in the shutdown cooling mode.

Which of the following flow paths could be utilized to drain the vessel to MAINTAIN the desired reactor water level?

- a. Main Steam Line drains (2B21-F016 and 2B21-F019) to the main condenser.
- b. Reverse flow from the RT return header to the main condenser via the RWCU blowdown valve (2G33-F033).
- c. A RHR Vent Downstream/ Upstream Valves (2E12-F073A and 2E12- F074A) to the suppression pool.
- d. Safety Relief Valves (2B21-F013H/K/P) to the suppression pool.

QUESTION: 010 (1.00)

Which of the following interlocks is designed to reduce reactor power in response to a trip of an operating feedwater pump from 100% power?

- a. Low RR Pump NPSH Runback
- b. Low Feed Flow Downshift
- c. Loss of Feed Flow Runback
- d. Low Reactor Water Level Downshift

QUESTION: 011 (1.00)

Unit 1 is at rated conditions. Nitrogen makeup is aligned to the drywell with the pressure controller in automatic set for +0.2 psig. The controller fails such that the regulating valve slowly opens fully. With NO operator action, which of the following will be the first to terminate the nitrogen flow to the drywell?

- a. High nitrogen flow isolation of the makeup regulating valve.
- b. Low temperature outlet isolation of the makeup regulating valve.
- c. High drywell pressure isolation of the nitrogen makeup flowpath.
- d. Excess flow check valve closure in the nitrogen makeup flowpath.

QUESTION: 012 (1.00)

Following a loss of primary containment cooling, the crew is preparing to perform non-emergency containment venting to control drywell pressure. While venting the drywell in this condition, the operator is directed to monitor the Standby Gas Treatment or Stack WRGM to . . .

- a. maintain sufficient dilution flow.
- b. stay below the toxic gas release limits.
- c. maintain sufficient stack flow.
- d. stay below radiation release limits.

QUESTION: 013 (1.00)

Unit 1 was operating at 100% power when the 16A High Pressure Heater Normal Drain Valve failed closed. In responding to this failure, the operators were directed to refer to LOA-RR-101, as well as several other procedures. Assume proper operator actions and no additional equipment problems. The guidance in LOA-RR-101 likely applied to this event when the change in Heater Drain flow led to

- a. a reduction in reactor recirc flow because of RPV level fluctuations.
- b. a reduction in reactor recirc flow because of feedwater flow fluctuations.
- c. entry into core instability region because of increased flow control line.
- d. entry into core instability region because of recirc pump cavitation.

QUESTION: 014 (1.00)

During an ATWS, the Emergency Operating Procedures direct the operator NOT to depressurize until the reactor is shutdown without boron injection or the cold shutdown weight of boron has been injected. The reason for this requirement is

- a. Positive reactivity will be added due to the water in the reactor being cooler and more dense.
- b. Core flow may become restricted due to the cooler water causing the boron to come out of solution and deposit on core surfaces.
- c. Higher reactor pressure helps mixing of the boron due to the higher steaming rates and minimizes the time to complete the shutdown.
- d. Lowering reactor pressure would cause the water in the reactor to "swell", thus lowering the boiling boundary and increase the chance to damage fuel.

QUESTION: 015 (1.00)

During performance of LGA-NB-01, Alternate Rod Insert, Single Rod Insertion, the operator is directed to place the MODE SELECT switch in BYP for the Rod Worth Minimizer. The above action bypasses . . .

- a. Nuclear Instrumentation rod blocks to allow all rod motion.
- b. Rod insert blocks to allow inward rod motion.
- c. The settle function to speed the rate of rod insertion.
- d. The single notch function to speed the rate of rod insertion.

QUESTION: 016 (1.00)

A severe fire with thick smoke forced an immediate evacuation of the control room. The reactor was not scrammed prior to exiting. Which of the following is the PREFERRED method of scramming the reactor from outside of the control room?

- a. Open and reclose the IRM supply breakers at the DC distribution panels.
- b. Open and reclose the RPS output breakers at the RPS distribution panel.
- c. Activate the ARI system in the Auxiliary Equipment Room.
- d. Vent the scram air header in the Reactor Building.

QUESTION: 017 (1.00)

A failure of the RHR heat exchanger has resulted in an offsite release above the alarm setpoint. With NO operator action, the SPDS RADIATION RELEASE box letters will . . .

- a. change from green to red.
- b. change from green to yellow.
- c. change from cyan to red.
- d. change from cyan to yellow.

QUESTION: 018 (1.00)

Unit 1 has been operating with a known leaking fuel assembly. An increase in the assembly leakage rate results in an Off Gas System automatic isolation. Which of the following describes the purpose of the isolation and the initial plant response without operator action?

- a. Prevent explosions due to ignitable concentrations of hydrogen; main generator output will decrease.
- b. Prevent explosions due to ignitable concentrations of hydrogen; main generator output will increase.
- c. Prevent radiation release to the environs in excess of short-term limits; main generator output will decrease.
- d. Prevent radiation release to the environs in excess of short-term limits; main generator output will increase.

QUESTION: 019 (1.00)

Unit 1 is at 80% power. A Group II isolation was caused by an invalid signal. The Unit Supervisor directs a 10% power reduction to reduce the containment heat load. Which of the following describes the method(s), if any, AVAILABLE to the Unit NSO to reduce reactor power by only 10%?

- a. Control rod insertion only.
- b. Flow control valve closure only.
- c. Both flow control valve closure and control rod insertion.
- d. Neither method is available.

QUESTION: 020 (1.00)

Unit 2 was at 100% power. Group 1 AND Group 10 isolations were caused by an instrument failure. The failure requires extended operation while aligned to the backup instrument air supply. The operators should monitor . . .

- a. Drywell pressure because instrument air is less dense than nitrogen and drywell pressure may go negative.
- b. Drywell oxygen concentration because use of drywell pneumatics or leaks in drywell pneumatic piping could raise oxygen levels.
- c. IN Receiver pressure because low receiver pressure would be a predictor of inboard MSIV closure.
- d. Bottle bank pressures because the bottles may depressurize due to leaks in 100 psig header piping.

QUESTION: 021 (1.00)

Unit 2 is in Condition 4 with the following conditions:

- Reactor water level is 40 inches on the Narrow Range.
- Reactor Recirculation pumps are off.
- A loss of shutdown cooling has occurred due to an erroneous signal.

The Unit Supervisor should direct the NSO to raise reactor water level to +75 inches on the Shutdown Range to . . .

- a. Utilize the most accurate level indication to assist in trouble shooting.
- b. Lower the bulk temperature of the vessel to prevent inadvertent mode change.
- c. Limit temperature stratification by inducing natural circulation.
- d. Provide additional inventory in anticipation of steam production.

QUESTION: 022 (1.00)

During Unit-2 core reload, a fuel bundle was inadvertently dropped while attempting to place it in the core. Bubbles were observed rising from the area of the dropped bundle. Alarms were received for:

- Div I and II Fuel Pool Ventilation Radiation (PRM reading 23 mr/hr)
- Refuel Floor Area High Radiation (ARM reading 1200 mr/hr)
- Reactor Building Overhead Crane Area Radiation Monitor (reading 250 mr/hr)

The operators should verify the . . .

- a. Control Room Ventilation System automatically shifts to "purge" and VC/VE Emergency Makeup train starts.
- b. Reactor Building Overhead Crane down motion stopped and automatically moves to South end of the refuel floor.
- c. Fuel grapple automatically retracts to the "full up" position and Refuel Bridge moves to South end of refuel floor.
- d. Reactor Building Ventilation System isolates and Standby Gas Treatment System auto starts.

QUESTION: 023 (1.00)

Unit One is in Condition 3 with the following conditions:

- Reactor water level is 68".
- Reactor pressure is 645 psig and increasing very slowly.

A rupture in the drywell has depressurized all low pressure IN piping and accumulators. The operator should control reactor pressure by . . .

- a. Cycling SRVs using the hand switches on 1H13-P601.
- b. Cycling Main Steam Line drain valves on 1H13-P601.
- c. Controlling Main Turbine Bypass Valves using the bypass jack.
- d. Placing Reactor Core Isolation Cooling in pressure control mode.

QUESTION: 024 (1.00)

Which of the following conditions could be expected to cause RHR system damage?

Provide LGA Fig V

	Suppression Chamber Pressure (psig)	Suppression Pool Temperature (°F)
a.	0	195
b.	5	210
c.	10	230
d.	15	240

QUESTION: 025 (1.00)

With Unit 2 operating at 100% power, an unisolable break at an ECCS pump suppression pool suction penetration caused suppression pool level to drop rapidly. Under these conditions, the actions directed by the Emergency Operating Procedures would primarily address which of the following issues?

- a. The loss of ECCS pump suction inventory which could threaten the ability to maintain adequate Rx core cooling.
- b. The flooding of the secondary containment spaces which could fail needed safety related equipment.
- c. The loss of steam condensation capability which could challenge the primary containment pressure limit.
- d. The decrease in radioactive gas condensation and scrubbing which could result in elevated radiation releases.

