*QNUM 001
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295001K201
*QUESTION
Unit 1 is at 80%. All condensate/booster pumps and feedwater pumps are in operation. The Unit 1 NSO observes the following conditions:

- a decrease in power level as indicated on APRMs.
- a decrease in 'B' loop recirculation flow.
- a decrease in feedwater flow.

These conditions were most likely due to . . .

a. a loss of feedwater heating.

b. de-energization of bus 12.

c. the trip of a condensate booster pump.

d. a spurious actuation of ATWS circuitry.

*ANSWER
b.
*REFERENCE
QCAN 901-6, F-7, Reactor feed Pump Auto Trip annunciator, Rev. 11
Lesson Plan 3200, Feedwater
Lesson Plan 0202, Recirculation System
NEW
HIGHER

*QNUM 002
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295003A102
*QUESTION
Both Units have experienced a station blackout. Both SBO diesels have been started. Local operations have resulted in a successful start of the U1 EDG.

In order to parallel and transfer electrical loads FROM the Unit 1 SBO to the Unit 1 EDG, what would be the required positions of the ISOCH/DROOP settings on the U1 SBO and the SPEED DROOP knob on the U1 EDG?

	SBO DG ISOCH/DROOP	EDG DROOP KNOB setting
a.	DROOP	0
b.	ISOCHRONOUS	50
c.	DROOP	50
d.	ISOCHRONOUS	0

*ANSWER
b
*REFERENCE
Lesson Plan 6620, SBO System
QCOP 6620-14 Attachment A
NEW
HIGHER

*QNUM 003
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295004K302
*QUESTION
The DC System engineer has confirmed that voltage on the 250 VDC Safety Related bus has lowered to 230 VDC due to a hard ground.

This ground is classified as a ___(1)____ and the actions to be taken include: ___(2)___ .

	(1)	(2)
a.	Level I ground	NO immediate actions required, record condition each shift.
b.	Level II ground	immediately locate and isolate the ground, do NOT enter a time clock.
c.	Level II ground	initiate a 7-day clock to locate, isolate and repair the ground.
d.	Level III ground	initiate a 14-day clock to locate, isolate and repair the ground.

*ANSWER
b.
*REFERENCE
Lesson Plan 6900, DC Distribution
QOP 6900-04, 250 VDC Ground Detection Unit 1, Rev17
NEW
HIGHER

*QNUM 004
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295005A208
*QUESTION
The Unit Supervisor ordered the Unit 1 reactor to be scrammed due to drifting Control Rods. Post trip conditions are normal.

In accordance with QCGP 2-3, Reactor Scram procedure, the NSO will VERIFY ALL of the following regarding the electrical distribution system status after the turbine generator trips EXCEPT:

a. Load shed relay on Bus 11 and Bus 12 has picked up.

b. Both 345 KV OCB circuit breakers 6-7 and 7-8 are open.

c. Aux Power has transferred.

d. Main Generator Exciter Field breaker is open.

*ANSWER
a.
*REFERENCE
QCGP 2-3, Reactor Scram, Rev 58.
NEW
FUNDAMENTAL

*QNUM 005
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR
*QVAL 1.00
*SEC
*SUBSORT
*KA 295006 2.4.1
*QUESTION
A transient has occurred that resulted in the Unit 2 NSO scramming the reactor. The following post-trip conditions exist:

- Reactor power is range 8 on IRMs and lowering
- CRDs A-6 and A-10 are at position 04
- Drywell pressure is 2.1 psig and rising slowly
- Drywell temperature is 175 degrees F and rising slowly
- Reactor water level dropped to +4 inches and is rising slowly
- Torus temperature is 98 degrees F and rising slowly

The NSO recommends to the Unit Supervisor to enter _____(1)_____ because _____(2)_____ exceeds the QGA Entry Condition.

	(1)	(2)
a.	QGA 100, RPV Control	RPV Water
b.	QGA 100, RPV Control	Reactor Power
c.	QGA 200, Primary Containment Control	Drywell Temperature
d.	QGA 200, Primary Containment Control	Torus Temperature

*ANSWER
d.
*REFERENCE
QGA 100, RPV Control, Rev 8 April 2006
QGA 200, Primary Containment Control, Rev 8, Feb 2002
295006 2.4.1
NEW
HIGHER

*QNUM 006
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295016.K2.03
*QUESTION
Unit 1 has been shutdown for a month for a refuel outage. Unit 2 has been shutdown for a week for a forced outage. The “B” Control Room ventilation system is operating for testing.

Maintenance personnel inadvertently spilled a barrel of sulfuric acid in the Auxiliary Electric Equipment room and notified the Control Room that personnel received skin burns from the fumes and have left the area. The Shift Manager ordered the Control Room abandoned and had ‘B’ CR HVAC system secured.

Securing the ‘B’ HVAC limits the forced circulation of fumes through each of the following areas except the . . .

a. Cable Spreading Room.

b. Old Computer Room.

c. 3rd Floor Service Building.

d. ‘B’ Control Room HVAC Equipment Room.

*ANSWER
c.
*REFERENCE
Lesson Plan 5752, Control Room Ventilation System, pgs 4-8
NEW
FUNDAMENTAL

*QNUM 007
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295018K101
*QUESTION
Both units are at full power operation. With the Mississippi river water temperatures about 85 degrees F and constant, the Unit 1 NLO reports a rising trend in the temperatures of various heat exchangers that discharge service water to the King Hole. Temperatures of systems serviced by the Queen Hole are steady. Believing that there may be blockage in the U1 King Hole, the Operators would expect to see which ONE of the following?

a. Drywell pressure rising.

b. SSMP room temperature rising.

c. Service water header pressure lowering.

d. Main generator stator temperature rising.

*ANSWER
a.
*REFERENCE
P&ID 22, Service Water System
NEW
HIGHER

*QNUM 008
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295019K301
*QUESTION
With Unit 1 instrument air system in its normal lineup, what actuations/alarms occur in order as system air pressure lowers:

a. Unit 1A Instrument Air Low Pressure Alarms,
Unit 1A Dryer Bypass Valve Opens,
1A Service Air Backup Valve Opens.

b. 1A Service Air Backup Valve Opens,
Unit 1A Dryer Bypass Valve Opens,
Unit 1A Instrument Air Low Pressure Alarms.

c. Unit 1A Dryer Bypass Valve Opens,
1A Service Air Backup Valve Opens,
Unit 1A Instrument Air Low Pressure Alarms.

d. 1A Service Air Backup Valve Opens,
Unit 1A Instrument Air Low Pressure Alarms,
Unit 1A Dryer Bypass Valve Opens.

*ANSWER
d.
*REFERENCE
Lesson Plan 4701, Instrument Air
NEW
HIGHER

Mark Jensen - Is this the sequence as it would happen in the plant? Sometimes the 'book' setpoints do not match actual in-plant setpoints!

*QNUM 009
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295021A105
*QUESTION
The following plant conditions exist on Unit 1 prior to refueling:

- Unit 1 is in Mode 4 with 'A' RHR operating in shutdown cooling.
- Reactor water temperature is 220 degrees F and steady.
- The 'B' condensate booster pump is operating with RWCU rejecting to the condenser.
- Both Recirculation Pumps are OFF.
- Main Condenser backpressure is 26 inches Hg.

Control Room Operators then receive alarm 901-3 B-6, RHR PUMP TRIP.

- Reactor Dome Pressure is 35 psig and rising slowly.
- Reactor Metal Temperatures are rising slowly.
- Reactor Water level is being maintained between 25 inches and 35 inches.

To prevent thermal stratification from occurring, Operators should . . .

a. start a Reactor recirc pump.

b. raise Reactor Water level to >110 inches and perform a feed and bleed with RWCU.

c. raise Reactor Water level to between 90 inches and 100 inches and secure RWCU reject.

d. open a Main Turbine Bypass Valve and maintain Reactor Water level between 20 inches and 40 inches.

*ANSWER
a
*REFERENCE
QCOA 1000-02, Loss of Shutdown Cooling, Rev 14
QCAN 901-3 B-6, RHR Pump Trip, Rev 3
NEW
HIGHER

*QNUM 010
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295023.A2.04
*QUESTION
Unit 2 is in a refueling outage. During core offload, the Fuel Handling Supervisor reported that a spent fuel assembly has been dropped in the spent fuel pool. Bubbles were seen rising from the damaged assembly. The immediate operator actions include which one of the following?

a. Evacuate all personnel from the refuel floor.

b. Evacuate all personnel from the refuel bridge only.

c. Verify proper operation of SBGTS PRIOR to evacuation of all personnel from refuel floor.

d. Direct the Fuel Handlers to retract refuel hoist PRIOR to evacuation of personnel from the refuel bridge.

*ANSWER
a.
*REFERENCE
QCFHP 0110-04, New/Irradiated Fuel Damage, Rev 3.
NEW
FUNDAMENTAL

*QNUM 011
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295024 2.1.7
*QUESTION
A transient initiated on Unit 2. One minute later, the following was noted on the 902-3 panel:

- Drywell pressure is 4.5 psig and rising.
- Drywell air temperature is 240 degrees F and rising.
- Torus pressure is 3.0 psig and rising.
- Torus water temperature is 82 degrees F and rising.

Which of the following is indicated?

a. A safety valve opened but is now closed.

b. The Drywell to Torus d/p system is malfunctioning.

c. The containment is functioning normally after a LOCA.

d. A relief valve has failed open and its tail pipe is cracked in the torus air space.

*ANSWER
c.
*REFERENCE
LNF-1601, Primary and Secondary Containment, pgs 44 - 49.
295024 2.1.7
MODIFIED
HIGHER

*QNUM 012
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295025.K1.02
*QUESTION
A transient condition has occurred that has resulted in a high pressure condition in the Unit 1 reactor pressure vessel.

As pressure increases, which of the following would actuate FIRST to ensure vessel integrity?

a. RPS

b. Target Rock Valve

c. Low set Safety Valve

d. Electromatic Relief Valve

*ANSWER
a.
*REFERENCE
LF-0203, Safety & Relief Valve Configuration
Horse Notes Dwg 0203-01, Rev 4
NEW
FUNDAMENTAL

*QNUM 013
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295026K305
*QUESTION
Unit 1 was at full power operation when Electromatic Relief Valve 1-203-3B spuriously opened. With Torus water average temperature exceeding 110 degrees F, Operators placed RHR 'A' in the Torus cooling mode. What additional action is required?

a. Blow down the reactor.

b. Depressurize the reactor to < 150 psig within 12 hours.

c. Lower Torus temperature to <95 degrees F within 12 hours.

d. Place the Reactor Mode Switch in SHUTDOWN immediately.

*ANSWER
d.
*REFERENCE
QGA 200, Primary Containment Control, Rev 8
LNF-1601, Primary & Secondary Containment, pg 17
QCOP 100-09, Torus Cooling Startup and Operation, Rev 17
QCOA 1600-03, Torus Water High Temperature, Rev 11, pg 2, 3
NEW
FUNDAMENTAL

*QNUM 014
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295028K204
*QUESTION
The following plant conditions exist on Unit 2:

- Unit 2 is in Mode 1, steady state.
- Drywell Average temperature is 135 degrees F and steady.
- Drywell pressure is 1.4 psig and steady.
- All other plant conditions are normal for full power operation.

