
ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 1 **QID:** 0086 **Rev:** 001 **Point:** 1.00

Following a CEA or CEDMCS malfunction in which the CEA was misaligned greater than 19 inches, the abnormal procedure directs you to hold reactor power constant for _____ after CEA alignment to _____.

- A. 1 hour, prevent pellet-clad interaction.
- B. 1 hour, minimize xenon redistribution.
- C. 2 hours, prevent pellet-clad interaction.
- D. 2 hours, minimize xenon redistribution..

QUESTION: 2 **QID:** 0014 **Rev:** 001 **Point:** 1.00

OP 2104.004, Shutdown Cooling Ops, prohibits the use of Containment Spray (CS) pumps for shutdown cooling unless RCS Pressure is less than 50 psia. Which one (1) of the following is the reason this condition is required?

- A. To ensure that RCS Inventory is NOT lost.
- B. To ensure that insoluble gasses do NOT collect in the CS pump.
- C. To ensure that CS pump has adequate NPSH.
- D. To ensure adequate flow rate exists for core cooling.

QUESTION: 3 **QID:** 0057 **Rev:** 000 **Point:** 1.00

Which one (1) of the following circulates water through the Reactor Coolant Pump (RCP) Seal Cooler?

- A. RCP Auxiliary Impeller.
- B. RCP Main Impeller.
- C. RCP Recirc Impeller.
- D. Delta P between RCP and Volume Control Tank (VCT).

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QUESTION: 4 **QID:** 0223 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

- * 2203.016, Excess RCS Leakage procedure has been entered due to excessive RCS leakage.
- * RCS Tave is 573F and steady.
- * Charging Pump 2P36C is Out of Service.
- * Charging Pumps 2P36A and 2P36B are running.
- * Letdown is secured to determine location of RCS Leak.
- * RCS Leakage is calculated to be 90 gpm.

Which of the following is the appropriate action to be performed in accordance with 2203.016?

- A. Maintain RCS conditions stable to prevent loss of pressurizer level while attempting to locate the leak.
- B. Commence a normal plant shutdown and be in Mode 3 within six (6) hours.
- C. Commence a rapid plant shutdown and be in Mode 3 within one (1) hour.
- D. Perform a manual reactor trip and go to 2202.001, Standard Post Trip Actions

QUESTION: 5 **QID:** 0219 **Rev:** 000 **Point:** 1.00

Containment Purge will be automatically secured on all of the following EXCEPT:

- A. Hi-Hi alarm signal on Radwaste Area Disch 2VEF-8A/B Process Rad Monitor 2RITS-8542.
 - B. Hi-Hi alarm signal on Containment Purge Disch 2VEF-15 Process Rad Monitor 2RITS-8233.
 - C. Hi Containment Pressure of 18.3 psia.
 - D. Pressurizer Pressure of 420 psia and variable setpoint of 450 psia.
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QUESTION: 6 **QID:** 0212 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

- * Plant trip occurred ten (10) minutes ago from full power.
- * Pressurizer pressure is 2100 psia and slowly rising
- * Pressurizer level lowered to 25% and is now 32% and rising.
- * Both Steam Generator pressures are 1000 psia and steady.
- * All systems are in automatic and have actuated as required.

Which of the following is the correct condition for the Pressurizer Heaters at this time?
(ASSUME NO OPERATOR ACTION)

- A. Backup heaters are OFF and proportional heaters are ON.
- B. Proportional heaters are OFF and backup heaters are ON.
- C. All pressurizer heaters are ON.
- D. All pressurizer heaters are OFF.

QUESTION: 7 **QID:** 0209 **Rev:** 001 **Point:** 1.00

The plant has just tripped from 100% power. What effect will a rise in containment temperature (i.e. from 80F to 250F) have on the Steam Generator Narrow Range level instruments?

- A. Actual level will be higher than indicated level due to voiding in the variable leg.
 - B. Actual level will be higher than indicated level due to reference leg temperature increase.
 - C. Actual level will be lower than indicated level due to voiding in the variable leg.
 - D. Actual level will be lower than indicated level due to reference leg temperature increase.
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QUESTION: 8 **QID:** 0201 **Rev:** 0 **Point:** 1.00

The following plant conditions exist:

- * Loss of Offsite Power has occurred from full power.
- * AACDG is Out of Service.
- * 4160 VAC ESF Bus 2A3 has lockout.
- * #2EDG has failed.
- * Twenty (20) minutes later a loss of Green D.C. occurs.

Which of the following actions should be performed for these conditions?

- A. Locally throttle EFW Valves 2CV-1026-2 and 2CV-1076-2.
- B. Locally start and manually control EFW Pump 2P7A.
- C. Re-open MSIVs and feed SGs with Main Feedwater Pump.
- D. Cross-connect Red and Green Train DC Buses.

QUESTION: 9 **QID:** 0228 **Rev:** 000 **Point:** 1.00

Procedure 2202.007, Loss of Offsite Power, directs the operator to verify Component Cooling Water (CCW) isolated to Containment. What is the reason for this action?

- A. To prevent thermal shocking the CEDM Coolers upon restart of the CCW Pumps.
 - B. To prevent water hammer in Containment Building piping upon restart of CCW Pumps.
 - C. To prevent thermal shocking the RCPs upon restart of CCW Pumps.
 - D. To prevent runout of the CCW Pumps upon restart.
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QUESTION: 10

QID: 0260

Rev: 000

Point: 1.00

Which of the following describes why 2CV-0742, Condensate X-Connect prior to MFP suction, is procedurally required to be open during MFP operations?

- A. Equalize Condensate flow.
- B. Prevent Condensate piping overpressurization.
- C. Equalize Main Feedwater flow.
- D. Ensure MFP NPSH maintained.

QUESTION: 11

QID: 0206

Rev: 001

Point: 1.00

Given the following plant conditions:

- * Mode 5 operation
- * LPSI Pump 2P60A in service on Shutdown Cooling.
- * RCS Pressure is 180 psia.
- * #2EDG is Out Of Service for maintenance.
- * Lockout occurs on 4160VAC ESF bus 2A3.
- * Loss of Offsite Power (LOOP) occurs.

Which of the following actions should be performed for the given conditions to restore SDC flow?

- A. Place #1EDG on 2A4 and start LPSI Pump 2P60B.
 - B. Place AACDG on 2A4 and start LPSI Pump 2P60B.
 - C. Place AACDG on 2A4 and start Containment Spray Pump 2P35B.
 - D. Place AACDG on 2A4 and start HPSI Pump 2P89B.
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QUESTION: 12

QID: 0256

Rev: 000

Point: 1.00

Which of the following describes the reason heat removal capability of the Containment Coolers is enhanced following actuation of SIAS and CCAS?

- A. Containment Cooling Fans shift to high speed and the bypass dampers open.
- B. Containment Cooling Fans shift to high speed and Service Water is aligned to cooling coils.
- C. Chilled water is aligned to cooling coils and Service Water is isolated.
- D. Service Water is aligned to cooling coils and bypass dampers are opened.

QUESTION: 13

QID: 0241

Rev: 001

Point: 1.00

Which of the following statements correctly describes the position of 4160 VAC ESF Bus cross-tie breakers 2A-310 and 2A-410 prior to going from Mode 5 operation to Mode 4 operation?

