Question 14

PARENT QUESTION - Bank #406972

Initial conditions:

- RCS Tave is 557°F.
- All Rods are fully inserted.
- The Diesel Instrument Air Compressor is tagged out.

The following sequence of events occurs:

1. The running “A” Instrument Air Compressor rips, and the standby “B” Compressor fails to load.
2. Air pressure starts decreasing, and the crew enters AOP 3562, *Loss of Instrument Air*.
3. Air pressure decreases to zero psig.
4. A PEO places the “B” Compressor in “CS”, and it loads.
5. Instrument air pressure recovers to 110 psig.

In accordance with AOP 3562, what actions are the operators required to take with the Reactor Plant Chilled Water System (CDS) now that air pressure has been restored?

a) Restart the previously running CDS Chillers at Main Board 1.
b) Restart the two previously running CDS Circulating Pumps at Main Board 1.
c) Open the RPCCW supply and return to Chilled Water valves, close the CDS CTVs, and close the CDS CTMT Air Recirc supply valves.
d) Close the RPCCW supply and return to Chilled Water valves, open the CDS CTVs, and open the CDS CTMT Air Recirc supply valves.

Answer: D

Question 15:

PARENT QUESTION - Bank #402128

With the plant operating at 100%, the following conditions exist:

- A "brown-out" condition occurs on the grid.
- 6.9KV and 4160V Bus voltages drop to 80% of normal voltage.
- This condition lasts for 5 minutes.

Assuming no operator actions have been taken, complete the following statement about the status of the 4.16KV Buses after the five minutes have passed.

a) The Normal 4160V buses are still energized at low voltage, and the Emergency 4160V buses are powered from the Emergency Diesels.
b) The Normal 4160V buses are still energized at low voltage, and the Emergency 4160V buses are powered from the RSSTs.
c) The Normal 4160V buses are de-energized, and the Emergency 4160V buses are powered from the Emergency Diesels.
d) The Normal 4160V buses are de-energized, and the Emergency 4160V buses are powered from the RSSTs.

Answer: A

Question 58:

PARENT QUESTION - Bank #404671

The plant is in MODE 0, and initial conditions are as follows:

- Fuel assemblies are being moved to different locations in the fuel pool.
- A PEO has recently completed alternating in-service Fuel Pool Purification System (SFC) filters.

The following sequence of events occurs:

1. A RADIATION HI annunciator is received on MB2.
2. The RO reports 3HVR-RE17-1 (Fuel Building Exhaust) is in ALARM.
3. The RO reports Area Radiation Monitor trends as follows:
   - 3RMS-RE08-1 (Spent Fuel Pool Bridge Hoist Area) shows slightly increasing radiation levels.
   - 3RMS-RE36-1 (Fuel Pool Area) shows slightly increasing radiation levels.

What condition is the most likely cause of the increasing radiation levels?

a) A Fuel Assembly has been damaged in the Fuel Pool.
b) Spent Fuel Pool level is decreasing.
c) Fuel Assemblies have been loaded into an unapproved loading pattern.
d) An improper SFC System alignment is bypassing the SFC filters.

Answer: A

Question 81:

PARENT QUESTION - Bank #407696

With the plant initially at 100% power, the following sequence of events occurs:

1. A LOCA outside Containment occurs, resulting in a Reactor trip and safety injection.
2. Over the next 10 minutes, RCS pressure increases to and cycles at 2350 psia, with PZR PORVs cycling.
3. The crew is responding using ECA-1.2, *LOCA Outside Containment*.
4. RWST level is 900,000 gallons and slowly decreasing.
5. Pressurizer level is 65% and increasing.
6. The final valve the crew closes while attempting to isolate the break is the "A" RHR Pump Cold Leg Injection Valve (3SIL*MV8809A).
7. After 3SIL*MV8809A closes, the RO reports that RCS pressure is still cycling at 2350 psia.
8. The STA observing the Real-Time trend reports that the Pzr PORVs are now cycling at a significantly faster rate.

To which procedure is the crew required to transition from ECA-1.2?

a) E-1, *Loss of Reactor or Secondary Coolant*.
b) ES-1.1, *SI Termination*.
c) ES-1.3, *Transfer to Cold Leg Recirculation*.
d) ECA-1.1, *Loss of Emergency Coolant Recirculation*.

Answer: A

Question 88:

PARENT QUESTION - Bank #407965

A large break LOCA occurs, and current conditions are as follows:

- No SIH pumps could be started.
- RWST Level is approaching the Lo-Lo level setpoint.

Which procedure will address the loss of SIH Pumps, and based on the loss of SIH Pumps, what action will be taken?

a) Per E-1, *Loss of Reactor or Secondary Coolant*, the crew will verify two Charging Pumps are running.
b) Per E-1, *Loss of Reactor or Secondary Coolant*, the crew will start the swing Charging Pump.
c) Per ES-1.3, *Transfer to Cold Leg Recirculation*, the crew will reopen one RHR Cold Leg Injection Valve.
d) Per ES-1.3, *Transfer to Cold Leg Recirculation*, the crew will restart one RHR Pump.

Answer: C