ANO UNIT 2 - 2000 SRO EXAM

QUESTION: 1 **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: 2 **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: 3 **QID:** 0202 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

* Reactor Trip from full power.
* CEAs 31 and 32 remain at 149" withdrawn.
* Charging header is ruptured.
* Ten (10) minutes after Reactor Trip, Reactor Power 3E-1% and stable.

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

A. Actuate SIAS and open High Point Vents.

B. Actuate SIAS and depressurize with Auxiliary Spray.

C. Start one HPSI Pump and depressurize with Main Spray.

D. Start both HPSI Pumps and open High Point Vents.

QUESTION: 4 **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: 5 **QID:** 0224 **Rev:** 000 **Point:** 1.00

After a Reactor Trip the following parameter values and trends are noted:

* Pressurizer Level is 0%.
* RCS Pressure is 1500 psia and lowering.
* RCS Tcold is 530F and slowly trending down.
* Containment pressure is 14.3 psia and steady.
* Containment Average Temperature is 105F and lowering.
* Main Steam Line Radiation Monitor 2RITS-1007 is in alarm and trending up.
* "A" Steam Generator Level is 20% and dropping slowly.
* "B" Steam Generator Level is 5% and dropping slowly.

Assuming that all other equipment responded as designed, determine the events in progress.

A. Main Steam Line Break and Loss of Coolant Accident inside Containment.

B. Main Steam Line Break outside Containment and isolated LOCA in Letdown.

C. Steam Generator Tube Rupture and isolated LOCA in the Letdown System.

D. Main Steam Line Break outside Containment and Steam Generator Tube Rupture.

QUESTION: 6 **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: 7 **QID:** 0245 **Rev:** 000 **Point:** 1.00

While performing a reactor startup, critically is predicted by 1/M plot for Reg Group 6 at 30 inches withdrawn. Which one of the following actions must be taken as a result of this prediction?

A. Fully insert all CEAs, return to Mode 3 and recalculate ECP and ECB.

B. Commence Emergency Boration, fully insert all CEAs, and verify boron concentration.

C. Fully insert all Reg Group CEAs, verify boron concentration, and recalculate ECB and ECP.

D. Commence Emergency Boration, return to Mode 3 and verify boron concentration.

QUESTION: 8 **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: 9 **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: 10 **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: 11 **QID:** 0292 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

* Full power operation.
* 480 V ESF Load Center 2B5 Feeder Breaker (2B512) trips.

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

A. Place #1 EDG start switch in Pull-To-Lock.

B. Secure #1 EDG at local handswitch.

C. Crosstie 480 V ESF Load Center 2B5 to 2B6.

D. Manually trip the reactor.

QUESTION: 12 **QID:** 0269 **Rev:** 000 **Point:** 1.00

An emergency Temporary Alteration is installed on Saturday at 0300. PSC approval of this package is required. What is the maximum time for PSC approval required?

A. Next full working day.

B. Within seven (7) days.

C. Within fourteen (14) days.

D. Within thirty (30) days.

QUESTION: 13 **QID:** 0299 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

* Mode 6 operations.
* Core offload partially completed.
* Service Water return piping on SF Pool Heat Exchanger has unisolable rupture.

Which of the following best describes the actions required for the above plant conditions?

A. Commence moving fuel back to vessel.

B. Verify SF Pool Ventilation System in operation.

C. Declare NUE based on Loss of SF Pool Cooling.

D. Sample Service Water return headers for activity.

QUESTION: 14 **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.

QUESTION: 15 **QID:** 0240 **Rev:** 001 **Point:** 1.00

The following plant conditions exist:

* Mode 6.
* Refueling in progress.
* SPING 5 is inoperable.
* Containment Purge Exhaust Process monitor is inoperable.
* Containment Purge System is in service.

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

A. Grab samples taken once per 24 hours and analyzed within 48 hours.

B. Place charcoal and HEPA filters in service.

C. Suspend positive reactivity additions to the core.

D. Suspend all core alterations.

QUESTION: 16 **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.

QUESTION: 17 **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: 18 **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.

QUESTION: 19 **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.

QUESTION: 20 **QID:** 0132 **Rev:** 000 **Point:** 1.00

As CRS, you are monitoring the safety function status checklist of OP 2202.002, "Reactor Trip Recovery". If RCS Pressure is 1890 psia and lowering, you should:

A. Restore the safety function using the continuing actions.

B. Return to the diagnostic actions and rediagnose.

C. Go to "Safety Function Recovery Procedure".

D. Refer to the pressure control decision tree.

QUESTION: 21 **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.

QUESTION: 22 **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: 23 **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.

