

\*QNUM 1  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 2.4.30

\*QUESTION

Given the following conditions:

- Unit 1 is at 100% power.
- Air in-leakage to the condenser has resulted in steadily degrading condenser vacuum.
- A load reduction is directed in order to maintain vacuum.
- With the unit at approximately 85% power, a manual reactor trip is ordered due to the inability to maintain vacuum.
- All systems function as designed.

Based solely on the information given, which of the following describes the notification requirements for this event?

- a. The State/County must be notified within 15 minutes of the trip due to reaching an Emergency Plan classification for an ALERT.
- b. Kewaunee Nuclear Power Plant must be notified within 1 hour in order to ensure grid stability is maintained.
- c. The NRC must be notified within 4 hours due to manual actuation of the Reactor Protection System.
- d. No notifications to any outside agencies are required for these conditions.

\*ANSWER

c.

\*REFERENCE

DCS Handbook 2.1.1 Appendix A  
FUNDAMENTAL  
NEW

\*QNUM 2  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA APE 2.1.12

\*QUESTION

Given the following conditions for Unit 1:

- RCS TAVG 547°F
- RCS pressure 2235 psig
- Reactor Trip breakers Both Open

Vibrations on 1P-1A, Reactor Coolant Pump, have steadily increased over the shift and the pump has just been secured.

Immediately after securing 1P-1A, the following plant conditions are noted:

- RCS TAVG 548°F
- RCS pressure 2240 psig
- SG 'A' pressure 1005 psig
- SG 'B' pressure 1013 psig
- SG 'A' NR level 40%
- SG 'B' NR level 25%

Using the given references, which of the following describes the Technical Specification implications for these conditions?

- a. Only RCS Loop A is inoperable.  
It must be restored in 72 hours.
- b. Both RCS Loops are inoperable.  
LCO 3.0.3 should be entered immediately since this condition is not addressed.  
The plant should be placed in Mode 4 within 13 hours.
- c. Neither RCS Loop is inoperable.  
No actions are required since one RCP is still in operation which satisfies the requirements of both loops.
- d. Both RCS loops are inoperable.  
Immediate actions are required to restore one loop to an operable status, verify control rods are incapable of being withdrawn, and verify suspension of operations that may cause an RCS dilution.

\*ANSWER

d.

\*REFERENCE

T.S. 3.4.5 and bases

HIGH

NEW

\*QNUM 3  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA APE 027.AA2.10  
\*QUESTION  
Unit 2 is operating at 100% power.

At 0300 hours, a major transient results in a Reactor Trip and Safety Injection.

At 0310 hours, the following plant conditions are noted:

- RCS pressure 1400 psig
- RCS TAVG 500°F
- Pressurizer level 75%
- Safety Injection NOT reset

With respect to LCO 3.4.9, Pressurizer, which of the following describes the required actions?

- a. Restore required pressurizer heaters to an operable status by 0400 hours.
- b. Restore Pressurizer water level to within the limit by 0410 hours.
- c. The plant is required to be in Mode 4 by 1510 hours.
- d. The plant is required to be in Mode 3 by 0900 hours AND Mode 4 by 1500 hours.

\*ANSWER

a.

\*REFERENCE

Logic Sheet 8, Logic Diagram Safeguard Sequence

Logic Sheet 9, Safeguards Sequence Logic

T.S. 3.4.9, Pressurizer

HIGH

NEW

\*QNUM 4  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA EPE 038.EK3.09

\*QUESTION

Which of the following is the basis for terminating Safety Injection flow when the criteria are satisfied during the performance of EOP-3, Steam Generator Tube Rupture?

- a. Prevent overcooling the RCS.
- b. Prevent solid plant operations.
- c. Prevent exhausting RWST level.
- d. Prevent overfilling the ruptured SG.

\*ANSWER

d.

\*REFERENCE

EOP-3, Steam Generator Tube Rupture, Background  
INPO Bank 2858  
FUNDAMENTAL  
BANK

\*QNUM 5  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA EPE 055.EA2.03  
\*QUESTION

Given the following conditions:

- Unit 1 is at 100% power.
- A major fault occurs on 1X-04, Low Voltage Station Auxiliary Transformer, resulting in a Sudden Pressure lockout.
- All four Emergency Diesel Generators have failed to start.
- 1A-05, 4160 VAC bus, has indications of a lockout and major damage.

The crew has entered ECA-0.0, Loss Of All AC Power. They have been unsuccessful in:

- starting an emergency diesel from the control room.
- cross-tying of the 1A-03 and 2A-03 buses.
- cross-tying of the 1A-04 and 2A-04 buses.

The crew has just placed all pump control switches in pullout.

Based on this information, which of the following attachments in ECA-0.0 should be performed in order to restore a power source?

- a. Attachment A, G-01 Local Manual Start.
- b. Attachment C, G-03 Local Manual Start.
- c. Attachment E, Power Restoration Using Gas Turbine.
- d. Attachment F, Backfeed To 480 VAC Safeguards Buses.

\*ANSWER

b.

\*REFERENCE

ECA-0.0, Loss Of All AC Power

PBNP Electrical Power Distribution diagram

HIGH

NEW

\*QNUM 6  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA EPE W/E04.EA2.2

\*QUESTION

Unit 2 was operating at 75% power when a plant transient resulted in a Reactor Trip and Safety Injection. EOP-0, Reactor Trip Or Safety Injection, has been entered and the crew is carrying out actions of the procedure.

The following plant conditions are noted:

- RCS pressure 1100 psig and slowly lowering.
- Pressurizer level 5% and slowly lowering.
- Pressurizer PORVs Closed.
- Spray valves Closed.
- Steam Generator levels Normal.
- Steam Generator pressures Normal.
- Containment pressure Normal.
- Sump 'A' level Normal.
- RE-214, PAB Exhaust Monitor Rising.
- Several PAB area radiation monitors Rising.

After assessing these conditions, the next procedure the DOS will implement is:

- a. EOP-1.1, SI Termination.
- b. EOP-0.1, Reactor Trip Response.
- c. ECA-1.2, LOCA Outside Containment.
- d. ECA-3.1, SGTR With Loss Of Reactor Coolant - Subcooled Recovery Desired.

\*ANSWER

c.

\*REFERENCE

INPO Bank 19554, Cook 1, ExamDate 05/21/2001

EOP-0, Reactor Trip Or Safety Injection

HIGH

BANK

\*QNUM 7  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA EPE W/E11.EA2.2  
\*QUESTION

Unit 1 was operating at 100% power with 1P-10A, RHR pump, tagged out for seal replacement.  
The following sequence of events occurs:

- Large break LOCA.
- The 'B' SI/RHR train has been fully aligned and placed on containment sump recirculation.
- 1P-10B, RHR pump, fails.
- Foldout page criteria for securing ANY pumps has NOT been met.
- Containment pressure is 55 psig.

Given the attached reference from ECA-1.1, Loss Of Containment Sump Recirculation, which of the following indicates the REQUIRED correct combination of Containment Accident Recirculation Fans and Containment Spray Pumps to operate under these conditions?

- a. 1 Accident Fan, 0 Spray Pumps.
- b. 2 Accident Fans, 2 Spray Pumps.
- c. 3 Accident Fans, 1 Spray Pumps.
- d. 4 Accident Fans, 0 Spray Pumps.

\*ANSWER

d.

\*REFERENCE

INPO Bank 20674, PBNP 1, ExamDate 02/02/2002  
EOP-1.3, Transfer To Containment Sump Recirculation  
ECA-1.1, Loss Of Containment Sump Recirculation  
HIGH  
BANK

\*QNUM 8  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA APE 005.AK1.02  
\*QUESTION  
Unit 1 is at 90% power.

In response to alarms and control board indications, the crew has determined that Quadrant Power Tilt Ratio is 1.04.

Using the given references, which of the following states the required power reduction?

- a. No power reduction is required.
- b. Power must be reduced to less than or equal to 88%.
- c. Power must be reduced to less than or equal to 78%.
- d. Power must be reduced to less than or equal to 50%.

\*ANSWER

b.

\*REFERENCE

PBNP ITS Bank 057.02.LP3338.003.009

T.S. 3.2.4, Quadrant Power Tilt Ratio (QPTR)

HIGH

MODIFIED



\*QNUM 9  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA APE 028.AA2.12

\*QUESTION

Unit 1 is operating at 100% power, with no equipment out of service. The following conditions exist:

- 1P-2A, Charging Pump, is in Automatic.
- 1P-2C, Charging Pump, is in Manual.
- 1LI-426, Pressurizer Level, is slowly lowering.
- 1LI-427, Pressurizer Level, is slowly lowering.
- 1LI-428, Pressurizer Level, is slowly rising.
- 1P-2A, Charging Pump, speed is lowering.
- 1FI-128, Charging Flow, is lowering.

Based on the above indications, which of the following describes the failure that is occurring and the guidance the DOS should use to address the failure?

(AOP-1D, Chemical and Volume Control System Malfunction)  
(AOP-24, Response To Instrument Malfunctions)

- a. 1HC-428C, 'C' Charging Pump Controller, is failing.  
AOP-1D should be entered to address the failure.
- b. 1LT-428, Pressurizer Level, is failing.  
AOP-24 should be entered to address the failure.
- c. 1LT-426 and 1LT-427, Pressurizer Levels, are both failing.  
AOP-24 should be entered to address the failure.
- d. 1HC-428A, 'A' Charging Pump Controller, is failing.  
AOP-1D should be entered to address the failure.

\*REFERENCE

b.

\*REFERENCE

Logic Sheet 18, Pressurizer Pressure and Level Control  
AOP-1D, Chemical and Volume Control System Malfunction, purpose  
AOP-24, Response to Instrument Malfunctions, purpose  
HIGH  
NEW

\*QNUM 10  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA APE 060.AK3.01

\*QUESTION

An accidental release of a Waste Gas Decay tank is occurring. The release started just over an hour ago and cannot be terminated.

After review of the Emergency Plan, the Shift Manager declares an Unusual Event due to meeting the following Emergency Action Level (EAL): "Vent radiation reading(s) exceed the high alarm setpoint for >60 minutes."

NO EALs for an ALERT or higher classification have been reached.

Which of the following indicates the reason an Unusual Event is declared and the Emergency Plan implemented for these conditions:

- a. Protective Action Recommendations are required to protect the health and safety of the public.
- b. Assembly, accountability, and evacuation of unnecessary personnel is required to protect plant personnel.
- c. The release indicates a degradation in plant control and a potential degradation in the level of safety.
- d. The conditions are indicative of radiation limits at the site boundary in excess of 10CFR20 limits.

\*ANSWER

c.

\*REFERENCE

EPIP 1.2, Emergency Classification, EAL 4.1.1.1

FUNDAMENTAL

NEW

\*QNUM 11  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA EPE W/E16.EA2.2  
\*QUESTION

Given the following plant conditions:

- A loss of coolant accident occurred about 15 minutes ago.
- During the initial phases of the accident, containment pressure peaked at 15 psig and containment radiation dose rate peaked at 106 R/hr.
- The DOS has directed that adverse containment numbers be used during EOP implementation.
- Approximately 30 minutes later, containment pressure lowered to 4.5 psig and containment radiation dose rate lowered to  $8 \times 10^4$  R/hr.

The DOS should direct that adverse containment numbers:

- a. still be used until containment pressure is less than 1 psig.
- b. not be used since containment pressure is no longer indicative of adverse containment conditions.
- c. still be used until relaxed by Technical Support Center personnel.
- d. not be used since the radiation level is no longer indicative of adverse containment conditions.

\*ANSWER

c.

