

Final Submittal

(Blue Paper)

NORTH ANNA 2006-302

RETAKES

RO Written

Reactor Operator Written Examination

QUESTIONS REPORT
for POST NRC REVIEW R1

1. The plant was manually tripped because of a slow uncontrollable decrease in RCS pressure. A Safety Injection was manually initiated.

Current indications are as follows:

- RCS pressure is 1700 psig slowly decreasing
- Highest CET temperature reads 555°F
- All PRZR heaters are energized
- PRZR level is 20% and decreasing
- Containment pressure is 15.5 psia and increasing
- CONTAINMENT SUMP HI LEVEL annunciator (1J-A6) is in alarm
- PRT level is 74% and stable
- PRT temperature is 100°F and stable

Which ONE of the following has caused the above indications?

- A. A PRZR Spray Valve has failed open.
- B. A PRZR reference leg has ruptured.
- C. A PRZR heater well has ruptured.
- D. A PRZR PORV has failed open.

QUESTIONS REPORT
for POST NRC REVIEW R1

2. A Loss of Component Cooling Water has occurred.

Which ONE of the following describes the effect on RCP temperatures, and the action that is required to mitigate the event?

- A. Pump bearing temperatures will rise. Affected RCPs must be tripped if temperature reaches 185 deg F
- B. Pump bearing temperatures will rise. Affected RCPs must be tripped if temperature reaches 195 deg F
- C. Motor stator winding temperatures will rise. Affected RCPs must be tripped if temperature reaches 225 deg F
- D. Motor stator winding temperatures will rise. Affected RCPs must be tripped if temperature reaches 300 deg F

QUESTIONS REPORT
for POST NRC REVIEW R1

3. Unit 1 is at 100% power when ONE Control Bank D rod is dropped.

The following NI indications exist:

- PR N-41 - 96.6%
- PR N-42 - 101.8%
- PR N-43 - 102.6%
- PR N-44 - 103.1%

Which ONE of the following describes the status of the Rod Control System (assuming the reactor does NOT trip and NO operator actions are taken)?

- A. Manual rod withdrawal is available; automatic rod withdrawal is blocked due to the NIS POWER RANGE OVERPOWER ROD STOP caused by N-44 ONLY.
- B. Manual rod withdrawal is available; automatic rod withdrawal is blocked due to the NIS POWER RANGE OVERPOWER ROD STOP caused by N-43 AND N-44.
- C. Manual and automatic rod withdrawal are blocked due to the NIS POWER RANGE OVERPOWER ROD STOP caused by N-44 ONLY.
- D. Manual and automatic rod withdrawal are blocked due to the NIS POWER RANGE OVERPOWER ROD STOP caused by N-43 AND N-44.

QUESTIONS REPORT
for POST NRC REVIEW R1

4. Unit 1 was at 100% power when an inadvertant Safety Injection occurred.

Which ONE of the following describes the effect on RCP #1 seal leakoff flow?

RCP seal leakoff flow is...

- A. Unaffected.
- B. Directed to the PRT.
- C. Directed to the containment sump.
- D. Directed to the PDTT.

QUESTIONS REPORT
for POST NRC REVIEW R1

5. Given the following conditions:

Unit 1 is at 100% power.

Pressurizer level is lowering slowly.

VCT level is lowering slowly.

Regenerative Heat Exchanger Charging Outlet Temperature is lowering slowly.

Non-Regenerative Heat Exchanger Temperature Control Valve 1-CC-TCV-106 is throttling closed.

Which ONE of the following describes the event in progress?

- A. Letdown leak between the regenerative and non-regenerative heat exchangers.
- B. Letdown line leak downstream of the non-regenerative heat exchanger
- C. Charging line leak upstream of the regenerative heat exchanger
- D. Charging line leak downstream of the regenerative heat exchanger

QUESTIONS REPORT
for POST NRC REVIEW R1

6. Given the following conditions:

Unit 1 is in Mode 5.

RHR is in service.

RCS temperature is 139 degrees F.

Reactor vessel level is 100 inches above loop centerline and slowly decreasing.

RCS drain down is in progress in preparation for refueling.

1-RH-HCV-1758, RHR Heat Exchanger Flow Control Valve begins to drift in the closed direction due to an electrical problem.

Assuming NO action by the operating crew, which ONE of the following describes the effect of this failure on plant operation?

- A. Uncontrolled RCS cooldown, potentially violating Tech Spec requirements
- B. LTOP PORV actuation due to overpressurization of the RCS.
- C. Lowering NPSH to the operating RHR pump due to increasing temperature.
- D. Loss of RHR letdown and uncontrolled RCS level increase.

QUESTIONS REPORT
for POST NRC REVIEW R1

7. Unit 1 is in Mode 6 with the following conditions:

- LHSI pump 1-SI-P-1A is dismantled for seal replacement.
- All Train "B" equipment is operable.

Which ONE of the following is the HIGHEST Mode the unit can operate in with this pump out of service?

Mode...

- A. 5
- B. 4
- C. 3
- D. 2

QUESTIONS REPORT
for POST NRC REVIEW R1

8. With unit 1 at 100% power, a partial phase "A" containment isolation signal results in closure of letdown isolation valve 1-CH-TV-1204A.

NO other valves or components are affected by the signal.

Which ONE of the following is correct concerning the affect of this on letdown?

Letdown flow indication...

- A. fluctuates as the relief valve lifts; actual flow continues to the **PRT**.
- B. goes to zero; actual flow continues to the **PDTT**.
- C. fluctuates as the relief valve lifts; actual flow continues to the **PDTT**.
- D. goes to zero; actual flow continues to the **PRT**.

QUESTIONS REPORT
for POST NRC REVIEW R1

9. Given the following:

A reactor trip has occurred on Unit 1.
The OATC has acknowledged the control room annunciators.

Which ONE of the following describes how to determine the 'First Out' annunciator?

- A. Illuminated solid red; alarm will clear when the initiating condition is clear.
- B. Illuminated solid red; alarm will NOT clear until it is manually reset at Benchboard 1-2.
- C. Illuminated flashing red; alarm will clear when the initiating condition is clear.
- D. Illuminated flashing red; alarm will NOT clear until it is manually reset at Benchboard 1-2.

QUESTIONS REPORT
for POST NRC REVIEW R1

10. Given the following:

A reactor trip has occurred due to low RCS pressure.
The crew is performing 1-E-0, Reactor Trip or Safety Injection.
ONE (1) PRZR Safety Valve is failed open.
Containment Pressure is 9.7 psia and stable.
PRT pressure is 26 psig and rising.

Which ONE of the following describes the **highest** indicated PRT pressure that will exist **just prior** to Containment pressure rising due to this event?