QUESTION: 24 **QID:** 0147 **Rev:** 001 **Point:** 1.00

The linear safety channel instruments have been set in accordance with the most recent Secondary calorimetric heat balance calculation. When the heat balance was performed, an error existed in the instrument used to measure feed flow. Actual feed flow was higher than measured feed flow. This will affect the degree of conservatism of the high linear power trip setpoint in which one (1) of the following ways?

A. It is unaffected due to temperature compensation of the instrument.

B. It becomes more conservative (trips at a lower power).

C. It becomes less conservative (trips at a higher power).

D. It is more conservative at BOL and less conservative at EOL.

QUESTION: 25 **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: 26 **QID:** 0300 **Rev:** 000 **Point:** 1.00

Given the following plant conditons:

* Mode 6 operation with core offload in progress.
* A complete Loss of Offsite Power occurs.
* 2DG1 is supplying 2A3 and 2DG2 failed on startup.
* Alternate AC (AAC) Diesel Generator is NOT available due to maintenance on governor.
* Annunciator 2K11-K5 "Fuel Pool Temp High" is actuated.

For the above plant conditions, which of the following would be an available source of makeup for the SF Pool, if makeup is required ?

A. Loop 1 Service Water using SW Pump 2P4A.

B. RWT using SFP Purification Pump 2P66.

C. BA Makeup System using BAMT Pump 2P39A/B and RMUW Pump 2P109A/B.

D. BMS Holdup Tanks using Holdup Tank Recirc Pump 2P48

QUESTION: 27 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.

QUESTION: 28 **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: 29 **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.

QUESTION: 30 **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.

QUESTION: 31 **QID:** 0244 **Rev:** 001 **Point:** 1.00

The following plant conditions exist:

* Mode 5 operations.
* RCS Pressure is 150 psia.
* Pressurizer Level 40%.
* SGs in wet lay-up.
* "A" SDC Heat Exchanger and "A" LPSI Pump in service for SDC.
* "A" LPSI pump trips.

Which of the following actions should be taken?

A. Place 2P60B in service on "A" SDC Heat Exchanger.

B. Repressurize RCS and start a Reactor Coolant Pump.

C. Place 2P35A in service on "A" SDC Heat Exchanger.

D. Place 2P35B in service on "B" SDC Heat Exchanger.

QUESTION: 32 **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

QUESTION: 33 **QID:** 0257 **Rev:** 001 **Point:** 1.00

Given the following plant conditions:

* Five (5) minutes post trip from full power.
* RCS pressure is 1300 psia and stable.
* Pressurizer Level is 8% and rising slowly.
* CAMS readings are 2000 CPM particulate and 850 CPM gaseous.
* Containment Area Radiation Monitors read 60 to 90 mr/hr.
* Containment Wide Range Area Radiation Monitors read 11 R/hr and 9 R/hr.
* Containment Pressure is 27 psia.
* Containment Temperature is 245 degrees F.

Determine the event in progress for the given conditions:

A. Tcold Small Break LOCA.

B. Thot Large Break LOCA.

C. Excess Steam Demand Event.

D. Pressurizer Steam Space Leak.

QUESTION: 34 **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.

QUESTION: 35 **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: 36 **QID:** 0284 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

* Ten (10) minutes post trip from full power.
* "A" Main Steam Line Rad Monitor reads 500 mr/hr.
* "A" SG Pressure is 690 psia.
* "B" SG Pressure is 880 psia.
* RCS Pressure is 1650 psia.
* Pressurizer Level is 15%.

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

A. 2202.003, Loss of Coolant Accident.

B. 2202.004, Steam Generator Tube Rupture.

C. 2202.005, Excess Steam Demand.

D. 2202.009, Functional Recovery

QUESTION: 37 **QID:** 0291 **Rev:** 000 **Point:** 1.00

Given the following conditions:

* Full power.
* Charging Pumps Select Switch in the B & C position.
* Breaker 2B52-A5, 2P36A supply breaker trips.

Which of the following will occur for the given conditions?

A. "B" Charging pump will immediately auto start.

B. "C" Charging pump will auto start on ten (10) second time delay.

C. Letdown will isolate on 2% level deviation.

D. Letdown will isolated on high temperature.

QUESTION: 38 **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: 39 **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: 40 **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.

QUESTION: 41 **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.

QUESTION: 42 **QID:** 0243 **Rev:** 000 **Point:** 1.00

Plant conditions following a Reactor Trip due to a loss of both 6900V Buses are:

* Pressurizer Level is 20% and rising.
* Pressurizer Pressure is 2000 psia and rising.
* CET temperature is 620 degrees F and stable.
* RVLMS indicates no levels void.