Operators observed that temperatures in the vicinity of the inboard MSIV pilot solenoids have increased. No annunciator alarms have actuated.

With regard to the drywell cooling ventilation system, the most probable cause for this condition is . . .

a. the drywell coolers F and/or G are degraded.

b. the drywell cooler blowers have auto tripped.

c. there is a loss of RBCCW cooling to the drywell coolers.

d. a temperature control damper in the vicinity of MSIV pilot solenoids has failed closed.

*ANSWER
a.
*REFERENCE
LIC 1602, Containment Auxiliaries, pgs 45 - 49.
NEW
HIGHER

*QNUM 015
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295028K302
*QUESTION
Unit 2 has experienced a LOCA. With Drywell temperatures increasing, the Unit Supervisor ordered the U2 NSO to spray the Drywell before exceeding the Drywell Spray Initiation Limit. The reason for initiating Drywell sprays is to . . .

a. prevent flashing of the RPV level instrument reference legs.

b. draw non-condensibles from the Torus back into the Drywell.

c. ensure the capabilities of the Drywell to Torus vacuum breakers are not exceeded.

d. ensure that a possible blowdown will not raise torus temperature or pressure above design limits.

*ANSWER
d.
*REFERENCE
QGA-200, Primary Containment Control
Lesson Plan L-QGA-200a
NEW
FUNDAMENTAL

*QNUM 016
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295030K302
*QUESTION
Which of the following systems operation is prohibited with a lowering Torus water level and why?

a. RCIC operation when Torus level drops below 10 feet because RCIC would lose NPSH.

b. HPCI operation when Torus level drops below 11 feet because the HPCI turbine exhaust would be exposed.

c. RCIC operation when Torus level drops below 12 feet because the RCIC turbine exhaust would be exposed.

d. HPCI operation when Torus level drops below 13 feet because HPCI would lose NPSH.

*ANSWER
b.
*REFERENCE
QC Bank question: 336293
QGA 200 states prevent HPCI ops less than 11 feet. QCOA 1600-05, Leak in Torus states scram at 12 feet. LN 2300 states the HPCI turbine steam exhaust enters the Torus water at a level of 11 feet. RCIC would expose exhaust NPSH too but is not a concern due to the volume of the exhaust. Loss of NPSH is not a concern due to suction from CCST or BOTTOM of Torus.
BANK
HIGHER

*QNUM 017
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295031A105
*QUESTION
A transient has occurred on Unit 1 with the following conditions existing:

- Reactor water level is -20 inches and lowering at 20 inches per minute.
- Reactor power is 7% and steady.
- HPCI, feedwater, and condensate systems are unavailable.
- QCOP 0250-02 has been completed, bypassing the Group I isolation.
- The MSIVs are OPEN.
- RPV pressure is being controlled using Turbine Bypass Valves.

The Unit Supervisor has ordered Reactor water level lowered to at least -35 inches. Regarding RCIC operation, operators will . . .

	(1)	(2)
a.	TRIP RCIC.	NO RPV injection is allowed.
b.	TRIP RCIC.	RCIC injection would cause a significant power excursion.
c.	allow RCIC to inject.	RCIC injection will be required for Reactor level control.
d.	allow RCIC to inject.	RCIC will be required for RPV pressure control.

*ANSWER
c.
*REFERENCE
QGA 100, RPV Control, Rev 8
QGA 101 RPV Control (ATWS), Rev 10
NEW
HIGHER

Will replace this question with one that Jensen has written.

*QNUM 018
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295037A207
*QUESTION
Given the following plant conditions on Unit 2:

- APRMs read 10% and are steady.
- Reactor pressure is 970 psig and lowering.
- Drywell pressure is 1.7 psig and steady.
- Torus pressure is 0.2 psig and steady.
- The Reactor Mode switch is in SHUTDOWN.
- Reactor water level is -24 inches and lowering.

The SRO directing the QGAs ordered QCOP 0250-02," Bypassing MSIV Group I Isolation from Low Low Reactor Water Level" be performed. Before any QCOP 0250-02 jumpers could be placed, a GROUP I isolation occurred due to Low Low reactor water level. The NSO assigned to perform QCOP 0250-02 continued with the procedure and completed placing the jumpers. He is now ready to reset the Group I isolation, and the following plant conditions have changed:

- Reactor water level is -72 inches
- Reactor pressure is 1080 psig.

Assume there is no Group I high temperature or high steam line flow signal present. The NSO then places the MN STM ISOL RESET switch to the INBD and then OUTBD position. The GROUP I isolation . . .

a. will NOT reset, and the MSIVs and the steam line drain valves will REMAIN CLOSED.

b. resets, and the MSIVs and the steam line drain valves AUTOMATICALLY OPEN.

c. resets, and the MSIVs and the steam line drain valves REMAIN CLOSED.

d. resets, and the MSIVs remain closed but the steam line drain valves will AUTOMATICALLY OPEN.

*ANSWER
c.
*REFERENCE
LIC-0250, Main Steam lesson plan
BANK (INPO bank Question 20823)

HIGHER

*QNUM 019
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295038 2.3.11
*QUESTION
Running Turbine Building Ventilation . . .

a. ensures Turbine Building air is filtered prior to release to the environment.

b. ensures Turbine Building air is monitored prior to release to the environment.

c. ensures Turbine Building pressure is maintained lower than Reactor Building pressure.

d. allows an alternate lineup for the Standby Gas Treatment System to take a suction from the Turbine Building.

*ANSWER
b.
*REFERENCE
QGA-400, Radioactivity Release Lesson Plan, pg 5
295038 2.3.11
NEW
FUNDAMENTAL

*QNUM 020
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 600000A105
*QUESTION
A fire has been reported behind the Main Turbine shield wall. Regarding ventilation, Control Room Operators MUST . . .

a. operate ventilation as directed by the Fire Pre-Plan book.

b. secure all Turbine Building Ventilation to prevent fanning the fire.

c. continue to operate Turbine Building Ventilation to remove smoke.

d. operate Turbine Building Ventilation as requested by the Fire Brigade Leader.

*ANSWER
d.
*REFERENCE
Fire Pre Plan Lesson Plan pgs 1 & 3.
NEW
FUNDAMENTAL

*QNUM 021
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295002K304
*QUESTION
The following plant conditions exist on Unit 1:

- Mode 1 at 30% reactor power and holding.
- Reactor pressure is being controlled by the Turbine Bypass Valves.
- Condenser backpressure is at 5 inches Hg and degrading rapidly.

As condenser vacuum is lost, the ___(1)____ will close on a ___(2)____ signal.

	(1)	(2)
a.	Turbine stop valves (only)	Loss of condenser vacuum
b.	Turbine stop valves and turbine bypass valves	Loss of condenser vacuum
c.	Turbine stop valves and turbine bypass valves	Reactor protection system
d.	Main steam isolation valves	Group I Isolation

*ANSWER
b.
*REFERENCE
Lesson Plan 0500, Reactor Protective System, pg 51
NEW
HIGHER

*QNUM 022
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP GE-BWR3
*EXLEVEL B
*EXMNR REESER
*QVAL 1.00
*SEC
*SUBSORT
*KA 295007A102
*QUESTION
Given the following conditions:

- Unit 1 was operating at full power, with no equipment out of service, when a Group 1 Isolation occurred due to a Main Feedwater line break.
- HPCI and RCIC are injecting.
- Reactor water level is -25 inches and rising.
- RPV Pressure is following the expected trend for automatic operation of ERVs.

Assuming the Operator has made no manipulations to HPCI:

HPCI pump flow is presently _(higher than / the same as)_, and
HPCI pump speed is _(higher than / the same as)_

as it would be if the Main Steam lines were NOT isolated and RPV pressure was being controlled by the Main Turbine Bypass Valves.

	Flow	Speed
a.	higher than	higher than
b.	higher than	the same as
c.	the same as	higher than
d.	the same as	the same as

*ANSWER
c.
*REFERENCE
LN-2300 High Pressure Coolant Injection
LIC-0203 Automatic Depressurization System
NEW
HIGHER

*QNUM 023
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295008A205
*QUESTION
Unit 2 was operating at 75% reactor power when it scrammed due to a loss of EHC. After the scram recovery, reactor water level increased to +35 inches and then began LOWERING with a feedwater flow indication of ZERO.

Moments later, ALL Reactor Feed Pumps TRIPPED due to a faulty low suction pressure switch. At -30 inches reactor water level, the NSO restarted the 'A' RFP and manually OPENED a FWRV. At +42 inches Reactor water level, the NSO CLOSED all Main FWRVs. Several minutes later, all Main FRVs were manually CLOSED by their controller. Two minutes later the NSO noted that RPV water level was +49 inches and the 'A' RFP was TRIPPED.

What caused RPV level to reach this level?

a. Condensate/booster pumps are injecting.

b. Decay heat is affecting the water injected.

c. HIGH pressure ECCS pumps are injecting.

d. The FWLC system is holding open a FWRV.

*ANSWER
b.
*REFERENCE
Explanation: Relatively cool feed water will swell when it is heated.
QC Bank Question 351373
MODIFIED
HIGHER

*QNUM 024
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295009K301
*QUESTION
Unit 2 was operating at 95% of rated power when the oil system pressure on the ‘C’ reactor feedwater pump lowered to 4 psig. What effect does this condition have on the recirculation system without operator action?

a. The Recirc Pumps will immediately run back to 70%.

b. The Recirc Pumps will immediately run back to minimum.

c. When Reactor water level reaches 26 inches within 45 seconds, the Recirc Pumps will run back to minimum.

d. When Reactor water level reaches 26 inches within 45 seconds, the Recirc Pumps will run back to 70%.

*ANSWER
d.
*REFERENCE
QC Bank question: 295449
LF-0202, Recirculation System Lesson Plan
MODIFIED
HIGHER

*QNUM 025
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295009 2.1.31
*QUESTION
Unit 1 was operating at 85% power with the feedwater level control (FWLC) system in AUTO, and in 3-Element control.

The NSO received a reactor scram signal and noted that Reactor Water Level lowered to +5 inches before recovering. About 15 seconds after the scram, the NSO observed that Reactor Water Level was responding sluggishly to the level demand.

The NSO determined that the FWLC system _____(1)_____ and responds by ____(2)_____ .