- A. 90.3 psig
- B. 100 psig
- C. 109.7 psig
- D. 115 psig

QUESTIONS REPORT
for POST NRC REVIEW R1

11. Given the following:

Both units are at 100% power.

A Component Cooling Water leak is occurring.

The crew is performing actions of 1-AP-15, Loss of Component Cooling Water.

The following alarm has JUST been received:

1G-A1, CC SURGE TK HI/LO LEVEL

Which ONE of the following describes the method that is normally used to raise CC Surge Tank level in accordance with 1-AP-15, Loss of Component Cooling Water?

- A. Ensure 1-CC-LCV-100 is automatically making up to the surge tank from the Service Water System.
- B. Initiate manual surge tank makeup by aligning Service Water and opening the bypass around 1-CC-LCV-100.
- C. Ensure 1-CC-LCV-100 is automatically making up to the surge tank from the unit-1 Condensate System.
- D. Initiate manual surge tank makeup by aligning either unit's Condensate System and opening the bypass around 1-CC-LCV-100.

QUESTIONS REPORT
for POST NRC REVIEW R1

12. Given the following conditions:

- A Small Break LOCA has occurred.
- The crew is performing the actions of 1-ES-1.2, Post LOCA Cooldown and Depressurization.
- Both LHSI pumps have been stopped.
- One charging pump has been stopped.
- Normal charging is aligned.
- RCPs are OFF.
- The crew is depressurizing the RCS.
- When the depressurization is stopped, the following conditions exist:
 - RCS subcooling is 23 degrees F and trending DOWN.
 - PRZR level is 68% and trending UP.

Based on these indications, what actions should be taken in accordance with 1-ES-1.2?

- A. Start one RCP to collapse any RCS voids.
- B. Manually start charging pumps and align the BIT to restore RCS subcooling.
- C. Reinitiate SI and verify all safeguards equipment has actuated.
- D. Increase RCS pressure using PRZR heaters to regain RCS subcooling.

QUESTIONS REPORT
for POST NRC REVIEW R1

13. Given the following conditions:

A small break LOCA has occurred.

The crew is performing the actions in 1-ES-1.2, Post LOCA Cooldown And Depressurization.

The BIT is isolated.

Normal charging has been aligned.

The crew is depressurizing the RCS using normal spray.

Which ONE of the following describes the strategy for the continuing depressurization?

- A. Maximize subcooling to ensure continued RCP operation.
- B. Minimize subcooling to reduce RCS break flow.
- C. Maximize subcooling to prevent a challenge to the Core Cooling CSF.
- D. Minimize subcooling to ensure PRZR level remains above the lower limit to allow heater operation to reduce the rate of increase of PRZR level.

QUESTIONS REPORT
for POST NRC REVIEW R1

14. Which ONE of the following **directly** supplies power to PRZR Spray Valve 1455A and 1455B controllers?
- A. 125VDC busses 1-I and 1-II
 - B. 480 volt MCCs 1J1 and 1H1
 - C. 120VAC Vital Instrument Busses 1-I and 1-II
 - D. Primary Plant Process Rack 8

QUESTIONS REPORT
for POST NRC REVIEW R1

15. Unit 1 is at 100% power.

Which ONE of the following identifies how a loss of 48VDC from SSPS directly affects the operation of the associated reactor trip breaker, and what is the crew's required response?

- A. SFGDS PROT SYS TR (A/B) TROUBLE alarm ONLY. Ensure only one train is affected and direct Instrument Department to investigate.
- B. ONLY the reactor trip breaker UV coil will deenergize. Enter 1-E-0, Reactor Trip or Safety Injection.
- C. ONLY the reactor trip breaker auto shunt trip relay will deenergize. Enter the applicable Tech Spec action statement and submit an urgent Work Request.
- D. SFGDS PROT SYS TR (A/B) TROUBLE alarm, and reactor trip breaker UV coil and auto shunt trip relay will BOTH deenergize. Enter 1-E-0, Reactor Trip or Safety Injection.

QUESTIONS REPORT
for POST NRC REVIEW R1

16. The following plant conditions exist.

- Unit 1 is at 100% power.
- All SGWLC inputs are selected to Channel III.
- Channel III steam generator "C" feed flow fails off scale low.
- The operator takes manual control of "C" main feed regulating valve and controls "C" steam generator level.

Which ONE of the following subsequent failures will cause an immediate reactor trip?

- A. Loss of Vital Bus II
- B. Loss of Vital Bus IV
- C. "C" steam generator Channel III steam flow fails high
- D. "C" steam generator Channel III level fails low

QUESTIONS REPORT
for POST NRC REVIEW R1

17. Given the following conditions:

A large-break LOCA has occurred on Unit 1.

The Safety Injection system has automatically swapped to cold-leg recirculation mode.

The OATC observes RWST level increasing approximately 1% every 10 minutes.

Which ONE of the following would account for the increase in RWST level?

- A. "B" LHSI pump recirculation valves 1-SI-MOV-1885B and -1885D both failed to fully close during the swapover, but their CLOSED limits were made up.
- B. VCT to charging pump suction valve 1-CH-MOV-1115E failed to close during the swapover.
- C. The OATC failed to close charging pump recirculation valves 1-CH-MOV-1275A, -1275B, and -1275C when required.
- D. LHSI discharge to HHSI suction valve 1-SI-MOV-1863A failed to fully open during the swapover, but the OPEN limits were made up.

QUESTIONS REPORT
for POST NRC REVIEW R1

18. During troubleshooting on the rod control system at 100% power, a power cabinet 2BD non-urgent alarm was received.

The Unit Supervisor directs the ALARM RESET push-button to be depressed, in accordance with a SNSOC approved test procedure.

The OATC mistakenly depresses the STARTUP RESET push buttons.

Which ONE of the following will occur?

- A. All IRPIs reset to zero and all rod bottom lights illuminate (actual rod position does not change).
- B. All control rod bank low and low-low insertion limit annunciators will illuminate.
- C. Non-Urgent failure internal alarm circuit will reset.
- D. CMPTR ALARM ROD DEV/SEQ alarm is disabled.

QUESTIONS REPORT
for POST NRC REVIEW R1

19. Given the following:

Unit 1 is at 100% power.

The following annunciators are received 10 seconds apart in the control room:

Panel C, G-6, RCP 1A-B-C LABYTH SEAL LO FLOW

Panel C, C-4, RCP 1A-B-C THERM BARR CC HI/LO FLOW

The OATC determines that RCP 1A seal injection flow is 0 gpm, and RCP 1A thermal barrier CCW flow is lowering toward 0 gpm.

The US enters 1-AP-33.2, Loss of RCP Seal Cooling.

Which ONE of the following actions will be required?

