

ILT-11 NRC Exam (RO)

1. 215003K2.01 001/01202C51/H-OP-90000.012/NEW/SYS-B/BOTH/215003K2.01/2/1/F/2/TDJ

Which ONE of the choices below completes the following statement?

On **Unit 2**, the power supply to IRM G is _____ .

- A. 2R25-S015, 24/48 VDC Cabinet 2A
- B. 2R25-S016, 24/48 VDC Cabinet 2B
- C. 2R22-S016, 125/250 VDC Cabinet 2A
- D. 2R22-S017, 125/250 VDC Cabinet 2B

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2. 202002K4.06 001/00401B31/004.001.A.10/MOD/SYS-B/BOTH/202002K4.06/2/2/F/2/TDJ

Which ONE of the choices below completes the following statement?

When the reactor is operating at 5% RTP, Recirc Pump NPSH is protected by Speed Limiter _____ .

- A. #1
- B. #2
- C. #3
- D. #4

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3. 202001A1.03 001/00401B31/004.005.A/NEW/SYS-B/BOTH/202001A1.03/2/2/F/2/TDJ

Unit 2 is operating with BOTH Recirc Pumps operating at 60% speed.

- o The operator depresses the Individual Pump A Lower MEDIUM pushbutton one (1) time

Based on the above conditions,

Recirc Pump A speed will decrease by five (5) rpms in _____ .

The change in Total Core Flow on recorder 2B21-R613, Core Plate DP/ Rx Core Flow, will be monitored on panel _____ .

- A. one (1) second;
2H11-P603
- B. one (1) second;
2H11-P602
- C. five (5) seconds;
2H11-P603
- D. five (5) seconds;
2H11-P602

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4. 203000K5.01 001/00701E11/H-OP-90000.010/NEW/SYS-I/BOTH/203000K5.01/2/1/H/3/TDJ

Unit 2 is shutdown due to a leak in Primary Containment.

- o RPV Pressure is 400 psig
- o RHR Pumps A & C are running
- o RHR Loop A is aligned for injection

2E11-F050A, RHR Injection Check Valve, is leaking by.

Based on the above conditions,

2E11-R606A, RHR Loop A Pressure, located on panel 2H11-P601, will be indicating approximately _____ .

2E11-F050A is located in the _____ .

- A. 250 psig;
Reactor Building
- B. 250 psig;
Drywell
- C. 400 psig;
Reactor Building
- D. 400 psig;
Drywell

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5. 203000K5.02 001/00701E11/H-OP-90000.004/BANK/P-EOP/BOTH/203000K5.02/2/1/H/3/TDJ

A **Unit 1** startup is in progress with RPV Pressure at 400 psig.

- o At 10:00, a LOCA occurs causing RPV Pressure to DECREASE
- o At 10:02, RPV Pressure is 390 psig

NOTE: 31EO-EOP-114-1, Preventing Injection Into The RPV From Core Spray and LPCI, has NOT been performed.

Based on the above conditions,

At 10:02, 1E11-F015A, RHR injection valve, _____ be OPEN.

At 10:08, to control injection into the RPV, 1E11-F017A, RHR Injection valve, _____ be throttled CLOSED.

- A. will;
can
- B. will;
can NOT
- C. will NOT;
can
- D. will NOT;
can NOT

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6. 205000A4.12 001/00701E11/H-OP-90000.013/MOD/P-NORM/BOTH/205000A4.12/2/1/F/3/TDJ

Unit 2 is in Mode 4 with RHR pump 2B in Shutdown Cooling.

Preparations are in progress to start Recirc pump 2B.

- o Reactor Coolant temperature 180°F
- o Recirc pump 2B Suction temperature 125°F
- o Steam Dome temperature 210°F
- o Bottom Head Drain temperature 142°F

Based on the above conditions and IAW 34SO-B31-001-2, Reactor Recirculation System,

The temperature difference between the reactor coolant inside the idle loop to be started and the coolant in the RPV _____ WITHIN limits.

Recirc pump 2B Suction temperature will be monitored on panel _____ .

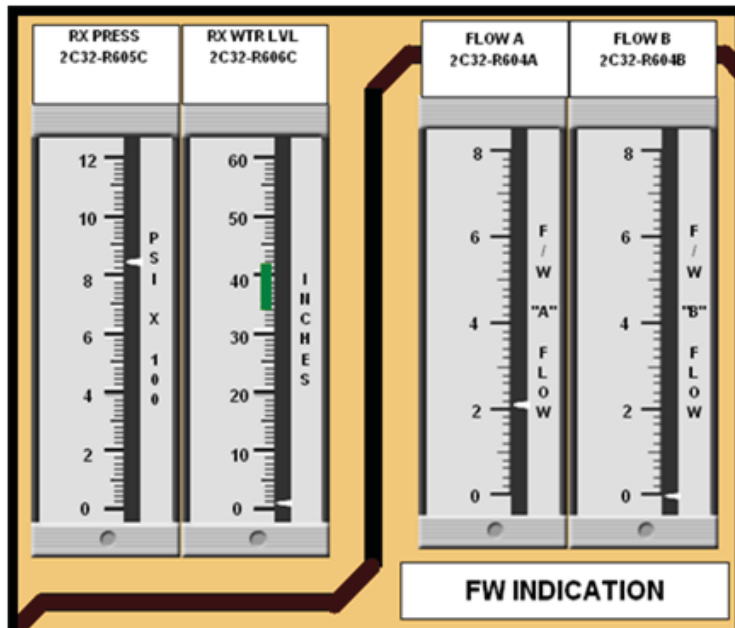
- A. is NOT;
2H11-P602
- B. is NOT;
2H11-P601
- C. is;
2H11-P602
- D. is;
2H11-P601

7. 206000G2.2.4 001/00501E41/H-OP-90000.010/BANK/SYS-I/BOTH/206000G2.2.4/2/1/H/2/RAG

Unit 2 was operating at 100% RTP when a Feedwater Line break in the Drywell caused a Reactor scram to occur.

Two (2) minutes after the scram, the following pumps are operating with the below panel indications:

- o Both RFPs
- o HPCI
- o RCIC



Based on the above conditions,

Currently, HPCI _____ pumping out of the Feedwater Line break.

Closing Feedwater Isolation valve _____ will ISOLATE the break from the RFPs.

- A. is;
2N21-F006A
- B. is;
2N21-F006B
- C. is NOT;
2N21-F006A
- D. is NOT;
2N21-F006B

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8. 209001A3.02 001/00801E21/H-OP-90000.014/NEW/SYS-B/BOTH/209001A3.02/2/1/F/3/RAG

Unit 1 is performing a reactor startup.

- o CORE SPRAY SYS I LOGIC POWER FAILURE, 601-335, is ILLUMINATED

Subsequently, Unit 1 experiences a LOSP and the following events occur:

- o At 12:00, the EDGs tie to their respective Emergency Buses
- o At 12:15, Drywell Pressure INCREASES to 1.85 psig

Based on the above conditions,

The EARLIEST listed time the Core Spray pumps will receive an AUTOMATIC initiation signal is _____ .

After the initiation signal, _____ Core Spray pump(s) will have AUTOMATICALLY started.

- A. 12:01;
ONLY one (1)
- B. 12:01;
BOTH
- C. 12:16;
ONLY one (1)
- D. 12:16;
BOTH

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9. 209001K4.02 001/00801E21/H-OP-90000.017/BANK/SYS-B/BOTH/209001K4.02/2/1/F/3/RAG

Unit 2 is operating at 100% RTP when the following conditions occur:

- o JOCKEY PUMP SYS A DISCH PRESS LOW, 601-333, ILLUMINATES
- o On 2E21-R600A, Core Spray A discharge pressure DECREASES to 45 psig

Based on the above conditions, a Core Spray Jockey Pump _____ receive an AUTOMATIC start signal.

If this condition is NOT corrected, the potential of water hammer damage exists to _____ of Core Spray system piping.

- A. will;
BOTH divisions
- B. will;
ONLY one (1) division
- C. will NOT;
BOTH divisions
- D. will NOT;
ONLY one (1) division

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10. 211000K1.10 001/00501E41/H-OP-90000.016/NEW/P-EOP/BOTH/211000K1.10/2/1/F/3/RAG

IAW 31EO-EOP-109-2, Alternate Boron Injection, to inject boron into the RPV using the HPCI System,

The operator will DIRECTLY connect hoses to _____ .

2E41-F012, HPCI Min Flow valve, _____ REQUIRED to be FUNCTIONAL.