	(1)	(2)
a.	was NOT operating properly	taking FWLC to MANUAL
b.	was NOT operating properly	taking FWLC to single-element
c.	WAS operating properly	verifying feedwater flow is 15% for <2 minutes after the scram
d.	WAS operating properly	verifying reactor water level returns to >15 inches within >2 minutes after the scram

*ANSWER
c.
*REFERENCE
Lesson Plan 0600, Feedwater, pgs 31 -33.
NEW
HIGHER

*QNUM 026
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295036A104
*QUESTION
Unit 2 is operating in Mode 1. A Non-Licensed Operator reported to the Control Room that the Unit 2 Torus room water level was about 3 inches with the room sump pump operating. To prevent an uncontrolled release of radioactivity to the environment, the water will be filtered by the Radioactive Liquid Waste system by first being pumped to the _____ .

a. Waste Collector Tank

b. Floor Drain Surge Tank

c. Floor Drain Collector Tank

d. Floor Drain Sample Tank

*ANSWER
c.
*REFERENCE
Lesson Plan 2000, Radioactive Liquid Waste System, pgs 8 & 9.
P&ID 2000, Radioactive Liquid Waste System.
NEW
FUNDAMENTAL

*QNUM 027
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 500000K208
*QUESTION
A severe accident has occurred on Unit 2 that has resulted in fuel damage and hydrogen release. The following atmospheric conditions exist in Unit 2 primary containment:

- Drywell Hydrogen 5%
- Torus Hydrogen 5%
- Drywell Oxygen 3%
- Torus Oxygen 3%
- Drywell pressure 4 psig
- Torus pressure 3 psig

QGA 200-5, “Hydrogen Control,” has the Operators vent the Torus and Drywell for hydrogen control. Assuming that the offsite release rate is expected to stay below the LCO during venting, which vent path is an NSO required to use first?

a. Vent the Torus using the Hardened Vent.

b. Vent the Drywell using the Drywell/Torus purge fans.

c. Vent the Torus through the Standby Gas Treatment system.

d. Vent the Drywell through the Standby Gas Treatment system.

*ANSWER
c.
*REFERENCE
QGA 200-5, Hydrogen Control, Rev. 5
QCOP 1600-13, Post Accident Venting of Primary Containment, Rev. 19
NEW
HIGHER

*QNUM 028
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 203000A109
*QUESTION
Torus Spray was being tested on Unit 1 when a Recirc System leak resulted in a reactor scram and entry into the QGAs on high Drywell pressure and low RPV level. The NSO established Torus Spray, and Torus Cooling. The MO 1-1001-16A, RHR HX Bypass Valve, is fully closed. The NSO notes that the maximum RHRSW flow with the MO 1-1001-5A, RHR HX SW Disch Valve, full open is 2500 gpm at a discharge pressure of 275 psig.

Which action(s) (if any) should be taken to correct the RHRSW System operation?

a. Start a 2nd RHRSW Pump.

b. Cross-tie the ‘A’ and ‘B’ RHRSW loops.

c. None, adequate RHRSW flow has been achieved.

d. Stop the RHRSW Pump, reverse heat exchanger flow and restart the RHRSW Pump.

*ANSWER
d.
*REFERENCE
QC Bank question 295445
QCOP 1000-04, RHR Service Water System Operation, Rev. 18
LNF-1000, RHR System Lesson Plan
BANK
HIGHER

*QNUM 029
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 203000A203
*QUESTION
A LOCA is in progress on Unit 1. RHR Loop Select Logic has determined that there is NO difference between 'A' and 'B' Jet Pump Riser pressures. MO 1-1001-29B fails to automatically open when the reactor low pressure permissive is satisfied. RPV level is -85 inches.

Regarding LPCI injection into the RPV; the Operator _____(1)_____ , and the injection valves ____(2)_____ .

a. (1) is directed to reset the LPCI Loop Select Logic
(2) will open automatically

b. (1) is directed to reset the LPCI Loop Select Logic
(2) can then be manually opened using the control switches on 901-3 panel

c. (1) can NOT maintain the injection valves open from the Control Room
(2) must be manually opened locally

d. (1) can NOT maintain the injection valves open from the Control Room
(2) must be remotely opened from the valve motor breakers

*ANSWER
c.
*REFERENCE
QC Bank Question 109010
MODIFIED
HIGHER

*QNUM 030
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 205000A202
*QUESTION
The following plant conditions exist on Unit 1 prior to refueling:

- Unit 1 is in Mode 4 with 'A' RHR operating in shutdown cooling.
- Reactor Pressure is 95 psig and rising slowly.
- Reactor Temperature is 220 degrees F and steady.
- Reactor Water level is being maintained between +20 inches and +40 inches.
- The 'B' condensate booster pump is operating with RWCU rejecting to the condenser.
- Reactor Recirculation Pumps are off.

Control Room Operators then receive the following alarm:

- Alarm 901-3 B-6, RHR PUMP TRIP

This condition was caused by _____(1)_____ and Operators should _____(2)_____.

a. (1) MO 1-1001-43 closing on increasing reactor pressure;
(2) lower reactor pressure by increasing RWCU reject

b. (1) MO's 1-1001-47 and 1-1001-50 closing on increasing reactor pressure;
(2) lower reactor pressure by increasing RWCU reject

c. (1) A Group II isolation occurring on low reactor water level;
(2) increase reactor water level by opening the feedwater regulating valve

d. (1) shutdown cooling low pressure permissive tripping RHR pump on high reactor pressure;
(2) reset the low pressure condition by depressing the isolation valves' reset switch on the 901-3 panel.

*ANSWER
b.
*REFERENCE
QCOA 1000-02, Loss of Shutdown Cooling, Rev 14
QCAN 901-3 B-6, RHR Pump Trip, Rev 3
NEW
HIGHER

*QNUM 031
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 205000A303
*QUESTION
Unit 1 is shutdown with refueling operations in progress. 1C RHR pump is in shutdown cooling operation at 3500 gpm. Maintenance personnel are locally cycling MO 1-1001-37B for testing.

If refueling water was draining into the Torus during valve testing, Operators would detect valve _____(1)_____ open indication and _____(2)_____ .

	(1)	(2)
a.	MO 1-1001-34B;	FR 1-1040-7, RHR FLOW lowering
b.	MO 1-1001-36B;	FI 1-1040-11B, CTMT SPRAY FLOW rising
c.	MO 1-1001-36B;	PI 1-1040-2B, RHR HX INLET pressure lowering.
d.	MO 1-1001-34B;	Annunciator Alarm 901-3 A-5 CNMT SPRAY A or B LOW FLOW Alarm NOT reset

*ANSWER
d.
*REFERENCE
RHR Lesson Plans LNF-1000
QCAN 901-3 A-5, RHR Pump Running and Low Flow to Containment Spray Header, Rev 1
NEW
HIGHER

*QNUM 032
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 206000A304
*QUESTION
Unit 2 HPCI is operating during an accident with the following plant conditions:

- Reactor pressure 100 psig, lowering.
- Drywell pressure 2.0 psig, steady.

The plant responds by closing the following valves, associated with the AC trip logic . . .

a. MO 2-2399-4, Inbd Steam Isolation valve ONLY.

b. MO 2-2301-5, Outbd Steam Isolation valve ONLY.

c. MO 2-2301-40, Vacuum Breaker Isolation valve AND
MO 2-2301-5, Outbd Steam Isolation valve.

d. MO 2-2399-40, Vacuum Breaker Isolation valve AND
MO 2-2301-4, Inbd Steam Isolation valve.

*ANSWER
a.
*REFERENCE
QCAN 901-3 D-9, “HPCI GROUP 4 PRIMARY CONTAINMENT ISOL VLVS AC TRIP CHANNEL DIVISION ISOLATION,” Rev 10
QCAN 901-3 D-10, “HPCI GROUP 4 PRIMARY CONTAINMENT ISOL VLVS DC TRIP CHANNEL DIVISION ISOLATION,” Rev 10
NEW
HIGHER

*QNUM 033
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 206000A410
*QUESTION
Maintenance personnel in the HPCI room are monitoring the HPCI booster pump using a tachometer and want Control Room Operators to adjust the HPCI turbine speed to obtain a booster pump speed of 1500 rpm.

What would Control Room Operators set the HPCI turbine speed at to obtain this reading?

a. 750 rpm

b. 1500 rpm

c. 3000 rpm

d. 4500 rpm

*ANSWER
c.
*REFERENCE
HPCI Lesson Plan 2300, pg 9
NEW
HIGHER

*QNUM 034
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 209001A403
*QUESTION
A transient has occurred on Unit 1 with the following conditions existing:

- Reactor pressure is 275 psig.
- Reactor water level is -68 inches.
- The ‘A’ Core Spray line break detection d/p is 1.2 psid.
- MO 1-1402-24A has dual position indication.
- MO 1-1402-25A has a CLOSED position indication.
- The ‘A’ Core Spray pump is RUNNING.

Discharge valve MO 1-1402-25A indicates closed because . . .

a. it must wait for the 8.5 minute timer to time out.

b. the Core Spray injection valve logic has failed.

c. MO 1-1402-24A must reach FULL OPEN before MO 1-1402-25A opens.

d. the Core Spray line break detection system has inhibited MO 1-1402-25A from opening.

*ANSWER
b.
*REFERENCE
Core Spray Lesson plan LIC-1400, pgs 4, 8, 15
NEW
HIGHER

*QNUM 035
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 600001A216
*QUESTION
There is a severe, uncontrolled fire on Unit 2. It is in an area where Unit 2 RCIC cables are routed.

Which of the following systems is the preferred RPV injection source which will meet the requirements of Appendix R?

a. U2 Condensate/Feedwater

b. Safe Shutdown Makeup Pump

c. U1 Reactor Core Isolation Cooling Pump

d. U2 High Pressure Coolant Injection Pump

*ANSWER
b.
*REFERENCE
QCARP 0030-02, TB-I Injection with SSMP and Bringing the Unit to Cold Shutdown, Rev 8
Lesson Plan 2900, Safe Shutdown Makeup Pump
Learning Objective N-2900-K01, SR-2900-K01
K/A selected to track selection of shutdown makeup pump, not fire.
NEW
FUNDAMENTAL

*QNUM 036
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 211000K102
*QUESTION
Core plate differential pressure low pressure is sensed from the ____(1)_____ and the core plate differential pressure high pressure is sensed from the _____(2)_____.

	(1)	(2)
a.	standby liquid control outer pipe	standby liquid control injection pipe
b.	standby liquid control injection pipe	standby liquid control outer pipe
c.	calibrated jet pump #11	RPV bottom head drain
d.	loop “B” core spray sparger	RPV bottom head drain

*ANSWER
a.
*REFERENCE
SBLC Lesson Plan 1100
Recirculation system ppt presentation pg 45, Core DP and SLC nozzle
Reactor Vessel and Internals Lesson Plan 0201
NEW
HIGHER

*QNUM 037
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 212000K201
*QUESTION
Bus 29-2 has tripped. How does this affect the U2 Reactor Protection System (RPS)?

a. RPS MG set 'A' trips ½ scram occurs.

b. RPS MG set 'A' trips NO effect on RPS.

c. RPS MG set 'B' trips NO effect on RPS.

d. RPS MG set 'B' trips ½ scram occurs.

*ANSWER
d.
*REFERENCE
Lesson Plan 500, RPS, pgs 3, 37.
QCAN 901-5 A-10, RPS Channel A Reactor Scram
NEW
HIGHER

*QNUM 038
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 215003K304
*QUESTION
Unit 2 is in startup mode. Following a Control Rod withdraw, the NSO received the following TWO alarms:

- 902-5 A-5, IRM HIGH
- 902-5 C-3, ROD OUT BLOCK

This condition was caused by . . .

a. improper detector ranging.

b. loss of IRM detector high voltage.

c. an IRM drawer module that was unplugged.

d. an IRM function switch that was out of the OPERATE position on an IRM drawer.
*ANSWER
a.
*REFERENCE
QCAN 902-5 A-5, IRM HIGH, Rev 6
QCAN 902-5 C-10, Channel A IRM HIGH HIGH or INOP, Rev 6
NEW
FUNDAMENTAL

*QNUM 039
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 215004K405
*QUESTION
An upward spike has occurred on Unit 1 SRM 23. Neutron level then returned to normal. How will the resulting UPSCALE HIGH alarm clear on the 901-5 panel?

a. It will automatically clear since the condition has cleared.

b. The Operator must momentarily take the SRM Bypass switch to ‘23' position.

c. The NSO must place the RESET switch on SRM 23 drawer to the TRIP position

d. The NSO must take the RESET switch on SRM 23 drawer to the TRIP position AND momentarily take the SRM Bypass switch to the ‘23' position.