- A. Restore either seal injection OR thermal barrier CCW flow within 5 minutes OR trip the reactor, trip RCP 1A, and isolate RCP 1A seal return
- B. Attempt to restore either seal injection OR thermal barrier CCW flow. If RCP 1A exceeds any temperature limits, THEN trip the reactor, trip RCP 1A, and isolate RCP 1A seal return
- C. Trip the reactor, trip RCP 1A, isolate RCP 1A seal return, and continue attempts to restore seal injection and thermal barrier CCW flow
- D. Trip the reactor, trip RCP 1A, isolate RCP 1A seal injection, seal return, and thermal barrier CCW flow

QUESTIONS REPORT

for POST NRC REVIEW R1

20. Which ONE of the following describes a purpose of the Core Exit Thermocouple (CETC) input to the Plant Computer System (PCS)?
- A. Input to Integrity CSF Status Tree.
 - B. Indication and PCS alarm for RCS cooldown/heatup limits.
 - C. Indication and PCS alarm for average five high CETC.
 - D. Input to Core Cooling CSF Status Tree.

QUESTIONS REPORT
for POST NRC REVIEW R1

21. Given the following conditions:

- The plant is operating at 100% power.
- Due to a loss of cooling to Containment Air Recirc Fans, containment temperature has risen from 103 degrees F to 119 degrees F.
- Actions are in progress to restore containment cooling.

If the temperature continues to rise in containment, which ONE of the following describes the effect on pressurizer level indication?

- A. The controlling pressurizer level channel will indicate slightly lower than actual level, and remain higher than the cold-calibrated pressurizer level instrument.
- B. The controlling pressurizer level channel will indicate slightly higher than actual level, and remain higher than the cold-calibrated pressurizer level instrument.
- C. The controlling pressurizer level channel will indicate slightly lower than actual level, and remain lower than the cold-calibrated pressurizer level instrument.
- D. The controlling pressurizer level channel will indicate slightly higher than actual level, and remain lower than the cold-calibrated pressure level instrument.

QUESTIONS REPORT
for POST NRC REVIEW R1

22. Plant conditions are follows:

- A power reduction to 50% is scheduled for this shift.
- A loss of power has just rendered the boric acid blender control inoperable.
- Emergency boration is not available.

Which ONE of the following is correct concerning the planned power reduction?

- A. The downpower should continue as planned using the RWST as a source of borated makeup.
- B. The downpower should continue as planned using the opposite unit's blender as a source of borated makeup.
- C. The downpower should be postponed because the crew will be unable to borate to compensate for Xenon effects during the downpower.
- D. The downpower should be postponed because the crew will be unable to maintain control rods above the insertion limit.

QUESTIONS REPORT
for POST NRC REVIEW R1

23. Given the following:

Unit 1 is in Mode 5, Reduced Inventory conditions due to removal of "B" RCP for corrective maintenance on the pump impeller.

Reactor coolant loops are **NOT** isolated.

A loss of RHR occurs.

The crew is performing actions of 1-AP-11, Loss of RHR.

RCS temperature is rising and NEITHER RHR pump can be started.

Which ONE of the following describes the method, and the actions that will be taken to restore core cooling?

- A. Cold Leg Injection Forced Feed and Spill; start two charging pumps and both LHSI pumps.
- B. Cold Leg Injection Forced Feed and Spill; start one charging pump, and if necessary, one LHSI pump.
- C. Hot Leg Injection Forced Feed and Spill; start two charging pumps and both LHSI pumps.
- D. Hot Leg Injection Forced Feed and Spill; start one charging pump, and if necessary, one LHSI pump.

QUESTIONS REPORT
for POST NRC REVIEW R1

24. In accordance with Attachment 3 of 1-E-1, Loss of Reactor or Secondary Coolant, which ONE of the following describes the correct sequence for securing Quench Spray?
- A. Reset CDA, Stop Quench Spray Pumps, close Quench Spray Pump discharge valves, and close Chemical Addition Tank outlet valves.
 - B. Reset CDA, close Quench Spray Pump discharge valves, close Chemical Addition Tank outlet valves, stop Quench Spray Pumps.
 - C. Ensure the initiating signal has cleared, reset CDA, Stop Quench Spray Pumps, close Quench Spray Pump discharge valves, and close Chemical Addition Tank outlet valves.
 - D. Ensure the initiating signal has cleared, reset CDA, close Quench Spray Pump discharge valves, close Chemical Addition Tank outlet valves, stop Quench Spray Pumps.

QUESTIONS REPORT
for POST NRC REVIEW R1

25. Unit 1 is at 100% power.

PRZR pressure control channel 1-RC-PT-1445 fails high.

Which ONE of the following describes the response of the PRZR Pressure Control System?

Generates an OPEN signal to...

- A. both PRZR spray valves and 1-RC-PCV-1455C
- B. both PRZR spray valves and 1-RC-PCV-1456
- C. 1-RC-PCV-1456 ONLY
- D. 1-RC-PCV-1455C ONLY

QUESTIONS REPORT
for POST NRC REVIEW R1

26. Given the following conditions:

Unit 1 is in Mode 6, core on-load in progress.

A recently-irradiated fuel assembly appears to fall apart during removal from the containment upender.

Bubbles are coming to the surface of the Refueling Cavity.

The following Containment radiation monitors are in alarm:

-1-RM-RMS-159

-1-RM-RMS-160

-1-RM-RMS-162

Which ONE of the following describes actions that will initially be required in accordance with 0-AP-30, Fuel Failure During Handling?

- A. Manually initiate Control Room bottled air dump; evacuate the Fuel Building.
- B. Place Fuel Building ventilation in service through the charcoal filters; evacuate the containment.
- C. Manually initiate Control Room bottled air dump; evacuate the Containment.
- D. Isolate reactor cavity from the Spent Fuel Pool; place Fuel Building ventilation in service through the charcoal filters.

QUESTIONS REPORT

for POST NRC REVIEW R1

27. In the case of an Anticipated Transient Without Scram (ATWS), the ATWS Mitigation System Actuation Circuitry (AMSAC) is designed to...
- A. open reactor trip breakers and actuate AFW to limit DNBR and maintain RCS parameters within the reactor core safety limits; does NOT directly trip the turbine.
 - B. open the Rod Drive MG Set supply breakers, trip the turbine, and actuate AFW to limit DNBR and maintain RCS parameters within the reactor core safety limits.
 - C. open reactor trip breakers and actuate AFW to limit the RCS pressure excursion for the event coincident with loss of feedwater; does NOT directly trip the turbine.
 - D. open the Rod Drive MG Set supply breakers, trip the turbine, and actuate AFW to limit the RCS pressure excursion for the event coincident with loss of feedwater.

QUESTIONS REPORT
for POST NRC REVIEW R1

28. Which ONE of the following describes one method for maintaining Spent Fuel Pool water volume and Shutdown Margin?

Minimum required boron concentration is...

