EX99040

The plant was operating at 99% power when a transient occurred. Not all control rods fully inserted. The following conditions exist:

- Several SRVs have lifted causing a suppression pool temperature increase.
- The CRS directed the initiation of SLC.
- Level in the reactor was lowered to reduce power production
- The crew is now inserting rods by driving and scramming.

Which one of the following describes when it would be permitted to stop both SLC Pumps?

A. The Reactor Engineer says that subcriticality can be guaranteed to 200°F

B. All rods are at position 00 except for control rod 34-35 is at position 48.

C. All rods are at position 02 except three in different quadrants at position 04.

D. The Hot Shutdown Boron Weight of SLC has been injected.

EX01002

The plant was operating at 90 % power when a failure in the Main Turbine Pressure regulating system caused Reactor pressure to increase to 1089 psig. The reactor did not scram. PPM 5.1.2 directs that pressure be stabilized below 1060 psig.

Which one of the following describes the basis for this direction?

A. Maximizes the amount of steam condensed in the Wetwell.

B. Prevents SRV cycling and fluctuating RPV water level.

C. Reduces RPV pressure to permit high-pressure Systems injection.

D. Maintains Reactor water inventory in the Containment.

EX01003

The plant was operating at 97% power when a transient occurred resulting in a gaseous release. QEDPS indicates a TEDE (Whole Body) dose that requires a General Emergency classification. The CDE (Thyroid/Iodine) dose is only 20% of the required General Emergency dose threshold.

Which one of the following is correct concerning these conditions?

The release is from the …

A. Reactor building with SGT in service.

B. Reactor building with SGT **not** in service.

C. Turbine building with Turbine Building HVAC in service.

D. Turbine building with Turbine Building HVAC **not** in service.

EX01004

The plant is in MODE 4 with the following conditions:

Reactor Water Level	36 inches
Drywell Temperature	139°F for the last 9 hours
Drywell Pressure	.8 psig
Suppression Pool Level	-1.8 inches
Suppression Pool Temperature	88°F

Concerning these conditions, which one of the following is the correct Tech Spec action?

A. Restore the Drywell average air temperature to within the limit in 8 hours.

B. Restore the Drywell average air temperature to within the limit in 12 hours.

C. The MODE Switch **cannot** be placed in STARTUP for Mode 2.

D. The MODE Switch can be placed in STARTUP for Mode 2.

EX99086

The plant is shutdown with RHR-P-2B in operation for Shutdown Cooling. A crack in the SDC suction line causes a start of FDR-P-2 and a high water level alarm in the B RHR pump room.

In addition to this, automatic isolation of RHR SDC suction...

A. valve RHR-V- 9 takes place at +13 inches to prevent flooding the RHR pump room.

B. valve RHR-V-8 takes place at -50 inches to prevent flooding the RHR pump room.

C. valves RHR-V-8 and 9 take place at -50 inches to prevent the further loss of reactor water inventory.

D. valves RHR-V-8 and 9 take place at +13 inches to prevent the further loss of reactor water inventory.

EX01006

Which one of the following describes a design feature of an LPRM detector that reduces the rate of burnup of the detector?

A. Enriched U-234 is added to the coating on the inner chamber wall which "breeds" an additional quantity of fissile material.

B. Enriched U-235 is added to the coating on the inner chamber wall which "breeds" an additional quantity of fissile material.

C. PU-238 is added to the inner chamber wall to act as a barrier to fast neutron flux.

D. PU-239 is added to the inner chamber wall to act as a barrier to fast neutron flux.

EX01007

The plant was operating at 75% power when a fire caused the loss of IN-1.

Which one of the following describes the effect of this loss on the Main Turbine?

A. DEH loses all AC Electrical power and trips the Main turbine.

B. DEH loses all AC Electrical power and the Main Turbine can only be tripped by the manual trip on the front standard.

C. The Main Turbine continues to operate with DEH Backup Power supplied by the Permanent Magnetic Generator in the Main Generator Exciter.

D. The Main Turbine continues to operate with DEH Backup Power supplied by IN-3.

EX01008

The plant is operating at 99% power with all equipment operating normally. A malfunction in the supply breaker for SL-81 causes it to trip.

Which one of the following is correct?

RCC flow is…

A. reduced to all components cooled by RCC, RCC-V-6 is open.

B. normal to all components cooled by RCC, RCC-V-6 is open.

C. shutoff to components outside the drywell, RCC-V-6 closes.

D. shutoff to components inside the drywell, RCC-V-6 closes.

EX01009

The plant was operating at 94% power. The following actions occur:

SW-P-1A	Auto starts
RRA-FN-5 (LPCS Room Cooling Fan)	Auto starts

All plant equipment operates as designed.

Which one of the following caused these auto starts?

A. Reactor level –46 inches.

B. Drywell pressure 1.62 psig

C. Manual start of DG-1.

D. Manual start of LPCS-P-1.

EX00030

The plant is operating at rated conditions with the lead Fan SGT-FN-1B-2 discharge SGT-V-5B-2, Exhaust to Stack, tagged closed for maintenance. A scram occurs from a loss of feedwater.

Assuming no operator action, which ONE of the following is correct concerning these conditions?

A. SGT-FN-1B-2 auto starts and trips on low flow. SGT-FN-1B1 auto starts 10 seconds later and aligns to the stack.

B. SGT-FN-1B-2 auto starts and runs with low flow and must be manually tripped.

C. SGT-FN-1B1 auto starts and aligns to the stack immediately following the start signal.

D. SGT-FN-1B1 auto starts 20 seconds following the start of SGT-FN-1B2 and aligns to the stack.

EX01011

The plant is operating at 95% power when an air leak occurs.

Which one of the following is correct concerning this condition?

The CAS standby air compressor starts when…

A. service air header pressure decreases to 100 psig.

B. service air header pressure decreases to 105 psig.

C. instrument air header pressure decreases to 100 psig.

D. instrument air header pressure decreases to 105 psig.

EX00099

The reactor was operating at 78% power coming out of a refueling outage. A large steam leak in the drywell caused the following plant conditions:

Wetwell level	39 feet
Drywell pressure	30 psig
Reactor pressure	214 psig
Reactor level	-145 inches and stable

RCIC tripped several minutes ago.

Which ONE of the following caused the RCIC trip?

A. Low reactor level.

B. Isolation from low reactor pressure.

C. Low suction pressure.

D. High exhaust pressure.

EX01013

Which one of the following describes the basis for an Emergency Depressurization if Wetwell Temperature and RPV Pressure cannot be maintained less than the HCTL?

A. The code allowable stresses on the SRV Tailpipes will not be exceeded during the blowdown.

B. The Primary Containment Pressure Limit will not be exceeded during an RPV depressurization.

C. The Wetwell/Drywell interface will not fail during a DBA LOCA.

D. Containment failure due to rapid depressurization is prevented.

EX01014

The plant is operating at 94% power when a loss of RPS A occurs.

