

Question # 1
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000007-EK1.02

QUESTION

Following a reactor trip, adequate Shutdown Margin is assured by:

- a. verifying all Control Rods have fully inserted.
- b. swapping Makeup Pump suctions to the BWST.
- c. starting the second Makeup Pump.
- d. maintaining Steam Generator pressures constant.

ANSWER

a.

REFERENCE

DB-OP-02000, Step 4.2

New

Memory

Question # 2
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000008-AA1.05

QUESTION

The following plant conditions exist:

- A Pressurizer vapor space leak occurred approximately 10 hours ago.
- An SFAS Level 2 actuation occurred and all safety systems responded as expected.
- BWST level is 9 ft.
- RCS pressure is 925 psig; temperature is 400°F.
- Subcooling margin was not lost.

Which one of the following actions should be performed prior to swapping LPI Pump suction to the CTMT sump?

- a. Block and stop HPI pumps.
- b. Piggyback LPI to HPI pump suction.
- c. Establish HPI alternate minimum recirc flowpath.
- d. Perform HPI flow balancing.

ANSWER

b.

REFERENCE

DB-OP-02000, step 13.12 and Specific Rule 3.4

Modified

Higher

Question # 3
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000009-EK3.13

QUESTION

Which one of the following describes the basis for tripping all Reactor Coolant Pumps (RCPs) on a loss of subcooling margin?

- a. To prevent possible core damage on a subsequent trip of the RCPs.
- b. To reduce RCS pressure by removing the pressure head developed by the RCPs.
- c. To prevent cavitation damage to the RCPs.
- d. To reduce the amount of heat being added to the RCS, from the RCPs.

ANSWER

a.

REFERENCE

B&W Tech Basis (for GEOG) Document, Vol. 2, page III.B-2

Bank

Memory

Question # 4
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000011-EK2.02

QUESTION

Recirculation from the emergency sump has been accomplished following a large break LOCA. Which one of the following actions protects the Containment Spray Pumps (CSP) from losing net positive suction head?

- a. Verify the "Emergency Sump Level Greater Than 2 Feet" red lights are lit.
- b. Verify emergency sump water temperature is less than the saturation temperature for the containment pressure.
- c. Verify CSP discharge valves throttle position amber lights are lit.
- d. Verify the CSP vent valves are open for continuous venting.

ANSWER

c.

REFERENCE

DB-OP-02000, Attach. 7

Bank

Memory

Question # 5
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000022-AK1.03

QUESTION

The following plant conditions exist:

- The plant was at 100% power.
- A loss of both Makeup Pumps has occurred.
- The reactor has been shutdown to Low Level Limits, approximately 28% power.

Which one of the following is the reason the reactor is tripped rather than continuing the rapid shutdown?

- a. The pressurizer level will lower with no ability to make up to the RCS.
- b. Tech. Spec. 3.0.3 requires the plant to be in Mode 3 within one hour.
- c. The loss of the boron injection flowpath will prevent the addition of boron to ensure adequate shutdown margin.
- d. The letdown isolation valves will be damaged since the valves were closed when hot.

ANSWER

a.

REFERENCE

DB-OP-02512, Caution 4.1.11.b

Bank

Higher

Question # 6
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000025-AA2.05

QUESTION

The following plant conditions exist:

- The plant is in Mode 5.
- The RCS is drained to 18 inches.
- The running Decay Heat Pump has tripped.
- The standby Decay Heat Pump has been started.

The maximum Decay Heat System flow that can be established is determined by comparing the running Decay Heat Pump _____ pressure to _____.

- a. suction; the reactor vessel maximum allowable cooldown rate
- b. discharge; the reactor vessel maximum allowable cooldown rate
- c. suction; RCS temperature
- d. discharge; RCS temperature

ANSWER

c.

REFERENCE

DB-OP-02527, Caution 4.1, Pg. 15

New

Higher

Question # 7
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000026-AK3.03

QUESTION

The following plant conditions exist:

- A Level 1, 2, and 3 SFAS actuation has occurred.
- Offsite power is available.
- CCW Pump 1 did not start.

Which one of the following components is required to be stopped immediately?

- a. High Pressure Injection Pump 1
- b. Low Pressure Injection Pump 1
- c. Makeup Pump 1
- d. Emergency Diesel Generator 1

ANSWER

d.

REFERENCE

DB-OP-02000, SR6

New

Memory

Question # 8
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000027-AK3.04

QUESTION

The following plant conditions exist:

- The plant is at 100% power.
- An instrument failure has caused Tave to decrease to 575°F.
- Annunciator 4-2-E, PZR LVL LO, is in alarm.

Which one of the following actions is taken to minimize the Pressurizer insurge and RCS pressure transient as Tave is recovered?

- a. Isolate the Pressurizer Spray Valve to stop the minimum spray bypass flow.
- b. Place the second purification demineralizer in service to maximize letdown flow.
- c. Turn off pressurizer heaters to limit rate of RCS pressure increase as pressurizer level increases.
- d. Reduce MU32 setpoint to minimize Makeup System flow.

ANSWER

d.

REFERENCE

DB-OP-02004, L & P 2.2.11, Page 18

New

Higher

Question # 9
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000029-EA1.08

QUESTION

During a transient, RCS pressure has decreased below the RPS low pressure trip setpoint. The reactor did not automatically trip. Which of the following combinations are the PREFERRED ORDER for shutting down the reactor?

- a. - Momentarily deenergize E2 and F2 simultaneously.
- Depress the Reactor Trip pushbutton.
- Trip BE211 and BF211 to deenergize the CRD System.
- Manually trip Reactor Trip Breakers A, B, and C.
- b. - Depress the Reactor Trip pushbutton.
- Momentarily deenergize E2 and F2 simultaneously.
- Trip BE211 and BF211 to deenergize the CRD System.
- Manually trip Reactor Trip Breakers A, B, and C.
- c. - Momentarily deenergize E2 and F2 simultaneously.
- Depress the Reactor Trip pushbutton.
- Manually trip Reactor Trip Breakers A, B, and C.
- Trip BE211 and BF211 to deenergize the CRD System.
- d. - Depress the Reactor Trip pushbutton.
- Momentarily deenergize E2 and F2 simultaneously.
- Manually trip Reactor Trip Breakers A, B, and C.
- Trip BE211 and BF211 to deenergize the CRD System.

ANSWER

d.

REFERENCE

DB-OP-02000, Immediate Actions, Pg. 11

Modified

Memory

Question # 10
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000038-EA1.28

QUESTION

The following plant conditions exist:

- A tube rupture has developed in SG2.
- The reactor has been tripped.
- An RCS cooldown is in progress.
- RCS temperature is 500°F.

Which one of the following actions is performed in order to maintain the ability to steam the good SG to the condenser?

- a. Pull a fuse in ICS to defeat the turbine bypass valve 125 psi bias.
- b. Pull a fuse in ICS to defeat the main steam isolation valve to turbine bypass valve interlock.
- c. Use the SASS transfer switch to select the Main Steam Line 1 turbine header pressure transmitter.
- d. Use the SASS transfer switch to select SG1 outlet pressure transmitter.

ANSWER

b.

REFERENCE

DB-OP-02000, Step 8.19.7.c & Attachment 6

New

Memory

Question # 11
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000054 2.2.22

QUESTION

The following plant conditions exist:

- The plant is at 50% power.
- MFPT 1 is in service.
- MFPT 2 is running on the ICS low speed stop.

In order for ARTS to be operable so that the reactor will trip if MFPT 1 trips, the ARTS Test Trip Bypass Switches are required to be in the _____ position and the ARTS Operate/Test Switches for MFPT 2 are required to be in the _____ position.

- a. NORMAL; OPERATE
- b. NORMAL; TRIP
- c. MFP; OPERATE
- d. MFP; TRIP

ANSWER

b.

REFERENCE

DB-OP-06224, Page 8

New

Higher

Question # 12
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000055-EA1.04

QUESTION

The following plant conditions exist:

- A loss of offsite power has occurred.
- While performing battery load shedding, RPS Channels 1 and 2 remain energized.

The reason for this is to maintain _____.

- a. RCS flow instruments energized
- b. a reliable indication of CRD breaker position
- c. a reliable indication of RCS temperature
- d. Source Range NIs energized

ANSWER

d.

REFERENCE

DB-OP-02521, Attachment 5

Bank

Memory

Question # 13
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000056-AA2.43

QUESTION

A Loss of Offsite Power (LOOP) has occurred, resulting in a reactor trip. Which one of the following sets of valves is used to verify the main turbine has tripped?

- a. Main stop valves and/or control valves
- b. Control valves and intercept valves
- c. Intercept valves and/or intercept stop valves
- d. Intercept stop valves and main stop valves

ANSWER

a.

REFERENCE

DB-OP-02000, Immediate Actions Step 3.4, Pg. 13

Bank

Memory

Question # 14
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000057-AK3.01

QUESTION

The following plant conditions exist:

- The plant has just experienced a loss of 120 VAC Bus YAU while at 100% power.
- The crew has tripped the reactor.
- SFRCS was actuated due to low deaerator level.