\*REFERENCE

INPO Bank 20596, PBNP 1, ExamDate 02/02/2002  
OM 3.7, AOP and EOP Procedure Sets Use and Adherence  
HIGH  
BANK

\*QNUM 12  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA EPE W/E09.EK3.4

\*QUESTION

Given the following plant conditions:

- A loss of power to all non-safety 4160 Volt buses has resulted in a Unit 1 Reactor Trip.
- Off-site power is available to all safety related buses.
- The appropriate Emergency procedures were implemented.
- RCS temperature is currently 325°F.
- All safety related equipment is operable.

The current procedure in use is EOP-0.2, Natural Circulation Cooldown. While implementing the steps of this procedure, a check is made to determine whether or not one train of Safety Injection (SI) should be removed from service.

Which of the following indicates the actions the DOS should direct when implementing this step?

The DOS should direct:

- a. the 'A' SI Train to be isolated, the 'B' SI Train is the preferred train to keep operable since it can inject via two flowpaths.
- b. the 'B' SI Train to be isolated, the 'A' SI Train is the preferred train to keep operable since it can be used to fill the accumulators.
- c. that neither SI Train be isolated since Technical Specifications require both trains operable for these conditions.
- d. that either SI Train be isolated, one train is not preferred over the other since off-site and on-site power to the safety related buses is available.

\*ANSWER

a.

\*REFERENCE

BG-EOP-0.2, Natural Circulation Cooldown, R20, page 37

FUNDAMENTAL

NEW

\*QNUM 13  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 004 A1.11

\*QUESTION

Unit 2 is operating at 100% power and is in a normal full power alignment.

The Unit 2 CO reports that 2CV-142, Charging Flow Control Valve, has failed full open.

Which of the following is the expected plant response for this valve failing open, including the proper procedure to address this failure?

(AOP-24, Response To Instrument Malfunctions)  
(AOP-1D, Chemical and Volume Control System Malfunctions)

- a. Reactor Coolant Pump labyrinth seal delta-P will rise.  
Pressurizer level will steadily rise.  
AOP-1D should be implemented.
- b. Reactor Coolant Pump labyrinth seal delta-P will rise.  
Pressurizer level will remain constant.  
AOP-24 should be implemented.
- c. Reactor Coolant Pump labyrinth seal delta-P will lower.  
Pressurizer level will steadily rise.  
AOP-24 should be implemented.
- d. Reactor Coolant Pump labyrinth seal delta-P will lower.  
Pressurizer level will remain constant.  
AOP-1D should be implemented to address this condition.

\*ANSWER

d.

\*REFERENCE

WEST 684J741 Sh. 2, Chemical & Volume Control P&ID  
AOP-1D, Chemical and Volume Control System Malfunctions  
HIGH  
NEW

\*QNUM 14  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 2.2.25

\*QUESTION

The Residual Heat Removal System, along with other ECCS subsystems, ensures that the ECCS Acceptance Criteria of 10CFR50.46 is met.

Which of the following is NOT one of these criteria?

- a. The total oxidation of the cladding shall nowhere exceed 0.17 times the total cladding thickness before oxidation.
- b. The maximum fuel pellet centerline temperature shall not exceed 2000°F.
- c. The total amount of hydrogen generated from the chemical reaction of the cladding with water or steam shall not exceed 0.01 times the hypothetical amount generated if all of the metal in the cladding were to react.
- d. Changes in core geometry shall be such that the core remains amenable to cooling.

\*ANSWER

b.

\*REFERENCE

Bank - TRCR31\_0BNK.LXRBANK, 031.01.LP0159.009.001  
T.S. Bases 3.5.2, ECCS - Operating  
FUNDAMENTAL  
BANK

\*QNUM 15  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 008.A2.02

\*QUESTION

Given the following plant conditions:

- Unit 1 was operating at 100% power when a loss of coolant event occurred.
- The operating crew has just entered EOP-1.3, Transfer To Containment Sump Recirculation - Low Head Injection.
- Shortly after initiating EOP-1.3, it is identified that the CCW surge tank is at 8% and continuing to lower.
- The DOS directs that both CCW pumps be placed in pullout.
- All other equipment is operating per design.

Based on these conditions, which of the following correctly describes the impact of these events during subsequent actions to establish containment sump recirculation?

(EOP-1.3, Transfer To Containment Sump Recirculation - Low Head Injection)  
(AOP-9B, Component Cooling System Malfunction)  
(ECA-1.1, Loss Of Containment Sump Recirculation)

- a. One CCW pump should be started later in EOP-1.3, regardless of CCW Surge Tank level.
- b. AOP-9B should be entered immediately to address the CCW leak. EOP-1.3 should be utilized as a secondary priority until CCW is restored.
- c. Alignment for containment sump recirculation should NOT continue without CCW. A transition to ECA-1.1 should be made immediately.
- d. Alignment for containment sump recirculation should continue without CCW. AOP-9B should be utilized as a secondary priority to address the CCW leak.

\*ANSWER

d.

\*REFERENCE

EOP-1.3, Transfer To Containment Sump Recirculation, step 13  
BG-EOP-1.3  
HIGH  
NEW

\*QNUM 16  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 026.A1.01

\*QUESTION

Unit 1 was operating at 100% power. The Reactor/Turbine tripped on Low Pressurizer Pressure due to a design basis loss of coolant accident.

The following conditions are noted:

- Subcooling margin is less than 0°F.
- Operators are responding using EOP-0, Reactor Trip Or Safety Injection.
- 1SW-2907, Containment Ventilation Cooler Outlet Emergency Flow Control Valve, cannot be opened manually or locally.
- The third license (BOP) has just secured 1P-14A, Containment Spray Pump, per Attachment A of EOP-0.

Which of the following statements is correct with respect to the above conditions?

(CSP-Z.1, Response to High Containment Pressure)

- a. Containment design pressure will NOT be exceeded.  
Only two Containment Accident Fan Coolers are operable.  
The BOP should continue with Attachment A.
- b. Containment design pressure will be exceeded.  
No Containment Accident Fan Coolers are operable.  
The BOP should re-start 1P-14A.
- c. Containment design pressure will be exceeded.  
An immediate transition to CSP-Z.1 should be made.  
The BOP should re-start 1P-14A.
- d. Containment design pressure will NOT be exceeded.  
All four Containment Accident Fan Coolers are operable.  
The BOP should continue with Attachment A.

\*ANSWER

d.

\*REFERENCE

INPO Bank 20611, PBNP, ExamDate 02/02/2002  
T.S. Bases 3.6.6, Containment Spray and Cooling Systems  
HIGH  
MODIFIED



\*QNUM 17  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 011.A1.04

\*QUESTION

Given the following plant conditions:

- Unit 1 is at 29% power awaiting release from a Secondary side chemistry hold.
- All equipment is in a normal lineup for this power level.
- There are no plant evolutions in progress.
- Control rods are in Manual.
- The RED TAVG meter and the RED DT meter are both observed to be steadily rising, and both eventually peg high.
- All other TAVG and DT meters are steady
- No operator actions have occurred.

Using the given references, which of the following states the impact of this failure, including the Technical Specification implications?

- a. Pressurizer level will rise and stabilize at a higher level.  
Technical Specification 3.3.1 is NOT met.  
Technical Specification 3.3.2 is met.
- b. Pressurizer level will rise until a high level trip occurs.  
Technical Specification 3.3.1 is NOT met.  
Technical Specification 3.3.2 is met.
- c. Pressurizer level will remain unchanged.  
Technical Specification 3.3.1 is NOT met.  
Technical Specification 3.3.2 is NOT met.
- d. Pressurizer level will rise and stabilize at a higher level.  
Technical Specification 3.3.1 is met.  
Technical Specification 3.3.2 is NOT met.

\*ANSWER

a.

\*REFERENCE

0-SOP-IC-002, Tech Spec LCO - Instrument Cross Reference

T.S. 3.3.1, RPS Instrumentation

T.S. 3.3.2, ESFAS Instrumentation

WEST 883D195 Sh. 18, Pressurizer Pressure and Level Control logic

HIGH

NEW

\*QNUM 18  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 041.2.1.10

\*QUESTION

Which one of the following is considered to be the most limiting event concerning operation of the Atmospheric Dump Valves?

- a. Small break loss of coolant accident.
- b. Steam generator tube rupture with a loss of offsite power.
- c. Large break loss of coolant accident.
- d. Steam generator tube rupture without a loss of offsite power.

\*ANSWER

b.

\*REFERENCE

INPO 20682, PBNP, ExamDate 02/02/2002

T.S. Bases 3.7.4, ADV Flowpaths

FUNDAMENTAL

BANK

\*QNUM 19  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 2.1.5

\*QUESTION

Both units are at 100% power. The mid-shift crew is at minimum shift crew composition.

At 0015, the Shift Manager (SM) is required to leave due to an emergency at home.

Which of the following actions, if any, must be taken?

- a. No action is required as long as the Duty Operating Supervisor (DOS) and the Operating Supervisor (OS) remain in the Control Room.
- b. The DOS can assume the Shift Manager duties until the next shift arrives.
- c. The Duty and Call Superintendent (DCS) must report to the Control Room until minimum staffing requirements are met.
- d. The Shift Technical Advisor (STA) must report to the Control Room and shall remain there until minimum staffing requirements are met.

\*ANSWER

d.

\*REFERENCE

INPO 20679, PBNP, ExamDate 02/02/2002  
OM-3.1, Operations Shift Staffing Requirements  
FUNDAMENTAL  
BANK

\*QNUM 20  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 2.1.9

\*QUESTION

Given the following plant conditions:

- Both Units are operating at 100% power.
- Unit 2 is operating in the ice melt mode.
- Due to rising lake temperatures, the DOS (who has Command & Control) directs the third license to secure ice melt.
- The fourth license is in the WCC and unavailable.
- When securing ice melt, the third license requests a peer check for the required valve manipulations.

The DOS should:

- a. direct the Unit 1 CO to provide a peer check.
- b. direct the Unit 2 CO to provide a peer check.
- c. direct the OS to provide a peer check.
- d. provide the peer check.

\*ANSWER

c.

\*REFERENCE

Bank LOR2002ExamQuestions 024.00.LP3694.001.001

OM-1.1, Conduct of Plant Operations

HIGH

BANK

\*QNUM 21  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 2.2.22

\*QUESTION

Given the following plant conditions:

- A Unit 1 Reactor startup is about to begin.
- Preparations are being made to begin pulling the Shutdown Bank rods and entering Mode 2.
- A power supply fails on 1LT-460A, Steam Generator 'A' Wide Range Level Transmitter.

Using the given references, which of the following statements correctly describes the Technical Specification requirements for entry into Mode 2 for this condition?

- a. Mode 2 can be entered and the startup continued.  
The channel must be restored to an operable status within 30 days.  
If the channel is NOT restored after 30 days, the plant must submit a special report within 14 days.
- b. Mode 2 can be entered and the startup continued.  
The channel must be restored to an operable status within 30 days.  
If the channel is NOT restored after 30 days, the plant must be in Mode 3 within 6 hours and Mode 4 within 12 hours.
- c. Mode 2 CANNOT be entered.  
Entry into Mode 2 is prohibited by LCO 3.0.4.
- d. Mode 2 CANNOT be entered.  
Entry into Mode 2 is prohibited by LCO 3.0.2.

\*ANSWER

a.

\*REFERENCE

Bank, LOR2002ExamQuestions.LXRBANK, 057.02.LP3341.002.002

T.S. 3.0, LCO Applicability

T.S. 3.3.3, PAM Instrumentation

T.S. 5.6, Reporting Requirements

HIGH

BANK

\*QNUM 22  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 2.2.24

\*QUESTION

Given the following conditions:

- Maintenance has requested a tagout for 1A52-60, G-01 Diesel Generator To Bus 1A-05 Breaker, in order to perform an inspection.
- Bus 1A-05 was re-aligned to G-02, Emergency Diesel Generator, per OI-35A.
- The tagout consisted of taking the control switch to PULLOUT and racking out the breaker.
- A visual inspection showed that NO work is required.
- NO disassembly work was performed on the equipment.