- A. 2600 ppm. Evaporation is compensated for by making up with Primary Grade water.
- B. 2300 ppm. Evaporation is compensated for by making up with blended flow from the boric acid blender.
- C. 2600 ppm. Leakage is compensated for by making up with Primary Grade water.
- D. 2300 ppm. Leakage is compensated for by making up with blended flow from the boric acid blender.

QUESTIONS REPORT
for POST NRC REVIEW R1

29. Given the following:

Unit 1 in Mode 6.

Refueling Operations are in progress.

Source Range counts on N31 and N32 have been approximately 120 CPS throughout the core reload process.

Which ONE of the following describes the minimum Source Range Count Rate required to automatically initiate the Containment Evacuation alarm?

- A. 240 CPS on EITHER channel
- B. 240 CPS on BOTH channels
- C. 600 CPS on EITHER channel
- D. 600 CPS on BOTH channels

QUESTIONS REPORT
for POST NRC REVIEW R1

30. Which ONE of the following is correct concerning the signals that will close the Blowdown Trip Valves in the Auxiliary Building (1-BD-TV-100A, -100C, and -100E) and the actions necessary to re-open the valves following closure?
- A. Containment Isolation Phase A closes the valves; depress CLOSE button on each valve to reset signal, then depress OPEN button to re-open.
 - B. High flow condition from the associated SG closes the valves; depress CLOSE button on each valve to reset signal, then depress OPEN button to re-open.
 - C. High flow condition from the associated SG closes the valves; depress OPEN button to re-open (signal resets automatically when valves close)
 - D. Containment Isolation Phase A closes the valves; place the Phase A reset switches in RESET, then depress OPEN buttons to re-open.

QUESTIONS REPORT
for POST NRC REVIEW R1

31. Given the following conditions:

Unit 1 is in Mode 6, core off-load is in progress.

A fuel assembly being withdrawn from the core has visible signs of damage.

0-AP-30, Fuel Failure During Handling, has been entered.

Which ONE of the following describes the location where the fuel assembly should be placed?

- A. Back in its original location in the core
- B. In the RCCA change fixture
- C. In a horizontal position in the upender
- D. Transport to the Spent Fuel Pool

QUESTIONS REPORT
for POST NRC REVIEW R1

32. Given the following:

A Steam Generator Tube Rupture has occurred on Unit 1.
The crew is preparing to initiate RCS depressurization to minimize break flow in accordance with 1-E-3, Steam Generator Tube Rupture.
Ruptured SG level is OFF-SCALE HIGH.
All equipment is available and operating as required.

Which ONE of the following describes the action that will be required to initiate RCS depressurization?

- A. Initiate Normal PRZR Spray flow
- B. Open one PRZR PORV
- C. Initiate Auxiliary Spray flow
- D. Open both PRZR PORVs

QUESTIONS REPORT
for POST NRC REVIEW R1

33. Given the following conditions:

Unit 1 is at 95% power.

The Main Turbine Generator is operating in IMP-IN.

Steam Dump valve 1-MS-TCV-1408C fails open.

Which ONE of the following describes the effect on the unit and the MINIMUM action required in accordance with 1-AP-38, Excessive Load Increase?

- A. Reactor power will rise. Place the affected Condenser Steam Dump Interlock Switch to OFF/RESET.
- B. Reactor power will rise. Place BOTH Condenser Steam Dump Interlock Switches to OFF/RESET.
- C. Reactor power will lower. Place the affected Condenser Steam Dump Interlock Switch to OFF/RESET.
- D. Reactor power will lower. Place BOTH Condenser Steam Dump Interlock Switches to OFF/RESET.

QUESTIONS REPORT
for POST NRC REVIEW R1

34. A turbine runback has occurred from 100% to 55% power.

Steam Dump Banks 1, 2, 3, and 4 are TRIPPED OPEN.

Which ONE (1) of the following is the MINIMUM plant condition that would cause this alignment?

- A. 10° F mismatch between T_{avg} and $T_{no-load}$
- B. 10° F mismatch between T_{avg} and T_{ref}
- C. 16° F mismatch between T_{avg} and $T_{no-load}$
- D. 16° F mismatch between T_{avg} and T_{ref}

QUESTIONS REPORT
for POST NRC REVIEW R1

35. A turbine runback has occurred on Unit 1.

Reactor power is 61% and stable.

Generator load is approximately 600 MWe and stable.

No operator actions have been taken.

The cause of the runback has been determined and the US directs the crew to restore affected systems to normal.

Which ONE of the following describes the method used to accomplish this?

- A. Initiate RCS boration and manually withdraw control rods above the insertion limits.
- B. Manually withdraw control rods to maintain Tavg on program. Place steam dumps in Steam Pressure mode and manually close.
- C. Raise generator load to close steam dumps while borating the RCS to maintain Tavg on program.
- D. Manually withdraw control rods to raise Tavg and reactor power. Ensure steam dumps close as Tavg is raised.

QUESTIONS REPORT
for POST NRC REVIEW R1

36. Given the following conditions:

Unit 1 reactor trip from 100% power.

A loss of off-site power has occurred.

Natural Circulation cooldown is being established in accordance with 1-ES-0.2A,
Natural Circulation Cooldown with CRDM Fans.

RCS pressure is 1880 psig.

Tavg is 557.5 degrees F

Thot is 575 degrees F

Tcold is 540 degrees F

Core Exit Thermocouples are 580 degrees F

1-ES-0.2A directs the crew to determine RCS subcooling.

Which ONE of the following describes the value of subcooling that will be reported in accordance with 1-ES-0.2A?

- A. 46 degrees F
- B. 48 degrees F
- C. 51 degrees F
- D. 53 degrees F

QUESTIONS REPORT
for POST NRC REVIEW R1

37. Given the following plant conditions:

- A fire occurred in the main control room.
- The crew relocated to the Auxiliary Shutdown Panel.
- The unit-1 OATC is preparing to secure the main feedwater (MFW) and condensate pumps.

Which ONE of the following is correct concerning the method that will be used to secure the pumps in accordance with 0-FCA-1, Control Room Fire.?

- A. The condensate pump breakers will be manually opened from the normal switchgear; then the turbine building operator will verify the MFW pumps trip on low suction pressure.
- B. The condensate pump breakers will be manually opened from the emergency switchgear; then the turbine building operator will verify the MFW pumps trip on low suction pressure.
- C. The MFW pump breakers will be manually opened from the normal switchgear; then the condensate pump breakers will be manually opened from the normal switchgear.
- D. The MFW pump breakers will be manually opened from the emergency switchgear; then the condensate pump breakers will be manually opened from the emergency switchgear.

