ANSWER KEY REPORT

for 2020 NRC RO WRITTEN EXAM FINAL Test Form: 0

#	ID	Points	Type	Answers 0
1	2020 NRC RO 28	1.00	MCS	B
2	2020 NRC RO 29	1.00	MCS	B
3	2020 NRC RO 30	1.00	MCS	B
4	2020 NRC RO 31	1.00	MCS	A
5	2020 NRC RO 32	1.00	MCS	D
6	2020 NRC RO 33	1.00	MCS	A
7	2020 NRC RO 34	1.00	MCS	B
8	2020 NRC RO 35	1.00	MCS	B
9	2020 NRC RO 36	1.00	MCS	B
10	2020 NRC RO 37	1.00	MCS	B
11	2020 NRC RO 38	1.00	MCS	A
12	2020 NRC RO 39	1.00	MCS	B
13	2020 NRC RO 40	1.00	MCS	B
14	2020 NRC RO 41	1.00	MCS	B
15	2020 NRC RO 42	1.00	MCS	D
16	2020 NRC RO 43	1.00	MCS	C
17	2020 NRC RO 44	1.00	MCS	D
18	2020 NRC RO 45	1.00	MCS	B
19	2020 NRC RO 46	1.00	MCS	B
20	2020 NRC RO 47	1.00	MCS	D
21	2020 NRC RO 48	1.00	MCS	C
22	2020 NRC RO 49	1.00	MCS	C
23	2020 NRC RO 50	1.00	MCS	C
24	2020 NRC RO 51	1.00	MCS	A
25	2020 NRC RO 52	1.00	MCS	B
26	2020 NRC RO 53	1.00	MCS	B
27	2020 NRC RO 54	1.00	MCS	C
28	2020 NRC RO 55	1.00	MCS	C
29	2020 NRC RO 19	1.00	MCS	A
30	2020 NRC RO 20	1.00	MCS	D
31	2020 NRC RO 21	1.00	MCS	D
32	2020 NRC RO 22	1.00	MCS	A
33	2020 NRC RO 23	1.00	MCS	B
34	2020 NRC RO 24	1.00	MCS	C
35	2020 NRC RO 25	1.00	MCS	C
36	2020 NRC RO 26	1.00	MCS	D
37	2020 NRC RO 27	1.00	MCS	D
38	2020 NRC RO 1	1.00	MCS	C
39	2020 NRC RO 2	1.00	MCS	C
40	2020 NRC RO 3	1.00	MCS	A
41	2020 NRC RO 4	1.00	MCS	A
42	2020 NRC RO 5	1.00	MCS	A
43	2020 NRC RO 6	1.00	MCS	A
44	2020 NRC RO 7	1.00	MCS	C
45	2020 NRC RO 8	1.00	MCS	D
46	2020 NRC RO 9	1.00	MCS	B
47	2020 NRC RO 10	1.00	MCS	B

ANSWER KEY REPORT

for 2020 NRC RO WRITTEN EXAM FINAL Test Form: 0

#	ID	Points	Type	Answers 0
48	2020 NRC RO 11	1.00	MCS	D
49	2020 NRC RO 12	1.00	MCS	A
50	2020 NRC RO 13	1.00	MCS	B
51	2020 NRC RO 14	1.00	MCS	C
52	2020 NRC RO 15	1.00	MCS	A
53	2020 NRC RO 16	1.00	MCS	A
54	2020 NRC RO 17	1.00	MCS	C
55	2020 NRC RO 18	1.00	MCS	C
56	2020 NRC RO 56	1.00	MCS	A
57	2020 NRC RO 57	1.00	MCS	B
58	2020 NRC RO 58	1.00	MCS	D
59	2020 NRC RO 59	1.00	MCS	B
60	2020 NRC RO 60	1.00	MCS	B
61	2020 NRC RO 61	1.00	MCS	A
62	2020 NRC RO 62	1.00	MCS	B
63	2020 NRC RO 63	1.00	MCS	A
64	2020 NRC RO 64	1.00	MCS	B
65	2020 NRC RO 65	1.00	MCS	C
66	2020 NRC RO 66	1.00	MCS	B
67	2020 NRC RO 67	1.00	MCS	A
68	2020 NRC RO 68	1.00	MCS	D
69	2020 NRC RO 69	1.00	MCS	A
70	2020 NRC RO 70	1.00	MCS	D
71	2020 NRC RO 71	1.00	MCS	C
72	2020 NRC RO 72	1.00	MCS	B
73	2020 NRC RO 73	1.00	MCS	B
74	2020 NRC RO 74	1.00	MCS	A
75	2020 NRC RO 75	1.00	MCS	B