During implementation of DB-OP-02000 . . .

- a. makeup/HPI flow is initiated since the PORV failed open
- b. emergency boration is initiated since APSR group position is lost
- c. AVV1 is controlled locally since the AVV fails closed
- d. AFPT1 is controlled locally since AFPT1 governor power is lost.

ANSWER

c.

REFERENCE

DB-OP-02541, Attachment 3

Modified

Higher

Question # 15
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000058 2.4.10

QUESTION

The following plant conditions exist:

- The plant is at 100% power.
- Annunciator 1-6-E, DC BUS 1 TRBL alarms.
- The AC input breaker to battery charger DBC-1P has tripped.

Which one of the following actions is required to be performed to prevent the loss of the 1P battery?

- a. Load shed DCMCC1.
- b. Place DBC-1N in service as DBC-1P.
- c. Place DBC-1PN in service as DBC-1P.
- d. Transfer D1P to DCMCC2.

ANSWER

c.

REFERENCE

DB-OP-02001, Alarm 1-6-E Response

New

Higher

Question # 16
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000062 2.1.28

QUESTION

The following plant conditions exist:

- The plant was at 100% power.
- Outside air temperature is 85°F
- Lake temperature is 82°F
- A loss of subcooling margin has occurred.
- SFAS Level 2 has actuated.
- The Train 2 Service Water (SW) pump has failed to start.

Which one of the following is the effect the SW pump failure will have on safety-related equipment?

- a. CCW Pump 2 will trip on high cooler outlet temperature.
- b. ECCS Room 2 will exceed the maximum design room temperature.
- c. HPI Pump 2 will trip on high lube oil temperature.
- d. The Control Room will exceed the maximum design room temperature.

ANSWER

b.

REFERENCE

System Description, SD-018, Pg. 2-10

Modified

Higher

Question # 17
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000065-AA2.05

QUESTION

The following plant conditions exist:

- The plant is at 100% power.
- Annunciator 9-1-F, INST AIR HDR PRESS LO, alarms.
- Instrument air pressure on PI810 reads 72 psig.
- The secondary plant is stable.

Which one of the following actions is required?

- a. Manually trip the reactor based on low air pressure.
- b. Commence a rapid shutdown based on low air pressure.
- c. Commence a rapid shutdown when a secondary plant upset begins.
- d. Manually trip the reactor when a secondary plant upset begins.

ANSWER

a.

REFERENCE

DB-OP-02528, Step 4.1.1, 4.2.1, 4.3.1, & 4.4.1

Modified

Higher

Question # 18
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A BW/E04-EK2.2

QUESTION

The following plant conditions exist:

- The reactor was at 100% power.
- Makeup/HPI/PORV cooling was initiated due to a loss of all feedwater.
- The MDFP has restored level in both SGs to 124 inches.

Which one of the following is used to attempt to regain primary to secondary heat transfer?

- a. Raise SG level using the MDFP.
- b. Lower SG pressure using the AVVs.
- c. Bump start an RCP.
- d. Close the PORV to recover subcooling margin.

ANSWER

b.

REFERENCE

DB-OP-02000, Step 6.12

New

Memory

Question # 19
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000024-AK1.01

QUESTION

The following plant conditions exist:

- The plant was at 100% power.
- A valid RPS trip signal failed to trip the reactor.
- The reactor could not be tripped from the Control Room

Which one of the following describes the methods available to reduce power and Tave prior to locally opening the reactor trip breakers?

- a. Manually insert control rods and lower turbine load.
- b. Manually insert control rods and start emergency boration.
- c. Manually open the turbine bypass valves and lower turbine load.
- d. Manually open the turbine bypass valves and start emergency boration.

ANSWER

b.

REFERENCE

DB-OP-02000, Step 3.3

New

Memory

Question # 20
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000032-AK3.01

QUESTION

The following plant conditions exist:

- A reactor startup is in progress following a mid-cycle outage.
- Control Rod Group 6 is at 25% rod index.
- Both source range nuclear instruments fail low.

The reactor startup is stopped, Control Rod Groups 1 through 7 are inserted and CRD breakers are opened . . .

- a. to comply with Tech. Specs.
- b. to disable the feed and bleed permissive
- c. until Gamma-Metric source range instruments are calibrated
- d. because the CRD out inhibit will prevent further rod withdrawals

ANSWER

a.

REFERENCE

DB-OP-02505, Step 4.3.1

New

Higher

Question # 21
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000033-AK1.01

QUESTION

A reactor startup is in progress.

Which one of the following is an indication that Intermediate Range NI-3 is over-compensated?

- a. IR NI-3 reads 3×10^{-6} amps
IR NI-4 reads 8×10^{-7} amps
- b. SR NI-1 and SR NI-2 read 8×10^5 cps
IR NI-3 reads 2×10^{-11} amps
- c. SR NI-1 and SR NI-2 read 3×10^4 cps
IR NI-3 reads 8×10^{-11} amps
- d. IR NI-3 reads 5×10^{-11} amps
IR NI-4 is not on scale

ANSWER

b.

REFERENCE

DB-OP-06912, Step 4.27

Bank

Higher

Question # 22
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 000069-AK3.01

QUESTION

The following plant conditions exist:

- The plant was at 100% power.
- A large break LOCA has occurred.

Proper SFAS response is verified to . . .

- a. determine if the HPI alternate minimum recirc flowpath is needed to protect the HPI pumps.
- b. determine if the auxiliary spray line is available for long term-boron dilution.
- c. ensure the Makeup System is properly aligned to provide adequate core cooling.
- d. ensure containment is properly isolated to minimize release of radioactive material.

ANSWER

d.

REFERENCE

DB-OP-02000, Tech. Basis Document

New

Memory

Question # 23
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A BW/A01-AA1.2

QUESTION

The following plant conditions exist:

- The plant was at 100% power.
- MFPT 1 tripped on low lube oil pressure.
- The plant has runback to 55% power.

To maintain the desired rod index for the first four hours after the runback, the RCS will need to be _____ as Xenon _____.

- a. borated; builds in
- b. deborated; builds in
- c. borated; burns out
- d. deborated; burns out

ANSWER

b.

REFERENCE

DB-OP-02504, Attachment 1

Modified

Higher

Question # 24
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A BW/A04 2.4.48

QUESTION

The following plant conditions exist:

- The plant is at 23% power.
- The turbine trips on low EHC fluid pressure.
- Following the turbine trip:
 1. FW Valve Delta-P is 44 psid
 2. SG pressures are 870 psig.
 3. SG levels are 60 inches.
 4. Generator output is 24 MWE.

Which of the above listed parameters will require manual action(s) to establish normal conditions?

- a. 1 and 2
- b. 1 and 4
- c. 2 and 3
- d. 3 and 4

ANSWER

d.

REFERENCE

DB-OP-02500, Step 4.1.5 and 4.1.7

New

Higher

Question # 25
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A BW/A05-AK2.1

QUESTION

The following plant conditions exist:

- The plant was at 100% power.
- A loss of off-site power has caused a reactor trip.

Which one of the following describes the response of Service Water Pump 2?

Service Water Pump 2 will start . . .

- a. immediately when EDG 2 output breaker closes.
- b. 25 seconds after EDG 2 output breaker closes.
- c. immediately after the SFAS sequencer times out.
- d. 20 seconds after the SFAS sequencer starts.

ANSWER

b.

REFERENCE

System Description 18, Pages 2-28

Modified

Higher

Question # 26
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A BW/A07-AK2.2

QUESTION

The following plant conditions exist:

- The plant was at 100% power.
- A complete rupture of the Circ Water piping expansion joint at the main condenser inlet has caused a turbine and reactor trip.

Which one of the following identifies plant equipment required to be shutdown to prevent damage due to flooding?

- a. Both Main Feedwater Pumps
- b. Both Auxiliary Feedwater Pumps
- c. All three CCW Pumps
- d. All three TPCW Pumps

ANSWER

a.

REFERENCE

DB-OP-02517, Step 4.2.1.f, and AB discussion

Bank

Memory

Question # 27
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A BW/E09-EA2.2

QUESTION

The following plant conditions exist:

- The plant was at 100% power for several months.
- A loss of CCW to containment has led to a reactor trip and tripping of all RCPs.
- Due to the loss of letdown, an RCS cooldown has been started.

The _____ will be manually controlled to prevent exceeding a maximum cooldown rate of _____ during the cooldown.

- a. Turbine Bypass Valves; 50°F/hr.
- b. Turbine Bypass Valves; 100°F/hr.
- c. Atmospheric Vent Valves; 50°F/hr.
- d. Atmospheric Vent Valves; 100°F/hr.

ANSWER

a.

REFERENCE

DB-OP-06903, Step 8.9

New

Higher

Question # 28
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 003-A1.01

QUESTION

Which ONE of the following combinations of Reactor Coolant Pump (RCP) parameters are inputs to the RCP Monitoring and Diagnostic System?

