Nuclear Regulatory Commission
Operator Licensing
Examination

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

Applicant Information	
Name:	Region: III
Date: 4/19/02	Facility/Unit: LaSalle Co. Station U1/U2
License Level: RO	Reactor Type: GE BWR
Start Time:	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	Points
Applicant's Score	_____	Points
Applicant's Grade	_____	Percent

PART A - GENERAL GUIDELINES

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. If you have any questions concerning the administration of any part of the examination, do not hesitate asking them before starting that part of the test.

3. SRO applicants will be tested at the level of responsibility of the senior licensed shift position (i.e., shift supervisor, senior shift supervisor, or whatever the title of the position may be).

4. You must pass every part of the examination to receive a license or to continue performing license duties. Applicants for an SRO-upgrade license may require remedial training in order to continue their RO duties if the examination reveals deficiencies in the required knowledge and abilities.

5. The NRC examiner is not allowed to reveal the results of any part of the examination until they have been reviewed and approved by NRC management. Grades provided by the facility licensee are preliminary until approved by the NRC. You will be informed of the official examination results about 30 days after all the examinations are complete.

PART B - WRITTEN EXAMINATION GUIDELINES

1. ***[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.

2. 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.

3. For an initial examination, the nominal time limit for completing the examination is six hours; extensions will be considered under extenuating circumstances.

4. You may bring pens, pencils, and calculators into the examination room. Use dark pencil to facilitate machine grading.

5. 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.

6. Mark your answers on the answer sheet provided. Use only the paper provided. If you need to change your original answer, erase completely and enter the desired answer. If the NRC grader is unable to determine which mark is your answer, the question will be marked as incorrect even if one of the circles blackened is the correct answer.

7. 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. Finally, answer all questions based on actual plant operation, procedures, and references. If you believe that the answer would be different based on simulator operation or training references, you should answer the question based on the *actual plant*.

8. Restroom trips are permitted, but only one applicant at a time will be allowed to use the rest room. If the restroom is outside the examination room, you will be escorted to the restroom. You and your escort should avoid contact with anyone outside the examination room to eliminate even the appearance or possibility of cheating.

9. When you complete the examination, assemble a package including the examination cover sheet and answer sheets 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. The examination questions will be given to the station training department immediately after 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 or revoked.

11. Do you have any questions?

QUESTION: 001 (1.00)

Given the following initial plant conditions:

- An ATWS has occurred
- The LGAs have been entered
- SBLC pump is injecting boron into the core
- Reactor power is 20% and oscillating
- SRVs controlling RPV pressure at 900 psig
- RPV level was lowered to -80 inches

As required by LGAs, reactor water level is being lowered to . . .

a. concentrate the boron thus lowering the reactor power level.

b. decrease natural circulation driving head and core flow thereby increasing core voiding.

c. decrease reactor pressure which will add negative reactivity due to reduced moderator density.

d. increase reactor water temperature which will add negative reactivity due to reduced moderator density.

QUESTION: 002 (1.00)

The Unit 1 Standby Gas Treatment (SBGT) system is out of service. The Unit 2 SBGT system is available. Which of the following events would be a concern if the Unit 2 SBGT system would become inoperable? The inability to . . .

a. monitor Refuel Floor radiation levels.

b. maintain negative pressure in Primary Containment.

c. provide a controlled release path during a refuel accident.

d. provide pressure control between clean and contaminated areas within the reactor building.

QUESTION: 003 (1.00)

Fuel handlers have informed the control room that the fuel dunking chamber is broken. As a result, _____ evolutions will be delayed by this component's failure.

a. core alteration

b. core verification

c. sipping fuel in spent fuel pool

d. movement of new fuel into spent fuel pool

QUESTION: 004 (1.00)

The following conditions exist on Unit 2:

- Drywell pressure 2.5 psig
- Undervoltage condition on Bus 242Y

The 2A EDG started and loaded onto the bus. After several minutes, a local operator reported annunciator 2DG03J-1-2, "OVERSPEED" alarmed.

As NSO, you verify the 2A EDG . . .

a. shuts down engine ONLY

b. continues to power Bus 242Y

c. electrically unloads AND runs idle

d. shuts down engine AND opens output breaker to Bus 242Y

QUESTION: 005 (1.00)

Fuel Pool Radiation High-High annunciators were received. Operators found that Channels 'A' and 'B' have tripped.

1. Sufficient air flow obtained, the VG Electric Heater energizes
2. Procedure directs operator to shutdown the unaffected unit VG equipment train
3. Reactor Building ventilation trip
4. VG Cooling Fan will trip, if it was running
5. VG Cooling Fan starts
6. Initiation signal starts the VG Primary Fan; the fan start signal opens the VG inlet, then outlet isolation dampers
7. No further action

From the above list, the expected actions in the expected sequence will be . . .

a. 7 only

b. 3,7 only

c. 3,6,1,4,2,7 only

d. 3,6,5,2,7 only

QUESTION: 006 (1.00)

Surveillance test, LIS-RI-112, "UNIT 1 REACTOR VESSEL HIGH WATER LEVEL 8 RCIC TURBINE TRIP AND MAIN TURBINE/FEEDWATER PUMP TRIP CALIBRATION," was in progress. While restoring from testing transmitter, 1B21-N705A, "RCIC Div 1 Level 8 trip logic," the NSO noticed annunciator "RCIC RX VESSEL WTR LVL HI" was still lit.

If the "RX WATER LVL HI C TRIP - LEVEL 8 TRIP" status light is actuated under these conditions, the other expected actions, if any, that will occur are . . .

a. no additional actions.

b. both divisions of RCIC logic trip (only).

c. Main Turbine trip and feedwater pumps trip (only).

d. both divisions of RCIC logic trip, Main Turbine trip, and Feedwater pumps trip.

QUESTION: 007 (1.00)

The reactor is in Mode 3 with 'A' loop of RHR in SDC mode, in preparation for a refueling outage. Reactor pressure is 100 psig.

1. 1E12-F023, RHR Head Spray Valve indicating light on the PCIS panel is extinguished
2. A and B RHR Service Water Pumps indicate tripped
3. 1E12-F053A, SDC Return Valve closed
4. Loss of Leakage Detection Power

From the above list, indication of a loss of SDC possibly requiring entry into an abnormal operating procedure would be . . .

a. 1, 3, and 4 only.

b. 2, 3, and 4 only.

c. 1 only.

d. 4 only.

QUESTION: 008 (1.00)

A _____(1)_____ radiation trip in one channel of the Off-gas Post-treatment Monitoring System combined with any other trip in the other channel will _____(2)_____.

a. (1) HIGH-HIGH;
(2) CLOSE the OG system outlet valve to the stack (1N62-F057) which closes the combined drain valves and the holdup line drain valves.

b. (1) HIGH-HIGH-HIGH;
(2) CLOSE the OG system outlet valve to the stack (1N62-F057) which closes the combined drain valves and the holdup line drain valves.

c. (1) HIGH-HIGH;
(2) OPEN the Off Gas Charcoal Adsorber Train Inlet Stop 1(2)N62-F042.

d. (1) HIGH-HIGH-HIGH;
(2) OPEN the Off Gas Charcoal Adsorber Train Inlet Stop 1(2)N62-F042.

QUESTION: 009 (1.00)

Identify how much water could be expected to be provided from the CRD system to the reactor pressure vessel under the following circumstances:

No control rod motion, CRD lineup in a normal configuration: _____(1)_____gpm. The reactor depressurized and CRD flow maximized: _____(2)_____gpm

a. (1) 120; (2) 170

b. (1) 120; (2) 300

c. (1) 60; (2) 170

d. (1) 60; (2) 300

QUESTION: 010 (1.00)

Control room operators received annunciator DIV 2 RB VENT RAD HI-HI and confirmed that both 'C' and 'D' radiation monitoring channels have tripped. From the list below, what automatic actions will occur?

1. U1 RB Ventilation System Inboard Isolation Dampers CLOSE.
2. U2 RB Ventilation System Inboard Isolation Dampers CLOSE.
3. BOTH trains of SBGT system START.
4. U1 RB Ventilation System Outboard Isolation Dampers CLOSE.
5. U2 RB Ventilation System Outboard Isolation Dampers CLOSE.

a. Only 3 occurs

b. Only 1, 2, and 3 occurs

c. Only 2, 3, and 5 occurs

d. Only 1, 2, 4, and 5 occurs

QUESTION: 011 (1.00)

The control room ventilation air filtration deluge system provides a(n) . . .

a. manual system for quenching charcoal fires.

b. emergency method for control room fire suppression.

c. automatic smoke quenching in case of control room fire.

d. automatic quenching of charcoal in case of charcoal fire.

QUESTION: 012 (1.00)

Maintenance personnel have removed the Instrument Air/Service Air after-filter and identified that the filter has been severely damaged. With only this filter damaged, what specific type of contaminant would pass into the downstream distribution header?

a. resin beads

b. desiccant fines

c. excess moisture

d. oil and dust particles

QUESTION: 013 (1.00)

On a hot summer day with both units operating in Mode 1, control room operators observe an increase in RBCCW system temperatures due to a decrease in service water flow.

The most limiting RBCCW-cooled component is the . . .

a. recirculation pump bearings.

b. CRD pump bearings.

c. recirculation pump motor windings.

d. RWCU heat exchangers.

