

Final Submittal

(Blue Paper)

OCONEE 2008-301 RETAKE
EXAMINATION 3/20/2008

FINAL RO

WRITTEN EXAMINATION

AND REFERENCES

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

Name:

Date: **March 20, 2008**Facility/Unit: **Oconee**Region: I ☐ II ☒ III ☐ IV ☐Reactor Type: W ☐ CE ☐ BW ☒ GE ☐

Start Time:

Finish Time:

Instructions

Use the answer sheets provided to document your answers. Staple this cover sheet on top of the answer sheets. To pass the examination, you must achieve a final grade of at least 80.00 percent. Examination papers will be collected 6 hours after the examination begins.

Applicant Certification

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

Applicant's Signature**Results**

Examination Value _____ Points

Applicant's Score _____ Points

Applicant's Grade _____ Percent

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1 POINT

Question 1

Unit 1 initial conditions:

- Reactor trip from 100%
- ALL RCPs OFF
- BOTH Main FDW pumps operating
- 1FDW-38 CLOSED
- 1FDW-36 OPEN
- 1FDW-47 OPEN
- 1FDW-45 CLOSED

Current conditions

- 1FDW-38 can not be repositioned

Based on the above conditions, which ONE of the following describes the actions regarding Main FDW pumps and the minimum level (inches) at which the Pzr will be controlled?

In accordance with Subsequent Actions tab of the EOP the operator will trip...

- A. ONE Main FDW pump and control Pzr level > 100
- B. ONE Main FDW pump and control Pzr level > 180
- C. BOTH Main FDW pumps and control Pzr level > 100
- D. BOTH Main FDW pumps and control Pzr level > 180

1 POINT

Question 2

Unit 1 plant conditions:

- Reactor power = 100%
- Pzr code safety valve is suspected of having steam blowing past its seat.
- Pzr temperature = 648 °F
- Quench tank pressure = 5 psig

Based on plant conditions, which ONE of the following describes the expected temperature downstream of the Pzr code safety valve and why?

- A. 228 °F
Because leakage past a valve is a constant enthalpy process
- B. 162 °F
Because leakage past a valve is a constant enthalpy process
- C. 228 °F
Because leakage past a valve is a constant entropy process
- D. 162 °F
Because leakage past a valve is a constant entropy process

1 POINT

Question 3

Unit 1 plant conditions:

Time = 1700

- Reactor power = 100%

Time = 1701

- Reactor tripped due to a SBLOCA

Time = 1706

- RCS pressure = 425 psig slowly decreasing
- All SCMs = 0°F and stable
- HPI header A flow = 478 gpm and stable
- 1A and 1B HPI pumps operating
- 1C HPI pump breaker failed open

Based on the above conditions, which ONE of the following describes what valve must be opened and what flow limit is in effect in accordance with Rule 2 (Loss of SCM)?

- A. Open 1HP-409 and ensure total HPI flow is ≤ 950 gpm
- B. Open 1HP-409 and ensure total HPI flow is ≤ 750 gpm
- C. Open 1HP-410 and ensure total HPI flow is ≤ 950 gpm
- D. Open 1HP-410 and ensure total HPI flow is ≤ 750 gpm

1 POINT

Question 4

Which ONE of the following describes the maximum RB pressure (psig) that will allow securing the RBS system and why it should be secured within 24 hours of the event in accordance with the EOP LOCA CD tab?

- A. < 3
Minimize boric acid corrosion of electrical components in containment
- B. < 3
Minimize the amount of water recirculating outside of containment to reduce dose to the public
- C. < 10
Minimize boric acid corrosion of electrical components in containment
- D. < 10
Minimize the amount of water recirculating outside of containment to reduce dose to the public

1 POINT

Question 5

Unit 2 plant conditions:

- Reactor power = 20% and stable
- Statalarms actuated:
 - 2SA-9/D2 (RCP VIBRATION HIGH) actuated
 - 2SA-16/D2 (RC Pump Motor 2B1 Oil Pot Low Level) actuated
- All RCPs seal leakage flow = 0 gpm

2B1 RCP parameters:

- SEAL RETURN FLOW = 4.0 gpm
- HIGHEST VIBRATIONS
 - Motor shaft = 3.2 mils
 - Spool piece = 17.6 mils
 - Upper bearing = 17.3 mils
- SEAL RETURN TEMPERATURE = 186°F increasing
- OIL POTS
 - Upper - Level = +.22" steady and Temperature = 108°F steady
 - Lower - Level = -1.3" decreasing and Temperature = 113°F increasing
- MOTOR BEARING TEMPERATURE
 - Upper Guide = 130°F decreasing
 - Lower Guide = 205°F increasing
 - Thrust = 140°F steady

Based on the above conditions, which ONE of the following describes why the 2B1 RCP should be tripped immediately?

- A. High seal return flow
- B. High sustained vibration
- C. Seal return temperature increasing
- D. Motor lower guide bearing temperature increasing

1 POINT

Question 6

Unit 1 initial conditions:

- Reactor power = 100%

Current conditions:

- 1HP-120 (RC VOLUME CONTROL) air line is severed

Based on the above conditions, which ONE of the following describes the initial Pzr level change and the valve that will be used to control Pzr level?

- A. increase / 1HP-26
- B. increase / 1HP-410
- C. decrease / 1HP-26
- D. decrease / 1HP-410

1 POINT

Question 7

Unit 1 plant conditions:

- A load rejection caused an RCS Pressure spike
- Pressurizer spray valve failed to fully reseal
- RCS pressure = 2145 psig decreasing slowly

Based on the above conditions, which ONE of the following lists ALL of the banks of Pressurizer Heaters that are energized?

- A. Bank 1 and 2 ONLY
- B. Banks 1 and 3 ONLY
- C. Banks 1, 2 and 3 ONLY
- D. Banks 1, 2, 3 and 4

1 POINT

Question 8

Unit 1 initial conditions:

- Reactor power = 78%
- 1A SG has a 56 gpm tube leak
- Unit shutdown in progress

Current conditions:

- Reactor power = 4% decreasing
- TBVs have failed closed
- 1A SG level = 36 inches SUR increasing slowly
- 1B SG level = 23 inches SUR increasing slowly
- An NEO is using the ADVs to control Turbine Header Pressure at 885 psig

Subsequently, the reactor is manually tripped as directed by procedure.

Which ONE of the following describes the required action of the NEO at the ADVs immediately following the reactor trip and why?