QUESTIONS REPORT
for POST NRC REVIEW R1

38. Given the following conditions:

Unit 1 is at 100% power.
All equipment is in service.
The following events occur:

RPS Channel III status lights illuminate.
NIS Cabinet N-43 indication is extinguished.
Multiple control room annunciators are received.
The crew is performing appropriate actions in accordance with plant procedures.

Which ONE of the following describes the event that has occurred, and the initial response of the unit?

- A. Loss of Bus 1J; an automatic reactor trip will occur.
- B. Loss of Inverter 1-III; an automatic reactor trip will occur.
- C. Loss of Bus 1J; an automatic reactor trip will NOT occur.
- D. Loss of Inverter 1-III; an automatic reactor trip will NOT occur.

QUESTIONS REPORT
for POST NRC REVIEW R1

39. Given the following conditions:

Unit 1 is at 100% power.

The following alarm is received in the control room:

1H-B2, BATTERY CHGR 1-II TROUBLE

Battery Charger 1-II DC Output breaker has tripped and CANNOT be reset.
DC Bus 1-II voltage is 110 volts and lowering.

Which ONE of the following describes the action that will be taken, and the indication available when the bus is restored?

- A. Place Battery Charger 1C-I in service. Charger output voltage will indicate 122 - 129 volts.
- B. Place Battery Charger 1C-I in service. Charger output voltage will indicate 132 - 139 volts.
- C. Place Battery Charger 1C-II in service. Charger output voltage will indicate 122 - 129 volts.
- D. Place Battery Charger 1C-II in service. Charger output voltage will indicate 132 - 139 volts.

QUESTIONS REPORT
for POST NRC REVIEW R1

40. Given the following:

Unit 1 is at 75% power.

"B" Main Feedwater Regulating Valve fails open.

"B" SG level indicates 76% NR and trending up.

Which ONE of the following describes the plant response to the FIRST signal from RPS/ESF?

Directly initiates a...

- A. reactor Trip and Feedwater Isolation. Main Feedwater Pumps remain running.
- B. reactor Trip, Feedwater Isolation, and Main Feedwater Pump trip.
- C. turbine Trip and Feedwater Isolation. Main Feedwater Pumps remain running.
- D. turbine Trip, Feedwater Isolation, and Main Feedwater Pump trip.

QUESTIONS REPORT
for POST NRC REVIEW R1

41. Given the following conditions:

Unit 1 is at 100% power.

A Main Feed Line Rupture has occurred in the Turbine Building.

SG N/R levels are lowering at a rate of approximately 50% per minute and are currently as follows:

SG "A" 26% N/R

SG "B" 24% N/R

SG "C" 21% N/R

All equipment operates as required.

Which ONE of the following describes the status of the unit?

- A. A reactor trip setpoint has been exceeded. AFW Pumps are running.
- B. A reactor trip setpoint has been exceeded. AFW Pumps are NOT running.
- C. A reactor trip setpoint has NOT been exceeded. AFW Pumps are running.
- D. A reactor trip setpoint has NOT been exceeded. AFW Pumps are NOT running.

QUESTIONS REPORT
for POST NRC REVIEW R1

42. Which ONE of the following describes the MAXIMUM reading that can be obtained on the Containment High Range Area Radiation Monitors, 1-RMS-RM-165 and 166?

- A. 10^3 R/Hr
- B. 10^5 R/Hr
- C. 10^7 R/Hr
- D. 10^9 R/Hr

QUESTIONS REPORT
for POST NRC REVIEW R1

43. Given the following conditions:

A reactor trip has occurred on Unit 1 due to a loss of Main Feedwater.
During the performance of 1-E-0, Reactor Trip or Safety Injection, AFW Pump
1-FW-P-2 trips on overspeed.

Prior to any action by the crew, which ONE of the following describes the Steam
Generators that are being supplied with AFW flow?

- A. All SGs
- B. A and B SGs only
- C. A and C SGs only
- D. B and C SGs only

QUESTIONS REPORT
for POST NRC REVIEW R1

44. Given the following:

A large-break LOCA has occurred on Unit 1.
The crew is performing actions of 1-E-0, Reactor Trip or Safety Injection.
The crew determines that there is **NO** SW flow to the RS Heat Exchangers.

Which ONE of the following actions is required **in accordance with 1-E-0?**

- A. Go to 0-AP-12, Loss of Service Water. When completed, return to 1-E-0.
- B. Perform 0-AP-12, Loss of Service Water, while continuing with 1-E-0.
- C. Initiate Attachment 5, Verification of Phase A Isolation, to establish RSHX SW flow while continuing with 1-E-0.
- D. Initiate Attachment 2, Verification of Phase B Isolation, to establish RSHX SW flow while continuing with 1-E-0.

QUESTIONS REPORT
for POST NRC REVIEW R1

45. The following plant conditions exist.

- Unit 1 is at 100% power
- Unit 2 is in Mode 3 following a refueling outage with all 3 RCPs running
- Bus 5 in the switchyard is out of service
- An earthquake occurs that causes Unit 1 to trip and the loss of bus 4 in the switchyard

Which ONE of the following describes the Unit 1 and Unit 2 Reactor Coolant Pump (RCP) status? (assume all equipment operates normally)

- A. Only Unit 1 "C" and Unit 2 "C" RCPs are running.
- B. All RCP's running except Unit 2 "A" & "B".
- C. All RCPs running except Unit 1 "C" and Unit 2 "C".
- D. Only Unit 1 "A" and Unit 2 "A" RCPs are running.

QUESTIONS REPORT
for POST NRC REVIEW R1

46. Given the following conditions:

- Unit 2 was operating at 100% power.
- 2-CH-P-1A was running.
- A loss of DC bus 2-III has occurred.
- While stabilizing the unit, Safety Injection actuated.

Which ONE of the following pump combinations will exist as a result of these failures?

- A. 2-CH-P-1A running, 2-CH-P-1B not running, 2-CH-P-1C not running
- B. 2-CH-P-1A running, 2-CH-P-1B not running, 2-CH-P-1C running
- C. 2-CH-P-1A running, 2-CH-P-1B running, 2-CH-P-1C not running
- D. 2-CH-P-1A not running, 2-CH-P-1B running, 2-CH-P-1C running

QUESTIONS REPORT
for POST NRC REVIEW R1

47. Given the following:

Unit 1 is at 100% power.

1H 4160V bus normal feeder breaker 15H11 spuriously tripped open.

Which ONE of the following describes the response of 1H EDG and starting air system?

1H EDG will...

- A. start and load. The starting air compressors will start directly from the EDG start signal, and will stop when air receiver pressure reaches 200 psig.
- B. start and load. The starting air compressors will start when air receiver pressure drops to 200 psig, and will stop when air receiver pressure reaches 240 psig.
- C. start and run unloaded. The starting air compressors will start directly from the EDG start signal, and will stop when air receiver pressure reaches 200 psig.
- D. start and run unloaded. The starting air compressors will start when air receiver pressure drops to 200 psig, and will stop when air receiver pressure reaches 240 psig.