1. Rotor horizontal displacement
2. Reactor Coolant System pressure
3. 13.8KV Bus Amps
4. Reactor Power
5. RCP Component Cooling Water flow

- a. 1, 2, 4
- b. 2, 3, 5
- c. 1, 3, 4
- d. 2, 4, 5

ANSWER

a

REFERENCE

System Description SD 039A, Section 2.5.1.18

Modified

Memory

Question # 29
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 004-K2.02

QUESTION

Which ONE of the following pairs of electrical buses represents the power supplies for the Makeup Pumps?

- a. 480 VAC essential buses E1 and F1
- b. 480 VAC essential buses E2 and F2
- c. 4160 VAC essential buses C1 and D1
- d. 4160 VAC nonessential buses C2 and D2

ANSWER

c

REFERENCE

DB-OP-06006, Att. 16 & 17

Bank

Memory

Question # 30
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 005-A4.01

QUESTION

Reactor Coolant System inventory has been reduced to replace a Reactor Coolant Pump seal package. The #1 Decay Heat (DH) pump flow AND amps begin to swing erratically. Which ONE of the following statements is correct?

- a. The #1 DH pump will TRIP on low flow less than 1000 gpm. The #2 DH pump will AUTO start when the #1 DH pump trips.
- b. Immediately start the #2 DH pump to provide core cooling.
- c. The #1 DH pump should be stopped if reducing flow does not stabilize flow and current.
- d. The #2 DH pump will AUTO start when the #1 DH pump flow drops below 1000 gpm. The #1 DH pump will NOT auto trip.

ANSWER

c

REFERENCE

DB-OP-02527, Caution 4.1 and Att. 1 & 2

Bank

Higher

Question # 31
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 006-K1.04

QUESTION

A LOCA has occurred and LPI suction has been shifted to the Containment Emergency Sump. Which ONE of the following describes the PREFERRED long term boron dilution flow path? (Assume the LPI loops are NOT cross-connected.)

- a. HPI Pump 1-2 piggybacks from LPI Pump 1-2, which takes suction from the EMERGENCY SUMP. HPI Pump 1-2 discharges to the pressurizer auxiliary spray line.
- b. LPI Pump 1-2 takes suction from RCS LOOP 2 HOT LEG and discharges through DH Cooler 1-2 to the reactor vessel.
- c. HPI pump 1-2 piggybacks from LPI pump 1-2, which take suction from RCS LOOP 2 HOT LEG. HPI pump 1-2 discharges to the RCS Loop 2 Cold Legs
- d. LPI pump 1-2 takes suction from the EMERGENCY SUMP and discharges through DH cooler 1-2 to the pressurizer auxiliary spray line.

ANSWER

a

REFERENCE

DB-OP-02000, Attachment 12

Modified

Memory

Question # 32
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 007-K3.01

QUESTION

To what location does the Quench Tank relief valve relieve on high pressure?

- a. Reactor Coolant Drain Tank
- b. Containment Normal Sump
- c. Containment Vent Header
- d. Train 1 ECCS Room Sump

ANSWER

b

REFERENCE

OS-001A sh. 3

New

Memory

Question # 33
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 007-K4.01

QUESTION

The following plant conditions exist:

- PZR PORV outlet temperature is 255°F
- PZR Quench Tank level is 9.6 ft.
- PZR Quench Tank temperature is 215°F
(Assume level and temperature control in AUTOMATIC.)

Which ONE of the following is correct?

- a. Quench Tank Recirculating Pump started on HIGH temperature caused by the leaking PORV and level is automatically being controlled by draining to the RC Drain Tank.
- b. Quench Tank Recirculating Pump started on HIGH level caused by the leaking PORV and temperature is automatically being controlled by draining to the Containment Sump.
- c. Quench Tank Recirculation Pump started on HIGH temperature caused by the leaking PORV and level is automatically being controlled by draining to the Containment Sump.
- d. Quench Tank Recirculating Pump started on HIGH level, caused by the leaking PORV, and pressure is automatically being controlled by draining to the RC Drain Tank.

ANSWER

a

REFERENCE

OS-001A, sh 3 & 4 Control Logic 9 & 10

Bank

Higher

Question # 34
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 008-K1.02

QUESTION

Select the statement that describes the Component Cooling Water/Letdown interface.

- a. High Temperature on Letdown AND/OR High Pressure on CCW out of the Letdown Cooler will provide alarm and isolation functions.
- b. High Temperature ONLY on Letdown out of the Letdown Cooler will provide alarm and isolation functions.
- c. High Pressure ONLY on CCW out of the Letdown Cooler will provide alarm but no isolation functions.
- d. High Temperature on Letdown AND/OR High Pressure on CCW out of the Letdown Cooler will provide alarm but no isolation functions.

ANSWER

a

REFERENCE

OS-002, Sh 1 Control Logics 2 & 4

Bank

Memory

Question # 35
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 010-K2.02

QUESTION

The Reactor Coolant System (RCS) is recovering from a transient that raised RCS pressure to 2225 psig. Pressure had been reduced to 2195 psig when a loss of NNI-X DC power occurred. What is the effect of the loss of NNI-X DC on RC2, Pressurizer Spray Valve?

- a. RC2 will remain open to 40% and will have to be manually closed.
- b. RC2 will remain open to 40% and will have to be isolated using RC11, Pressurizer Spray Block Valve.
- c. RC2 will close and RCS pressure will have to be controlled using RC200, Pressurizer Vent Line Stop Valve and RC2A, Pressurizer PORV.
- d. RC2 will close and will have to be manually operated to control RCS pressure.

ANSWER

d

REFERENCE

DB-OP-02532, steps 4.2.3 & 4.2.17; Elementary drawings E52B sh 10 & sh 59

References to be provided to applicants during examination: EWD E52B sh. 10 & sh 59

New

Higher

Question # 36
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 010-A3.01

QUESTION

Reactor Coolant System heatup is in progress per DB-OP-06900, Plant Heatup.

- RCS temperature is 360°F
- RCS pressure is 675 psig

PORV testing, per DB-SP-03363 is initiated. Which of the following conditions would require termination of the PORV cycle test?

- a. Quench Tank pressure of 85 psig
- b. Reactor Coolant Drain Tank temperature of 165(F
- c. Pressurizer level of 80 inches
- d. RCS pressure drops to 600 psig

ANSWER

a

REFERENCE

DB-SP-03363, step 2.2.1.e

New

Memory

Question # 37
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 012-K1.01

QUESTION

Which ONE of the following situations will occur if 120VAC essential AC power is lost to ARTS Channel 1?

- a. ARTS Ch. 1 will trip.
- b. The reactor will trip.
- c. The only result will be a loss of power alarm.
- d. ARTS Ch. 1 and Ch. 3 will both trip.

ANSWER

a

REFERENCE

Drawing E-28

Bank

Memory

Question # 38
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 012-K4.04

QUESTION

During operation at 100% Power, with RPS channel 1 in manual bypass, RCS pressure exceeds the RPS high pressure trip setpoint. RPS channels 2 and 4 trip, but RPS channel 3 does not trip due to a failed pressure bistable. Which of the following statements is correct concerning the expected response of the CRD breakers?

- a. Only the "B" and "D" breakers will open.
- b. No CRD breakers will open.
- c. Only the "A" and "C" breakers will open.
- d. All CRD breakers will open.

ANSWER

d

REFERENCE

DB-OP-06403, Att. 4

Bank

Higher

Question # 39
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 013-K6.01

QUESTION

The plant is operating at 100% power when the following equipment failure occurs:

- PT2000, Containment Wide Range Pressure, fails to mid-scale (30 psia).

What is the expected plant response?

- a. SFAS Channel 1 trips on high containment pressure. All SFAS level 1, 2, and 3 components for Channel 1 actuate to their SFAS condition.
- b. SFAS Channel 1 trips on high-high containment pressure. All SFAS level 1, 2, 3, and 4 components for Channel 1 actuate to their SFAS condition.
- c. SFAS Channel 1 trips on high containment pressure. All SFAS level 1, 2, and 3 components for Channel 1 remain in their pre-failure condition.
- d. SFAS Channel 1 trips on high-high containment pressure. All SFAS level 1, 2, 3, and 4 components for Channel 1 remain in their pre-failure condition.

ANSWER

c

REFERENCE

E16 Sheets 1 & 2

Modified

Higher

Question # 40
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 022-K3.02

QUESTION

The following plant conditions exist:

- The plant is operating at 95% power
- All plant systems are operating as designed
- Due to problems with cooling, containment temperatures are increasing

Which ONE of the following is the expected effect of these conditions?

- a. Indicated Makeup Tank level will DECREASE.
- b. Actual Makeup Tank level will INCREASE.
- c. Indicated Pressurizer level will DECREASE.
- d. Actual Pressurizer level will INCREASE.

ANSWER

b

REFERENCE

Generic fund. Components module, Ch 7, pg 18

Bank

Higher

Question # 41
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 026-K1.01

QUESTION

A large break LOCA occurred. All systems functioned as expected. The following plant conditions exist:

- The Borated Water Storage Tank Level is at 5 ft.
- Both Containment Spray pumps are running.
- Both Low Pressure Injection pumps are running.
- Containment pressure is 18 psig and slowly rising.