Which one of the following is correct for these conditions?

Auto closure of…

A. RCC-V-104 (Outboard Isolation).

B. RCC-V-40 (Inboard Isolation).

C. RWCU-V-4 (Outboard Isolation).

D. RWCU-V-1 (Inboard Isolation).

EX98074

You have been directed to maximize cooling of the suppression pool with the A loop of RHR.

Which ONE of the following describes the correct RHR lineup?

RHR-V-48A (HX bypass)...

A. open, RHR-V-3A (HX discharge) full open, RHR-V-27A (suppression pool spray) closed, and RHR-V-24A (suppression pool test return) open.

B. closed, RHR-V-3A (HX discharge) throttled, RHR-V-27A (suppression pool spray) open, and RHR-V-24A (suppression pool test return) closed.

C. open, RHR-V-3A (HX discharge) full open, RHR-V-27A (suppression pool spray) open, and RHR-V-24A (suppression pool test return) open.

D. closed, RHR-V-3A (HX discharge) full open, RHR-V-27A (suppression pool spray) closed, and RHR-V-24A (suppression pool test return) open.

EX01016

The plant is in MODE 5 with refueling in progress. Fuel Pool Cooling is in service with 1 pump, 1 heat exchanger, and 1 demineralizer in service. A leak in the Drywell Bellows seal has caused the Fuel Pool Cooling Skimmer Surge Tank level to decrease.

Which one of the following hard piped water sources can be used to limit the decreasing level?

A. Standby Service Water (SSW)

B. Turbine Service Water (TSW)

C. Fire Protection

D. Main Condensate (COND-P-1A discharge)

EX98092

Following a major plant transient, RPV water level is -162 inches and down slow and 3 control rods have not fully inserted.

Which ONE of the following describes the required Tech Spec actions for these conditions?

A. Initiate action within 1 hour to restore level to greater than -129 inches.

B. Within 8 hours, restore reactor level to greater than + 13 inches and insert all insertable control rods.

C. Within 2 hours, restore reactor level greater than TAF and insert all insertable control rods.

D. Initiate action within 2 hours to restore level to greater than -129 inches.

EX01018

The plant is in operation at 93% power with CB B7 tagged out and removed from the cubicle for maintenance. A failure at the ASHE Substation causes a Main Generator Trip and a failure of TRS to close in. SW-P-1A then trips on overload. All other auto actions occur.

Assuming no operator action, which one of the following is correct concerning these conditions?

A. DG-1 starts and closes onto the bus, then trips on High Jacket Water Temperature.
DG-2 starts but does not close onto the bus.

B. DG-1 starts and closes onto the bus and operates until the ASHE Substation failure is repaired.
DG-2 starts but does not close onto the bus.

C. DG-1 starts and closes onto the bus, then trips on High Jacket Water Temperature.
DG-2 starts and closes onto the bus.

D. DG-1 starts and closes onto the bus and operates until the ASHE Substation failure is repaired.
DG-2 starts and closes onto the bus.

EX01019

The plant was operating at 91% power when a small break LOCA occurred concurrently with a failure of TR-S. HPCS-P-1 trips due to an overcurrent lock out.

Which one of the following systems is designed specifically to mitigate the effects of this event?

A. RCIC

B. ADS

C. RHR

D. LPCS

EX01020

The plant was operating at 98% power when a transient occurred. Annunciators are received on both the front and back panels of the control room. During the recovery from the transient, it is noted that REA-V-1, REA-V-2, ROA-V-1, and ROA-V-2 have closed.

Assuming no operator action, which one of the following caused these indications?

A. Trip of RFP-DT-1A

B. Trip of COND-P-2A

C. Lockout of SH-5

D. Lockout on SM-7

EX01021

Caution #1 in the EOPs states that RPV Level Instrumentation may not be used to determine RPV level if Drywell Temperature is at or above the RPV Saturation Temperature erroneous/erratic indication is observed.

Which one of the following explains this caution?

A. Temperature greater than the RPV Saturation Curve in the drywell results in conditions exceeding the equipment qualifications of the RPV level transmitter.

B. Temperature greater than the RPV Saturation Curve in the drywell results in steam flashing in the variable leg and erroneously low RPV level indications.

C. Boiling may occur in the reference leg resulting in erroneously high indicated RPV water level.

D. Boiling may occur in the reference leg resulting in erroneously low indicated RPV water level.

EX01022

The plant was operating at 93% power when a fire broke out in the control room. Thick smoke is rapidly filling the control room, requiring immediate evacuation.

Which one of the following actions is correct under these conditions?

A. Manually Scram the reactor
Start RHR in suppression pool cooling
Notify the Hanford Fire Department by pushing the pushbutton on FCP-1
Announce (over the PA) the scram, evacuation, and operator to locally start DG2.

B. Close the MSIVs
Start RHR in suppression pool cooling
Request Security to unlock the security doors
Announce (over the PA) the scram, evacuation, and all operators to the RSD Panel.

C. Close the MSIVs
Start HPCS to maintain reactor level
Notify the Hanford Fire Department by pushing the pushbutton on FCP-1
Announce (over the PA) the scram, evacuation, and all operators to the RSD Panel.

D. Manually Scram the reactor
Close the MSIVs
Request Security to unlock the security doors
Announce (over the PA) the scram, evacuation, and operator to locally start DG2.

EX01023

The plant was operating at 90% power when a failure in the DEH System caused the Governer Valves to close. The Bypass Valves also failed closed. All control rods fully inserted except 30-31, which is at an unknown position. All other plant equipment operated as expected.

Concerning these conditions, which one of the following is correct?

Immediately enter PPM…

A. 5.1.1 RPV Control, place the Mode Switch in SHUTDOWN, monitor reactor power pressure and level, depress the manual scram pushbuttons, initiate ARI, insert the SRMs.

B. 5.1.1 RPV Control, PPM 5.1.2 RPV Control ATWS, place the Mode Switch in SHUTDOWN, monitor reactor power pressure and level, insert the SRMs.

C. 5.1.2 RPV Control ATWS, place the Mode Switch in SHUTDOWN, monitor reactor power pressure and level, insert the SRMs.

D. 5.1.2 RPV Control ATWS, open the Main Condenser Vacuum Breakers, place the Mode Switch in SHUTDOWN.

EX01024

The plant has reached conditions which could cause a deflagration in the containment.

Which one of the following describes the reason an Emergency Depressurization is directed at this time?

The Emergency Depressurization…

A. stops the production of H_2 in the reactor.

B. stops the O_2 production in the reactor.

C. places the reactor in the lowest possible energy state.

D. reduces the amount of energy in the containment.

EX01025

The plant is operating at 68% power with RWCU-P-1A in service. CRD flow has to be isolated to the pump for a short period of time.