- A. 2C41-F034, SBLC Combined Drain Valve;
is
- B. 2C41-F034, SBLC Combined Drain Valve;
is NOT
- C. 2C41-F015, SBLC Suction Line Drain Valve;
is
- D. 2C41-F015, SBLC Suction Line Drain Valve;
is NOT

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11. 212000K1.07 001/01001C71/H-OP-90000.004/NEW/SYS-B/BOTH/212000K1.07/2/1/F/2/TDJ

Which ONE of the choices below completes the following statements?

The LOWEST listed RPV Pressure at which a High RPV Pressure RPS Scram signal will FIRST be received is _____ .

With RPV Pressure at the RPS Scram setpoint, opening any SRV _____ actuate the LLS logic.

- A. 1074 psig;
will
- B. 1074 psig;
will NOT
- C. 1055 psig;
will
- D. 1055 psig;
will NOT

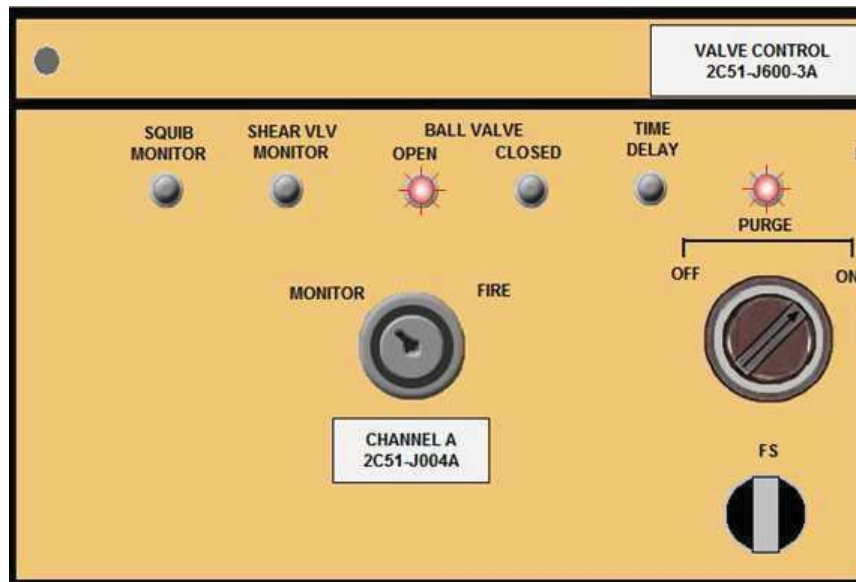
12. 215001A4.03 001/01301T23/013.036.A01/BANK/P-AB/BOTH/215001A4.03/2/2/H/3/RAG

Unit 2 is operating at 100% RTP with the "A" Channel TIP in the core.

Subsequently, a pipe break in the Reactor Building results in the following:

- o Steam is confirmed to be coming from the TIP room
- o A manual reactor scram is inserted
- o RWL decreases to -20 inches before being restored to +9 inches
- o A manual WITHDRAW command is initiated for the "A" TIP probe

Five (5) minutes later, the status of the "A" Channel TIP is indicated below:



Based on the above conditions,

The EXPECTED location of the "A" TIP probe is the _____ position.

IAW 34AB-C71-001-2, Scram Procedure, the "A" TIP Shear valve _____ REQUIRED to be fired.

- A. In Shield;
is
- B. In Shield;
is NOT
- C. Parked (indexer position);
is
- D. Parked (indexer position);
is NOT

13. 201006K1.02 001/05403C11/H-OP-90000.016/NEW/SYS-B/BOTH/201006K1.02/2/2/F/3/RAG

Unit 2 is operating at 15% RTP. A reactor shutdown is in progress.

The following occurs:

- o Control Rod 22-39 is INSERTED to position 12 and a failed reed switch is encountered

Based on the above conditions,

For the position indication of Control Rod 22-39, the RWM will display _____ .

The RWM _____ AUTOMATICALLY insert a substitute position for Control Rod 22-39 to allow control rod movement.

- A. "None";
will
- B. "None";
will NOT
- C. "FF";
will
- D. "FF";
will NOT

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14. 215004K2.01 001/01201C51/012.003.A.09/MOD/SYS-B/BOTH/215004K2.01/2/1/F/2/RAG

Unit 1 is starting up with Reactor power at 5% RTP.

- o 24/48 VDC Cabinet 1B, 1R25-S016, de-energizes and can NOT be restored

Based on the above conditions,

SRM Channels _____ will have lost their power supply.

- A. 1A & 1C
- B. 1A & 1D
- C. 1B & 1C
- D. 1B & 1D

15. 215004K3.02 001/01201C51/012.003.A.13/NEW/SYS-I/BOTH/215004K3.02/2/1/F/3/TDJ

Unit 1 is operating in Mode 2.

- o ALL IRMs are on Range 6
- o SRM B drawer is removed and is BYPASSED

Subsequently, SRM D fails UPSCALE.

- o SRM UPSCALE OR INOPERATIVE, 603-204, ILLUMINATES

Based on the above conditions,

The SRM D failure _____ initiate a control rod WITHDRAW block.

With SRM B bypassed, SRM D _____ be placed in BYPASS on panel 1H11-P603.

- A. will;
can NOT
- B. will;
can
- C. will NOT;
can NOT
- D. will NOT;
can

16. 215005K2.02 001/01203C51/90000.012/BANK/SYS-B/BOTH/215005K2.02/2/1/F/3/TDJ

Unit 1 is operating at 85% RTP.

- o A loss of RPS Bus 1A occurs

Based on the above conditions,

_____ APRM "2 of 4 Voter Modules" will be ENERGIZED.

_____ APRM NUMACs will be ENERGIZED.

- A. ALL four (4);
ALL four (4);
- B. ALL four (4);
ONLY two (2);
- C. ONLY two (2);
ALL four (4);
- D. ONLY two (2);
ONLY two (2);

17. 217000A1.07 001/03901E51/H-OP-90000.016/BANK/SYS-I/BOTH/217000A1.07/2/1/H/2/RAG

Unit 2 is operating at 100% RTP.

- o RCIC is operating in Full Flow Test mode at rated flow

Subsequently, a malfunction causes 2E41-F042, HPCI Torus Suction valve, to OPEN.

Based on the above conditions,

RCIC will _____ .

Torus water level will _____ .

- A. continue pumping at rated flow;
remain the same
- B. continue pumping at rated flow;
increase
- C. be operating on minimum flow;
remain the same
- D. be operating on minimum flow;
increase

18. 218000K3.01 001/03801B21/038.004.A.02/BANK/SYS-I/BOTH/218000K3.01/2/1/H/4/RAG

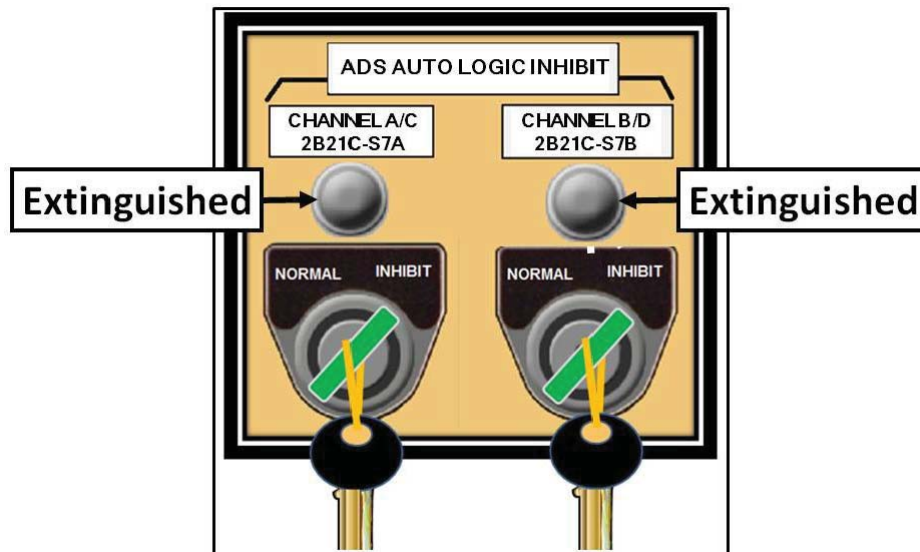
Unit 2 was at 100% RTP when the following occurred concurrently:

- o Loss of Coolant Accident (LOCA)
- o A complete Loss of Off Site Power (LOSP)
- o All DC power is available

At 08:00, the following conditions exist:

- o RWL -95 inches, DECREASING at 2 inches per minute
- o RPV Pressure 900 psig, DECREASING at 25 psig per minute
- o Drywell pressure 4.0 psig, slowly INCREASING

The following ADS panel indications concurrently exist:



Based on the above conditions and with NO additional operator actions,

At 08:20, ONLY _____ will be injecting into the RPV.