1. Given the following plant conditions:
   - The unit is in Mode 3
   - ALB-007-4-2, VCT HIGH-LOW PRESS, has alarmed
   - Actual VCT pressure is 15 psig

   Which ONE of the following completes the statement below?

   If VCT pressure continues to lower, RCP #1 Seal Leakoff flow will ___(1)___ and RCP #2 Seal Leakoff flow will ___(2)___.

   A. (1) rise

      (2) rise

   B. (1) rise

      (2) lower

   C. (1) lower

      (2) rise

   D. (1) lower

      (2) lower

2. Given the following plant conditions:
   - The unit is operating at 100% power
   - Control Rods are in MANUAL

   Subsequently:
   - A DEH System malfunction causes a load rejection of approximately 50 MWe

   Which ONE of the following completes the statements below regarding the INITIAL effect on Pressurizer pressure and Charging flow?

   Pressurizer pressure will ___(1)___.

   Charging flow will ___(2)___.

   A. (1) rise

      (2) rise

   B. (1) rise

      (2) lower

   C. (1) lower

      (2) rise

   D. (1) lower

      (2) lower

3. Which ONE of the following completes the statements below?

   1RH-1, RCS Loop A to RHR Pump A-SA, is powered from 480V MCC ___(1)___.

   In Mode 1, the supply breaker to 1RH-1 is ___(2)___.

   A. (1) 1B21-SB

      (2) ON

   B. (1) 1B21-SB

      (2) OFF

   C. (1) 1B35-SB

      (2) ON

   D. (1) 1B35-SB

      (2) OFF

4. With the unit operating at 100% power, which ONE of the following identifies valves that will automatically re-position upon receipt of a Safety Injection signal?

   A. CSIP normal miniflow isolation valves (1CS-182/196/210/214)

   B. TDAFW pump flow control valves (1AF-129/130/131)

   C. SI accumulator discharge valves (1SI-246/247/248)

   D. RWST to RHR pump suction valves (1SI-322/323)

5. Given the following plant conditions:
   - ALB-009-8-1, Pressurizer Relief Tank High-Low Level Press Or Temp, alarms due to a high temperature condition

   Which ONE of the following describes how the PRT is cooled in accordance with APP-ALB-009-8-1 and OP-100, Reactor Coolant System?

   (Assume a rapid cooldown is NOT required)

   A. Drain the PRT to the Reactor Coolant Drain Tank while making up to the PRT from the Demineralized Water Storage Tank.

   B. Drain the PRT to the Reactor Coolant Drain Tank while making up to the PRT from the Reactor Makeup Water Storage Tank.

   C. Recirculate the PRT through the Reactor Coolant Drain Tank heat exchanger using Service Water to cool the heat exchanger.

   D. Recirculate the PRT through the Reactor Coolant Drain Tank heat exchanger using Component Cooling Water to cool the heat exchanger.

6. Which ONE of the following completes the statements below?

   In accordance with OP-145, Component Cooling Water, the NORMAL source of makeup to the Component Cooling Water (CCW) System is __(1)__ Water.

   Makeup from this source will be initiated __(2)__.

   A. (1) Demineralized

      (2) from the MCB

   B. (1) Demineralized

      (2) via local field actions

   C. (1) Reactor Makeup

      (2) from the MCB

   D. (1) Reactor Makeup

      (2) via local field actions

7. Given the following plant conditions:
   - The unit is operating at 75% power
   - ALB-005-1-2A, RCP Therm Bar Hdr High Flow, is in alarm

   Which ONE of the following completes the statements below?