QUESTION: 026 (1.00)

Unit 2 was at rated conditions. The operators noted Main Steam Line Tunnel temperature had increased to 165°F. The crew:

- Scrammed the reactor
- Closed all MSIVs and MSL drains.
- Closed the Feedwater Line Outboard Isolation Valves
- Started RCIC in level control mode.

The STA reports that tunnel temperature is NOT decreasing. The Radwaste operator reports that the Aux. Bldg Floor Drain Sump 0DA01 is pumping down continuously. Which of the following actions should be taken?

- a. Cooldown at greater than 100°F/hr to reduce pressure boundary leakage.
- b. Reset the reactor scram to stop potential leakage into the Steam Tunnel.
- c. Shutdown and isolate RCIC to stop potential leakage into the Steam Tunnel.
- d. Shutdown and isolate RWCU to stop potential leakage into the Steam Tunnel.

QUESTION: 027 (1.00)

Why do radiation levels in the Secondary Containment in excess of Maximum Normal Radiation Levels require a GSEP Unusual Event be declared? The radiation level would. . .

- a. be indicative of a primary system leaking.
- b. be indicative of a secondary system leaking.
- c. impede plant operations.
- d. impede system operation.

QUESTION: 028 (1.00)

Unit 1 is starting up with the following conditions:

- Drywell inerting is in progress.
- Drywell pressure is 0.3 psig.

The 'DIV 2 RB VENT RAD HI-HI' alarm energizes due to both Division 2 Reactor Building Ventilation Radiation trip units reaching their trip setpoint. What would the automatic response of Primary Containment Vent and Purge Valves be, if any? (Consider ONLY the actions associated with this alarm.)

- a. Neither the Inboard nor the Outboard Isolation Valves close.
- b. Inboard Isolation Valves close.
- c. Outboard Isolation Valves close.
- d. Inboard and Outboard Isolation Valves close.

QUESTION: 029 (1.00)

Given a constant input of contaminated water to the Unit 1 RB Northeast Floor Drain Sump (1RE07) AND a failure of both associated sump pumps, contamination/radiation levels in the room will .

- a. increase because the sump will eventually overflow to the room floor.
- b. increase because the sump will eventually overflow to the RBEDT which has minimal shielding.
- c. not be affected because the sump will overflow to the RB raceway sumps before top of 1RE07 sump is reached.
- d. not be affected because the sump is sealed and excess input will backup to the source.

QUESTION: 030 (1.00)

Unit 2 is experiencing an ATWS.

- RMCS has tripped.
- Actions were taken to rescrum the reactor.

Which of the following can be utilized to determine if ALL control rods were inserted?

- a. Full Core Display AND Rod Worth Minimizer CRT
- b. Four-Rod Display AND Full Core Display
- c. Rod Sequence Control Display AND Rod Worth Minimizer CRT
- d. Rod Sequence Control Display AND Four-Rod Display

QUESTION: 031 (1.00)

The Shift Manager is filling out a NARS due to a High Off-site Release from the Unit 2 Reactor Building and has requested you to determine wind speed and wind direction. Which of the following describes the control room panel(s) where the information must be obtained?

- a. 1PM10J for both parameters.
- b. 2PM10J for both parameters.
- c. 1PM10J or 2PM10J for both parameters.
- d. 1PM10J for Wind Direction and 2PM10J for Wind Speed.

QUESTION: 032 (1.00)

A transient has occurred causing Unit 2 reactor fuel failure.

- The crew closed the MSIVs and MSL drains due to elevated steam line radiation ten minutes ago.
- Groups II, IV, VII, and X isolations initiated and were verified to be complete ten minutes ago.
- The STA reports that the SBGT WRGM value has increased in the last ten minutes to $7E6 \mu\text{Ci/sec}$.

The most likely source of the increasing release rate is leakage FROM the . . .

- a. Reactor Coolant Pressure Boundary TO the Primary Containment.
- b. Primary Containment TO the Secondary Containment.
- c. Reactor Coolant Pressure Boundary TO Primary Containment Cooling System.
- d. Secondary Containment TO the Auxiliary Building.

QUESTION: 033 (1.00)

The procedure for Operation of the Post-LOCA Combustible Gas Control System provides a precaution that "during a LOCA Environment, flows may be increased up to 200 scfm." Which of the following is the reason for this restriction on system flow?

- a. Higher flow rates may result in excessive reaction chamber shell temperatures and an automatic shutdown of the HG System.
- b. The electric heaters are sized to produce the temperatures necessary for recombination only at flow rates of 200 scfm or less.
- c. Higher flow rates entrains moisture droplets in the gas steam, reducing the amount of hydrogen recombination that occurs.
- d. The residence time of the gases in the reaction chamber may not be sufficient to provide proper recombination of the hydrogen.

QUESTION: 034 (1.00)

Which of the following identifies the individual(s) and location to which they should be dispatched in response to a Unit 1 Red NON-CO2 fire panel alarm?

- | | Individual(s) | Location |
|----|---------------|----------------------------|
| a. | fire brigade | affected area |
| b. | operator | Turbine Building Fire Cage |
| c. | operator | affected area |
| d. | fire brigade | Turbine Building Fire Cage |

QUESTION: 035 (1.00)

Following a reactor scram, the pressure equalization valves associated with the CRD Hydraulic system function to. . .

- a. repressurize the scram discharge volume to minimize introduction of air and foreign materials into the system.
- b. equalize pressure between the scram supply header and the cooling water header to ensure cooling flow is not lost during a scram.
- c. equalize pressure between the drive water header and scram discharge volume to prevent inadvertent rod movement.
- d. repressurize the CRD HCU exhaust header to prevent excessively high control rod velocity during subsequent normal rod movement.

QUESTION: 036 (1.00)

Given that a Backup Subloop is available, which of the following conditions will cause the reactor recirc hydraulic system to be shutdown with the FCV hydraulically locked in position?

- a. Loss of Control Signal to the Servo Controller
- b. Loss of pump outlet pressure
- c. Loss of DC power
- d. Low Low Reservoir Level

QUESTION: 037 (1.00)

Unit 2 is at rated conditions when an electrician inadvertently disconnects the 2A TDRFP discharge valve open limit switch causing alarm 2H13-P603-A410, 2A/2B TDRFP NOT READY, to annunciate in the control room. Which of the following describes the response of the RR FCVs to this event?

- a. ONLY the 'A' RR FCV will run back to minimum position.
- b. ONLY the 'B' RR FCV will run back to minimum position.
- c. Both 'A' and 'B' RR FCVs will run back to minimum position.
- d. Both 'A' and 'B' RR FCVs will remain at their present position.

QUESTION: 038 (1.00)

Immediately following exercising of a 1A RHR system valve for post maintenance testing, a low pressure alarm was received for the 1A RHR system. With respect to the 1A RHR system, which of the following actions is appropriate?

- a. The crew should wait until the water leg pump restores system pressure and should make an entry in the unit log that the alarm was received and subsequently cleared.
- b. The crew should verify the water leg pump restores system pressure and should send an operator to check the high point vent to verify piping filled and vented.
- c. The crew should verify the 1A RHR pump is still operable by running it per the applicable portions of the quarterly surveillance.
- d. The crew should lineup the CY fill system to the 1A RHR injection line piping and keep the system in this configuration until the water leg pump can be repaired.

QUESTION: 039 (1.00)

Regarding the Reactor Water Cleanup system, what automatic actions take place when reactor water level drops to 60 inches?

- a. Two suction line valves close
- b. Two discharge line valves close
- c. Two suction line AND two discharge line valves close
- d. One suction line AND one discharge line valve close

QUESTION: 040 (1.00)

135Y-2 has tripped. Which of the following valves are affected?

- a. 'C' RHR Minimum Flow Valve
- b. HPCS Injection Valve
- c. LPCS Injection Valve
- d. RCIC Minimum Flow Valve

QUESTION: 041 (1.00)

Unit 1 was operating at 100% reactor power when a LOCA occurred resulting in the following:

- The reactor has scrammed
- RPV pressure is 480 psig
- RPV level is 140 inches
- HPCS and RCIC are injecting to the RPV

Based on these conditions, the LPCS pump is _____ (1) _____ and the LPCS injection line check valve is _____ (2) _____.

- a. (1) not running (2) closed
- b. (1) not running (2) open
- c. (1) running (2) closed
- d. (1) running (2) open

QUESTION: 042 (1.00)

Unit 2 has scrammed due to a LOCA. HPCS initiated on Level 2 and re-filled the RPV to a level above Level 8. Level subsequently decreased to -25 inches and is stable. Which of the following describes the action(s) the operator must take to re-establish HPCS flow to the RPV?

- a. Arm and depress the HPCS System Manual Initiation Pushbutton.
- b. Shutdown the HPCS Pump, then restart it and open the injection valve.
- c. Depress the HPCS High Water Level Reset pushbutton, then open the Injection Valve.
- d. Take the Injection Valve to close to break the seal in, then take the switch to open.

QUESTION: 043 (1.00)

Unit 2 is shutdown with the following conditions:

- SBLC has been initiated.

Which of the following describes how SBLC will respond to a loss of Instrument Air?

- a. Remote tank level indication would be lost.
- b. Remote flow indication would be lost.
- c. The pulsation dampers would fail open.
- d. The tank heaters would fail to energize.