- A. HPCI
- B. Core Spray and RHR
- C. HPCI and the Condensate Booster Pumps
- D. Core Spray, RHR and the Condensate Booster Pumps

19. 223001K5.09 001/10001E10/LT-10001.004/BANK/SYS-B/BOTH/215001A4.03/2/2/F/2/TDJ

Which ONE of the choices below completes the following statements?

Following a Design Basis LOCA, the LOWEST listed cladding temperature at which the temperature addition from the Zirconium-Water reaction dominates over decay heat is _____ .

When this reaction starts to accelerate, large quantities of _____ are generated and could cause an explosion in Primary Containment.

- A. 2200°F;
hydrogen
- B. 2200°F;
oxygen
- C. 1800°F;
hydrogen
- D. 1800°F;
oxygen

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20. 223002K6.03 001/10007D11/200.030.A.02/NEW/SYS-B/BOTH/223002K6.03/2/1/F/2/RAG

Unit 2 is operating at 15% RTP.

Subsequently, all Main Steam Line Radiation Monitors, 2D11-K603A-D, fail UPSCALE and the following alarms are received:

- o MAIN STEAM LINE RADIATION HIGH-HIGH/INOP, 603-125
- o MAIN STEAM LINE RADIATION HIGH, 601-425

Based on the above conditions,

MSIVs will _____ .

Reactor Water Sample valves, 2B31-F019 & F020, _____ AUTOMATICALLY close.

- A. remain OPEN;
will
- B. remain OPEN;
will NOT
- C. automatically CLOSE;
will
- D. automatically CLOSE;
will NOT

21. 226001A3.05 001/00701E11/007.003.A.03/NEW/SYS-B/BOTH/226001A3.05/2/2/F/2/TDJ

Unit 2 is at 90% RTP.

- o RHR Loop A is operating in Torus Spray mode
- o Torus Sprays are in service due to a leaking SRV

Subsequently, Drywell Pressure begins to slowly INCREASE.

<u>Time</u>	<u>Drywell Pressure</u>
10:00	1.0 psig
10:05	1.5 psig
10:10	2.0 psig
10:30	5.0 psig

Based on the above conditions,

The EARLIEST listed time the Torus Spray valves, 2E11-F027A and 2E11-F028A, will have received an AUTOMATIC isolation signal is _____ .

- A. 10:00
- B. 10:05
- C. 10:10
- D. 10:30

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22. 230000K2.02 001/00701E11/H-OP-90000.012/BANK/SYS-B/BOTH/230000K2.02/2/2/F/2/RAG

Unit 1 has experienced a LOSP.

- o 4160 VAC Bus 1G is the ONLY 4160 VAC bus that is ENERGIZED

Based on the above conditions,

Only _____ is AVAILABLE to be used for Torus Spray.

- A. RHR pump 1A
- B. RHR pump 1B
- C. RHR pump 1C
- D. RHR pump 1D

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23. 239002A2.06 001/01401B21/014.003.A.06/MOD/P-AB/BOTH/239002A2.06/2/1/H/3/ARB

Unit 1 experienced a Main Turbine trip, resulting in RPV Pressure INCREASING to 1125 psig.

- o RPV Pressure is currently 940 psig

Based on the above conditions,

The MAXIMUM number of SRV's that will have AUTOMATICALLY opened
is _____ .

To mitigate this event, entry into 31EO-EOP-010-1, RC - RPV Control (Non-ATWS),
_____ REQUIRED.

- A. eight (8);
is
- B. eight (8):
is NOT
- C. four (4);
is
- D. four (4);
is NOT

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24. 245000K3.02 001/01902N32/019.010.A.01/NEW/SYS-I/BOTH/245000K3.02/2/2/H/3/RAG

Unit 1 is operating at 90% RTP.

At 11:00, reactor power has been INCREASED to 100% RTP.

At 11:15, a MALFUNCTION causes the Max Combined Flow Limit (MCFL) setting to DECREASE below 100%.

Based on the above conditions,

At 11:00, the MAXIMUM value for Control Reference will be _____ .

At 11:15, RPV Pressure will _____ .

- A. 97%;
INCREASE
- B. 97%;
DECREASE
- C. 100%;
INCREASE
- D. 100%;
DECREASE

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25. 259002G2.4.47 001/00202C32/H-OP-90000.001/NEW/SYS-B/BOTH/259002G2.4.47/2/1/H/2/RAG

Unit 2 is operating at 100% RTP.

At 11:00 the following RWL indications exist:

- o 2C32-R606A, Narrow Range 37.3 inches
- o 2C32-R606B, Narrow Range 37.1 inches
- o 2C32-R606C, Narrow Range 36.9 inches
- o 2C32-R655, Floodup Range 33.0 inches

Subsequently, 2C32-R606A & R606C, begin to slowly and continuously INCREASE.

At 11:05 the following indications exist:

- o 2C32-R606A 42.3 inches
- o 2C32-R606B 32.1 inches
- o 2C32-R606C 41.9 inches
- o 2C32-R655 28.0 inches
- o Drywell Pressure is 0.7 psig and STEADY

Based on the above conditions,

At 11:05, the 2C32-K648, Median Level Signal Processor, will output the _____ RWL signal to be used by the RWLC system.

If the current RWL trend continues, an AUTOMATIC reactor scram _____ occur.

Reference Provided

- A. 2C32-R606B;
will
- B. 2C32-R606B;
will NOT
- C. Median;
will
- D. Median;
will NOT

26. 259002K4.06 001/00202C32/002.021.A.01/MOD/SYS-B/BOTH/259002K4.06/2/1/F/2/RAG

Unit 1 is operating at 100% RTP with the following RWLC System alignment:

- | | |
|--|--------|
| o Reactor Level Mode Select switch | AUTO |
| o Reactor Water Level Select switch | B |
| o Feedwater Control Mode Select switch | 3 ELEM |
| o 1C32-R601A "A" M/A Station | MANUAL |

Subsequently, the following conditions occur:

- o Loss of output signal from 1C32-R600, Master Feedwater Controller
- o FEEDWATER CONTROL SYSTEM TROUBLE, 603-132, ILLUMINATES

Based on the above conditions,

_____ will have assumed the role of the Master Feedwater Controller.

The RWLC System will be operating in _____ Element Control.

- A. 1C32-R601A, "A" M/A Station;
Single
- B. 1C32-R601A, "A" M/A Station;
Three
- C. 1C32-R601B, "B" M/A Station;
Single
- D. 1C32-R601B, "B" M/A Station;
Three

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27. 261000A3.01 001/03001T46/030.001.A.09/MOD/SYS-B/BOTH/261000A3.01/2/1/H/2/ARB

BOTH Units are operating at 100% RTP.

- o **Unit 1** experiences an event which results in a Secondary Containment isolation

Based on the above conditions and with NO operator action,

Ten (10) minutes later, the TOTAL combined amount of **Unit 1 AND Unit 2** SBT System flows going to the Main Stack is expected to be between _____ .

- A. 3000 and 4000 scfm
- B. 6000 and 8000 scfm
- C. 9000 and 12000 scfm
- D. 13000 and 16000 scfm

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28. 261000A4.06 001/03001T46/030.001.A.05/NEW/SYS-B/BOTH/261000A4.06/2/1/F/2/ARB

Which ONE of the choices below completes the following statements?

The purpose of the SBGT System is to ensure any release from the Secondary Containment is controlled by maintaining a negative pressure of AT LEAST _____ on the Reactor Building.

This **Unit 2** Reactor Building negative pressure is indicated on Panel _____ .

- A. 0.20 inches of water;
2H11-P657
- B. 0.20 inches of water;
2H11-P700
- C. 0.06 inches of water;
2H11-P657
- D. 0.06 inches of water;
2H11-P700

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29. 262001G2.4.8 001/02703R23/027.021.A.02/BANK/P-AB/BOTH/262001G2.4.8/2/1/H/2/RAG

Unit 1 is being shutdown.

The following events occur:

<u>Time</u>	<u>Event</u>
07:30	4160 VAC 1G de-energizes and can NOT be restored
08:00	The Reactor Mode Switch is placed in SHUTDOWN
15:00	Reactor Coolant temperature is reduced to 211°F
23:00	The Reactor Mode Switch is placed in REFUEL

NOTE: The EOPs are NOT in use.

Based on the above conditions and IAW 34AB-R23-001-1, Loss of 600 Volt Emergency Bus,

The EARLIEST time that the 4160/600V 1CD Transformer can be used to supply power to 600 VAC 1D is _____ .