   1CC-252, CCW Return Isolation from RCP Thermal Barriers Flow Control, will shut if CCW flow rises to a MINIMUM of ___(1)___ gpm.

   With 1CC-252 shut, RCP operational limits ___(2)___ be exceeded.

   A. (1) 198

      (2) will

   B. (1) 198

      (2) will NOT

   C. (1) 245

      (2) will

   D. (1) 245

      (2) will NOT

8. Which ONE of the following completes the statements below regarding PORV testing IAW OST-1117, Pressurizer PORV Operability Quarterly Interval Modes 3 - 6?

   When Pressurizer pressure begins to lower from Normal Operating Pressure, the Group 'C' heaters will FIRST receive a "full on" signal when Pressurizer pressure reaches ___(1)___ psig

   The PRT rupture discs will blow when PRT pressure reaches a MINIMUM of ___(2)___ psig.

   A. (1) 2220

      (2) 50

   B. (1) 2220

      (2) 100

   C. (1) 2210

      (2) 50

   D. (1) 2210

      (2) 100

9. Given the following plant conditions:
   - The unit is operating at 100% power

   Subsequently:
   - Pressurizer Spray Valve, 1RC-103, begins to slowly fail open

   Which ONE of the following completes the statements below?

   An ___(1)___ turbine runback will occur.

   The SETPOINT for this runback is ΔT within ___(2)___% of the Reactor trip setpoint.

   (Assume NO operator action)

   A. (1) Overtemperature ΔT (OTΔT)

      (2) 1.9

   B. (1) Overtemperature ΔT (OTΔT)

      (2) 3

   C. (1) Overpower ΔT (OPΔT)

      (2) 1.9

   D. (1) Overpower ΔT (OPΔT)

      (2) 3

10. Given the following plant conditions:
    - Reactor power is 7%
    - A plant startup is in progress in accordance with GP-005, Power Operation (Mode 2 to Mode 1)

    Subsequently:
    - Instrument Bus S-I de-energizes

    Given the above plant conditions, which ONE of the following will result in a Reactor trip signal being generated?

    A. LT-461, PRZ Level Channel III, fails high

    B. LT-496, 'C' SG Level Channel III, fails low

    C. PT-457, PRZ Pressure Channel III, fails low

    D. A and C Aux buses are crosstied and breaker 107, Aux Bus A supply, fails open

11. Given the following plant conditions:
    - The unit is operating at 100% power

    Subsequently:
    - An inadvertent actuation of Train 'B' Safety Injection occurs

    Which ONE of the following completes the statement below?

    ___(1)___ will trip AND the Main Feedwater Regulating Valves will ___(2)___.

    A. (1) BOTH Main Feedwater Pumps

       (2) SHUT

    B. (1) BOTH Main Feedwater Pumps

       (2) OPEN

    C. (1) ONLY the 'B' Main Feedwater Pump

       (2) SHUT

    D. (1) ONLY the 'B' Main Feedwater Pump

       (2) OPEN

12. Given the following plant conditions:
    - The unit is operating at 100% power
    - Instrument Bus SIII is de-energized and actions are being taken in accordance with AOP-024, Loss of Uninterruptible Power Supply

    Subsequently:
    - PT-953, Containment Pressure Channel IV, fails high

    Which ONE of the following identifies the effect on the Safety Injection (SI) and Containment Spray Actuation Signal (CSAS) systems?

	SI	CSAS
A.	NOT Actuated	NOT Actuated
B.	Actuated	NOT Actuated
C.	NOT Actuated	Actuated
D.	Actuated	Actuated

13. Given the following plant conditions:
    - The unit is operating at 100% power
    - S-2B-SB, Primary Shield Cooling Fan, is in operation

    Subsequently:
    - ALB-027-5-5, Reactor Primary Shield Clg Fans S2 Low-Flow-O/L, alarms

    The S-2B-SB control switch indications are as follows:

    Which ONE of the following completes the statement below?