Which of the following indicates the minimum requirement(s) for restoring operability of 1A52-60?

1A52-60 can be considered operable when it is:

- a. racked in.
- b. racked in and the control switch is in Auto.
- c. racked in and TS-81, EDG G-01 Monthly Test, is performed.
- d. racked in, the control switch is in Auto, and the green indicating light is ON.

\*ANSWER

c.

\*REFERENCE

Bank, Kewaunee 2002 Exam, #91

OI-35A, Standby Emergency Power Alignment

FUNDAMENTAL

MODIFIED

\*QNUM 23  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 2.3.9

\*QUESTION

Given the following plant conditions:

- Unit 2 is in Mode 5.
- A containment purge is in progress.
- 2RE-212, Containment Noble Gas Monitor, has just been declared inoperable and removed from service for calibration.

Using the given references, which of the following statements describes the impact of removing 2RE-212 from service?

- a. There are no required actions provided RE-305, Containment Purge Exhaust Noble Gas Monitor, is operable.
- b. Grab samples are required to be taken and analyzed every twelve hours in order for the purge to continue.
- c. Continuous sampling using auxiliary equipment is required in order for the purge to continue.
- d. The purge must be immediately secured, the requirements for monitoring the purge effluent cannot be met.

\*ANSWER

a.

\*REFERENCE

RECM Section 3.0

HIGH

MODIFIED

\*QNUM 24  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 2.4.14

\*QUESTION

The plant has experienced a major plant transient. An ORANGE path CSP is currently being implemented.

The implementation of the ORANGE path CSP must be suspended for all of the following conditions EXCEPT when:

- a. a RED path CSP is identified.
- b. a higher priority ORANGE path CSP is identified.
- c. the ORANGE path condition clears.
- d. a total loss of onsite and offsite AC power occurs.

\*ANSWER

c.

\*REFERENCE

INPO 20685, PBNP, 02/02/2002

OM 3.7, AOP and EOP Procedure Sets Use and Adherence

FUNDAMENTAL

BANK



\*QNUM 25  
\*QDATE 2002/02/02  
\*FAC 266  
\*RTYP PWR-WEC2  
\*EXLEVEL S  
\*KA 2.4.16

\*QUESTION

Given the following plant conditions:

- An accident has occurred that has resulted in a Reactor Trip and Safety Injection.
- The EOPs are currently being implemented.
- Prior to the trip, an AOP was being implemented to address plant equipment problems.
- A second SRO is now coordinating remaining actions in the AOP while the EOPs are being implemented.
- A conflict has arisen between the EOP and the AOP, regarding an electrical lineup.

Which of the following describes the proper resolution of this conflict?

- a. Guidance in the EOP should be followed since it is the controlling procedure. The conflicting guidance in the AOP should NOT be performed.
- b. Guidance in the AOP should be followed since the AOP was implemented first. The conflicting guidance in the EOP should NOT be performed.
- c. The SRO should consult with the DCS and follow guidance in either the AOP or the EOP, depending on the specific situation.
- d. The SRO should invoke 10CFR50.54(x) and perform the procedure most appropriate for the situation.

\*ANSWER

a.

\*REFERENCE

OM 3.7, AOP and EOP Procedure Sets Use and Adherence, section 4.8

FUNDAMENTAL

NEW

Question #: 1  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A EPE 007.2.4.31

QUESTION

A Unit 1 reactor trip has occurred for undetermined reasons. The operator is carrying out the Immediate Actions of EOP-0, Reactor Trip or Safety Injection. While performing Step 3, "Verify Safeguards Buses Energized", the operator notes the following:

- All off-site power has been lost to Unit 1.
- All four Emergency Diesel Generators have failed to auto-start.

- Annunciator C02 D 3-4, Unit 1 4.16kV Bus Lockout, is lit.

The operator's next action is to:

- a. Immediately transition to ECA-0.0, Loss of All AC Power.
- b. Attempt to restore power to 1B-03 or 1B-04 by cross-tying to buses 1B-01 or 1B-02.
- c. Attempt to restore power to 1A-05 or 1A-06 by fast starting and loading either G-01 or G-03, Emergency Diesel Generator.
- d. Continue on to step 4, "Check if SI is Actuated", when immediate actions are complete, concurrently enter AOP-19, Safeguards Bus Restoration.

ANSWER

a.

REFERENCE

Bank: NRC Y2K Bnk 031.02.LP0405.006.002

EOP-0, Reactor Trip or Safety Injection

PBNP Electrical Bus Diagram

ARB C02 D 3-4, 4.16kV Bus Lockout

HIGH

BANK

Question #: 2  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 008.AK3.03

QUESTION

Given the following plant conditions:

- Unit 1 has just tripped from 100% power due to a small break LOCA.
- During implementation of EOP-1, Loss of Reactor or Secondary Coolant, subcooling lowers to 15°F.
- The operating crew has just tripped both Reactor Coolant Pumps (RCPs).

Which of the following indicates the reason the RCPs were tripped by the crew?

- a. To prevent excessive RCS inventory loss.
- b. To minimize the cooldown rate.
- c. To prevent RCP damage from cavitation.
- d. To prevent an RCP motor over-current condition.

ANSWER

a.

REFERENCE

LP1829, EOP Generic Issues

FUNDAMENTAL

BANK

Question #: 3  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A EPE 009.EA2.34

QUESTION

Given the following Unit 1 plant conditions:

- The Unit has tripped from 100% due to a small break LOCA.
- Conditions have stabilized and operators are evaluating the criteria for terminating Safety Injection.
- Adverse containment conditions do NOT exist.

Which one of the following conditions would PREVENT SI termination per EOP-1.2, "Small Break LOCA Cooldown and Depressurization"?

- a. RCS subcooling is 40°F.
- b. Both Steam Generator levels are 40%.
- c. RCS pressure is 2050 psig.
- d. Pressurizer level is 9%.

ANSWER

d.

REFERENCE

INPO bank 2866

PBNP exam 8/2/1999

EOP-1.2 foldout page

FUNDAMENTAL

BANK

Question #: 4  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A EPE 011.EK2.02

QUESTION

Given the following plant conditions:

- A Large Break LOCA has occurred on Unit 1.
- EOP-1.3, Transfer To Containment Sump Recirculation - Low Head Injection, is in progress.
- Containment sump recirculation utilizing RHR Pump 'B' has just been established.

After sump recirculation is established, Safety Injection Pump 'B' is required to be started within 14 hours of the onset of the event.

Which of the following indicates the reason that SI Pump 'B' is started?

- a. To prevent the formation of stratification layers in the core.
- b. To reduce thermal stresses on RHR injection nozzles.
- c. To address boron precipitation concerns within the vessel.
- d. To prevent excessive voiding in the reactor vessel head.

ANSWER

c.

REFERENCE

EOP-1.3 and BG Document, LP3340 pg 13

FUNDAMENTAL

BANK

Question #: 5  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 015.AK3.02

#### QUESTION

Unit 1 is operating at 100% power. The following indications are noted:

- Annunciator "1P-1A or B RCP Upper or Lower Sump Oil Level High or Low" is lit.
- Points 2 and 4 on recorder 1TR-2001 (1P-1A RCP Thrust Bearing Upper and Lower Shoe temperatures) are in alarm and are currently reading 92°C and rising.
- Unit 1 Component Cooling Water Surge Tank level is 49% and lowering.
- 1P-1A RCP seal injection flow is 6 gpm.
- 1P-1A RCP No. 1 seal leakoff is 1.2 gpm.

Which of the following describes the required action and the reason for the action that would explain all of the above abnormal conditions?

- a. Unit 1 Reactor must be tripped and 1P-1A RCP stopped because oil has leaked out of the pump resulting in poor bearing lubrication.
- b. The position of 1CC-761A, Thermal Barrier Outlet AOV, should be checked to ensure it is shut because the thermal barrier is leaking.
- c. Unit 1 Reactor must be tripped and 1P-1A RCP stopped because its oil has been emulsified with CCW and this has affected bearing lubrication.
- d. The Seal Return Heat Exchanger should be bypassed because CCW is diluting the RCS through a leak in the heat exchanger.

#### ANSWER

c.

#### REFERENCE

AOP-1B

HIGH

NEW

Question #: 6  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 022.AK3.02

QUESTION

Unit 1 was operating at 100% power when a disk failure occurs on 1CV-304C, 1P-1A RCP Seal Injection Check Valve. The failure results in a complete loss of seal injection to 1P-1A.

1P-1A should be run no more than 24 hours in order to:

- a. minimize the possibility of a combined loss of seal injection and CCW to the RCPs.
- b. prevent exceeding a TSAC for loss of flow path to RCP seals.
- c. minimize damage due to overheating 1P-1A #1 seal.
- d. prevent high flow damage to 1P-1B #1 seal.

ANSWER

a.

REFERENCE

AOP-1D

FUNDAMENTAL

NEW

Question #: 7  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 025.AK1.01

QUESTION

Given the following plant conditions:

- Unit 1 is in day 10 of a refueling outage.
- Unlatching of rods is in progress.
- Reactor Coolant System temperature (RHR inlet) is 90°F.
- The running RHR pump trips.
- The other RHR pump is tagged out for minor maintenance, but can be restored if needed.

Using the given references, which one of the following indicates the minimum time (number of hours) at which RCS boiling will occur?

- a. 15.0 hours
- b. 16.5 hours
- c. 18.0 hours
- d. 21.5 hours

ANSWER

b.

REFERENCE

WEST 883D195 sh 9 logic, LP0084 CCW.

HIGH

BANK



Question #: 8  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 026.AK3.02

QUESTION

Given the following sequence of events:

- Unit 2 is operating at 100% power.
- 2P-11A, Component Cooling Water Pump, is running.
- 2P-11B, Component Cooling Water Pump, is in standby.
- A manual Reactor Trip was initiated due to a large feedwater leak in the Turbine Building.
- During performance of Immediate Actions of EOP-0, a manual Safety Injection is initiated due low Pressurizer Level.
- After completing all immediate actions, a lockout on Low Voltage Station Transformer 1X-04 occurs.
- All automatic actions occur and the safeguards buses are re-energized from the Emergency Diesel Generators.

Which of the following indicates the status of the Component Cooling Water Pumps after the buses are re-energized?

- a. 2P-11A is running, 2P-11B is in standby.
- b. Neither CCW Pump is running.
- c. 2P-11A is tripped, 2P-11B is running.
- d. Both CCW Pumps are running.

ANSWER

b.

REFERENCE

NONE PROVIDED

HIGH

MODIFIED

Question #: 9  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 027.AK1.01

#### QUESTION

Given the following plant conditions:

- Unit 1 is operating at 100% power.
- Normal Letdown has been secured for maintenance.
- Excess Letdown is in service with one Charging Pump running in Manual at minimum speed per OP-5E, Establishing and Securing Excess Letdown.
- Charging and Excess Letdown flow have been balanced and Pressurizer level is stable.
- No other equipment is out of service.

1LT-428, Pressurizer Level Transmitter, fails low. What effect will this transmitter failure have on Pressurizer pressure and saturation temperature?

- a. Pressurizer pressure rises.  
Saturation temperature rises.
- b. Pressurizer pressure rises.  
Saturation temperature lowers.
- c. Pressurizer pressure lowers.  
Saturation temperature rises.
- d. Pressurizer pressure lowers.  
Saturation temperature lowers.