QUESTIONS REPORT
for POST NRC REVIEW R1

48. Unit 1 is at 100% power.

The crew is responding to a loss of instrument air using 1-AP-28, "Loss of Instrument Air," when the RO identifies that pressurizer level is 85% and rising.

Which ONE of the following describes the actions required?

- A. Continue performance of 1-AP-28 until an automatic reactor trip occurs, then exit 1-AP-28 and initiate performance of 1-E-0.
- B. Immediately initiate performance of 1-E-0, "Reactor Trip or Safety Injection," and continue performance of 1-AP-28 as resources permit.
- C. Exit 1-AP-28 and immediately initiate performance of 1-E-0. Resume actions of 1-AP-28 upon exiting the EOPs.
- D. Continue performance of 1-AP-28 until completion, then if the cause for the pressurizer level increase has not been corrected, trip the reactor and perform 1-E-0.

QUESTIONS REPORT
for POST NRC REVIEW R1

49. Given the following conditions:

A loss of Containment Integrity has occurred.

In accordance with the accident analyses, which ONE of the following events would result in the HIGHEST rate of Containment mass leakage to atmosphere?

- A. DBA LOCA, Beginning of Core Life, 100% power.
- B. DBA LOCA, End of Core Life, 0% power.
- C. Main Steam Break inside Containment, Beginning of Core Life, 100% power.
- D. Main Steam Break inside Containment, End of Core Life, 0% power.

QUESTIONS REPORT
for POST NRC REVIEW R1

50. With a containment vacuum pump running on each unit, process vent particulate radiation monitor 1-GW-RI-178-3 indication spiked, causing an ALERT and HIGH alarm to lock in.

Which ONE of the following describes the plant response?

- A. ONLY the unit 1 vacuum pump will trip.
- B. Both units' vacuum pumps will trip, but discharge valves remain open.
- C. Both units' vacuum pump discharge valves will automatically close.
- D. ONLY the unit 1 vacuum pump discharge valve will automatically close.

QUESTIONS REPORT
for POST NRC REVIEW R1

51. Given the following:

- Both units are operating at 100% power.
- The unit 2 Service Water pumps are running.
- A rupture occurs on an expansion joint on the "B" SW header in the Auxiliary Building.
- The control room crew enters 0-AP-12, Loss of Service Water.
- The unit 2 "B" SW pump trips and the unit 1 "A" pump CANNOT be started.

Which ONE of the following describes the required action?

- A. Enter action of T.S. 3.0.3 and commence a shutdown of Unit 1 ONLY within one hour.
- B. Start unit 1 "B" SW pump to restore flow to one header.
- C. Trip both reactors due to no flow to an intact header.
- D. Evaluate the need to perform an orderly shut down on both units.

QUESTIONS REPORT
for POST NRC REVIEW R1

52. Which ONE of the following describes the operation of the Radiation Monitoring Pumps on the Recirculation Spray Heat Exchangers following a large-break LOCA?
- A. Starts immediately. Pump will stop when Phase B isolation is reset.
 - B. Starts immediately. Pump will only stop by resetting Phase B isolation and placing the pump in STOP.
 - C. Starts after 2 minutes. Pump will stop when Phase B isolation is reset.
 - D. Starts after 2 minutes. Pump will only stop by resetting Phase B isolation and placing the pump in STOP.

QUESTIONS REPORT
for POST NRC REVIEW R1

53. Which ONE of the following describes the function of the Turbine Building Instrument Air Dryer Bypass Valve, 2-IA-TV-211?
- A. Opens at 90 psig decreasing instrument air header pressure; automatically closes above 90 psig increasing instrument air header pressure.
 - B. Opens at 90 psig decreasing instrument air header pressure; must be manually reset to close above 90 psig increasing instrument air header pressure.
 - C. Opens at 80 psig decreasing instrument air header pressure; automatically closes above 80 psig increasing instrument air header pressure.
 - D. Opens at 80 psig decreasing instrument air header pressure; must be manually reset to close above 80 psig increasing instrument air header pressure.

QUESTIONS REPORT
for POST NRC REVIEW R1

54. Given the following:

Service Air Compressor 1-SA-C-1 is in HAND.
Service Air Compressor 2-SA-C-1 is in AUTO.

Which ONE of the following describes the operation of each compressor in this configuration?

- A. 1-SA-C-1 will run unloaded as long as SA pressure remains above its unload setpoint.
- B. 2-SA-C-1 will run unloaded as long as SA pressure remains above its unload setpoint.
- C. 1-SA-C-1 will load and unload at lower air pressure setpoints than 2-SA-C-1.
- D. BOTH Service Air Compressors will load and unload at the same air pressure setpoints.

QUESTIONS REPORT
for POST NRC REVIEW R1

55. Which ONE of the following best describes the operation of the pre-action sprinkler system for the Records Room vault?
- A. Piping is always full of water requiring only sprinkler head actuation based on detection of either heat or smoke.
 - B. Sprinkler head actuates when heat is detected, to discharge compressed air, allowing water to flow through the system against a lowering pressure.
 - C. Compressed air is bled off when smoke is detected, allowing water to flow through the system against a lowering pressure.
 - D. A stop valve opens when smoke is detected, and then the sprinkler head actuates if exposed to heat.

QUESTIONS REPORT
for POST NRC REVIEW R1

56. Which ONE of the following describes the operation of Containment Vacuum pumps 3A and 3B?
- A. Automatically operate to maintain Containment Vacuum. A vacuum breaker ensures containment vacuum is not reduced below 5.5 psia.
 - B. Automatically operate to maintain Containment Vacuum. Vacuum breaker protection is NOT provided.
 - C. Manually operated to maintain Containment Vacuum. A vacuum breaker ensures containment vacuum is not reduced below 5.5 psia.
 - D. Manually operated to maintain Containment Vacuum. Vacuum breaker protection is NOT provided.

QUESTIONS REPORT
for POST NRC REVIEW R1

57. Given the following conditions:

- A LOCA has occurred
- The crew is performing 1-E-1, Loss of Reactor or Secondary Coolant
- The following parameters exist:
 - All SG pressures – 930 psig and slowly trending down
 - All SG levels – being controlled at 42% NR
 - PRZR level – off-scale high
 - RVLIS Full Range indicates 20%
 - Containment Pressure – 23 psia
 - RWST level – 74% and decreasing slowly
 - RCS pressure – 800 psig and decreasing slowly

Based on these indications, which ONE of the following procedures will the crew enter next?