The RCS Inventory Safety Function is:

A. Being maintained because RVLMS indicates plenum level >80%.

B. Being maintained because Pressurizer Level is >16% and rising.

C. NOT being maintained because RCS Margin To Saturation is <30 degrees F.

D. NOT being maintained because Pressurizer Level is less than setpoint.

QUESTION: 43 **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: 44 **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: 45 **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.

QUESTION: 46 **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.

QUESTION: 47 **QID:** 0304 **Rev:** 000 **Point:** 1.00

Following plant conditions exist:

* Plant operating at full power.
* CEA Exercise Test for planned power decrease to 80% in progress.
* CEA 46 was inserted to 144" but would not withdraw.
* I & C has placed CEA 46 on hold bus.
* ACTM card replacement can be completed in 15 minutes.

Which of the following statements is correct for the plant conditions?

A. CEA 46 is inoperable because the CEA is immoveable.

B. CEA 46 is operable because the CEA is still trippable.

C. CEA 46 is inoperable because the CEA is NOT trippable.

D. CEA 46 is operable because it can be repaired in less than 15 minutes.

QUESTION: 48 **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.

QUESTION: 49 **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.

QUESTION: 50 **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: 51 **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.
* Preperations 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: 52 **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: 53 **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: 54 **QID:** 0203 **Rev:** 001 **Point:** 1.00

Given the following plant conditions:

* Plant operating at full power.
* Instrument Air pressure reading 62 psig and slowing lowering.

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

A. Pin Main FW Regulating valves in the "AS IS" position.

B. Pin Main Steam Isolation Valves in the "OPEN" position.

C. Isolate Chilled Water to Containment Coolers.

D. Align Service Water Returns to the Emergency Cooling Pond.

QUESTION: 55 **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.

QUESTION: 56 **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: 57 **QID:** 0226 **Rev:** 001 **Point:** 1.00

Given the following plant conditions:

* Full Power Opeations.
* 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.

QUESTION: 58 **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: 59 **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.

QUESTION: 60 **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: 61 **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: 62 **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.
* Appropiate 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: 63 **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: 64 **QID:** 0282 **Rev:** 001 **Point:** 1.00

Given the following plant conditions:

* Ten (10) minutes post trip from full power.
* Pressurizer Level is 5% and lowering.
* Pressurizer pressure is 1400 psia and lowering.
* Steam Generator Pressures are 550 psia and lowering.
* Steam Generator Levels are 150 inches wide range and lowering.

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

A. Isolate Instrument Air to MSIVs to close 2CV-1010-1 and 2CV-1060-2.

B. Isolate Main Steam to EFW Pump 2P7A by closing 2CV-1000-1 and 2CV-1050-2.

C. Remove HPSI Pump 2P89C from Pull-To-Lock and maximize RCS Makeup.

D. Go to HR-3 for once through cooling.

QUESTION: 65 **QID:** 0296 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

* 100% steady state Power.
* RCS Leakrate Calculation has increased from 0.11 gpm to 0.65 gpm over past two (2) hours.
* RCP 2P32A Lower Seal Pressure (2PI-6004) has decreased from 1520 psia to 685 psia.
* A Containment Building Power entry is being planned inspect 2P32A seal area and attempt to locate and isolate source of increased RCS leakage.

Which of the following statements reflect the approval(s) required for this power entry by Form 1601.300A, Reactor Building Power Entry Checkoff List?

A. The Unit 2 Plant Manager AND the Manager, Radiation Protection.

B. The Manager, Unit 2 Operations AND any Superintendent, Radiation Protection.

C. The Unit 2 Shift Operations Superintendent OR Manager, Radiation Protection.

D. The Unit 2 Shift Operations Superintendent OR Superintendent, Radiation Protection.

QUESTION: 66 **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.

QUESTION: 67 **QID:** 0252 **Rev:** 000 **Point:** 1.00

Which of the following would prompt entry into the Severe Accident Management Guidelines (SAMG)?

A. SGTR with concurrent steamline break on same SG.

B. Partial core uncovery with CETs indicating >1200 degrees F.

C. Small break LOCA with vessel level at centerline of hot legs.

D. Large break LOCA with all critical safety functions satisfied.

QUESTION: 68 **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: 69 **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: 70 **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: 71 **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.

QUESTION: 72 **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.

QUESTION: 73 **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.

QUESTION: 74 **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: 75 **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: 76 **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.

QUESTION: 77 **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: 78 **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 temperatue 181F and rising.

QUESTION: 79 **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.

QUESTION: 80 **QID:** 0303 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

* Loss of Offsite Power has occurred due to tornado damage in switchyard.
* Both Emergency Diesel Generators are supplying their 4160V ESF buses.
* Unit 1 EDG #1 has failed and they have requested AACG to supply 4160V ESF bus A3.

For the above plant conditions, which of the following would be the preferred method of feeding S/Gs and what level should be maintained during an RCS cooldown?