Which one of the following describes the area of the pump affected by the loss of CRD flow?

A. Cooling water to the external heat exchanger

B. Pump pedestal heat exchanger

C. Cavitation reduction supply

D. Pump Motor Cavity

EX01026

The plant was operating at 89% power when a Recirc Suction Line break caused a high drywell pressure reactor scram. The scram has been reset.

Which one of the following is correct concerning these conditions?

A. EDR-R-5 (Sump in the CRD Pump room) is filling from the scram discharge header, and pumps down based on the operation of the Fill/Pumpout Timer.

B. EDR-R-5 (Sump in the CRD Pump room) is filling from the scram discharge header, but does not pump down due to the isolation of the outlet discharge valve EDR-V-395.

C. FDR-R-3 (Sump in the HPCS Pump room) is filling from the broken RRC Suction line, but does not pump down due to the isolation of the outlet discharge valve FDR-V-220.

D. FDR-R-3 (Sump in the HPCS Pump room) is filling from the broken RRC Suction line and pumps down based on the operation of the Fill/Pumpout Timer.

EX01027

The plant is operating at 99% power with MC-S2-1A tagged out for bus work. A failure causes a lockout on BKR N1-3.

Assuming no operator action, which one of the following is correct concerning these conditions?

A. The reactor scrams, RCIC and HPCS maintain water level in automatic from –50 inches to +54 inches.

B. The reactor scrams, HPCS maintains water level in automatic from –50 inches to +54 inches.

C. Reactor power is approximately 60% following a Recirculation Runback.

D. Reactor power remains at 99% power.

EX01028

Reactor power is 19% with a shutdown in progress. After opening RFW-V-118 (Main Startup Block Valve), direction is given to increase the output of RFW-LIC-620 (Startup Level Controller) to approximately 90% per PPM 2.2.4.

Which one of the following describes the reason for this direction?

A. Ensures sufficient flow capability in preparation for closing RFW-V-112A and 112B.

B. Strokes RFW-FCV-10A/10B in preparation for placing the valves in automatic.

C. RFW-LIC-600 (Master Level Controller) can only be placed in manual with the output of RFW-LIC-620 greater than 85%.

D. RFW-SC-601A/B can only be placed in manual with the output of RFW-LIC-620 greater than 85%.

EX01029

The plant was operating at 100% power when a transient occurred causing a reactor scram due to instantaneous neutron flux. Immediately following the scram, a full MSIV Isolation occurred.

Which one of the following describes the cause of this event?

A. Main Turbine Trip.

B. Main Generator ground causing a load rejection

C. Broken instrument air line to 1 MSIV.

D. Loss of IN-3 to the MSIV isolation logic.

EX98086

The reactor is in MODE 5 with fuel movement underway. After moving a bundle through the "cattle chute" and into the vessel cavity, it is observed that the "ROD BLOCK INTERLOCK #1" light does not illuminate. The "HOIST LOADED" indicator is illuminated. The control room reports no rod block indication.

Which of the following actions is correct for these conditions?

A. Immediately stop the refuel bridge until the inoperable rod block is corrected.

B. Immediately initiate action to insert all insertable control rods in core cells containing one or more fuel assemblies.

C. The fuel bundle may be moved back to the spent fuel pool, then immediately suspend in-vessel fuel movement.

D. Fuel movement may continue as long as ROD BLOCK INTERLOCK #2 is operable.

EX99070

Which one of the following conditions shall be announced to the plant staff over the PA system?

A. A radioactive spill in the RW 437' level has just been reported by the laborer supervisor.

B. The CRO is starting the Auxiliary Oil pump for the 'B' RFP as part of a plant shutdown.

C. The CRO is starting the Turbine Seal Oil Backup pump as part of a plant startup.

D. Stopping SW-P-1A after securing from Shutdown cooling during a plant startup.

EX98088

The plant is operating in single loop operation at 21% power. RRC-P-1A is running, RRC-P-1B is ready to restart.

Reactor pressure	986 psig
Bottom head drain temp	391°F
Recirc loop B temp	496°F
Recirc loop A temp	512°F
Reactor level	+36 inches

Considering all of the above data, which one of the following is correct concerning the start of RRC-P-1B?

A. The pump cannot be started, based on reactor coolant temperature to bottom head drain temperature.

B. The pump cannot be started, based on recirc loop B to operating loop temperature.

C. The pump can be started, based on recirc loop B to bottom head drain temperature.

D. The pump can be started, based on reactor coolant temperature.

EX99033

The plant has been operating since Monday at 0700 with HPCS out of service for replacement of the motor for HPCS-P-2, the water leg pump. On Friday at 1000 the breaker for RCIC-V-45 trips with the valve in the closed position.

Which one of the following is correct for these conditions?

A. Restore RCIC to operable within 14 days.

B. Be in MODE 3 in 12 hours and MODE 4 in 36 hours.

C. Be in MODE 3 in 12 hours and reduce reactor pressure to less than 150 psig in 36 hours.

D. Restore HPCS to operable within 14 days.

EX98091

The plant is operating at 99% power. A troubleshooting plan for RFW-P-1A is being developed that has a high potential to trip the pump.

Which one of the following describes whose concurrence is needed prior to implementation?

A. Licensed SRO, Operations Manager and Plant Manager.

B. Operations Manager, Licensed SRO, and Maintenance Manager.

C. Licensed SRO, CRS/Shift Manager, and Operations Manager.

D. CRS/Shift Manager, Technical Manager, and Engineering Manager.

EX98126

You have assigned a maintenance person to briefly inspect a valve inside of a valve room, which is a posted RADIATION AREA. The Maintenance person informs you that he only has 10 mr left on his yearly dose limit. Health Physics informs you that the radiation levels where the mechanic will be working are at the minimum value as defined for a RADIATION AREA posting.

Which one of the following is the maximum time available for this mechanic to inspect the valve?

A. 1 hour

B. 1 ½ hours

C. 2 hours

D. 2 ½ hours

EX01036

The plant is operating at 61% power with RRC-P-1A out of service. A loss of SH-6 occurs.

Which one of the following is correct for this condition?

A. Verify operation in Region A of the Power to Flow Map prior to scramming the plant.

B. If operating in Region B or C of the Power to Flow Map, take action to exit the region in 15 minutes.

C. Immediately scram the plant.

D. Verify the runback of RRC-P-1A.

EX01037

The plant was operating at 55% power when a scram occurred. The CRO notes several control rods that do not have the "FULL IN" indication on the Full Core Display. These control rods all indicate "00" on the 4 rod display.

Which one of the following explains these indications?

A. The lack of "FULL IN" indications are burned out light bulbs since both "FULL IN" and "00" indications come from the same reed switch.