QUESTION: 014 (1.00)

With reactor power at 16%, the nuclear station operator was performing a single notch withdrawal on a control rod. If an RMCS abnormal condition occurred because Activity Control Units disagree, the RMCS will _____(1)_____ and the operator should _____(2)_____.

a. (1) generate a rod block and allow insert signals only
(2) monitor rod position only

b. (1) generate a rod block and allow insert signals only
(2) monitor rod position and briefly depress the Insert pushbutton

c. (1) lock out and cause a loss of Accumulator Trouble and Scram indications on the full core display
(2) monitor rod position only

d. (1) lock out and cause a loss of Accumulator Trouble and Scram indications on the full core display
(2) monitor rod position and briefly depress the Insert pushbutton

QUESTION: 015 (1.00)

Reactor power was stable at 100%. Short-term maintenance was being performed on a reactor recirculation flow control subloop. A manual transfer to the redundant subloop was performed. The operator pushed the Motion Inhibit Trip (MIT) pushbutton at the 1H13-P602 panel. A sudden failure of the operating controller caused controller output to go to zero.

If the subloop in maintenance is still functioning, recirculation flow control will . . .

a. remain with the operating subloop because automatic transfer is inhibited by the MIT, and the flow control valve position will NOT change.

b. remain with the operating subloop because any maintenance on the backup subloop prevents automatic transfer, and the flow control valve will CLOSE.

c. transfer to the backup subloop because of a sensed rate of change fault, and the flow control valve position will NOT change.

d. transfer to the backup subloop because an AC 70 system component failure will be sensed, and the flow control valve will CLOSE.

QUESTION: 016 (1.00)

Unit 1 was operating at 100% power. Performance of 'A' RHR system full flow surveillance test was in progress in accordance with LOS-RH-Q1. The 'A' RHR pump was running with an operator in the process of raising flow to 7200 gpm using the control switch for 1E12-F024A, "A RHR Pump Full Flow Test Isol Valve," in accordance with the procedure.

Under these conditions, 1E12-F024A will go closed if . . .

a. a High Drywell Pressure initiation signal is received regardless of control switch position for 1E12-F024A.

b. reactor vessel level reaches -150 inches AND then the control switch for 1E12-F024A is released.

c. the control switch for 1E12-F024A is released AND then the manual initiation pushbutton for "A" LPCI is armed and depressed.

d. a High Drywell Pressure initial signal is received AND then the control switch for 1E12-F024A is released AND reactor vessel level drops to -150 inches.

QUESTION: 017 (1.00)

The Low Pressure Core Spray system functions primarily to . . .

a. minimize H2 generation by keeping a water spray environment above the core.

b. limit maximum cladding temperature and cool it to saturation upon flooding the core.

c. provide the predominant source of steam cooling to the core.

d. minimize zirconium oxide production for small to intermediate break LOCAs.

QUESTION: 018 (1.00)

Unit 1 was in Mode 1 when a trip of the Unit 1 SAT occurred. With respect to HPCS, which of the following conditions is expected to exist?

a. Bus 143 will be de-energized and HPCS will NOT be available.

b. Bus 143 will fast transfer to the UAT and HPCS will be available.

c. The HPCS pump will be unavailable until Bus 143 can be cross-tied to Bus 243.

d. The HPCS pump will be unavailable until the Division 3 DG energizes Bus 143.

QUESTION: 019 (1.00)

With standby liquid control (SBLC) injecting, reactor power will decrease and the reactor will remain subcritical . . .

a. even if the normal cooldown rate is exceeded. HOWEVER, subcriticality is NOT assured if the reactor recirculation pumps are running because the SBLC boron concentration does NOT account for the volume of water in the reactor recirculation piping.

b. as long as the normal cooldown rate is NOT exceeded. HOWEVER, subcriticality is NOT assured if the reactor recirculation pumps are running because the SBLC boron concentration does NOT account for the volume of water in the reactor recirculation piping.

c. even if the normal cooldown rate is exceeded AND the reactor recirculation pumps are running because the SBLC boron concentration accounts for the volume of water in the reactor recirculation piping.

d. as long as the normal cooldown rate is NOT exceeded, even if the reactor recirculation pumps are running because the SBLC boron concentration accounts for the volume of water in the reactor recirculation piping.

QUESTION: 020 (1.00)

The unit is in an outage with the Reactor Mode Switch in Shutdown with the scram reset. Instrument testing has scram discharge volume (SDV) high level scram signals present. The SDV water level bypass switch is in BYPASS. The fuel handling foreman requests the Reactor Mode Switch be placed in Startup for refueling bridge interlock testing.

Under these conditions, predict what would happen if the Reactor Mode Switch was taken to Startup. The reactor will _____(1)_____ and you should refer to procedure _____(2)_____ for guidance.

a. (1) scram (2) LOP-AA-03, "Reactor Mode Changes"

b. (1) scram; (2) LFP-100-1, "Master Refueling Procedure"

c. (1) not scram; (2) LOP-AA-03, "Reactor Mode Changes"

d. (1) not scram; (2) LFP-100-1, "Master Refueling Procedure"

QUESTION: 021 (1.00)

With Unit 1 operating in Mode 3, control room operators completed LOS-LP-Q1, "LPCS System Inservice Test." When the LPCS Water Leg pump was restarted, the LPCS System Discharge Pressure Low Annunciator (H13-P601-C308) did not reset. An operator was dispatched and identified that there was no water at the high point vent.

This condition requires entry into Technical Specifications Section . . .

1) 3.3.5.1, ECCS Instrumentation
2) 3.5.1, ECCS - Operating
3) 3.5.2, ECCS - Shutdown

a. only 1)

b. only 2)

c. only 3)

d. only 1) AND 3)

QUESTION: 022 (1.00)

Given:

1. Reactor building supply and exhaust dampers will close on both units because of the interlock with Group IV.
2. The CRD Pump Cubicle Fans will trip because of low reactor building ventilation air exhaust flow.
3. A Group I MSIV isolation on Hi Steam Tunnel Differential Temperature will occur because of high temperatures following the reactor building ventilation trip.
4. Primary Containment Nitrogen Inerting and Makeup Isolation Valves will close because of the interlock with Group IV.

From the above list, the functions that are expected to result from the initiation of a Group IV Primary Containment Isolation Signal is (are) . . .

a. 3 only

b. 2 and 4 only

c. 1 and 3 only

d. 1, 2 and 4 only

QUESTION: 023 (1.00)

From the following DC load list, select those which would show abnormal operation due to Panel 112Y becoming de-energized:

1. Automatic Depressurization System Division 2
2. Standby Gas Treatment System Panel
3. Remote Shutdown System Panel
4. Low Pressure Core Spray logic

The affected loads would include . . .

a. 1, 2, and 3.

b. 1, 3, and 4.

c. 2 only.

d. 4 only.

QUESTION: 024 (1.00)

With the Unit in Mode 1, what is the MINIMUM suppression pool level that would require taking actions per Technical Specifications.

a. 1.5 inches

b. 2.5 inches

c. 3.5 inches

d. 4.5 inches

QUESTION: 025 (1.00)

The liquid radwaste effluent monitor will automatically stop a discharge to the environment if the monitor identified _____(1)_____ exceeded pre-established limits measured in _____(2)_____.

a. (1) dose rate (2) mrem per hr

b. (1) radioactivity levels (2) cpm

c. (1) radioactivity levels (2) mrem per hr

d. (1)dose rates (2) cpm

QUESTION: 026 (1.00)

With a turbine roll in progress, the throttle pressure feedback signal for the regulator in control of the main turbine electro- hydraulic control system failed high. The rate of turbine acceleration will . . .

a. increase as the control valves start to open.

b. remain about the same and the backup regulator NOT pick up.

c. remain about the same and the backup regulator will pick up.

d. decrease as the control valves start to close.

QUESTION: 027 (1.00)

With the unit operating at full power, the Main Generator 86 Lockout Device actuated. The resultant feedwater temperature will . . .

a. decrease due to increased ambient heat losses.

b. increase due to increased thermal efficiencies.

c. decrease due to extraction steam isolation to feedwater heaters.

d. increase due to feedwater pumps running near dead-head conditions.

QUESTION: 028 (1.00)

The reactor was at 65% power when maintenance personnel caused the main turbine stop valves to close inadvertently. A reactor scram resulted and reactor water level decreased, but NOT enough to cause any level-generated primary containment isolation signals to occur.

Given these conditions, recirculation system flow decreased due to:

a. ATWS recirculation pump trip signal.

b. less voiding in core.

c. flow control valve runback.

d. End Of Cycle-Recirc Pump Trip signal.

QUESTION: 029 (1.00)

Unit 1 is in Mode 2 with reactor pressure at 925 psig. The RCIC system is injecting to the RPV in pressure control mode with the RCIC controller in Manual. If reactor pressure increases, RCIC turbine speed _____(1)_____ and flow _____(2)_____.

a. (1) will not change; (2) increases

b. (1) will not change; (2) decreases

c. (1) increases; (2) increases

d. (1) decreases; (2) decreases

QUESTION: 030 (1.00)

A reactor startup was in progress with operators rejecting RWCU flow to the condenser. Control room operators then detected the following conditions:

- Primary containment pressure at 10 psig and increasing
- Primary containment temperature 140°F and increasing
- Reactor pressure vessel level drops to -60 inches

Assuming no operator intervention, ONLY RWCU valve(s) _____ CLOSE(S).

a. G33-F033, "RWCU Blowdown Header Control Valve"

b. G33-F001 AND G33-F004, "RWCU Inboard and Outboard Isolation Valves"

c. G33-F004, "RWCU Outboard Isolation Valve"

d. G33-F001, "RWCU Inboard Isolation Valve"

QUESTION: 031 (1.00)

The Unit is operating at full power. The following primary containment conditions exist:

- Drywell temperature is 120°F
- Drywell pressure is 1.2 psig
- Auxiliary Building temperature is 90°F on the 786' level

In order to reduce drywell pressure to 0.2 psig, the shift manager directs an NSO to vent the drywell using the VQ system IAW LOP-VQ-04, "Special Operations/Modes of the Primary Containment Vent and Purge System."