- A. 1B ADV must be throttled in the closed direction to increase 1B SG level
- B. Both ADVs must be throttled in the closed direction to stabilize MS pressure
- C. 1A ADV must be throttled in the open direction to prevent 1A SG overfill
- D. Both ADVs must be throttled in the open direction to prevent lifting the MSRVs

1 POINT

Question 9

Unit 1 plant conditions:

Time = 10:00:00

- Reactor power = 100%
- 1A MD EFDW pump OOS
- 1SA2/A9 (MS PRESS HIGH/LOW) alarms

Time = 10:00:20

- 1A SG pressure = 905 psig decreasing
- 1B SG pressure = 62 psig decreasing
- RB pressure = 3.6 psig increasing
- Core SCM has decreased to 3°F and is now increasing

Based on the above conditions, which ONE of the following describes level (XSUR) at which 1A SG will be controlled 30 minutes from now?

1A SG will be controlled...

- A. automatically at 30".
- B. automatically at 240".
- C. manually at 60".
- D. manually at 270".

1 POINT

Question 10

Unit 1 plant conditions:

Time = 0200

- Power = 100%

Time = 0202

- '1A' SG pressure = 100 psig
- '1B' SG pressure = 810 psig
- RB pressure = 3.6 psig
- PZR level = 9 inches decreasing
- RCS pressure = 1610 psig decreasing
- CETCs = 520°F and decreasing.

Based on the above conditions, which ONE of the following is correct?

A _____ has occurred and _____.

ASSUME NO OPERATOR ACTION

- A. Small break LOCA / ES Channels 3 and 4 have actuated
- B. Small break LOCA / ES Channels 3 and 4 have NOT actuated
- C. Main FDW line break / AFIS will have actuated to secure the Main FDW pumps
- D. Main FDW line break / AFIS will NOT have actuated to secure the Main FDW pumps

1 POINT

Question 11

Unit 1 plant conditions:

- Blackout tab in progress

Which ONE of the following describes the maximum allowed time (minutes) to establish SSF RCMU flow and the bases for this limit?

- A. 14 / prevents RCP seal failures
- B. 14 / ensures minimum makeup required for cooldown
- C. 20 / prevents RCP seal failures
- D. 20 / ensures minimum makeup required for cooldown

1 POINT

Question 12

Plant initial conditions:

- Units 1 and 2 Reactor power = 100%
- Units 3 Reactor power = 26%
- Switchyard Isolation occurs
- Unit 1 regains power from CT-1
- CT-2 Lockout has occurred

Current conditions:

- Unit 2 SSF is activated
- Unit 2 SSF RCMU pump operating
- Unit 2's PORV has seat leakage

Based on the above conditions, which ONE of the following describes who in accordance with OMP 2-1 (Duties and Responsibilities of On-Shift Operations Personnel) is designated to activate the SSF and where the PORV block valve can be operated to stop the leakage?

- A. Unit 2's BOP / SSF control room ONLY
- B. Unit 3's BOP / SSF control room ONLY
- C. Unit 2's BOP / SSF AND Plant control room
- D. Unit 3's BOP / SSF AND Plant control room

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1 POINT

Question 13

Unit 1 initial conditions:

- Reactor power = 100%

Current conditions:

- 1A SG XSUR Primary = Blank
- 1A SG XSUR Backup = 152" stable
- 1B SG XSUR Primary = 152" stable
- 1B SG XSUR Backup = Blank
- 1A SG outlet Pressure (Dixon) Train A = 895 psig
- 1B SG outlet Pressure (Dixon) Train A = 895 psig
- 1A SG outlet Pressure (Dixon) Train B = Blank
- 1B SG outlet Pressure (Dixon) Train B = Blank

Based on current conditions, which ONE of the following states the power supply that has de-energized?

- A. 1DCA
- B. 1KVIB
- C. 1KVIC
- D. 1DCB

1 POINT

Question 14

Unit 1 initial conditions:

- Reactor power = 100%
- 1SA6/B2 INVERTER 1DID SYSTEM TROUBLE actuated

Current conditions:

- NEO reports:
 - 1SA13/A8 INVERTER 1DID INPUT VOLTAGE LOW actuated
 - Inverter 1DID output voltage low

Based on the above conditions, which ONE of the following describes the alarm setpoint (volts DC) and what action does 1SA13/A8 ARG direct if the inverter output voltage remains low?

- A. 110 / Transfer DC bus 1DID power to alternate unit (Unit 2 DCB)
- B. 110 / Transfer power for 1KVID to Regulated Power Panel Board (1KRA)
- C. 121 / Transfer DC bus 1DID power to alternate unit (Unit 2 DCB)
- D. 121 / Transfer power for 1KVID to Regulated Power Panel Board (1KRA)

1 POINT

Question 15

Unit 1 initial conditions:

- Reactor power = 100%

Current conditions:

- A, B and C LPSW pumps tripped
- AP/24, Loss of LPSW in progress
- RCP temperatures increasing

Based on the above conditions, which ONE of the following statements is a required action per AP/24?

- A. If a RCP radial bearing temperature exceeds 225 °F, manually trip the Reactor and stop ONLY that RCP
- B. If a RCP radial bearing temperature exceeds 225 °F, manually trip the Reactor and stop ALL RCPs
- C. If a RCP motor stator temperature exceeds 260 °F, manually trip the Reactor and stop ONLY that RCP
- D. If a RCP motor stator temperature exceeds 260 °F, manually trip the Reactor and stop ALL RCPs

1 POINT

Question 16

Unit 2 initial conditions:

AP/2/A/1700/022, Loss of Instrument Air in progress

Current conditions:

- Instrument Air Pressure = 92 psig decreasing slowly
- An operator has been dispatched to "Place all Backup IA Compressor control switches in BASE"

Which ONE of the following describes how this step should be performed and why?

When transferring from STBY to BASE the switch should...

- A. remain in OFF for at least 3 seconds to prevent activating the anti-pump circuit.
- B. remain in OFF for at least 3 seconds to prevent tripping the breaker.
- C. be turned as quickly as possible to prevent tripping the breaker.
- D. be turned as quickly as possible to prevent activating the anti-pump circuit.

1 POINT

Question 17

Unit 1 initial conditions:

- Reactor power = 100%
- TD EFDWP OOS

Current conditions:

- Reactor power = 40% decreasing
- "1A" Main Steam Line Pressure = 950 psig and slowly decreasing
- "1B" Main Steam Line Pressure = 105 psig and decreasing
- BOTH Main FDW pumps tripped
- BOTH MDEFDW pumps tripped
- RCS Temperature = 505°F and decreasing
- SCM = 7°F decreasing slowly
- OATC is performing Immediate Manual Actions (IMAs)
- BOP is performing a Symptoms Check

Based on the above conditions, which ONE of the following is correct?

The OATC will _____ and the BOP operator will perform _____.

- A. complete IMAs / Rule 1 (ATWS/Unanticipated Nuclear Power Production)
- B. perform Rule 1 (ATWS/Unanticipated Nuclear Power Production) / Rule 2 (Loss of SCM)
- C. perform Rule 1 (ATWS/Unanticipated Nuclear Power Production) / Rule 3 (Loss of Main or Emergency FDW)
- D. complete IMAs / Rule 5 (Main Steam Line Break)

1 POINT

Question 18

Unit 1 initial conditions:

- Reactor power = 35% stable
- AP/34 (Degraded Grid) in progress

Current conditions:

- Generator voltage cannot be maintained within the capability curve

Based on current conditions, which ONE of the following describes a required action in accordance with AP/34?