B. High temperature water from the scram reduces the magnetic strength of the "FULL IN" reed switch causing it to remain open.

C. High control rod speeds during the scram drive the rod past the "FULL IN " reed switch.

D. High control rod speeds during the scram cause the rod to bounce out ½ notch past the 00 notch.

EX01038

The plant is operating at 67% power when a complete loss of RCC requires a reactor scram.

Which one of the following describes the reason for this requirement?

The scram is directed because of the loss of cooling to the…

A. CRD pump seals.

B. RHR pump seal coolers.

C. RWCU Non-regen Heat Exchanger.

D. Recirculation Pump motors and seals.

EX01039

Which one of the following is designed to prevent secondary containment overpressurization during postulated piping break between the drywell and the Turbine Building?

A. Standby Gas Treatment.

B. Reactor Building Ventilation.

C. Reactor Building Blowout Panels.

D. Main Steam Tunnel Blowout Panels.

EX00006

You have directed an equipment operator to operate a valve in a high radiation area for maintenance. The job is projected to take 15 minutes. Since being re-zeroed, the operator has received 937 mrem TEDE for the present quarter and 1211 mrem TEDE for the previous 3 quarters.

Which ONE of the following is correct for these conditions?

A. Complete an Increased Exposure Request for the equipment operator following completion of the job.

B. Complete an Increased Exposure Request for the equipment operator prior to the start of the job.

C. No action is required until the operator exceeds 5 rem TEDE for the year.

D. No action is required until the operator exceeds 1 rem TEDE for the present quarter.

EX01041

The plant was operating at 91% power when a transient caused reactor water level to decrease and auto initiate HPCS. Reactor level has been recovered to the normal operating band and HPCS has been secured by placing the control switch for HPCS-P-1 in the Normal After Stop position and closing HPCS-V-4 with the control switch. Reactor level is now going down.

Assuming no other operator actions, which one of the following is true?

A. The HPCS System auto initiates with any valid auto start signal.

B. The HPCS System can only be auto initiated with the Arm and Depress pushbutton.

C. HPCS-P-1 must be manually started with the control switch; it will not auto initiate.

D. HPCS-P-1 auto starts with an initiation signal, but HPCS-V-4 has to be manually opened with the control switch.

EX01042

The plant was operating at 89% power when a transient occurred. The CRS has directed the CRO to open the 7 ADS SRVs by arming and depressing the A and C Logic Channel pushbuttons. When the CRO pushes the pushbuttons, the 7 ADS SRVs open immediately. All 7 ADS SRVs close immediately upon release of the pushbuttons by the CRO.

Which one of the following is correct concerning these conditions?

A. RHR-P-2A is not running.

B. RHR-P-2C is not running.

C. The Division 2 Inhibit switch is in the INHIBIT position.

D. The Division 1 Inhibit switch is in the INHIBIT position.

EX01043

The plant is operating at 99% power. Surveillances have been run on MS-LIS-24A, B, C and D (Reactor level 3 isolation input). The setpoint for MS-LIS-24D was found to be 8.5 inches at 0800. During a review of the surveillance at 2000 it was discovered that appropriate actions have not yet been taken.

Which one of the following is the correct action for these conditions?

A. Place the channel in trip in one hour.

B. Restore the isolation capability in 1 hour.

C. Isolate the affected flowpath(s) in 1 hour.

D. Isolate the affected flowpath(s) in 24 hours.

EX01044

The reactor was operating at 96% power when a transient occurred causing reactor level to decrease rapidly. The following conditions exist:

Reactor level	stable at –136 inches for 2 minutes.
SM-8	out of service due to a lockout.
RHR-P-2A	Off
LPCS-P-1	Off

Which one of the following is correct?

The 7 ADS SRVs automatically…

A. open immediately upon the breaker closure of RHR-P-2A or LPCS-P-1.

B. open with sufficient discharge pressure from RHR-P-2A or LPCS-P-1.

C. opened as soon as the ADS timer timed out.

D. opened as soon as level decreased below the setpoint.

EX01045

A plant startup is underway with the following conditions:

Reactor power	approximately 2% to 3%.
IRM A	75/125 R 8
IRM B	39/40 R 7
IRM C	45 /125 R 8

The CRO places the control switch for IRM C on Range 9.

Which one of the following is correct for these conditions?

A. There is a ½ scram on RPS B and a Rod Block from IRM B. A full Scram is generated when the CRO places the Range Switch for IRM C on R 9.

B. There is a ½ scram on RPS B and a Rod Block from IRM B. Another rod block is generated when the CRO places the Range Switch for IRM C on R 9.

C. The only rod bock generated is from placing the Range Switch for IRM C on R 9.

D. A ½ scram on RPS A is generated from placing the Range Switch for IRM C on R 9.

EX01046

The plant is operating at 92% power when a broken line causes the main CIA header pressure to decrease to 0 psig.

Based on the design of the system, which one of the following is correct for these conditions?

A. All SRVs can be opened 1 time from P601.

B. All SRVs can be opened 5 times from P628/P631.

C. Only ADS SRVs can be opened from P601.

D. Only ADS SRVs can be opened and must be opened for P628/P631.

EX01047

The reactor was operating at 95% power when a reactor scram signal occurred. No control rods inserted. You have been directed to INHIBIT ADS.

Which one of the following describes the reason for this direction?

ADS is inhibited to prevent…

A. flashing of the RPV level instrument reference legs.

B. avoidable heat addition to the Suppression Pool.

C. uncontrolled injection from low-pressure injection systems.

D. cooldown before hot shutdown boron weight is injected.

EX01048

A Main Turbine Startup is underway. The Turbine is accelerating towards 1800 RPM. A failure causes the loss of DC power from DP-S1-2B to the 20 AST solenoid coincidentally with a malfunction that causes the Turbine Throttle Valves to ramp open.

Which of the following is the result of this malfunction?

The Turbine trips from a/an…

A. electrical overspeed.

B. mechanical overspeed.

C. OPC solenoid.

D. Throttle Valve position.

EX01049

The plant was operating at 99% power when a Load Rejection occurred on the Main Generator.

Which one of the following is correct for this condition?

Both Recirc Pumps…

A. are running at 15 hz.

B. are running at 60 hz.

C. trip off with CB-RPT-3A and CB-RPT-3B tripped open.

D. trip off with CB-RPT-3A, 3B, 4A, and 4B tripped open.

EX01050

The plant was operating at 99% power when a transient occurred. After the plant stabilized, both Recirc Pumps were operating at 15 hz. No operator actions have been taken.

Which one of the following caused these indications?

A. Reactor level of -5 inches.

B. Reactor Pressure of 1128 psig.

C. Main Turbine Trip.

D. COND-P-2A trip.

EX01051

The plant is in MODE 5 with movement of irradiated fuel assemblies in progress. A leak develops in the drywell bellows seal and reactor level decreases to 20 ½ feet above the RPV Flange.