- A. Racked down fully with control power energized.
 - B. Racked up fully with control power energized.
 - C. Racked down to approximately one (1) inch above the floor.
 - D. Racked up to approximately one (1) inch from full up position.
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QUESTION: 14

QID: 0258

Rev: 001

Point: 1.00

The plant is operating at 100% power. The Channel A Pressurizer Pressure Low trip bistable is bypassed due to the Safety Channel A pressure transmitter failing low. The Channel D PPS Functional Test is being performed as scheduled. Prior to inserting a low Pressurizer Pressure signal into Channel D, the RO depresses the trip channel bypass button for the Channel D Pressurizer Pressure Low trip bistable. The RO then notices his mistake. What is the results of this action if the RO stops at this point?

- A. Channel A and D are bypassed and trip logic is 1 out of 2.
 - B. Channel A and D are bypassed and trip logic is 2 out of 2.
 - C. Channel D does NOT bypass, Channel A is removed from bypass, a reactor trip and SIAS occurs.
 - D. Channel D does NOT bypass, Channel A is removed from bypass, a reactor trip and SIAS do NOT occur.
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QUESTION: 15

QID: 0253

Rev: 001

Point: 1.00

Given the following conditions:

- * Mode 6 with refueling in progress.
- * All interlocks satisfied to move bridge on Main Refueling Machine.
- * Fuel Handler desires to move bridge forward but mistakenly takes hold of the Hoist control lever and moves it in the RAISE direction.
- * Fuel Handler realizes mistake and attempts to move the bridge in the forward direction, but it will not move.

The reason the Refueling Machine would NOT move is because the Hoist Control Switch movement:

- A. actuated the Bridge-Trolley Interlock and this button must be depressed before bridge movement will be allowed.
 - B. caused hoist to move above the Up Limit and must be reset with computer override keyswitch before bridge movement will be allowed.
 - C. actuated the Hoist Load Bypass Interlock and this button must be pulled before bridge movement will be allowed.
 - D. caused Hoist Overload Limit alarm and must be reset with computer override keyswitch before bridge movement will be allowed.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 16

QID: 0247

Rev: 001

Point: 1.00

The following plant conditions are given:

- * Twenty (20) minutes post trip from full power.
- * Pressurizer Level indicates 100%.
- * Pressurizer Pressure is 1400 psia.
- * RVLMS level 6 wet.
- * "A" SG pressure is 860 psia.
- * "B" SG pressure is 870 psia.
- * CET temperature indicates 580 degree F.
- * Auxiliary Spray in service.

Which of the following actions should be performed for the given conditions?

- A. Restart RCPs to allow use of normal Pressurizer Spray.
- B. Override HPSI to restore Pressurizer Level.
- C. Repressurize RCS to restore Margin to Saturation.
- D. Depressurize RCS via Reactor Vessel Hi Point vents.

QUESTION: 17

QID: 0233

Rev: 000

Point: 1.00

Given the following plant conditions:

- * Full power operation.
- * Shutdown Bank B CEA 002 indicates 117 inches withdrawn.
- * Shutdown Bank B CEA 017 indicates 123 inches withdrawn.
- * I & C Maintenance in progress in CEDMCS Room.

Which of the following actions should be performed for the given conditions?

- A. Notify I & C to stop maintenance.
 - B. Trip the Reactor.
 - C. Notify the CRS to enter procedure 2203.003, CEA malfunction AOP.
 - D. Notify the SS to enter Tech Spec 3.1.3.1.e for misaligned CEA.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 18

QID: 0283

Rev: 001

Point: 1.00

Given the following plant conditions:

- * Post trip from full power.
- * Loss of 4160V ESF Bus 2A2 has occurred.
- * Loss Of Coolant Accident (LOCA) in progress.
- * #2 Emergency Diesel Generator (EDG) failure has occurred.
- * Refueling Water Tank (RWT) Level is 6%.
- * HPSI Pump 2P89C is Out of Service.
- * HPSI Pump 2P89A Recirc Isolation Valve 2CV-5126-1 breaker trips.

Which of the following actions should be performed for the given conditions?

- A. Place HPSI Pump 2P89A in Pull-To-Lock.
- B. Cross-tie 2A3 and 2A4 and start HPSI Pump 2P89B.
- C. Cross-tie 2Y1 and 2Y2 and close ESF Header Recirc Isolation 2CV-5628-2.
- D. Cross-tie 2B5 and 2B6 and close ESF Header Recirc Isolation 2CV-5628-2.

QUESTION: 19

QID: 0273

Rev: 000

Point: 1.00

The following conditions exist:

- * Plant operating at full power.
- * Annunciator 2K11-C10, Process Liq Rad Hi/Lo is actuated.
- * 2RITS-5202, Loop II CCW Return is in Hi alarm.
- * Loop II CCW Surge Tank Level is 45%.
- * Letdown is isolated.
- * Pressurizer Level is 60%.

Which of the following actions should be performed for the given conditions?

- A. Locally shift CCW Pump Room drains to Auxiliary Building.
 - B. Locally isolate ESF Pump Room floor drains.
 - C. Lower Loop II CCW Surge Tank Level to 20%.
 - D. Raise Loop II CCW Surge Tank Level to 70%.
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QUESTION: 20

QID: 0268

Rev: 001

Point: 1.00

Given the following plant conditions:

- * 15 minutes Post Reactor Trip.
- * Containment Radiation Monitors indicate 2 Rem and rising very slowly.
- * Volume Control Tank level decrease of 1% in eight (8) minutes.
- * Containment Sump Level increase of 1% in fifteen (15) minutes.
- * Loss of 6900V buses 2H1 and 2H2 has occurred.

Which of the following will minimize the possibility of a Reactor Head void formation for the given conditions?

- A. Maintain Margin To Saturation 30 to 35 degrees F.
- B. Maintain Margin To Saturation > 50 degrees F.
- C. Reduce RCS pressure to minimize RCS inventory loss.
- D. Maximize RCS pressure to minimize void fraction.

QUESTION: 21

QID: 0262

Rev: 000

Point: 1.00

Given the following plant conditions:

- * Mode 5 operation.
- * RCS temperature is 120 degrees F.
- * RCS pressure is atmospheric.
- * Annunciator 2K12-A8, Instr Air Press Hi/Lo is actuated.
- * IA pressure on 2PIS-3013 on Panel 2C14 is 75 psig and lowering.

Which of the following actions should be performed for the given conditions?

- A. Immediately secure Shutdown Cooling.
 - B. Dispatch an operator to throttle 2CV-5091 to prevent pump runout.
 - C. Dispatch an operator to throttle 2CV-5093 to prevent pump runout.
 - D. Cross-connect IA with Unit 1.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 22

QID: 0227

Rev: 001

Point: 1.00

The following plant conditions exist:

- * Large Loss of Coolant Accident has occurred.
- * All Reactor Coolant Pumps are secured.
- * No Safety Injection Flow is available.
- * Reactor Coolant in the core region is at saturated conditions.

SELECT the expected response of the Excore Nuclear Instrumentation System Startup Channels as the coolant in the core region is initially boiled off and level in the core drops.

- A. Count rate rises because the level in the down comer drops.
- B. Count rate lowers because the level in the down comer rises.
- C. Count rate lowers because there are fewer neutrons generated.
- D. Count rate rises because there are more neutrons generated.

QUESTION: 23

QID: 0204

Rev: 000

Point: 1.00

The following plant conditions exist:

- * A large break LOCA has occurred on Unit 2.
- * EOP 2202.003, Loss of Coolant Accident is being implemented.
- * Hydrogen Analyzers initially indicate 0.7%.
- * Hydrogen concentration has increased another 2.2% since the initial reading.
- * No equipment is out of service.

Which of the following actions are required to satisfy the Containment Combustible Gas Control safety function?