- A. Open PCB 20 and 21
- B. Manually trip ALL operating Keowee Units
- C. Initiate AP/29 (Rapid Unit Shutdown)
- D. Manually trip the Turbine

1 POINT

Question 19

Unit 1 plant conditions:

- Reactor power = 50%
- Power escalation in progress
- Control rods failed to stop moving out when the CTPD Set was reached
- The OATC took ICS to manual
- Rod motion has stopped
- Tave = 582°F increasing

Based on the above conditions, which ONE of the following is required in accordance with plant transient response process contained in SOMP 1-02 (Reactivity Management)?

- A. Increase FDW to restore Tave to setpoint
- B. Increase FDW to restore heat balance and stop the RCS pressure transient
- C. Insert rods to restore Tave to setpoint
- D. Insert rods to restore heat balance and stop the RCS pressure transient

1 POINT

Question 20

Unit 1 initial conditions:

- Reactor power = 100%
- Turbine trips

Current conditions:

- Reactor power = 14% decreasing
- ALL HPI Pumps operating
- 1A HPI header flow = 675gpm
- 1B HPI header flow = 375gpm
- HPI seal injection flow = 38gpm
- 1HP-24 OPEN
- 1HP-25 indicating lights not LIT
- 1HP-26 and 27 OPEN

Based on the above conditions, which ONE of the following describes the actions (if any) required to place the HPI system in the proper configuration?

- A. No actions are required
- B. Stop 1A or 1B HPI pump
- C. Throttle 1HP-26 to reduce 1A HPI header flow < 475gpm
- D. Ensure total HPI injection flow including RCP Seal Injection is < 950 gpm

1 POINT

Question 21

Unit 1 initial conditions:

- Reactor power = 100%

Current conditions:

- Condenser vacuum = 5.6 inches Hg stable

Based on the above conditions, which ONE of the following describes the expected SGs pressure (psig) and on what **PAM** instrument can it be monitored?

ASSUME NO OPERATOR ACTIONS

- A. Less than 1020 / 1A and 1B MS PRESS
- B. Less than 1020 / 1A and 1B SG OUT PRESS
- C. Greater than 1020 / 1A and 1B MS PRESS
- D. Greater than 1020 / 1A and 1B SG OUT PRESS

1 POINT

Question 22

Unit 1 plant conditions:

- Unit shutdown in progress
- Reactor power = 80% decreasing
- SGTL 1A SG = 20 gpm

Based on the above conditions, which ONE of the following describes the most significant radiation hazard in the vicinity of the Main Steam lines and actions taken to limit the spread of contamination to other units?

A. 6.7 Mev γ 's from the decay of N16

All 3 units Auxiliary Steam Systems are aligned such that each unit is supplying its own Auxiliary Steam Loads.

B. 6.7 Mev γ 's from the decay of N16

The Turbine Building Sump Trenches are split to prevent secondary system leaks from the affected Unit from going to the other units.

C. 2.2 Mev γ 's from the decay of Co60 due to the primary to secondary leakage

All 3 units Auxiliary Steam Systems are aligned such that each unit is supplying its own Auxiliary Steam Loads.

D. 2.2 Mev γ 's from the decay of Co60 due to the primary to secondary leakage

The Turbine Building Sump Trenches are split to prevent secondary system leaks from the affected Unit from going to the other units.

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1 POINT

Question 23

Unit 1 plant conditions:

- Reactor power = 100%
- 1SA-08/A9 RM AREA MONITOR RADIATION HIGH, has actuated
- 1RIA-39 (CNTL RM GAS) is in alarm HIGH

Based on the conditions above, which ONE of the following describes the actions directed to be performed and the reason for the actions?

- A. Start BOTH Outside Air Booster Fans and open Control Room doors to provide dilution to the air in the Control Room and reduce airborne radiation levels
- B. Start BOTH Outside Air Booster Fans and the dampers align to ensure Control Room pressure is positive in relation to outside atmosphere
- C. Start ONE Outside Air Booster Fan and open Control Room doors to provide dilution to the air in the Control Room and reduce airborne radiation levels
- D. Start ONE Outside Air Booster Fan and the dampers align to ensure Control Room pressure is positive in relation to outside atmosphere

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1 POINT

Question 24

Plant conditions:

- A dropped rod caused a runback from 100 to 55% power
- The operating crew has notified Chemistry that power changed greater than 15% in one hour

Which one of the following identifies the analysis to be run by Chemistry and the reason for it?

- A. E Bar to re-calculate the RCS gross activity limit
- B. Dose Equivalent Iodine to monitor for fuel failures and TS compliance
- C. RCS Boron concentration to verify proper shutdown margin
- D. Gamma Isotopic Analysis to determine if a crud burst requires RCS cleanup actions

1 POINT

Question 25

Unit 1 initial plant conditions:

- Reactor power = 25%
- 1FDW-41 (1B Main FDW Control) in MANUAL

Current conditions:

- ICS HAND power lost

Based on the above conditions, which ONE of the following describes the affect on SG feed flow assuming no operator action and what would happen if the AUTO pushbutton is depressed on the 1FDW-41 Hand/Auto Station?

- A. 1B SG overfeed will occur and 1FDW-41 will transfer to AUTO.
- B. 1B SG overfeed will occur and 1FDW-41 will remain in MANUAL.
- C. 1B SG underfeed will occur and 1FDW-41 will transfer to AUTO.
- D. 1B SG underfeed will occur and 1FDW-41 will remain in MANUAL.

1 POINT

Question 26

Unit 1 initial conditions:

- Reactor power = 100%
- HWP Pump Load Shed Defeat Switch selected to 1B
- Both Channels of CRD trip confirm circuitry inoperable

Current conditions:

- Turbine trips
- ES Channels 1 and 2 actuates

Based on the above conditions, which ONE of the following describes which HWP(s) will be operating and the purpose of the LOCA Load Shed Logic circuit?

ASSUME NO OPERATOR ACTIONS

- A. ONLY the 1B HWP will be operating
LOCA Load Shed prevents overloading CT-4 or CT-5
- B. ALL three HWPs will be operating
LOCA Load Shed prevents overloading CT-4 or CT-5
- C. ONLY the 1B HWP will be operating
LOCA Load Shed reduces the post LOCA voltage dip on ES buses
- D. ALL three HWPs will be operating
LOCA Load Shed reduces the post LOCA voltage dip on ES buses

1 POINT

Question 27

Unit plant conditions:

- LOCA CD tab in progress
- ALL SCMs = 4°F increasing
- RCS pressure is controllable
- Statalarm 1SA7/E2 (LP Injection ES Bypass Permit) actuated

Which ONE of the following describes when Statalarm 1SA7/E2 actuates and the required action in accordance with the LOCA CD tab?