Which one of the following is correct Tech Spec action for these conditions?

A. Start at least one Recirc Loop in 2 hours.

B. Start the second RHR Loop in Shutdown Cooling in 2 hours.

C. Suspend movement of irradiated fuel assemblies within the RPV in 1 hour.

D. Suspend movement of irradiated fuel assemblies within the RPV immediately.

EX00096

The plant is operating at 99% power with a small steam leak in the drywell. RCIC is in operation for a surveillance. The following conditions exist

Wetwell temperature	91°F
Drywell temperature	132°F
Wetwell level	+1.8 inches
Drywell pressure	1.1 psig

Which ONE of the following is correct concerning these conditions?

A. One loop of RHR in operation is adequate for wetwell temperature reduction.

B. HPCS is operated with flow to the Condensate Storage Tanks to reduce the increasing suppression pool level.

C. Available drywell cooling is operated prior to initiation of more complex actions to terminate the increasing drywell temperature.

D. The drywell is vented through CEP-V-1A and CEP-V-2A, 24 inch drywell vent valves to prevent exceeding the drywell initiation pressure.

EX01053

The plant is operating at 97% power when annunciator SPRAY HEAD TO TOP OF CORE PLATE ΔP HIGH for the High Pressure Core Spray System illuminates.

Which one of the following is correct concerning this condition?

SLC…

A. will inject directly into the core under all conditions.

B. may not be able to be directly injected into the core if needed.

C. will only inject if HPCS is running.

D. will only inject if HPCS is off.

EX01054

The plant was operating at 98% power when a loss of all feedwater occurred. All plant equipment initiated as designed.

Assuming no operator action, which one of the following is correct?

A. RCIC-V-1 trips at +54.5 inches and has to be reset at the RCIC Turbine before it can be restarted.

B. RCIC-V-1 trips at +54.5 inches and has to be reset from the control room before it can be restarted.

C. The HPCS DG High Crankcase Pressure trip is bypassed.

D. The HPCS DG Generator Differential Relay trip is bypassed.

EX01055

The plant is operating at 95% power with HPCS-P-1 in Full Flow Test at 6000 gpm for surveillance. The HPCS PUMP RM WATER LEVEL HIGH annunciator illuminates. Ops 2 has verified the water level on the floor above the alarm setpoint and increasing.

Which one of the following are the required **immediate** actions for this condition?

A. Make announcement over the PA for personnel to evacuate the area and start LPCS-P-1 in anticipation of the loss of HPCS-P-2 HPCS/LPCS Water Leg Pump.

B. Enter PPM 5.3.1 Secondary Containment Control and make announcement over the PA for personnel to evacuate the area.

C. Make announcement over the PA to alert Maintenance personnel and stop HPCS-P-1.

D. Stop HPCS-P-1 and enter PPM 5.3.1 Secondary Containment Control.

EX01056

The plant is in MODE 5 with fuel movement underway when the Bridge Air Compressor fails.

Which one of the following is inoperable without this air supply?

A. Main Hoist Safety Brake

B. Main Trolley Auxiliary Hoist Safety Brake

C. Main Hoist Grapple

D. Main Trolley Auxiliary Hoist

EX01057

The plant is operating at 98% power. It is turnover time for dayshift. The oncoming crew composition is as follows:

Shift Manager	1
Control Room Sup.	1
Shift Support Sup.	1
Control Room Oper.	3
Equip. Operator	4 – 1 is Fire Brigade Leader qualified, 3 not FB qualified
STA	1
HP	3
Chemistry	1
Elec/I+C	1
Mech Maint.	1
SCC Duty Officer	1
Security Responder	1
Plant Laborer	1

Which one of the following is correct for these conditions?

A. One EO (Fire Brigade qualified) must be held over from the previous shift until a replacement can be found for Fire Brigade requirements.

B. Two EOs (Fire Brigade qualified) must be held over from the previous shift until replacements can be found for Fire Brigade requirements.

C. The crew can take the watch as long as the Chemistry Tech is Fire Brigade qualified.

D. The crew can take the watch as long as the Control Room Supervisor is Fire Brigade qualified and assumes the position of Fire Brigade Leader.

EX01058

Which one of the following is designed to minimize the affects of the Design Basis Rod Drop Accident?

A. APRM Upscale scram (Mode Switch not in Run)

B. IRM Upscale scram

C. Rod Block Monitor

D. Rod Worth Minimizer

EX01059

The plant was operating at 99% power when a transient occurred. Following the transient, reactor pressure decreased to 14 psig and MSLC was started. All MSLC components operated as designed. Ten minutes later, a failure in the reactor pressure sensing instrumentation caused the indicated reactor pressure to increase to 1200 psig.

Which one of the following describes the effect on the operation of MSLC?

A. MSLC-FN-1 trips.

B. MSLC-FN-2 starts.

C. MSLC-V-3A through 3D close (inboard bleed valves).

D. MSLC-V-1A through 1D open (inboard depressuization valves).

EX01060

The plant was operating at power when a Lockout on SM-7 occurred.

Which one of the following describes the location to send an operator to verify the operation of IN-3?

A. SM-7 Switchgear Room

B. SM-8 Switchgear Room

C. RPS-A MG Set-1 Room

D. RPS-B MG Set-2 Room

EX01061

The plant was operating at power with BKR B-8 tagged out for maintenance. A fault caused BKR 3-8 to open.

Which one of the following is correct response for these conditions?

A. IRM-A indicates UPSCALE TR OR INOP, UPSCALE ALARM, and DNSC on P603.

B. IRM-B indicates UPSCALE TR OR INOP, UPSCALE ALARM, and DNSC on P603.

C. RBM-A indicates UPSCALE, INOP, and DOWNSCALE on P603.

D. RBM-B indicates UPSCALE, INOP, and DOWNSCALE on P603.

EX01062

The plant was operating at 75% power when a transient occurred causing reactor level to decrease to –7 inches.

Which one of the following is correct concerning the initial direction from the CRS?

CRO-1 should be directed to…

A. P603, and Board A.
CRO-2 Board B and Board C
CRO-3 P601 and P602

B. P602, P603, and Board A.
CRO-2 Board B and Board C
CRO-3 P601

C. P602 and P603
CRO-2 Board A, Board B and Board C
CRO-3 P601

D. P603
CRO-2 Board A, Board B and Board C
CRO-3 P601, and P602

EX01063

The plant was operating at 46% power when a Large Break LOCA occurred. After the main turbine tripped, bkrs S-1, S-2, and S-3 failed to close.

Which one of the following is correct for these conditions?