- A. 07:30
- B. 08:00
- C. 15:00
- D. 23:00

30. 262002A3.01 001/02705R25/H-OP-90000.014/MOD/SYS-B/BOTH/262002A3.01/2/1/H/3/TDJ

Unit 2 is operating at 100% RTP when the following occurs:

- o The Vital AC Battery Charger AC Input breaker trips OPEN

Based on the above conditions,

The Vital AC Bus will INITIALLY receive power from _____ .

Subsequently, if this power supply is lost, the Vital AC Bus _____
AUTOMATICALLY transfer to ANOTHER power source.

- A. the Vital AC batteries;
will
- B. the Vital AC batteries;
will NOT
- C. 600 VAC Bus 2C;
will
- D. 600 VAC Bus 2C;
will NOT

31. 263000A1.01 001/02704R42/H-OP-90000.011/BANK/SYS-B/BOTH/263000A1.01/2/1/F/3/RAG

On **Unit 2**, the Division I 125/250 VDC Station Service Battery Chargers are operating in the EQUALIZE mode.

- o An operator is preparing to place the Battery Chargers in the FLOAT mode

Based on the above conditions,

The NORMAL power supply for the 125/250 VDC Station Service Battery System is the _____ .

The battery charger output voltage will be HIGHEST when operating in the _____ mode.

- A. battery chargers;
EQUALIZE
- B. battery chargers;
FLOAT
- C. batteries;
EQUALIZE
- D. batteries;
FLOAT

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32. 264000K5.05 001/02801R43/H-OP-90000.015/NEW/SYS-B/BOTH/264000K5.05/2/1/F/3/RAG

IAW 34SV-R43-003-2, Diesel Generator 2C Monthly Surveillance, an operator is preparing to parallel EDG 2C to 4160 VAC bus 2G.

- o The Speed Droop control knob is positioned to the correct setting
- o The EDG 2C synchroscope is rotating in the REQUIRED direction

Based on the above conditions,

The Speed Droop control knob is REQUIRED to be positioned to _____ .

The reason the synchroscope is rotating in the above direction is to REDUCE the probability of causing a(an) _____ trip.

- A. zero (0);
over current
- B. zero (0);
reverse power
- C. 50;
over current
- D. 50;
reverse power

33. 268000A2.01 001/01301T22/201.078.B/BANK/P-AB/BOTH/268000A2.01/2/2/H/3/RAG

Unit 2 experiences a rupture on the RHR A Loop suction piping in the Torus Area of the Reactor Building.

The following alarms are ILLUMINATED:

- o TORUS N-E AREA INSTR SUMP LVL HIGH, 657-088
- o RB S-E DIAGONAL FLOOR DRN SUMP LEVEL HIGH-HIGH, 657-034

The following valve alignment exists:

- o 2T45-F002, Torus N-E and S-E Outboard Sump Isol Valve, is OPEN
- o 2T45-F003, Torus N-E and S-E Inboard Sump Isol Valve, is OPEN

Based on the above conditions,

The flow of water from the SE Diagonal sump pump to the Radwaste facility _____
AUTOMATICALLY isolate as Torus area water levels continue to INCREASE.

IAW 34AR-657-034-2, RB S-E DIAGONAL FLOOR DRN SUMP LEVEL HIGH-HIGH,
2T45-F002 is REQUIRED to be _____ .

- A. will;
open
- B. will;
closed
- C. will NOT;
open
- D. will NOT;
closed

34. 272000A1.02 001/10007D11/H-OP-90000.013/NEW/SYS-B/BOTH/272000A1.02/2/2/F/2/RAG

Unit 1 is operating at 100% RTP.

- o Control Room Intake Radiation Monitor Functional Test is in progress

Due to the testing, the following alarm is received:

- o CR OUTSIDE AIR INLET RADIATION HIGH, 601-132

Based on the above conditions,

The operator will verify that the _____ .

- A. Offgas Stack Isolation Valve has isolated
- B. Main Stack Accident Range Monitor has started
- C. MCREC System has shifted to pressurization mode
- D. Turbine Building Ventilation Exhaust Fans have tripped

ILT-11 NRC Exam (RO)

35. 288000K6.01 001/1303T41/200.031.A.03/BANK/SYS-B/BOTH/288000K6.01/2/2/F/3/RAG

Which ONE of the choices below completes the following statement?

On **Unit 2**, a loss of distribution panel _____ will result in Reactor Building ventilation Exhaust flow decreasing to zero (0) scfm.

- A. 2R24-S011, Rx. Bldg. MCC 2A
- B. 2R24-S012, Rx. Bldg. MCC 2B
- C. 2R24-S015, Rx. Bldg. MCC 2F
- D. 2R24-S016, Rx. Bldg. MCC 2G

36. 290001G2.1.20 001/01302T22/013.038A.04/BANK/SYS-B/BOTH/290001G2.1.20/2/2/H/2/ARB

Unit 2 is at 100% RTP when a Secondary Containment Isolation signal is received.

Subsequently, 34SO-T46-001-2, Stand-by Gas Treatment System, Section 4.2.1 AUTOMATIC STARTUP, has been entered to confirm proper operation of SGBT.

IAW 34SO-T46-001-2,

The operator _____ REQUIRED to place one (1) train of SGBT in STANDBY.

Operation of both trains of SGBT will _____ off site release rates.

- A. is NOT;
increase
- B. is NOT;
decrease
- C. is;
increase
- D. is;
decrease

37. 295001AK1.01 001/HLT-SIM-LP-00003/HLT-SIM-00003.014/NEW/P-AB/BOTH/295001AK1.01/1/1/H/2/RAG

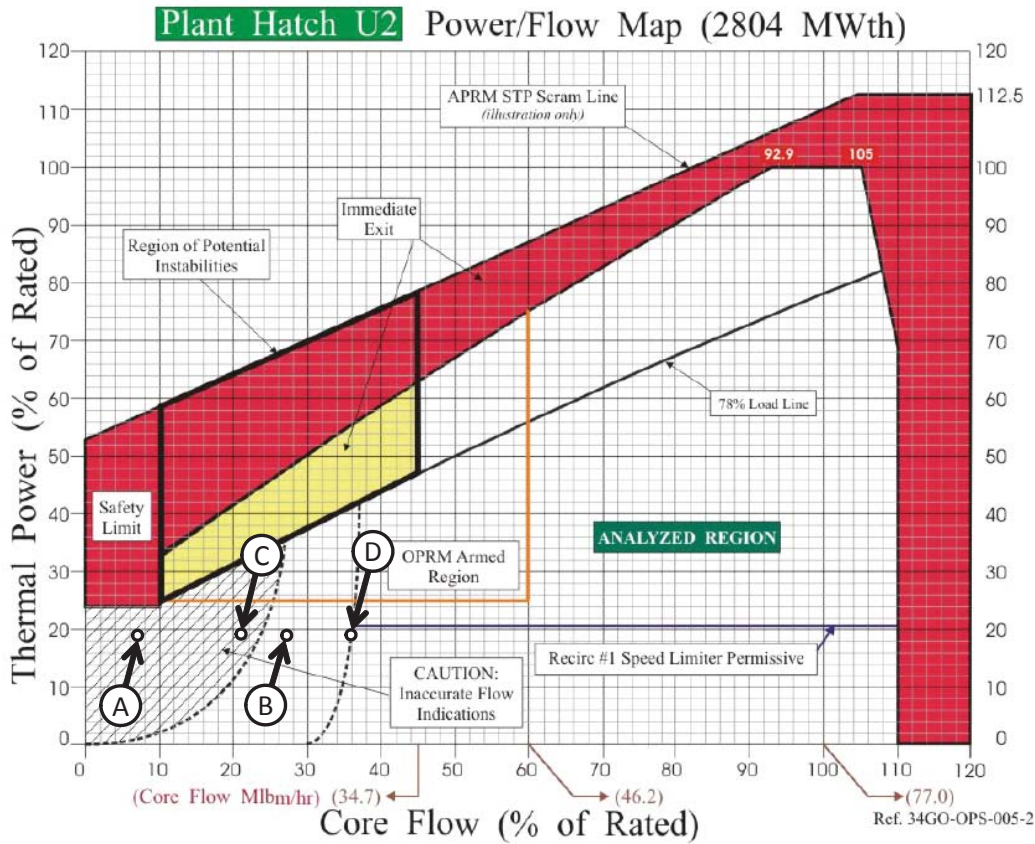
A **Unit 2** reactor startup is in progress.

- o Both Recirc pumps are operating at 22% speed

Subsequently, Recirc pump 2A trips.