In order to verify that gaseous release in within the ODCM release limits, the NSO would monitor the . . .

a. SBGT area radiation monitor.

b. station ventilation stack radiation monitor.

c. Auxiliary Building exhaust ventilation radiation monitor.

d. Reactor Building exhaust ventilation radiation monitor.

QUESTION: 032 (1.00)

With the unit operating at full power, HPCS inadvertently started and injected into the reactor vessel. Regarding this event, which core thermal limit would be most limiting?

a. Minimum Critical Power Ratio

b. Linear Heat Generation Rate

c. Maximum Fraction Limiting Power Distribution

d. Average Planar Linear Heat Generation Rate

QUESTION: 033 (1.00)

Unable to start either CRD pump, and with control rods drifting into the core, the Unit Supervisor directed the NSO to insert a scram. Following the scram from full power, the NSO identified the following conditions:

- neutron power decreasing on all IRMs
- all rods indicate full-in on the full core display except for center control rod 30-31

Center control rod 30-31 indicates full-out with the blue light extinguished and no other alarms on the on full core display. Based on these indications, the reason for control rod 30-31 not inserting is . . .

a. scram discharge instrument volume is full.

b. loss of control rod drive charging header pressure.

c. associated accumulator has a low pressure condition.

d. scram valves on the associated HCU did not reposition.

QUESTION: 034 (1.00)

The purpose of having a High Drywell Pressure reactor scram is to limit . . .

a. fuel damage AND the pressure spike in the drywell during a LOCA.

b. ONLY the pressure spike in the drywell during a LOCA.

c. the reactor pressure spike AND any core flux transient during a LOCA.

d. the amount of water volume added to the suppression pool during a LOCA.

QUESTION: 035 (1.00)

Unit 2 was operating at power when a transient caused the reactor steam dome pressure to increase to 1150 psig. Two of the ATWS trip units for Division 2 reactor pressure failed to initiate.

Under these circumstances, the recirculation pumps will _____(1)_____ and the ARI system _____(2)_____.

a. (1) trip; (2) will initiate automatically

b. (1) trip; (2) must be manually initiated

c. (1) remain in fast speed; (2) will initiate automatically

d. (1) remain in fast speed; (2) must be manually initiated

QUESTION: 036 (1.00)

A LOCA occurred in the drywell concurrent with a release of radioactivity which caused the Reactor Building (RB) ventilation system to isolate. The following plant conditions also exist:

- Reactor water level is at -60 inches, lowering
- Drywell pressure is at 6.5 psig, rising
- Reactor building ventilation exhaust radiation is 6 mr/hr, steady
- Fuel Pool ventilation exhaust radiation is 5 mr/hr, steady
- Main Steam line delta T is 25°F, steady
- MSIVs are closed

In accordance with LGA-002, in order to restart RB ventilation, operators must bypass...

1. Main steam line delta T.
2. High Drywell pressure.
3. Low RPV water level.
4. Reactor Building ventilation radiation.
5. Fuel Pool ventilation radiation.

a. 2 and 3 only.

b. 4 and 5 only.

c. 1, 2, and 3 only.

d. 1, 4, and 5 only.

QUESTION: 037 (1.00)

The hydrogen recombiners reduce hydrogen concentration in the primary containment to prevent . . .

a. a hydrogen burn thus ensuring drywell integrity.

b. a hydrogen-oxygen recombination which could limit acceptable containment oxygen concentrations.

c. radiolytic decomposition of water in the reactor coolant system.

d. a metal-steam reaction between the zirconium fuel rod cladding and the reactor coolant.

QUESTION: 038 (1.00)

The unit is operating at 20% power, with the 'A' train of SJAE in standby, and the 'B' train of SJAE in operation. Personnel performing maintenance cause a loss of condensate cooling to the 'B' train SJAE condenser and off gas condenser.

With no operator action, _____ condenser vacuum.

a. efficiency of the OG system is lost resulting in reduced

b. the 'A' train of SJAE would automatically start and maintain

c. an IMMEDIATE turbine trip and reactor scram would occur due to loss of

d. the mechanical vacuum pump would automatically start after a reduction in

QUESTION: 039 (1.00)

The reason for 'load shedding' on the 4160 VAC safety buses under LOCA conditions is to . . .

a. prevent loading a faulted bus.

b. protect non-ESF equipment from damage due to increased current.

c. protect motors from damage due to prolonged operation at reduced voltage.

d. prevent an overload condition when the DG picks up the bus.

QUESTION: 040 (1.00)

The following plant conditions exist:

- Reactor is at full power
- Suppression Pool (SP) Cooling is in operation
- Average pool temperature is increasing
- RCIC testing is in progress

Per Technical Specifications, there is a required action to immediately stop RCIC testing if SP temperature exceeds the temperature limit of _____(1)_____°F, or immediately place the reactor mode switch in SHUTDOWN if SP temperature exceeds the temperature limit of _____(2)_____°F.

a. (1)105; (2)110

b. (1)110; (2)120

c. (1)105; (2)120

d. (1)110; (2)110

QUESTION: 041 (1.00)

To reduce containment pressure, operators are venting primary containment using standby gas treatment system (SBGT) post- accident in accordance with LGA-VQ-01, "Containment Vent."

Reactor plant conditions are stable. Other plant conditions are as follows:

- Unit 1 SBGT train is in operation
- Unit 2 SBGT train is in standby
- Radiation levels in primary containment are elevated
- Primary containment pressure is 1.5 psig, decreasing
- Primary containment temperature is 145°F, decreasing

If the discharge rate through the Unit 1 SBGT radiation monitor causes annunciator 1PM07J-A304, "SBGT WIDE RANGE GAS MONITOR TROUBLE" to alarm due to a high radiation release condition, the operator would be required to . . .

a. continue venting, no radiation release limits are imposed.

b. secure venting to prevent exceeding offsite release limits.

c. continue venting until General Emergency radiation limits are reached.

d. verify automatic shutdown of the Unit 1 SBGT.

QUESTION: 042 (1.00)

Unit 1 is operating at full power with the Reactor Building Closed Cooling Water (RBCCW) and the service water system in operation as follows:

- 'A' RBCCW heat exchanger and pump in operation.
- 'B' RBCCW heat exchanger and pump in standby
- '0' RBCCW heat exchanger is available
- Service Water system temperature is 80°F

The RBCCW system is leaking water into containment at a rate of 5 gpm. Assuming no operator actions, what additional condition would eventually result in a loss of RBCCW cooling?

a. RBCCW heat exchanger tube leak.

b. low reactor water level (Level 3 signal).

c. loss of instrument air to flow control valve 1WS087A/B.

d. loss of instrument air to RBCCW expansion tank makeup valve 1WR091.

QUESTION: 043 (1.00)

With both units at full power, the operating station air compressors failed, resulting in reduced Service Air and Instrument Air (SA/IA) pressures. Without operator intervention and as a result of the decreasing SA/IA header pressures, . . .

a. Turbine Building ventillation will isolate.

b. feedwater temperature will increase.

c. feedwater suction pressure will decrease.

d. the standby Station Air Compressor will AUTO start.

QUESTION: 044 (1.00)

The Unit 1 reactor is shutdown with head installed and the following conditions:

- Coolant temperature is 170°F
- 'B' train residual heat removal is in shutdown cooling operation at 7000 gpm
- both recirculation pumps out of service
- reactor water level is being maintained at +50 inches on the Shutdown Range

If an inadvertent PCIS Group 6 isolation occurs and the isolation signal can NOT be cleared, in order to minimize thermal stratification of the bottom reactor vessel head AND enhance RPV moderator temperature monitoring, the operators would . . .

a. minimize RWCU blowdown flow.

b. maximize CRD flow to the vessel.

c. maximize RBCCW flow to the RWCU heat exchanger.

d. raise reactor vessel level to at least 220 inches on the shutdown range.

QUESTION: 045 (1.00)

Unit 2 was at full power operation with the "A" CRD pump in operation. The control room operator received annunciator "2A CRD FEED PUMP AUTO TRIP" and the 2B CRD pump failed to start.

With no operator actions, all accumulator pressures will _____(1)_____, the control rods are _____(2)_____.

a. (1) IMMEDIATELY depressurize; (2) still scrammable

b. (1) IMMEDIATELY depressurize; (2) NOT scrammable

c. (1) eventually depressurize; (2) NOT scrammable

d. (1) eventually depressurize; (2) still scrammable

QUESTION: 046 (1.00)

Unit 1 was operating at 100% reactor thermal power with SRV 1B21-F013U, leaking steam past its seat. The leakage caused the suppression pool to heatup. Under these circumstances, initiating suppression pool cooling would be necessary to prevent _____ during accident conditions.

a. SRV tailpipe damage

b. RH, LPCS, and HPCS pumps thermal damage

c. incomplete condensing of steam discharged to the suppression pool

d. possible water hammer when starting RH, LPCS or HPCS pumps

QUESTION: 047 (1.00)

After a transient, the following parameters are noted:

- Drywell pressure 12 psig rising
- Drywell air temperature 240°F rising
- Suppression chamber pressure 7 psig rising
- Suppression pool water temperature 105°F rising

Assuming no operator action has been taken, the event describes a . . .

a. failed open SRV.

b. breached containment following a water break LOCA.

c. normally functioning containment following a high pressure discharge into the drywell.

d. normally functioning containment following a bypass path discharge into the suppression chamber airspace.