The restart of…

A. RHR-P-2A and RHR-P-2B is delayed 10 seconds.

B. RHR-P-2A and RHR-P-2B is delayed 5 seconds.

C. LPCS-P-1 and RHR-P-2C is delayed 10 seconds.

D. LPCS-P-1 and RHR-P-2C is delayed 5 seconds.

EX01064

The plant was operating at 28% power when a failure caused a full MSIV Isolation. One of the SRV tailpipes has sheared off just below the Drywell Floor. Suppression Chamber Pressure is 21 psig.

Which one of the following is correct for these conditions?

At this point, the expected Drywell Pressure is approximately…

A. 19.5 psig.

B. 20.5 psig.

C. 21.5 psig.

D. 22.5 psig.

EX01065

With reactor level GT TAF, operation of HPCS Pump is **not** allowed with Suppression Pool level LT the Vortex Limit of the pump.

Which one of the following is the basis for this limitation/

A. Air entrainment could occur and cause system damage during subsequent restarts.

B. Air entrainment can cause pitting and failure in the spray ring nozzles.

C. Loss of NPSH resulting in a pump trip from low suction pressure.

D. Loss of NPSH resulting in pump runout and motor overheating.

EX01066

The plant was operating at 98% power when a failure caused all power connections between ASHE Substation and Columbia Generating Station to trip open. One hour later, the following conditions exist at Columbia Generating Station:

Reactor Level	36 inches
Reactor Pressure	544 psig
Reactor Power	0% all rods in
RCIC	in operation for level control
Charger C1-1	failed, out of service
Battery B1-1	106 VDC
TRS	out of service

Which one of the following is correct for these conditions?

A. Maintain reactor level with Condensate Booster pumps and RFW-FCV-10A/B.

B. Stop RCIC and start HPCS for reactor level control.

C. Continue the shutdown, using the BPVs for pressure control.

D. Reset one Reactor Feedpump for level control.

EX01067

A plant shutdown is underway. The Main Turbine has been tripped. Reactor power is 20%

Which one of the following is the correct Bypass Valve position for this power?

All Bypass Valves at approximately…

A. 60%

B. 70%

C. 80%

D. 90%

EX01068

The plant was operating at 45% power when a lockout occurred on BKR S-2. HPCS-P-2 (Service Water Pump) did not start.

Which of the following is correct for these conditions?

A. Trip HPCS-P-1 when it is determined unnecessary for adequate core cooling.

B. Trip HPCS-P-1 immediately at P601.

C. Immediately trip DG-3 at P601.

D. Immediately trip DG-3 at the local diesel control panel.

EX01069

The plant was operating at 94% power when the "DRYWELL PRESS HIGH TRIP" annunciator illuminated on both A7 and A8 annunciator panels on P603. All plant equipment functioned as designed.

Which one of the following is correct concerning these conditions?

Immediately…

A. Place the Mode Switch in SHUTDOWN
Monitor Reactor level, pressure, and power
Depress the manual scram pushbuttons and initiate ARI
Insert the SRMs and IRMs

B. Place the Mode Switch in SHUTDOWN
Monitor Reactor level, pressure, and power
Depress the manual scram pushbuttons and initiate ARI
Trip the Main Turbine

C. Enter PPM 5.1.1 RPV Control and PPM 5.2.1 Primary Containment Control
Place the Mode Switch in SHUTDOWN
Monitor Reactor level, pressure, and power
Verify all rods full in.
Insert the SRMs and IRMs

D. Enter PPM 5.1.1 RPV Control, 5.1.2 RPV Control ATWS, and 5.2.1 Primary Containment Control
Place the Mode Switch in SHUTDOWN
Monitor Reactor level, pressure, and power
Depress the manual scram pushbuttons

EX01070

A control rod is being withdrawn for a plant startup. A ROD DRIFT annunciator is received on a control rod that is not selected (it is drifting out). Shortly thereafter, an SRM PERIOD FAST annunciator illuminates. Reactor period is 48 seconds.

Which one of the following is the correct **immediate** action for these conditions?

A. Stop control rod withdrawal.

B. Scram the reactor.

C. Insert the selected control rod to 00

D. Insert the drifting control rod to 00.

EX01071

The reactor was operating at 98% power when an Inop trip on APRM-A coincident to a failure on RPS-B caused a full scram. Reactor level is in automatic on RFW-LIC-620 (RFW-FCV-10A/B) at 36 inches with pressure control on the Bypass Valves at 736 psig. The scram is reset.

Assuming no operator action, which one of the following describes plant response to a subsequent failure of all Bypass Valves full open?

A. Reactor level decreases to approximately –20 inches and the Recirc pumps trip.

B. Reactor level decreases to approximately –20 inches and the Recirc pumps runback to 15 hz.

C. Reactor level increases to approximately +57 inches and returns +36 inches with Condensate/Condensate Booster pumps feeding through RFW-FCV-10A/B in automatic.

D. Reactor level increases to approximately +57 inches and returns +36 inches with reactor feed pumps feeding through RFW-FCV-10A/B in automatic.

EX00058

A plant shutdown is in progress at 24% power when an air leak develops in the Main Condenser. Off Gas flow is increasing at a rapid rate.

Assuming no operator action, which one of the following is correct for this condition?

The plant will scram from…

A. high RPV pressure.

B. low RPV water level.

C. MSIV isolation.

D. main turbine trip.

EX01073

The reactor is at 35% power following a refueling/maintenance outage. A pile of leftover outage debris, outside of the Tip Room, has caught on fire and caused an alarm in the control room. There is visible damage to cable and equipment in the area. All immediate actions have been performed.

Which one of the following is correct for these conditions?

A. Use MS-LR/PR-623B for level indication and immediately scram the reactor if C2-1 voltage is LT 220 volts.

B. Use MS-LR/PR-623B for level indication and start RHR-P-2B within 1 hour or verify locally that RHR-P-3 is running within one hour and each hour thereafter.

C. RFW-LI-606B and MS-LR/PR-623B are both affected by the fire. Ensure RFW-LI-606A is selected for input to the feedwater level control system.

D. RFW-LI-606B and MS-LR/PR-623B are both affected by the fire. Ensure RFW-LI-606C is selected for input to the feedwater level control system.

EX01074

The plant was operating at 57% power when a LOCA occurred. HPCS-P-1 is injecting into the RPV at 4950 gpm; LPCS-P-1 is injecting into the RPV at 1300 gpm. Reactor level is –209 inches and stable.

Which one of the following is true concerning these conditions?

Adequate core cooling is maintained by …

A. Core Submergence.

B. Steam Cooling without injection.

C. Steam Cooling with injection.

D. Spray Cooling.

X01075

The plant was operating at 100% power when a DBA LOCA occurred. Fuel damage has occurred along with a failure of primary containment. SGT-FN-1A1 has been in operation for the last 15 minutes. SGT-EHC-1A1 now fails.

Which one of the following is correct for these conditions?