QUESTION: 044 (1.00)

Unit 2 is operating at 35% reactor power with the following conditions:

- MSV-1 slowly drifted close.
- CV-1 RETS pressure is 0 psig.
- All others valves remain in their normal position.

Which one of the following describes the effect of these conditions on the RPS logic?

- a. Neither a ½ scram, nor a full scram will be received.
- b. A ½ scram on 'A' RPS channel is received.
- c. A ½ scram on 'B' RPS channel is received.
- d. A full scram is received.

QUESTION: 045 (1.00)

Unit 2 is starting up. Which of the following would occur if the 'A' IRM were to fail upscale? RPS will generate. . .

- a. a half scram due to the shorting links being installed.
- b. a full scram due to the shorting links being installed.
- c. a half scram due to the shorting links being removed.
- d. a full scram due to the shorting links being removed.

QUESTION: 046 (1.00)

Which of the following identifies the APRM channel and its power supply that can provide a reference power input to the 'A' RBM?

	APRM Channel	Power Supply
a.	A	A RPS
b.	E	A RPS
c.	A	111Y
d.	E	111Y

QUESTION: 047 (1.00)

Unit 1 is starting up with the following conditions:

- The Reactor Operator has just stopped withdrawing control rods and determined that the reactor is critical.
- The 'A' IRM / 'C' IRM RECORDER is accidentally de-energized.

Which of the following describes how the 'A' and 'C' IRM alarms and trips are affected by this failure and the actions, if any, which are required? The 'A' and 'C' IRM alarms and trips are . . .

- a. Functional; The startup can continue without further action.
- b. Non-functional; A manual scram must be inserted.
- c. Functional; Stop power changes until cause determined.
- d. Non-functional; A half scram must be inserted.

QUESTION: 048 (1.00)

During a reactor startup, the NSO can more closely monitor the SRMs by. . .

- a. changing the recorder speed.
- b. changing the indicated range.
- c. adjusting the discriminator voltage.
- d. selecting the process computer screen.

QUESTION: 049 (1.00)

Unit 2 is shutting down. An NSO is driving a control rod from 48 to 00. The NSO should expect the B LPRM meters to noticeably decrease as the rod passes through positions _____.

- a. 08 to 04
- b. 16 to 20
- c. 32 to 28
- d. 44 to 40

QUESTION: 050 (1.00)

Unit 2 is at 100% power with the following conditions:

- B Narrow Range is selected for RWLC.
- Power is lost to the 'C' Narrow Range.

Reactor water level will

- a. increase until two narrow range instruments reach Level 8.
- b. decrease until restored by HPCS and RCIC.
- c. remain stable and part of the Level 8 logic will be made up.
- d. remain stable and part of the Level 8 logic will NOT function.

QUESTION: 051 (1.00)

Unit 1 is scrammed with the following conditions:

- Feedwater flow has been lost.
- Drywell pressure is 2.5 psig.
- Reactor water level is stable.
- Wide Range Level instruments are indicating 120 inches.
- Fuel Zone Level instruments are indicating 194 inches.
- Reactor pressure is 510 psig and decreasing at 220 psig/hr.
- 'A' and 'B' RHR are aligned for containment cooling.

When possible, 'A' and 'B' RHR should be . . .

- a. aligned for LPCI injection because adequate core cooling is NOT assured.
- b. aligned for LPCI injection because initiation conditions have been met.
- c. left in containment cooling because adequate core cooling is assured.
- d. left in containment cooling because initiation conditions have NOT been met.

QUESTION: 052 (1.00)

Unit 2 is in STARTUP with the following conditions:

- Reactor pressure is 150 psig.
- RWCU blowdown is open 25% to maintain level during the heatup.

An RBCCW valve failure causes a loss of RBCCW flow to the non regenerative heat exchanger. Which one of the following describes the resultant response of the valves listed?

	RWCU Inboard Isolation Valve 2G33-F001	RWCU Outboard Isolation Valve 2G33-F004	RWCU Blowdown Header Control Valve 2G33-F033
a.	Remains Open	Remains Open	Closes
b.	Remains Open	Closes	Remains Open
c.	Closes	Remains Open	Closes
d.	Closes	Closes	Remains Open

QUESTION: 053 (1.00)

Unit 2 has experienced a LOCA with the following conditions:

- Reactor pressure is 175 psig.
- The condenser hotwell is empty.
- HPCS is OOS.
- RCIC and 'C' RHR are maintaining reactor water level at 36 inches.
- 'A' RHR is supplying Drywell and Suppression Chamber sprays.
- 'B' RHR is in Suppression Pool cooling.

Which of the following describe the primary concern if 241Y were lost?

- a. Reactor water level due to insufficient makeup.
- b. Suppression chamber pressure due to a bypass path.
- c. Drywell pressure due to the inability to re-establish drywell spray.
- d. Reactor pressure due to the loss of steam loads.

QUESTION: 054 (1.00)

Which of the following describes the expected change in skimmer surge tank level if the first fuel pool cooling pump is started with the discharge valve full open AND the wier gate set at its highest position? Skimmer surge tank level . . .

- a. increases until the tank overflows.
- b. increases and then returns to the level that existed prior to starting the pump.
- c. decreases and then increases to the level that existed prior to starting the pump.
- d. decreases until the pump trips on low suction pressure.

QUESTION: 055 (1.00)

With the plant operating at power what effect, if any, would depressing the B Manual Isolation pushbutton, located on 1(2)H13P601, have on PCIS Group 1 valves?

- a. Inboard MSIVs Close
- b. Outboard MSIVs Close
- c. One MSL Drain Valve Closes
- d. No Valves reposition as only half the logic is tripped.

QUESTION: 056 (1.00)

Unit 2 is shutdown with the following conditions:

- Reactor pressure 1000 psig
- MSIVs are closed.
- MDRFP is in single element control.
- Reactor water level is approximately 45" on the Narrow Range.

Which of the following describes the expected response if an SRV were opened? Reactor water level will . . .

- a. increase causing a trip of the MDRFP.
- b. increase slightly and then return to near the original level.
- c. decrease slightly and then return to near the original level.
- d. decrease causing a Reactor scram.

QUESTION: 057 (1.00)

Unit 2 is in Run with the following conditions:

- Reactor power - 30%
- LOAD SELECT - 40%

If reactor power were increased by 20%, which of the following would occur?

- | | Turbine Control
Valves | Turbine Bypass
Valves |
|----|-------------------------------------|--------------------------|
| a. | Would open further | Remain closed |
| b. | Would open further | Would open |
| c. | Remain at their
present position | Remain closed |
| d. | Remain at their
present position | Would open |

QUESTION: 058 (1.00)

Which of the following identifies the expected positions of the turbine control valves (TCVs), intermediate control valves (ICVs), and extraction steam dump valves (ESDVs) following a turbine trip?

	TCVs	ICVs	ESDVs
a.	Closed	Closed	Closed
b.	Closed	Closed	Open
c.	Closed	Open	Closed
d.	Open	Closed	Closed

QUESTION: 059 (1.00)

Unit 2 is at 20% Reactor Power conducting a normal Unit Startup.

- The MDRFP is not running.
- One Turbine Driven Reactor Feedwater Pump (TDRFP) is in automatic controlling reactor water level.
- The main turbine is on the line with all of the turbine bypass valves closed.
- The main turbine unexpectedly trips.

The TDRFP High Pressure control valve will

- a. CLOSE due to the increasing reactor pressure.
- b. OPEN due to the loss of low pressure steam supply.
- c. OPEN due to the increased steam flow through the bypass valves.
- d. CLOSE due to the decreased low pressure steam flow without the main turbine running.

QUESTION: 060 (1.00)

Unit 1 is at rated conditions. The high high level switch for the 11C heater fails in the tripped condition. In fifteen seconds the running feed pump will be MUCH lower.

- a. differential pressure
- b. speed
- c. suction pressure
- d. suction temperature

QUESTION: 061 (1.00)

Unit 2 is at 100% power with the following conditions:

- Both TDRFPs in 3 element control
- Level setpoint at 36 inches.

If the selected level input channel slowly fails downscale, the RPV water level will . . .

- a. decrease, and the reactor will scram on low water level.
- b. increase, the Main Turbine will trip, and the reactor will scram due to the turbine trip.
- c. increase until feedflow/steamflow error signal compensates for the reactor water level error.
- d. decrease and reactor water level will be maintained above the scram setpoint due to the combined effects of Recirculation Pump downshift, setpoint setdown and dynamic compensator.

QUESTION: 062 (1.00)

A trainee is synchronizing the '0' DG to bus 141Y. While synchronizing the generator the following indications are present:

- The incoming voltage is slightly HIGHER than the running voltage.
- The synchroscope is rotating slowly (45 seconds beat) in the FAST (clockwise) direction.

The trainee turns the '0' DG output breaker to the close position when the synchroscope is at the 3 o'clock position. Which of the following describe the expected breaker response? The '0' DG output breaker will . . .

- a. close and then trip due to overspeed as the DG shifts pole alignment.
- b. close and then trip due to overcurrent as the DG shifts pole alignment.
- c. remain open due to the sync-check relay sensing excessive phase differential.
- d. remain open due to the sync-check relay sensing excessive voltage differential.