*ANSWER
a.
*REFERENCE
Lesson Plan 701, SRMs, pg 11, 20
QCAN 901-5 A-4, SRM Channel high or Inop, Rev 5
NEW
FUNDAMENTAL

*QNUM 040
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 215005K505
*QUESTION
With Unit 2 in Mode 1 on the 60% rod line, NSOs raise recirculation flow with both pumps to 80% of rated drive flow. This would raise the APRM Flow Biased scram set point to . . .

a. 108%.

b. 112%.

c. 116%.

d. 125%.

*ANSWER
b.
*REFERENCE
Lesson Plan 703, APRM
QCOP 0700-04, APRM System Operation, Rev 15
APRM Scram in Run Mode (2 loop operation) = (.56 Wd + 67.4%)
NEW
HIGHER

*QNUM 041
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 217000K601
*QUESTION
While operating Unit 1 RCIC for a surveillance test, the NLO in the RCIC room reported that the RCIC vacuum pump and condensate pump failed to start. This failure most likely was due to loss of power from . . .

a. 125 Volts DC Bus 1A.

b. 125 Volts DC Bus 2A.

c. 250 Volts DC MCC 1B.

d. 250 Volts DC MCC 1A.

*ANSWER
c.
*REFERENCE
RCIC Lesson Plan 1300, pg 41 of 62
NEW
FUNDAMENTAL

*QNUM 042
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 218000A101
*QUESTION
Unit 2 is at 100% power. No testing is in progress. The ANSO reports that ADS valve 2-202-3B has a tailpipe temperature of 210 degrees F and stable. This indicates that . . .

a. the valve is lifting.

b. the tailpipe is at ambient conditions, the valve has NOT lifted.

c. the valve has seat leakage, but there are no immediate concern of valve operability.

d. the valve has a significant seat leak and valve operability must be evaluated immediately.

*ANSWER
c.
*REFERENCE
Lesson Plan 0203 ADS, pgs 12 & 28
QCOS 0203-03, Main Steam Relief Valves Operability Test, Rev 23
NEW
FUNDAMENTAL

*QNUM 043
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 223002A204
*QUESTION
You are the Unit 1 NSO. After a change in reactor power on Unit 1, you observe the following conditions:

Annunciator 901-5 B-9, Channel A MSL Hi-Hi Radiation Alarm	In alarm
Annunciator 901-5 B-16, Channel B MSL Hi-Hi Radiation Alarm	NOT alarming
Annunciator 901-3 A-2, MSL High Radiation	NOT alarming

Based on the above, you. . .

a. manually INITIATE a Group II isolation AND a Reactor scram.

b. VERIFY automatic actions have occurred and you must scram the reactor.

c. do NOT initiate any isolations, and you must MONITOR all main steam line radiation monitors.

d. do NOT initiate any isolations, and you must LOWER reactor power until alarm condition clears.

*ANSWER
c.
*REFERENCE
QCAN 901-5 B-9, Channel MSL Hi-Hi Radiation, Rev 8
QCAN 901-3 A-2, MSL Hi Radiation, Rev 10
QCOA 1700-05, Abnormal Main Steam Line Radiation, Rev 13
NEW
HIGHER

*QNUM 044
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 239002A301
*QUESTION
To prevent reopening of an ADS relief valve, within _____(1)_____ seconds of valve closure, the interlock timers have been set for approximately _____(2)_____ seconds.

	(1)	(2)
a.	4	14
b.	10	14
c.	14	20
d.	20	24

*ANSWER
b.
*REFERENCE
QCOP 0203-01, Reactor Pressure Control Using Manual Relief Valve Actuation, Rev 12
Lesson Plan 0203, ADS
NEW
FUNDAMENTAL

*QNUM 045
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 259002A404
*QUESTION
With Unit 2 operating at 100% power, the Control Room Operators receive the following alarms:

- 902-5 C-8, 2A FW ACTUATOR TROUBLE
- 902-5 H-8, 2B FW ACTUATOR TROUBLE

A Non-Licensed Operator set to investigate the annunciators reported back that there must have been a momentary loss of the control signal, but that everything at the local skid looks normal EXCEPT that neither FWRV appears to be moving like the NLO is used to seeing on rounds.

This condition _____ after Control Room Operators null the deviation between FWRV demand and indicated position.

a. will automatically reset immediately

b. will automatically reset after a time delay

c. must be manually reset from the Control Room

d. must be manually reset locally at the FWRV hydraulic control station

*ANSWER
c.
*REFERENCE
Lesson Plan 600, Digital RPV Level Control
QCOP 0600-21, Operation of Feedwater Level Control System, Rev 12
NEW
FUNDAMENTAL

*QNUM 046
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 261000 2.1.27
*QUESTION
The charcoal filter in the Standby Gas Treatment System (SBGTS) is designed primarily to remove . . .

a. at least 99% of radioactive particles >0.3 microns in size.

b. radioactive isotopes of iodine released during an accident.

c. inert and halogenated fission products released to the primary containment.

d. dust particles and other debris that have been entrained into the system flow.

*ANSWER
b.
*REFERENCE
Lesson Plan 7500, SBGTS.
261000 2.1.27
NEW
FUNDAMENTAL

*QNUM 047
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 262001K103
*QUESTION
Unit 2 is operating at full power with a normal electrical lineup, EXCEPT that 345KV GCB 8-9 is OPEN for maintenance activities.

An electrical fault has deenergized Line 0402, the 345 KV line to Cordova, that results in a trip of the Unit 2 turbine generator. After the electrical transient has stabilized, and with no Operator action, Bus 23 is ____(1)_____ and Bus 24 is ____(2)____ .

	(1)	(2)
a.	powered from T21	powered from T21
b.	de-energized	de-energized
c.	powered from T22	powered from T22
d.	de-energized	powered from T22

*ANSWER
b.
*REFERENCE
Lesson Plan 6500, 4KV Distribution
345 KV Switchyard Drawing 6100-01, Rev 3.
NEW
HIGHER

*QNUM 048
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 262002K301
*QUESTION
With Unit 1 operating at 100% power, a loss of ESS power occurred. Regarding the feedwater level control circuitry, this condition would immediately result in a . . .

a. silent lockup of the 1A FWRV.

b. Nematron system alarm.

c. BLAC system alarm.

d. Feedwater Regulator Hydraulic Power Unit Trouble alarm.

*ANSWER
a.
*REFERENCE
Lesson Plan 0600 Feedwater Level Control System, Pg 83, 84
NEW
FUNDAMENTAL

*QNUM 049
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 263000.K2.01
*QUESTION
A maintenance worker reports to the control room that he accidently de-energized 250 VDC Turbine Building MCC 2. What Reactor Building (RB) busses would be affected by this action?

a. RB MCC 2A Main Feed AND
RB MCC 2B Reserve Feeds ONLY

b. RB MCC 2A Main Feed AND
RB MCC 2B Reserve Feeds AND
RB MCC 1B Main Feed

c. RB MCC 2 Main Feed AND
RB MCC 1A Main Feed AND
RB MCC 1B Reserve Feed

d. RB MCC 2A Reserve Feed AND
RB MCC 2B Main Feed ONLY

*ANSWER
b.
*REFERENCE
QOM 2-6900-10, Rev 4.
QOM 1-6900-10, Rev 5
NEW
FUNDAMENTAL

*QNUM 050
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 264000K407
*QUESTION
When locally starting the Emergency Diesel Generator, the maintenance toggle switch on the Engine Mounted Control Panel must be in the REMOTE AUTOSTART position, otherwise . . .

a. the EDG Cooling Water Pump will not auto start.

b. the generator field will NOT flash when the EDG is started.

c. the normal engine trips will NOT be available during manual operation.

d. the undervoltage load shedding of nonessential loads will NOT occur automatically following a LOOP.

*ANSWER
b.
*REFERENCE
QCOP 6600-11, Diesel Generator Local Operation, Rev. 21
Lesson Plan 6600, EDG, pg 57
NEW
FUNDAMENTAL

*QNUM 051
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 300000K513
*QUESTION
An NLO on rounds identified the following conditions associated with the 1A Instrument Air compressor air dryer:

- Instrument air header pressure is 95 psig and steady.
- Dryer Pre-filter d/p is 2 psid and steady.
- Dryer After-filter d/p is 10 psid and slowly rising.
- The CHAMBER PERFORMANCE DEGRADING alarm is Clear.

These conditions are . . .

a. normal.

b. caused by a loss of pilot air.

c. caused by desiccant break through.

d. caused by moisture overload in the system.

*ANSWER
c.
*REFERENCE
Lesson Plan 4701 Instrument Air, pgs 24 - 27, 60
NEW
HIGHER

*QNUM 052
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 400000K601
*QUESTION
Unit 2 was at 100% power in January, when maintenance personnel inadvertently cut into the Instrument Air line supplying the Unit 2 Reactor Building.

As the Instrument Air system slowly depressurizes, what affect would this have on the RBCCW system or systems cooled by the RBCCW system?

a. An increase in drywell pressure.

b. Degraded lubrication of the Reactor Recirc pump motor bearings.

c. The ability to manually and automatically replenish the RBCCW expansion tank is lost.

d. High temperature in the RWCU non-regenerative heat exchanger return to the recirculation system.

*ANSWER
b.
*REFERENCE
QCOP 0202-29, Unit Reactor Recirculation Oil System Start-up and Operation, Rev 4
Lesson Plan 3700, RBCCW, pg 30
Lesson Plan 1200, RWCU , pg 51
NEW
HIGHER

*QNUM 053
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 263000A101
*QUESTION
Unit 1 was operating at full power when a loss of offsite power occurred.

- HPCI was trip-latched when DW pressure was 1.7 psig and RISING.
- Reactor water level lowered to +20 inches when RCIC was manually started for injection.

Presently:

- Reactor Water Level is +25" and STEADY.
- DW pressure is 4 psig and STEADY.

Which one of the loads listed below will have the greatest impact on the discharge rate of the Unit 1 Safety Related 250VDC battery?

a. HPCI Auxiliary Oil pump.

b. HPCI Emergency Oil pump

c. Main Turbine Emergency Bearing Oil pump.

d. RCIC Barometric Condenser Condensate pump.