Why is the pressure in the Containment rising?

- a. Containment Spray pump discharge valves have throttled to prevent runout with suction from the warmer Emergency Sump.
- b. Containment Spray pump discharge valves have throttled to prevent cavitation due to low BWST level.
- c. Containment Spray pump discharge valves have throttled to prevent cavitation with suction from the warmer Emergency Sump
- d. Low Pressure Injection pump discharge valves have throttled to prevent cavitation with suction from the warmer Emergency Sump.

ANSWER

c

REFERENCE

BW Tech Basis Doc. Vol.2, page V.C-4

DB-OP-02000 Basis & Deviation Document, pp. 216-219

Modified

Higher

Question # 42
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 039-K5.05

QUESTION

A plant cooldown is in progress per DB-OP-06903, Plant Shutdown and Cooldown, with ONE Steam Generator. The operator is directed to cool the RCS to less than or equal to the isolated Steam Generator average shell temperature. The reason for this is to ensure . . .

- a. the Steam Generator tubes will be in tension, since differential temperature limits are less restrictive with tubes in tension.
- b. a 100°F/hr cooldown rate to minimize the time to reach Decay Heat Removal System operation.
- c. the Steam Generator tubes will be in compression, since differential temperature limits are less restrictive with tubes in compression.
- d. HOT STANDBY conditions can be maintained without a MODE change, to minimize thermal stress on the Steam Generator.

ANSWER

a

REFERENCE

DB-OP-06903, Note 7.4 & Limit and Precaution 2.2.9

Modified

Higher

Question # 43
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 039-A4.04

QUESTION

All feedwater has been lost to the steam generators. AFPs 1 and 2 have tripped on overspeed. A local operator has been sent to take local speed control of the #1 auxiliary feedwater pump. Which of the following sequences would the control room operator see as local control was established?

- a. AFPT 1 OVRSPD TRIP (10-2-G) clears, AFP-1 Flow is indicated on FI 6426, Steam Generator level and pressure are increasing.
- b. AFP-1 Flow is indicated on FI 6426, AFPT 1 OVRSPD TRIP (10-2-G) clears, Steam Generator level and pressure are increasing.
- c. Steam Generator level and pressure are increasing, AFPT 1 OVRSPD TRIP (10-2-G) clears AFP-1 Flow indicated on FI 6426.
- d. Steam Generator level and pressure are increasing, AFP-1 Flow indicated on FI 6426, and AFPT 1 OVRSPD TRIP (10-2-G) clears.

ANSWER

a

REFERENCE

DB-OP-02010, Alarm 10-2-G response

DB-OP-06233, Section 5.11

Bank

Higher

Question # 44
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 056-A2.04

QUESTION

The following plant conditions exist:

- SFRCS has been manually actuated due to a loss of all three Condensate Pumps
- AFP 2 failed to start
- MDFP is supplying AFW to SG 2
- SG 2 pressure, though low due to the loss of feed, is stabilizing

An SFRCS low pressure trip on SG 2 occurs. Determine which ONE of the following choices describes the AFW system alignment, and what actions should be taken.

- a. AFP 1 is supplying SG 1, MDFP is supplying SG 1; block and restore AF3972 and AF3971 to normal lineup to allow MDFP to feed SG 2.
- b. AFP 1 is supplying SG 1, MDFP is supplying SG 2; take no action, lineup is acceptable
- c. AFP 1 is not supplying either SG, MDFP is supplying SG 1; send an operator to locally restart AFP 1
- d. AFP 1 is not supplying either SG, MDFP is supplying SG 2; block and realign AF3972 and AF3971 to allow MDFP to feed SG 1

ANSWER

b

REFERENCE

DB-OP-02000 Section 7.0 Overcooling

Modified

Higher

Question # 45
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 059-K3.03

QUESTION

The plant is operating at 100% power. Both MFW Pumps trip. All systems respond as designed. Assuming NO operator action, plant conditions 15 minutes after the SFRCS initiation would be:

- a. - Tave - 556°F
- SG level - 40 inches
- SG press - 995 psig
- b. - Tave - 550°F
- SG level - 49 inches
- SG press - 995 psig
- c. - Tave - 556°F
- SG level - 49 inches
- SG press - 1050 psig
- d. - Tave - 556°F
- SG level - 40 inches
- SG press - 1050 psig

ANSWER

c

REFERENCE

DB-OP-02000, Specific Rule 4; Trip Recovery, Section 4.0; OS-008, Sh 1 & 5
Steam Tables

References to be provided to applicants: CE Steam Tables

Bank

Higher

Question # 46
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 061-K5.03

QUESTION

Which ONE of the following contain statements that are ALL correct regarding the Auxiliary Feedwater System flowpath?

1. Check valves are the ONLY isolation between the CSTs and the OTSGs with AFW in its NORMAL lineup.
 2. MS Line 2 to AFW 1 Isolation Valve (MS 106A) and MS Line 1 to AFW 2 Isolation Valve (MS 107A) are normally OPEN in MODES 1, 2 and 3.
 3. AFW 1 to SG 1 Stop Valve (AF 3870) and AFW 2 to SG 2 Stop Valve (AF 3872) are normally OPEN in MODES 1, 2, 3.
 4. Closing AFW 1 SG Level Control Valve (AF 6452) OR AFW 2 SG Level Control Valve (AF 6451) isolates ALL AFW flow from that AFW pump to the OTSGs
- a. 1, 2, 3
 - b. 1, 2, 4
 - c. 1, 3, 4
 - d. 2, 3, 4

ANSWER

a

REFERENCE

OS-017A, sh. 1, OS-017B, sh. 1

OS-010, sh. 1

Modified

Memory

Question # 47
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 061-A1.02

QUESTION

The following plant conditions exist:

- The plant tripped from 100% power.
- SG 1 pressure is 600 psig; level is 62 inches.
- SG 2 pressure is 640 psig; level is 58 inches.

Which ONE of the following is the expected SFRCS response to these plant conditions?

- a. SFRCS is feeding BOTH SGs.
- b. SFRCS is NOT feeding either SG.
- c. SFRCS is feeding ONLY SG 1.
- d. SFRCS is feeding ONLY SG 2.

ANSWER

d

REFERENCE

OS-17A, Control Description 1

Bank

Higher

Question # 48
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 062-A3.04

QUESTION

The OUT OF SYNC light on YV2 is normally OFF. Which ONE of the following will cause it to ILLUMINATE?

- a. Difference in Phase or Voltage between the inverter and its reference.
- b. The inverter is in proper phase to be paralleled with a load.
- c. The inverter is looking for an in-sync supply for power.
- d. Difference in current/voltage of the inverter to reference.

ANSWER

a

REFERENCE

System Description 007, Section 2.4.5.2

DB-OP-06319, Section 5.0

Bank

Memory

Question # 49
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 063-K2.01

QUESTION

Which ONE of the following identifies a combination of loads, which are ALL powered from DC MCC 1?

1. RCP 1-1 DC Lift Pump
 2. RCP 2-1 DC Lift Pump
 3. Emergency Seal Oil Pump
 4. Emergency Bearing Oil Pump (Main Turbine)
 5. Inverter YVA
 6. Inverter YVB
-
- a. 1, 3, 6
 - b. 1, 4, 5
 - c. 2, 3, 5
 - d. 2, 4, 6

ANSWER

b

REFERENCE

OS-060, Sh. 1

Bank

Memory

Question # 50
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 064-K1.05

QUESTION

The EDG 1 Monthly Test had begin when the following alarms actuate:

- 1-1-A EDG 1 TROUBLE
- 1-1-B EDG 1 FAULT
- 1-2-A EDG 1 AIR RCVR PRESS LO

The local operator reports the following alarms:

- 43-1-B UNIT LOCKOUT
- 43-1-C FAIL TO START
- 43-1-D FAIL TO REACH RATED SPEED & VOLTAGE
- 43-3-B LOW AIR START PRESSURE

What is the expected status of EDG 1 starting air at this time?

- a. EDG Starting Air Compressor 1-1 is running to repressurize EDG Air Receiver 1-1-1 after which the Starting Air System will attempt another EDG 1 start.
- b. EDG Starting Air Compressor 1-2 is running to repressurize EDG Air Receiver 1-1-2. EDG 1 will remain locked out until the local lockout relay is reset.
- c. EDG Starting Air Compressor 1-1 is locked out and EDG Air Receiver 1-1-1 will remain at low pressure until the local lockout relay is reset.
- d. EDG Starting Air Compressor 1-2 is locked out and EDG Air Receiver 1-1-2 will remain at low pressure until EDG Starting Air Compressor 1-3 is placed in service.

ANSWER

b

REFERENCE

OS-041B Control Logic 4

New

Higher

Question # 51
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 073-K3.01

QUESTION

Preparations were in progress to release Clean Waste Monitor Tank 1 when it was discovered that RE1770A, Clean Waste Radiation Monitor detector has failed and was declared inoperable. For a release from the clean liquid waste to proceed, _____.