After conditions stabilize, the following indications exist:

- o Jet Pump Total A Flow, 2B21-R611A 7.8 Mlbm/hr
- o Jet Pump Total B Flow, 2B21-R611B 13.5 Mlbm/hr



Based on the above conditions and IAW 34AB-B31-001-2, Reactor Recirculation Pump(s) Trip, Or Recirc Loops Flow Mismatch, Or ASD Power Cell Failure,

ACTUAL Total % core flow is indicated by _____ on the above Power to Flow Map.

- A. Point A
- B. Point B
- C. Point C
- D. Point D

38. 295002AK1.04 001/HLT-SIM-LP-00003/HLT-SIM-00003.014/NEW/P-AB/BOTH/295002AK1.04/1/2/H/3/RAG

Unit 2 is operating at 100% RTP.

- o Main Condenser Vacuum 26.9 inches of Hg vacuum

Subsequently, the following alarm is received:

- o INLET FLOW TO STACK HIGH, N62-020

Five (5) minutes later, the following conditions exist:

- o Recombiner Temperature 800°F and steady
- o Offgas flow to Main Stack 50 scfm and slowly INCREASING
- o Main Condenser Vacuum 25.5 inches of Hg vacuum and slowly DEGRADING

Based on the above conditions,

Main Condenser Vacuum degrading is a result of _____ .

IAW 34AB-N61-002-2, Main Condenser Vacuum Low, to maintain vacuum, the initial REQUIRED action is to _____ .

- A. Failure of the offgas recombiner;
start the mechanical vacuum pump
- B. Failure of the offgas recombiner;
reduce reactor power
- C. Main Condenser air inleakage;
start the mechanical vacuum pump
- D. Main Condenser air inleakage;
reduce reactor power

ILT-11 NRC Exam (RO)

39. 295003AA2.05 001/02702R22/200.017.A.03/NEW/P-AB/BOTH/295003AA2.05/1/1/H/2/RAG

BOTH Units were operating at 100% RTP when a LOSP occurred.

The following conditions exist:

- o On **Unit 1**, ONLY 4160 VAC Bus 1E is ENERGIZED from its associated EDG
- o On **Unit 2**, 4160 VAC Buses 2E & 2G are ENERGIZED from their associated EDGs

Based on the above conditions,

On **Unit 1**, ENTRY into 34AB-R22-003-1, Station Blackout, _____ REQUIRED.

NORMAL power is available to _____ of the **Unit 1** LPCI Buses (1R24-S018A/B).

- A. is;
ONLY one (1)
- B. is;
BOTH
- C. is NOT;
ONLY one (1)
- D. is NOT;
BOTH

ILT-11 NRC Exam (RO)

40. 295004AK3.02 001/02704R42/H-OP-90000.013/BANK/P-AB/BOTH/295004AK3.02/1/1/H/2/RAG

Unit 2 is operating at 100% RTP when the following alarm occurs:

- o 125/250V BATTERY GND FAULT, 651-127

IAW 34AB-R42-001-0, Location Of Grounds and 34AR-651-127-2,

Actions to locate and isolate the ground are REQUIRED if the magnitude of the ground is _____.

The above actions are REQUIRED because _____ .

- A. 8,000 OHMS;
a single ground frequently results in spurious equipment operation
- B. 8,000 OHMS;
personnel or equipment hazards could occur if a second ground develops
- C. 22,000 OHMS;
a single ground frequently results in spurious equipment operation
- D. 22,000 OHMS;
personnel or equipment hazards could occur if a second ground develops

ILT-11 NRC Exam (RO)

41. 295005AK2.02 001/01501N22/H-OP-90000.004/NEW/P-AB/BOTH/295005AK2.02/1/1/H/3/TDJ

Unit 1 is operating at 60% RTP.

At 10:00, a transient occurs resulting in feedwater temperature DECREASING.

- o Operators enter 34AB-N21-001-1, Loss of Feedwater Heating
- o Feedwater temperatures are stabilized

Unit 1 is reduced to 24% RTP preparing to shut down for repairs.

At 11:00, the Main Turbine AUTOMATICALLY trips.

Based on the above conditions,

At 10:00, IAW 34AB-N21-001-1, feedwater temperature indications on SPDS _____
for Final Feedwater Temperatures.

At 11:10, Feedwater temperature will be lower due to _____ .

- A. can be used DIRECTLY;
high level in the feedwater heaters
- B. can be used DIRECTLY;
loss of extraction steam
- C. must be AVERAGED;
high level in the feedwater heaters
- D. must be AVERAGED;
loss of extraction steam

ILT-11 NRC Exam (RO)

42. 295006AA2.02 001/20304EOP/201.093.A.11/NEW/P-AB/BOTH/295006AA2.02/1/1/H/2/RAG

IAW the EOPs and after a scram, which ONE of the following rod configurations confirms the reactor will remain shut down under all conditions without Boron injection and without a Reactor Engineering evaluation?

All control rods fully inserted to position 00 except _____ .

- A. two (2) control rods at position 18
- B. ten (10) control rods at position 02
- C. one (1) control rod at position 02 AND one (1) at position 48
- D. one (1) control rod at position 48 AND one (1) control rod with NO indication (blank)

ILT-11 NRC Exam (RO)

43. 295009AA2.03 001/00301G31/H-OP-90000.001/NEW/P-AB/BOTH/295009AA2.03/1/2/H/2/RAG

Unit 2 is in MODE 2 with a heat up in progress.

- o RWL is being maintained by the CRD and RWCU systems

Subsequently, the following conditions occur:

- o REACTOR VESSEL WATER LEVEL HIGH/LOW, 603-141, ILLUMINATES
- o RWL is 30 inches and slowly DECREASING
- o RWCU NRHX Outlet Temperature is 125°F and slowly INCREASING

Based on the above conditions,

IAW 34AR-603-141-2, the REQUIRED action is to _____ .

A RWCU System isolation will FIRST occur when RWCU NRHX Outlet Temperature increases to _____ .

- A. maximize CRD System flow;
130°F
- B. maximize CRD System flow;
140°F
- C. throttle closed 2G31-F033, RWCU Blowdown Flow Control valve;
130°F
- D. throttle closed 2G31-F033, RWCU Blowdown Flow Control valve;
140°F

ILT-11 NRC Exam (RO)

44. 295012G2.4.49 001/01304P64/200.032.A.01/NEW/P-AB/BOTH/295012G2.4.49/1/2/H/2/ARB

Unit 2 is operating at 100% RTP with Drywell Chiller 2B Danger Tagged out of service.

Subsequently, Drywell Chiller 2A trips on loss of 4160 VAC Bus 2E.

- o 4160 VAC Bus 2E is restored
- o Drywell Pressure is 0.85 psig
- o Highest Drywell Air Temperature is 200°F

Based on the above conditions and IAW 34AB-T47-001-2, Complete Loss of Drywell Cooling,

The operator will restore Drywell cooling by _____ .

The Drywell _____ REQUIRED to be vented.

- A. restarting Drywell Chiller 2A;
is
- B. restarting Drywell Chiller 2A;
is NOT
- C. cross connecting to Rx Bldg Chilled Water;
is
- D. cross connecting to Rx Bldg Chilled Water;
is NOT

ILT-11 NRC Exam (RO)

45. 295013AK2.01 001/01301T23/200.040.A.01/BANK/P-AB/BOTH/295013AK2.01/1/2/H/3/RAG

Unit 2 is operating at 100% RTP.

- o A Safety Relief Valve (SRV) inadvertently OPENS
- o Torus water temperature increases to 97°F
- o An operator closes the SRV

Based on the above conditions,

IAW 34AB-T23-003-2, Torus Temperature Above 95°F, _____ RHR loop(s) is(are) REQUIRED to be placed in Torus Cooling.

IAW 34SO-E11-010-2, RHR System, prior to starting any RHR pumps in any respective loop, the RHR heat exchanger _____ REQUIRED to be ISOLATED.

- A. ONLY one (1);
is
- B. ONLY one (1);
is NOT
- C. ALL available;
is
- D. ALL available;
is NOT

46. 295015AA2.01 001/20328EOP/201.071.A.02/BANK/P-EOP/BOTH/295015AA2.01/1/2/H/2/TDJ

Unit 2 has experienced an ATWS.

IAW the RC-1 Placard:

- o At 10:00, the Recirc Pumps are tripped
- o At 10:01, Reactor Power is 4%

Based on the above conditions,

At 10:01, Injection with SBLC _____ required.

IAW the EOPs, the EARLIEST listed condition where the reactor could be called SUBCRITICAL is with the _____ .