#### ANSWER

d.

#### REFERENCE

TRHB 10.3, Pressurizer, Pressure Control and Relief System  
WEST 883D195 Sh.18, Pressurizer Pressure and Level Control Logics  
HIGH  
NEW

Question #: 10  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A EPE 038.EA2.17

QUESTION

Unit 1 was operating at 100% power when a Steam Generator Tube Rupture occurred.

The following plant conditions exist:

- |   |              |   |
|---|--------------|---|
| - | RCPs         | Both secured  |
| - | Ruptured S/G | identified and isolated                             |
| - | RCS          | cooled down to target temperature and depressurized |
| - | SI pumps     | secured   |
| - | Charging     | in service  |
| - | Letdown      | in service  |

Preparations are being made to start a Reactor Coolant Pump (RCP). Which of the following conditions will PREVENT starting an RCP?

- a. Labyrinth Seal Delta-P = 10 inches.
- b. VCT Pressure = 26 psig.
- c. RCS subcooling = 75°F.
- d. #1 Seal Delta-P = 900 psid.

ANSWER

a.

REFERENCE

EOP-3

FUNDAMENTAL

NEW

Question #: 11  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 040.AA2.05

QUESTION

Given the following Unit 1 plant conditions:

- The Unit has tripped from 100% due to a steam line break inside containment.
- Containment pressure peaked at 28 psig.
- All equipment functioned as designed.
- The crew has completed EOP-0, Reactor Trip or Safety Injection, and Attachment 'A' of EOP-0.
- A transition to EOP-2, Faulted Steam Generator Isolation, has just been made.
- All procedural steps were performed without error.

The current status of the Containment Spray system is:

- a. both pumps running.
- b. both pumps secured.
- c. one pump secured with its suction valve shut.
- d. one pump secured with its suction valve open.

ANSWER

c.

REFERENCE

EOP-0, Attachment A, Automatic Action Verification

HIGH

NEW

Question #: 12  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 054.AA2.05

#### QUESTION

Unit 2 was operating at 100% power when a manual Reactor Trip was inserted due to rising Containment Pressure. While implementing the Immediate Actions of EOP-0, Reactor Trip or Safety Injection, it is identified that Containment Pressure is at 6 psig and rising.

- S/G 'A' NR Level is currently 10%.
- S/G 'B' NR Level is currently 35%.
  
- Assume all equipment functions per design.
- No equipment has been manipulated following the trip.

Which of the following describes the status of Feedwater System components as a result of these conditions?

- a. Both Main Feed Regulating Bypass Valves shut.  
Both Main Feed Regulating Valves open.  
Both Main Feed Pumps running.  
Both Main Feed Pump Discharge MOVs open.
  
- b. S/G 'A' Main Feed Regulating Bypass Valve is open, 'B' is shut.  
Both Main Feed Regulating Valves shut.  
Both Main Feed Pumps tripped.  
Both Main Feed Pump Discharge MOVs shut.
  
- c. Both Main Feed Regulating Bypass Valves shut.  
S/G 'A' Main Feed Regulating Valve is open, 'B' is shut.  
Both Main Feed Pumps running.  
Both Main Feed Pump Discharge MOVs open.
  
- d. Both Main Feed Regulating Bypass Valves shut.  
Both Main Feed Regulating Valves shut.  
Both Main Feed Pumps tripped.  
Both Main Feed Pump Discharge MOVs shut.

#### ANSWER

d.

#### REFERENCE

NRC Y2K BNK.LXRBANK  
WEST 883D195 sh. 10  
HIGH  
MODIFIED

Question #: 13  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 056.AA1.31

#### QUESTION

Given the following plant conditions:

- Unit 1 is responding to a loss of offsite power.
- Both Emergency Diesel Generators G-01 and G-03 have started and loaded onto their respective buses.
- Safety Injection did NOT actuate.
- Pressurizer level is 25 %.

The Control Operator is attempting to control Pressurizer pressure.

What must be done to energize 1T-1C, Backup Group C Heaters?

- a. Reset the 1B-03 Non-Safeguards Equipment lockout.  
Leave the 1T-1C control switch in AUTO.
- b. Restore power to 1B-01.  
Then take the 1T-1C control switch to ON.
- c. Turn the 1T-1C control switch to OFF.  
Then turn the 1T-1C control switch to ON.
- d. Place 1HC-431K, Pressurizer Pressure Controller, in Manual.  
Then take the 1T-1C control switch to ON.

#### ANSWER

c.

#### REFERENCE

AOP-18A, Train "A" Equipment Operation

HIGH

NEW

Question #: 14  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.4.31

QUESTION

Unit 1 and Unit 2 are at 100% power. Service Water Pumps P-32A, B, and F are running. The following annunciators are received:

- Service Water Strainers Delta-P High.
- North or South Service Water Header Pressure Low.
- G-01 Emergency Diesel Cooler Delta-P Low.
- G-02 Emergency Diesel Cooler Delta-P Low.
- Unit 2 Turbine Building Sump Level High.

Which of the following indicates the cause of these alarms and the appropriate remedial action?

(OI-70, Service Water System Operation)  
(AOP-9A, Service Water System Malfunction)

- a. The Unit 2 Turbine Building Zurn Strainer is clogged, OI-70 should be utilized to backwash the strainer.
- b. There is a leak in the North Service Water Header, AOP-9A should be utilized to isolate the leak.
- c. The North Service Water Header Strainer is clogged, OI-70 should be utilized to backwash the strainer.
- d. There is a leak in the South Service Water Header, AOP-9A should be utilized to isolate the leak.

ANSWER

b.

REFERENCE

ARB C01 A 1-6, ARB C01 A 3-5, AOP-9A

HIGH

NEW

Question #: 15  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 065.AK3.03

QUESTION

Given the following plant conditions:

- A total loss of the Instrument Air System has occurred due to compressor failures.
- The Service Air to Instrument Air backup valves have failed to open and the Instrument Air System headers have completely depressurized.

Which of the following indicates the impact on 1P-29 Turbine Driven AFP Mini-Recirc Valve, 1AF-4002, and its recirculation line capability?

- a. 1AF-4002 will continue to operate normally due to a separate Service Air backup.
- b. 1AF-4002 will continue to operate normally due to Nitrogen backup.
- c. 1AF-4002 will operate for at least 2 hours since it has an IA accumulator.
- d. 1AF-4002 will NOT open, recirculation line capability is immediately lost.

ANSWER

c.

REFERENCE

AOP-5B Rev 22, NOTE before and step 24

FUNDAMENTAL

NEW



Question #: 16  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A EPE W/E04.EK1.3

QUESTION

Unit 1 was operating at 100% power, with no equipment out of service.

The following conditions exist:

- A small break LOCA occurred outside Unit 1 containment.
- Both Safety Injection Trains have actuated.
- Both SI Pumps are running.
- Both RHR Pumps are running.
- The crew is currently in ECA-1.2, LOCA Outside Containment.
- Annunciator "Unit 1 or 2 RHR Pump Rooms Level High" is in alarm.
- The amber light above 1WL-4100, 1P-10B RHR Pump Drain To Sump, is lit.
- 1WL-4100 switch is in the OPEN position.
- P-40A, -19' Sump Pump, is running continuously.

(1P-10B, Residual Heat Removal Pump)

(1P-15B, Safety Injection Pump)

Based on the above indications, the crew will need to:

- a. Continue operating with all Safety Injection and RHR pumps.  
Make up to the RWST using the Unit 1 blender.
- b. Stop 1P-10B and 1P-15B.  
Neither pump is required to maintain core cooling.
- c. Stop 1P-10B only.  
1P-15B is required to maintain core cooling.
- d. Continue operating with all Safety Injection and RHR pumps.  
Make up to the RWST using the Unit 2 RWST.

ANSWER

b.

REFERENCE

ECA-1.2, LOCA Outside Containment

HIGH

NEW

Question #: 17  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A EPE W/E11.EK1.3

#### QUESTION

Following a LOCA, the inability to open either Containment Sump 'B' suction valve has resulted in a loss of containment sump recirculation. All other equipment has functioned normally. ECA-1.1, Loss of Containment Sump Recirculation, is the procedure in effect. The following indications are noted:

- Containment Pressure = 15 psig
- VCT level = 52%
- RWST level = 4%
- RCS Pressure = 26 psig

The crew has just determined that 100 gpm is the required minimum injection flow.

Based on these indications, which of the following actions will the crew take to maintain core cooling?

- a. Charging Pumps should be aligned to the VCT and started to establish 100 gpm charging flow.
- b. One Safety Injection Pump should be started and 100 gpm injection flow established by throttling the respective 1SI-866A/B (SI Pump Discharge Header MOV).
- c. Both Safety Injection Pumps should be started and 50 gpm each established by throttling both 1SI-866A and B.
- d. One RHR Pump should be started and 100 gpm established by throttling 1RH-625, RHR Hx Outlet Flow Control Valve.

#### ANSWER

a.

#### REFERENCE

ECA-1.1, Loss Of Containment Sump Recirculation, ARB C01 B 3-9, STPT 11.1

HIGH

NEW

Question #: 18  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A EPE W/E05.EA1.1

#### QUESTION

Unit 1 was operating at 100% power when a Reactor Trip and Safety Injection occurred. Subsequent failures have also resulted in a total loss of all Auxiliary Feedwater. The crew has transitioned to CSP-H.1, Response to Loss of Secondary Heat Sink.

While attempting to restore 1P-29, Turbine Driven AFW Pump, using CSP-H.1, the following conditions are noted:

- 1MS-2019, 1P-29 Steam Supply valve - green light off, red light lit.
- 1MS-2020, 1P-29 Steam Supply valve - green light off, red light lit.
- 1MS-2082, 1P-29 Low Suction / Overspeed Trip valve operator - green light off, red light lit.
- 1MS-2082 Trip Valve Position - amber light lit, red light off.
- 1P-29 AFP Low Suction Pressure Trip annunciator is clear.
- Unit 1 Auxiliary Feedwater System Disabled annunciator is lit.

Which of the following is the reason 1P-29 is NOT running?

- a. 1P-29 tripped on overspeed, local operator action is required to start 1P-29.
- b. 1P-29 did not receive a start signal, Trip Valve 1MS-2082 should be opened manually.
- c. 1P-29 tripped on low suction pressure, local operator action is required to start 1P-29.
- d. 1P-29 attempted to start but did not because Trip Valve 1MS-2082 was manually shut from the Control Room.

#### ANSWER

a.

#### REFERENCE

LP0169, Auxiliary Feedwater System

HIGH

NEW

Question #: 19  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 001.AK1.08

QUESTION

With the Unit 1 Reactor operating at 60% power and turbine in IMP IN, the following indications are observed:

- Rising Steam Generator pressures.
- Rising Pressurizer pressure.
- $T_{AVG}$  greater than  $T_{REF}$  and rising.
- Turbine Impulse Pressure constant.
- Rising NI Power.

Assuming no operator action, which of the following would initially explain the above indications?

- a. Turbine runback.
- b. Main steam line leak.
- c. Inadvertent AFW actuation.
- d. Uncontrolled rod withdrawal.

ANSWER

d.

REFERENCE

NRC Y2K Bnk.LXRBank

055.00.LP0000.000 003

AOP-6C Symptoms or Entry Conditions

HIGH

BANK

Question #: 20  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 005.AA2.03

QUESTION

Given the following Unit 1 plant conditions:

- An inadvertent reactor trip has just occurred.
- Both reactor trip breakers indicate open.
- Rod bottom lights are NOT lit for control rods K-7 and L-6.
- Control rod K-7 IRPI reads 220 steps.
- Control rod L-6 IRPI reads 35 steps.