QUESTION: 048 (1.00)

The bases for the low suppression pool level LGA entry condition is to . . .

a. prevent excessive clearing loads from SRV discharges.

b. ensure sufficient volume of water to condense steam energy.

c. minimize heating the suppression pool during a LOCA.

d. prevent excessive pool swell loads during a LOCA.

QUESTION: 049 (1.00)

Main steam tunnel temperatures and pressures are increasing due to a steam leak in the tunnel. As main steam line tunnel pressure increases, the low pressure blowout panels will actuate relieving pressure to the _____(1)_____ resulting in a/an _____(2)_____ release to the environment.

a. (1) turbine building; (2) monitored

b. (1) turbine building; (2) UNMONITORED

c. (1) auxiliary building roof; (2) monitored

d. (1) auxiliary building roof; (2) UNMONITORED

QUESTION: 050 (1.00)

Unit 1 was operating at 100% power, when the 'A' TDRFP tripped. Assuming no operator action and all other equipment operates as designed, both recirculation flow control valves are expected to be at _____(1)_____ and the recirculation pumps _____(2)_____.

a. (1) minimum position; (2) remain at fast speed

b. (1) minimum position; (2) downshift to slow speed

c. (1) an intermediate position; (2) downshift to slow speed

d. (1) an intermediate position; (2) remain at fast speed

QUESTION: 051 (1.00)

The following accident conditions exist:

- Drywell pressure 3.5 psig increasing
- RPV pressure 525 psig decreasing
- RPV level -40 inches decreasing

Assuming all ECCS equipment functions as designed, LPCI would inject when _____.

a. the LPCI pumps start

b. RPV level drops to -147 inches

c. RPV pressure drops below 250 psig

d. the LPCI outboard isolation valves indicate open

QUESTION: 052 (1.00)

Before actuating SBLC from Control Room Panel 1H13-P603 during a failure to scram scenario, the reactor operator observed the following conditions:

- SBLC INJ SQUIB VLV ON light for 1C41-F004A is ON
- SBLC INJ SQUIB VLV ON light for 1C41-F004B is OFF
- SBLC SQUIB VLV CONTINUITY LOSS alarm has annunciated.

Which of the following could be the cause of all of these indications?

a. SBLC NOT injecting.

b. a loss of power from Bus 136X-2.

c. a loss of power from Bus 135X-1.

d. there is less than 0.2 ma current in the 1C41-F004A continuity circuit.

QUESTION: 053 (1.00)

The reactor was operating at full power in a half-scram trip condition due to loss of an RPS bus. A subsequent loss of power to the other RPS bus resulted in a reactor scram. Reactor water level is currently at 14 inches and feedwater flow approximately 30%.

Assuming systems responded as designed, the loss of RPS buses caused BOTH reactor recirculation pumps to _____(1)_____ because the _____(2)_____ logic was activated.

a. (1) trip; (2) ATWS Recirc Pump Trip

b. (1) trip; (2) End Of Cycle-Recirc Pump Trip

c. (1) downshift to SLOW; (2) ATWS Recirc Pump Trip

d. (1) downshift to SLOW; (2) End Of Cycle-Recirc Pump Trip

QUESTION: 054 (1.00)

Unit 2 Mode switch was in STARTUP when an IRM detector spiked, causing a momentary upscale alarm. The design feature that allows the RO to determine which detector spiked is the . . .

a. annunciator remains lit.

b. 2H13-P603 upscale light seals in.

c. back panel alarm seals in on the drawer.

d. core monitoring computer print out.

QUESTION: 055 (1.00)

During startup of the unit, operators can retract the source range detectors from the core without causing a rod block when . . .

a. the Retract Permit light de-energizes.

b. neutron level on ALL IRMs is on Range 2.

c. SRM channel count rate is greater than 400 cps.

d. neutron level on ANY IRM is on Range 3 or greater.

QUESTION: 056 (1.00)

With the unit at full power operation, an operator selected the COUNT function on APRM B cabinet and the APRM meter read 70%. If the operator bypasses an operable LPRM input to the 'B' APRM, the _____ annunciator(s) will alarm.

1. Channel A1 Reactor Auto Scram
2. Channel B1 Reactor Auto Scram
3. Rod Out Block

a. 1 only

b. 2 only

c. 1 and 3 only

d. 2 and 3 only

QUESTION: 057 (1.00)

Unit 1 was at full power operation with RCIC operating for a quarterly surveillance test. The Unit 1 control room NSO received a report from equipment operators that the RCIC room was filled with steam. The NSO observed RCIC area temperatures and noted the following:

- RCIC Equipment Area ambient temperature was 195°F and increasing
- RCIC Area Vent Differential temperature was 103°F and increasing
- Annunciator 1H13-P601-D411, "Div I RCIC Equip Area Diff/Area Temp Hi," was alarming
- Division II, RCIC Primary Containment Isolation System had NOT actuated

Assuming no operator actions were initiated, the RCIC Turbine Steam Supply _____(1)_____ automatically close(s) AND operator actions need be taken to _____(2)_____.

a. (1) inboard isolation valves;
(2) shutdown RCIC in accordance with LOP-RI-03, "Reactor Core Isolation Cooling System Isolation and System Shutdown"

b. (1) outboard isolation valve;
(2) shutdown RCIC in accordance with LOP-RI-03, "Reactor Core Isolation Cooling System Isolation and System Shutdown"

c. (1) inboard isolation valves;
(2) recover RCIC in accordance with LOP-RI-04, "Turbine Trip Recovery and Turbine Reset of RCIC"

d. (1) outboard isolation valve;
(2) recover RCIC in accordance with LOP-RI-04, "Turbine Trip Recovery and Turbine Reset of RCIC"

QUESTION: 058 (1.00)

Unit 1 was operating at 100% power with Division 3 DG unavailable due to engine bearing replacement. A loss of offsite power resulted in a reactor scram.

The Unit 1 assist NSO observed the following:

- Drywell pressure is 2.0 psig and steady
- All RHR pumps are operating on minimum flow
- LPCS can NOT be started
- Division 1 RPV wide range level indicates -145 inches and is trending down at a rate of -10 inches per minute
- Division 2 RPV wide range level indicates -87 inches and is trending down at a rate of -10 inches per minute

Based on the given conditions, ADS valves will open on actuation of . . .

a. Division 1 ADS at approximately 118 seconds.

b. Division 1 ADS at approximately 716 seconds.

c. Division 2 ADS at approximately 958 seconds.

d. Division 2 ADS at approximately 1076 seconds.

QUESTION: 059 (1.00)

The Hydrogen Recombiner System gas inlet valve may be positioned IAW station procedures from . . .

1. Main Control Room
2. Auxiliary Electric Equipment Room
3. Hydrogen Recombiner Skid

a. 1 only

b. 1 OR 2 only

c. 2 OR 3 only

d. 3 only

QUESTION: 060 (1.00)

The ADS accumulators are at a higher pressure than the SRV accumulators because . . .

a. the ADS system requires 2 solenoids to open the valve.

b. the ADS valves must be able to open with an elevated drywell pressure.

c. elevated pressure ensures better seating of the SRV accumulator check valve.

d. ADS accumulator components require higher actuation pressure.

QUESTION: 061 (1.00)

Unit 1 was shutting down and dumping steam to the condenser via the turbine bypass valves. Unit 1 conditions are as follows:

- All control rods are inserted
- Plant pressure is 800 psig decreasing slowly
- Both TDRFPs are secured
- MDRFP maintaining reactor water level in normal band
- 1A CD/CB in operation
- Reactor water level control in automatic
- Condensate and feedwater system lineups normal for given conditions

If an electrical fault de-energizes Bus 152, reactor vessel water level will start to decrease because . . .

a. both the MDRFP and 1A CD/CB pump de-energize.

b. the feedwater regulating valves close on the loss of power.

c. the 1A CD/CB de-energizes and causes the MDRFP to trip on low suction pressure.

d. the MDRFP de-energizes and the 1A CD/CB pump discharge pressure is too low to feed the RPV.

QUESTION: 062 (1.00)

Unit 1 was operating at 100% power when the speed demand from the RWLCS failed. Assuming no operator action, the Unit 1 TDRFP speed could be controlled from the . . .

a. RWLC Engineering Workstation.

b. GE/Woodward 5009 Cabinet touch screen.

c. TDRFP front standard at the hydraulic assembly.

d. Manual Backup Station in the main control room.

QUESTION: 063 (1.00)

Unit 1 was in cold shutdown and Unit 2 operating at full power. The 1B DG was out of service for overhaul. A subsequent faulted condition on the ring bus caused a loss of all offsite power and a Unit 2 turbine generator trip. The 1A DG failed to start on demand and a SBGT system initiation signal was received.

Assuming no operator action, the status of the SBGT approximately 5 minutes after the ring bus fault is . . .

a. Unit 1 SBGT running, Unit 2 SBGT NOT running

b. Unit 1 SBGT running, Unit 2 SBGT running

c. Unit 1 SBGT NOT running, Unit 2 SBGT NOT running

d. Unit 1 SBGT NOT running, Unit 2 SBGT running

QUESTION: 064 (1.00)

According to LOS-DG-M2, "Diesel Generator Operability Test," the EDG speed droop switch must be positioned to "50" prior to paralleling with AC power sources. The speed droop switch is placed in this position to . . .

a. allow the EDG to share the load.

b. prevent exceeding limits on fuel rack position.

c. ensure that the EDG picks up all loads on the bus.

d. ensure the EDG will carry the design load assumed in the safety analysis.