- A. is;
IRMs on Range 7
- B. is;
IRMs on Range 5
- C. is NOT;
IRMs on Range 7
- D. is NOT;
IRMs on Range 5

47. 295016AK2.01 001/05201C82/007.019.A.04/NEW/SYS-I/BOTH/295016AK2.01/1/1/H/3/TDJ

Unit 2 has experienced a transient which requires the Control Room to be EVACUATED.

The following conditions exist:

- o 31RS-OPS-001-2, Shutdown From Outside Control Room, has been entered
- o ALL RSDP emergency transfer switches are in EMERGENCY

Subsequently, RWL decreases to -110 inches.

Based on the above conditions and IAW 31RS-OPS-001-2, Attachment 5, LPCI Operation From the Remote Shutdown Panel,

RHR SW Pumps 2B & 2D _____ .

RHR Pump 2B _____ .

- A. will be confirmed to have automatically tripped;
will be confirmed to have automatically started
- B. will be confirmed to have automatically tripped;
must be manually started
- C. must be manually tripped;
will be confirmed to have automatically started
- D. must be manually tripped;
must be manually started

48. 295018AK3.05 001/00901P42/H-OP-90000.001/NEW/SYS-I/BOTH/295018AK3.05/1/1/H/2/TDJ

Unit 2 is operating at 100% RTP when the following annunciators are recieved:

- o HX PSW/RBCCW DIFF PRESS LOW, 650-238
- o RBCCW SURGE TK LEVEL HIGH, 650-258

The following conditions currently exist:

- o Three (3) PSW pumps are operating
- o PSW Div I and Div II pressures are 120 psig and STEADY

Based on the above conditions and IAW 34AR-650-238-2,

The alarm setpoint for low PSW-to-RBCCW differential pressure is _____ .

The operator is REQUIRED to _____ .

- A. 7 psid;
place the standby RBCCW Hx in service to isolate a PSW-to-RBCCW leak
- B. 7 psid;
start the standby PSW pump to increase PSW System pressure
- C. 20 psid;
place the standby RBCCW Hx in service to isolate a PSW-to-RBCCW leak
- D. 20 psid;
start the standby PSW pump to increase PSW System pressure

ILT-11 NRC Exam (RO)

49. 295019AA1.02 001/HLT-SIM-LP-00003/HLT-SIM-00003.014/NEW/P-AB/BOTH/295019AA1.02/1/1/H/2/RAG

Unit 2 is operating at 100% RTP.

- o An Instrument Air System break occurs

IAW 34AB-P51-001-2, Loss of Instrument and Service Air or Water Intrusion into the Service Air System,

If CONTINUOUSLY cycling full open to full closed, turning off the supply breaker, or opening links, to stop valve cycling is REQUIRED for _____ .

- A. 2P51-F017, Service Air Isolation valve
- B. 2P70-F004, Drywell Pneumatic Supply Isolation valve
- C. 2P52-F565, Rx Bldg Inst N2 To Non-Int Air El. 185 Isol valve
- D. 2P52-F015, Turb Bldg Inst Air After Fltrs, D102A/B To RW Bldg Isol valve

50. 295021G2.4.20 001/LT-LP-20201/LT-20201.014/MOD/P-AB/BOTH/295021G2.4.20/1/1/H/2/ARB

Unit 2 is in Mode 4 with RHR Loop B operating in Shutdown Cooling.

- o RWL indicates 58 inches on 2C32-R606A-C, Narrow Range RWL
- o RHR Loop B flow is 7700 gpm

RHR Loop B develops a leak and a SDC isolation results. Following the isolation, the following parameter was noted:

- o RWL indicates 2 inches on 2C32-R606A-C

Based on the above conditions and IAW 34AB-E11-001-2, Loss of Shutdown Cooling,

The operator will raise RWL to a MINIMUM of _____ as indicated on _____ .

- A. 37 inches;
2B21-R605, Floodup Range RWL
- B. 37 inches;
2C32-R606A-C
- C. 53 inches;
2B21-R605, Floodup Range RWL
- D. 53 inches;
2C32-R606A-C

ILT-11 NRC Exam (RO)

51. 295022AA1.01 001/LT-LP-20201/LT-20201.013/MOD/P-AB/BOTH/295022AA1.01/1/2/H/2/RAG

On **Unit 2**, a reactor startup is in progress.

- o RPV Pressure is 700 psig

Subsequently, the operating CRD pump TRIPS.

At 14:00, the following events occur:

- o A SO reports the accumulator pressure for Control Rod 22-19 indicates 920 psig
- o Control Rod 22-19 is at position 48

At 14:05, the following events occur:

- o A SO reports the accumulator pressure for Control Rod 18-15 indicates 900 psig
- o Control Rod 18-15 is at position 48

Based on the above conditions and IAW 34AB-C11-001-2, Loss of CRD System,

The EARLIEST listed time a reactor SCRAM is REQUIRED is _____ .

- A. 14:01
- B. 14:06
- C. 14:21
- D. 14:26

52. 295023AK3.02 001/04502F15/200.036.A.01/NEW/P-AB/BOTH/295023AK3.02/1/1/H/3/TDJ

Unit 2 is in Mode 5, with fuel movement in progress.

An irradiated fuel bundle drops from the grapple and lands on the top of the core.

The following alarm is received:

- o REFUEL FLOOR AREA RADIATION HIGH, 601-306
- o Refuel area radiation monitors indicate 50 mr/hr

Based on the above conditions,

The refueling equipment interlock designed to prevent this refueling accident is the _____.

IAW 34AB-J11-001-2, Irradiated Fuel Damage During Handling, personnel are to evacuate the _____.

- A. hoist operation interlock;
refuel floor only
- B. hoist operation interlock;
refuel floor and reactor building
- C. refueling platform movement;
refuel floor only
- D. refueling platform movement;
refuel floor and reactor building

53. 295024EA2.04 001/20310EOP/201.076.A.16/BANK/P-EOP/BOTH/295024EA2.04/1/1/H/3/TDJ

Unit 1 was operating at 100% RTP when a spurious Group I Isolation occurred.

The pressure transient caused a small break LOCA to occur inside the Drywell.

- o Drywell pressure is 11.5 psig and steady
- o Torus pressure is 10.1 psig and steady
- o Torus Spray is in service

Based on the above conditions and IAW EOPs,

Drywell Sprays _____ REQUIRED to be initiated at this time.

When Torus pressure was at 10.0 psig, the MAXIMUM concentration of noncondensables remaining in the Drywell is approximately _____ .

- A. are;
one (1) %
- B. are;
five (5) %
- C. are NOT;
one (1) %
- D. are NOT;
five (5) %

54. 295025EK1.03 001/01401B21/014.003.A.01/NEW/SYS-B/BOTH/295025EK1.03/1/1/H/2/TDJ

Unit 2 was operating at 100% RTP when a reactor scram occurred.

- o Currently, RPV Pressure is 1070 psig

The operator enters 34SO-B21-001-2, ADS And LLS Systems, and opens SRV 2B21-F013M to control RPV Pressure.

Based on the above conditions,

With 2B21-F013M open, the HIGHEST expected tailpipe temperature reading on 2B21-R614, Auto Blowdown/Safety Valve Temps, recorder is approximately _____ .

IAW 34SO-B21-001-2, sequencing open the SRVs is REQUIRED to ensure _____ .

- A. 380 - 400°F;
equal heat distribution in the Torus
- B. 380 - 400°F;
nitrogen pressure is maintained in each SRV accumulator
- C. 270 - 290°F;
equal heat distribution in the Torus
- D. 270 - 290°F;
nitrogen pressure is maintained in each SRV accumulator

ILT-11 NRC Exam (RO)

55. 295026EA1.03 001/20310EOP/201.074.A.03/NEW/P-EOP/BOTH/295026EA1.03/1/1/H/2/TDJ

Unit 2 is operating at 100% RTP.

- o SPDS is INOPERABLE
- o 31EO-EOP-012-2, Primary Containment Control, is in progress

Based on the above conditions and IAW EOPs,

The LOWEST listed Torus Temperature REQUIRING a reactor scram is _____ .

Torus Temperature will be monitored on panel _____ .

- A. 106°F;
2H11-P602
- B. 106°F;
2H11-P650
- C. 111°F;
2H11-P602
- D. 111°F;
2H11-P650

ILT-11 NRC Exam (RO)

56. 295028EA1.02 001/20311EOP/013.059.A.04/NEW/P-EOP/BOTH/295028EA1.02/1/1/H/3/TDJ

Which ONE of the choices below completes the following statements?