- A. Ensure both Hydrogen Recombiners are in service.
 - B. Ensure the Hydrogen Purge System in service.
 - C. Ensure both Hydrogen Recombiners and Hydrogen Purge System in service.
 - D. Ensure both Hydrogen Purge System and Containment Spray in service.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 24

QID: 0221

Rev: 000

Point: 1.00

Given the following plant conditions:

- * Loop II CCW Surge Tank Level increased from 40% to 55% in 10 minutes.
- * Pressurizer Level is 60% and stable.
- * VCT level decreased from 77% to 73% in 10 minutes.

What is the Reactor Coolant System Leakage Rate for these conditions?

- A. 4 GPM.
- B. 14 GPM.
- C. 44 GPM.
- D. 64 GPM.

QUESTION: 25

QID: 0215

Rev: 001

Point: 1.00

A fire has been detected in the Unit 2 Containment Building. As the Fire Brigade Leader working with the Fire Department, you are asked what type of automatic water suppression system is used in the immediate vicinity of the Containment Upper and Lower South Cable Spreading Areas.

Which of the following is the correct response?

- A. A deluge water spray sprinkler.
 - B. A wet pipe sprinkler.
 - C. Automatic pre-action sprinkler.
 - D. Dry pipe sprinkler.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 26

QID: 0068

Rev: 000

Point: 1.00

Which of the following Steam Generator level bands will be maintained fifteen (15) minutes post trip for the following conditions:

- * Plant was operating at full rated power.
- * Emergency Feedwater Pump 2P7B Out of Service for maintenance.
- * All systems operate properly.
- * Loss of Offsite Power (LOOP) occurs.

- A. 58 - 62% Narrow Range.
- B. 240 - 260 inches Wide Range.
- C. 23 - 26% Narrow Range.
- D. 90 - 120 inches Wide Range.

QUESTION: 27

QID: 0017

Rev: 000

Point: 1.00

Given the following:

- * A large Break LOCA has occurred.
- * Containment Spray has actuated.
- * Operators are evaluating if Containment Spray can be secured according to 2202.003, Loss of Coolant Accident.

Which one (1) of the following is the MAXIMUM containment pressure below which containment spray may be secured?

- A. 24.0 psia.
 - B. 22.0 psia.
 - C. 20.3 psia.
 - D. 18.3 psia.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 28

QID: 0295

Rev: 000

Point: 1.00

Given the following plant conditions:

- * Refueling Outage has just been completed.
- * Preparations being made for RCS heatup and Reactor Startup.
- * RCS Temperature is 180F.
- * RCS Pressure is 270 psia.
- * RCS Boron Concentration is 2535 ppm.
- * Preparations for starting RCP and securing SDC are in progress.

Which one of the following describes a condition that requires Containment Building integrity be established?

- A. Increasing RCS pressure to 400 psia.
- B. Increasing RCS temperature to 225F.
- C. Reducing RCS Boron concentration to 2300 ppm.
- D. Securing SDC and starting RCP for RCS cooling.

QUESTION: 29

QID: 0272

Rev: 001

Point: 1.00

Given the following conditions:

- * Plant operating in Mode 1.
- * Dry fuel movement in progress.
- * Loaded dry fuel cask is dropped seven (7) feet in train bay due to crane failure.

Which of the following procedures should be entered for the given conditions?

- A. 2203.002, Spent Fuel Pool Emergencies.
 - B. 2203.008, Natural Emergencies.
 - C. 2503.003, Operation of Fuel Handling Equipment.
 - D. 2502.001, Refueling Shuffle
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 30 **QID:** 0008 **Rev:** 001 **Point:** 1.00

Given the following:

- * A small fire has started due to burning insulation inside breaker cubicle 2B52-A4.
- * Power to the breaker cannot be interrupted.

Which one (1) of the following should be used to extinguish the fire?

- A. Foam generating extinguisher.
- B. Pressurized water extinguisher.
- C. CO2 Extinguisher.
- D. Dry chemical extinguisher.

QUESTION: 31 **QID:** 0255 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

- * Ten (10) minutes post trip from full power.
- * RCS pressure is 1600 psia and stable.
- * Containment pressure is 18.7 psia and lowering.
- * Restoration of CCW to Containment has commenced.
- * Loop II CCW Surge Tank Level lowers to 9%.

Which of the following actions should be performed for the given conditions?

- A. Maintain RCP seal cooldown rates < 100 degrees F/Hr.
 - B. Throttle 2CV-5255-1 open to increase Loop II CCW flow by 100 gpm.
 - C. Trip remaining RCPs and isolate CCW to Containment.
 - D. Trip remaining RCPs and actuate CIAS.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 32 **QID:** 0280 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

- * 70% Reactor Power.
- * 2P32A Reactor Coolant Pump (RCP) shaft shear occurs.

Which of the following will cause an automatic trip of the Reactor to occur for the given conditions?

- A. Low Pressurizer Pressure.
- B. High Pressurizer Pressure.
- C. Reactor Core Exit Quality of zero (0).
- D. Asymmetric Steam Generator Trip.

QUESTION: 33 **QID:** 0088 **Rev:** 001 **Point:** 1.00

Steam Bypass Valve 2CV-0302 receives a quick open block for a:

- A. Turbine Power to Load Unbalance..
 - B. Turbine Setback with a Feed Pump trip.
 - C. Reactor trip with Tave less than or equal to 552F.
 - D. Reactor trip with SG Pressure less than or equal to 915 psia
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 34

QID: 0009

Rev: 000

Point: 1.00

The following conditions exist:

Unit 2 is at 50% power.

Power escalation in progress.

Which one of the following CEDM components is the FIRST component to be energized when the CBOR places the CEA control switch to WITHDRAW?

- A. Lift Coil.
- B. Upper Gripper Coil.
- C. Load Transfer Coil.
- D. Lower Gripper Coil.

QUESTION: 35

QID: 0051

Rev: 000

Point: 1.00

Which one (1) of the following is used by the Pressurizer Level Controller to generate the pressurizer level curve (programmed level)?

- A. RCS Delta T.
 - B. RCS Tavg.
 - C. Tref.
 - D. Reactor Power.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 36

QID: 0218

Rev: 000

Point: 1.00

You are withdrawing Reg Group 6 CEAs when one CEA in the group stops moving while the rest continue to withdraw. Which of the following conditions will prevent any further group withdrawal when reached?

- A. 4.9 inch misalignment detected by CPC target CEAs.
- B. 5.0 inch misalignment detected by CEACs.
- C. When CPC Target CEA generates a CWP.
- D. When PMS pulse counter generates a CWP.

QUESTION: 37

QID: 0225

Rev: 001

Point: 1.00

Given the following plant conditions:

- * 480 VAC ESF Bus 2B5 overcurrent trip.
- * Loss of Offsite Power (LOOP).
- * Loss of DC Bus 2D02.

Which of the following actions is preferred for the given conditions?

- A. Tie AACG to 4160 VAC Bus 2A1 and feed SGs with Auxiliary Feedwater Pump 2P75.
 - B. Tie AACG to 4160 VAC Bus 2A1 and feed SGs with Main Feedwater Pumps.
 - C. Cross-tie 4160 VAC ESF Bus 2A3 to 2A4 and feed with Emergency Feedwater Pump 2P7A.
 - D. Cross-tie 4160 VAC ESF Bus 2A3 to 2A4 and feed with Emergency Feedwater Pump 2P7B.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 38 **QID:** 0301 **Rev:** 000 **Point:** 1.00

The plant is operating at 100% power with all systems in normal power lineup. Which of the following Reactor Coolant Pump (RCP) malfunction indications on a single RCP would allow the affected RCP to be stopped after the plant is shutdown, rather than requiring an immediate reactor trip and RCP stoppage?