QUESTION: 063 (1.00)

The station is experiencing a station blackout. Which of the following is energizing the U-1 process computer?

- a. 111Y
- b. 211Y
- c. 121Y
- d. 221Y

QUESTION: 064 (1.00)

LOP-VX-01, "Switchgear Heat Removal System Startup" has a precaution which states in part that "the Battery Exhaust Fans should be operated continuously." Which of the following describes the reason for this precaution?

- a. Exhaust fan operation ensures that the room temperature is maintained above 50°F, even during winter months.
- b. Operation of the exhaust fans prevents the buildup of hydrogen gas which is generated as the batteries are charged.
- c. Without fan operation, room temperature would exceed 104°F due to the heat load generated by the switchgear.
- d. The RPS MG Set cooling requirements cannot be met without continuous operation of the battery exhaust fans.

QUESTION: 065 (1.00)

The 1A DG Cooling Water pump tripped while the 1A DG was running under load for a surveillance. Assuming no operator action, which of the following describes the expected impact on continued 1A DG operation?

- a. The 1A DG will trip on high cooling water temperature.
- b. The pump trip will directly actuate the DG lockout which will trip the 1A DG.
- c. The 1A DG will continue to heat up and eventually fail with possible damage due to lack of cooling.
- d. The 1A DG governor will runback the load limiter to 10%, which is within the DG's cooling capacity.

QUESTION: 066 (1.00)

Automatic fire suppression is delayed from activation in the DG rooms to . . .

- a. allow the fire brigade time to extinguish the fire without having to secure the DG.
- b. allow personnel in the DG room time to exit prior to activation.
- c. ensure that a signal spike would not cause unneeded loss of the DG.
- d. ensure that a signal spike would not cause unneeded activation.

QUESTION: 067 (1.00)

Unit 2 is in Run with the following conditions:

- Reactor Building Exhaust Air Flow has increased.
- Reactor Building to Outside Differential Pressure is 1" WC and getting more negative. (the pointer is moving toward the bottom of the meter).
- '2A' and '2B' VR Supply fans are running.
- '2A' and '2B' VR Exhaust fans are running.

Which of the following identifies the potential cause of this event? Loss of Instrument Air pressure to the . . .

- a. Supply Duct Isolation Dampers
- b. Exhaust Duct Isolation Dampers
- c. Exhaust Air Flow Control Dampers
- d. Supply Fan Check Dampers

QUESTION: 068 (1.00)

The Control Room Ventilation System is aligned for normal operations (not in purge) and smoke is detected in the RETURN AIR supply duct. Which of the following describes the response of the VC System?

- a. The Emergency Make Up Train automatically comes on line and the Minimum Outside Air Damper remains open.
- b. The Emergency Make Up Train automatically comes on line and the Outside Air Supply isolates.
- c. The VC Charcoal Filter is automatically placed on line and the Minimum Outside Air Damper remains open.
- d. The VC Charcoal Filter is automatically placed on line and the Minimum Outside Air Damper closes.

QUESTION: 069 (1.00)

Unit 1 is in Run with the following conditions: *Provide Tech Spec pages 1-19 to 1-22*

- SBLC tank volume 4800 gal
- SBLC tank concentration 13%
- SBLC tank temperature 70°F

Which of the following describes the status of the system?

- a. A one hour LCO is in effect.
- b. An eight hour LCO is in effect.
- c. A seven day LCO is in effect.
- d. Technical Specifications requirements are satisfied.

QUESTION: 070 (1.00)

Unit 2 is in STARTUP with the following conditions:

- It has been 24 hours following a scram from an extended full-power run.
- Reactor temperature is 138°F.
- Source range counts have been allowed to stabilize at 30,000 cps while the second verifier checks rod positions.

You notice that source range counts begin to SLOWLY increase above 30,000 cps. The increasing counts are . . .

- a. Expected, the startup should continue.
- b. Expected, rod withdrawal is prohibited until count rate stabilizes.
- c. Unexpected, rods should be inserted to stabilize the count rate.
- d. Unexpected, Shift Manager permission is required to continue the startup.

QUESTION: 071 (1.00)

The Plant Supervisor has ordered you to perform a RCIC operability test following maintenance using LOS-RI-Q3, Reactor Core Isolation Cooling (RCIC) System Pump Operability and Valve Inservice Tests In Conditions 1, 2, and 3. During the RCIC pump run, this surveillance would require the performance of ?

- a. Chemistry analysis on the Suppression Pool water.
- b. Suppression Pool Temperature Monitoring Checks.
- c. RCIC Monthly Valve Operability on the RCIC Exhaust Rupture Diaphragm.
- d. Remote Shutdown Panel Post Accident Instrumentation Operability Checks.

QUESTION: 072 (1.00)

Unit 1 is in a refueling outage. A single fuel bundle is being loaded into the core. The signal-to-noise ratio is 15 to 1. The MINIMUM count rate to verify the required SRMs operable is ____ counts per second.

- a. 0.7
- b. 1.0
- c. 2.0
- d. 3.0

QUESTION: 073 (1.00)

Which of the following must be in service prior to performing a containment purge when the unit is at power?

- a. MCR AND AEER Emergency Makeup Trains
- b. ONLY the MCR Emergency Makeup Train
- c. MCR AND AEER Recirculation Charcoal Filter Units
- d. ONLY the MCR Recirculation Charcoal Filter Unit

QUESTION: 074 (1.00)

Unit 2 is shutdown with the following conditions:

- A large LOCA has occurred.
- Containment pressure quickly exceeded the Pressure Suppression Pressure Limit.

Which of the following describes the sequence of steps to be attempted to mitigate the containment pressure increase?

- a. Align VQ for venting the Drywell IAW LGA-VQ-02; Align RHR for Suppression Chamber Spray IAW LGA-RH-101; Align RHR for Drywell Spray IAW LGA-RH-101; Initiate ADS IAW LGA-04.
- b. Align RHR for Suppression Chamber Spray IAW LGA-RH-101; Align RHR for Drywell Spray IAW LGA-RH-101; Initiate ADS IAW LGA-04; Align VQ for venting the Drywell IAW LGA-VQ-02.
- c. Align VQ for venting the Drywell IAW LGA-VQ-02; Align RHR for Drywell Spray IAW LGA-RH-101; Align RHR for Suppression Chamber Spray IAW LGA-RH-101; Initiate ADS IAW LGA-04.
- d. Align RHR for Drywell Spray IAW LGA-RH-101; Align RHR for Suppression Chamber Spray IAW LGA-RH-101; Initiate ADS IAW LGA-04; Align VQ for venting the Drywell IAW LGA-VQ-02.

QUESTION: 075 (1.00)

Both Unit-1 and Unit-2 are at normal rated full power conditions. You were the off-going NSO on Unit-2. You were properly relieved. While sitting in your car you remember that you left your lunch box in the Service Building. You re-enter the protected area and as you approach the Service Building a passer-by informs you that a Site Emergency has been declared and the station is about to perform a site assembly. You then hear the Assembly Siren.

Based on the above information, you must . . .

- a. Assemble in the Operational Support Center.
- b. Assemble in the Service Building Trackway.
- c. Report immediately to the Unit-2 Control Room and offer your assistance.
- d. Return to your vehicle and wait at home to be called back as a relief crew member.

QUESTION: 076 (1.00)

Unit 1 is operating at 100% power. Unit 2 is in a refueling outage with fuel shuffle activities in progress. A scheduled Out of Service activity has left switchgear 241Y isolated and deenergized. Which of the following technical specifications sections would require entry into an action statement?

- a. Unit 1, 3.8.2.1, Onsite Power Distribution Systems, A.C. Distribution - Operating
- b. Unit 2, 3.8.2.2, Onsite Power Distribution Systems, A.C. Distribution - Shutdown
- c. Unit 1, 3.8.1.1, A.C. Sources, A.C. Sources - Operating
- d. Unit 2, 3.8.1.2, A.C. Sources, A.C. Sources - Shutdown

QUESTION: 077 (1.00)

Unit One is at rated condition.

Provide T.S. 3.8.2.3

- The DIV 2 125V DC BATT CHARGER TROUBLE alarm has come in.
- The Battery Charger voltage indicates 120 volts.

Which of the following describes the impact this situation has on the continued operation of the plant?

- a. Action must be taken within 1 hour to be in at least STARTUP within the next 6 hours, at least HOT SHUTDOWN within the following 6 hours and at least COLD SHUTDOWN within the subsequent 24 hours.
- b. Action must be taken within 2 hours to be in at least STARTUP within the next 6 hours, at least HOT SHUTDOWN within the following 6 hours and at least COLD SHUTDOWN within the subsequent 24 hours.
- c. The battery charger must be restored to operable status within 1 hour or the unit must be in at least HOT SHUTDOWN within the next 12 hours and COLD SHUTDOWN within the following 12 hours.
- d. The battery charger must be restored to operable status within 2 hours or the unit must be in at least HOT SHUTDOWN within the next 12 hours and COLD SHUTDOWN within the following 24 hours.

QUESTION: 078 (1.00)

Unit 1 is at rated power with the following conditions:

- 'A' Narrow Range Level instrument is selected.
- Both TDRFPs are in 3-element control.