- a. RE1770A must be repaired.
- b. two independent samples, calculations and valve lineups must be performed.
- c. the release path must be realigned to use RE1878A & B, Miscellaneous Waste Radiation Monitors.
- d. RE1770B must be verified operable.

ANSWER

d.

REFERENCE

DB-OP-03011, L&P 2.1.4

Modified

Higher

Question # 52
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 076-A1.02

QUESTION

A LOCA causes Reactor Cooling System pressure to drop to 1400 psig. Which ONE of the following describes the response of the Service Water System?

- a. Cooling of Turbine Plant Cooling Water will swap from service water to circulating water.
- b. Cooling water to Turbine Plant Cooling Water will be terminated and must be manually realigned.
- c. Cooling water to the containment air coolers will throttle to maintain containment air temperature.
- d. Cooling water flow to all three containment air coolers will be maximized.

ANSWER

a

REFERENCE

OS-020, Sheet 2, Control Logics

Bank

Higher

Question # 53
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 076 2.4.4

QUESTION

The following plant conditions have occurred while operating in MODE 1 at 95% RTP:

1. Annunciator Alarms
 - * (11-3-C) SW PMP 3 STRNR DISCH PRESS LO
 - * (11-6-C) SW PMP 3 STRNR DP HI
 - * (11-3-B) CCW HX 3 OUTLET TEMP HI

2. Computer Alarms
 - * (X002) SW PMP MTR TRBL
 - * (T083) CC HX 3 OUT TEMP
 - * (P945) SW HDR 1 PRESS

Which ONE of the following sections of DB-OP-02511, LOSS OF SERVICE WATER PUMPS/SYSTEMS, would you enter based on the above conditions?

- a. Loss of all Service Water pumps
- b. Service Water Non-Seismic Line Rupture
- c. Loss of SW Loop 2
- d. Loss of SW Loop 1

ANSWER

d

REFERENCE

DB-OP-02511, Section 2, symptoms

Bank

Higher

Question # 54
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 078-K4.02

QUESTION

Under which ONE of the following circumstances will the Emergency Instrument Air Compressor supply Station Air loads?

- a. When a spool piece between the Emergency Instrument Air compressor and the Station Air header has been installed.
- b. When started by local operator action, since the Emergency Instrument Air compressor is normally lined up to station air.
- c. When the Emergency Instrument Air compressor is lined up to station air and Emergency Instrument Air receiver pressure is GREATER than 95 psig.
- d. When Instrument Air receiver pressure is less than 95 psig, the Instrument Air and Station Air are operated as a common system.

ANSWER

c

REFERENCE

OS-19B Control Logic 6

Bank

Memory

Question # 55
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 103 2.1.27

QUESTION

Which ONE of the following combinations are ALL design features of Containment Vessel Isolation valves?

1. Located as close as practical to the CTMT vessel when the valve is located OUTSIDE CTMT
 2. Leakage is MINIMIZED by double barriers
 3. Valves located INSIDE CTMT are motor operated.
 4. All CTMT Isolation Valves are controlled per DB-OP-00008, Locked Valves.
- a. 1, 2
 - b. 3, 4
 - c. 1, 3
 - d. 2, 4

ANSWER

a

REFERENCE

DB-OP-00008, Step 2.2

10CFR50 App. A, GDC 55-57

Modified

Memory

Question # 56
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 002-K1.07

QUESTION

Under which of the following plant conditions will the RCS Hot Leg Level Monitoring System provide valid direct display of RCS Hot Leg Level?

1. Plant in Mode 5 with RCS drained below pressurizer level
 2. Plant in Mode 5 with RCS filled and vented with pressure below 150 psig
 3. Plant in Mode 3 ready to enter Mode 2
 4. Plant in Mode 1 at full power
 5. Plant in Mode 3 with natural circulation cooldown in progress
 6. Plant in Mode 4 ready to transition from OTSG cooldown to Decay Heat cooldown
-
- a. 1, 2, 5
 - b. 1, 3, 6
 - c. 2, 4, 5
 - d. 3, 4, 6

ANSWER

a

REFERENCE

DB-OP-06432, Att. 2

New

Memory

Question # 57
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 011-K6.03

QUESTION

The following Pressurizer (PZR) indications exist:

- LI RC14-4, Uncompensated PZR level at 26 inches and rising
- LRS RC14, Compensated PZR level at 30 inches and rising
- LIC RC14, PZR Level Control shows 100% demand

Which ONE of the following is the plant response to these conditions?

- a. There is a loss of all PZR heater control.
- b. There is a loss of PZR level control.
- c. There is a loss of control for the PZR spray valve.
- d. There is a loss of control for the PORV.

ANSWER

a

REFERENCE

DB-OP-02513 Section 2, Symptoms

Bank

Higher

Question # 58
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 014-A4.01

QUESTION
Initial Conditions

- Safety Rod Groups 1 through 4 are full out
- Regulating Rod Groups 5 and 6 are full out
- APSRs are at 30% withdrawn
- 100% Reactor Power
- ICS full automatic
- Group select switch positioned at 8
- Single select switch positioned at ALL

Which ONE of the following sets of lamp status' would represent the above conditions on the PI Panel?

- a. Group 6 ON Control Lamps ON
Group 7 ON Control Lamps ON
Group 8 ON Control Lamps ON
- b. Group 6 100% Lamps ON
Group 7 ON Control Lamps ON
Group 8 ON Control Lamps ON
- c. Group 6 100% Lamps ON
Group 7 ON Control Lamps ON
Group 8 ON Control Lamps OFF
- d. Group 6 ON Control Lamps OFF
Group 7 ON Control Lamps OFF
Group 8 ON Control Lamps OFF

ANSWER

b

REFERENCE

DB-OP-06402, Att. 2

Bank

Higher

Question # 59
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 015-K2.01

QUESTION

Which ONE of the following combinations represents the correct association of NI channels to power sources?

- a. NI-1 & NI-5 are powered from Y1 and NI-2 & NI-6 are powered from Y2
- b. NI-4 & NI-8 are powered from Y4 and NI-3 & NI-7 are powered from Y3
- c. NI-2 & NI-6 are powered from Y1 and NI-4 & NI-8 are powered from Y3
- d. NI-2 & NI-4 are powered from Y2 and NI-1 & NI-3 are powered from Y4

ANSWER

c

REFERENCE

DB-OP-06403, step 3.1.3

SD 044, Section 2.1.2.1.1

Bank

Memory

Question # 60
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 017-K5.02

QUESTION

A large break LOCA had occurred resulting in a rapid depressurization of the RCS to Containment pressure. As a result, the following sequence of events occurred:

- Reactor trip on low RCS pressure
- RCPs were tripped due to a loss of subcooling margin

The Control Room SRO has asked you to check for inadequate core cooling. You observe that the subcooling margin meters have a red light lit on them. Which ONE of the following statements is correct?

- a. Use the incore thermocouples as the input to the subcooling margin meters due to their faster instrument response time for present RCS conditions.
- b. Use the T-hot as the input to the subcooling margin meters due to their faster instrument response time for present RCS conditions.
- c. Inform the Control Room SRO that inadequate core cooling exists for the present RCS conditions.
- d. Use the incore thermocouples and RCS pressure to determine the status of the subcooling margin for the present RCS conditions.

ANSWER

d

REFERENCE

DB-OP-02000, step 5.11 details

Bank

Memory

Question # 61
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 033-K3.03

QUESTION

The plant has recently returned to power following a refueling outage. The following alarms are received:

- 3-3-B SFP TEMP HI
- 3-5-B SFP HX TOTAL FLOW LO

Actions to raise flow have been unsuccessful. Which one of the following actions should be taken to reduce the SFP temperature?

- a. Open the demineralized water fill valve to the SFP.
- b. Line up the Decay Heat system to cool the SFP.
- c. Line up Service Water to cool the SFP Heat Exchangers.
- d. Add water from the BWST to the SFP.

ANSWER

b

REFERENCE

DB-OP-02003 alarm response for above alarms

Modified

Higher

Question # 62
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 035-A2.03

QUESTION

The plant at 70% power. OTSG 1 startup level is 128 inches. The selected OTSG 1 startup level instrument feeding ICS rapidly fails to mid-scale. Which ONE of the following describes how the effect on the plant would be different with SASS in automatic versus the effect with SASS unable to transfer, and what actions would need to be taken?

- a. In automatic, SASS would cause a transfer to the non-selected instrument. The same button would stay depressed; however, both would be illuminated. The operator would need to select the new instrument to ensure SASS did not transfer back to the original instrument when power changed.
- b. There would be no difference because even in automatic, OTSG 1 startup level would not transfer due to the difference between actual and mid-scale being less than 3% at this power level. No action would be necessary because startup level provides no control function at this power level.
- c. In automatic, SASS would cause a transfer to the non-selected instrument. The previously selected instrument's pushbutton would "pop out" and both buttons would be illuminated. No action would be necessary, because the previously selected instrument is "locked out" of selection until SASS is reset.
- d. There would be no difference since regardless of whether SASS is in auto or not, an automatic transfer to the non-selected instrument would occur. The operator would need to reset SASS to ensure another instrument failure will be detected if it occurs.