*ANSWER
a.
*REFERENCE
QC Bank Question 351400
BANK
HIGHER
Explanation: At 2.5 psig in the DW, HPCI will receive an autostart signal causing the the HPCI aux oil pump to start. It is a large load off the DIV I (Unit 1) essential battery. The HPCI EBOP is a large load on the battery but will not be running. If HPCI had been allowed to autostart before it was trip-latched the EBOP would be running. The main turbine EBOP will be running but is a load on the NON-essential 250VDC battery. The RCIC barometric condenser condensate pump will be running but is a load on the DIV II (Unit 2) battery. Technical Reference: QOM 1-6300-T08, QCOA 2300-01

*QNUM 054
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 202001K410
*QUESTION
Unit 2 experienced a Recirculation Pump trip from 100% power due to the pump discharge valve going to the fully closed position. Preparations are being made to restart the pump.

The recirculation pump can be restarted following the trip, since the discharge valve closure pump trip is . . .

a. removed from the start circuitry after the discharge valve is full closed.

b. removed from the start circuitry as soon as the pump speed is indicating 0% after the trip.

c. bypassed by setting the pump speed demand signal to 14% during preparation for pump start.

d. removed from the start circuitry as soon as the motor-generator set breaker is tripped and the pump is coasting down.

*ANSWER
a.
*REFERENCE
QC Bank question 106169
Justification: Discharge Valve interlock start RE3
BANK
FUNDAMENTAL

*QNUM 055
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 202002K604
*QUESTION
Unit 1 was operating at 95% of rated power when Control Room Operators received the following alarms:

- 901-6 F-5, CONDENSATE BOOSTER PUMP AUTO TRIP
- 901-4 F-7, RECIRCULATION LOOP FLOWS LIMITED BY FEEDWATER FLOW AND REACTOR VESSEL LEVEL

The Operators observe that:

- The ‘C’ Condensate/Condensate booster pump indicates tripped.
- Reactor Feedwater Pump suction pressure stabilized at about 155 psig.
- Recirc flow controllers transferred to Manual.

Operators regain control of Reactor water level at +15 inches and rising.

NO additional automatic actions occur. The Operators respond by . . .

a. inserting a reactor scram.

b. attempting to restart the ‘C’ booster pump.

c. returning Recirc flow controllers to Auto.

d. lowering Reactor Recirc pump speed to 70%.

*ANSWER
d.
*REFERENCE
QCAN 901-4, F-7, Recirc Loop Flows Limited by Feedwater Flow and RPV level, Rev 4
QCAN 901-5, F-8, RPV Low Level, Rev 10
QCAN 901-6 F-5, Condensate Booster Pump Auto Trip, Rev 6
QCOA 3300-01, Loss of Condensate Pump, Rev 17
NEW
HIGHER

*QNUM 056
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 204000K504
*QUESTION
Unit 1 is at 97% power when a valving error in the RWCU room results in the 'A' train of non-regenerative heat exchangers becoming isolated. The following annunciator alarms (assume that this is the ONLY alarm received):

- 901-4 F-12, CU SYSTEM AFTER NON-REGEN HX HIGH TEMP

The operator's actions are to . . .

a. lower RBCCW system temperatures.

b. VERIFY a Group III isolation has occurred.

c. immediately trip the operating RWCU pump(s).

d. isolate RWCU system before non-regenerative heat exchanger outlet temperature reaches 140 degrees F.

*ANSWER
d.
*REFERENCE
QCAN 901-4 F-12, RWCU Non-Regenerative Heat Exchanger Outlet High Temperature, Rev 7
NEW
FUNDAMENTAL

*QNUM 057
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 214000A201
*QUESTION
Unit 1 is in startup mode. Operators were withdrawing in-sequence control rod K14 from notch 24 to notch 36. Under these circumstances, the reed switch associated with rod K14 did not actuate for position 32. The plant response is ____(1)_____ and the Operator actions would be to ___(2)____.

	(1)	(2)
a.	a rod withdraw block would occur	verify rod motion stopped
b.	annunciator RPIS INOP would alarm	stop rod motion
c.	the Rod Worth Minimizer would alarm	stop rod motion
d.	no alarm would occur	continue rod motion until the rod reaches position 36

*ANSWER
b.
*REFERENCE
QCAN 901-5 G-5, RPIS INOP Alarm, Rev 5
QCOA 0280-01, RPIS Failure, Rev 10.
NEW
HIGHER

*QNUM 058
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 215001A103
*QUESTION
Unit 1 is at 96% power with the Traverse In-Core Probe System (TIPS) operating for a surveillance. Upon a valid Group II actuation, the isolation of TIPS occurs by . . .

a. manually firing the shear valve.

b. automatic retraction of the cable, then manual closing of the ball valve as soon as the detector clears the indexer.

c. automatic retraction of the cable, then automatic closing of the ball valve after the detector enters the shield chamber.

d. manual retraction of the cable, then automatic firing of the shear valve.

*ANSWER
c.
*REFERENCE
Lesson Plan 0704, TIPS, pgs 6, 7, 14, 24
Lesson Plan 1603, Primary Containment Isolation, pg 12.
NEW
FUNDAMENTAL

*QNUM 059
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 215002A302
*QUESTION
Unit 1 is operating at 45% reactor power. No LPRMs or APRMs are bypassed. The NSO selects in-sequence rod R-9 for rod withdraw and notices that the Rod Block Monitor (RBM) recorder on the 901-5 panel goes downscale. This indication is due to . . .

a. an edge rod being selected.

b. insufficient LPRM inputs to the RBM.

c. insufficient neutron flux in the vicinity of rod R-9.

d. the RBM is automatically bypassed at this power level.

*ANSWER
a.
*REFERENCE
Lesson plan 0705 Rod Block Monitor, pgs 4, 9-11.
Horse Notes Dwg 0280-05, Rod Select Matrix
NEW
HIGHER

*QNUM 060
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 216000A401
*QUESTION
The RPV Metal Temperature recorder 1-0263-104 can be found in the ___(1)____ and it senses and records the ____(2)_____ metal temperatures.

	(1)	(2)
a.	Aux Electric Room	Vessel Head Flange and FW Nozzle
b.	Aux Electric Room	Vessel Bottom Head and Steam Outlet Nozzle
c.	Control Room	Vessel Head Flange and FW Nozzle
d.	Control Room	Vessel Bottom Head and Steam Outlet Nozzle

*ANSWER
c.
*REFERENCE
QC Bank Question 105362
ILT.04177: RPV temp recorder location and sensing points.
MODIFIED
HIGHER

*QNUM 061
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 219000 2.4.18
*QUESTION
An accident has occurred on Unit 2. The Unit Supervisor entered QGA 200, “Primary Containment Control.” The operating crew could NOT control Torus water temperature and entered QGA 500-1, RPV Blowdown due to exceeding . . .

a. Heat Capacity Limit.

b. Primary Containment Pressure Limit.

c. Pressure Suppression Pressure.

d. Drywell Spray Initiation Limit.

*ANSWER
a.
*REFERENCE
QGA 200, Primary Containment Control, Rev 8
219000 2.4.18
NEW
FUNDAMENTAL

*QNUM 062
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 223001K101
*QUESTION
Unit 1 is in Mode 3, cooling down for a refuel outage. De-inerting is in progress using Reactor Building Vents. Reactor vessel water level drops to -2 inches due to a valving error and then recovers to normal level. Which of the following is NOT true. The _____(1)_____, if running, will trip due to a _____(2)_____.

	(1)	(2)
a.	pumpback air compressor	low suction pressure
b.	drywell/torus purge fan	Group II signal
c.	the CAM sample pump and bypass pump	low suction pressure
d.	reactor building floor drain sump pump	Group II signal

*ANSWER
c.
*REFERENCE
QC Bank question 100631
All of the distractors will be affected by a group II isolation at +0 inches with the exception of the CAM system which is a post-accident monitoring system and has its own suction valves that do NOT close on a group II signal!
Lesson Plan 1602, pgs 28, 43, 66, 90
MODIFIED
HIGHER

*QNUM 063
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 226001K202
*QUESTION
Unit 2 is in Mode 1. A LOOP/LOCA occurs. Relief valves are cycling to control reactor pressure. The following annunciators are in alarm:

- Annun 902-8, C-7, DIESEL GENERATOR 1 FAILED TO START
- Annun 902-3, E-7, RHR SYSTEM BUS 13-1 SUPPLY FROM ½ EDG

Non-Licensed Operators have been dispatched to the affected diesel generators.

Under these conditions, which of the following should be used, if the Unit Supervisor directs you to establish Torus cooling?

a. 'A' and 'B' RHR pumps

b. 'C' and 'D' RHR pumps

c. 'A' and 'C' RHR pumps

d. 'B' and 'D' RHR pumps

*ANSWER
a.
*REFERENCE
QOM 2-6500-T05, Bus 23-1, 4160V AC, Rev 8
QOM 2-6500-T06, Bus 24-1, 4160V AC, Rev 7
Annun 902-8, C-7, Diesel Generator 2 Failed to Start Annunciator, Rev 3
Annun 902-3, E-7, RHR System Bus 13-1 Supply from ½ EDG , Rev 4
NEW
HIGHER

*QNUM 064
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 241000K302
*QUESTION
Unit 2 was operating at 97% power with the ‘A’ EHC pressure regulator controlling reactor pressure at 1002 psig. The ‘A’ EHC pressure regulator then failed downscale.

With NO Operator action, the backup pressure regulator will control reactor pressure at . . .

a. 996 psig.

b. 999 psig.

c. 1002 psig.

d. 1005 psig.

*ANSWER
d.
*REFERENCE
Lesson Plan 5652, pg 38
NEW
FUNDAMENTAL

*QNUM 065
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 233000K406
*QUESTION
Both Units are in Mode 1. The U1 and U2 spent fuel pools are connected through the transfer canal. Maintenance activities in the U1 spent fuel pool have just started, and resulted in a release of styrofoam blocks on the surface of the pool. The styrofoam has clogged the weir plates on the SOUTH side of the Unit 1 spent fuel pool.

Without Operator actions, the spent fuel pool water level will _____.

a. lower, resulting in a trip of the operating SFP pump

b. rise, resulting in SFP water overflowing into the pool ventilation ducts

c. rise slightly as the pool overflow will be controlled by the remaining weir plates

d. vary due to intermittent draining/refilling of the skimmer surge tank and the automatic tripping/restarting of the spent fuel pool pump

*ANSWER
c.
*REFERENCE
Lesson Plan 1900, Spent Fuel Pool system, pgs 5, 8, 9
Figure 1900-01, Refuel Floor Layout, Horse Notes.
NEW
HIGHER

*QNUM 066
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.1.3
*QUESTION
In accordance with the Shift Turnover Procedure, choose the list below that includes activities (but not all activities) that are included on the shift turnover sheets.

a. LCO status,
completed C/O checklists,
panel annunciators in alarm.

b. Completed C/O checklists,
panel annunciators in alarm,
electric operation/transmission system changes.

c. LCO status,
panel annunciators in alarm,
electric operation/transmission system changes.

d. LCO status,
completed C/O checklists,
electric operation/transmission system changes.

*ANSWER
c.
*REFERENCE
OP-AA-20, Rev 0, Conduct of Operations Process Description
OP-AA-112-101, Rev 2, Shift Turnover
NEW
FUNDAMENTAL

*QNUM 067
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.1.18
*QUESTION
In accordance with OP-AA-111-101, “Operating Narrative Logs and Records,” the Unit Control Room log . . .

a. is maintained by the Unit Supervisor.

b. may be created or printed with blue ink.

c. must be devoid of any wit, irony and sarcasm.

d. must be complete, legible, accurate, and understandable.