QUESTION: 065 (1.00)

If a failure of the Display Memory Module occurs in the RMCS, the NSO could determine control rod position indication from observing the . . .

a. Four Rod display

b. Rod Worth Minimizer

c. Rod Select display

d. Rod Block Monitor

QUESTION: 066 (1.00)

Unit 2 is shutdown for a refuel outage. The reactor head is removed and core reload is in progress (Mode 5). The following additional plant conditions exist:

- 'A' RHR is in shutdown cooling mode at 6000 gpm
- 'B' RHR is in standby

The NSO inadvertently positions 2E12-F006B to open. The refuel floor supervisor observes level dropping in the refueling cavity. The NSO observes Suppression Pool level is increasing and identifies that both the 2E12-F004B, "RHR Pump Suction Valve," and 2E12-F006B, "RHR Shutdown Cooling Suction Valve," are open.

Actions prescribed by Abnormal Procedures must be taken to mitigate...

a. high radiation levels on the refuel floor by closing the 2E12-F004B valve.

b. exceeding heat capacity temperature limit by closing the 2E12-F006B valve.

c. inadequate NPSH for RHR pump operation by closing either the 2E12-F004B or the 2E12-F006B valve.

d. excessive temperature stratification within the reactor vessel by closing either the 2E12-F004B or the 2E12-F006B valve.

QUESTION: 067 (1.00)

While operating at power, Unit 1 experienced an under voltage condition on all 1E busses and a plant transient that resulted in drywell pressure increasing to 5.5 psig. DG 1A sequentially picked up loads; however, the NSO identified that the 1B RHR pump failed to auto start. The shift manager directed the NSO to start the 1B RHR pump in accordance with LGA-RH-103, "Unit 1 A/B RHR Operations in the LGAs/LSAMGs."

If the load on DG 1A is 1800 KW, starting the 1B RHR pump, will _____.

a. have minimal affect on the bus and the DG will continue to operate.

b. cause DG 1A engine to shutdown on underfrequency.

c. cause DG 1A output breaker to trip on overcurrent after a 0.5 sec time delay.

d. cause DG 1A engine to shutdown on overcurrent after a 10 second time delay.

QUESTION: 068 (1.00)

Control room NSOs were making preparations to start the 'B' RHR pump in the suppression pool spray mode for a special test. Equipment operators noted that the discharge pressure downstream of the 'B' RHR pump discharge check valve was only 15 psig. The condition is caused by . . .

a. RHR water leg pump failure.

b. LPCS water leg pump failure.

c. CLOSED 'B' RHR pump suction valve.

d. LIFTED 'B' RHR pump suction relief valve.

QUESTION: 069 (1.00)

Unit 1 was starting up from a refuel outage with the following plant conditions:

- Mode Switch in RUN
- Reactor power 12%
- all MSIVs OPEN

If RPS Bus 'A' lost power, the IMMEDIATE MSIV response would be . . .

a. ALL MSIVs would go closed.

b. ALL MSIVs would stay open.

c. ONLY inboard MSIVs would go closed.

d. ONLY outboard MSIVs would go closed.

QUESTION: 070 (1.00)

With Unit 2 at full power, the NSO noticed that 2ES001B, "Hi Press Htr 26A/B Extrn Stm Inlet Valve," went closed. This condition results in . . .

a. a reactor power increase.

b. a reactor power decrease.

c. a change in pH of feedwater chemistry.

d. the inability to remove moisture from the main turbine.

QUESTION: 071 (1.00)

An internal fault on the Unit 1 SAT caused the electrical loads to fast transfer to the Unit Auxiliary Transformer. The Unit 1 SAT was isolated by opening switchyard OCBs . . .

a. 2-3 AND 3-4

b. 1-6 AND 4-6

c. 9-10 AND 10-11

d. 1-13 AND 11-13

QUESTION: 072 (1.00)

During a loss of off-site power, the Plant Computer system status is . . .

a. the Hathaway SOER and the Process Computer are all powered from AC and DC power sources available; therefore, all computer systems will remain functional.

b. the Hathaway SOER and the Process Computer are all powered from the Process Computer UPS; therefore, all computer systems will be functional.

c. the Hathaway SOER will be inoperable due to a loss of AC power; however, they will reboot when the DG re-energizes the appropriate bus.

d. the Process Computer is not safety-related, load-sheds on a loss of the Class 1E switchgear, and must be manually re- booted.

QUESTION: 073 (1.00)

During a discharge from the Rad Waste Discharge Storage Tank to the blowdown line, annunciator "RW DISCHARGE HIGH RAD/INOP OR LOW SAMPLE FLOW," alarmed in the rad waste control room. The expected automatic actions of the system include . . .

a. the operating RW discharge pump trips (ONLY).

b. the RW discharge pump discharge valve closes (ONLY).

c. the operating RW discharge pump trips AND the RW discharge valve closes.

d. the RW discharge pump discharge valve closes AND the RW discharge pump recirculation valve back to the Rad Waste Discharge Storage Tank opens.

QUESTION: 074 (1.00)

Feedwater header flows were balanced with the reactor at 100% power, when an instrumentation problem caused the FW header flows to read about 0.5 Mlbm/hr less than actual. This error will cause the reactor water level to ____(1)____, and will result in _____(2)_____ if the error reaches 1.0 Mlbm/hr.

a. (1) increase; (2) transfer of feedwater input from feedwater header flows to the sum of the individual feed pump discharge flows.

b. (1) increase; (2) automatic transfer to single element control.

c. (1) decrease; (2) transfer of feedwater input from feedwater header flows to the sum of the individual feed pump discharge flows.

d. (1) increase; (2) automatic transfer to single element control.

QUESTION: 075 (1.00)

Service water cooling to Unit 1 Fuel Pool Cooling heat exchangers was lost and could not be restored. An acceptable method for restoring fuel pool cooling is to connect . . .

a. LPCS to the Fuel Pool Cooling system.

b. RH Loop A to the Fuel Pool Cooling system.

c. RH Loop B to the Fuel Pool Cooling system.

d. RBCCW to the Fuel Pool Cooling heat exchangers.

QUESTION: 076 (1.00)

Diesel Generators _____(1)_____ be used for peaking power requirements and _____(2)_____ be started in anticipation of loss of offsite power.

a. (1) shall; (2) should

b. (1) shall; (2) should NOT

c. (1) shall NOT; (2) should

d. (1) shall NOT; (2) should NOT

QUESTION: 077 (1.00)

Exclusive of plant transients, plant announcements are NOT REQUIRED prior to . . .

a. commencement of reactor startup.

b. stopping major plant components.

c. starting of major plant components.

d. placing Primary and Secondary containment integrity into effect during plant startup.

QUESTION: 078 (1.00)

The Reactor Mode Switch is located on the _____(1)_____ of panel H13-P603. When the Reactor Mode Switch is required to be LOCKED, the key shall be located _____(2)_____.

a. (1) apron section; (2) in the lock

b. (1) vertical section; (2) in the lock

c. (1) apron section; (2) at the switch, but NOT in the lock

d. (1) vertical section; (2) at the switch, but NOT in the lock

QUESTION: 079 (1.00)

The suppression chamber is to be re-inerted after a short duration outage. Control room NSOs will monitor AI CM063, "Suppression Chamber/DW Oxygen Monitor," on control room panel _____(1)_____ during the evolution. The suppression chamber would be considered inerted when the MAXIMUM oxygen concentration is less than _____(2)_____ by volume and indicated oxygen concentration is no longer decreasing.

a. (1) PM13J; (2) 1%

b. (1) PM13J; (2) 5%

c. (1) PM16J; (2) 1%

d. (1) PM16J; (2) 5%

QUESTION: 080 (1.00)

During approach to criticality, the NSO will DISCONTINUE Notch Out Override between positions 00 and 24 when . . .

a. the generator is on line.

b. at least one bypass valve is open.

c. Group 1 has been pulled to position 48.

d. highest initial SRM count rate has increased by a factor of 4.

QUESTION: 081 (1.00)

Unit 1 is at full power operations. In order for maintenance to work on the main turbine trip pressure switches in the turbine EHC system at plant normal operating temperature and pressure, and without the out of service (OOS) being an Exceptional OOS, the Operations department needs _____(1)_____ valve isolation since _____(2)_____.

a. (1) single; (2) pressure is greater than 500 psig

b. (1) double; (2) pressure is greater than 500 psig

c. (1) single; (2) temperature is greater than 200°F

d. (1) double; (2) temperature is greater than 200°F

QUESTION: 082 (1.00)

At 9:00 a.m. Instrument Maintenance technicians inform the NSO that the “RCIC Vessel Water Level-Hi, Level 8" surveillance is commencing and the channel is to be declared inoperable. The maintenance is expected to be completed in 2 hours.

The required method to track the associated LCO and to ensure the RCIC Technical Specification is met, is by use of . . .

a. Condition Report

b. Plan of the Day

c. Degraded Equipment Log

d. Short Duration Time Clock

QUESTION: 083 (1.00)

A condition occurs where the standby main generator stator cooling pump auto starts and stator cooling pressure remains at 40 psig.

If this condition continues to exist, and stator amps remain greater than _____(1)_____ for 2.0 minutes, the Main Turbine will automatically _____(2)_____.

a. (1) 7,057 amps; (2) trip

b. (1) 7,057 amps; (2) runback

c. (1) 21,831 amps; (2) runback

d. (1) 21,831 amps; (2) trip

QUESTION: 084 (1.00)

Which of the following activities requires you to notify RP of changing radiation levels.

a. Starting 'A' RHR pump

b. Starting SBLC pump

c. Swapping RWCU pumps.

d. Starting additional condensate/condensate booster pump

QUESTION: 085 (1.00)

A male visitor with no previous exposure gets lost in the reactor building at LaSalle and he inadvertently walks into a high radiation area. Assuming no previous exposure, RP personnel read the visitor's dosimeter and calculated that the visitor received the following radiation exposure:

- Chest 4500 mrem
- Hands 1060 mrem
- Eye Lens 510 mrem
- Internal 550 mrem

Which, if any, Federal Exposure limit has the visitor exceeded?

a. LDE limit.

b. SDE limit.

c. TEDE limit.

d. No exposure limits exceeded.