ANSWER

b

REFERENCE

SD-051, Non-Nuclear Instrumentation, Sections 2.1.1.1.2 & 2.1.1.1.3

DB-OP-06407, Attachment 1

DB-PF-06703, CC7.1

Modified

Higher

Question # 63
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 041-A3.05

QUESTION

A Reactor trip has occurred, and it was identified that the Turbine Bypass Valves are in HAND with zero demand. Which ONE of the following statements describes how the Turbine Bypass Valves will respond to increasing Steam Generator pressure with no operator actions being taken? The Turbine Bypass Valves will _____.

- a. maintain Steam Generator pressure at 995 psig
- b. maintain Steam Generator pressure at 1025 psig
- c. remain closed
- d. maintain Turbine Header pressure at 920 psig

ANSWER

b

REFERENCE

SD-045, Fig, 2.1-14

Bank

Higher

Question # 64
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A (045) 2.4.11

QUESTION

The following sequence of events has occurred:

- The Main Turbine tripped at 35% reactor power.
- Main Stop Valve 1 failed to close.
- Main Control Valve 1 failed to close.

After completion of the appropriate steps of DB-OP-02500, Turbine Trip, the plant status will be:

- a. reactor power at 28%, steam generator level control on low level limits, and steam generator pressure control on TBVs.
- b. reactor power at 0%, steam generator level control on low level limits, and steam generator pressure control on the MSSVs.
- c. reactor power at 28%, steam generator level control on auxiliary feedwater, and steam generator pressure control on TBVs.
- d. reactor power at 0%, steam generator level control on auxiliary feedwater, and steam generator pressure control on the MSSVs.

ANSWER

d

REFERENCE

DB-OP-02500, step 4.1.2

Bank

Higher

Question # 65
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 072-K4.02

QUESTION

The following plant conditions exist:

- The monthly surveillance (DB-SS-03250) for EVS Fan 1 is in progress.
- CV 5024, EVS Motor Operated Inlet Damper, is closed.
- EVS Fan 1 has been running for 10 minutes.
- RE 8447, FH Area Ventilation Exhaust Monitor in Train 2 trips

Which ONE of the choices below identifies EVS operation under these conditions?

- a. Both EVS fans will be ON, taking suction from the Fuel Handling Area.
- b. EVS Fan #1 will be OFF. EVS Fan #2 will be ON, taking suction from the Fuel Handling Area.
- c. Both EVS fans will be ON, taking suction from MPR 4.
- d. EVS Fan #1 will be ON, taking suction from #4 MPR. EVS Fan #2 will be OFF.

ANSWER

c

REFERENCE

OS-33B, OS-33D, OS-34, Sh. 1

Bank

Higher

Question # 66
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 2.1.2

QUESTION

The plant is in Mode 6. Fuel Handling activities are in progress. Which one of the following individuals is responsible to directly monitor the indications of core reactivity during fuel handling activities within the Reactor Vessel?

- a. Reactor Engineer
- b. Control Room Operator
- c. Fuel Handling Director
- d. Unit Supervisor

ANSWER

b

REFERENCE

DB-OP-00030, step 5.6

New

Memory

Question # 67
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 2.1.21

QUESTION

The Control Rod Drive Exercise Test is scheduled for the upcoming shift. DB-OP-06402, CRD Operating Procedure, can be verified current by . . .

- a. using the Curator controlled view library
- b. referring to NG-DB-00225, Procedure Use and Adherence
- c. referring to Operations Directive PR-01, Operations Procedure Maintenance
- d. using the Production - Shared Services module in SAP

ANSWER

a

REFERENCE

NG-NA-00107, step 6.12

Bank

Memory

Question # 68
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 2.2.1

QUESTION

The following plant conditions exist:

- A reactor startup is in progress
- Current rod index is 285
- The upper rod index limit is 285
- Initial count rate was 4×10^1 cps on source range NI 1 and 2
- Current count rate is stable at 6×10^2 cps on source range NI 1 and 2

Which ONE of the following is the next action to be taken?

- a. Add demineralized water to lower rod index and continue the reactor startup
- b. Insert Control Rod Groups 2 through 7 and evaluate
- c. Withdraw Control Rod Group 7 and continue the reactor startup
- d. Begin emergency boration to achieve 1% shutdown margin

ANSWER

b

REFERENCE

DB-OP-06912, Step 4.24

Bank

Higher

Question # 69
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 2.2.11

QUESTION

DB-OP-00016, Temporary Configuration Control, provides a controlled method for . . .

- a. hanging clearance tags in components and systems
- b. establishing plant conditions for temporary plant modifications
- c. hanging Operations caution tags on components and systems
- d. establishing poant conditions addressed by an operating procedure

ANSWER

c

REFERENCE

DB-OP-00016, step 1.1

New

Memory

Question # 70
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 2.2.28

QUESTION

The plant is in Mode 6. A full core reload is in progress. Which of the following individuals are required to be in direct communication with the Control Room Operator?

1. Shift Manager
 2. Fuel Handling Director
 3. Reactor Engineer
 4. Radiation Protection Technician
 5. Main Fuel Handling Bridge Operator
 6. Transfer Mechanism Operator
-
- a. 1, 3, 5
 - b. 1, 2, 4
 - c. 2, 5, 6
 - d. 3, 4, 6

ANSWER

c

REFERENCE

DB-OP-00030 step 6.6

New

Memory

Question # 71
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 2.3.2

QUESTION

Which ONE of the following is required for an operator to enter a room posted as a High Radiation Area (HRA) to perform a normal valve lineup?

- a. A whole-body count prior to and after the HRA access
- b. Dedicated Radiation Protection coverage while in the HRA
- c. Sign onto a Radiation Work Permit specifically for the HRA
- d. A key to the HRA barrier entryway

ANSWER

c

REFERENCE

NG-DB-00240, step 6.6

New

Memory

Question # 72
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 2.3.4

QUESTION

The plant is in Mode 5. An operator has been performing a valve lineup on the letdown cooler. For the last half hour, two maintenance workers have been working three feet away from the operator. Both maintenance workers' digital reading dosimeter (DRD) begin to continuously alarm. The operator looks at his DRD, which is reading 0 mrem. Which ONE of the following actions must be taken?

- a. Remain in Containment and promptly notify the Shift Manager.
- b. Exit Containment with the maintenance workers and promptly notify Radiation Protection.
- c. Remain in Containment and continue working until the DRD alarms.
- d. Exit Containment with the maintenance workers and rezero all the DRDs.

ANSWER

b

REFERENCE

DB-HP-01224, steps 6.4.4, 6.4.5 and 6.4.7

Bank

Memory

Question # 73
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 2.4.1

QUESTION

- The plant is at 28% power on low level limits.
- RCS Temperature is 582°F and stable.
- Annunciator 12-1-A, MN STM LINE 1 RAD HI, is in alarm.
- Annunciator 9-4-A, VACM SYS DISCH RAD HI, is in alarm
- Both Makeup Pumps are running.
- Letdown is isolated.
- Pressurizer level is at 200 inches and decreasing at 5 inches/minute.

Which ONE of the following sets of actions should be taken?

- a. Continue in DB-OP-02531, Steam Generator Tube Leak and perform a normal Reactor shutdown to Mode 3.
- b. Continue in DB-OP-02531, Steam Generator Tube Leak and perform a rapid plant shutdown to Mode 3.
- c. Enter DB-OP-02000, immediately trip the Reactor and route to the Steam Generator Tube Rupture section after check Specific Rule Criteria and Symptom Direction.
- d. Enter DB-OP-02000, route to the Steam Generator Tube Rupture section and Trip the Reactor after transferring steam loads to the Turbine Bypass Valves.

ANSWER

d

REFERENCE

DB-OP-02531, Step 4.1.4

DB-OP-02000, step 3.1

Modified

Higher

Question # 74
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 2.4.43

QUESTION

The plant is at 100% power. An Alert has been declared. The state and local agencies are notified using the _____ and the NRC is notified using the _____.

- a. 4-Way Ringdown Circuit, Emergency Notification System
- b. Computerized Automatic Notification System, Emergency Notification System
- c. 4-Way Ringdown circuit, Prompt Notification System
- d. Computerized Automatic Notification System, Prompt Notification System

ANSWER

a

REFERENCE

RA-EP-02110, Section 6.2 & 6.5

New

Memory

Question # 75
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level RO
K/A 2.4.45

QUESTION

- The plant is at 100% power.
- Annunciator 11-1-A, CCW RETURN RAD HI, is in alarm.
- Annunciator 11-4-A, CCW SURGE TK LVL HI, is in alarm.
- Computer Point P101, CC OUT LETDOWN HX PRESSURE is in alarm.

Which one of the following procedures and sections should be implemented first?