Which of the following, without operator intervention, would trip the TDRFPs and require entry into LGP-3-2? De-pressurization over fifteen minutes of the . . .

- a. high pressure leg to the 'A' MSL flow instrument.
- b. high pressure leg to the 'A' TDRFP flow instrument.
- c. low pressure leg to the 'A' FW Header flow instrument.
- d. variable leg to the 'A' Narrow Range level instrument.

QUESTION: 079 (1.00)

Unit two is at 50% power

- A high-high level in the 23A heater has occurred
- The NSO reports that feedwater temperature has decreased by ten degrees.
- The Assist NSO reports:
 - the associated Extraction Steam Inlet have failed to close.
 - the associated Extraction Non-Return valves have failed to close.
- The NSO scrams the reactor and trips the Main Turbine.

The NSO's actions were...

- a. CORRECT to prevent possible backflow of water into the main turbine causing damage.
- b. CORRECT to prevent possible fuel damage due to the decreasing feedwater temperature.
- c. INCORRECT without first checking the minimum feedwater temperature for the current power.
- d. INCORRECT without first attempting a manual isolation of the valves.

QUESTION: 080 (1.00)

Unit 2 is operating at rated power with the following conditions:

Instrument Maintenance is performing calibration checks of the 'C' Narrow Range Level instrument and reports that the trip setpoint is currently 55.7 inches and cannot be adjusted lower at this time.

Which one of the following describes the applicable requirements?

Provide T.S. pg. 3-86 to 3-89

- a. 'C' Narrow Range instrument is still OPERABLE, no action is required.
- b. Declare the channel INOP immediately and verify sufficient channels remain OPERABLE or tripped to maintain trip capability.
- c. Within two hours, declare the channel INOP and verify sufficient channels remain OPERABLE or tripped to maintain trip capability.
- d. Restore 'C' Narrow Range within seven days or place it in the tripped condition.

QUESTION: 081 (1.00)

Unit 1 is in Run with recirculation loop flow mismatch of 3000 gpm. Which of the following is the MAXIMUM percentage of core flow that is allowed to exist WITHOUT entering a Technical Specification Action statement?

- a. 64%
- b. 69%
- c. 74%
- d. 79%

QUESTION: 082 (1.00)

LOP-MP-05, Isolating the Main Transformers, the Unit 1(2) Generator and the Unit Auxiliary Transformer, provides a precaution to notify the Load Dispatcher prior to placing the sudden pressure cutout switch to the OFF position or restoring the switch to the ON position. Which of the following describes the reason for this precaution? The Load Dispatcher . . .

- a. will receive an alarm at the Load Dispatcher control center as operation of the sudden pressure cutout switch will bypass an important main transformer protective function.
- b. must coordinate with the Unit Supervisor to inhibit the trip function while the switch is moved to the ON position when restoring the sudden pressure relay to service.
- c. will take action to reduce the loading of the main transformer so a sudden pressure condition is less likely to occur while the function is bypassed.
- d. must give permission since an important transformer function which could affect the availability of the unit is being removed from or restored to service.

QUESTION: 083 (1.00)

Unit 1 is shutdown with the following conditions:

- Drywell pressure is 1.8 psig and increasing due to a small coolant leak.
- Drywell temperature is 175°F and increasing slowly.

Which of the following lists the MINIMUM set of actions to be completed?

- a. Enter LGA-001, "Reactor Pressure Vessel Control" and reduce drywell pressure utilizing LGA-VQ-01.
- b. Enter LGA-003, "Primary Containment Control" and reduce drywell temperature utilizing LGA-VP-01.
- c. Enter LGA-001, "Reactor Pressure Vessel Control" and LGA-003, "Primary Containment Control" and reduce drywell pressure utilizing LGA-VQ-01.
- d. Enter LGA-001, "Reactor Pressure Vessel Control" and LGA-003, "Primary Containment Control" and reduce drywell temperature utilizing LGA-VP-01.

QUESTION: 084 (1.00)

Unit 1 was at rated power when an earthquake occurred resulting in the following conditions:

- Suppression Pool Level has decreased to 698' 4" and is stable
- The Reactor Operator reported that initially, six SRVs were open simultaneously.
- 'A' RHR is in drywell spray mode.

Which of the following lists (1) the procedure to correct the Suppression Pool Level condition AND (2) the best indication of the average Suppression Pool temperature?

- a. (1) LGA-RH-101 (2) Average suppression pool temperature off of 1TR-CM037A (Div 1).
- b. (1) LOP-RH-16 (2) Bulk Average Temperature from the respective NUMAC, 1UY-CM037.
- c. (1) LGA-RH-101 (2) RHR DISCH HX A from recorder 1E12-R601.
- d. (1) LOP-RH-16 (2) RHR INLET TO HX A from recorder 1E12-R601.

QUESTION: 085 (1.00)

Unit 2 is shutdown with the following conditions:

- A Group I isolation occurred due to personnel error.
- Reactor pressure is being controlled from 900-1000 psig by RCIC in the pressure control mode.
- RB North HCU radiation level has increased to 20 mr/hr.
- RCIC pipe route temperature has increased to 175°F.

Which of the following describes the required actions?

PROVIDE LGA-002 (with entry conditions blanked out)

- a. Enter LGA-002 immediately BUT leave RCIC running.
- b. Enter LGA-002 immediately AND isolate RCIC steam lines.
- c. Delay LGA-002 entry until pipe route temperature increased by 5°F AND THEN RCIC could be left running.
- d. Delay LGA-002 entry until pipe route temperature increased by 5°F AND THEN RCIC isolation would be required.

QUESTION: 086 (1.00)

With the plant at rated power, Control Rod Accumulator Trouble alarms are received for two fully-withdrawn Control Rods within one minute. Investigation revealed that the alarms are both due to low accumulator pressures. The operators must

- a. declare BOTH control rods inoperable AND immediately verify one CRD pump is operating OR place the mode switch in SHUTDOWN due to the indication of a systemic problem with the drive mechanisms.
- b. declare BOTH control rods inoperable AND immediately verify one CRD pump is operating OR place the mode switch in SHUTDOWN to insure sufficient negative reactivity insertion on a scram.
- c. insert and electrically disarm one control rod within one hour OR be in at least HOT SHUTDOWN within 12 hours due to the indication of a systemic problem with the drive mechanisms.
- d. insert and electrically disarm one control rod within one hour OR be in at least HOT SHUTDOWN within 12 hours to insure sufficient negative reactivity insertion on a scram.

QUESTION: 087 (1.00)

Unit 1 has just scrammed due to a loss of the SAT. LGP-3-2, "Reactor Scram" is being performed. LOA-AP-101, "Unit 1, AC Power System Abnormal" is being performed. Two minutes later suppression pool temperature is 106°F and increasing. Which of the following actions are required?

- a. Continue LOA-AP-101 and LGP-3-2 and monitor suppression pool temperature.
- b. Exit LOA-AP-101 and enter LGA-003, "Primary Containment Control."
- c. Exit LGP-3-2 and enter LGA-003, "Primary Containment Control."
- d. Concurrently enter LGA-003, "Primary Containment Control."

QUESTION: 088 (1.00)

Unit 1 is at rated power.

PROVIDE Tech Spec pages 3/4 6-38 and 3/4 6-39

Reactor Building Ventilation supply damper 1VR04YA is found to have an isolation time of 90 seconds. Which of the following describes the response to this situation?

- a. No Action is required since there is at least one operable damper in the effected penetration.
- b. Maintain 1VR04YB operable and put it on an increased surveillance frequency.
- c. Declare Unit 1 VR INOP and take actions to be in Hot Shutdown within 12 hours.
- d. Restore the inoperable damper to operable status within 8 hours.

QUESTION: 089 (1.00)

Unit 2 is shutdown. While returning the '2A' RHR pump to service, the control power fuse for the breaker CAN NOT be located. The preferred method for determining a replacement fuse is by using the . . .

- a. Placards placed near the fuse.
- b. Vendor manuals.
- c. EWCS Data Panels.
- d. Station fuse list.

QUESTION: 090 (1.00)

Unit 1 was at rated power when the following occurred:

- A station blackout occurred.
- Reactor water level is below the narrow range.
- Five control rods are fully withdrawn.
- The HPCS DG is running

Which of the following describes the expected crew response? Scram, Turn Mode Switch to Shutdown, . . .

- a. Inhibit ADS and attempt start of the remaining Diesel Generators.
- b. Inhibit ADS and prevent ECCS injection.
- c. Initiate Division 3 ECCS and attempt start of the remaining Diesel Generators.
- d. Initiate Division 3 ECCS and Inhibit ADS.

QUESTION: 091 (1.00)

What is the HIGHEST level of station management that must review and approve the ODCM prior to purging the containment?

- a. Unit Supervisor
- b. Health Physics Supervisor
- c. Shift Manager
- d. Health Physics Manager

QUESTION: 092 (1.00)

Authorization to receive radiological exposures in excess of 10CFR20 limits is the responsibility of the _____.

- a. Station Director
- b. Recovery Manager
- c. Com Ed Medical Director
- d. Radiation Protection Director

QUESTION: 093 (1.00)

LOS-RH-R1-R2, LPCI Injection Line Check Valve Inservice Test can be utilized to perform which of the following?