The current procedure in effect is EOP-0.1, "Reactor Trip Response".

Which of the following describes the amount of boration required for these conditions?

- a. No boration is required since the reactor trip breakers are open.
- b. A 1200 gallon boration is required since one control rod is not fully inserted.
- c. A 2400 gallon boration is required since two control rods are not fully inserted.
- d. A 3600 gallon boration is required since two control rods are not fully inserted and one additional rod must be considered stuck out.

ANSWER

c.

REFERENCE

INPO bank #2691(S), #9134(R)

EOP-0.1 and BG-EOP-0.1

HIGH

MODIFIED

Question #: 21  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 024.AK2.04

QUESTION

Given the following plant conditions:

- Unit 1 is in Mode 3, Hot Standby.
- 1CV-350, Emergency Boration Valve, is tagged shut for repair.
- An inadvertent dilution of the Reactor Coolant System has just been detected.
- The dilution has been terminated, however, a shutdown margin calculation has determined that the required shutdown margin is NOT met.
- After initiating boration, 1CV-110A, Boric Acid to Blender Flow Control Valve, is observed to be shut and cannot be re-opened.

Which one of the following boration flowpaths is immediately available to re-establish shutdown margin using approved procedures?

- a. Borate using the Charging Pumps and the RWST.
- b. Borate using the Charging Pumps and the Blender.
- c. Borate using the Safety Injection Pumps and normal Pressurizer Spray.
- d. Borate using the Boric Acid Transfer Pumps, the Charging Pumps and the in-service Boric Acid Tank.

ANSWER

a.

REFERENCE

NRC Y2K BANK.LXRBank  
055.00.LP0000.000 005  
EOP-0.1 / OP 5B  
FUNDAMENTAL  
BANK

Question #: 22  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 033.2.1.33

QUESTION

Given the following:

- A Unit 1 reactor startup is in progress per OP-1B, Reactor Startup.
- Reactor power is less than the P-6 interlock and the Intermediate Range Neutron Flux instruments are currently NOT required to be operable per Technical Specifications.
- 1N-35, Intermediate Range, then fails low.

Which of the following indicates the impact of this failure on reactor startup?

- a. Reactor power must be raised and maintained greater than the P-10 interlock until the channel is restored.
- b. Reactor power is limited to a maximum of 5% until the channel is restored.
- c. The failed channel can be bypassed and the startup can continue without restriction.
- d. Reactor power must be maintained less than the P-6 interlock until the channel is restored.

ANSWER

d.

REFERENCE

OP-1B, Reactor Startup

HIGH

BANK

Question #: 23  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 069.AK3.01

QUESTION

Unit 1 was operating at 100% power when a Steam Line Break occurred inside containment on Steam Generator 'A'.

Several Containment Spray and Cooling system failures have resulted in the crew entering CSP-Z.1, Response To High Containment Pressure.

Which of the following actions in CSP-Z.1 helps to limit the containment pressure transient?

- a. Feed S/G 'A' at only 50 gpm to minimize liquid inventory.
- b. Initiate containment purge and exhaust to lower containment atmospheric pressure.
- c. Manually isolate feedwater to S/G 'A' to minimize the mass and energy release.
- d. Perform a rapid cooldown of the RCS using S/G 'B' to reduce the energy input to containment.

ANSWER

c.

REFERENCE

TRCR43\_0BNK.LXRBank  
043.03.LP2000.006 003  
CSP-Z.1 / BG-EOP-2  
FUNDAMENTAL  
BANK



Question #: 24  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 076.AA1.04

QUESTION

Given the following plant conditions:

- Unit 1 is operating at 100% power.
- A small amount of Steam Generator tube leakage is present on both Steam Generators. However, the leakage is below the Technical Specification limit.
- A fuel cladding defect has been detected via multiple indications of rising RMS monitors.
- The severity and magnitude of the defect is being evaluated.
- An inadvertent Containment Isolation signal is then generated during I&C testing.

Which of the following radiation monitors would NOT be expected to have a decreasing trend?

- a. 1RE-231, Steam Line 'A' Monitor
- b. 1RE-109, Failed Fuel Monitor
- c. 1RE-116, Demineralizer Valve Gallery Monitor
- d. 1RE-219, Steam Generator Blowdown Liquid Monitor

ANSWER

a.

REFERENCE

WEST 883D195 sh 21

HIGH

NEW

Question #: 25  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A EPE W/E02.EA2.1

QUESTION

Assume all automatic actions occur.

Which of the following will result in entering EOP-0, Reactor Trip or Safety Injection, and transition to EOP-1.1, SI Termination, without the implementation of any other EOPs?

- a. Unit 1 is at 100% power when a break develops on the RTD Bypass Line, causing containment pressure to rise to 6 psig.
- b. Unit 1 is at 30% power when a Pressurizer PORV sticks open and cannot be isolated, causing Pressurizer pressure to lower to 1700 psig.
- c. Unit 1 is at 100% power when a steam leak develops on the turbine, causing a high-high steam flow condition on both Steam Generators and Steam Generator pressures to lower to 520 psig.
- d. Unit 1 is at 50% power a Steam Generator Safety Valve lifts and sticks open, causing pressure in that Steam Generator to lower to 500 psig.

ANSWER

c.

REFERENCE

INPO 17388, Salem, ExamDate 01/23/1998

EOP-0, Reactor Trip or Safety Injection

WEST 883D195 Sh. 7, Safeguards Actuation Signals Logic

HIGH

BANK

Question #: 26  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A EPE W/E13.EA1.2

QUESTION

During recovery from a Unit 1 reactor trip, the crew identifies the following plant conditions at 1200 hours:

- Steam Generator 'A' pressure is 1075 psig and slowly rising.
- Steam Generator 'A' level is 65% and stable.

At 1205 hours, the following plant conditions are noted:

- 'A' Steam Generator pressure begins to lower.
- 'A' Steam Generator level rapidly rises, then slowly lowers.

Which of the following would initiate the conditions noted at 1205 hours?

- a. RCS temperature was rapidly lowered.
- b. 'A' Steam Generator feed flow was raised.
- c. 'A' Steam Generator feed flow was lowered.
- d. 'A' Steam Generator Safety Valve has opened.

ANSWER

d.

REFERENCE

LP0446, Steam Generator Transient Response

HIGH

NEW

Question #: 27  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A EPE W/E03.EA2.2

QUESTION

A small break LOCA has occurred on Unit 1.

The crew is performing EOP-1.2, Small Break LOCA Cooldown and Depressurization.

Which of the following describes the Reactor Coolant System cooldown rate that is called for in EOP-1.2?

- a. Less than 100°F / hour in order to preclude violating thermal shock limits.
- b. Less than 100°F / hour in order to minimize outsurge from the Pressurizer.
- c. As rapid as possible in order to conserve RWST inventory.
- d. As rapid as possible in order to shorten the time until Residual Heat Removal is placed in service.

ANSWER

a.

REFERENCE

EOP-1.2, Small Break LOCA Cooldown and Depressurization

LP3339, Reactor Coolant System. LO 057.02.LP3339.001

LP 1829 EOP Generic issues L.O 031.02.LP1829.005

FUNDAMENTAL

NEW

Question #: 28  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 003.K3.01

QUESTION

Unit 1 is at 15% power and preparing to place the Main Generator on-line.

1P-1A, Reactor Coolant Pump, breaker trips open.

Which of the following indicates the effect on the Reactor and Reactor Coolant System?

- a. The reactor will trip automatically.  
'A' loop DT will rise.
- b. The reactor will trip automatically.  
'A' loop DT will lower.
- c. The reactor will not trip.  
'A' loop DT will lower.
- d. The reactor will not trip.  
'A' loop DT will rise.

ANSWER

c.

REFERENCE

WEST 883D195 Sh. 15, RCS Trip Signals

WEST 883D195 Sh. 12, Nuclear Instr. Permissives & Blocks

STPT 3.1, Reactor Trip Interlock Setpoints

LP0408

HIGH

NEW

Question #: 29  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 003.A3.01

QUESTION

Unit 1 is operating at 100% power.

Over the past 15 minutes, the following conditions are noted:

- Charging flow has been constant at 28 gpm.
- Letdown Line flow has been constant at 40 gpm.
- Pressurizer level is stable.
- Total No. 1 seal leakoff from both RCPs is 2.0 gpm.
- Total No. 2 seal leakoff is negligible.
- Total No. 3 seal leakoff is negligible.
- Total Charging Pump seal leakage is 0.03 gpm.
- $T_{AVG}$  has remained constant.
- There are no other sources of RCS leakage.

What is the total seal injection to both RCPs?

- a. 8 gpm
- b. 10 gpm
- c. 12 gpm
- d. 14 gpm

ANSWER

d.

REFERENCE

WEST 685J175 Sh. 2, Chemical & Volume Control P&ID

HIGH

NEW

Question #: 30  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 004.K6.31

QUESTION

The following conditions exist on Unit 1:

- Pressurizer pressure 1620 psig
- Volume Control Tank pressure 20 psig
- 1P-1A RCP, No. 1 Seal leakage 4 gpm
- 1P-1B RCP, No. 1 Seal leakage 0.5 gpm
- All other seal parameters are normal.

Using the given references, which of the following states the condition of the RCP seal leakage and why it is a concern?

- a. 1P-1A No. 1 seal leakage is high.  
The Labyrinth Seal may be damaged by impurities in the RCS.
- b. 1P-1A No.1 seal leakage is high.  
The No. 2 Seal does not have enough flow for lubrication.
- c. 1P-1B No. 1 seal leakage is low.  
The No. 2 Seal may fail due to higher backpressure from the No. 1 Seal.
- d. 1P-1B seal leakage is low.  
The lower pump radial bearing does not have enough cooling flow.

ANSWER

d.

REFERENCE

AOP-1B, Reactor Coolant Pump Malfunction, Figure 1

OP-4B, Reactor Coolant Pump Operation

HIGH

NEW

Question #: 31  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 050.K2.01

QUESTION

The normal power supply breaker for 1P-10B, Residual Heat Removal Pump, is located on:

- a. 480 Volt Bus B-08
- b. 480 Volt Bus 1B-03
- c. 480 Volt Bus 1B-04
- d. 480 Volt Bus B-09

ANSWER

c.

REFERENCE

OI-112, Aligning Equipment to Appendix R Power Supply

FUNDAMENTAL

NEW



Question #: 32  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 006.K6.18

#### QUESTION

A small break LOCA has occurred on Unit 1.

- EOP-1.1, SI Termination, is in progress.
- Both Safety Injection Pumps have just been secured.

The following conditions are noted:

- 1TI-970, Subcooling Monitor 200°F
- 1TI-971, Subcooling Monitor 25°F
- RCS Wide Range Pressure 1210 psig
- Core Exit Thermocouple avg 545°F
- Containment pressure 5 psig
- Containment rad levels 4 R/hr

After comparing the subcooling readings with RCS pressure and CETs, the crew will determine that:

- a. 1TI-970 is reading accurately, Safety Injection Pumps should NOT be re-started, the crew should continue in EOP-1.1.
- b. 1TI-970 is reading inaccurately, at least one Safety Injection Pump must be started to restore subcooling.
- c. 1TI-971 is reading accurately, Safety Injection Pumps should NOT be re-started, the crew should continue in EOP-1.1.
- d. 1TI-971 is reading inaccurately, at least one Safety Injection Pump must be started to restore subcooling.

#### ANSWER

b.

#### REFERENCE

OP 4B, EOP-1.1, SI Termination

Steam Tables

HIGH

NEW

Question #: 33  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 007.K1.01

QUESTION

A small break LOCA has occurred on Unit 1. Pressurizer PORVs are being used to reduce RCS pressure per EOP-1.2 Small Break LOCA Cooldown and Depressurization.