- A. RCS Pressure = 900 psig
Bypass ES Channels 1 and 2
- B. RCS Pressure = 900 psig
Bypass ES Channels 3 and 4
- C. RCS Pressure = 1750 psig
Bypass ES Channels 1 and 2
- D. RCS Pressure = 1750 psig
Bypass ES Channels 3 and 4

1 POINT

Question 28

Unit 1 plant conditions:

- Unit Startup is in progress
- RCS Pressure = 800 psig
- 1A1 and 1A2 RCPs are operating

Based on the above conditions, which ONE of the following would prevent 1B2 RCP from starting?

- A. RCS temperature = 300°F
- B. Oil lift pressure = 660 psig
- C. HPI Seal Injection flow rate = 24 gpm
- D. Total Component Cooling flow = 550 gpm

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1 POINT

Question 29

Unit 1 plant conditions:

- BWST Temperature = 85°F
- LDST Temperature = 105°F
- RCS pressure = 685 psig

Based on the above conditions, which ONE of the following describes acceptable suction source(s) for Auxiliary Pressurizer Spray and the reason for the applicable limit in accordance with SLC 16.5.8 (Pressurizer)?

- A. LDST ONLY / to reduce thermal stress on the Pzr spray nozzle
- B. LDST or the BWST / to reduce thermal stress on the Pzr spray nozzle
- C. LDST ONLY / to reduce potential for exceeding Pzr heater capacity
- D. LDST or the BWST / to reduce potential for exceeding Pzr heater capacity

1 POINT

Question 30

Unit 1 plant conditions:

- RCS pressure = 290 psig
- RCS temperature = 240°F
- 1A1 and 1A2 RCP operating
- 1LP-11 (1A LPI COOLER INLET) failed closed

Which ONE of the following describes the LPI mode that will be used for unit cooldown based on the failure of 1LP-11 and what actions, if any, are required to continue the cooldown per OP/1/A/1102/010 (Controlling Procedure For Unit Shutdown)?

- A. Series Mode / no additional action is required
- B. Series Mode / 1/0 RCP operation must be established
- C. Switchover Mode / no additional action is required
- D. Switchover Mode / 1/0 RCP operation must be established

1 POINT

Question 31

Unit 1 plant conditions:

- Mode 5 with RCS temperature at 170 °F with LPI maintaining temperature
- The operating crew is preparing to makeup to the RCS
- No RCPs are operating
- RCS Boron Concentration = 1500 PPM
- COLR Boron Concentration limits are:
 - Refueling – 2200 PPM
 - 1% $\Delta K/K$ @ 70 °F – 1400 PPM
 - 1% $\Delta K/K$ @ 200 °F – 1225 PPM

Based on the above conditions, which ONE of the following is the minimum boron concentration (PPM) allowed for the makeup source?

- A. 2201
- B. 1501
- C. 1401
- D. 1226

1 POINT

Question 32

Unit 1 initial conditions:

- LBLOCA
- Enclosure 5.1 (ES Actuation) in progress
- RCS pressure = 50 psig decreasing
- 1A and 1B LPIPs operating

Current conditions:

- 1A LPIP trips

Based on the above conditions, which ONE of the following describes actions to be taken in accordance with Enclosure 5.1 AND the results of that action?

- A. Close 1LP-17, LPI Flow will be aligned to ONLY the B Injection Nozzle
- B. Close 1LP-12, LPI Flow will be aligned to ONLY the B Injection Nozzle
- C. Close 1LP-17, LPI Flow will be aligned to BOTH Injection Nozzles
- D. Close 1LP-12, LPI Flow will be aligned to BOTH Injection Nozzles

1 POINT

Question 33

Unit 1 plant conditions:

Time = 0400

- Reactor Power =100%

Time = 0405

- RCS pressure =1500 psig decreasing
- RB pressure = 9 psig

Time =0415

- RCS pressure =1100 psig decreasing
- RB pressure = 11 psig
- Enclosure 5.1 (ES Actuation) actions completed awaiting SRO direction to exit

Time = 0500

- RCS pressure =180 psig decreasing
- RB pressure = 7 psig

Based on the above conditions, which ONE of the following actions is directed to be taken immediately in accordance with Enclosure 5.1?

- A. Close 1CF-1 and 1CF-2
- B. Start ALL LPI Pumps
- C. Secure BOTH RBS Pumps
- D. Start ONLY A & B LPI Pumps

1 POINT

Question 34

Unit 1 was operating at 100% power when the following trends were observed:

- RCS pressure began to lower
- Quench tank level began to rise
- Quench tank pressure began to rise

Which ONE of the following correctly describes the **INITIAL** effect on containment when these trends are observed?

- A. Containment pressure rises. 1RIA-47 indicates an increase in radiation level
- B. Containment pressure rises. 1RIA-47 indicated radiation level remains constant.
- C. Containment pressure remains constant. 1RIA-47 indicates an increase in radiation level
- D. Containment pressure remains constant. 1RIA-47 indicated radiation level remains constant

1 POINT

Question 35

Unit 1 initial conditions:

- Reactor power = 100%
- Switchyard isolation occurs

Current conditions:

- Reactor trip
- CT1 lockout

Based on the above conditions, which ONE of the following states how long after the reactor trip the CC pumps will re-energize and from what source will they be powered?

- A. 21 seconds / 1XL and 1XN
- B. 21 seconds / 1XO and 1XP
- C. 31 seconds / 1XL and 1XN
- D. 31 seconds / 1XO and 1XP

1 POINT

Question 36

Unit 1 initial conditions:

- Reactor power = 100%

Current conditions:

- BOTH CC pumps have TRIPPED
- RCP seal injection = 8 gpm/pump

Based on current conditions, which ONE of the following describes the continued operation of the RCPs?

- A. RCPs must be secured immediately
- B. RCPs must be secured within 30 minutes
- C. RCPs may continue operation indefinitely
- D. RCP can operate up to 100 hours

1 POINT

Question 37

Unit 1 initial conditions:

- Reactor power = 100%
- A transient occurs

Current conditions:

- RCS pressure = 2130 psig decreasing
- Pzr level = 78 inches stable
- Pzr temperature = 639 °F decreasing

Based on the current conditions, which ONE of the following states the status of the Pzr heaters and why?

- A. All Pzr heaters are OFF to protect the heaters due to low Pzr level
- B. ALL Pzr heater would be energized to increase RCS pressure to normal
- C. Bank 1, 2, and 3 Pzr heaters ONLY will be energized to increase RCS pressure
- D. Bank 2 Pzr heaters will be energized by the Saturation Recovery Circuit to establish saturated conditions in the Pzr

1 POINT

Question 38

Unit 1 initial conditions:

- Reactor power = 100%

Current conditions:

- 1B1 Reactor coolant pump trips

Based on the above conditions, which ONE of the following RPS trips will prevent exceeding the DNBR safety limit?