    The S-2B-SB control switch indicates the alarm was received due to actuation of the ___(1)___ AND S-2A-SA, Primary Shield Cooling Fan, ___(2)___.

A. (1) thermal overload device

   (2) will start automatically

B. (1) thermal overload device

   (2) must be manually started

C. (1) low flow switch

   (2) will start automatically

D. (1) low flow switch

   (2) must be manually started

14. Given the following plant conditions:
    - A LOCA occurred
    - The crew has transitioned EOP-ES-1.3, Transfer to Cold Leg Recirculation
    - Both trains of Safety Injection and Containment Spray are aligned for recirculation

    Which ONE of the following completes the statements below?

    A MINIMUM of ___(1)___ inches Containment (CNMT) wide range sump level assures a long term recirculation suction source.

    In accordance with EOP-ES-1.3, the PREFERRED method for raising CNMT sump inventory is to re-align one of the running ___(2)___ suction back to the RWST.

    A. (1) 142

       (2) CSIPs

    B. (1) 142

       (2) CNMT Spray Pumps

    C. (1) 196

       (2) CSIPs

    D. (1) 196

       (2) CNMT Spray Pumps

15. Given the following plant conditions:
    - The unit is operating at 100% power
    - 'A' Containment Spray Pump is running on recirculation per OST-1118, Containment Spray Operability Train A Quarterly Interval Modes 1-4

    Subsequently:
    - A LOCA occurs
    - Containment pressure rises to 7.5 psig

    Which ONE of the following identifies the positions of 1CT-24, Containment Spray Eductor Test, and 1CT-50, Containment Spray Pump 1A-SA Discharge Valve?

	1CT-24	1CT-50
A.	OPEN	OPEN
B.	OPEN	SHUT
C.	SHUT	OPEN
D.	SHUT	SHUT

16. Given the following plant conditions:
    - The unit is operating at 100% power
    - A Main Steam line rupture in the Turbine Building has occurred
    - The crew has manually tripped the Reactor

    Which ONE of the following completes the statement below?

    The Turbine Ventilating valves (1GS-97, 1GS-98) are expected to __(1)__ AND the MSR Non-Return valves (1HD-2, 1HD-3, 1HD-302, 1HD-303) are expected to __(2)__.

    Valve Noun Name:

    Turbine Ventilating valves
    1GS-97, HP Turbine Vent to Cond (FCV-01TA-0415B)
    1GS-98, HP Turbine Vent to Cond (FCV-01TA-0415A)

    MSR Non-Return valves
    1HD-2, MSR 1A-NNS Outlet to MSDT 1A-NNS
    1HD-3, MSRDT 1A-NNS Outlet to 5-1A-NNS
    1HD-302, MSR 1B-NNS Outlet to MSDT 1B-NNS
    1HD-303, MSRDT 1B-NNS Outlet to 5-1B-NNS

    A. (1) SHUT

       (2) SHUT

    B. (1) SHUT

       (2) OPEN

    C. (1) OPEN

       (2) SHUT

    D. (1) OPEN

       (2) OPEN

17. Which ONE of the following completes the statement below regarding operation of the SG PORVs?

    Control power selector switches located in the ___(1)___ can be used to supply alternate control power from the instrument buses to ___(2)___ SG PORVs.

    A. (1) Steam Tunnel

       (2) ALL

    B. (1) Steam Tunnel

       (2) ONLY 'A' and 'B'