- Containment pressure is 10 psig

Which of the following is the minimum pressure inside the Pressurizer Relief Tank that will cause the PRT rupture disc to rupture?

- a. 90 psig
- b. 100 psig
- c. 110 psig
- d. 125 psig

ANSWER

c.

REFERENCE

LP0078, Pressurizer, Level Control, Pressure Control, and Relief System

HIGH

NEW

Question #: 34  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 008.A1.04

QUESTION

Given the following plant conditions:

- Unit 2 is operating at 100% power.
- Annunciator "2T-12 CC Surge Tank Level High or Low" is lit.
- 2LI-618B, CC Surge Tank Level, indicates 58% and rising.

Which of the following actions will help mitigate the consequences of this event?

- a. swap Component Cooling Water Heat Exchangers.
- b. secure Normal Letdown and place Excess Letdown in service.
- c. shut 2CC-17, Surge Tank Rad Control Vent Valve.
- d. shut CC-LW-63 and CC-LW-64, Radwast System CC Supply and Return Valves.

ANSWER

c.

REFERENCE

AOP-9B

HIGH

NEW

Question #: 35  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 010.K6.04

QUESTION

Unit 1 is operating at 100% power when the following sequence of events occurs:

- 1RC-431C, PORV, opens and sticks open.
- 1RC-515, PORV Block valve, cannot be shut.
- Unit 1 Reactor trips.
- Safety Injection actuates.
- PRT pressure rises to the point that the PRT Rupture Disc ruptures.

Which of the following is an effect of the disc rupturing?

- a. N<sub>2</sub> Header pressure lowers.
- b. Pressurizer Relief Valve Outlet temperature lowers.
- c. H<sub>2</sub> concentration in containment lowers.
- d. PRT level drains below the sparging nozzles.

ANSWER

b.

REFERENCE

LP0413, Second Law of Thermodynamics

FUNDAMENTAL

NEW

Question #: 36  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 010.A4.03

QUESTION

Unit 1 is operating at 100% power steady-state.

1RC-516, Pressurizer PORV Block valve, has just been shut due to seat leakage past 1RC-430, Pressurizer PORV.

Which of the following would be an indication that 1RC-516 also has seat leakage?

- a. Primary leak rate remains the same.
- b. Pressurizer Vapor Space temperature remains the same.
- c. 1RE-211, Containment Particulate Monitor, indication is rising.
- d. Annunciator 1RC-430 or 431C Pressurizer PWR-Operated Relief Valve Not Shut alarms.

ANSWER

a.

REFERENCE

P&ID 541F091 Sh. 2, Reactor Coolant System

FUNDAMENTAL

NEW

Question #: 37  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 012.A2.06

#### QUESTION

Unit 2 was operating at 100% power when a total loss of Main Feedwater occurred. An automatic Reactor Trip signal was generated. However, both Reactor Trip breakers remained shut.

- All attempts to perform a manual Reactor Trip have been unsuccessful.
- An Urgent Failure alarm is preventing all rod motion.
- Auxiliary Feedwater is operating per design.
- Main Generator Output indicates 530 MWe.
- Reactor power remains near 100% on Nuclear Instrumentation.

Which of the following actions should the operator take to mitigate this transient?

- a. Trip the Main Turbine to avoid an excessive pressure increase after the Steam Generator tubes uncover.
- b. Open the Pressurizer PORVs immediately because the increasing pressure will take the Pressurizer solid, resulting in insufficient water relief.
- c. Align maximum Auxiliary Feedwater flow to one Steam Generator to maintain it as a heat sink for cooldown of the Reactor Coolant System.
- d. Reduce turbine load slowly to avoid a rapid Reactor Coolant System temperature and pressure increase, leading to opening of a Pressurizer Safety Valve.

#### ANSWER

a.

#### REFERENCE

INPO 20653, PBNP, ExamDate 02/02/2002  
CSP-S.1, Response to Nuclear Power Generation/ATWS  
FUNDAMENTAL  
BANK

Question #: 38  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.4.4

#### QUESTION

Given the following plant conditions:

- Unit 1 is in Mode 4, Hot Shutdown.
- Both RHR Pumps are in service for decay heat removal and there is a bubble in the Pressurizer.
- I&C is performing maintenance on a failed Containment Pressure instrument.

The following indications are noted:

- "Containment Pressure High" annunciator is lit on 1C04.
- Several Containment Isolation valves which were previously open are now shut.
- All four Emergency Diesel Generators are running (unloaded).

Which of the following procedures should the crew use to address these indications?

- a. EOP-0, Reactor Trip or Safety Injection.
- b. AOP-24, Response To Instrument Malfunctions.
- c. AOP-26, Recovery From Inadvertent Safety Injection.
- d. SEP-1, Degraded RHR System Capability.

ANSWER

c.

REFERENCE

AOP-26

HIGH

MODIFIED

Question #: 39  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 022.2.1.27

QUESTION

Unit 1 is in Mode 3, Hot Standby, and preparing for reactor startup. Three sets of Containment Cooling and Containment Accident Fans are running.

The reason that at least three Containment Accident Fans must be running is to:

- a. prevent steam formation in the Service Water coils.
- b. maintain Containment pressure below its parametric limit.
- c. support continuous operation of the Reactor Coolant Pumps.
- d. satisfy the LCO for Containment Spray and Cooling Systems.

ANSWER

c.

REFERENCE

OI 72, Containment Air Recirculation System

FUNDAMENTAL

NEW



Question #: 40  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 026.A3.01

QUESTION

A steam line break in Unit 1 Containment caused a Containment Spray actuation. All equipment responded as required.

Thirty (30) seconds after the spray actuation, what is the status of the Unit 1 Containment Spray System components?

- a. Both spray pumps running.  
All four discharge valves open.  
Both spray eductor valves shut.
- b. Both spray pumps running.  
All four discharge valves open.  
Both spray eductor valves open.
- c. Both spray pumps running.  
All four discharge valves shut.  
Both spray eductor valves shut.
- d. Both spray pumps secured.  
All four discharge valves open.  
Both spray eductor valves shut.

ANSWER

a.

REFERENCE

WEST 883D195 Sh. 8, Safeguard Sequence Logic Diagram

WEST 883D195 Sh. 9, Safeguards Sequence Logic

FUNDAMENTAL

NEW

Question #: 41  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 039.K1.07

QUESTION

Unit 1 was operating at 100% power when a steam line break occurred in the PAB. The break is upstream of 1MS-2019, 'B' Steam Generator Supply to 1P-29 TDAFP.

During the performance of EOP-2, Faulted Steam Generator Isolation, the Control Operator fails to manually shut 1MS-2019 as required by procedure.

Which of the following describes a consequence of this error?

- a. 1P-29 will lose its steam supply because both Steam Generators will blow down through the rupture.
- b. 1P-29 will lose its steam supply because 1MS-2082, 1P-29 Low Suction/Overspeed Trip Valve, will trip shut.
- c. 1P-29 will NOT be affected because 1MS-2017, 'B' Steam Generator Main Steam Stop, will automatically shut.
- d. 1P-29 will NOT be affected because 1MS-2019, 'B' Steam Generator Supply to 1P-29 AFP, is a stop-check MOV.

ANSWER

d.

REFERENCE

P&ID M-201 Sh. 1, Main & Reheat Steam System  
TRHB 11.1, Secondary Systems Descriptions: Main Steam

HIGH

NEW

Question #: 42  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 039.K3.06

QUESTION

Unit 1 is operating at 100% power.  
All equipment is in a normal alignment.  
1PT-484, Steam Header Pressure Transmitter, fails high.

Which of the following describes an effect of this failure?

- a. The Atmospheric Steam Dumps will open immediately because the Atmospheric Steam Dump Controllers are in Auto.
- b. The Atmospheric Steam Dumps will open if the Atmospheric Steam Dump Controllers are taken to Manual.
- c. The Condenser Steam Dumps will NOT open on a Reactor Trip as long as the Steam Dump Mode Selector is in Auto.
- d. The Condenser Steam Dumps will open if the Steam Dump Mode Selector is taken to Manual.

ANSWER

d.

REFERENCE

WEST 883D195 Sh. 17, Steam Dump Control Logic Diagram

HIGH

NEW

Question #: 43  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 056.K1.03

QUESTION

OP-13A, Secondary Systems Startup, contains a note to start the Steam Generator Feed Pump (SGFP) oil pumps prior to starting the Condensate Pumps.

The reason for this note is to:

- a. electrically enable the Condensate Pumps to start.
- b. minimize the effects of cold seal water on SGFP bearings.
- c. prevent damage to the SGFPs due to condensate flow spinning the pumps.
- d. allow time for the SGFPs oil to warm up to operating temperature prior to starting the SGFPs.

ANSWER

c.

REFERENCE

LP0102, Condensate System

FUNDAMENTAL

NEW

Question #: 44  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 056.A2.04

QUESTION

Unit 1 is operating at 100% power, when the following conditions are noted:

- 1P-28A SG Feed Pump Suction Pressure Low alarm.
- 1P-28B SG Feed Pump Suction Pressure Low alarm.
- Both Steam Generator levels are 63% and lowering.
- 1PI-2273, SG Feed Pump Suction Pressure, is 165 psig.
- 1FI-2255, Heater Drain Pumps Discharge Flow, is 5200 gpm.
- 1PI-2272, Condensate Pump Discharge Pressure, is 200 psig.

Which of the following would cause the above conditions?

- a. One Main Feed Pump has tripped.
- b. One Condensate Pump has tripped.
- c. The standby Heater Drain Tank Pump is rotating backwards.
- d. 1CS-2273, LP Feedwater Heater Bypass valve, has failed open.

ANSWER

b.

REFERENCE

M-202 Sh.1, Condensate System, TRHB 11.2, TRHB 11.6

HIGH

NEW

Question #: 45  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 059.K1.02

QUESTION

Unit 1 is operating at 100% power. During troubleshooting of an electrical problem associated with the Auxiliary Feedwater Actuation circuitry, both Motor Driven Auxiliary Feedwater Pumps auto-start and both Unit 1 AFW Discharge MOVs, AF-4023 and AF-4021, open. No other equipment is affected.

Unit 1 Main Feedwater flow will:

- a. lower due to Steam Generator swell.
- b. lower due to rising Steam Generator level.
- c. remain constant due to the higher head of the Main Feed pumps.
- d. remain constant due to having a separate Steam Generator feed line.

ANSWER

b.

REFERENCE

LP0131, Feedwater Control System

HIGH

NEW

Question #: 46  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 061.K5.02

QUESTION

Unit 1 has been operating at 100% power for several months.

Unit 2 has just reached 100% power, after being shutdown for several weeks for maintenance.

Both Units are tripped due to a Circulating Water System malfunction. Decay heat is being removed with the aid of the Atmospheric Steam Dumps and the Auxiliary Feedwater System.

How does the amount of AFW required by Unit 1 compare to the amount required by Unit 2, and why?

- a. Unit 1 will require more AFW because decay heat is dependent on power history.
- b. Unit 1 will require more AFW because the metal of its primary system has absorbed more heat.
- c. The units will require equal amounts of AFW because both units started out at the same temperature.
- d. The units will require equal amounts of AFW because both units started out at the same power level.

ANSWER

a.

REFERENCE

LP0332, Fundamentals of Nuclear Physics (Part 2)

FUNDAMENTAL

NEW

Question #: 47  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.2.22

QUESTION

Given the following plant conditions:

- Unit 1 is at 100% power.
- Turbine Driven Auxiliary Feedwater Pump, 1P-29, is tagged out for maintenance.
- Engineering has just notified the Shift Manager that both Motor Driven Auxiliary Feedwater Pumps, P-38A and P-38B, have several electrical components installed that were calibrated incorrectly.
- The Shift Manager has declared P-38A and P-38B inoperable.