- A. High flux
- B. Flux/Pump
- C. Flux/Flow/Imbalance
- D. High RCS Temperature

1 POINT

Question 39

Unit 1 initial conditions:

- Reactor power = 100%

Current conditions:

- Reactor trip due to Variable Low Pressure

Which ONE of the following sets of detector failures resulted in the above reactor trip?

ASSUME NO OPERATOR ACTION

- A. WR RCS pressure A and B fail low
- B. WR RCS Pressure A and B fail high
- C. NR RCS pressure A and E fail low
- D. NR RCS Pressure A and E fail high

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1 POINT

Question 40

Unit 1 plant conditions:

- A SBLOCA has occurred
- EOP LOSCM tab in progress
- Reactor Building pressure = 25 psig decreasing
- EOP Enclosure 5.12 (ECCS Suction Swap to RBES) in progress
 - RBES has just been aligned to the suction of the LPI Pumps

Based on the above conditions, which ONE of the following describes the initial BWST level response and the required condition(s) for isolating LPI pumps from the BWST?

- A. BWST level initially decreases
When BWST level is 9 feet and RB level is increasing.
- B. BWST level initially decreases
When BWST level is less than 6 feet
- C. BWST level initially remains constant
When BWST level is 9 feet and RB level is increasing.
- D. BWST level initially remains constant
When BWST level is less than 6 feet

1 POINT

Question 41

Unit 1 plant conditions:

- Reactor power = 100%
- RBNS Level is increasing
- LPSW RBCU COOLER Flows are as follows:
 - 1A INLET = 990 gpm
 - 1A OUTLET = 580 gpm
 - 1C INLET = 930 gpm
 - 1C OUTLET = 970 gpm

Based on the conditions above, which ONE of the following describes the condition of the RBC Units, AND the action directed to correct the condition?

- A. The RBCU "C" is leaking,
Isolate the "C" RBCU outlet, then inlet to prevent water hammer and minimize generation and processing of liquid radwaste.
- B. The RBCU "A" is leaking,
Isolate the A RBCU outlet, then inlet to prevent water hammer and minimize generation and processing of liquid radwaste.
- C. The RBCU "C" is leaking,
Isolate the "C" RBCU inlet, then outlet to maintain containment integrity and prevent dilution of the RB Sump.
- D. The RBCU "A" is leaking,
Isolate the "A" RBCU inlet, then outlet to maintain containment integrity and prevent dilution of the RB Sump.

1 POINT

Question 42

Unit 1 initial conditions:

- Time = 0400
- Reactor power = 20%

Current conditions:

- Time = 0401
- RB pressure = 14 psig increasing
- 1TD de-energized

Based on the above conditions, which ONE of the following describes the expected status of the Reactor Building Spray System (RBS)?

- A. 1A RBS pump - OPERATING
1B RBS pump - OFF
1BS-1 - OPEN
1BS-2 - OPEN
- B. 1A RBS pump - OPERATING
1B RBS pump - OFF
1BS-1 - OPEN
1BS-2 - CLOSED
- C. 1A RBS pump - OFF
1B RBS pump - OPERATING
1BS-1 - OPEN
1BS-2 - OPEN
- D. 1A RBS pump - OFF
1B RBS pump - OPERATING
1BS-1 - CLOSED
1BS-2 - OPEN

1 POINT

Question 43

Unit 1 initial conditions:

- Reactor power = 100%
- Troubleshooting in progress on Channel "A" Reactor Building Spray Pressure String

Current conditions:

- The High RB pressure Contact Buffer is removed in Channel "A"
- 1SA-7/D3 (ES RB Spray Pwr Supply Failure or Channel "A" Module Removed) actuated

Based on the above conditions, which ONE of the following describes the impact on the ES channels?

- A. ES Channel 7 and 8 are in a 1 out of 2 trip logic Mode
- B. ES Channel 7 and 8 are in a 2 out of 2 trip logic Mode
- C. ES Channel 5 and 6 are in a 1 out of 2 trip logic Mode
- D. ES Channel 5 and 6 are in a 2 out of 2 trip logic Mode

1 POINT

Question 44

Unit 3 plant conditions:

- Critical just below the Point of Adding Heat
- The Turbine Bypass Valves are in MANUAL at the Auxiliary Shutdown Panel (ASDP)
- Turbine Header Pressure = 885 psig

Based on the above conditions, which ONE of the following describes **initial** turbine header pressure response if a manual reactor trip is initiated?

Turbine Header Pressure will...

- A. decrease and RCS temperature will decrease until TBVs are closed.
- B. increase to approximately 1010 psig and RCS temperature will increase to 555°F.
- C. remain at approximately 885 psig and RCS temperature will remain relatively constant.
- D. increase to the main steam relief valve settings and RCS temperature will be maintained at approximately 560°F.

1 POINT

Question 45

Unit 1 initial conditions:

- Reactor power = 100%
- ICS is in MANUAL

Current conditions:

- AP/29 (Rapid Unit Shutdown) is initiated to reduce power to 15%

Based on the above conditions and in accordance with AP/29, which ONE of the following describes which Main FDW pump will be secured first and what plant indications will be used to determine when the pump will be removed from service?

- A. 1A Main FDW pump / when a statalarm for FDWP flow at or below minimum is received for the associated Main FDW pump and CTP < 65%
- B. 1A Main FDW pump / ≈ 325 MWe
- C. 1B Main FDW pump / when a statalarm for FDWP flow at or below minimum is received for the associated Main FDW pump and CTP < 65%
- D. 1B Main FDW pump / ≈ 325 MWe

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1 POINT

Question 46

Unit 1 initial conditions:

- Time = 0400
- Reactor power = 100%
- TDEFDW Pump OOS
- Switchyard Isolation occurs

Current conditions:

- Time = 0403
- 1A and 1B MDEFDW Pump operating
- Power has been lost to the HAND/AUTO Station for 1FDW-316

Based on the above conditions, which ONE of the following describes the response of "1B" SG level?

ASSUME NO OPERATOR ACTION

- A. Steadily lower to "dryout"
- B. Maintain at 30"
- C. Maintain at 240"
- D. Steadily rise and overflow to the steam lines

1 POINT

Question 47

Unit 2 initial conditions:

- Reactor power = 27%
- PCB-24 (Unit 2 Generator Output Breaker-to Yellow Bus) is OPEN

Current conditions:

- Reactor trip

Based on the above conditions, which ONE of the following describes the MFB breaker operation and the RCP status?

The "N" breakers will open and the....