QUESTION: 086 (1.00)

During fuel moves, access to the 796’ level in the drywell is . . .

a. ALWAYS prohibited.

b. allowed with permission from EITHER an RP technician or the Shift Manager.

c. controlled ONLY by the specific RWP which governs the work to be performed.

d. controlled by an RP technician in continual attendance OR by remote monitoring with continuous communication.

QUESTION: 087 (1.00)

The following conditions exist in primary containment:

- Primary Containment Pressure 1.3 psig
- Drywell Temperature 130°F
- Suppression Pool Temperature 106°F
- Drywell Hydrogen at 1.8%

The condition requiring entry into LGA-003, "Primary Containment Control," is . . .

a. Primary Containment Pressure.

b. Drywell Temperature.

c. Suppression Pool Temperature.

d. Drywell Hydrogen.

QUESTION: 088 (1.00)

Regulatory Guide 1.97 post-accident instruments in the control room are identified with . . .

a. blue tags.

b. white tags.

c. orange circles.

d. black dots.

QUESTION: 089 (1.00)

If 'C' APRM is bypassed, RBM Channel 'A' . . .

a. is automatically bypassed.

b. automatically receives a reference signal from another APRM.

c. generates a Downscale Failure alarm AND Rod Withdrawal Block.

d. will light an RBM Bypass light indicating another APRM may be selected.

QUESTION: 090 (1.00)

The HPCS line integrity monitor senses the differential pressure between the HPCS spray sparger and the . . .

a. differential pressure tap to confirm HPCS piping integrity between the injection check valve and the RPV.

b. SBLC above core plate pressure tap to confirm HPCS piping integrity from inside the RPV to the core shroud.

c. drywell to confirm HPCS piping integrity between the drywell wall and the RPV.

d. HPCS suction to confirm HPCS piping integrity from suction to discharge.

QUESTION: 091 (1.00)

Unit 1 was initially operating at 26% power. A main turbine trip signal was received and the NSO observed reactor pressure spike to 1100 psig.

The NSO observes:

- Reactor pressure controlled by BPVs, 1060 psig and steady
- Reactor power 20% and steady

The first recovery initiative that is to be implemented is . . .

a. Initiate ARI IAW LGP-3-2, "Reactor Scram."

b. Insert manual Scram IAW LGP-3-2, "Reactor Scram."

c. Reduce reactor power with recirculation IAW LGP-2-1, "Normal Unit Shutdown."

d. Reduce reactor power by inserting control rods IAW LGP- 2-1, "Normal Unit Shutdown."

QUESTION: 092 (1.00)

Unit 1 is in Mode 4 completing a 25 day refuel outage. Both recirculation pumps are operating in slow speed. Other plant conditions are as follows:

- 'B' RHR pump is in shutdown cooling mode
- 'A' RHR pump is unavailable due to maintenance
- Coolant temperature at 175°F
- Both trains of RHR service water are available
- Circulating Water and feedwater and condensate systems are available
- 'A' train of Fuel Pool Cooling in service.

A fault de-energizes Bus 142Y and the bus CANNOT be re-energized. Which of the following methods of alternate heat removal are NOT available?

a. LPCS in core cooling mode.

b. RWCU removing decay heat.

c. 'C' RHR pump in shutdown cooling mode.

d. Main Condenser and condensate/booster pump.

QUESTION: 093 (1.00)

Given the following plant conditions:

- Reactor recirculation loop B pump tripped
- Power and flow in the allowable region of Technical Specifications

Thermal Limits:

1. Average Planar Linear Heat Generation Rate
2. Minimum Critical Power Ratio
3. Linear Heat Generation Rate
4. Maximum Allowable Power Ratio

Which of the above thermal limits must be adjusted?

a. 1, 2, and 4.

b. 1, 2, and 3.

c. 1 and 2 only

d. 3 and 4 only

QUESTION: 094 (1.00)

Reactor power is 100 %. Unit 2 drywell temperature is currently reading 105°F and has been increasing consistently at a rate of 25°F/hr. Assuming the rate of temperature change remains the same, LGA-003 "Primary Containment Control" must be entered in _____ minutes.

a. 36

b. 72

c. 84

d. 108

QUESTION: 095 (1.00)

Placing a component's transfer switch to the "EMERGENCY" position on the Remote Shutdown Panel will allow control of the component from the Remote Shutdown Panel _____(1)_____ to enable bringing the reactor to cold shutdown and the component will _____(2)_____ automatic primary containment isolation features.

a. (1) ONLY; (2) lose

b. (1) ONLY; (2) maintain

c. (1) AND the control room; (2) lose

d. (1) AND the control room; (2) maintain

QUESTION: 096 (1.00)

Unit 1 and Unit 2 reactor building (RB) ventilation systems were operating when instrument air was lost. The RB ventilation exhaust and supply dampers fail _____(1)_____ and RB modulating dampers fail _____(2)_____.

a. (1) closed; (2) open

b. (1) closed; (2) closed

c. (1) open; (2) open

d. (1) open; (2) closed

QUESTION: 097 (1.00)

Both Units are operating at 100% power. An operator reported smoke in the vicinity of the 2A DG room and a RED CO_2 alarm is on Panel FP04JB/JC.

The CO_2 system _____(1)_____ actuated. If required, manual actuation requires use of levers for the master valve located _____(2)_____.

a. (1) should have;
(2) by the CO_2 storage tank and for the header stop located in the DG corridor.

b. (1) should NOT have;
(2) by the CO_2 storage tank and for the header stop located in the DG corridor.

c. (1) should have;
(2) in the DG corridor and slave valve located just inside the door to the DG.

d. (1) should NOT have;
(2) in the DG corridor and slave valve located just inside the door to the DG.

QUESTION: 098 (1.00)

The Unit 1 NSO receives annunciator 1H13-P601-C205, "1A RHR PMP Cubicle Temp Hi" and a report of smoke in the area. What is the expected status of the diesel fire pumps?

"0A" Diesel Fire Pump is _____(1)_____, "0B" Diesel Fire Pump is _____(2)_____,

a. (1) Running; (2) In Standby

b. (1) Running; (2) Running

c. (1) In Standby; (2) Running

d. (1) In Standby; (2) In Standby

QUESTION: 099 (1.00)

If water intrusion created grounds that disabled all Division 1 and Division 2 125VDC power . . .

a. RCIC will trip if running because of an overspeed trip.

b. RCIC will remain running because 125 VDC power loss does NOT affect RCIC overspeed.

c. RCIC will trip if running because of power loss to the Steam Supply Stop Valve, 1(2)E51-F045.

d. RCIC will remain running because 125 VDC power loss does NOT affect the Steam Supply Stop Valve, 1(2)E51-F045.

QUESTION: 100 (1.00)

Given the following conditions:

- Unit 2 in Operating Condition 1
- 2VG023, "SBGT VQ XTIE Valve," is OPEN
- Primary Containment Vent and Purge (VQ) isolation valves are OPEN

The Unit 2 SBGT (VG) train is inoperable because the lineup may cause damage to the . . .

a. VQ system during some non-accident vent conditions.

b. VG system during some non-accident vent conditions.

c. VQ system under LOCA conditions with high drywell pressure.

d. VG system under LOCA conditions with high drywell pressure.

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

ANSWER: 001 (1.00)
b.
REFERENCE:
LGA-010, Failure to Scram Lesson Plan
LGA-010, Failure to Scram
Modified
Higher
295031A202 ..(KA's)

ANSWER: 002 (1.00)
c.
REFERENCE:
095 SBGT System Lesson Plan
Modified
Memory
295023A203 ..(KA's)

ANSWER: 003 (1.00)
a.
REFERENCE:
LTP 1700-1, Core Verification
LFP 200-1, Receiving New Fuel
LFP 400-6, Installation and Operation of Fuel Sipping Equipment
LFS 100-4, Core Alteration
New
Memory
234000K304 ..(KA's)

ANSWER: 004 (1.00)
d.
REFERENCE:
LOR-2DG03J-1-2
011 EDG Lesson Plan
New
Memory
2.4.10 ..(KA's)

ANSWER: 005 (1.00)
c.
REFERENCE:
SBGT lesson plan pg 14 of 45
LOR-1(2)H13-P601-F205
LOP-VG-02
New
Higher
295033K204 ..(KA's)

ANSWER: 006 (1.00)
a.
REFERENCE:
LIS-RI-112, pg 61
Modified
Higher
216000A103 ..(KA's)

ANSWER: 007 (1.00)
b.
REFERENCE:
PCIS lesson plan
New
Higher
2.4.4 205000 ..(KA's)

ANSWER: 008 (1.00)
b.
REFERENCE:
Lesson plans offgas (80)
LOP-PR-03, Big Notes OG-1
New
higher
271000A405 ..(KA's)

ANSWER: 009 (1.00)
d.
REFERENCE:
CRD Hydraulic Lesson Plan
LGA-RD-01
New
fundamental
201001A107 ..(KA's)

ANSWER: 010 (1.00)
b.
REFERENCE:
118 Reactor Building Ventilation Systems Lesson Plan, pgs 24 and 26
LOR-1H13-P601-E204, Annunciator Response Procedure
New
Higher
295034A103 ..(KA's)

ANSWER: 011 (1.00)
a.
REFERENCE:
117 Control room Ventilation Lesson Plan
Dwg VC/VE-1
New
Memory
290003K604 ..(KA's)