*ANSWER
d.
*REFERENCE
OP-AA-111-101, “Operating Narrative Logs and Records,” Rev 5
NEW
FUNDAMENTAL

*QNUM 068
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.1.23
*QUESTION
Unit 1 was operating at 100% power with the main generator regulator being operated in manual. Non-Licensed Operators notified the Control Room that all Unit 1 Generator Hydrogen Seal Oil pumps have tripped. Hydrogen pressure dropped and finally stabilized at 40 psig.

Given the resulting hydrogen pressure for this condition and the attached generator capabilities curve, which of the following represents an allowed station output with the HIGHEST power factor?

a. 800 Mw 250 MVARs

b. 800 Mw 150 MVARs

c. 700 Mw 250MVARs

d. 600 Mw 300MVARs

*ANSWER
b.
*REFERENCE
QCOP 6000-2, Adjusting VARS on the Main Generator, Rev 7
QCGP 3-1, Attachment A, Reactor Power Operations, Rev 51
MODIFIED
HIGHER

*QNUM 069
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.2.24
*QUESTION
The following Unit 2 plant conditions are given:

- Reactor power is 40%.
- QCOS 1300-5, "Quarterly RCIC Pump Operability Test" is in progress.
- Torus water temperature is 77 degrees F and increasing at 3 degrees F every 15 minutes.
- Torus cooling is in operation.

What is the MAXIMUM amount of time this test may continue without Tech Specs requiring the test to be terminated?

a. 90 minutes

b. 140 minutes

c. 165 minutes

d. 215 minutes

*ANSWER
b.
*REFERENCE
TS 3.6.2.1, Suppression Pool Average Temperature
3/15 =0.2 Deg f/min: 105 - 77 = 28 deg F: 28/0.2 = 140 min
MODIFIED
HIGHER

*QNUM 070
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.2.13
*QUESTION
Which of the following lists examples of conditions that require a Clearance Order to be EXCEPTIONAL?

a. freeze seal,
relief valve gagging device,
work in electrical cubicles that contain backfeed voltages.

b. relief valve gagging device,
work in electrical cubicles that contain backfeed voltages,
valve that is opened and torqued on its backseat.

c. freeze seal,
work in electrical cubicles that contain backfeed voltages,
valve that is opened and torqued on its backseat.

d. freeze seal,
relief valve gagging device,
valve that is opened and torqued on its backseat.

*ANSWER
a.
*REFERENCE
OP-AA-109-101, Clearance and Tagging, Rev 0, paragraph 7.1.2, 7.3.3.1, 7.3.4.3.C, 7.3.8.10, 7.3.2.7 and Attachment 2 (page 51).
NEW
FUNDAMENTAL

*QNUM 071
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.2.28
*QUESTION
During Core Alterations, the Reactor Operator is required to verify that the SRMs are reading at least ____(1)_____ every _____(2)_____.

	(1)	(2)
a.	3 cps	8 hours
b.	3 cps	12 hours
c.	0.7 cps	8 hours
d.	0.7 cps	24 hours

*ANSWER
b.
*REFERENCE
QCFHP 0100-01, Master Fuel Handling procedure, Rev 26, pg 8 step E.2 and page 11, step E.17.b.(2)
Technical Specification 3.3.1.2
NEW
FUNDAMENTAL

*QNUM 072
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.3.4
*QUESTION
In order to extend the administrative dose control limit for an individual to 3000 mrem TEDE, the individual must request the extension and the request must be approved by the . . .

a. work group supervisor only.

b. work group supervisor and the RP Manager only.

c. work group supervisor and the RP Manager and the Station Manager only.

d. work group supervisor and the RP Manager and the Station Manager and the Site Vice President.

*ANSWER
b.
*REFERENCE
RP-AA-203, Rev 2, Exposure Control and Authorization, pg 9 of 12.
NEW
FUNDAMENTAL

*QNUM 073
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.3.9
*QUESTION
Operators are preparing to vent the primary containment.

Which of the following can NEVER be used to ensure that the radioactive release rate will remain below the ODCM allowed release rate limit?

a. A calculation provided IAW EP-MW-110-200, Dose Assessment.

b. The absence of annunciator 912-1, E-3, Main Chimney GE Radiation Monitor High-High Radiation.

c. The absence of annunciators 912-1, E-9, or F-9, High Radiation Detected on Eberline Radiation Monitors A or B.

d. A vent recommendation IAW QCCP 1300-01, Drywell & Suppression Chamber Sampling, Venting, & Purging.

*ANSWER
b.
*REFERENCE
QCOP 1600-13, Post-Accident Venting of the Primary Containment, Rev 19, pg 1
NEW
FUNDAMENTAL

*QNUM 074
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.4.12
*QUESTION
Complete the following sentence:

During transient conditions, the RO _____(1)_____ immediate operator actions of abnormal procedures from memory _____(2)_____ the Unit Supervisor.

	(1)	(2)
a.	may NOT perform	until directed by
b.	may NOT perform	until concurred upon by
c.	may perform	while verbalizing actions being taken to
d.	may perform	only after verbalizing the actions to be taken to

*ANSWER
c.
*REFERENCE
OP-AA-101-111, Roles and Responsibilities of On-Shift Personnel, Rev 0
NEW
FUNDAMENTAL

*QNUM 075
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL B
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.4.49
*QUESTION
Unit 2 is operating at 83% power with the following plant conditions existing:

- Bus 25-2 is OOS.
- MCC 28-2 has tripped and is being investigated.
- All expected actions occurred.
- One minute later, APRM 5 FAILED, resulting in an INOP trip.

The NSO noted the appropriate alarms on 902-5, but ONLY light 4 of the RPS solenoid group lights extinguished. Lights 1, 2 and 3 are STILL lit.

The FIRST action that the NSO should take is to . . .

a. depress the ‘A’ manual scram pushbutton

b. depress the ‘B’ manual scram pushbutton.

c. bypass APRM 5 and reset the half scram.

d. refer to TS 3.3.1.1 to determine proper actions.

*ANSWER
b.
*REFERENCE
QC Bank question 342099
BANK
HIGHER

*QNUM 076
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295001 2.4.4
*QUESTION
Unit 1 is at 100% power following a refueling outage.

When the 1B Recirc MG Set tripped on high current. NO action was taken other than reducing 1A Recirc MG Set to 78% speed. The NSO notes that approximately 10 LPRM Hi lights are coming in and out near the core center at a frequency of about once every second. APRMs do NOT indicate appreciable change.

As Unit Supervisor, what procedure do you enter and what actions do you order?

a. Enter QCOA 0202-04, Reactor Recirc Pump Trip - Single Pump AND insert CRAM rods

b. Enter QCOA 0202-04, Reactor Recirc Pump Trip - Single Pump AND insert a reactor scram

c. Enter QCOA 0400-02, Core Instabilities AND insert CRAM rods

d. Enter QCOA 0400-02, Core Instabilities AND increase Reactor Recirc flow

*ANSWER
b.
*REFERENCE
QC Bank question 340140
295001 2.4.4
MODIFIED
HIGHER

*QNUM 077
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295003A102
*QUESTION
Unit 2 was operating at 60% power with a normal electric plant lineup when a transient occurred. The following valid annunciators were received in the order listed:

- 902-8, F3, 4 KV BUS OVERCURRENT
- 902-8, A1, 4KV MAIN FEED BREAKER TRIP
- 902-8, D3, 4KV BUSSES 23/24 LOW VOLTAGE
- 902-8, A7, DIESEL GEN #2 TROUBLE
- 902-8, G8, DIESEL GEN #2 RELAY TRIP

The unit supervisor diagnoses the failure as an overcurrent ____(1)_____.
To mitigate this event, the unit supervisor orders _____(2)_____ .

(1) (2)

a. (1) trip of Bus 23.
(2) establish alternate power to Bus 23-1 IAW QCOP 6500-08, 4KV Bus Cross-Tie Operation.

b. (1) trip of Bus 24.
(2) establish alternate power to Bus 24-1 IAW QCOP 6500-08, 4KV Bus Cross-Tie Operation.

c. (1) condition that locked out Bus 24-1.
(2) Reestablish normal power to Bus 24 IAW QCOP 6500-09, Energizing 4KV Switchgear & Transferring Auxiliary Power.

d. (1) trip of Transformer 21 that deenergized Bus 24.
(2) Verify proper operation of U2 EDG IAW QCOP 6500-02, Diesel Generator 1(2) Startup Procedure.

*ANSWER
b.
*REFERENCE
QC Bank Question 339272
Bus 24 has an overcurrent condition based upon, OC alarm, alarm for T21 bkr trip and U2 EDG alarms. The U2 EDG has tripped on OC (186 trip G8).
MODIFIED

HIGHER

*QNUM 078
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295005 2.1.20
*QUESTION
Unit 1 was operating at 28% of rated power when the following annunciator alarmed:

- 901-7, A-4 TURB TRIPPED OPERATING OIL LOW PRESSURE

During the transient, Reactor pressure remained within 900 to 1000 psig, and Reactor water level remained between 15 inches and 38 inches. As Unit Supervisor, you enter procedure _____(1)_____ and _____(2)_____ .

(1) (2)

a. (1) QCGP 2-3, Reactor Scram
(2) verify all main turbine stop, control, intercept and bypass valves are closed.

b. (1) QGA 100, RPV control
(2) follow pressure and level legs.

c. (1) QOA 5600-04, Loss of Turbine Generator
(2) verify main turbine bypass valves control reactor pressure.

d. (1) QCOA 5650-01, Malfunction of EHC Pressure Control System
(2) reduce power using recirculation flow.

*ANSWER
c.
*REFERENCE
QCAN 901-7, A-4 Turb Tripped Operating Oil Low Pressure
QOA 5600-04, Loss of Turbine Generator, Rev 23
295005 2.1.20
NEW
HIGHER

*QNUM 79
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Moore
*QVAL 1.00
*SEC
*SUBSORT
*KA 295018A204
*QUESTION
Unit 1 was operating at 96% steady state power. The NSO inadvertently closed MO-1-3702 RBCCW to Drywell Supply Isolation Valve. He realized his mistake and just as the valve indicated full closed, he tried to re-open the MO-1-3702. This caused its breaker to trip with MO-1-3702 closed.

When the NSO informs you of this condition as the Unit Supervisor you will . . .?

a. Direct the Unit 1 NSO to stop both Recirc Pumps then scram Unit 1.

b. Dispatch a Non-Licensed Operator to fully open the bypass around MO-1-3702 within 5 minutes or scram Unit 1.

c. Dispatch a Non-Licensed Operator to reset the breaker for MO-1-3702. If the NLO can't reset the breaker to allow reopening MO-1-3702 within 5 minutes, scram Unit 1.

d. Dispatch a Non-Licensed Operator immediately to manually re-open MO-1-3702. If the NLO can't start to reopen MO-1-3702 within 1 minute, scram Unit 1.