- A. 1-ES-1.1, SI Termination
- B. 1-ES-1.2, Post-LOCA Cooldown and Depressurization
- C. 1-ES-1.3, Transfer to Cold Leg Recirculation
- D. 1-E-2, Faulted Steam Generator Isolation

QUESTIONS REPORT
for POST NRC REVIEW R1

58. Given the following conditions:

- A LOCA outside containment has occurred.
- The crew is performing the actions in 1-ECA-1.2, LOCA Outside Containment.

Which ONE of the following actions will be attempted to isolate the break and which indication is used to determine if the leak has been isolated in accordance with 1-ECA-1.2?

- A. Isolate Low Head Safety Injection piping; RCS pressure is monitored, because SI flow will repressurize the RCS with the break isolated.
- B. Isolate Low Head Safety Injection piping; PRZR level is monitored, because with the break isolated, RCS inventory will rapidly rise.
- C. Isolate High Head Safety Injection piping; RCS pressure is monitored, because SI flow will repressurize the RCS with the break isolated.
- D. Isolate High Head Safety Injection piping; PRZR level is monitored, because with the break isolated, RCS inventory will rapidly rise.

QUESTIONS REPORT
for POST NRC REVIEW R1

59. A reactor trip has occurred due to a loss of all feedwater.

The following conditions exist:

The crew has entered 1-FR-H.1, Response To Loss of Secondary Heat Sink.
SG levels are 38% wide range and slowly trending down.
RCS pressure is 2040 psig and lowering.
SG pressure is 1040 psig and lowering.
Annunciators AUX FD PP 3A-3B AUTO TRIP and TURBINE DRIVEN AFW
PUMP TROUBLE OR LUBE OIL TRBL are both lit.

Which ONE of the following is performed NEXT?

- A. Stop RCPs and attempt to initiate main feedwater flow.
- B. Stop RCPs and establish bleed and feed cooling of the RCS.
- C. Return to 1-E-1, Loss Of Reactor Or Secondary Coolant, for the LOCA in progress.
- D. Depressurize SGs and initiate feed using the condensate pumps.

QUESTIONS REPORT
for POST NRC REVIEW R1

60. Which ONE of the following describes the parameter and the reason that a RED condition on the Integrity CSF status tree may develop while performing actions of 1-FR-C.2, Response to Degraded Core Cooling?
- A. Core exit thermocouple temperature will decrease rapidly when charging or LHSI pumps are started and SI flow is initiated.
 - B. Core exit thermocouple temperature will decrease rapidly when SG depressurization and SI accumulator injection occur.
 - C. RCS cold leg temperature will decrease rapidly when charging or LHSI pumps are started and SI flow is initiated.
 - D. RCS cold leg temperature will decrease rapidly when SG depressurization and SI accumulator injection occur.

QUESTIONS REPORT
for POST NRC REVIEW R1

61. Given the following conditions:

A reactor trip has occurred due to a loss of offsite power.
The crew is performing actions of 1-ES-0.2A, Natural Circulation Cooldown with CRDM Fans.
RVLIS is NOT available.
The crew has commenced RCS cooldown and depressurization.

The following conditions are indicated:

RCS pressure is 2030 psig and trending DOWN.
RCS Tavg is 547°F and trending DOWN slowly.
PRZR Level is 26% and stable.

Which ONE of the following actions is required?

- A. Continue depressurization to 1950 psig and block the Low PRZR Pressure SI inputs.
- B. Initiate Safety Injection and go to 1-E-0, Reactor Trip Or Safety Injection.
- C. Stop the cooldown and depressurization, block the Low PRZR Pressure SI inputs, and resume cooldown and depressurization.
- D. Stop the depressurization and go to 1-ES-0.4, Natural Circulation Cooldown With Steam Void In Vessel (Without RVLIS)

QUESTIONS REPORT
for POST NRC REVIEW R1

62. Given the following:

- The reactor was tripped due to a loss of all Component Cooling Water.
- The crew is performing the actions of 1-ES-0.4, Natural Circulation Cooldown with Steam Void in Vessel (without RVLIS)

The following conditions currently exist:

- RCS pressure is 1600 psig
- RCS temperature is 450°F

Which ONE of the following describes the reason for equalizing charging and letdown flows during the subsequent depressurization?

- A. Allows pressurizer level to be used to monitor void growth.
- B. Charging and letdown flows by themselves are the only true measure of RCS inventory at this point in the procedure.
- C. Ensures that stable conditions are established to ensure that the pressurizer does not go solid.
- D. Ensures pressurizer heaters will remain energized and available to collapse any voids that may be present.

QUESTIONS REPORT
for POST NRC REVIEW R1

63. Given the following conditions:

- A LOCA has occurred.
- Due to multiple equipment failures, the crew is performing actions of 1-ECA-1.1, Loss Of Emergency Coolant Recirculation.
- Two charging pumps and two LHSI pumps are running.
- RWST level is approximately 3% and continues to lower.

Which ONE of the following describes the NEXT actions required in accordance with 1-ECA-1.1?

- A. Stop BOTH Quench Spray pumps, ONE charging pump and ONE LHSI pump and verify NO backflow from the RWST to containment sump.
- B. Stop BOTH Quench Spray pumps, ONE charging pump and ONE LHSI pump and initiate secondary depressurization to facilitate SI accumulator injection.
- C. Stop ALL pumps taking a suction from the RWST and verify NO backflow from the RWST to containment sump.
- D. Stop ALL pumps taking a suction from the RWST and initiate secondary depressurization to facilitate SI accumulator injection.

QUESTIONS REPORT
for POST NRC REVIEW R1

64. Given the following conditions:

- 1-ECA-2.1, Uncontrolled Depressurization of All Steam Generators is being performed.
- The crew has reduced AFW flow to all steam generators (SG) to minimum as they continue attempts to isolate the SGs.

Which ONE of the following describes the expected plant response to the AFW flow reduction and what actions are to be taken as SG pressures decrease?

- A. RCS hot leg temperatures will eventually begin to increase due to reduction of SG inventory and the crew will then transition to 1-ES-1.1, Safety Injection Termination.
- B. RCS hot leg temperatures will eventually begin to increase due to reduction in SG inventory and the crew will then increase AFW flow while continuing in 1-ECA-2.1, Uncontrolled Depressurization of All Steam Generators.
- C. The SGs will eventually become completely depressurized due to inadequate secondary heat sink and the crew will then transition to 1-E-2, Faulted Steam Generator Isolation.
- D. The SGs will eventually become completely depressurized due to inadequate secondary heat sink and the crew will then transition to 1-ES-1.1, Safety Injection Termination.

QUESTIONS REPORT
for POST NRC REVIEW R1

65. Given the following conditions:

- A LOCA has occurred.
- RCS pressure is 220 psig.
- Containment pressure peaked at 41 psia.
- Containment Pressure is 26 psia and lowering slowly.
- All automatic actuations have occurred as required.
- The crew is about to transition from 1-E-0, Reactor Trip or Safety Injection.
- Due to an ORANGE condition on the Containment CSF Status Tree, the US has determined that transition to FR-Z.2, Response to High Containment Sump Level is required.