A. EFW Pump 2P7A and maintain S/G levels 10 - 90%.

B. EFW Pump 2P7B and raise S/G levels to 60%.

C. AFW Pump 2P75 and maintain S/G levels 10 - 90%.

D. Condensate Pump and raise S/G levels to 60 %.

QUESTION: 81 **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.

QUESTION: 82 **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: 83 **QID:** 0145 **Rev:** 001 **Point:** 1.00

A Standard RWP was generated on March 31, 2000. Which of the following is the latest date which will require generation of a new RWP?

A. April 7, 2000.

B. April 30, 2000.

C. December 31, 2000.

D. March 31, 2001.

QUESTION: 84 **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: 85 **QID:** 0302 **Rev:** 000 **Point:** 1.00

Concerning the actual conditions in the core, what does the DNBR trip setpoint ensure?

A. Actual DNBR is greater than 1.25 so that the reduction in DNBR after the trip will NOT result in a DNBR of 1.0.

B. Actual DNBR is greater than 1.25 so that the reduction in DNBR after the trip will NOT result in a DNBR that is less than 1.25.

C. Actual DNBR is equal to 1.25 so that the reduction in DNBR after the trip will NOT result in a DNBR of 1.0.

D. Actual DNBR is equal to 1.25 so that the reduction in DNBR after the trip will NOT result in a DNBR of 1.25 except in a very small fraction of the core.

QUESTION: 86 **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 neutron generated.

D. Count rate rises because there are more neutrons generated.

QUESTION: 87 **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.

QUESTION: 88 **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.

QUESTION: 89 **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.

QUESTION: 90 **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.

QUESTION: 91 **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: 92 **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: 93 **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.

QUESTION: 94 **QID:** 0286 **Rev:** 001 **Point:** 1.00

Given the following plant conditions:

* Ten (10) minutes post trip from full power.
* Containment Radiation Monitors read 2 Rem and slowly rising.
* RCS Pressure is 2000 psia and rising.
* All RCPs running.
* Pressurizer Level is 38% and rising.
* Containment Sump Level has increased 4% in ten (10) minutes.
* Containment Pressure has increased from 14.0 to 14.6 psia in ten (10) minutes.

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

A. Depressurize RCS to maximize HPSI flow.

B. Depressurize RCS to within 100 psia above RCP NPSH.

C. Establish normal Mode 3 Hot Standby conditions.

D. Secure RCPs and perform a Natural Circulation Cooldown.

QUESTION: 95 **QID:** 0290 **Rev:** 000 **Point:** 1.00

Given the following conditions:

* Fuel off-load in progress.
* Spent fuel assembly in main bridge mast.
* Upender in Containment.
* Main Bridge power supply reel faults to ground.

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

A. Immediately evacuate Containment.

B. Immediately start Containment Purge.

C. Manually place fuel assembly in storage rack.

D. Manually place fuel assembly in upender and transfer to Spent Fuel Pool.

QUESTION: 96 **QID:** 0058 **Rev:** 000 **Point:** 1.00

Which one (1) of the following will cause an AUTOMATIC start of an RCP Lift Pump?

A. Low oil lift system pressure.

B. Low oil lift system flow is sensed.

C. A start of the RCP is attempted.

D. The RCP breaker trips.

QUESTION: 97 DELETED **QID:** 0305 **Rev:** 000 **Point:** 1.00

Given the following plant conditions:

* Reactor Startup in Progress.
* Shutdown Bank A , B and Reg Groups 1, 2, 3, 4 are fully withdrawn.
* Reg Group 5 is being withdrawn when CEA 60 continues to withdraw when Shim Switch is released.
* Mode Selector Switch is placed to off and CEA 60 outward motion stops.
* Reg Group 5 position is 60 inches and CEA 60 is 65 inches.
* Minor CEA Deviation alarm is actuated.

Which of the following actions should be taken for the given plant conditions?

A. Insert Reg Group CEAs

B. Insert Reg Group and Shutdown bank CEAs.

C. Manually trip Reactor if CEA is NOT aligned within 15 minutes.

D. Commence troubleshooting CEA 60 with Reactor Engineering concurrence.

QUESTION: 98 **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%.

QUESTION: 99 **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: 100 **QID:** 0293 **Rev:** 001 **Point:** 1.00

Given the following plant conditions:

* 1 hour post trip from full power.
* Large Break LOCA in progress.
* SIAS, CCAS, CSAS, CIAS and RAS actuated.

Which of the following will have the greatest impact on long term RCS heat removal for the given conditions?

A. "A" LPSI Pump failure.

B. "A" Spray Pump failure.

C. "A" Charging Pump failure.

D. #1 EDG failure.