- A. "E" breakers will NOT close automatically
RCPs will trip
- B. "E" breakers will close in 1.7 seconds
RCPs will remain in operation
- C. "E" breakers will close immediately
RCPs will remain in operation
- D. "E" breakers will close in 21 seconds
RCPs will trip

1 POINT

Question 48

Which ONE of the following is powered from DCA (125VDC Control Power Bus)?

- A. EFWPT Auxiliary Oil Pump
- B. KSF1 Inverter
- C. Main FDW Pump Turbine Control power
- D. KX Inverter

1 POINT

Question 49

Unit 1 initial conditions:

- Reactor power = 100%
- ACB-3 closed
- 230 KV Switchyard Voltage sustained at 223.1 KV

Current conditions:

- RCS pressure = 1120 psig
- RB pressure = 3.9 psig

Based on the above conditions, which ONE of the following describes the source of power and the transformer which will energize the Unit 1 Main Feeder Busses?

ASSUME NO OPERATOR ACTIONS

- A. ONS Switchyard via CT-1 Transformer
- B. Keowee Unit 1 via CT-4 Transformer
- C. Keowee Unit 2 via CT-1 Transformer
- D. Keowee Unit 2 via CT-4 Transformer

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1 POINT

Question 50

Which ONE of the following will DIRECTLY initiate an emergency start signal to BOTH Keowee Units?

- A. STAR_A relay actuation
- B. Switchyard Isolation Confirm signal
- C. Standby Breaker Close Initiation signal
- D. Keowee Emergency Start Channel "B" is manually actuated from Unit 2's Cable Room.

1 POINT

Question 51

Unit 1 initial conditions:

- Reactor power = 100%
- 1A GWD tank release in progress
- 1RIA-38 OOS

Current conditions:

- Loss of power to RM-80 skid of 1RIA-37
- 1SA8/B9 RM PROCESS MONITOR RADIATION HIGH in alarm
- 1SA8/B10 RM PROCESS MONITOR FAULT in alarm

Based on the above conditions, which ONE of the following states the status of 1GWD-4 (A GWD TANK DISCHARGE) and stipulations for the release?

- A. 1GWD-4 will remain open / GWD tank release may continue if 1RIA-37 is re-energized within one hour.
- B. 1GWD-4 will automatically close / GWD tank release may be re-initiated as long as 1RIA-37 is re-energized within one hour.
- C. 1GWD-4 will remain open / GWD tank release may continue as long as two independent samples are obtained.
- D. 1GWD-4 will automatically close / GWD tank release may be re-initiated as long as two independent samples are obtained prior to the release.

1 POINT

Question 52

Unit 1 initial conditions

- Mode 5
- RB Purge in operation

Current conditions:

- Radiation levels in the RB increasing

Based on current conditions, which ONE of the following describes the operation of the Unit Vent Radiation Monitors 1RIA-45 and 1RIA-46 when the switchover acceptance range setpoint is reached?

1RIA-45 will read _____ and 1RIA-46 will provide _____

- A. offscale high / only alarm and unit vent radiation level indication.
- B. offscale high / the same interlock functions that RIA-45 performs.
- C. ZERO / only alarm and unit vent radiation level indication.
- D. ZERO / the same interlock functions that RIA-45 performs.

1 POINT

Question 53

Unit 1 and 2 initial conditions:

- A & B LPSW pump operating

Current conditions:

- 1SA9/A9 LPSW HEADER A PRESS LOW
- A LPSW pump amps = 15 - 35 fluctuating
- B LPSW pump amps = 55 stable
- LPSW HDR PRESS = rapidly fluctuating between 60 & 75 psig

Based on current conditions, which ONE of the following describes the status of the LPSW pumps and what actions are directed by plant procedures?

- A. The A LPSW pump is cavitating / Place the Unit 1/2 STANDBY LPSW PUMP AUTO START CIRCUIT in DISABLE then stop LPSW Pump A and start LPSW Pump C
- B. The A LPSW pump has a sheared shaft / Place the Unit 1/2 STANDBY LPSW PUMP AUTO START CIRCUIT in DISABLE then stop LPSW Pump A and start LPSW Pump C
- C. The A LPSW pump is cavitating / Start LPSW Pump C then stop LPSW Pump A
- D. The A LPSW pump has a sheared shaft / Start LPSW Pump C then stop LPSW Pump A

1 POINT

Question 54

Unit 1 initial conditions:

- Reactor power = 100%
- Power reduction to 70% initiated to secure RCP
- STANDBY 1 Backup IA Compressor start
- IA pressure = 91 psig decreasing
- AP/22 (Loss of Instrument Air) initiated

Current conditions:

- IA pressure = 85 psig stable
- Reactor power = 80% decreasing
- Total FDW flow = 9.9 E6 lbm/hr stable

Based on current conditions, which ONE of the following describes the actions directed by AP/22?

- A. Trip the reactor and BOTH MFWPs
- B. Dispatch operator to Manually OPEN 1CC-8
- C. Dispatch operator to throttle 1HP-31 to ~ 32 gpm
- D. Isolate the LPSW supply to the RB Aux Coolers

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1 POINT

Question 55

Unit 1 initial conditions:

- LOCA
- RB Pressure = 4.5 psig increasing
- RCS Pressure = 1500 psig decreasing

Current conditions:

- RB Pressure = 2.5 psig stable
- RCS Pressure = 1800 psig stable
- ES reset is desired

Based on the current conditions, which ONE of the following describes the components that must be reset in order to allow the HPIPs ES Logic to be reset?

- A. HPI Trip Bistables in Analog Channels A/B/C / Reset ES Ch 1&2 Digital Channels
- B. HPI and RB Pressure Trip Bistables in Analog Channels A/B/C / Reset ES Ch 1&2 Digital Channels
- C. HPI Trip Bistables in Analog Channels A/B/C / Reset ES Ch 3&4 Digital Channels
- D. HPI and RB Pressure Trip Bistables in Analog Channels A/B/C / Reset ES Ch 3&4 Digital Channels

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1 POINT

Question 56

Unit 1 initial conditions:

- Time 0900
- Reactor power = 68%
- CR group 2 rod 3 dropped into the core
- 1B2 RCP secured
- 1SA4/C1 QUADRANT POWER TILT in alarm

Current conditions

- Time 1300
- Encl 4.15 (Recovery of Dropped/Misaligned Safety or Regulating Control Rod With Diamond In automatic) of OP/1/A/1105/019 (Control Rod Drive System) in progress.
- Reactor Engineering has determined no maneuvering limitations other than those specified by the procedure need to be applied

Based on above conditions, which ONE of the following states the maximum reactor power allowed by Tech Spec and during the recovery of the dropped control rod, what procedural limitations are required for the rate of control rod withdrawal?