- A. Failure of the lower, middle and upper shaft seals.
- B. Vapor seal pressure is 1610 psia and rising slowly.
- C. Valid "Stator WDG Temp Hi" annunciator and stator temperature rising.
- D. Controlled Bleedoff (CBO) flow 5.8 gpm and CBO temperature 181F and rising.

QUESTION: 39 **QID:** 0199 **Rev:** 002 **Point:** 1.00

Given the following plant conditions:

- * Pressurizer Level has decreased by 10% in 10 minutes.
- * Loop II CCW Surge Tank has increased by 57% in 10 minutes.
- * Loop II CCW Radiation Monitor is in high alarm.
- * Reactor has been manually tripped.
- * All RCPs are secured.
- * EOP/AOP Actions completed for cooldown to Shutdown Cooling Entry Conditions.

Which of the following statements describe the status of RCS leakage?

- A. Directed to Reactor Drain Tank.
 - B. Directed to Quench Tank.
 - C. Directed to Aux Bldg floor drains.
 - D. Directed to Containment floor drains.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 40

QID: 0108

Rev: 000

Point: 1.00

Which of the following describes an automatic function of the 1E-4% bistable?

- A. Bypasses High Log power trip.
- B. Bypasses High Steam Generator Level Trips.
- C. Enables High Log Power Trip.
- D. Enables High Steam Generator Level Trips.

QUESTION: 41

QID: 0264

Rev: 000

Point: 1.00

Given the following plant conditions:

- * 20 minutes post trip from full power.
- * RCS pressure 1200 psia.
- * RCS Thot temperature 530 degree F.
- * RVLMS Level 4 wet.
- * "A" SG Level is 12% narrow range.
- * "B" SG Level is 47% narrow range.
- * Pressurizer Level is 34% and rising.

Which of the following actions must be performed to allow HPSI override?

- A. Restore Margin To Saturation to > 30 degrees F.
 - B. Restore SG Levels to > 50% Narrow Range.
 - C. Restore Pressurizer Level to 41%.
 - D. Restore RVLMS to Level 2 wet.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 42

QID: 0274

Rev: 000

Point: 1.00

The following plant conditions exist:

- * Ten (10) minutes post-trip from full power.
- * SG "A" pressure is 680 psia.
- * SG "B" pressure is 660 psia.
- * SG "A" level is 6% narrow range.
- * SG "B" level is 4% narrow range.

Which of the following actions must be performed to feed SG "A"?

- A. Manually actuate Emergency Feedwater Actuation System (EFAS).
- B. Manually start Emergency Feedwater Pump 2P7A.
- C. Take 2HS-1038-2 and 2HS-1025B-1 to EFAS override and commence manual feed.
- D. Take 2HS-1038-2 and 2HS-1025B-1 to MSIS override and commence manual feed.

QUESTION: 43

QID: 0126

Rev: 000

Point: 1.00

Which ONE of the following describes the Excore Nuclear Instrumentation Safety Log Channel response as power is increased from the source range to full power.

- A. At about 1E-6% (Log Safety Channel), the NI input shifts from two detectors to one detector and the recorder on Panel 2C03 drops 1-2 decades.
 - B. At about 1E-6% (Log Safety Channel), the NIs shift from log count rate to the Campbelling Circuit and the Panel 2C03 log channel meter indications drop 1-2 decades.
 - C. At about 2E-2% (Log Safety Channel), the NIs shift from a count rate circuit to the Campbelling Circuit and there is no other noticeable indication changes.
 - D. At about 2E-2% (Log Safety Channels), the NIs shift from the Campbelling Circuit to the Count Rate Circuit and there is no other noticeable indication changes.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 44 **QID:** 0231 **Rev:** 000 **Point:** 1.00

The reactor has just tripped due to a Loss of 4160V ESF Bus 2A4. As the CBOR what are your required actions when you notice two (2) CEAs stuck out?

- A. Commence emergency boration via gravity feed valves.
- B. Commence emergency boration using Boric Acid Makeup Pump 2P39A and emergency boration valve.
- C. Commence emergency boration using Boric Acid Makeup Pump 2P39B and emergency boration valve.
- D. Commence emergency boration via RWT Outlet valve.

QUESTION: 45 **QID:** 0298 **Rev:** 001 **Point:** 1.00

Which of the following statements describes Unit 2 Control Room Watchstander (SS, CRS, SE, CBOR and CBOT) respirator qualification requirements?

- A. Self contained breathing apparatus (SCBA), due to control room watch standing requirements.
 - B. Self contained breathing apparatus (SCBA), due to fire brigade watch standing requirements.
 - C. Air purifying respirators, due to fire brigade watch standing requirements.
 - D. Air purifying respirators, due to control room watch standing requirements.
-
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 46

QID: 0242

Rev: 001

Point: 1.00

Given the following plant conditions:

- * Full power operations.
- * Emergency Feedwater Pump 2P7B surveillance in progress.
- * Condensate Supply to EFW Suction (2EFW-0706) is closed.
- * EFW Pump 2P7B Discharge Stop Check (2EFW-6) is closed.
- * SW Supply to EFW Pump 2P7B (2SW-39A) is open.

The surveillance procedure requires that an operator be stationed locally in communication with the Control Room to _____ if EFAS is actuated.

- A. Open 2EFW-0706.
- B. Open 2EFW-6.
- C. Close 2SW-39A.
- D. Throttle 2SW-39A.

QUESTION: 47

QID: 0251

Rev: 000

Point: 1.00

Determine the plant response for the following conditions:

- * FWCS "A" Master Controller in Manual.
 - * Plant Trip from full power occurs.
- A. SG "A" will continuously rise until HLO isolates feedwater.
 - B. SG "A" will continuously rise until FW Blocks isolate feedwater.
 - C. SG "A" will initially shrink then slowly rise until HLO isolates feedwater.
 - D. SG "A" will initially shrink then slowly rise until FW blocks isolate feedwater
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 48

QID: 0297

Rev: 000

Point: 1.00

Plant conditions are:

- * A LOCA has occurred.
- * Whole body dose rates are 3 Rem/hr in the "B" SDC Heat Exchanger Room.
- * An "ALERT" Emergency Classification has been declared.

A female WCO with complete exposure records is assigned to align the "B" SDC train for decay heat removal. This job is expected to take 30 minutes. The WCO has a radiation history of 1000 mrem exposure for this year.

Which of the following statements is correct for the additional dose that would be received by performing this system alignment with the above conditions?

- A. WCO will NOT exceed annual ANO Admin whole body (TEDE) limits for radiation workers.
- B. WCO will NOT exceed annual ANO Admin whole body (TEDE) limits for female radiation workers.
- C. WCO will exceed annual Federal whole body (TEDE) limits for female radiation workers..
- D. WCO will exceed annual ANO Admin whole body (TEDE) limits for radiation workers..

QUESTION: 49

QID: 0234

Rev: 002

Point: 1.00

The following plant conditions exist:

- * A plane has crashed in the switchyard.
- * Large fire exists.

Which of the following groups should be requested of assistance first for the given conditions?

- A. London Fire Department.
 - B. Russellville Fire Department.
 - C. Federal Aviation Administration.
 - D. Little Rock Air Force Base.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 50 **QID:** 0261 **Rev:** 000 **Point:** 1.00

Which of the following sets of parameters match plant response for a turbine trip from 50% Reactor Power?