- a. DB-OP-02523, Component Cooling Water System Malfunctions, section for High Component Cooling Surge Tank Level
- b. DB-OP-02523, Component Cooling Water System Malfunctions, section for Component Cooling Water Radiation Rising
- c. DB-OP-06006, Makeup and Purification System, section for Recovery from Letdown Isolation (135 psig)
- d. DB-OP-06006, Makeup and Purification System, section for Isolation of Letdown During Operation.

ANSWER

b

REFERENCE

DB-OP-02523, step 2.5

Modified

Higher

Question # 1
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 000008-AA1.07

QUESTION

The following plant conditions exist:

- The plant is at 100% power.
- All systems are in a normal lineup.
- The RCS pressure input to the heaters, spray and PORV spiked, causing the PORV to temporarily lift.
- Quench tank level is increasing at a rate equivalent to 15 gpm.
- No operator action has been taken.

Which one of the following Limiting Conditions for Operation is required to be entered?

- a. Technical Specification 3.4.3, Safety Valves and PORV - Operating
- b. Technical Specification 3.4.6.2, RCS Operational Leakage
- c. Technical Requirements Manual 3.4.9, Pressurizer
- d. Technical Requirements Manual 3.4.11, RCS Vents

ANSWER

b.

REFERENCE

DB-OP-02513, Step 4.7.4

New

Higher

Question # 2
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 000017 2.4.31

QUESTION

The following plant conditions exist:

- The plant is at 100% power.
- CCW surge tank level is slowly decreasing.
- All other plant parameters are normal.

Which one of the following annunciator responses would require a power reduction in order to stop one of the RCPs?

- a. 6-5-C SEAL INJ FLOW LO
- b. 6-6-B AIR CLR CCW LEAK
- c. 11-1-A CCW RETURN RAD HI
- d. 11-3-A CCW SURGE TK LVL LO

ANSWER

b.

REFERENCE

DB-OP-02006, 6-6-B

New

Higher

Question # 3
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 000026-AA2.04

QUESTION

The following plant conditions exist:

- The plant is at 100% power.
- CC1411A, CCW TO CTMT, has failed closed and cannot be opened.

CCW has been lost to the _____ and a reactor trip is required in accordance with

_____.

- a. Control Rod Drive Motors
DB-OP-02523, Component Cooling Water System Malfunctions
- b. Reactor Coolant Pump Motors
DB-OP-02515, Reactor Coolant Pump and Motor Abnormal Procedure
- c. Letdown Coolers
DB-OP-02512, Loss of RCS Makeup
- d. Pressurizer Quench Tank
DB-OP-02513, Pressurizer System Abnormal Operation

ANSWER

b.

REFERENCE

DB-OP-02523, Pg. 34

DB-OP-06402, L&P 2.2.4 & 2.2.5, Pg. 6

New

Higher

Question # 4
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 000038-EK1.02

QUESTION

The following plant conditions exist:

- A tube rupture has developed in SG2.
- The reactor has been tripped.

Which one of the following is the basis for reducing RCS pressure prior to beginning a cooldown?

- a. Increase HPI flow to raise boron concentration, thus raising Shutdown Margin.
- b. Decrease the leak rate to limit the boron corrosion of carbon steel in the secondary plant.
- c. Increase HPI flow to prevent the formation of a reactor head steam bubble.
- d. Decrease the leak rate to minimize the radioactivity released to atmosphere.

ANSWER

d.

REFERENCE

DB-OP-02000, TBD, Vol. 3, III.E-2

New

Memory

Question # 5
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 000058-AA2.01

QUESTION

The following plant conditions exist:

- The plant is at 100% power.
- An electrical failure has caused the loss of status indication for B Bus source breakers and D2 Bus breakers.

The plant has experienced a loss of _____. Breaker control power can be restored by transferring B Bus and D2 Bus control power to _____.

- a. Y4; Y2
- b. NNI X-AC; NNI Y-AC
- c. DBN; DBP
- d. YBU; YAU

ANSWER

c.

REFERENCE

DB-OP-02540, Attachment 3

New

Higher

Question # 6
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 000062 2.1.32

QUESTION

The following plant conditions exist:

- The plant was at 100% power.
- A seismic event occurred causing a service water pipe break in the TPCW header.

Action is required within three hours to isolate the break. This action will help prevent the loss of _____.

- a. Ultimate Heat Sink inventory
- b. Motor Driven Feed Pump suction supply
- c. Emergency Instrument Air Compressor cooling
- d. Cooling Tower makeup

ANSWER

a.

REFERENCE

USAR Sect. 9.2.1.2.b pg. 9.2-3

DB-OP-02511, Note 4.4.1.f

Bank

Higher

Question # 7
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A W/E04-EA2.1

QUESTION

The following plant conditions exist:

- The plant is at 100% power.
- Annunciator 2-2-C, MU TK LVL LO, is in alarm.
- Annunciator 6-5-C, SEAL INJ FLOW LO, is in alarm.
- Annunciator 6-6-C, SEAL INJ TOTAL FLOW, is in alarm.
- Pressurizer level is stable at 220 inches.
- Makeup Tank level is lowering at one inch per minute.

Actions are in progress to isolate a leak in the Makeup System using DB-OP-02522, Small RCS Leaks. Which one of the following additional procedures is required to be referenced?

- a. DB-OP-02504, Rapid Shutdown
- b. DB-OP-02512, Loss of RCS Makeup
- c. DB-OP-02513, Pressurizer System Abnormal Operation
- d. DB-OP-02515, Reactor Coolant Pump and Motor Abnormal Operation

ANSWER

d.

REFERENCE

AB Discussion for DB-OP-02522, Section 4
DB-OP-02522, Steps 4.4.1, 4.4.6, and 4.4.15

Modified

Higher

Question # 8
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 000005-AK2.02

QUESTION

The following plant conditions exist:

- The plant is at 95% power.
- Control rod drive exercise testing is in progress.
- Group 2 has been inserted to 97%.
- Rod 2-3 remained at 97% when the rest of the group was withdrawn to 100%.
- I&C has determined a problem exists with a connector in the patch panel.

Control Rod 2-3 is . . .

- a. operable, since shutdown margin is greater than 1% $\Delta K/K$
- b. operable, since the rod is misaligned by less than 6.5%
- c. inoperable, since the rod is untrippable
- d. inoperable, since the rod is not fully withdrawn

ANSWER

d.

REFERENCE

Tech. Spec. 3.1.3.5

New

Higher

Question # 9
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 000024-AA1.10

QUESTION

The following plant conditions exist:

- RCS temperature is 165°F.
- RCS pressure is 190 psig.
- C1 bus is de-energized for cleaning.
- Shutdown margin is determined to be less than 1%.

Which one of the following equipment combinations is acceptable for the required emergency boron flowpath?

- a. BWST to the RCS via DH Pump 2.
- b. BAAT 1 via BA Pump 2 to the RCS via DH Pump 1.
- c. BAAT 1 via BA Pump 2 to the RCS via MU Pump 2.
- d. BWST to the RCS via MU Pump 1.

ANSWER

c.

REFERENCE

DB-SP-03382, Step 4.1

Bank

Higher

Question # 10
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 000033-AA2.10

QUESTION

While operating at 50% power, BOTH intermediate range NI detectors fail LOW. Which one of the following actions must be performed? (Assume that repairs will take approximately 48 hours to complete.)

- a. Power operation may continue but the crew must maintain power greater than 5% power.
- b. Power operation may continue but the Gamma-Metrics Neutron Flux Monitoring System must be operable.
- c. Within one hour, take action to place the unit in Mode 5.
- d. Within one hour, take action to place the unit in Mode 3.

ANSWER

d.

REFERENCE

Technical Specifications LCO 3.3.1.1, Table 3.3-1

Technical Specifications LCO 3.0.3

Modified

Higher

Question # 11
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 000067 2.1.7

QUESTION

The following plant conditions exist:

- The plant was at 100% power.
- A serious Control Room fire has forced the evacuation of the Control Room
- A natural circulation cooldown at 50°F/hr. is in progress in order to comply with Tech. Specs.
- Thot is 550°F.
- Tcold is 518°F.
- RCS pressure is 1400 psig.
- Due to a sudden increase in pressurizer level, the Shift Manager has determined a reactor vessel head bubble has formed.

Which one of the following actions should the Shift Manager direct or perform?

- a. Increase cooldown rate to restore adequate subcooling margin.
- b. Establish letdown flow to lower pressurizer level.
- c. Raise RCS pressure to restore adequate subcooling margin.
- d. Lower makeup flow to lower pressurizer level.

ANSWER

c.

REFERENCE

DB-OP-06903, Step 8.5

New

Memory

Question # 12
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A BW/A07-AA2.2

QUESTION

The following plant conditions exist:

- The plant is at 100% power.
- The following alarms are received:
 1. Computer Point P945, SW HDR1 PRESS
 2. Computer Point Z997, SW ISO VLV TO CLNG WTR, 1399
 3. Computer Point L386, ECCS SUMP 1 LVL SMP PMP RUNNING for both ECCS Room 1 sump pumps

Procedure _____ should be implemented because _____.