ANSWER: 012 (1.00)
b.
REFERENCE:
120 Plant Air System Lesson Plans
Figure 120-05, Air Filter-Dryer Unit
New
Memory
300000K513 ..(KA's)

ANSWER: 013 (1.00)
c.
REFERENCE:
114 RBCCW Lesson Plan, pg 20
Dwg WR-1, RBCCW System drawing
LOA-WR-101, Loss of RBCCW System
New
Memory
400000K301 ..(KA's)

ANSWER: 014 (1.00)
c.
REFERENCE:
System 47, page 24
New
Higher
201002A201 ..(KA's)

ANSWER: 015 (1.00)
a.
REFERENCE:
Recirculation Flow Control Lesson Plan
New
Higher
202002K306 ..(KA's)

ANSWER: 016 (1.00)
c.
REFERENCE:
LOS-RH-Q1
New
Higher
203000K408 ..(KA's)

ANSWER: 017 (1.00)
b.
REFERENCE:
UFSAR 6.3.1.1
System 63 LPCS Lesson Plan
New
Memory
209001K504 ..(KA's)

ANSWER: 018 (1.00)
d.
REFERENCE:
LaSalle Exam Bank
Bank
Memory
209002K601 ..(KA's)

ANSWER: 019 (1.00)
d.
REFERENCE:
FSAR 9.3.5.3
New
fundamental
211000A107 ..(KA's)

ANSWER: 020 (1.00)
a.
REFERENCE:
Lesson plan 49
New
Higher
212000A216 ..(KA's)

ANSWER: 021 (1.00)
b.
REFERENCE:
LOR-1H13-P601-C308
New
higher
2.1.33 209001 ..(KA's)

ANSWER: 022 (1.00)
d.
REFERENCE:
Lesson Plan 091 pg 15
New
Memory
223002K110 ..(KA's)

ANSWER: 023 (1.00)
a.
REFERENCE:
Lesson Plan 6, DC Distribution
New
Memory
263000K201 ..(KA's)

ANSWER: 024 (1.00)
c.
REFERENCE:
LGA-003
LGA-003 lesson plan
LOP-RH-16
Technical Specifications
New
Memory
2.1.33 295029 ..(KA's)

ANSWER: 025 (1.00)
b.
REFERENCE:
ODCM, Chapt. 10
Lesson Plan 52, pg 14
Lesson Plan 121, pg 33
New
Higher
26800K501 ..(KA's)

ANSWER: 026 (1.00)
b.
REFERENCE:
EHC electrical lesson plans (074)
New
Higher
241000K317 ..(KA's)

ANSWER: 027 (1.00)
c.
REFERENCE:
071 Main Turbine and Auxiliaries, VIII.A.2.e.1, page 32 of 56
077 Feedwater Lesson Plan, Section VII.A.6
008 Main Generator and Excitation Lesson Plan, Section IV.A,
IV.A.4, IV.D.1, pgs 22 and 23
111, Circulating Water System Lesson Plan, Section VII.B.2, pg.
31
New
Higher
295005K202 ..(KA's)

ANSWER: 028 (1.00)
d.
REFERENCE:
022 Reactor Recirculation Lesson Plan Section, pages 17 -20.
023 Recirculation Flow Control Lesson Plan, pg 15
New
Higher
295006K306 ..(KA's)

ANSWER: 029 (1.00)
b.
REFERENCE:
Lesson Plan 032-RCIC
New
Higher
295007A103 ..(KA's)

ANSWER: 030 (1.00)
b.
REFERENCE:
027 RWCU System Lesson Plan, pages 12-15
Dwg RT-1, RWCU System
New
Higher
295009A203 ..(KA's)

ANSWER: 031 (1.00)
b.
REFERENCE:
093 Containment Vent and Purge Lesson Plan
Drawing VQ-1, Primary Containment Purge
LGA-VQ-01, Containment Vent
New
Memory
2.3.11 295010 ..(KA's)

ANSWER: 032 (1.00)
a.
REFERENCE:
BWR Thermodynamics, Core Thermal Limits
Modified
Higher
295014K105 ..(KA's)

ANSWER: 033 (1.00)
d.
REFERENCE:
LGP 3-2, "Reactor Scram," Attachment E
025 Control Rod Drive Hydraulics Lesson Plan pgs 8 and 17
Dwg RD-1, CRD Hydraulic System
Dwg RM-1, Reactor Manual Control System
New
Higher
295015K201 ..(KA's)

ANSWER: 034 (1.00)
a.
REFERENCE:
049 Reactor Protective System Lesson Plan
Dwg RP-1, Reactor Protection
New
Fundamental
295024K306 ..(KA's)

ANSWER: 035 (1.00)
a.
REFERENCE:
Dwg RR3, "Reactor Recirculation Power Distribution"
022 Recirculation System Lesson Plan, pgs 19 and 20
026 Alternate Rod Insertion Lesson Plan
New
Higher
295025A107 ..(KA's)

ANSWER: 036 (1.00)
a. or c.
REFERENCE:
LOA-AR-101, Area Radiation Monitoring System Abnormal Procedure
118 Reactor Building Ventilation Lesson Plan
Modified
Higher
290001A101 ..(KA's)

ANSWER: 037 (1.00)
a.
REFERENCE:
090 Primary and Secondary Containment Lesson Plan
094 Hydrogen Recombiner Lesson Plan
New
Fundamental
500000K101 ..(KA's)

ANSWER: 038 (1.00)
a.
REFERENCE:
080 Offgas Lesson Plan
New
Higher
295002K207 ..(KA's)

ANSWER: 039 (1.00)
d.
REFERENCE:
005, "AC Distribution Lesson Plan"
New
Fundamental
295003K303 ..(KA's)

ANSWER: 040 (1.00)
a.
REFERENCE:
090 Primary and Secondary Containment Lesson Plan
Technical Specification 3.6.2.1
New
Higher
295013K302 ..(KA's)

ANSWER: 041 (1.00)
b.
REFERENCE:
LGA-VQ-01, Containment Vent
Dwg VG-1, "Standby Gas Treatment System"
Dwg M-153, Sh 1, Process radiation Monitoring System
New
Higher
295017A109 ..(KA's)

ANSWER: 042 (1.00)
d.
REFERENCE:
114 RBCCW Lesson Plan, pg 4, 5
091 Primary Containment Isolation System, pg 17 and42
New
Higher
295018A203 ..(KA's)

ANSWER: 043 (1.00)
c.
REFERENCE:
LOA-IA-101, Rev 0 Attachments A and B.
075 Condensate and Condensate Booster System Lesson Plan, pg 22
029 Fuel Pool Cooling Lesson Plan
113 TBCCW Lesson Plan
New
Higher
2.1.27 295019 ..(KA's)

ANSWER: 044 (1.00)
d.
REFERENCE:
LOA-RH-101, RHR Abnormal
LOP-RH-17, Shutdown Cooling System Startup, Operation, and Transfer
New
Higher
295020K104 ..(KA's)

ANSWER: 045 (1.00)
d.
REFERENCE:
024 Control Rod Drive Mechanism Lesson Plan
New
higher
295022K203 ..(KA's)

ANSWER: 046 (1.00)
c.
REFERENCE:
090 Primary and Secondary Containment Lesson Plan
064 Residual Heat Removal Lesson Plan
New
Memory
295026K302 ..(KA's)

ANSWER: 047 (1.00)
c.
REFERENCE:
90, Primary and Secondary Containments
LGA-003 Primary Containment Control (LGA Lesson Plan)
New
Higher
295028A205 ..(KA's)

ANSWER: 048 (1.00)
b.
REFERENCE:
090 Primary and Secondary Containment Lesson Plan
New
Memory
295030K103 ..(KA's)

ANSWER: 049 (1.00)
a.
REFERENCE:
090 Primary and Secondary Containment System Lesson Plan, pg 26
and 27
095 Standby Gas Treatment System Lesson Plan
New
Higher
295035K301 ..(KA's)

ANSWER: 050 (1.00)
d.
REFERENCE:
Recirculation Flow Control Lesson Plan 23-1
bank
higher
202002A301 ..(KA's)

ANSWER: 051 (1.00)
c.
REFERENCE:
Dwg. RH-2, "RHR Modes of Operation"
LGA-001, RPV Control
064 Residual Heat Removal System Lesson Plan
New
Higher
203000A410 ..(KA's)

ANSWER: 052 (1.00)
b.
REFERENCE:
028 Standby Liquid Control Lesson Plan
Electrical Dwg 1E-1-4209AA and AB, Schematic of SBLC
Big Notes Dwg SC-1, SBLC
LOR-1H13-P603-A105, SBLC Squibb vlv continuity loss alarm
New
Higher
211000K202 ..(KA's)

ANSWER: 053 (1.00)
d.
REFERENCE:
022 Reactor Recirculation Lesson Plan, pg 11
New
Higher
212000K311 ..(KA's)

ANSWER: 054 (1.00)
c.
REFERENCE:
042 Intermediate Range Monitor Lesson Plan, pgs 31
050 Process Computer Lesson Plan
New
Memory
215003K406 ..(KA's)

ANSWER: 055 (1.00)
c.
REFERENCE:
041 Source Range Monitor Lesson Plan, pg 6
LOP-NR-01, Source Range Monitors, pg 6
New
fundamental
215004K503 ..(KA's)

ANSWER: 056 (1.00)
d.
REFERENCE:
LIP-NR-904, LPRM Cable and Connector Checks
043 LPRM Lesson Plan
044 APRM Lesson Plan, Pg 8
LOR-1H13-P603-A405, A505, B203 B303 (Annunciator Response Procedures)
NR-4, APRM Simplified Schematic
Figure 44-01, APRM Channel and Trip Units
New
Higher
215005K603 ..(KA's)