- A. Reactor tripped, Tave approximately 540 degrees F.
- B. Reactor tripped, Tave approximately 550 degrees F.
- C. Reactor power approximately 50%, Tave approximately 550 degrees F.
- D. Reactor power approximately 50%, Tave approximately 560 degrees F.

QUESTION: 51 **QID:** 0279 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

- * Mode 5.
- * LPSI Pump 2P60B in service through "A" SDC Heat Exchanger.
- * All ESF component breakers available.

Which of the following will occur if the handswitch for Cntmt Spray Header Isolation 2CV-5612-1 is taken to the OPEN position on Control Room Panel 2C17?

- A. Cntmt Building will be sprayed down with water from Reactor Coolant System (RCS).
 - B. Cntmt Building will be sprayed down with water from Refueling Water Tank (RWT).
 - C. Pump interlock will defeat opening of Cntmt Spray Header Isolation 2CV-5612-1.
 - D. LPSI Pump 2P60B will trip due to contact in Cntmt Spray Header 2CV-5612-1 MOV logic.
-
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 52

QID: 0276

Rev: 000

Point: 1.00

Given the following plant conditions:

- * Twenty (20) minutes post trip from full power.
- * Startup Transformer #3 is locked out.
- * Alternate AC Diesel Generator (AACG) Out of Service.
- * Steam Generator Tube Rupture in progress.
- * #1 Emergency Diesel Generator (EDG) has failed.
- * 4160 VAC ESF Bus 2A3 crosstied to 2A4.
- * #2 Emergency Diesel Generator (EDG) is loaded to 3300 KW.
- * Emergency Feedwater Pump 2P7A overspeed trip device is tripped and will not reset.

Which of the following action should be performed for the given conditions?

- A. Un-crosstie 2A3 and 2A4.
- B. Reduce #2EDG load to 3000 KW.
- C. Reduce #2EDG load to 2800 KW.
- D. Cross-tie 2B5 to 2B6.

QUESTION: 53

QID: 0294

Rev: 000

Point: 1.00

Which of the following conditions would cause the Steam Generator Tube Leak N-16 Monitor System output to be invalid?

- A. Any Excore NI Power indicates < 20% power.
 - B. Feedwater Flow signal from FWCS indicates < 25% plant power.
 - C. COLSS Plant Power (CV9000) indicates < 20% Power.
 - D. Steam Flow signal from FWCS indicates < 25% plant power.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 54 **QID:** 0265 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

- * Plant operating at full power.
- * DNBR indicates 1.1

Which of the following actions should be performed?

- A. Enter Loss of COLSS AOP.
- B. Commence power reduction until DNBR > 1.25.
- C. Depress PPS reset pushbuttons on Panel 2C03.
- D. Depress DSS pushbutton on Panel 2C03.

QUESTION: 55 DELETED **QID:** 0226 **Rev:** 001 **Point:** 1.00

Given the following plant conditions:

- * Full Power Operations.
- * RCS Gross Activity is 3.3 microcuries/gram.
- * RCS Iodine Activity is 12 microcuries/gram.
- * Auxiliary Building Area Radiation Monitors are reading 0.4 R/Hr.
- * Letdown System is isolated.

Which of the following actions should be performed for the given conditions?

- A. Immediately trip the Reactor.
 - B. Restore Letdown System to service and place demineralizers in service.
 - C. Secure all Reactor Coolant Pumps.
 - D. Isolate Controlled Bleedoff from RCPs.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 56

QID: 0200

Rev: 001

Point: 1.00

The following plant conditions exist:

- * Unit 2 is holding at 20% power following a refueling outage.
- * Moderator Temperature Coefficient (MTC) is $+0.3E-4$ delta k/k/degree F.
- * The CBOT increases Steam Generator Blowdown flow from 20 gpm to 100 gpm on both SGs.

Which of the following statements describes the immediate plant response to this evolution?
(Assume no operator actions)

- A. Reactor power increases, letdown flow increases, feedwater flow increases.
- B. Reactor power decreases, letdown flow increases, feedwater flow decreases.
- C. Reactor power increases, letdown flow decreases, feedwater flow decreases.
- D. Reactor power decreases, letdown flow decreases, feedwater flow increases.

QUESTION: 57

QID: 0207

Rev: 001

Point: 1.00

Which of the following conditions meet safety function criteria to ensure an adequate heat sink for RCS Heat Removal in the Standard Post Trip Actions (SPTA)?

- A. SG levels at 5 % with "A" MFWP in Reactor Trip Override.
 - B. SG levels at 10% with EFW Pump 2P7A total flow 615 gpm.
 - C. SG levels at 35% with EFW pumps and MFW Pumps unavailable.
 - D. SG levels at 95% with "A" MFWP in Reactor Trip Override.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 58

QID: 0195

Rev: 001

Point: 1.00

Given the following plant conditions:

- * A trip from full power occurred three (3) minutes ago.
- * RCS Tave is 552F and stable.
- * Pressurizer pressure is 1737 psig and decreasing rapidly.
- * Pressurizer level is 28% and increasing rapidly.
- * Containment pressure is 14.4 psia and stable.

Which ONE of the following events has occurred?

- A. Steam Generator Tube Leak.
- B. RCS Sample Line Rupture.
- C. Stuck open Pressurizer Safety Valve.
- D. Small steam line break inside containment.

QUESTION: 59 DELETED

QID: 0217

Rev: 001

Point: 1.00

A plant downpower is in progress with the following conditions:

- * Tref is 565F and dropping.
- * Tave is 570F and steady.
- * Boration is in progress at 20 gpm.
- * Main turbine is being unloaded at 30 MW/min.

Select the following statement which is true regarding this downpower:

- A. Turbine unloading rate is excessive for the boration rate, as evidenced by the steady Tave indication.
 - B. Turbine unloading rate is excessive for the boration rate, as evidenced by the dropping Tref indication.
 - C. Boration rate is excessive for the turbine load rate, as evidenced by the dropping Tref indication.
 - D. Boration rate is excessive for the turbine load rate, as evidenced by the steady Tave indication.
-
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 60 **QID:** 0080 **Rev:** 001 **Point:** 1.00

During a loss of condenser vacuum event, the following annunciators are received:

- * 2K03-E09 FWP Turb "A" Vacuum Lo
- * 2K03-E12 FWP Turb "B" Vacuum Lo

Prior to these alarms which of the below listed alarms should have been received first?

- A. 2K03-C3 Condenser 2E11A/B delta P High.
- B. 2K02-A14 SDBCS Emergency Off.
- C. 2K03-A3 2E11A Pressure Hi.
- D. 2K03-A8 2P1A Feed Pump Trip.

QUESTION: 61 **QID:** 0032 **Rev:** 001 **Point:** 1.00

Given the following plant conditions:

- * A Steam Line Break exists upstream of the "B" S/G MSIV.
- * Main Steam Isolation has automatically actuated.

The primary reason for providing a steaming flowpath from the unaffected steam generator following dryout of the affected steam generator is to prevent:

- A. A void formation in the Reactor Vessel Upper Head.
 - B. An increase in core exit temperatures resulting in an interruption of natural circulation.
 - C. A rapid increase in Tcold of the unaffected loop resulting in an interruption in natural circulation.
 - D. A rapid repressurization of the RCS and subsequent pressurized thermal shock.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 62

QID: 0085

Rev: 000

Point: 1.00

Given the following plant conditions:

- * A Loss of Offsite Power has occurred.
- * Reactor is in Mode 3
- * RCS pressure is 1900 psia and slowly rising.
- * Tcold is 550F and constant.
- * Average CET temperature is 597 degrees F.
- * Steam Generator "A" & "B" levels are 15% NR and slowly rising.
- * Thot is 585F and slowly lowering.