- a. RA-EP-02880, Internal Flooding; the flooding will cause an unmonitored release.
- b. DB-OP-02511, Loss of Service Water Pumps/Systems; a service water non-seismic pipe rupture is the cause of the flooding.
- c. RA-EP-02880, Internal Flooding; the flooding could affect safe shutdown capability.
- d. DB-OP-02511, Loss of Service Water Pumps/Systems; cooling has been lost to the ECCS Room coolers.

ANSWER

c.

REFERENCE

RA-EP-02880, Step 5.0

New

Higher

Question # 13
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 004-A4.13

QUESTION

A plant cooldown is in progress. 1000 gallons of water must be added to the RCS from the makeup tank. Initial makeup tank level is 80". Assuming no additions are made to the makeup tank, what will the approximate makeup tank level be following the completion of the water addition to the RCS?

- a. 68 inches
- b. 58 inches
- c. 48 inches
- d. 38 inches

ANSWER

c.

REFERENCE

DB-PF-06705, curve 15.42

Bank

Memory

Question # 14
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 010-K6.02

QUESTION

The initial symptoms of a Pressurizer steam space leak are indicated by Pressurizer level _____ and Reactor Cooling System pressure _____.

- a. dropping; dropping
- b. dropping; rising
- c. rising; dropping
- d. rising; rising

ANSWER

c.

REFERENCE

DB-OP-02513, Step 2.7

Bank

Memory

Question # 15
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 022 2.1.20

QUESTION

A steam leak has occurred inside Containment (CTMT), resulting in SFAS actuation due to high CTMT pressure. The Unit Supervisor (US) directs a Reactor Operator (RO) to verify proper operation of Containment Air Coolers (CACs), per DB-OP-02000, Table 3, CTMT Monitoring and Control. The RO reports back that the overload light is lit on CAC 1. What is the proper course of action?

- a. Block and stop CAC 1
- b. Block and switch CAC 1 to FAST speed
- c. Notify the TSC to determine whether or not the CAC should remain running.
- d. Take no action. Continue to monitor CAC motor and bearing temperatures.

ANSWER

d.

REFERENCE

DB-OP-02000, Table 3

DB-OP-06016, Section 5.1

New

Higher

Question # 16
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 039-A2.01

QUESTION

A Large Break LOCA has occurred. Actions are in progress to respond to the LOCA per DB-OP-02000. What is the expected response of main steam/steam generator pressure to the LOCA, and why?

- a. Pressure will increase due to boiling in the core.
- b. Pressure will decrease due to loss of heat source.
- c. Pressure will remain at post trip pressure.
- d. Pressure will decrease due to the HPI cooling.

ANSWER

b.

REFERENCE

DB-OP-02000, Note 10.21

Modified

Memory

Question # 17
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 045-A2.15

QUESTION

Following a Turbine TRIP on HIGH EXHAUST HOOD TEMPERATURE, the Reactor Operator notices that the Generator Output breakers are still closed. Which one of the following actions should be taken, and why?

- a. MANUALLY trip the breakers immediately to prevent generator damage due to motoring.
- b. Initiate opening of the generator disconnects to prevent generator damage due to motoring.
- c. Wait until annunciator alarm 16-6-C, GEN REV PWR/ANTI MTR TRIP, is received to prevent turbine damage due to overspeed, then MANUALLY trip the breakers.
- d. MANUALLY trip the turbine even if it is already tripped. Then MANUALLY trip the breakers if they have remained closed to prevent turbine damage due to overspeed.

ANSWER

c.

REFERENCE

DB-OP-02500, step 4.1.5

DB-OP-02500 Discussion

Modified

Higher

Question # 18
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 079 2.4.4

QUESTION

The following conditions develop while operating at 100% power:

- Annunciators
- 9-3-E, STA AIR HDR PRESS LO
- 9-1-F, INSTR AIR HDR PRESS LO
- PI 810, IA header pressure reads 88 psig and dropping.
- PI 811, SA header pressure reads 93 psig and dropping.

The plant is reported as stable by the secondary RO. Which ONE of the following identifies correct procedure routing given the above conditions?

- a. Enter DB-OP-02528, Loss of Instrument Air, and route to Section 2.1, Severe Loss of Instrument Air Symptoms.
- b. Enter DB-OP-02528, Loss of Instrument Air, and route to Section 2.2, Instrument Air Dryer Switching Failure Symptoms.
- c. Enter DB-OP-02528, Loss of Instrument Air, and route to Section 2.3, Air Compressor Trip Symptoms.
- d. Enter DB-OP-02528, Loss of Instrument Air, and route to Section 2.4, Stable Low Instrument Air Header Pressure Symptoms.

ANSWER

a.

REFERENCE

DB-OP-02528, Symptoms

Modified

Higher

Question # 19
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 2.1.6

QUESTION

The plant was at 100% power. Main Feed Pump Turbine (MFPT) 1 has tripped due to an oil leak. ICS is running back the plant. The Shift Manager should provide oversight _____.

- a. at the MFPT to ensure Immediate Action Maintenance is being properly performed.
- b. In the Control Room to ensure E-Plan notifications are made in a timely manner.
- c. At the MFPT to ensure unsafe behaviors are identified and stopped.
- d. In the Control Room to ensure correct implementation of procedures.

ANSWER

d.

REFERENCE

DBBP-OPS-0001, pg 93

New

Higher

Question # 20
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 2.1.33

QUESTION

The following plant conditions exist:

- 100 % power
- DH Pump 1 is out of service for motor bearing replacement

An EO reports the EDG 2 lube oil temperature is 83°F, which according to DB-OP-06316, Diesel Generator Operating Procedure, makes the EDG inoperable. Which one of the following Technical Specifications applies to these conditions?

- a. Enter T. S. 3.9.8.2 - Decay Heat Removal and Coolant Recirculation.
- b. Enter T. S. 3.0.3
- c. Enter T. S. 3.0.5
- d. Enter T. S. 3.1.2.5 - Reactivity Control System: Decay Heat Pump

ANSWER

c.

REFERENCE

T. S. 3.0.5 basis

Bank

Higher

Question # 21
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 2.2.18

QUESTION

The plant is in Mode 5. The RCS is drained to 80 inches. Decay Heat Removal Pump 1 is running. A Shutdown Safety Contingency Plan is required if _____ is(are) removed from service for maintenance.

- a. The Motor Driven Feed Pump
- b. Spent Fuel Pool Cooling Pump 1
- c. Decay Heat Removal Pump 2
- d. The Condensate Storage Tanks

ANSWER

c.

REFERENCE

DB-OP-06904, Att. 3

New

Higher

Question # 22
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 2.3.5

QUESTION

Which ONE of the following procedures directs the use of emergency dosimetry when entering the Radiologically Restricted Area through the Emergency Entrance?

- a. DB-OP-02508, Control Room Evacuation
- b. DB-OP-02519, Serious Control Room Fire
- c. DB-OP-02530, Fuel Handling Accident
- d. DB-OP-02535, High Activity in the RCS

ANSWER

b.

REFERENCE

DB-OP-02519, Att. 3

New

Memory

Question # 23
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 2.3.10

QUESTION

The following plant conditions exist:

- Radiation Protection has detected a Hot Spot on an elbow in the discharge piping of MU Pump. 2
- A Shielding Request has been initiated to hang lead blankets from the MU Pump 2 recirculation line to reduce the dose rate.

The Shielding Request _____.

- a. can be authorized by the Shift Manager.
- b. requires a temporary modification prior to implementation.
- c. requires an Engineering Evaluation prior to implementation.
- d. can be authorized by the Manager-Radiation Protection.

ANSWER

c.

REFERENCE

DB-HP-01802, step 3.1.1

Bank

Memory

Question # 24
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 2.4.22

QUESTION

When using DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Rupture following a Reactor Trip, the first symptom checked is _____.

- a. SG Tube Rupture, to ensure all three fission product barriers are intact.
- b. SG Tube Rupture, to ensure radiation releases will be rapidly minimized.
- c. Adequate Subcooling Margin to ensure sufficient heat transfer from the core will occur.
- d. Adequate Subcooling Margin to ensure PTS concerns are addressed.

ANSWER

c.

REFERENCE

B&W Technical Basis Document, Vol. 3, page II.A-3

New

Memory

Question # 25
Exam Date 05/02/2004
Docket # 246 Davis Besse
Exam Level SRO
K/A 2.4.28

QUESTION

The plant is at 100% power. Security reports that the site has received a credible threat specific to Davis-Besse. Which ONE of the following procedures should be implemented in addition to DB-OP-02544, Security Event or Threats?

- a. DB-OP-02504, Rapid Shutdown
- b. DB-OP-02508, Control Room Evacuation
- c. RA-EP-01500, Emergency Classification
- d. RA-EP-02870, Station Isolation

ANSWER

c.

REFERENCE

DB-OP-02544, step 4.3.2

New

Memory