ANSWER: 057 (1.00)
b.
REFERENCE:
LOR 1H13-P601-D411, Div1 RCIC Equip Area Diff/Amb Temp Hi alarm procedure
New
higher
217000A215 ..(KA's)

ANSWER: 058 (1.00)
a.
REFERENCE:
62, Automatic Depressurization System
40, Reactor Vessel Instrumentation (Figures 040-6, -07, -08, and -09)
New
Higher
218000A309 ..(KA's)

ANSWER: 059 (1.00)
b.
REFERENCE:
LaSalle Exam Bank 094.00.06
Lesson Plan 094, Hydrogen Recombiner, pg 10 & 12
LGA-HG-01
Bank
Memory
223001A413 ..(KA's)

ANSWER: 060 (1.00)
b.
REFERENCE:
062 Automatic Depressurization System Lesson Plan
070 Main Steam Lesson Plan
Dwg NB-1, ADS
New
Memory
239002K108 ..(KA's)

ANSWER: 061 (1.00)
d.
REFERENCE:
Dwg. AP-3, AC Distribution
1E-1-4000M and 1E-1-4000NF
LGP 2-1, Normal Reactor Shutdown
New
Higher
259001K201 ..(KA's)

ANSWER: 062 (1.00)
d.
REFERENCE:
078-1 U1 TDRFP Speed Control System Lesson Plan
New
Memory
259002K412 ..(KA's)

ANSWER: 063 (1.00)
d.
REFERENCE:
E-prints: 1E-1-4000M, P, BQ, DN (Bus 136X-1)
005 AC Distribution Lesson Plan
095 Standby Gas Treatment Lesson Plan
New
Higher
261000K603 ..(KA's)

ANSWER: 064 (1.00)
a.
REFERENCE:
LOS-DG-M2, "Diesel Generator Operability Test"
011 Emergency Diesel Generator Lesson Plan, pg 53
New
Memory
264000K505 ..(KA's)

ANSWER: 065 (1.00)
b.
REFERENCE:
047 Reactor Manual Control System Lesson Plan, pg 18
Rod Worth Minimizer, Figure 48-06
Dwg RM-1, Reactor Manual Control System
New
Higher
214000A402 ..(KA's)

ANSWER: 066 (1.00)
a.
REFERENCE:
LOA-RH-102, Unit 2 RHR Abnormal
LOA-FC-201, Unit 2 Fuel Pool Cooling System Abnormal
Dwg RH-2, RHR Modes of Operation
New
Higher
219000A212 ..(KA's)

ANSWER: 067 (1.00)
a.
REFERENCE:
011 Emergency Diesel Generator Lesson Plan, pgs 45, 57, 74
LTA 500-109, Unit 1 Integrated Division I Response Time
Surveillance Test
LGA-RH-103, "Unit 2 A/B RHR Operations in the LGAs/LSAMGs"
New
higher
226001A110 ..(KA's)

ANSWER: 068 (1.00)
a.
REFERENCE:
Dwg. RH-2, RHR Modes of Operation
Dwg 1E-1-4000CV, 480 VAC, MCC135Y-2
New
higher
230000K604 ..(KA's)

ANSWER: 069 (1.00)
b.
REFERENCE:
Dwg. MS-2, Main Steam Details
070 Main Steam Lesson Plan, pgs 14 and 15
LOP-AA-03, Primary Containment Isolations, pg 17
New
higher
239001K506 ..(KA's)

ANSWER: 070 (1.00)
a.
REFERENCE:
079 Heater Drain Lesson Plan, pg 4
075 Condensate and Condensate Booster System Lesson plan, pgs 12
and 21
Dwg HD-1, Heater Drains
New
Higher
239001A110 ..(KA's)

ANSWER: 071 (1.00)
d.
REFERENCE:
Dwg AP-1, AC Distribution
Figure 03-02, Switchyard Layout
New
Memory
262001K201 ..(KA's)

ANSWER: 072 (1.00)
a.
REFERENCE:
Licensee Question Bank 050.00.16
050 Lesson Plan, Process Computer Bank
Memory
262002K106 ..(KA's)

ANSWER: 073 (1.00)
c.
REFERENCE:
LOR 0PL01J-L202, Annunciator Response Procedure, "RW Discharge
High Rad/Inop or Low Sample Flow"
121 Liquid Processing and Sumps Lesson Plan, pg 33
Dwg. LRW-1, Liquid Processing and Sump Systems
New
Memory
272000A303 ..(KA's)

ANSWER: 074 (1.00)
a.
REFERENCE:
Unit 1 Reactor Water Level Control Lesson Plan 031-1
New
Higher
295008A202 ..(KA's)

ANSWER: 075 (1.00)
c.
REFERENCE:
LOA-FC-101, "Unit 1 Fuel Pool Cooling System Abnormal Procedure,"
LOP-RH-15, RHR in Fuel Pool Cooling Assist Mode
Dwg RH-2, RHR Modes of Operation
New
Memory
233000K403 ..(KA's)

ANSWER: 076 (1.00)
d.
REFERENCE:
LAP 200-1, "Conduct of Operations"
New
Memory
2.1.1 ..(KA's)

ANSWER: 077 (1.00)
b.
REFERENCE:
LAP 200-1, Conduct of Operations
LGP-1-S1, Master Startup Checklist
New
Memory
2.1.14 ..(KA's)

ANSWER: 078 (1.00)
d.
REFERENCE:
Dwg RM-1, Reactor Manual Control System
LAP 200-1, "Conduct of Operations"
New
fundamental
2.1.30 ..(KA's)

ANSWER: 079 (1.00)
a.
REFERENCE:
LOP-VQ-04, Vent/Purge Primary Containment
New
fundamental
2.1.31 ..(KA's)

ANSWER: 080 (1.00)
c.
REFERENCE:
LGP-1-1, "Normal Unit Startup"
New
Memory
2.2.2 ..(KA's)

ANSWER: 081 (1.00)
b.
REFERENCE:
OP-AA-101-201, Station Equipment Out of Service
New
Higher
2.2.13 ..(KA's)

ANSWER: 082 (1.00)
d.
REFERENCE:
OP-AA-101-302, Degraded Equipment Program
OP-AB-101-206, Short Duration Time Clock
OP-AA-101-402, Operating Records
New
Memory
2.2.23 ..(KA's)

ANSWER: 083 (1.00)
d.
REFERENCE:
Lesson Plan 9, Main Generator and Auxiliaries, pg 4
Modified
higher
245000K409 ..(KA's)

ANSWER: 084 (1.00)
a. or c.
REFERENCE:
No Ref Provided
New
Higher
2.3.2 ..(KA's)

ANSWER: 085 (1.00)
c.
REFERENCE:
RP-AA-203, Exposure Review and Authorization
New
higher
2.3.4 ..(KA's)

ANSWER: 086 (1.00)
d.
REFERENCE:
LRP 1120-3, "Drywell Access During Fuel Moves"
New
Memory
2.3.10 ..(KA's)

ANSWER: 087 (1.00)
c.
REFERENCE:
LGA-003, Primary Containment Control
New
Higher
2.4.1 ..(KA's)

ANSWER: 088 (1.00)
d.
REFERENCE:
40 Lesson Plan, Reactor Vessel Instrumentation
LAP-1600-15, Regulatory Guide 1.97 Instruments
New
fundamental
2.4.3 ..(KA's)

ANSWER: 089 (1.00)
b.
REFERENCE:
UFSAR 7.7.6.3.2
Lesson Plan 45
New
Memory
215002A306 ..(KA's)

ANSWER: 090 (1.00)
b.
REFERENCE:
Lesson Plan 61
OBJ 061.00.05
Bank
Memory
209002K109 ..(KA's)

ANSWER: 091 (1.00)
b.
REFERENCE:
LGP-3-2, "Reactor Scram"
New
higher
2.1.23 295037 ..(KA's)

ANSWER: 092 (1.00)
c.
REFERENCE:
LOA-RH-101, Unit 1 RHR Abnormal
LOP-RH-17, Alternate Shutdown Cooling
LOP-CD-10, Main Condenser as Alternate Decay Heat Removal
Dwg 1E-1-4000M and P, 6900 and 4160 VAC Buses
New
higher
295021A104 ..(KA's)

ANSWER: 093 (1.00)
c.
REFERENCE:
ITS TS 3.4.1
New
fundamental
295001K103 ..(KA's)

ANSWER: 094 (1.00)
b.
REFERENCE:
LGA-003
New
Higher
295012K102 ..(KA's)

ANSWER: 095 (1.00)
a.
REFERENCE:
Lesson Plan 54
New
Memory
295016K303 ..(KA's)

ANSWER: 096 (1.00)
a.
REFERENCE:
118 Reactor Building Ventilation Lesson Plan
New
fundamental
288000K603 ..(KA's)

ANSWER: 097 (1.00)
a.
REFERENCE:
LOA-FP-101
FP system lesson plan Pg19
New
higher
286000A208 ..(KA’s)

ANSWER: 098 (1.00)
d.
REFERENCE:
1H13-P601-C205, "1A RHR PMP Cubicle Temp Hi"
System Description 125, Fire Protection
New
Fundamental
295032A104 ..(KA’s)

ANSWER: 099 (1.00)
a.
REFERENCE:
LOA-DC-101 pg 179
New
Higher
295004A102 ..(KA’s)

ANSWER: 100 (1.00)
d.
REFERENCE:
LGA-VQ-01 section F
New
Higher
295010K301 ..(KA’s)

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

A N S W E R K E Y
MULTIPLE CHOICE

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

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