All of the following conditions meet the criteria for single phase natural circulation in accordance with OP 2202.007, Loss of Offsite Power with the exception of:

- A. Tcold Temperature trend.
- B. Thot Temperature trend.
- C. Subcooled Margin.
- D. Thot - CET differential temperature.

QUESTION: 63

QID: 0119

Rev: 000

Point: 1.00

Which one of the following interlocks/permissives in CEDMCS is provided by the reed switch position transmitters (RSPT)?

- A. Lower Group Stop.
 - B. Upper Control Limit.
 - C. Upper Electrical Limit.
 - D. Upper Group Stop.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 64 **QID:** 0142 **Rev:** 001 **Point:** 1.00

During normal power operations, Reactor Coolant Pump 2P32B Upper Oil Reservoir level begins to drop. Annunciators 2K11-F3, RCP "B" UPPER/LOWER OIL RSVR LEVEL LO" and 2K11-B3, RCP "B" UPPER THRUST BEARING METAL TEMPERATURE HI are actuated. Thrust Bearing temperature is rising. Which one (1) of the following operator actions is required?

- A. Trip RCP 2P32B if vibration increase noted..
- B. Trip RCP 2P32B if thrust bearing temperature exceeds 330F.
- C. Immediately trip the reactor and stop ALL RCPs.
- D. Immediately trip the reactor and stop RCP 2P32B.

QUESTION: 65 **QID:** 0112 **Rev:** 002 **Point:** 1.00

If 2PSV-4822, the Chemical and Volume Control System (CVCS) 600 psig relief valve, inadvertently lifts and sticks open, which of the following indications is expected?

- A. Back pressure regulating valve closes down.
- B. Hold Up Tank (2T12) level rises rapidly.
- C. Letdown Flow Control Valve closes down.
- D. Letdown Heat Exchanger temperature rises.

QUESTION: 66 **QID:** 0100 **Rev:** 001 **Point:** 1.00

The purpose of energizing the Pressurizer Backup Heaters when the Pressurizer level rises above Programmed Level during an insurge is:

- A. To raise Pressurizer pressure to saturation.
- B. To raise Pressurizer steam space temperature.
- C. To return Pressurizer pressure to setpoint.
- D. To return Pressurizer water temperature to saturation.

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 67 **QID:** 0083 **Rev:** 001 **Point:** 1.00

Given the following plant conditions:

- * Pressurizer Level Control Channel Selector is positioned to "B" channel.
- * Pressurizer Low Level Heater Cutout Channel Selector is positioned to BOTH.
- * All Pressurizer Heaters are on for Boron Equalization.

Which of the following describes the status of the Pressurizer Heaters if Pressurizer Level Channel A fails low?

- A. All Pressurizer Heaters remain energized.
- B. All Pressurizer Heaters will de-energize.
- C. All Backup Heaters de-energize, all Proportional Heaters remain energized.
- D. All Pressurizer Heaters de-energize except Train B powered heaters.

QUESTION: 68 **QID:** 0082 **Rev:** 002 **Point:** 1.00

Which of the following actions should be initially performed for the following conditions?

- * Plant operating at full power conditions.
 - * Emergency Feedwater Pump 2P7A Out Of Service for Maintenance.
 - * A Loss of Offsite Power occurs.
 - * A lockout occurs on 2DG1 when it auto starts.
 - * After ten (10) minutes 4160V ESF Bus 2A3 is energized from the AACG Diesel Generator.
- A. Start EFW Pump 2P7B, override and throttle open 2CV-1025-1 and 2CV-1075-1.
 - B. Start EFW Pump 2P7B, override and throttle open 2CV-1036-1 and 2CV-1038-1.
 - C. Start EFW Pump 2P7B and maximize EFW flow to both Steam Generators.
 - D. Reset EFAS signals to allow EFW to automatically feed both Steam Generators.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 69**QID:** 0220**Rev:** 000**Point:** 1.00

The plant is operating at 100% when the CBOR notices Tcold dropping and Reactor Power rising. Which of the following would give these indications?

- A. Atmospheric Dump Valve 2CV-1001 failed open.
- B. EH supply to the Main Turbine #4 control valve is blocked.
- C. Emergency Feedwater Pump 2P-7A tripped on overspeed.
- D. Atmospheric Dump Valve 2CV-0305 failed open.

QUESTION: 70**QID:** 0208**Rev:** 000**Point:** 1.00

Which of the following conditions will result in a Loss of Letdown System flow?

- A. Temperature of 150F leaving the Letdown Heat Exchanger.
 - B. VCT Outlet Valve (2CV-4873-1) fails closed.
 - C. Loss of Instrument Air to Letdown Rad Monitor Isolation Valve (2CV-4804).
 - D. Letdown flow of 120 gpm with only one charging pump running.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 71

QID: 0196

Rev: 0

Point: 1.00

Given the following conditions:

- * Unit 2 operating at full licensed power.
- * Normal operating temperature and pressure.
- * A steam leak develops on the "A" Main Steam line outside containment.
- * A one (1) gpm RCS leak develops on the "A" Hot Leg.
- * Containment pressure is at atmospheric.

Which of the following statements correctly describes the condition of the steam exiting each leak?

- A. The primary side steam is saturated, the secondary steam is saturated.
- B. The secondary steam is superheated, the primary steam is saturated.
- C. The primary steam is superheated, the secondary steam is superheated.
- D. The secondary steam is saturated, the primary steam is superheated.

QUESTION: 72

QID: 0229

Rev: 001

Point: 1.00

Plant conditions are as follows:

- * RCS Pressure is 1100 psia and slowly lowering.
- * CET Temperature is 465 degrees F and slowly lowering.
- * Pressurizer Level is 0%.
- * SG "A" pressure is 375 psia and level is 70 inches Wide Range.
- * SG "B" pressure is 725 psia and level is 240 inches Wide Range.
- * Containment Temperature is 200 degrees F.
- * Containment Pressure is 27.5 psia.

Which of the following describes the correct actions for this event?

- A. When RCS pressure starts to increase, stabilize pressure by using Main or Aux Spray.
 - B. When CET temperature starts to rise, fully open SDBCS valve 2CV-0303.
 - C. Manually initiate EFAS to "A" SG and commence feeding in manual to restore level.
 - D. Open Aux Spray valve to lower RCS pressure and maximize HPSI flow to restore Pzr level.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 73

QID: 0266

Rev: 001

Point: 1.00

Given the following plant conditions:

- * 15 minutes post trip from Mode 3.
- * "B" CCP running prior to trip.
- * Startup Transformer #3 is locked out.
- * #1 EDG is Out of Service.

Which of the following will restore RCS Pressure Control for the given conditions?

- A. Place Pressurizer Level Control Channel Switch (2HS-4628) to B channel.
- B. Place Pressurizer Pressure Control Channel Switch (2HS-4626) to B channel.
- C. Feed 2A1 from AACG.
- D. Crosstie 2Y1 and 2Y2.

QUESTION: 74

QID: 0271

Rev: 001

Point: 1.00

The plant is in Mode 6 operation and Electrical Maintenance informs the Control Room that 2RS-1 Breaker 1 has inadvertently tripped and breaker is damaged. Maintenance states that control room panel 2C336-1 is de-energized and the following alarms are inoperable:

- * 2K10-A4, Pzr Relief Valve Open.
- * 2K10-A6, Containment Radiation Hi Alarm.
- * 2K10-K4, Startup Channel 1 Trouble.

Which of the following actions is correct?