Which ONE of the following describes the likely sources of leakage that may require action to isolate?

- A. Component Cooling Water
- B. Service Water
- C. Primary Grade Water
- D. Chilled Water

QUESTIONS REPORT

for POST NRC REVIEW R1

66. Valve lineups are in progress to support unit startup. The valve lineup being worked specifies that a valve should be "locked 2 turns open."

Which ONE of the following correctly describes the process for initially checking, and for independently verifying the valve's position?

- A. The valve should be fully closed, then re-opened 2 turns with a simultaneous verifier observing and concurring that the valve is opened 2 turns, then the lock should be installed.
The independent verifier should verify the lock is properly installed on the correct valve.
- B. The valve should be fully closed, then re-opened 2 turns, then the lock should be installed. No SV is required.
The independent verifier should visually verify valve position and check that the lock is properly installed.
- C. The valve should be fully closed, then re-opened 2 turns with a simultaneous verifier observing and concurring that the valve is opened 2 turns, then the lock should be installed.
The independent verifier should remove the lock and fully close the valve, then re-open the valve 2 turns and install the lock.
- D. The valve should be fully closed, then re-opened 2 turns with a simultaneous verifier observing and concurring that the valve is opened 2 turns.
The independent verifier should visually verify valve position and install the lock.

QUESTIONS REPORT
for POST NRC REVIEW R1

67. RCS temperature is currently stable at 355° F. Rated thermal power is <5% and Keff is <0.99.

Which ONE of the following is the correct operational mode for the given condition?

- A. Mode 5
- B. Mode 4
- C. Mode 3
- D. Mode 2

QUESTIONS REPORT
for POST NRC REVIEW R1

68. As the Unit-2 OATC, you are preparing to take a mid-day meal break.

Based on the requirements of OPAP-0005, "Shift Relief and Turnover," which of the following is required?

- A. All OATC activities in progress prior to turnover must be suspended for the duration of the break.
- B. Your relief may NOT have any other concurrent duties while at the controls.
- C. You must complete a shift turnover checklist.
- D. BOTH unit SROs must be informed of the turnover.

QUESTIONS REPORT
for POST NRC REVIEW R1

69. In accordance with VPAP-1403, Temporary Modifications, which ONE of the following conditions must be controlled as a Procedurally Controlled Temporary Modification?
- A. Plugs installed in floor drains in the New Fuel Receiving area.
 - B. Portable HVAC unit installed in Warehouse #5 fire pump house.
 - C. Temporary lead shielding package installed per applicable VPAP.
 - D. Hose connected to 2-CD-289, CD circ pumps discharge drain valve, for CD system blowdown.

QUESTIONS REPORT
for POST NRC REVIEW R1

70. Which ONE of the following activities requires entry into a technical specification LCO **limiting** action statement? Assume both units at 100% power.
- A. 1-CC-P-1B seal repair with the remaining CCW subsystems operable
 - B. Breaker PMs on PRZR backup heater group 5 supply breaker
 - C. Casing cooling tank level transmitter loop calibration per ICP
 - D. Boron injection tank recirculation local flow indicator leak repair

QUESTIONS REPORT
for POST NRC REVIEW R1

71. Which ONE of the following identifies a difference between unit 1 and unit 2?
- A. Unit 1 train "A" emergency loads are normally powered from "B" RSST;
Unit 2 train "A" emergency loads are normally powered from "A" RSST.
 - B. Common radiation monitors are powered from either unit 1 train "B" (1J1-1) or unit 2 train "A" (2H1-1).
 - C. Unit 1 train "A" emergency loads are normally powered from "C" RSST;
Unit 2 train "A" emergency loads are normally powered from "B" RSST.
 - D. Common radiation monitors are powered from either unit 1 train "A" (1H1-1) or unit 2 train "B" (2J1-1).

QUESTIONS REPORT

for POST NRC REVIEW R1

72. Which ONE of the following is NOT part of the ALARA plan for reducing dose during a unit refueling outage?
- A. Using the gas stripper to degas the primary during RCS cooldown.
 - B. Fully opening one RCS loop bypass MOV during RCS cooldown.
 - C. Fully opening PRZR spray valves one at a time after blocking Low PRZR Pressure SI inputs.
 - D. Keeping RCPs running as long as possible during RCS cooldown.

QUESTIONS REPORT
for POST NRC REVIEW R1

73. Given the following:

Unit 1 has just entered Mode 5.

A Containment Purge is being initiated per 1-OP-21.2, Containment Purge.

Containment Partial Pressure is 9.8 psia.

The crew is preparing to establish atmospheric conditions in Containment.

Which ONE of the following describes the method that will be used to establish atmospheric conditions in Containment?

- A. Open 1-HV-MOV-102, CONT PURGE RELIEF VALVE
- B. Open 1-MOV-HV-100A **OR** 1-MOV-HV-100B, CONT PURGE SUPPLY VALVE
- C. Open 1-MOV-HV-100A **AND** 1-MOV-HV-100B, CONT PURGE SUPPLY VALVE
- D. Open 1-MOV-HV-101, CONT PURGE EXH BYPASS VALVE

QUESTIONS REPORT
for POST NRC REVIEW R1

74. Given the following conditions:

A LOCA has occurred.

'A' train ECCS equipment is operating as required.

'B' train is deenergized and ECCS equipment HAS NOT been started.

The US has announced transition to 1-E-1, Loss of Reactor or Secondary Coolant.

Critical Safety Function Status Trees indicate the following:

SUBCRITICALITY	GREEN
CORE COOLING, INTEGRITY, and CONTAINMENT	ORANGE
HEAT SINK and INVENTORY	YELLOW

Which ONE of the following actions shall be taken?

- A. Transition to 1-FR-C.1, Response to Inadequate Core Cooling.
- B. Transition to 1-FR-C.2, Response to Degraded Core Cooling.
- C. Transition to 1-FR-Z.1, Response to High Containment Pressure.
- D. Attempt to restore power to Train 'B' equipment in 1-E-1, then transition to the highest priority procedure if conditions cannot be cleared.

QUESTIONS REPORT
for POST NRC REVIEW R1

75. A Notification of Unusual Event has been declared.

Which ONE of the following describes the MINIMUM requirement for notification or communication with the NRC?

Notify the NRC within...

- A. 15 minutes of event classification using the Emergency Notification System phone.
- B. 15 minutes of event classification using a commercial phone line and Emergency Response Data System (ERDS) link.
- C. 1 hour of event classification using the Emergency Notification System phone.
- D. 1 hour of event classification using a commercial phone line and ERDS link.