- a. Reduce the radiation exposure of personnel working on the refueling bridge.
- b. Reduce the radiation exposure of personnel working in the Drywell.
- c. Increase core flow to prevent thermal stratification during Refueling.
- d. Increase core cooling to assist Fuel Pool Cooling during periods of increased heat loads.

QUESTION: 094 (1.00)

Unit 2 is in a refueling outage. It is a weekend. A new system engineer has requested that the Unit 2 HPCS pump be started with the full flow test valve throttled to 75% open to determine starting current. The evolution is not described in current procedures or the Safety Analysis Report. Which of the following would describes the correct response to the request? The Shift Manager may . . .

- a. approve the evolution without restrictions.
- b. only approve the test if another SRO with an engineering degree agrees.
- c. not approve the test until a written safety evaluation has been performed and approved.
- d. not approve the test under any conditions.

QUESTION: 095 (1.00)

Unit 2 is experiencing an ATWS with the following conditions:

- Reactor water level is 10 inches and is being rapidly lowered.
- The Reactor operator reports that APRMs are oscillating between two and sixteen percent.

Which of the following actions should be taken?

- a. Reduce the rate of level decrease.
- b. Raise reactor water level until oscillations stop.
- c. Maintain reactor water level at 10 inches.
- d. Continue with the level decrease.

QUESTION: 096 (1.00)

Unit 2 is operating at rated power with the following conditions:

- Primary Containment Vent Fan 2VP02CB is OOS.

Primary Containment Vent Fan 2VP02CA trips. Which of the following describe the expected crew response to this event? Enter LGA-003 . . .

- a. immediately and start hydrogen and oxygen monitors.
- b. immediately and start containment venting IAW LGA-VQ-02.
- c. if Drywell temperature exceeds 135°F on 2TR-CM037A or B. Then start hydrogen and oxygen monitors.
- d. if Drywell temperature exceeds 135°F on 2TR-CM037A or B. Then start containment venting IAW LGA-VQ-02.

QUESTION: 097 (1.00)

Unit 1 is at rated conditions with NO LCO action statements in effect. Electrical maintenance has requested permission to de-energize the LPCS minimum flow valve in the closed position while they perform a required breaker inspection. Which of the following describes the shortest time clock that would be entered if you allowed the maintenance to start? Provide Tech Specs 3.5.1 ,3.6.1.1, and 3.6.3.

- a. 1 hour
- b. 4 hours
- c. 12 hours
- d. 7 days

QUESTION: 098 (1.00)

Unit 2 is at rated power with the following conditions:

- HD tank level increasing.
- HD Pump Minimum Flow Valves opening.
- HD Pump Forward Valves closing.
- LP Heater Emergency Spills Valve opening.

Which of the following is responsible for all of the conditions AND which procedure(s) should be implemented?

- a. LP Heater 23 Level transmitter failing high, enter LOA-HD-201.
- b. HD Pump Flow Transmitter failing low, enter LOA-HD-201.
- c. Loss of Misc. Auto Control System, enter LOA-HD-201 and LOA-GC-201.
- d. Loss of Instrument Air, enter LOA-HD-201 and LOA-IA-201.

QUESTION: 099 (1.00)

Unit 2 is operating near full power when instrument maintenance technicians discovered that three turbine stop valve closure channels that input to RPS are inoperable.

PROVIDE T.S. 3.3.1.

Which of the following actions is required?

- a. Within one hour, verify sufficient channels remain operable or tripped to maintain trip capability in the Functional Unit.
- b. Within one hour, initiate a reduction in reactor power to less than 25% thermal power within two hours.
- c. Within six hours restore the inoperable channels or reduce power to less than 25% within the following 12 hours.
- d. Within six hours place the remaining operable channel in the tripped condition.

QUESTION: 100 (1.00)

Unit 2 is in Hot Shutdown with the following conditions:

- Both of the running VR exhaust fans have tripped.
- Reactor building differential pressure is +0.01 inch H₂O.

Which of the following is the overriding document for this situation?

- a. LGA-002, Secondary Containment Control.
- b. The associated annunciator response procedures.
- c. Tech Spec 3.6.5.1, Secondary Containment Integrity.
- d. LOA-VR-201, Unit 2 Recovery from a Group 4 Isolation or Spurious Trip of Reactor Building Ventilation.

(***** END OF EXAMINATION *****)

ANSWER: 001 (1.00)

c.

REFERENCE:

Rx Vessel Inst, LP-040, Rev 0,
pg. 19

New

Objective: 040.00.05

Cognitive Level: 3

295001K202 ..(KA's)

ANSWER: 006 (1.00)

c.

REFERENCE:

RPS, LP 49, Rev 0, pg. 13
Bank

Objective: 049.00.14

Cognitive Level: 2

295006A101 ..(KA's)

ANSWER: 011 (1.00)

c.

REFERENCE:

LOA-PC-201, Rev 02, pg. 16
LOP-VQ-04, Rev 12, pg. 44

New

Objective: 093.00.12

Cognitive Level: 1

295010K204 ..(KA's)

ANSWER: 002 (1.00)

b.

REFERENCE:

Rx Vessel Instrumentation, pg.
14

New

Objective: 040.00.05

Cognitive Level: 1

295001A206 ..(KA's)

ANSWER: 007 (1.00)

b.

REFERENCE:

EHC Elec, LP 74, Rev 1, pg. 4
& 5 INPO Bank No. 762

Objective: 074.00.05

Cognitive Level: 2

295007K201 ..(KA's)

ANSWER: 012 (1.00)

d.

REFERENCE:

LOP-VQ-04, Rev 12 pg. 40

New

Objective: 092.00.05

Cognitive Level: 1

295010K303 ..(KA's)

ANSWER: 003 (1.00)

c.

REFERENCE:

LOR-1PM01J-A314 Rev 1
New

Objective: 005.00.10

Cognitive Level: 1

2.1.28 ..(KA's)

ANSWER: 008 (1.00)

b.

REFERENCE:

LOA-EH-101, Rev 4, pg. 13
EHC Elec, LP 74, Rev 1, pg.
29 New

Objective: 074.00.21

Cognitive Level: 2

295007A202 ..(KA's)

ANSWER: 013 (1.00)

c.

REFERENCE:

LOA-HD-101(201)

New

Objective: 079.02.20

Cognitive Level: 2

295014K106 ..(KA's)

ANSWER: 004 (1.00)

a.

REFERENCE:

DC, LP 06, Rev 1, pg. 25. New

Objective: 006.00.16

Cognitive Level: 2

295003A203 ..(KA's)

ANSWER: 009 (1.00)

c.

REFERENCE:

LOP-RH-07, Rev 45, pg. 10

LOP-FC-09, Rev 10, pg. 4

New

Objective: 027.00.03

Cognitive Level: 2

295008A109 ..(KA's)

ANSWER: 014 (1.00)

a.

REFERENCE:

LP LGA010, pg. 14 LaSalle
9501 ILT Exam Question No.
119

Objective: 400.00.14

Cognitive Level: 1

295015K1.0 ..(KA's)

ANSWER: 005 (1.00)

b.*REFERENCE LOA-EH-201,
Rev 4 pg. 14 New

Objective: 049.00.10

Cognitive Level: 3

295005A102 ..(KA's)

ANSWER: 010 (1.00)

c.

REFERENCE:

RR Flow Control; LP 23, Rev
1, pg. 15 New

Objective: 023.00.10

Cognitive Level: 1

295009K301 ..(KA's)

ANSWER: 015 (1.00)
b.
REFERENCE:
LGA-NB-01 Rev 5 pg. 10
New
Objective: 045.00.05
Cognitive Level: 1
295015K301 ..(KA's)

ANSWER: 019 (1.00)
a.
REFERENCE:
RRFC, LP 23, Rev 1, pg. 32
New
Objective: 023.00.16
Cognitive Level: 2
295020K102 ..(KA's)

ANSWER: 024 (1.00)
c.
REFERENCE:
LGA Figure V
New
Objective: 413.00.04
Cognitive Level: 2
295026K101 ..(KA's)

ANSWER: 016 (1.00)
b.
REFERENCE:
LOA-RX-101, Rev 3, pg. 5
LaSalle 9501 ILT Exam
Question No. 87
Modified
Objective: 049.02.20
Cognitive Level: 1
295016A101 ..(KA's)

ANSWER: 020 (1.00)
b.
REFERENCE:
LOA-IN-201, Rev 1 pg. 12
New
Objective: 090.00.05
Cognitive Level: 1
295020K302 ..(KA's)

ANSWER: 025 (1.00)
c.
REFERENCE:
LGA-003 Rev 0 BWROG
EPGs/SAGs Appendix B
New
Objective: 421.00.04
Cognitive Level: 2
295030K103 ..(KA's)

ANSWER: 017 (1.00)
a.
REFERENCE:
CX, LP 50, pg. 8
New
Objective: 050.00.05
Cognitive Level: 1
295017K208 ..(KA's)

ANSWER: 021 (1.00)
c.
REFERENCE:
LOA-RH-101 Rev 3, pg. 7
New
Objective: 049.00.18
Cognitive Level: 1
295021K104 ..(KA's)

ANSWER: 026 (1.00)
d.
REFERENCE:
LGA-002 Rev 00
New
Objective: 418.00.02
Cognitive Level: 3
295032A105 ..(KA's)

ANSWER: 018 (1.00)
c.
REFERENCE:
LaSalle UFSAR Section
7.7.14.1.1.1.c New
Objective: 118.00.05
Cognitive Level: 2
295017K301 ..(KA's)

ANSWER: 022 (1.00)
d.
REFERENCE:
LOP-VG-01, Rev 8. pg. 2
LOA-FH-001, Rev 0., pg. 3,5
New
Objective: 095.00.01
Cognitive Level: 1
295023K207 ..(KA's)

ANSWER: 027 (1.00)
a.
REFERENCE:
LZP-1200-1, Rev 23, pg. 38
New
Objective: 400.00.14
Cognitive Level: 1
295033K305 ..(KA's)

ANSWER: 023 (1.00)
b.
REFERENCE:
LGA-001 Rev 00 New
Objective: 410.00.01
Cognitive Level: 3
295025A101 ..(KA's)

ANSWER: 028 (1.00)

b.