The loss of heating causes the efficiency of the…

A. final HEPA Filter to decrease resulting in the offsite dose from the radioactive charcoal dust increasing.

B. pre-filter to decrease resulting in the offsite dose from radioactive dust increasing.

C. charcoal adsorbers to decrease resulting in the offsite dose from Iodine increasing.

D. moisture separators to decrease resulting in the offsite dose from Iodine increasing.

EX01076

The reactor was operating at 94% power when a leak in the suction line of RRC-P-1A caused a scram. It is now 4 minutes following the scram. Reactor level is –45 inches and going up. Reactor Pressure is 430 psig.

Which one of the following is correct concerning these conditions?

The operator can start…

A. RHR-P-2A and inject into the core with the Heat exchanger bypass open.

B. RHR-P-2A and inject into the core with the Heat exchanger bypass closed.

C. RHR-P-2B in Suppression Pool Cooling with the Heat exchanger bypass remaining closed.

D. RHR-P-2B in Suppression Pool Cooling with the Heat exchanger bypass remaining open.

EX01077

RHR-A loop was in Suppression Pool Spray when a LOCA occurred.

Which one of the following is correct concerning these conditions?

A. RHR-V-27A, Suppression Pool Spray, cannot be reopened until the LOCA signal has been reset.

B. RHR-V-27A, Suppression Pool Spray, cannot be reopened until RHR-V-42A, RPV Injection, is closed.

C. RHR-V-42A, RPV Injection does not open until RHR-V-27A, Suppression Pool Spray, is closed.

D. RHR-V-42A, RPV Injection, opens; RHR-V-27A, Suppression Pool Spray, must be manually close.

EX01078

The annunciator for MSLC LINE A FLOW HIGH is disabled as part of a TMR.

Which one of the following describes who is required to review the TMR Log once per shift?

A. Control Room Supervisor or the Shift Manager

B. Control Room Supervisor and the Shift Manager

C. On duty Work Team Supervisor

D. Shift Support Supervisor

EX01079

The plant is operating at 99% power. Bus SM-82 is tagged out for maintenance. A failure causes a lockout on SM-75. All plant equipment operates as designed.

Which one of the following is correct for these conditions?

A. Drywell Pressure decreases.

B. Main Condenser Back Pressure decreases

C. Main Turbine Lube Oil Temperature increases.

D. CW Pit Level increases.

EX01080

The plant is operating at 67% power. A large instrument air leak has developed in the area of COND-V-76 Condensate Demin Bypass.

Which one of the following is correct for this condition?

A. Manually open COND-V-76.

B. Close CAS-V-155, RW Building isolation.

C. Close CAS-V-153, TB 441 isolation.

D. Take the immediate scram actions.

EX01081

Which one of the following events requires an entry into the Barrier Impairment Log.

A. Replacement of the WNA-FU-54A (Control Room Emerg. Filter) charcoal adsorber.

B. Propping both control room doors open to allow passage of a supervisory panel.

C. De-energizing and danger tagging of WMA-FN-51 (toilet/kitchen exhaust fan).

D. Repair of WMA-AD-51A1 (fresh air inlet damper) actuator

EX01082

A plant shutdown is underway for a refuel outage. Reactor pressure has been reduced to 45 psig and RHR-P-2B has been placed in Shutdown Cooling. Due to a DEH malfunction, reactor pressure is now increasing.

Which one of the following is correct for these conditions?

A. At 48 psig, RHR Shutdown Cooling isolates and RHR-P-2B continues to run on minimum flow.

B. At 48 psig, RHR Shutdown Cooling isolates and RHR-P-2B trips.

C. At 125 psig, RHR Shutdown Cooling isolates and RHR-P-2B continues to run on minimum flow.

D. At 125 psig, RHR Shutdown Cooling isolates and RHR-P-2B trips.

EX01083

The reactor was at 90% power when a LOCA occurred. The following conditions exist:

Reactor level Wide Range	-149 inches
Reactor level Uncompensated Fuel Zone	-144 inches
Reactor level Compensated Fuel Zone	-111 inches
Reactor pressure	834 psig
Drywell pressure	35 psig
Drywell temperature	275°F

The CRO at P601 reports reactor level is –149 inches and stable on Wide Range.

Which one of the following is correct for these conditions?

The report is incorrect because the…

A. RPV Saturation Temperature has been exceeded. The correct level report should be level is at –111 inches on the Compensated Fuel Zone.

B. Wide range is below the Minimum Usable level. The correct level report should be level is at –111 inches on the Compensated Fuel Zone.

C. RPV Saturation Temperature has been exceeded. The correct level report should be level is at –144 inches on the Uncompensated Fuel Zone.

D. Wide range is below the Minimum Usable level. The correct level report should be level is at –144 inches on the Uncompensated Fuel Zone.

EX01084

The plant was operating at 90% power when a transient occurred. The following conditions exist:

LD-TE-4A/B - RCIC Pump Room	239°F (GT Max Safe Operating Value)
ARM-RIS-12 - RCIC Pump Room	Offscale High (GT Max Safe Operating Value)

Which one of the following is correct concerning these conditions?

A. A primary system is discharging into the area and RCIC operation can continue indefinitely under these conditions.

B. A primary system is discharging into the area and the continued operability of RCIC is in question.

C. There is a fire in the RCIC Pump Room and RCIC operation can continue indefinitely under these conditions.

D. There is a fire in the RCIC Pump Room and the continued operability of RCIC is in question.

EX01085

An accident has occurred such that Drywell Temperature and Pressure have exceeded the Drywell Spray Initiation Limit.

Which one of the following is correct for this condition?

A. Initiation of Drywell Sprays can cause convective cooling and failure of the Wetwell to Drywell Interface.

B. Continued operation of Drywell Sprays can cause convective cooling and failure of the Wetwell to Drywell Interface.

C. Initiation of Drywell Sprays can cause evaporative cooling and failure of the Wetwell to Drywell Interface.

D. Continued operation of Drywell Sprays can cause evaporative cooling and failure of the Wetwell to Drywell Interface.

EX01086

The plant is operating at 39% power with SM-7 powered from DG-1. All other supply breakers to SM-7 are open and operable. A spurious lockout on DG1 then occurs, causing a DG-1 trip.

Which one of the following is correct for this condition?

A. B-7 automatically closes and supplies power to SM-7.

B. 1-7 and 7-1 automatically close and supply power to SM-7.

C. B-7 has to be manually closed for SM-7 power supply.

D. No supply breakers can be closed until the lockout is cleared on 7-DG1

EX01087

The plant is in Mode 5 with refueling operations in progress. The Mode Switch is placed in the START/HOT STANDBY Position.

Which one of the following is the result of this action?