IAW 31EO-EOP-100-2, Miscellaneous Emergency Overrides, the HIGHEST listed Drywell temperature point at which the Drywell Chillers are allowed to be restarted is _____ .

The Drywell Chiller 2P64-S3, LOCA Override Switch, is located on panel _____ .

- A. 249°F;
2H11-P654
- B. 249°F;
2H11-P700
- C. 279°F;
2H11-P654
- D. 279°F;
2H11-P700

ILT-11 NRC Exam (RO)

57. 295029EK3.03 001/20310EOP/201.075.B.01/NEW/P-EOP/BOTH/295029EK3.03/1/2/H/3/TDJ

Unit 2 is operating at 100% RTP when a transient occurs causing Torus Water Level to increase.

- o Torus Water Level 175 inches & stable
- o RPV Pressure 1045 psig & slowly increasing

Based on the above conditions,

IAW the SP/L path of 31EO-EOP-012-2, Primary Containment Control, a reactor scram is inserted to prevent failure of the _____ .

- A. Downcomers
- B. SRV Tailpipes
- C. Torus Spray Header
- D. Torus to Drywell Vacuum Breakers

58. 295030EK1.02 001/20306EOP/201.065.A.23/BANK/P-EOP/BOTH/295030EK1.02/1/1/H/3/RAG

The following conditions exist on **Unit 1**:

- o Torus Water Level 148 inches
- o Torus Water Temperature 230°F
- o Torus Pressure 12 psig

Subsequently, the following conditions occur at the listed times:

<u>Time</u>	<u>Condition</u>
10:00	Core Spray is injecting at 3000 gpm
10:10	Torus Water Level DECREASES to 144 inches
10:15	Core Spray flow is INCREASED to rated
10:20	Torus Pressure DECREASES to 6.0 psig due to Drywell Sprays

Based on the above conditions and IAW the EOPs,

The EARLIEST listed time that entry into the UNSAFE area of the Core Spray Pump NPSH Limit Graph occurs is _____ .

Reference Provided

- A. 10:00
- B. 10:10
- C. 10:15
- D. 10:20

ILT-11 NRC Exam (RO)

59. 295031G2.4.45 001/30005TS/300.003.A.01/NEW/EOP/BOTH/295031G2.4.45/1/1/H/3/TDJ

A LOCA has occurred on **Unit 2**.

- o RWL -15 inches and DECREASING
- o Drywell Temperature 180°F and INCREASING

At 11:00, the following alarms are received:

- o REACTOR VESSEL LEVEL 2 DIV I TRIP, 603-205
- o REACTOR VESSEL LEVEL 2 DIV II TRIP, 603-206

At 11:15, the following alarms are received:

- o REACTOR VESSEL LEVEL 1 DIV I TRIP, 603-218
- o REACTOR VESSEL LEVEL 1 DIV II TRIP, 603-227

At 11:20,

- o RWL decreases to -156 inches

At 11:25,

- o RWL decreases to -195 inches

Based on the above conditions,

IAW 34AB-B21-002-2, RPV Water Level Corrections, the EARLIEST listed time operators are FIRST directed to use the Fuel Zone Compensated instruments to monitor RWL is _____ .

The EARLIEST listed time a SAFETY LIMIT violation FIRST occurred is _____ .

- A. 11:00;
11:20
- B. 11:00;
11:25
- C. 11:15;
11:20
- D. 11:15;
11:25

ILT-11 NRC Exam (RO)

60. 295037G2.1.20 001/20329EOP/2001.100.B.06/NEW/EOP/BOTH/295037G2.1.20/1/1/H/3/TDJ

Unit 2 has scrambled due to high Drywell Pressure.

- o Reactor Power 10 %
- o RPV Pressure 940 psig controlled by EHC

At 10:00, the order is given to perform 31EO-EOP-114-2, Preventing Injection into the RPV from Core Spray and LPCI. The operator reads the following statement from the procedure:

<u>CONTINUOUS RECHECK STATEMENT</u>			
WHILE performing the steps in this section:			
IF IMMEDIATE Prevention of LPCI injection is required, <u>THEN</u> perform the following:			
a) POSITION control switches for the following valves to CLOSE:			
<u>VALVE</u>	<u>DESCRIPTION</u>	<u>PANEL</u>	
2E11-F016A (B)	CNMT SPRAY OUTBD VLV	2H11-P601	_____
2E11-F028A (B)	TORUS SPRAY OR TEST VLV	2H11-P601	_____
b) TRIP LPCI Pump(s), 2E11-C002A (B, C, D).			_____

- o At 10:10, 31EO-EOP-114-2 actions for RHR & Core Spray have been completed
- o At 10:15, Drywell Sprays are placed in service
- o At 10:20, Drywell Pressure decreases to 0.6 psig and Drywell Sprays are secured
- o At 10:25, Drywell Pressure increases to 2.1 psig

Based on the above conditions,

At 10:00, IAW the CONTINUOUS RECHECK STATEMENT above, the Immediate Prevention of LPCI injection _____ REQUIRED.

At 10:25, the Core Spray pumps _____ AUTOMATICALLY start.

- A. is;
will
- B. is;
will NOT
- C. is NOT;
will
- D. is NOT;
will NOT

ILT-11 NRC Exam (RO)

61. 295038EK3.01 001/20102EP/001.087.A.05/BANK/P-EP/BOTH/295038EK3.01/1/1/H/2/ARB

An emergency has been declared by the Emergency Director and the following conditions currently exist:

- o A radiological release is in progress
- o Wind direction is from 120°

Based on the above conditions and IAW NMP-EP-111-002, Emergency Notification Network Communicator Instructions - Hatch:

The Rally point used will be _____ .

Without Emergency Director Judgement, evacuation of the Plant Site is MANDATORY for all non essential personnel at a MINIMUM Emergency classification of _____ Emergency.

Reference Provided

- A. Gate 17;
an Alert
- B. Gate 17;
a Site Area
- C. PESB;
an Alert
- D. PESB;
a Site Area

ILT-11 NRC Exam (RO)

62. 300000A2.01 001/03501P51/P70/035.001.A.02/NEW/P-AB/BOTH/300000A2.01/2/1/H/2/ARB

Unit 2 is operating at 100% RTP when the following occurs:

- o INSTR AIR DRYERS MALFUNCTION, 700-205, ILLUMINATED
- o INSTR AIR DRYERS SYS PRESS LOW, 700-219, ILLUMINATED
- o Non-Essential Instrument Air Header pressure is 55 psig

Based on the above conditions,

The Non-Essential Instrument Air Header Isolation Valve, 2P52-F015, will _____ .

Entry into 34AB-P51-001-2, Loss of Instrument and Service Air System or Water Intrusion into the Service Air System, _____ REQUIRED.

- A. remain open;
is
- B. remain open;
is NOT
- C. close and remain closed;
is
- D. close and remain closed;
is NOT

63. 400000K4.01 001/00901P42/200.014.A.06/NEW/SYS-B/BOTH/400000K4.01/2/1/F/3/RAG

Unit 1 is operating at 100% RTP.

- o A malfunction causes the RBCCW system pressure to DECREASE

The following conditions occur:

<u>Time</u>	<u>RBCCW System pressure</u>
11:00	95 psig
11:05	90 psig
11:10	85 psig
11:15	80 psig

Based on the above conditions,

The EARLIEST listed time the STANDBY RBCCW pump will RECEIVE an AUTO start signal is _____ .

- A. 11:00
- B. 11:05
- C. 11:10
- D. 11:15

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64. 600000AK1.02 001/03601X43/200.024.A.04/NEW/P-AB/BOTH/600000AK1.02/1/1/F/3/RAG

A FIRE is burning in the Cable Spreading Room.

Outside of the Cable Spreading Room, the operator opens the box, the ready light is illuminated. The operator depresses the START pushbutton.

- o The RED ready light remains ILLUMINATED

Based on the above conditions and IAW 34SO-Z43-002-0, Turbine and Control Building Carbon Dioxide System,

To initiate the release of CO₂, the operator _____ REQUIRED to MANUALLY open the Cable Spreading Room Master Pilot valve.

Once the Cable Spreading Room CO₂ system actuates, CO₂ will be discharged from the _____ Cardox Tank.

- A. is NOT;
thirteen (13) Ton
- B. is NOT;
five (5) Ton
- C. is;
thirteen (13) Ton
- D. is;
five (5) Ton

65. 700000AK2.07 001/02706S11/200.116.A.04/BANK/P-AB/BOTH/700000AK2.07/1/1/H/3/RAG

BOTH UNITS are operating at 100% RTP.

The Northern Control Center has notified the control room that 230 KV Bus voltage can NOT be maintained above the normal MINIMUM voltage.