In addition to restoring an Auxiliary Feedwater Pump to service, which of the following statements describes an action required for Unit 1?

- a. The reactor must be maintained at 100% power.
- b. A reactor shutdown to Mode 2 must be initiated.
- c. A reactor shutdown to Mode 3 must be initiated.
- d. A reactor shutdown to Mode 4 must be initiated.

ANSWER

a.

REFERENCE

LP3343, TS 3.7.5

FUNDAMENTAL

NEW



Question #: 48  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 062.A3.01

QUESTION

Both Units are operating at 100% power steady-state. The AC Electrical Distribution System is in a normal alignment, except that TS-81, Emergency Diesel Generator G-01 Monthly, is in progress. G-01 is operating in parallel with offsite power through 1X-04 and 1A-05.

The following ammeter indications are noted on C02:

- G-01 Emergency Diesel Generator, 300 amps
- 1X-11 Station Service Transformer, 60 amps
- 1X-13 Station Service Transformer, 100 amps
- 1X-14 Station Service Transformer, 80 amps
- 1X-12 Station Service Transformer, 70 amps

What will the G-01 EDG ammeter indicate if 1A52-57, 1A-03 to 1A-05 Bus Tie breaker, trips open? (Note: No other equipment or alignment is affected.)

- a. 100 amps
- b. 180 amps
- c. 300 amps
- d. 400 amps

ANSWER

a.

REFERENCE

LP0007, 4160 VAC Electrical Distribution

HIGH

NEW

Question #: 49  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 063.A3.01

QUESTION

Both units are operating at 100% power. The DC electrical distribution system is in a normal alignment.

The following conditions are noted:

- D-07 Battery Charger Trouble alarm.
- D-01/D-03 125V DC Bus Under/Over Voltage alarm.
- D-05-AM, Battery Ammeter, indicates 120 amps discharging.
- D-01-VM, Bus Voltmeter, indicates 123 VDC.

The cause of the above indications is:

- a. D-05 Battery Breaker tripped open.
- b. D-01 DC Bus has a ground.
- c. D-05 Battery has an internal short in a cell.
- d. D-07 Battery Charger DC Output Breaker tripped open.

ANSWER

d.

REFERENCE

ARP 2C20A 1-1

ARP 2C20A 2-2

0-SOP-DC-001

HIGH

NEW

Question #: 50  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 064.K4.02

QUESTION

Both units were operating at 100% power. Three minutes ago, an inadvertent Safety Injection occurred on Unit 1. All equipment responded as required.

For these conditions, which of the following will initiate a trip of G-03, Emergency Diesel Generator?

- a. Low Water Pressure.
- b. Low Bearing Oil Pressure.
- c. High Crankcase Pressure.
- d. High Jacket Water Temperature.

ANSWER

b.

REFERENCE

TRHB 12.8

Modified from TRCR52\_BNK.LXRBANK 054.02.LP0133.004.001

FUNDAMENTAL

BANK

Question #: 51  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 073.K5.01

QUESTION

Unit 1 has been operating at 100% power for several weeks.

1SC-938C, 1RE-109 Failed Fuel Monitor Flow Valve, which is normally in a throttled position, was just inadvertently taken to a full open position.

1RE-109, Failed Fuel Monitor, indication will:

- a. rise because now it is more sensitive to small fuel defects.
- b. rise because now more N-16 gammas will reach the detector.
- c. remain the same because the gross specific activity of the reactor coolant has not changed.
- d. lower because of the increased flow which lowers the time N-16 gammas are in the detector.

ANSWER

b.

REFERENCE

RMSASRB CI 1RE-109

HIGH

NEW

Question #: 52  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 076.K1.08

QUESTION

- Unit 1 is in Mode 5.
- The RCS is solid at 300 psig and on RHR.
- 1HC-135, Letdown Line Pressure Controller, is in Manual to control RCS pressure.
- All RCS and RHR conditions are stable.

The PAB operator then performs a blowdown of the Service Water side of 1HX-12A and HX-12B, Component Cooling Water Heat Exchangers.

If no other operator actions are taken, RCS pressure will:

- a. lower because RHR temperature will lower.
- b. rise because more RHR flow will bypass the RHR Heat Exchangers.
- c. rise because Service Water blowdown flow will bypass the CCW Heat Exchanger tubes.
- d. lower because the Non-Regenerative Heat Exchanger letdown outlet temperature will rise.

ANSWER

a.

REFERENCE  
1-SOP-CC-001

HIGH  
NEW

Question #: 53  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 078.K2.01

QUESTION

Which of the following is the power supply to Instrument Air Compressor K-2A?

- a. 480 Volt MCC 1B-32.
- b. 480 Volt MCC 2B-32.
- c. 480 Volt Bus 1B-04.
- d. 480 Volt Bus 2B-04.

ANSWER

a.

REFERENCE

LP0338, Instrument and Service Air, PBNP Electrical Dist. Drawing, WEST 883D195 sh9.

FUNDAMENTAL

NEW

Question #: 54  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 103.K3.01

QUESTION

Given the following conditions:

- Unit 1 is in Mode 5 with RCS temperature at 100°F.
- RCS time to boil is 2 hours.
- Containment Integrity has been relaxed per OP-3C, Hot Standby To Cold Shutdown.
- Containment purge is in operation per OP-9C, Containment Venting and Purging.

The Unit 1 containment upper personnel airlock has been damaged such that neither door can be shut. Maintenance estimates that it will take 12 hours to return at least one of the doors to service.

Which of the following is a valid concern about the status of the upper airlock?

- a. An unmonitored release to the atmosphere is taking place while both airlock doors are open.
- b. The lower airlock cannot be utilized because one of its bulkhead doors must be locked shut.
- c. The containment closure time requirements of CL-1E, Containment Closure Checklist, are not met.
- d. The Unit 1 upper airlock will not be returned to service before the one hour Technical Specification Required Action time.

ANSWER

c.

REFERENCE

CL-1E, Containment Closure Checklist

HIGH

NEW

Question #: 55  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 103.A2.04

QUESTION

Unit 1 is operating at 100% power.

A Unit 1 containment inspection is in progress per PC-24, Containment Inspection Checklist. The two Operators and an RP Tech are on the 8' level of containment. The Control Room receives indications of a steam leak inside containment and orders the immediate evacuation of containment.

The three individuals should evacuate via the:

- a. lower personnel hatch because it is the closest exit.
- b. lower personnel hatch because it is the normal entry/exit used during PC-24.
- c. upper personnel hatch because it is the only unlocked exit.
- d. upper personnel hatch because that is where the Designated Airlock Operator is stationed.

ANSWER

a.

REFERENCE

PC-24, Containment Inspection Checklist

FUNDAMENTAL

NEW



Question #: 56  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.4.6

QUESTION

Given the following plant conditions:

- Following a series of plant malfunctions, operators are currently implementing ECA-0.0, Loss of All AC Power.
- The operators have reached the point in the procedure where they are to begin depressurization of the Steam Generators.

Which of the following statements indicates the reason that a secondary depressurization is performed?

- a. To ensure the reactor remains subcritical and does not result in a restart accident.
- b. To minimize RCS inventory loss through the RCP seals, which maximizes time to core uncover.
- c. To remove all the stored energy in the Steam Generators to prevent a secondary side Safety Valve from lifting.
- d. To prevent a challenge to the "Integrity" Critical Safety Function Status Tree which is being monitored for implementation.

ANSWER

b.

REFERENCE

ECA-0.0, LP0462.

FUNDAMENTAL

BANK

Question #: 57  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 011.A2.06

QUESTION

Given the following plant conditions:

- Unit 1 is at 100% power.
- An internal failure associated with 1PC-431K, Master Pressurizer Pressure Controller, has caused both Unit 1 Pressurizer Spray valves to open approximately 25%.
- All Pressurizer pressure channels indicate a lowering Pressurizer pressure.

Which of the following choices is correct regarding the initial response of the Pressurizer Level Control System to this failure and the procedure used to mitigate this transient?

(AOP-24, "Response to Instrument Malfunctions")

- a. Charging pump speed will rise due to lowering pressurizer level.  
AOP-24 can be used to address the failure of the controller.
- b. Charging pump speed will rise due to lowering pressurizer level.  
AOP-24 CANNOT be used since a controller has failed, not an instrument.
- c. Charging pump speed will lower due to rising pressurizer level.  
AOP-24 can be used to address the failure of the controller.
- d. Charging pump speed will lower due to rising pressurizer level.  
AOP-24 CANNOT be used since a controller has failed, not an instrument.

ANSWER

c.

REFERENCE

AOP-24- ILT exam 2/2/2002

HIGH

BANK

Question #: 58  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 014.K4.03

QUESTION

Which one of the following inputs cause the rod bottom lights to illuminate?

- a. Bank demand for each control rod bank.
- b. Individual rod position signal via a reed switch.
- c. The Individual Rod Position Indicator (IRPI) signal.
- d. The output signal of the rod control P/A converter.

ANSWER

c.

REFERENCE

LP0576, Rod Position Indication System

OP-1B, Reactor Startup

FUNDAMENTAL

NEW

Question #: 59  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 015.K2.01

QUESTION

Unit 1 was operating at 100% power when the following conditions were noted:

- Numerous annunciators are alarming.
- Numerous instruments have failed.
- Unit 1 'B' Steam Generator level is rising.
- None of the bistable status lights on 1C-04 are lit.

Given the above conditions, which Power Range Nuclear Instrument channel does NOT have power?

- a. 1N-41
- b. 1N-42
- c. 1N-43
- d. 1N-44

ANSWER

d.

REFERENCE

LP3456, DC and Instrument Bus Malfunctions  
LP2416, Nuclear Instrumentation System  
HIGH  
NEW

Question #: 60  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 016.A4.02

QUESTION

An accident is in progress on Unit 1. The Control Room staff has entered CSP-C.1, Response To Inadequate Core Cooling.

Several steps in CSP-C.1 require the value of core exit thermocouples.

From what qualified source is this data obtained?

- a. Digital display on 1C-04.
- b. PPCS drop screen on 1C-03.
- c. 1TR-00001A and 1TR-00001B on 1C-20.
- d. SPEC-200 racks above the Control Room.

ANSWER

c.

REFERENCE

CSP-C.1, Response to Inadequate Core Cooling

FUNDAMENTAL

NEW

Question #: 61  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 033.A2.03

QUESTION

Given the following plant condition:

- A seismic event has occurred that has resulted in a non-isolable leak at the North end of the Spent Fuel Pool.
- The leak is located one foot above the top of the spent fuel racks.
- Level in the pool is slowly lowering.
- The fuel transfer canal doors are open.

What will be the effect of this leak on the Spent Fuel Pool Cooling System and what action should the crew take to mitigate this event?

- a. Cooling will NOT be lost since the leak is above the suction pipe opening, the transfer canal doors should be shut to conserve water inventory.
- b. Cooling will NOT be lost since the leak is above the suction pipe opening, makeup to the pool should be initiated to provide radiation shielding above the fuel.
- c. Cooling will be lost when level drops below the suction pipe opening, pool cooling should be increased by recirculating water between the transfer canal and the Spent Fuel Pool with P-9, HUT Recirc Pump.
- d. Cooling will be lost when level drops below the suction pipe opening, make-up to the pool should be initiated to control pool temperature and maintain inventory.

ANSWER

d.

REFERENCE

AOP-8F, LP0110 pg 19

L.O 112.01.LP0110.006

HIGH

NEW

Question #: 62  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 045.A2.17

QUESTION

Unit 1 is holding reactor power at 28%.