*ANSWER
a.
*REFERENCES
Lesson Plan LF-3700 Reactor Building Closed Cooling Water System
Loss of both Recirc pumps requires a reactor scram.
NEW
HIGHER

*QNUM 80
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295023 2.4.30
*QUESTION
During refueling in Unit 2, a fuel assembly is dropped in the reactor vessel. Immediate actions taken include manual start of the SBGTS. Radiation levels on the refuel floor slowly increase to 20 mrem/hr general area. Nobody exceeds administrative radiation exposure limits.

How would this be categorized AND when should the NRC be notified of this event?

a. This is categorized as an Unusual Event, the NRC needs to be notified within 15 minutes.

b. This is categorized as an Alert, the NRC needs to be notified within 15 minutes.

c. This is categorized as an actuation of a valid safety system, the NRC needs to be notified within 4 hours.

d. This is considered a Reportable Event (Only), the NRC needs to be notified within 60 days.

*ANSWER
c.
*REFERENCES
10CFR50.72
EP-AA-1006, Radiological Emergency Plan Annex, Rev 22, pgx 3-75, 76
LS-AA-1020, Reportability Reference Manual, Rev 9
295023 2.4.30
NEW
FUNDAMENTAL

*QNUM 81
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Moore/Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295026A202
*QUESTION
Unit 2 is in Mode 1 with suppression pool initial conditions of:

Suppression pool level at 14' 3"
Suppression pool average temperature 70 degrees F.

Subsequently, a relief valve begins to leak past its seat. Suppression pool level increases by 0.2 inches/hr and average suppression pool temperature increases at 10 degree F/hr.
Which suppression pool Tech Spec limit will be reached first (level or average temperature) AND what is the Tech Spec Bases for that high limit?

a. High average Torus water temperature limits will be reached first.
Basis: to prevent primary containment pressures and temperatures from exceeding maximum allowable values during a DBA LOCA.

b. High average Torus water temperature limits will be reached first.
Basis: to prevent excessive down-comer loads to cause excessive swell during relief valve operations during a DBA LOCA.

c. High Torus water level limits will be reached first.
Basis: to prevent primary containment pressures and temperatures from exceeding maximum allowable values during a DBA LOCA.

d. High Torus water level limits will be reached first.
Basis: to prevent excessive down-comer loads to cause excessive swell during relief valve operations during a DBA LOCA.

*ANSWER
a.
*REFERENCES
Tech Spec Bases 3.6.2.1 Suppression Pool Average Temperature
Tech Spec Bases 3.6.2.2 Suppression Pool Water Level
NEW
HIGHER

*QNUM 82
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Moore
*QVAL 1.00
*SEC
*SUBSORT
*KA 295028 2.4.41
*QUESTION
The following plant conditions exist on Unit 1:

- Reactor Coolant Activity 325 µCi/gm I-131 dose equivalent
- Drywell Pressure 4.7 psig and stable
- Reactor Pressure 75 psig and stable
- All MSIVs are closed
- Drywell sprays and drywell cooling have failed
- Drywell temperature is 285 degrees F and increasing very slowly
- Reactor Water level is at -100 inches and slowly increasing
- CRD pumps are the only pumps providing water to the core

Based on these conditions, which Emergency Action Level classification would you declare?

a. Unusual Event - FU1

b. Alert - FA1

c. Site Area Emergency - FS1

d. General Emergency - FG1

*ANSWER
d.
*REFERENCES
EP-AA-1006 Rev. 19 (12/04)
295028 2.4.41
NEW
HIGHER

*QNUM 83
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295007A201
*QUESTION
After a long operating period, the Unit 1 Reactor was manually scrammed due to steam tunnel temperatures rapidly rising to >200 degrees F. Reactor pressure was cycling between 1115 psig and 1070 psig. In accordance with the pressure leg of QGA 100, “RPV Control,” you establish a pressure band _____(1)_____ using ___(2)_____ to control Reactor pressure.

	(1)	(2)
a.	below 940 psig	ADS valves.
b.	between 940 and 1060 psig	ADS valves.
c.	below 940 psig	turbine bypass valves.
d.	between 940 and 1060 psig	turbine bypass valves.

*ANSWER
b.
*REFERENCES
Quad Cities Lesson Plan 1603, Primary Containment Isolation System, pg 3
Quad Cities Lesson Plan 0203, ADS, pg 3
QGA 100 Basis document
NEW
HIGHER

*QNUM 84
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295014A204
*QUESTION
Unit 2 was at 35% power. Due to a transient condition, AND a failure of the RPS system to actuate, the reactor was operated with reactor pressure at 750 psig for a short period of time.

Reactor engineering determined that this condition resulted in Minimum Critical Power Ratio (MCPR) being <1.05.

As Unit Supervisor, you realize this condition is a violation of _____(1)_____ and you must _____(2)_____ .

a. (1) Safety Limit 2.1.1
(2) Insert all insertable control rods within 2 hours.

b. (1) TS 3.1.1, Shutdown Margin
(2) Restore Shutdown Margin within 6 hours.

c. (1) Safety Limit 2.1.1
(2) Restore MCPR to within allowable limits immediately.

d. (1) TS 3.1.1, Shutdown Margin
(2) Fully insert all insertable control rods immediately.

*ANSWER
a.
REFERENCES
Tech Spec 2.1, & 3.1.1
NEW
HIGHER

*QNUM 85
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 295032 2.4.7
*QUESTION
With Unit 1 at full power operation, the Unit 1 Control Room receives the following annunciators:

901-4, A-12, RWCU AREA TEMPERATURE 'A' HIGH
901-4, A-13, RWCU AREA TEMPERATURE 'B' HIGH

Reactor pressure, level and power are stable, but attempts to isolate RWCU have failed.
RWCU Heat Exchanger Room Temperature quickly rises to 170 degrees F.

As Unit Supervisor, you . . .

a. reduce reactor power IAW QCGP 3-1, "Reactor power operations."

b. enter QGA 100, "RPV Control," ONLY, and scram the reactor.

c. Enter QGA 300, "Secondary Containment Control," and shutdown the reactor IAW QCGP 2-1, "Normal Unit Shutdown."

d. Enter QGA 300, then enter QGA 100, "RPV Control" to scram the reactor.

*ANSWER
d.
*REFERENCES
QCAN 901(2)-4 A-12 RWCU Area High Temperature, Rev 6.
QGA 300
295032 2.4.7
NEW
HIGHER

*QNUM 86
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2060000 2.1.32
*QUESTION
Unit 2 is starting up in accordance with QCGP 1-1, following a weekend outage. No work was performed on HPCI, but periodic overspeed testing is scheduled during startup. A Clearance Order, which was placed to allow the Mechanics to prepare HPCI for the overspeed test, is now TEMP LIFTED. The Startup schedule indicates that Reactor pressure should be raised to 155 psig for HPCI overspeed testing. Reactor pressure is presently 136 psig, increasing to 155 psig at 2 psig / minute. The ANSO just brought to your attention, a caution statement in QCGP 1-1: "IF HPCI / RCIC overspeed testing is to be performed, THEN do NOT allow Reactor pressure to exceed 150 psig until testing is completed."

(1) What Reactor pressure should you direct the ANSO to maintain?
AND
(2) What is the basis for the response?

(1) (2)

a. (1) 142 psig.
(2) The caution statement is correct, BUT HPCI IS ALREADY OPERABLE.

b. (1) 155 psig.
(2) The caution statement is correct, BUT HPCI IS ALREADY OPERABLE.

c. (1) 142 psig.
(2) The caution statement is correct, HPCI is NOT OPERABLE and MUST BE MADE OPERABLE before pressure goes above 150 psig.

d. (1) 155 psig.
(2) The caution statement does NOT apply in this case because HPCI does NOT need to be OPERABLE until 12 hours AFTER Reactor pressure exceeds 150 psig. The procedure can be REVISED later.

*ANSWER
c.
*REFERENCES
QC Bank Question 301983
2060000 2.1.32
BANK
HIGHER

*QNUM 87
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 211000A205
*QUESTION
Unit 1 is in Mode 1 and the electrical breaker to the Standby Liquid Control (SBLC) Tank heaters has failed. The SBLC tank initial temperature was 90 degrees F, level was at 3600 gallons and boron concentration (by weight) was 15.5%.

Given these conditions AND that the breaker will NOT be repaired before tank temperature decreases below the minimum value allowed by Technical Specifications, what TS Action statement is applicable AND what MINIMUM TS surveillance requirements must be completed upon return of the heaters to service before the SBLC tank can be declared operable?

	Action Statement	Surveillance Requirements
a.	TS 3.1.7 A	SR 3.1.7.2, SR 3.1.7.3, SR 3.1.7.5, SR 3.1.7.9
b.	TS 3.1.7.A	SR 3.1.7.2, SR 3.1.7.5
c.	TS 3.1.7.B	SR 3.1.7.2, SR 3.1.7.3, SR 3.1.7.5, SR 3.1.7.9
d.	TS 3.1.7.B	SR 3.1.7.2, SR 3.1.7.5

*ANSWER
d.
*REFERENCES
Technical Specification 3.1.7, Standby Liquid control System.
NEW
HIGHER

*QNUM 88
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 212000A212
*QUESTION
Unit 2 is as 75% power. Instrument Maintenance personnel report that Unit 2 (Turbine Control Valve Fast Closure circuit) is faulted and can NOT be aligned and must be replaced.

Given (DWG 4E-XXX), determine:

(1) what Technical Specification Function is impacted by this condition,
AND
(2) if Technical Specification 3.3.1.1, Action E is applicable.

	(1)	(2)
a.	Turbine Stop Valve - Closure	TS NOT applicable
b.	Turbine Control Valve - Fast Closure	TS NOT applicable
c.	Turbine Stop Valve - Closure	TS IS applicable
d.	Turbine Control Valve - Fast Closure	TS IS applicable

*ANSWER
d.
*REFERENCES
Technical Specification 3.3.1.1
NEW
HIGHER

*QNUM 89
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Moore
*QVAL 1.00
*SEC
*SUBSORT
*KA 239002A202
*QUESTION
You are the Unit 2 Unit Supervisor. The Unit 2 NSO has just informed you that alarm 902-4 F-18, FAILURE OF TARGET ROCK VALVE 3A BELLOWS has just come in. The following plant conditions exist:

Acoustic Monitor Activated alarm.
Tail-pipe Temperature Recorder TRX-260-20 indicates 225 degrees F.
Drywell pressure increasing very slowly.
Torus Temperature increasing very slowly.
Reactor Pressure steady at 975 psig.
Total RCS Leakage is 7.5 gpm.

As the Unit Supervisor which of the following actions should you direct?

a. Cycle Target Rock Valve 2-203-3A control switch between AUTO and MANUAL in an attempt to reseat the valve and if that is unsuccessful the Unit 2 Reactor must be shutdown to MODE 3 with in 6 hours and MODE 4 within 24 hours.

b. Cycle Target Rock Valve 2-203-3A control switch between AUTO and MANUAL in an attempt to reseat the valve and if that is unsuccessful start to shutdown the Unit 2 Reactor prior to Torus Temperature reaching 95 degrees F.

c. Do Not attempt to reseat Target Rock Valve 2-203-3A, based on current plant conditions power operation may continue indefinitely.

d. Do Not attempt to reseat Target Rock Valve 2-203-3A, based on current plant conditions the Unit 2 Reactor must be shutdown to MODE 3 with in 12 hours and MODE 4 within 36 hours.