- A. 60% / Withdrawn with no designated wait periods
- B. 45% / Withdrawn with no designated wait periods
- C. 60% / Withdrawn in 10% increments spaced 30 min apart
- D. 45% / Withdrawn in 10% increments spaced 30 min apart

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1 POINT

Question 57

Unit 1 Conditions

0800

- Reactor power = 100% stable
- Pzr level = 210" decreasing
- RC MAKE UP FLOW = 120 gpm increasing
- 1RC-66 Relief Outlet Temp = 118°F increasing slowly
- Quench Tank level = 86 inches stable
- AP/2 (RCS Leakage) initiated

0810

- RC MAKE UP FLOW = 160 gpm increasing
- Pzr level = 190" decreasing

In accordance with AP-2, which ONE of the responses below answers the following?

a) What is the required action for conditions at 0800?

b) What is the required action for conditions at 0810?

- A. Close 1RC-4 / Initiate rapid unit shutdown
- B. Close 1RC-4 / Trip the reactor
- C. Close 1HP-5 / Initiate rapid unit shutdown
- D. Close 1HP-5 / Trip the reactor

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1 POINT

Question 58

Unit 1 plant conditions:

- Reactor power = 100%
- 1HP-120 (RC Volume Control) has failed CLOSED due to controller malfunction
- 1HP-5 (Letdown Isolation) is CLOSED
- PZR level = 210 inches
- Total HPI Nozzle Warming line flow = 8 gpm

Based on the above conditions, which ONE of the following will be PZR Level (inches) in one hour?

Assume:

- **No additional operator actions**
- **RCS Temperature remains constant**
- **No thermal expansion of the water used for makeup**

- A. 275
- B. 295
- C. 310
- D. 330

1 POINT

Question 59

Unit 1 initial conditions:

- Time = 0400
- Reactor power = 100%

Current conditions:

- Time = 0401
- Control Rods are Inserting
- Neutron Error is Negative
- Feedwater flow is Increasing
- SG levels are increasing
- RPS Channel A trip

Based on the current conditions, which ONE of the following malfunctions has occurred?

- A. Controlling NI signal has failed HIGH
- B. Controlling RCS NR pressure failed LOW
- C. Controlling Turbine Header Pressure failed HIGH
- D. Controlling Tave failed LOW

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1 POINT

Question 60

As indicated on the ICCM plasma display, which ONE of the following describes the lowest indicated CETC temperature (°F) at which core uncover is certain AND the indicated CETC temperature when fuel melt is occurring?

- A. 1200 / 5000
- B. 1200 / 2500
- C. 2200 / 5000
- D. 2200 / 2500

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1 POINT

Question 61

Which ONE of the following describes who determines that a RB Continuous Release is allowed and after it is started what are the requirements for sampling the RB atmosphere in accordance with OP/1102/014 (RB Purge System)?

- A. Shift RP / Release may continue indefinitely after initial 24 hours without submitting daily sample requests.
- B. Shift RP / Release may continue indefinitely provided RP assigns a new GWR number and sample results are entered in the Unit Log every 24 hours.
- C. CRSRO / Releases may continue indefinitely after initial 24 hours without submitting daily sample requests.
- D. CRSRO / Release may continue indefinitely provided RP assigns a new GWR number and sample results are entered in the Unit Log every 24 hours.

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1 POINT

Question 62

Unit 1 plant conditions:

- Reactor power = 18% decreasing
- 1SA2/E8, MS STM GEN "A" LEVEL LOW LIMIT in alarm
- 1SA2/E9, MS STM GEN "B" LEVEL LOW LIMIT in alarm
- 1A SG level = 25" SUR stable
- 1B SG level = 25" SUR stable
- 1A SG Loop Tave = 580 °F slowly decreasing
- 1B SG Loop Tave = 578 °F slowly decreasing
- Tave Setpoint = 579 °F

Based on the above conditions, which ONE of the following states the validity of the SG Low Level Limit Stat Alarms?

- A. ONLY 1A SG Stat Alarm is valid
- B. ONLY 1B SG Stat Alarm is valid
- C. BOTH 1A and 1B SG Stat Alarms are valid
- D. Neither 1A and 1B SG Stat Alarms are valid

1 POINT

Question 63

Unit 3 initial conditions:

- Time = 0400
- Reactor power = 25%
- EHC DISCHARGE HEADER PRESSURE = 1600 psig
- TURBINE BEARING OIL PRESSURE = 22 psig decreasing

Current conditions:

- Time = 0401
- EHC DISCHARGE HEADER PRESSURE = 1200 psig
- TURBINE BEARING OIL PRESSURE = 7 psig increasing

Based on the current conditions, which ONE describes the response of the Main Turbine and the RPS system?

The Main Turbine will trip due to low...

- A. EHC DISCHARGE HEADER PRESSURE and RPS will trip the reactor.
- B. EHC DISCHARGE HEADER PRESSURE and RPS will NOT trip the reactor.
- C. TURBINE BEARING OIL PRESSURE and RPS will trip the reactor.
- D. TURBINE BEARING OIL PRESSURE and RPS will NOT trip the reactor.

1 POINT

Question 64

Initial plant conditions:

- All units 100% power
- Unit 1 Gaseous Waste Release (GWR) is planned
- 1RIA-37 is inoperable due to a failed source check
- 1RIA-37 background is $1.3 \text{ e}+03 \text{ cpm}$
- 1RIA-38 background is $1.0 \text{ e}+01 \text{ cpm}$

Current plant conditions:

- GWD Tank Sample Request recommends resetting RIA's as follows:
 - 1RIA-37 at 800 cpm above background
 - 1RIA-38 at 30 cpm above background

Based on the above conditions, which ONE of the following describes the correct setpoints used for 1RIA 37 & 1RIA-38?

- A. 1RIA-37 is set to $2.1 \text{ e}+03$, 1RIA-38 is set to $4.0 \text{ e}+01$
- B. 1RIA-37 is set to 0.0, 1RIA-38 is set to $4.0 \text{ e}+01$
- C. 1RIA-37 is set to $2.1 \text{ e}+03$, 1RIA-38 is set to $3.0 \text{ e}+01$
- D. 1RIA-37 is set to 0.0, 1RIA-38 is set to $3.0 \text{ e}+01$

1 POINT

Question 65

Unit 1 plant conditions:

- 1SA3/B6 (FIRE ALARM) actuated

Based on the above conditions, which ONE of the following describes the status of the Fire Alarm Control Panel and 1SA3/B6 Stat Alarm?

- A. Only ONE alarm location can be displayed until the initial alarm is cleared and reset. 1SA3/B6 can alarm again as soon the existing Fire Alarm Control Panel alarm(s) are acknowledged.
- B. Multiple alarms can be displayed using the Prev/Next Switch to scroll before any alarms are reset. 1SA3/B6 can not alarm again until the condition has cleared and current Fire Alarm Control Panel Alarm is reset.
- C. Only ONE alarm location can be displayed until the initial alarm is cleared and reset. 1SA3/B6 can not alarm again until the condition has cleared and current Fire Alarm Control Panel Alarm is reset.
- D. Multiple alarms can be displayed using the Prev/Next Switch to scroll before any alarms are reset. 1SA3/B6 can alarm again as soon the existing Fire Control Panel alarm(s) are acknowledged.