- A. Evacuate Containment since radiation levels are unavailable.
 - B. Evacuate Containment since neutron flux monitoring unavailable.
 - C. Suspend all core alterations since radiation levels are unavailable.
 - D. Suspend all core alterations since neutron flux monitoring unavailable.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 75

QID: 0275

Rev: 001

Point: 1.00

Which of the following activities requires the highest boron concentration in the Spent Fuel Pool (SFP)?

- A. Storing new fuel in SFP prior to outage.
- B. When core off-load is in progress.
- C. During dry fuel storage operations.
- D. When core reload is in progress.

QUESTION: 76

QID: 0281

Rev: 000

Point: 1.00

Given the following plant conditions:

- * Service Water Pump 2P4B inoperable.
- * Containment Cooler 2VSF-1B inoperable.
- * Startup Transformer #2 locked out.
- * Loss of 500KV buses.
- * Loss of Coolant Accident (LOCA) has occurred.
- * Both Emergency Diesel Generators have failed.

Which of the following will minimize peak containment pressure for the given conditions?

- A. Place AACDG on 2A1 Bus.
 - B. Place AACDG on 2A2 Bus.
 - C. Place AACDG on 2A3 Bus.
 - D. Place AACDG on 2A4 Bus.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 77

QID: 0232

Rev: 001

Point: 1.00

A disgruntled and armed Security Guard enters the Unit 2 Control Room and directs all operations personnel to leave. Which of the following describes the preferred method of reactivity control which should be employed?

- A. Auxiliary Operator will open Load Center 2B7 and 2B8 feeder breakers.
- B. Waste Control Operator will open the MG Set output breakers locally.
- C. CBOR will open Reactor Trip Circuit Breakers 1 through 8 locally.
- D. CBOT will commence emergency boration locally.

QUESTION: 78

QID: 0237

Rev: 001

Point: 1.00

Volume Control Tank (VCT) Level Transmitter 2LT-4857 on 2C09 fails low. Select the effect of this failure on the Chemical and Volume Control System (CVCS)?

- A. A continuous automatic makeup demand signal would be present; high and low level alarms are disabled.
 - B. Automatic diversion of the VCT inlet valve on high level is disabled; Charging pump suction automatically aligns to the RWT and the VCT suction path isolates.
 - C. A continuous automatic makeup demand signal would be present; Charging pump suction automatically aligns to the Boric Acid Makeup Tanks and the VCT suction path isolates.
 - D. Automatic diversion of the VCT inlet valve on high level is disabled; high and low level alarms are disabled.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 79 **QID:** 0285 **Rev:** 001 **Point:** 1.00

Given the following plant conditions:

- * Reactor trip for full power.
- * Three (3) CEAs remain fully withdrawn.
- * Unisolable Charging Header rupture.
- * Reactor power indicates 5E-1% and stable.

Which of the following action(s) should be performed for the given conditions?

- A. Depressurize RCS to 600 psia and use SIT injection for boration.
- B. Depressurize RCS to 1300 psia and use HPSI injection for boration.
- C. De-energize MCCs 2B7 and 2B8 from Control Room.
- D. Perform an RCS cooldown to Shutdown Cooling System operating conditions.

QUESTION: 80 **QID:** 0248 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

- * 13 minutes post trip from full power.
- * Pressurizer level is 0%.
- * Pressurizer pressure is 1300 psia.
- * Containment Radiation Monitors indicate 10 Rem/Hr.
- * Steam Generator pressures are at 1000 psia.
- * RAS is actuated on red train.

Which of the following actions will limit fuel damage for the given conditions?

- A. Override and open Containment Sump Isolation valves 2CV-5647-1 and 2CV-5649-1.
 - B. Override and close Containment Sump Isolation valves 2CV-5647-1 and 2CV-5649-1.
 - C. Use Auxiliary Spray to depressurize and dump Safety Injection Tanks (SITs).
 - D. Use Auxiliary Spray to depressurize and maximize HPSI Flow.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 81

QID: 0254

Rev: 000

Point: 1.00

Standard Post Trip Actions requires Main Feedwater to be in Reactor Trip Override (RTO). Which of the following actions should be performed if RTO is not met?

- A. Trip remaining Condensate Pumps.
- B. Trip remaining Main Feed Pumps.
- C. Close MFW block valves.
- D. Close MSIVs.

QUESTION: 82

QID: 0306

Rev: 000

Point: 1.00

An unextinguishable fire occurs in Panel 2C16 while operating in Mode 1.

- * You are the RO and the SS directs you to align gravity feed valves at MCC 2B52.
- * At CA-2, all ERIMS are inoperable.
- * The RP Technician states you must wait for ten minutes for ERIMS to reboot.

Which of the following actions should be taken?

- A. Allow ERIMS to reboot and make normal Aux Building entry.
 - B. Inform HP Supervisor of problem and follow his directions.
 - C. Immediately proceed to MCC 2B52 regardless of dose received.
 - D. Obtain emergency dosimetry, enter Aux Building and do not exceed 3 Rem.
-
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 83

QID: 0235

Rev: 000

Point: 1.00

Given the following plant conditions:

- * Mode 6
- * Core offload in progress.
- * Annunciator 2K13-B8 , Fuel Handling Area Exhaust Fan Air Flow Lo actuates.
- * Fuel Handling Exhaust Fan 2VEF-14A has tripped.

Which of the following should be performed for the given conditions?

- A. Start 2VSF-4, Spent Fuel Pool Supply Fan.
- B. Start 2VEF-15, Containment Purge Exhaust Fan.
- C. Start 2VEF-14B, Spent Fuel Pool Area Exhaust Fan.
- D. Start 2VSF-2, Containment Purge Supply Fan.

QUESTION: 84

QID: 0250

Rev: 001

Point: 1.00

The following plant conditions exist:

- * A liquid release of a Waste Condensate Tank (2T21) is in progress.
- * The Liquid Radwaste Process Monitor 2RE-2330 fails low.

Which of the following will allow the release to recommence?

- A. Two independent samples, release rate calculations and valve lineup verifications must be performed.
 - B. The liquid release cannot recommence until 2RE-2330 is determined to be OPERABLE.
 - C. Release flow rate must be independently verified every two (2) hours by technically qualified personnel.
 - D. Approval by Unit 2 Plant Manager and Unit 2 Shift Superintendent.
-
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 85 **QID:** 0270 **Rev:** 000 **Point:** 1.00

The following conditions exist:

- * Leakage of 400 gpm from Reactor Coolant System to Component Cooling Water System.
- * Control Room Supply Radiation Monitor 2RITS-8750-1 in Hi Alarm.

Which of the following Unit 2 Doors must be closed?

- A. Shift Supervisor's Office (Door 450) and Unit 2 Control Room Foyer (Door 342).
- B. Coffee and Printer Room (Door 286) and Unit 2 Shift Supervisor's Office (Door 450).
- C. Shift Supervisor's Office to CRSA Area (Door 341) and Coffee and Printer Room (Door 286).
- D. Unit 2 Control Room Foyer (Door 342) and Coffee and Printer Room (Door 286).

QUESTION: 86 **QID:** 0277 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

- * Plant at full power.
- * Letdown Gross Activity Monitor (2RITS-4806-A) reads $2E+5$ CPM.
- * Letdown I-131 Activity Monitor (2RITS-4806-B) reads $1E+5$ CPM.

Which of the following events occurred for the given indications?

- A. RCS chemical shock.
 - B. RCS crud burst.
 - C. Letdown Demineralizer exhausted.
 - D. Failed Fuel.
-
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 87 **QID:** 0267 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

- * 15 minutes post trip from full power operation.
- * "A" Main Steam Radiation Monitor reads 2 R/Hr.
- * RCS pressure is 1500 psia and stable.
- * RCS temperature is 550 degrees F and stable.