The following conditions are noted:

- Main Generator MWe = 150 MWe and stable.
- 1PT-2058, Impulse Pressure, indicates 100%.
- The LOAD REF CHAN monitor light is lit.

Based on the above conditions, the Control Operator should ensure:

- a. EH controls are in IMP-IN.
- b. EH controls are in Turbine Manual.
- c. the Control Rod Bank Selector switch is in Manual.
- d. the Condenser Steam Dump controller is in Manual.

ANSWER

b.

REFERENCE

LP0023, Main Turbine Controls

HIGH

NEW

Question #: 63  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 068.A4.04

QUESTION

A discharge of the "A" Monitor Tank is in progress.

Which of the following would provide the Control Operator indication that WL-18, Waste Condensate Overboard to SW Header Control Valve, has automatically closed?

- a. The "Unit 1 Process Monitor High" annunciator alarms.
- b. RE-223, Waste Distillate Tank Overboard Monitor, status indication on the RMS server changes from green to blue.
- c. The status light for WL-18 is lit on the Containment Isolation Panel.
- d. RE-218, Waste Disposal System Liquid Monitor, status indication on the RMS server changes from green to red.

ANSWER

d.

REFERENCE

RMSASRB CI RE-218, Waste Disposal System Liquid Monitor

RMSASRB 1.0, Generic RMS Alarm Response Guidelines

FUNDAMENTAL

NEW



Question #: 64  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 071.A1.06

QUESTION

Given the following plant conditions:

- Unit 1 is at 100% power.
- The "A" Gas Decay Tank is being discharged per OP-9D, Discharge of Gas Decay Tanks.
- A forced vent of Unit 1 containment is in progress per OP-9C, Containment Venting and Purging.

The following alarms are then received:

- "Containment or Aux Bldg Vent System Air Flow Low" annunciator on 1C04.
- FT-3298A, PAB Flow Stack Velocity, alarms on the RMS System Server and indicates low.

Which of the following actions is required for these conditions?

- a. Secure the Gas Decay Tank discharge.
- b. Secure the Unit 1 containment forced vent.
- c. Start the standby Cavity Cooling Fan.
- d. Start the standby CRDM Shroud Fan.

ANSWER

a.

REFERENCE

ARB 1C04 1C 2-9, RMS ARB FT-3298A, OI-39 pg 10

HIGH

NEW

Question #: 65  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 086.A2.04

QUESTION

P-35A, Electric Fire Pump, is OOS.

PS-3713, Diesel Fire Pump Start Pressure Switch, is inadvertently isolated.

In the event of a fire, which of the following will NOT be protected by an automatic suppression system?

- a. G-01, Emergency Diesel Generator.
- b. G-03, Emergency Diesel Generator.
- c. Auxiliary Feed Pump room.
- d. Main Turbine bearings.

ANSWER

b.

REFERENCE

LP0003, Fire Protection

FUNDAMENTAL

NEW

Question #: 66  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.1.33

QUESTION

Given the following plant conditions:

- Unit 1 is at 100% power.
- Bank D step counter indicates 220 steps.
- Unit 1 containment forced vent in progress.

Which of the following control board indications will require Unit 1 to enter a Technical Specification Action Condition?

- a. 1LI-428, Pressurizer Level, indicates 40%.
- b. Control Rod C-7 (Bank D) IRPI indicates 205 steps.
- c. 1PI-449, Pressurizer Pressure, indicates 2215 psig.
- d. 1PI-945, Containment Pressure, indicates -0.4 psig.

ANSWER

b.

REFERENCE

T.S. 3.1.4, Rod Group Alignment Limits

FUNDAMENTAL

NEW

Question #: 67  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.1.17

#### QUESTION

You are the Unit 1 Control Operator. Unit 1 has had a steam line break.

The procedure currently in use is EOP-0, Reactor Trip or Safety Injection. The DOS reads the following step to you:

Check If Secondary System Is Intact:

- ◇ No S/G pressure dropping in an uncontrolled manner.  
AND
- ◇ No S/G completely depressurized.

The following conditions are noted:

'A' S/G pressure	400 psig and lowering
'B' S/G pressure	800 psig and stable

What should you report to the DOS?

- a. "Yes, the secondary system is not intact."
- b. "Yes, the Bravo Steam Generator is intact, but no, the Alpha Steam Generator is not."
- c. "No, Alpha Steam Generator pressure is 400 psig and lowering, Bravo Steam Generator pressure is 800 psig and stable."
- d. "No, Alpha Steam Generator is faulted, Bravo Steam Generator pressure is 800 psig."

ANSWER

c.

REFERENCE

OM 3.7, AOP and EOP Procedure Sets Use And Adherence

FUNDAMENTAL

NEW

Question #: 68  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.2.22

QUESTION

Unit 2 has been operating at 50% power for several days due to 2P-28A, Main Feedwater Pump, being OOS for maintenance. A severe plant transient occurs. The result is several automatic trip signals being generated without the reactor trip breakers opening; however, a manual trip is successfully performed.

After stabilizing the plant, a Post Trip Review indicated the following simultaneous panel readings occurred during the transient:

- RCS pressure 2385 psig
- Reactor power 52%
- RCS TAVG 640°F
- RCPs Both running

Using the given references, which of the following statements is correct?

- a. No safety limits were exceeded.
- b. Only the Reactor Core Safety Limit was exceeded.
- c. Only the RCS Pressure Safety Limit was exceeded.
- d. Both Reactor Core and the RCS Pressure Safety Limits were exceeded.

ANSWER

a.

REFERENCE

INPO 20655, PBNP, 02/02/2002

T.S. 2.0, Safety Limits

COLR, Core Operating Limits Report

HIGH

BANK

Question #: 69  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.2.33

QUESTION

Given the following plant conditions:

- Unit 1 was operating at 100% power when condenser vacuum was observed to be lowering.
- Power was rapidly reduced and is currently 65%.
- Rod control is in AUTO.
- Control Bank 'D' is observed to be stepping in at minimum speed (8 steps/min) due to a TAVG-TREF deviation of +2.0°F and is currently at 96 steps.

Which of the following is correct with regard to control rod operation for these conditions?

- a. The rod speed proportional controller is malfunctioning.
- b. Control Bank 'D' rods should be stepping out.
- c. Control Bank 'C' and 'D' rods should be stepping in.
- d. The rod control system is operating properly.

ANSWER

c.

REFERENCE

Modified question from KNPP 2002 exam.

LP1547, Rod Control System.

HIGH

MODIFIED

Question #: 70  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.2.27

QUESTION

Which of the following is a description of how a Rod Control Cluster Assembly (RCCA) is changed in a fuel assembly located inside containment?

- a. The manipulator removes the RCCA from the spent fuel assembly and places it in the basket of the change fixture, the change fixture gripper picks up the RCCA and places it in the receiving fuel assembly in the upender.
- b. The manipulator places a spent fuel assembly with an RCCA in one basket on the change fixture, the change fixture gripper picks up the RCCA from the assembly and places it in the receiving fuel assembly in the upender.
- c. The manipulator places a spent fuel assembly with an RCCA in one of the baskets on the change fixture, then places the receiving fuel assembly in the basket next to the spent fuel assembly, the change fixture gripper then picks up the RCCA and shifts it to the receiving fuel assembly.
- d. The manipulator places a spent fuel assembly with an RCCA in one of the baskets on the change fixture. The manipulator operator then removes the RCCA from the assembly with the manipulator and places it in the receiving fuel assembly in the core.

ANSWER

c.

REFERENCE

LP0259, Fuel Handling Containment  
TRCR112bnk.LXRBank  
112.01.LP0259.002 006  
FUNDAMENTAL  
BANK

Question #: 71  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.3.1

#### QUESTION

Operations and RP have just completed filling the spent resin High Integrity Container (HIC) with spent resin. The results of a subsequent radiation survey is as follows:

	Contact	30 cm
- Top of shielded HIC by fill head	2500 mr/hr	1200 mr/hr
- Sides of HIC	100 mr/hr	60 mr/hr

Which of the following describes the required radiological postings?

- a. The HIC should be posted as a High Radiation Area with a red flashing light.
- b. The HIC should be posted as a High Radiation Area without a red flashing light.
- c. No postings are required because you need a ladder to access the top of the shielded HIC.
- d. The PAB truck bay should be barricaded with locked gate access and posted as a Very High Radiation Area.

#### ANSWER

a.

#### REFERENCE

INPO 20657, PBNP, ExamDate 02/02/2002

HP 3.2, Radiological Labeling, Posting and Barricading Requirements

HIGH

BANK



Question #: 72  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.3.4

QUESTION

Per NP 4.2.14, Administrative Dose Levels/Dose Level Extension Procedure, an individual at Point Beach has an administrative dose limit of (1) \_\_\_\_\_ mrem TEDE per year. This can be raised to (2) \_\_\_\_\_ mrem TEDE per year by the First-line Supervisor.

- a. (1) 1000  
(2) 3000
- b. (1) 1000  
(2) 5000
- c. (1) 2000  
(2) 3000
- d. (1) 2000  
(2) 5000

ANSWER

c.

REFERENCE

Bank question 19331 from INPO bank

NP 4.2.14, Administrative Dose Levels/Dose Level Extension Procedure

FUNDAMENTAL

BANK

Question #: 73  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.3.11

QUESTION

Which one of the following pieces of equipment, if operated, would NOT be considered an unmonitored release path that would require logging on PBF-3070, Potentially Contaminated Steam Releases?

- a. 1MS-2037, Steam Supply to the Priming Air Ejector.
- b. 1P-29, Turbine Driven Auxiliary Feedwater Pump.
- c. 1MS-2016, Atmospheric Steam Dump.
- d. 1MS-2050, Condenser Steam Dump.

ANSWER

d.

REFERENCE

LP0035, LP0135

FUNDAMENTAL

NEW

Question #: 74  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.4.31

QUESTION

A transient has occurred on Unit 1 causing multiple alarms. The unit has remained on-line. The Unit 1 CO has just used the "Mushroom" to silence alarms.

Which one of the following individuals is required to be notified that the "Mushroom" has been used?

- a. OS
- b. DOS
- c. 3rd License
- d. Unit 2 CO

ANSWER

d.

REFERENCE

OM 1.1

FUNDAMENTAL

NEW

Question #: 75  
Exam Date: 2002/02/02  
Facility Point Beach: 266  
Reactor Type: PWR-WEC2  
RO/SRO: RO  
K/A 2.4.9

#### QUESTION

Given the following Unit 1 plant conditions:

- OP-3C, Hot Standby to Cold Shutdown, is in progress.
- 1P-10A, RHR Pump, is running.
- Preparations are being made to start 1P-10B, RHR Pump.
- RCS temperature is 250°F and slowly lowering.
- 1P-10A suddenly trips due to motor failure.
- An attempt to start 1P-10B is made, however, its breaker will NOT close.
- Subsequent attempts to start an RHR pump have failed.
- The procedure currently in effect is SEP-1.1, Alternate Core Cooling.

Which of the following methods available in SEP-1.1 would NOT provide for decay heat removal for these conditions?

- a. Steaming via a Steam Generator (SG) and utilizing Auxiliary Feedwater as makeup to the SG.
- b. Feeding with a Safety Injection Pump and opening a Pressurizer PORV.
- c. Steaming via a SG and utilizing Condensate as makeup to the SG.
- d. Gravity drain of the Refueling Water Storage Tank to the RCS via the RHR piping.

#### ANSWER

d.

#### REFERENCE

SEP-3, Loss of All AC Power to a Shutdown Unit, OP-3C, Hot Standby To Cold Shutdown  
HIGH  
NEW