The crew enters 34AB-S11-001-0, Operation with Degraded System Voltage

<u>Time</u>	<u>Emergency 4160 VAC</u>
10:00	3850 VAC
10:30	3820 VAC

Grid frequency has lowered to 59 hertz.

Based on the above conditions,

IAW 34SO-N40-001-1/2, Main Generator Operation, to RAISE reactive load (VARs) from the HMI Screen, the operator will select _____ .

At 11:00, IAW 34AB-S11-001-0, if 4160VAC Emergency Bus voltages remain 3820 VAC, then _____ 4160VAC Emergency Buses will be transferred to their respective Diesel Generator.

- A. EX2100 then REGULATOR ADJUST and depress RAISE;
two (2)
- B. EX2100 then REGULATOR ADJUST and depress RAISE;
four (4)
- C. PSI-LOAD then LOAD SET and depress RAISE;
two (2)
- D. PSI-LOAD then LOAD SET and depress RAISE;
four (4)

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66. G2.1.3 001/HLT-SIM-LP-00003/HLT-SIM-00003.015/NEW/P-ADMIN/BOTH/G2.1.3/3/F/3/RAG

On **Unit 1**, an operator is relieving the OATC for his third consecutive day on shift.

Based on the above conditions,

IAW NMP-OS-007-001, Conduct of Operations Standards and Expectations, the on-coming operator is REQUIRED to review the Control Room logs for the previous _____ .

IAW NMP-OS-007-009, Site Specific Hatch Minimum Shift Crew Composition, the OATC turnover is NORMALLY conducted _____ the Shift Supervisor turnover.

- A. 12 hours;
before
- B. 12 hours;
after
- C. 3 days;
before
- D. 3 days;
after

67. G2.1.25 001/00401B31/004.003.A.01/BANK/P-AB/BOTH/G2.1.25/3/H/2/RAG

Unit 2 was operating at 70% RTP & 60% Core flow, with the OPRMs INOPERABLE.

- o A transient occurs causing a spurious Recirc runback to Speed Limiter #1

Based on the above conditions,

INDICATED RWL will INITIALLY _____ during the Recirc runback to Speed Limiter #1.

Once Speed Limiter #1 is reached, an IMMEDIATE Scram _____ REQUIRED.

Reference Provided

- A. increase;
is
- B. increase;
is NOT
- C. decrease;
is
- D. decrease;
is NOT

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68. G2.1.37 001/40001C95/400.060.G.01/BANK/P-NORM/BOTH/G2.1.37/3/F/3/RAG

Unit 2 experiences a condition resulting in the CTP 3.75 minute Average Core Thermal Power exceeding its limit.

IAW 34GO-OPS-022-0, Maintaining Rated Thermal Power,

The operator is **REQUIRED** to use _____ to maintain the Shift Current Average CTP less than or equal to _____ .

- A. control rods;
2790 MWth
- B. control rods;
2804 MWth
- C. Recirc flow;
2790 MWth
- D. Recirc flow;
2804 MWth

69. G2.2.13 001/400GE/S-GE-400.010.A.05/BANK/P-ADMIN/BOTH/G2.2.13/3/F/2/RAG

IAW NMP-AD-003, Equipment Clearance and Tagging,

Danger Tags are ALLOWED to co-exist on the same component with _____ Tags.

When a Danger Tag and a Status Tag are on the same component, the _____ Tag is REQUIRED to be unobstructed.

- A. Caution;
Status
- B. Caution;
Danger
- C. Operating Permit;
Status
- D. Operating Permit;
Danger

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70. G2.2.22 001/30005TS/300.003.A.04/BANK/TECH SPEC/BOTH/G2.2.22/3/F/2/RAG

Which ONE of the choices below complete the following statement?

IAW Tech Specs, the SAFETY LIMIT for RPV Pressure, as measured in the steam dome,
is _____ .

- A. 1170 psig
- B. 1250 psig
- C. 1325 psig
- D. 1450 psig

71. G2.3.5 001/HLT-SIM-LP-00003/HLT-SIM-00003.014/BANK/P-AB/BOTH/G2.3.5/3/H/2/RAG

Unit 2 has been at 100% RTP for 7 days.

- o Steam Tunnel Normal Full Power Background (FPB) radiation is 1,000 mR/hr

Subsequently, Main Steam Tunnel radiation increases to 2,800 mR/hr.

Based on the above conditions,

MAIN STEAM LINE RADIATION HIGH, 601-425, _____ be ILLUMINATED.

If radiation levels continued to INCREASE, the LOWEST listed radiation level at which MAIN STEAM LINE RADIATION HIGH-HIGH, 603-125, will alarm is _____ .

- A. will;
3,000 mR/hr
- B. will;
9.99 E5 mR/hr
- C. will NOT;
3,000 mR/hr
- D. will NOT;
9.99 E5 mR/hr

72. G2.3.14 001/30004ADMIN/LT-30008.002/MOD/P-NORM/BOTH/G2.3.14/3/F/2/RAG

On **Unit 2**, 34SV-E51-002-2, RCIC Pump Operability, will be performed within the next hour.

Which ONE of the choices below completes the following statements?

RCIC is located in the _____ diagonal.

IAW 34SV-E51-002-2, prior to running RCIC, the necessary locations are REQUIRED to be posted as _____ .

- A. Southwest;
High Radiation Areas
- B. Southwest;
Locked High Radiation Areas
- C. Northwest;
High Radiation Areas
- D. Northwest;
Locked High Radiation Areas

73. G2.4.6 001/20327EOP/201.091.A.17/NEW/EOP/BOTH/G2.4.6/3/H/2/RAG

An ATWS exists on **Unit 2**.

- o The SS has determined that RWL can NOT be maintained
- o An Emergency Depress has been initiated

Based on these conditions and IAW 31EO-EOP-017-2, CP-3 ATWS Level Control,

Injection into the RPV is REQUIRED to commence when RPV Pressure decreases below the _____ .

When injection into the RPV is INITIALLY commenced, the _____ pumps will be used.

- A. Minimum Steam Cooling Pressure;
Core Spray
- B. Minimum Steam Cooling Pressure;
RHR
- C. shutoff head of the ECCS pumps;
Core Spray
- D. shutoff head of the ECCS pumps;
RHR

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74. G2.4.28 001/20201AB/LT-20201.019/NEW/P-EP/BOTH/G2.4.28/3/F/3/ARB

Security has just notified the Main Control Room that a non-airborne Credible Imminent Security Threat exists to Plant Hatch.

Based on the above conditions and IAW 34AB-Y22-004-0, Intruder Based Security Threat,

A "CREDIBLE IMMINENT SECURITY THREAT" means a Security Threat will be at Plant Hatch in a MAXIMUM of _____

- A. five (5) minutes
- B. fifteen (15) minutes
- C. thirty (30) minutes
- D. sixty (60) minutes

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75. G2.4.45 001///BANK/P-EP/BOTH/G2.4.45/3/F/2/ARB

Which ONE of the choices below completes the following statement?

The white plastic frame installed at the Reactor / Containment Cooling and Isolation panel 2H11-P601 means that the annunciator _____ .

- A. has been disabled
- B. is an expected alarm
- C. indicates an EOP entry condition
- D. is an indicator of a potential radiological condition

E. I. HATCH 2017-301 ILT EXAM ANSWER SHEET

RO EXAM

1	A	26	C	51	A
2	A	27	C	52	A
3	C	28	B	53	B
4	D	29	C	54	A
5	B	30	A	55	D
6	A	31	A	56	B
7	A	32	D	57	B
8	D	33	D	58	B
9	B	34	C	59	C
10	B	35	D	60	C
11	A	36	C	61	D
12	A	37	B	62	A
13	D	38	D	63	B
14	D	39	B	64	C
15	A	40	B	65	A
16	C	41	D	66	B
17	D	42	B	67	A
18	B	43	D	68	D
19	A	44	A	69	B
20	A	45	A	70	C
21	C	46	D	71	B
22	B	47	D	72	C
23	C	48	A	73	B
24	A	49	C	74	C
25	A	50	C	75	D

NRC RO REFERENCES

RO EXAM

1. 34AB-N21-002-2, Feedwater/Reactor Water Level Control Issues, Attachment 2
2. U1 EOP Graphs 11A & 11B, Core Spray NPSH Limit
3. NMP-EP-111-002, Emergency Notification Network Communicator Instructions – Hatch, Page 10
4. 34GO-OPS-005-2, Power Changes, Attachment 1
5. 34AB-C51-001-2, Entry Into The RPI Or Reactor Operations With Inoperable OPRM System, Attachment 1