REFERENCE:

LOR-1H13-P601-E204, Rev 0.

53.00.15 001

(bank)

Objective: 091.00.08

Cognitive Level: 2

295034K206 ..(KA's)

ANSWER: 032 (1.00)

b.

REFERENCE:

LOP-PC-03, Rev 12 pg. 15

New

Objective: 427.00.01

Cognitive Level: 3

295038A204 ..(KA's)

ANSWER: 036 (1.00)

c.

REFERENCE:

LOP-RR-03, Rev 8, pg. 5

New

Objective: 023.00.16

Cognitive Level: 1

202002K202 ..(KA's)

ANSWER: 029 (1.00)

a.

REFERENCE:

LaSalle UFSAR Appendix J

LOR-1PM13J-A304 Rev 0

New

Objective: 121.00.20

Cognitive Level: 2

295036K101 ..(KA's)

ANSWER: 033 (1.00)

d.

REFERENCE:

LOP-HG-02, Rev 8, pg. 2

094.00.20 002

(bank)

Objective: 094.00.05

Cognitive Level: 1

500000A103 ..(KA's)

ANSWER: 037 (1.00)

d.

REFERENCE:

LOR-1H13-P603-A410

New

Objective: 023.00.14

Cognitive Level: 2

202002A207 ..(KA's)

ANSWER: 030 (1.00)

a.

REFERENCE:

LOA-RM-201 Rev 3, pg. 18,

19

New

Objective: 047.00.06

Cognitive Level: 2

295037K214 ..(KA's)

ANSWER: 034 (1.00)

d.

REFERENCE:

LOA-FP-101, Rev 3, pg. 6 &

51 125.02.20 001

(modified)

Objective: 125.00.20

Cognitive Level: 2

600000K304 ..(KA's)

ANSWER: 038 (1.00)

b.

REFERENCE:

LOS-RH-Q2, Rev 30, pg. 4

New

Objective: 064.00.21

Cognitive Level: 1

203000A217 ..(KA's)

ANSWER: 031 (1.00)

a.

REFERENCE:

LOS-AA-S101, Rev 4, pg. 16

New

Objective: 721.02.20

Cognitive Level: 1

295038A102 ..(KA's)

ANSWER: 035 (1.00)

d.

REFERENCE:

LP-25, chapter 25, pp. 20,

section III.J. 25.00.05 006

(modified)

Objective: 024.00.16

Cognitive Level: 1

201001K110 ..(KA's)

ANSWER: 039 (1.00)

a.

REFERENCE:

LP-27 Section IV.A

New

Objective: 027.00.05

Cognitive Level: 1

204000A303 ..(KA's)

ANSWER: 040 (1.00)

c.

REFERENCE:

LPCS LP pg. 23

New

Objective: 063.00.16

Cognitive Level: 1

209001K202 ..(KA's)

ANSWER: 041 (1.00)

c.

REFERENCE:

LaSalle UFSAR Section

7.3.1.2.3.6 LaSalle Systems

Description Manual, Chapter

63, Low Pressure Core Spray

System

Modified

Objective: 063.00.05

Cognitive Level: 2

209001A103 ..(KA's)

ANSWER: 042 (1.00)

c.

REFERENCE:

HPCS Lesson Plan pg. 10

061.00.05 006

(bank)

Objective: 061.00.05

Cognitive Level: 2

209002K407 ..(KA's)

ANSWER: 043 (1.00)

a.

REFERENCE:

SBLC LP, pg. 5, 18 New

Objective: 028.00.16

Cognitive Level: 1

211000K506 ..(KA's)

ANSWER: 044 (1.00)

b.

REFERENCE:

RPS LP pg. 23 LOS-TG-W1

Rev 30, pg. 13 LOS-RP-M5,

Rev 2, pg. 14

New

Objective: 049.00.10

Cognitive Level: 2

212000K110 ..(KA's)

ANSWER: 045 (1.00)

a.

REFERENCE:

RPS Lesson Plan pg. 26 & 35

New

Objective: 049.00.14

Cognitive Level: 2

212000K402 ..(KA's)

ANSWER: 046 (1.00)

b.

REFERENCE:

RBM LP pg. 32; APRM LP pg.

22

New

Objective: 045.00.16

Cognitive Level: 2

215002K203 ..(KA's)

ANSWER: 047 (1.00)

c.

REFERENCE:

IRM LP Fig 42-2 1E-1-4210AP

LOA-NR-101, Rev 1, pg. 9

New

Objective: 042.00.21

Cognitive Level: 2

215003A207 ..(KA's)

ANSWER: 048 (1.00)

a.

REFERENCE:

LOP-NR-01, Rev 9, pg. 5

New

Objective: 041.00.15

Cognitive Level: 1

215004A301 ..(KA's)

ANSWER: 049 (1.00)

c.

REFERENCE:

LPRM LP pg. 6 and Fig 43-6

New

Objective: 043.00.14

Cognitive Level: 2

215005K504 ..(KA's)

ANSWER: 050 (1.00)

c.

REFERENCE:

NB Inst LP pg. 30 RWLC LP

pg. 30

New

Objective: 040.00.16

Cognitive Level: 2

216000K602 ..(KA's)

ANSWER: 051 (1.00)

c.

REFERENCE:

LPGP-PSTG-01S08, Rev. 1,

pg. 10 LGA-001, Rev 0

New

Objective: 040.00.05

Cognitive Level: 3

216000A301 ..(KA's)

ANSWER: 052 (1.00)
b.
REFERENCE:
RWCU LP pg. 37 027.00.21
001
(Significantly modified)
Objective: 096.00.12
Cognitive Level: 2
223002K606 ..(KA's)

ANSWER: 053 (1.00)
b.
REFERENCE:
RH LP, Figure 64-05 T.S.
4.5.1.b pg. 3/45-4
New
Objective: 064.00.21
Cognitive Level: 3
226001K301 ..(KA's)

ANSWER: 054 (1.00)
d.
REFERENCE:
FC LP pg. 46
New
Objective: 029.00.05
Cognitive Level: 2
233000A101 ..(KA's)

ANSWER: 055 (1.00)
c.
REFERENCE:
PCIS LP pg. 22 091.00.05B.1
002
(modified)
Objective: 091.00.05
Cognitive Level: 1
239001K402 ..(KA's)

ANSWER: 056 (1.00)
a.
REFERENCE:
LPGP-PSTG-01S04A Rev 1
New
Objective: 070.02.20
Cognitive Level: 2
239002A105 ..(KA's)

ANSWER: 057 (1.00)
b.
REFERENCE:
EH LP No. 74
New
Objective: 074.00.05
Cognitive Level: 2
241000K108 ..(KA's)

ANSWER: 058 (1.00)
b.
REFERENCE:
Mn Turb LP No. 71, pg. 29
071.00.14 001
(modified)
Objective: 071.00.10
Cognitive Level: 1
245000A407 ..(KA's)

ANSWER: 059 (1.00)
b.
REFERENCE:
FW LP pg. 14 77.00.14 001
(modified)
Objective: 077.00.05
Cognitive Level: 2
259001K503 ..(KA's)

ANSWER: 060 (1.00)
c.
REFERENCE:
HD LP pg. 38 & 52 New
Objective: 079.00.05
Cognitive Level: 2
259001A106 ..(KA's)

ANSWER: 061 (1.00)
b.
REFERENCE:
RWLC LP pg. 26 031.00.16B
001
(modified)
Objective: 031.00.05
Cognitive Level: 2
259002K307 ..(KA's)

ANSWER: 062 (1.00)
c.
REFERENCE:
DG LP No. 11, pg. 52
005.00.20 001
(modified)
Objective: 001.00.07
Cognitive Level: 3
262001A405 ..(KA's)

ANSWER: 063 (1.00)
c.
REFERENCE:
UPS LP pg. 22
New
Objective: 012.00.16
Cognitive Level: 2
262002K601 ..(KA's)

ANSWER: 064 (1.00)
b.
REFERENCE:
LOP-VX-01 Rev 7 119.00.20
001
Objective: 006.00.05
Cognitive Level: 1
263000K501 ..(KA's)