1 POINT

Question 66

Unit 1 plant conditions:

- MODE 6
- Reactor shutdown 5 days ago
- Defueling in progress
- 1RIA-3 (Fuel Transfer Canal Monitor) has been declared out of service
- Repair expected to take 4 hours
- Fuel handling was suspended in the Reactor Building when 1RIA-3 failed

Based on the above conditions, which ONE of the following describes the status of fuel handling operations in the Reactor Building?

- A. Fuel handling activities can resume as long as the Main Fuel Bridge Area Monitor remains operable.
- B. Fuel handling activities can resume as long as 1RIA-49 (RB Vent Gas) remains operable.
- C. Fuel handling activities cannot be resumed until 1RIA-3 is declared operable.
- D. Fuel handling activities can resume using a portable instrument that has the appropriate range and sensitivity.

1 POINT

Question 67

An ECP is calculated for Unit 1 at the following conditions:

- 400 EFPD
- 535 °F RCS Temperature
- 200 ppmB RCS boron concentration
- (-1.47%) $\Delta k/k$ Xenon/Samarium Concentration

The Estimated Critical Position is calculated to be CRD Group 7 at 30% w/d

Which ONE of the following changes will result in an Estimated Critical Position of CRD Group 7 greater than 30% w/d?

- A. 395 EFPD
- B. 537°F RCS temperature
- C. (-1.26%) $\Delta k/k$ Xenon/Samarium Concentration
- D. 190 ppmB RCS boron concentration

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1 POINT

Question 68

Unit 1 and 3 Conditions:

- Mode 4
- RCS Cooldown in Progress
- LPI in-service
- RCP's secured

Which ONE of the following correctly describes the actions directed by procedures to reduce the cooldown rate of the RCS on each of the Units?

- A. Unit 1 - Raise LPI Flow through the LPI Cooler Bypass Line while reducing LPI Flow through the cooler
Unit 3 - Lower LPSW Flow through the in-service LPI Cooler
- B. Unit 1 - Lower LPSW Flow through the in-service LPI Cooler
Unit 3 - Raise LPI Flow through the LPI Cooler Bypass Line while reducing LPI Flow through the cooler
- C. Unit 1 - Lower LPI Flow through the LPI Cooler Bypass Line while raising LPI Flow through the cooler
Unit 3 - Raise LPSW Flow through the in-service LPI Cooler
- D. Unit 1 - Raise LPSW Flow through the in-service LPI Cooler
Unit 3 - Lower LPI Flow through the LPI Cooler Bypass Line while raising LPI Flow through the cooler

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1 POINT

Question 69

Unit 1 plant conditions:

- EFDWP Discharge Startup Checklist in progress
- 1C-156 (TD EFDWP Normal Supply) checklist position is OPEN
- 1C-156 (TD EFDWP Normal Supply) is Red Tagged CLOSED per an R&R to repair a packing leak

Based on the above conditions, which ONE of the following describes the process for closing the valve checklist (if any)?

- A. Review the impact of the out of position valve, list the R&R number on the checklist and initial
- B. Review the impact of the out of position valve, list the Work Request number on the checklist and initial
- C. Review the impact of the out of position valve, N/A the block and note on the checklist that an R&R is outstanding and initial
- D. The valve checklist cannot be closed with a valve out of position

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1 POINT

Question 70

Unit 1 plant conditions:

- MODE 3
- SR 3.1.1.1(Verify SDM is within the limit specified in the COLR) has a 24 hour frequency
- SR 3.1.1.1 was last performed at 1000 on 8/12

Based on the above conditions and applying any extensions allowed, which ONE of the following indicates the latest time that SR 3.1.1.1 must be performed before it is classified as a missed surveillance?

- A. 8/13 @ 1000
- B. 8/13 @ 1600
- C. 8/13 @ 1900
- D. 8/14 @ 1600

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1 POINT

Question 71

A NEO is to valve out the Unit 1A Seal Supply filter.

Based on the RWP and the Plan View, which ONE of the following describes the maximum time (minutes) he can take to perform this task before he must exit the area?

SEE ATTACHMENT

- A. 33
- B. 60
- C. 166
- D. 300

1 POINT

Question 72

Plant conditions:

- Refueling of Unit 3 is complete
- The Reactor Vessel Head is installed
- RCS temperature is being maintained at 150 °F
- An NEO must enter the Reactor Annulus

Which ONE of the choices fills in the blanks of the following statement?

Access to the Reactor Annulus is controlled by _____. The in-core wires must be _____ before entry is permitted, and _____ RP coverage is required for entry.

- A. RP Supervisor / Manager; “parked”; periodic
- B. RP Supervisor / Manager; fully inserted into the reactor core; continuous
- C. Operations Shift Manager; “parked”; continuous
- D. Operations Shift Manager; fully inserted into the reactor core; periodic

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1 POINT

Question 73

Unit 3 plant conditions:

- Reactor power = 100%
- 3A and 3B RCW pumps tripped

Based on above conditions, which ONE of the following states the procedure that should be entered?

- A. EP/3/A/1800/001 (Emergency Operating Procedure)
- B. AP/3/A/1700/22 (Loss of Instrument Air)
- C. AP/3/A/1700/29 (Rapid Unit Shutdown)
- D. AP/3/A/1700/35 (Loss of SFP Cooling and/or Level)

1 POINT

Question 74

Unit 1 initial conditions:

- Reactor power = 100%

Current conditions:

- Switchyard isolation due to low switchyard voltage
- CT1 lockout

Based on the above conditions, which ONE of the following states what will initiate the trip and which operator will be directed to perform AP/25 (Standby Shutdown Facility Emergency Operating Procedure)?

- A. Loss of MFWPs / BOP
- B. Loss of MFWPs / OATC
- C. High RCS Press / BOP
- D. High RCS Press / OATC

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1 POINT

Question 75

Unit 1 plant conditions:

- Reactor power = 100%
- 1RIA-40, CSAE Off-Gas Monitor, reading is rising slowly
- 1RIA-54, Turbine Building (TB) Sump Monitor, is inoperable
- The operating crew has just entered AP/31, PRIMARY TO SECONDARY LEAKAGE

Based on the above conditions, which ONE of the following describes who must be notified and a required action?

The operating crew must notify _____ to sample the TB sump and direct an NEO to _____.

- A. Secondary Chemistry / open and white tag the TB Sump Pump breakers.
- B. Secondary Chemistry / align the TB Sump to the TB Sump Monitor Tanks.
- C. Radiation Protection / open and white tag the TB Sump Pump breakers.
- D. Radiation Protection / align the TB Sump to the TB Sump Monitor Tanks.