*ANSWER
d.
*REFERENCE
QCAN 901(2)-4 F-18, Failure of Target Rock Valve 3A Bellows
QCOA 0203-01 Failure of a Relief Valve to Close or Reseat Properly
Tech Spec 3.4.3 Safety and Relief Valves
Tech Spec 3.4.3 Bases
NEW
HIGHER

*QNUM 090
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 262001 2.1.12
*QUESTION
Unit 1 is in Mode 1. At 0200 on June 1, DG 1 Circulating Oil Pump develops a motor short and trips. Surveillance Requirement 3.8.1.1 is completed at 0250. Without requiring entry into a TS Condition that requires a plant shutdown and using allowed TS extentions, as Unit Supervisor, what is the LATEST time that you must assure the next completion of SR 3.8.1.1?

a. June 1, by 1000

b. June 1, by 1050

c. June 1, by 1250

d. June 1, by 1300

*ANSWER
c.
*REFERENCE
QC Bank question 340803
262001 2.1.12
MODIFIED
HIGHER

*QNUM 91
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Moore
*QVAL 1.00
*SEC
*SUBSORT
*KA 214000 2.2.33
*QUESTION
Unit 1 is at 97% power. Control Rod H-10 had just been moved to position 36 per QCOS 0300-01, CRD Exercise procedure, when all position indication was lost due to a faulty connector. No other rods were affected by this failure.

As the Unit Supervisor, which of the following actions should you take to address the failed rod position indication?

a. Enter QCOA 0280-01, RPIS Failure procedure, Reset Reactor Manual Control System, Reduce Reactor Power.

b. Enter QCOA 0280-01, RPIS Failure procedure, Insert Control Rod H-10, Disarm Control Rod Drive mechanism for rod H-10.

c. Reset Reactor Manual Control System, complete QCOS 0300-01, CRD Exercise procedure, then enter QCOA 0280-01, RPIS Failure procedure.

d. Notify the Shift Manager and the Unit 1 QNE, reduce Reactor Power to minimize xenon production, enter QCOA 0280-01 RPIS Failure procedure.

*ANSWER
b.
*REFERENCE
QCOA 0280-01 RPIS Failure
QCOS 0300-01 CRD Exercise
Tech Spec 3.1.3 Control Rod Operability
Tech Spec 3.1.3 Bases
214000 2.2.33
NEW
HIGHER

*QNUM 92
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Moore
*QVAL 1.00
*SEC
*SUBSORT
*KA 239001 2.1.28
*QUESTION
(1) When is Technical Specification 3.7.7 applicable AND
(2) When are the Main Turbine Bypass Valves assumed to function, AND
(3) What safety parameter is the Main Turbine Bypass Valves protecting?

	(1)	(2)	(3)
a.	≥15% RTP	Turbine Trip	APLHGR
b.	≥15% RTP	Load Reject	MCPR
c.	≥25% RTP	ATWS	APLHGR
d.	≥25% RTP	Feedwater Controller Failure	MCPR

*ANSWER
d.
*REFERENCE
Tech Spec 3.7.7 and Tech Spec Bases 3.7.7
239001 2.1.28
NEW
HIGHER

*QNUM 93
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Moore
*QVAL 1.00
*SEC
*SUBSORT
*KA 290002A204
*QUESTION
What is one of the RCS Temperature Limits and what is the bases for Tech Spec 3.4.9 RCS Pressure and Temperature (P/T) Limits?

a. RCS Cooldown rates must be $\leq$ 100 degrees F/Hr so that undetected flaws will NOT propagate and cause non-ductile failure of the reactor coolant pressure boundary, a condition that is unanalyzed.

b. RCS Heat-up rates must be $\leq$ 100 degrees F/Hr so that pressure stresses in the reactor pressure vessel do NOT cause a non-ductile failure of the reactor pressure vessel as analyzed in the Design Bases Accident analyses.

c. Reactor Vessel flange and Head flange temperatures must be $\geq$ 93 degrees F to prevent exceeding the Reactor Vessel stress analyses.

d. The difference between the bottom head coolant temperature and the reactor pressure vessel coolant temperature must be $\leq$ 125 degrees F so that pressure stresses in the reactor pressure boundary due NOT cause a non-ductile failure of the reactor pressure vessel as analyzed in the Design Bases Accident analyses.

*ANSWER
a.
*REFERENCE
Tech Spec 3.4.9
TS Bases 3.4.9
NEW
HIGHER

*QNUM 94
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Moore
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.1.1
*QUESTION
During the performance of a special test while at 95% reactor power the 1A Core Spray Pump is placed in Pull-to-Lock. For the special test the Shift Manager has dedicated one NSO as being responsible for restoring the 1A Core Spray pump in the event that it becomes necessary, and hence has determined that the 1A Core Spray pump remains OPERABLE. As the Unit 1 Unit Supervisor you...

a. agree with the Shift Manager's operability determination regarding the 1A Core Spray pump and continue with the special test.

b. disagree with the Shift Manager's operability determination regarding the 1A Core Spray pump and enter Tech Spec 3.5.1, ECCS-Operating.

c. agree with the Shift Manager's operability determination regarding the 1A Core Spray pump and enter Tech Spec 3.3.5.1 ECCS Instrumentation.

d. disagree with the Shift Manager's operability determination regarding the 1A Core Spray pump and enter Tech Spec's 3.3.5.1 ECCS Instrumentation and 3.5.1 ECCS-Operating.

*ANSWER
b.
*REFERENCE
QAP 0300-02, Conduct of Shift Operations, Rev. 66.
2.1.1
NEW
HIGHER

*QNUM 95
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Moore
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.1.19
*QUESTION
You are the Unit 1 Unit Supervisor during an accident when the Safety Parameter Display System (SPDS) starts displaying a Yellow parameter. What does the Yellow color signify and if the SPDS were to completely fail how long may it be out before the NRC must be notified?

a. Yellow indicates an ALERT condition and if the SPDS is out of service for greater than 8 hours the NRC must be notified.

b. Yellow indicates an ALARM condition and if the SPDS is out of service for greater than 8 hours the NRC must be notified.

c. Yellow indicates an ALERT condition and if the SPDS is out of service for greater than 24 hours the NRC must be notified.

d. Yellow indicates an ALARM condition and if the SPDS is out of service for greater than 24 hours the NRC must be notified.

*ANSWER
d.
*REFERENCE
QCOA 9900-02, Loss of Plant Process Computer (PPC)
LS-AA-1020, Reportability Reference Manual Vol. 1 - Table SAF
QOP 9900-102 Operation of Safety Pararmeter Display System
Distractor b is not correct because alarm is incorrect.
Distractor c is not correct because 24 hours is incorrect.
Distractor d is not correct because alarm and 24 hours are incorrect.
NEW
HIGHER

*QNUM 96
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Moore
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.2.26 Refueling administrative requirements.
*QUESTION
During in-vessel fuel movement with the Reactor Mode Switch in the REFUEL position the failure of the _____(1)_____ interlock would require _____(2)_____ .

	(1)	(2)
a.	refuel platform fuel grapple to fully retract	suspension of all fuel movement.
b.	refuel platform position	control rod withdraw block insertion **AND** verification of all control rods fully inserted.
c.	refuel platform monorail position	suspension of in-vessel fuel movement involving the refuel platform monorail.
d.	refuel platform frame mounted hoist	control rod withdraw block insertion **OR** verify all control rods are fully inserted.

*ANSWER
b.
*REFERENCE
Tech Spec 3.9.1 Refueling Equipment Interlocks
NEW
MEMORY

*QNUM 97
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.3.2
*QUESTION
In accordance with corporate Dose Equalization policy, the Unit Supervisor should maintain individual Non-Licensed Operators within the recommended band of ____(1)_____ of the group mean dose utilizing _____(2)_____.

	(1)	(2)
a.	± 100 mrem	a three-year rolling average.
b.	± 200 mrem	a three-year rolling average.
c.	± 100 mrem	the yearly department cumulative dose list.
d.	± 200 mrem	the yearly department cumulative dose list.

*ANSWER
b.
*REFERENCE
RP-AA-400-1002, Dose Equalization, Rev 0.
NEW
HIGHER

*QNUM 98
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Moore
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.3.6
*QUESTION
What MINIMUM requirements must be met to discharge the River Discharge Tank (RDT) to the river if the Radwaste Liquid Effluent Line Radiation Monitor Panel 2212-948 is inoperable?

a. None, the River Discharge Tank may NOT be discharged until the Radwaste Liquid Effluent Line Radiation Monitor Panel 2212-948 is operable.

b. One RDT sample, one qualified station individual performs discharge calculation, one qualified radwaste operator performs valve alignment, AND previous actions logged.

c. Two independent RDT samples, two independent station personnel verify discharge calculation, one qualified radwaste operator performs valve alignment, AND previous actions logged.

d. Two independent RDT samples, two independent station personnel verify discharge calculation, two qualified radwaste operators perform valve alignment, AND previous actions logged.

*ANSWER
d.
*REFERENCE
QOP 2000-24 & QOP 2000-25
ODCM, Chapter 12
NEW
MEMORY

*QNUM	99
*HNUM	
*ANUM	
*QCHANGED	FALSE
*ACHANGED	FALSE
*QDATE	2007/06/04
*FAC	254
*RTYP	BWR-GE3
*EXLEVEL	S
*EXMNR	Moore
*QVAL	1.00
*SEC	
*SUBSORT	
*KA	2.4.28

*QUESTION

This question has been redacted due to its security-related content.

*REFERENCE

NEW
HIGHER

*QNUM 100
*HNUM
*ANUM
*QCHANGED FALSE
*ACHANGED FALSE
*QDATE 2007/06/04
*FAC 254
*RTYP BWR-GE3
*EXLEVEL S
*EXMNR Walton
*QVAL 1.00
*SEC
*SUBSORT
*KA 2.4.46
*QUESTION
Given the initial conditions on Unit 1:

- Reactor scram has occurred, all rods in,
- Reactor water level at -55 inches and lowering rapidly,
- Reactor pressure 700 psig and lowering slowly,
- Drywell pressure 2.7 psig and rising slowly
- RCIC pump is being started,
- No other high pressure injection sources are available,
- Annunciator 901-3, B-13, Automatic Blowdown Timer Start has just alarmed.

As Unit Supervisor, you have just determined that you can NOT hold level above -59 inches. You order the NSO to inhibit ADS. The NSO places the ADS Inhibit switch in INHIBIT.

Annunciators ...

- 901-3, G-14, Auto Blowdown Inhibit is EXTINGUISHED
- 901-3, B-13, Auto Blowdown Timer Start is LIT

To prevent ADS blowdown, you could order ..

a. Secure low pressure ECCS pumps.

b. Place individual ADS valve control switches in OFF.

c. Momentarily (<1 second) depress the ADS Timer Reset pushbutton.

d. Spray the drywell to lower drywell pressure below the reset pressure point.

*ANSWER
a.
*REFERENCE
QCAN 901(2)-3 G-14, Auto Blowdown Inhibit Rev. 3
QCAN 901(2)-3 B-13, Auto Blowdown Timer Start, Rev 6
Lesson Plan 0203, ADS, pgs 4, 8, 13-14.
NEW
HIGHER
*END