ANSWER: 065 (1.00)
a.
REFERENCE:
LOP-DG-01 Rev 25 pg. 5
011.00.21 004
(slightly modified)
Objective: 011.00.21
Cognitive Level: 2
264000K104 ..(KA's)

ANSWER: 066 (1.00)
b.
REFERENCE:
FP LP pg. 44
New
Objective: 125.00.05
Cognitive Level: 1
286000K302 ..(KA's)

ANSWER: 067 (1.00)
c.
REFERENCE:
VR LP pg. 9, 16, 17, 31
New
Objective: 118.00.16
Cognitive Level: 2
288000K106 ..(KA's)

ANSWER: 068 (1.00)
c.
REFERENCE:
VC LP, pg. 4, 5 117.00.08 001
Objective: 117.00.08
Cognitive Level: 1
290003K401 ..(KA's)

ANSWER: 069 (1.00)
d.
REFERENCE:
Technical Specifications LCO
3.1.5. 28.00.022 001
(Sig Modified)
Objective: 028.00.22
Cognitive Level: 2
2.1.25 ..(KA's)

ANSWER: 070 (1.00)
a.
REFERENCE:
Rx Theory LGP-1-1, Rev
62, pg. 7
Dresden 1998 NRC ILT Exam
Objective: 041.00.14
Cognitive Level: 2
2.1.7 ..(KA's)

ANSWER: 071 (1.00)
b.
REFERENCE:
LOS-RI-Q3 Rev 31
INPO Q No. 821
Objective: 032.00.20
Cognitive Level: 1
2.2.12 ..(KA's)

ANSWER: 072 (1.00)
d.
REFERENCE:
LFS-100-4, Rev 16, pg. 12
New
Objective: 30.077
Cognitive Level: 1
2.2.28 ..(KA's)

ANSWER: 073 (1.00)
c.
REFERENCE:
LOP-VQ-04, Rev 12, Pg. 34
New
Objective: 93.00.20
Cognitive Level: 2
2.3.9 ..(KA's)

ANSWER: 074 (1.00)
b.
REFERENCE:
LGA-003, Rev 0
New
Objective: 400.00.18
Cognitive Level: 1
2.4.6 ..(KA's)

ANSWER: 075 (1.00)
b.
REFERENCE:
LZP-1170-2, Revision 8, Page
6 and 7, Step E.4 LOR Bank
LZP-1170-2 006
(modified)
Objective: 702.06
Cognitive Level: 2
2.4.12 ..(KA's)

ANSWER: 076 (1.00)
a.
REFERENCE:
Technical Specifications
Section 3.8
New
Objective: 005.02.20
Cognitive Level: 2
2.1.10 ..(KA's)

ANSWER: 077 (1.00)
d.
REFERENCE:
Tech Spec, Amendment No.
74, pg. 3/4 8-14, 8-15
TS-3/4.8.2 001
(Bank)
Objective: 006.00.22
Cognitive Level: 2
2.1.12 ..(KA's)

ANSWER: 078 (1.00)
d.
REFERENCE:
RL LP pg. 28
New
Objective: 031.00.16
Cognitive Level: 3
295008A202 ..(KA's)

ANSWER: 079 (1.00)

a.

REFERENCE:

LOA-HD-201 Rev 3, pg. 10 & 14

New

Objective: 24.048

Cognitive Level: 1

2.4.11 ..(KA's)

ANSWER: 083 (1.00)

d.

REFERENCE:

LGA-001, Rev 0 LGA-003, Rev 0

New

Objective: 400.00.01

Cognitive Level: 2

2.4.1 ..(KA's)

ANSWER: 087 (1.00)

d.

REFERENCE:

LGA-003, Rev 0

New

Objective: 400.00.05

Cognitive Level: 3

2.4.8 ..(KA's)

ANSWER: 080 (1.00)

a.

REFERENCE:

T.S. 3.3.8 New

Objective: 027.00.22

Cognitive Level: 2

2.1.12 ..(KA's)

ANSWER: 084 (1.00)

d.

REFERENCE:

LOP-CM-03, Rev 11, pg. 3 & 8

LGA-003, Rev 0

New

Objective: 421.00.02

Cognitive Level: 2

295026A201 ..(KA's)

ANSWER: 088 (1.00)

d.

REFERENCE:

Tech Spec 3/4.6.5.2 pg. 3/4 6-38 090.00.22 002

(modified)

Objective: 118.00.22

Cognitive Level: 1

2.1.12 ..(KA's)

ANSWER: 081 (1.00)

b.

REFERENCE:

Tech Spec 3.4.1.3, pg. 3/4 4-3

LOA-RR-101, Rev 5, pg. 15

New

Objective: 022.00.22

Cognitive Level: 2

2.1.33 ..(KA's)

ANSWER: 085 (1.00)

d.

REFERENCE:

LGA-002 Rev 0

New

Objective: 400.00.01

Cognitive Level: 3

2.4.1 ..(KA's)

ANSWER: 089 (1.00)

c.

REFERENCE:

CC-AA-206 Rev 0 pg. 4

Dresden 1997 ILT exam

Objective: 660.02

Cognitive Level: 1

2.2.18 ..(KA's)

ANSWER: 082 (1.00)

d.

REFERENCE:

Lesson Plan for System 02, Sections VI.A and VIII.

002.00.20 001

(modified)

Objective: 02.00.20

Cognitive Level: 2

2.1.32 ..(KA's)

ANSWER: 086 (1.00)

b.

REFERENCE:

Tech Specs 3.1.3.5., ACTION

a.2. (a. AND Bases 3/4.1.3,

pg. B 3/4 1-3.) 025.00.24 001

(Modified)

Objective: 774.010

Cognitive Level: 1

2.1.11 ..(KA's)

ANSWER: 090 (1.00)

b.

REFERENCE:

LGA-001, Rev 0 & LGA-010,

Rev 0

New

Objective: 400.00.01

Cognitive Level: 2

2.4.1 ..(KA's)

ANSWER: 091 (1.00)

a.

REFERENCE:

LOP-VQ-04, Rev 12, pg. 4

LYP-1300-1, Rev 11, pg. 7

New

Objective: Cognitive Level: 1

2.3.6 ..(KA's)

ANSWER: 095 (1.00)

d.

REFERENCE:

LGA-010, Rev 0

New

Objective: 434.00.01

Cognitive Level: 1

295031A202 ..(KA's)

ANSWER: 099 (1.00)

a.

REFERENCE:

LP 73 Section VII.A and T.S.

3.3.1 73.00.24 001

(bank)

Objective: 073.00.24

Cognitive Level: 2

2.1.11 ..(KA's)

ANSWER: 092 (1.00)

a.

REFERENCE:

LZP-1260-5, Rev 1, pg. 2

CPS 2000 ILT SRO Exam

Objective:

Cognitive Level: 1

2.3.4 ..(KA's)

ANSWER: 096 (1.00)

a.

REFERENCE:

LOP-CM-04, Rev 8, pg. 1

LGA-003, Rev 0

New

Objective: 400.00.01

Cognitive Level: 2

2.4.1 ..(KA's)

ANSWER: 100 (1.00)

a.

REFERENCE:

LGA-002, Rev 0

New

Objective: 400.00.01

Cognitive Level: 2

2.4.1 ..(KA's)

ANSWER: 093 (1.00)

b.

REFERENCE:

LOS-RH-R1, Rev 10, pg. 3

New

Objective: 30.100

Cognitive Level: 1

2.3.10 ..(KA's)

ANSWER: 097 (1.00)

d.

REFERENCE:

Tech Spec 3.5.1

New

Objective: 061.00.22

Cognitive Level: 3

2.2.24 ..(KA's)

ANSWER: 094 (1.00)

c.

REFERENCE:

RS-AA-104, Rev 0, pg. 5

New

Objective:

Cognitive Level: 1

2.2.7 ..(KA's)

ANSWER: 098 (1.00)

d.

REFERENCE:

LOA-IA-201, Rev 1, pg. 14

New

Objective: 120.00.18

Cognitive Level: 2

295019A201 ..(KA's)

(***** END OF EXAMINATION *****)

ANSWER KEY

001 c	021 c	041 c	061 b	081 b
002 b	022 d	042 c	062 c	082 d
003 c	023 b	043 a	063 c	083 d
004 a	024 c	044 b	064 b	084 d
005 b	025 c	045 a	065 a	085 d
006 c	026 d	046 b	066 b	086 b
007 b	027 a	047 c	067 c	087 d
008 b	028 b	048 a	068 c	088 d
009 c	029 a	049 c	069 d	089 c
010 c	030 a	050 c	070 a	090 b
011 c	031 a	051 c	071 b	091 a
012 d	032 b	052 b	072 d	092 a
013 c	033 d	053 b	073 c	093 b
014 a	034 d	054 d	074 b	094 c
015 b	035 d	055 c	075 b	095 d
016 b	036 c	056 a	076 a	096 a
017 a	037 d	057 b	077 d	097 d
018 c	038 b	058 b	078 d	098 d
019 a	039 a	059 b	079 a	099 a
020 b	040 c	060 c	080 a	100 a

(***** END OF EXAMINATION *****)