The Refuel Bridge automatically stops…

A. only when it is over the reactor cavity.

B. at any location over the Spent Fuel Pool or the Reactor Cavity.

C. as it approaches the Reactor Cavity from the Spent Fuel Pool.

D. only as it approaches the Reactor Cavity from the Spent Fuel Pool when loaded with a fuel bundle.

EX01088

The plant is operating at 72% power when a ground alarm is received on Battery S1-2. CRO-2 reports that S1-2 Ground Detection Meter indicates 0KΩ (ohms).

Which one of the following is correct for this indication>

A. The annunciator is spurious; the meter indicates no ground on S1-2.

B. The annunciator is valid; the meter indicates a severe ground on S1-2.

C. The Ground Test Switch has been placed in POS (positive).

D. The Ground Test Switch has been placed in NEG (negative).

EX00022

The plant is operating at 88% power, when the following auto actions take place:

SGT started
CSP/CEP isolated
CN makeups isolated
CR and TSC Emerg Filtration starts and aligns to remote air intakes
RB Emerg Room Coolers start
RB Lighting quenches
RB EDR and FDR discharge headers isolate

The plant remains operating at power following the initiations. All plant equipment operated as designed.

Which ONE of the following is correct concerning these initiations?

These initiations were caused by…….

A. 1.73 psig Drywell Pressure

B. - 52 inches Reactor Water Level

C. 15 mr/hr Reactor Building Exhaust Plenum

D. + 1.9 inches H2O Reactor Building Pressure

EX01090

Which one of the following signals would directly input to ADS Logic and require an EOP entry?

A. Drywell temperature 155°F.

B. Drywell pressure 1.98 psig

C. Reactor pressure 1072 psig.

D. Reactor level +9 inches.

EX01091

The plant was operating at 89% power when a loss of MC-8A occurred.

Which one of the following is a result of this loss?

A. ½ Scram on RPS-A.

B. Full Reactor Scram.

C. Inboard and Outboard Isolation – MSIVs close and the reactor scrams.

D. Inboard and Outboard Isolation – MSIVs stay open.

EX01092

A plant startup is underway. The reactor is critical with power indicated on IRM detectors. IRM range switches are being ranged as required by procedure. At approximately 25 on range 8, power stops increasing.

Which one of the following is the reason for this indication?

Power turned due to feedback from…

A. Xenon buildup.

B. fuel temperature increase.

C. void fraction increase.

D. pressure increase.

EX01093

The plant was operating at 97% power when a transient occurred. Wetwell temperature is now 93°F.

Which one of the following is correct concerning this condition?

A. EOP actions are not required until wetwell temperature exceeds 110°F.

B. EOP actions are not required until wetwell temperature exceeds 100°F.

C. The high wetwell temperature may indicate the rate of heat addition to the wetwell has exceeded the heat removal rate of wetwell cooling.

D. The high wetwell temperature is past the point at which SLC should be injected to prevent exceeding the HCTL.

EX01094

The plant was operating at 92% power when a transient caused an ATWS. The following conditions exist:

Reactor power	24%.
The MSIVs.	Open
SLC-P-1A and 1B	In operation
Reactor level	-70 inches on the Feedwater System

Which one of the following is correct concerning these conditions?

Cooldown…

A. is not permitted until Cold Shutdown Boron Weight has been injected because core reactivity response for a partially borated core is unpredictable.

B. is not permitted because additional heat load will be imposed on the primary containment that could lead to containment failure.

C. is permitted to start when Hot Shutdown Boron Weight is injected

D. is permitted as long as it is secured if the core returns to power.

EX01095

A fire has caused the control room to be abandoned.

Which one of the following describes level indications available at the Remote and the Alternate Remote Shutdown Panels?

A. Wide Range (-150 to +60), Narrow Range (0 to +60), and Fuel Zone (-310 to -110) at the RSD.
Wide Range (-150 to +60), Narrow Range (0 to +60), and Fuel Zone (-310 to -110) at the ARSD

B. Wide Range (-150 to +60) and Fuel Zone (-310 to -110) at the RSD.
Wide Range (-150 to +60) and Fuel Zone (-310 to -110) at the ARSD

C. Wide Range (-150 to +60) and Narrow Range (0 to +60) at the RSD.
Wide Range (-150 to +60) and Narrow Range (0 to +60) at the ARSD

D. Wide Range (-150 to +60) at the RSD.
Wide Range (-150 to +60) at the ARSD

EX01096

The plant was operating at 95% power when an accident occurred. All procedural actions have been taken up to this point. The following conditions exist:

Reactor level	-210 inches
RHR-P-2A	Injecting
RHR-P-2B	Injecting
Drywell H2	6.2%
Wetwell O2	5.5%

Which one of the following is the next action to complete for these conditions?

A. Initiate CAC with suction from the wetwell.

B. Initiate CAC with suction from the drywell.

C. Emergency Depressurize the reactor.

D. Purge the drywell with Nitrogen.

EX99046

An EOP entry has been made following a reactor scram and steam leak in the drywell. The first step in the EOPs for controlling Drywell temperature is to maintain temperature with "available drywell cooling".

Which of the following describes the reason for this direction?

A. This action assures that the normal method of temperature control is attempted in advance of more complex actions.

B. This action assumes normal cooling is not functional and to use whatever cooling is "available" under the given plant conditions.

C. Other means to control temperature such as containment spray are not available until a LOCA signal has been received.

D. This direction is given as an initial action since drywell-cooling equipment will load shed if conditions degrade, resulting in a LOCA signal.

EX01098

Which one of the following describes equipment that has an auto action at the same reactor level for RHR Shutdown Cooling Isolation?

A. Auto close signal for CEP-V-2A/1A (upper drywell exhaust)

B. Auto close signal for REA-V-1/2 (reactor building exhaust)

C. Auto start signal for SGT-FN-1A1/1B1 (SGT lead fans)

D. Auto start signal for CRA-FN-4A/B (drywell head exhaust fans).

EX01099

The plant is shutdown for repair of a leak in a line attached to the head spray line. Post maintenance testing requires a full reactor vessel hydro to 1000 psig. During performance of the hydro, a problem with a valve has caused reactor pressure to increase to 1367 psig Steam Dome Pressure.

Which one of the following is correct for these conditions?

A. Reduce reactor pressure to LT 1060 psig immediately. Notify the NRC in 4 hours.

B. Immediately enter PPM 5.1.1 RPV Control and reduce reactor pressure to LT 1325psig in 2 hours.

C. Take action to reduce pressure to LT 1060 immediately. Complete the pressure reduction in 1 hour.

D. Reduce pressure to LT 1325 psig in 1 hour and enter PPM 5.1.1 RPV Control.

EX01100

The plant is operating at 20% power following a startup. A batch of nonradioactive CJW water has to be discharged following maintenance on the system. It has been sampled and is acceptable for release.

Which one of the following describes who authorizes this release?

A. CRS/Shift Manager

B. Operations Manager

C. Chemistry Manager

D. Rad Protection Manager