Which of the following actions will minimize the off-site release for the given conditions?

- A. Restore CCW to RCPs.
- B. Restore SW to ACW.
- C. Isolate SG Blowdown.
- D. Isolate RCS Letdown.

QUESTION: 88 **QID:** 0198 **Rev:** 001 **Point:** 1.00

Given the following conditions:

- * Plant operating at Full Rated Power
- * 2PI-1041-1, SG "A" Pressure Transmitter fails HIGH

Which of the following action(s) should be taken:

- A. Bypass Trip #11, "A" SG Pressure Low AND Trip #14, "A" SG Pressure High on PPS Channel A.
 - B. Bypass Trip #11, "A" SG Pressure Low AND Trip #19, SG-1 Delta P High on PPS Channel A.
 - C. Bypass Trip #11, "A" SG Pressure Low AND Trips #19 & 20, SG-1 & SG-2 Delta P High on PPS Channel A.
 - D. No bypasses required because instrument failed in the conservative direction.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 89 **QID:** 0211 **Rev:** 001 **Point:** 1.00

The plant is at 75% power when a new Letdown Demineralizer is placed in service. Which of the following will occur if the boron saturation of this demineralizer is incomplete?

- A. T-ave will increase.
- B. Reactor power will decrease.
- C. Lithium concentration will go up.
- D. Demineralizer resin channeling will occur.

QUESTION: 90 **QID:** 0222 **Rev:** 000 **Point:** 1.00

Which of the following set of Reactor Trip Circuit Breakers will open as a direct result of de-energizing 2D35 Battery Eliminator?

- A. Breakers 2 and 6.
 - B. Breakers 4 and 8.
 - C. Breakers 3 and 7.
 - D. Breakers 1 and 5.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 91 **QID:** 0013 **Rev:** 002 **Point:** 1.00

The plant is operating at full power when a fully withdrawn control rod drops into its fully inserted position. Which one of the following describes the effect that a delay in recovering the rod will have on the potential for core damage as a result of the recovery of the rod?

- A. Any delay will not appreciably affect the potential for damage over the next eight (8) hours.
- B. Changes in xenon concentration will make rod recovery more hazardous over the next eight (8) hours.
- C. Changes in xenon concentration will make rod recovery less hazardous over the next eight (8) hours.
- D. Changes in fuel burnup will make rod recovery more hazardous over the next eight (8) hours.

QUESTION: 92 **QID:** 0122 **Rev:** 001 **Point:** 1.00

Pressurizer Spray Valve manual bypass 2RC-8A was repacked. The valve lineup is being performed. As independent verifier how would you check this normally throttled valve's position?

- A. Visually observe the initial verifier throttling the valve to the correct position.
 - B. Move the valve slightly in the closed direction and then return it to its original position.
 - C. Inspect the last valve lineup sheet for verification signature and compare recorded valve position with the required position.
 - D. Compare stem or indicator position with the remote position indication position.
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ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 93

QID: 0163

Rev: 000

Point: 1.00

The following plant conditions exist:

- * No operator actions have been taken.
- * Core life is near EOL.
- * Power level is 80% and increasing.
- * Tave is increasing.
- * Containment pressure and temperature are normal.
- * Pressurizer pressure is normal.
- * All systems are in their normal mode.

Which of the following can cause these conditions?

- A. Partial loss of feedwater heating.
- B. Continuous rod withdrawal.
- C. Steam leak outside containment.
- D. Slow closure of an MSIV

QUESTION: 94

QID: 0214

Rev: 000

Point: 1.00

Plant conditions are as follows:

- * A Loss of Offsite Power has occurred.
- * Pressurizer pressure is 1430 psia.
- * #1 Emergency Diesel Generator (#1EDG) has just tripped.

Which of the following trips caused the Loss of #1EDG?

- A. High crankcase pressure.
 - B. High jacket water cooling temperature.
 - C. Loss of excitation.
 - D. Generator phase differential current.
-
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 95

QID: 0263

Rev: 001

Point: 1.00

The following plant conditions exist:

- * Small Break LOCA in progress.
- * RCPs 2P32B and 2P32C in service.
- * Annunciator 2K11-C2, "A RCP Reverse Rotation" is actuated.
- * Appropriate actions are taken.

Which of the following should be used to determine subcooled margin?

- A. SPDS.
- B. CPCs.
- C. Digital Indication 2XI-4612 on Panel 2C-336-3/4.
- D. Chart Recorder 2XR-4612 on Panel 2C03.

QUESTION: 96

QID: 0278

Rev: 000

Point: 1.00

Given the following plant conditions:

- * Large Break LOCA in progress.
- * Refueling Water Tank (RWT) level is 6% and lowering.

Which of the following over-rides will be removed for the given conditions?

- A. HPSI Injection MOV 2CV-5015-1 over-ridden closed.
 - B. ACW Supply Isolation MOV 2CV-1425-1 over-ridden open.
 - C. CAMS Supply Isolation Valve 2SV-8263-2 over-ridden open.
 - D. CCW Supply Isolation Valve 2CV-5255-1 over-ridden open.
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 97 **QID:** 0230 **Rev:** 000 **Point:** 1.00

The plant is at 100% power when the output of the inservice Pressurizer Pressure controller, 2PIC-4826-A fails high. Which response describes why the reactor trips if no operator action is taken?

- A. Low pressure trip from the Core Protection Calculators (CPCs).
- B. Low pressure trip from the Plant Protection System (PPS).
- C. High pressure trip from the Core Protection Calculators (CPCs).
- D. High pressure trip from the Plant Protection System (PPS).

QUESTION: 98 **QID:** 0238 **Rev:** 001 **Point:** 1.00

Which of the following should be removed first when wearing single Anti-C's and exiting a "Contamination Area"?

- A. Dosimetry.
 - B. Rubber Gloves.
 - C. Rubber Shoes.
 - D. Hood.
-
-

ANO UNIT 2 - 2000 INITIAL RO EXAM

QUESTION: 99

QID: 0246

Rev: 000

Point: 1.00

Given the following plant conditions:

- * RCS pressure is 1000 psia.
- * "A" SG Main Steam Radiation Monitor 2RE-1007 reading 3.7 R/Hr.
- * "B" SG Main Steam Radiation Monitor 2RE-1057 reading .48 R/Hr.
- * RCS Tcold is 480 degrees F.
- * RCS Thot is 482 degrees F.
- * RCS cooldown being performed by steaming "B" SG to condenser using 2CV-0302.
- * Attachment 10 of 2202.010, Standard Attachment completed.
- * "A" and "C" Reactor Coolant Pumps running.

Which of the following actions should be taken?

- A. Reduce RCS pressure to maintain 25 to 50 degrees Margin to Saturation.
- B. Reduce RCS pressure to within 50 psi of "A" SG pressure.
- C. Reduce RCS pressure to within 50 psi of "B" SG pressure.
- D. Allow RCS pressure to stay on HPSI float.

QUESTION: 100

QID: 0249

Rev: 000

Point: 1.00

Which of the following situations procedurally require overriding an ESF actuated component prior to reaching its actuated position?

- A. During a SGTR by overriding Service Water to Auxiliary Cooling Water.
 - B. During an Inadvertent SIAS by overriding Service Water to Auxiliary Cooling Water.
 - C. During an Inadvertent CIAS by overriding Letdown Isolation.
 - D. During an Inadvertent MSIS by overriding Letdown Isolation.
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