    C. (1) RAB 286 Electrical Penetration Areas

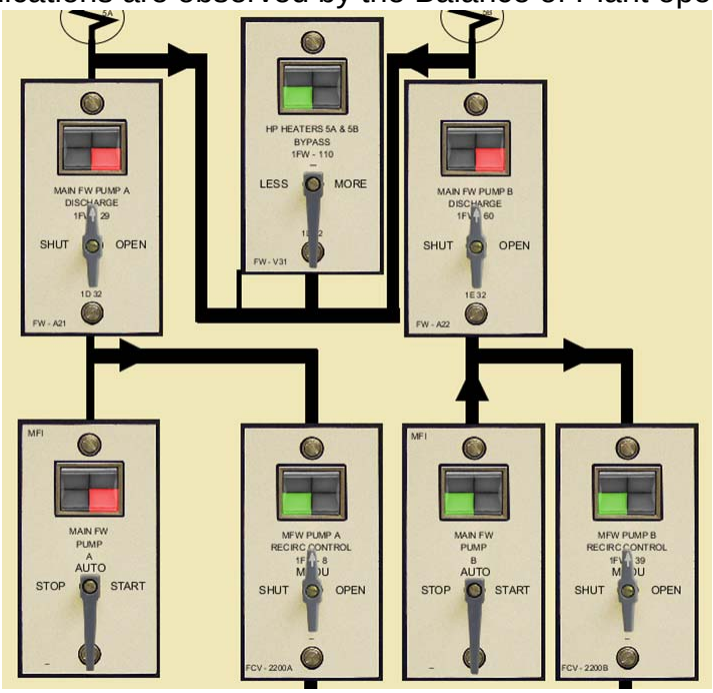
       (2) ALL

    D. (1) RAB 286 Electrical Penetration Areas

       (2) ONLY 'A' and 'B'

18. Given the following plant conditions:
    - The unit is operating at 85% power

    Subsequently:
    - The following indications are observed by the Balance of Plant operator (BOP):



Which ONE of the following completes the statements below?

A loss of 6.9 KV Aux Bus __(1)__ has occurred.

In accordance with AOP-010, Feedwater Malfunctions, the operator is required to __(2)__.

A. (1) 1B

   (2) trip the Reactor

B. (1) 1B

   (2) isolate Steam Generator Blowdown

C. (1) 1E

   (2) trip the Reactor

D. (1) 1E

   (2) isolate Steam Generator Blowdown

19. Which ONE of the following identifies the power supply for 1MS-72, Main Steam C to Aux FW Turbine?

    A. PP-1B312-SB

    B. DP-1B2-SB

    C. 1B31-SB

    D. IDP-SII

20. Given the following plant conditions:
    - The unit is operating at 100% power
    - Annunciator ALB-014-7-4, SG A, B, C BACKLEAKAGE HIGH TEMP, has alarmed
    - An AO has been dispatched to verify local temperatures

    Which ONE of the following completes the statements below?

    The reason this condition occurred is because a/an __(1)__ piping check valve is leaking.

    In accordance with the AOP-010, Feedwater Malfunctions, under these conditions with the TDAFW piping local temperature > 212°F, the FIRST action required is to __(2)__.

    A. (1) TDAFW pump steam supply

       (2) start the TDAFW pump to flush the line through the exhaust

    B. (1) TDAFW pump steam supply

       (2) isolate the TDAFW pump discharge header

    C. (1) Auxiliary Feedwater

       (2) start the TDAFW pump to flush the line to the SGs

    D. (1) Auxiliary Feedwater

       (2) isolate the TDAFW pump discharge header

21. Given the following plant conditions:
    - The unit is Mode 3

    Subsequently:
    - A loss of SUT 1A occurs
    - The crew enters AOP-025, Loss of One Emergency AC Bus (6.9KV) or One Emergency DC Bus (125V)

    With regard to AOP-025, which ONE of the following completes the statements below?

    EDG 1A-SA __(1)__ automatically re-energize 480V Emergency Bus 1A1.

    When SUT 1A becomes available, the operator will energize Emergency Bus 1A-SA from Auxiliary Bus __(2)__ and unload the EDG.

    A. (1) will

       (2) 1D

    B. (1) will

       (2) 1E

    C. (1) will NOT

       (2) 1D

    D. (1) will NOT

       (2) 1E

22. Given the following plant conditions:
    - The unit is operating at 100% power
    - 250 VDC Battery Charger 1A is in service

    Subsequently:
    - Annunciator ALB-015-3-4, 250 VDC BUS TROUBLE, alarms

    Which ONE of the following completes the statements below?

    The crew will use indications ___(1)___ to determine if a ground condition exists.

    If a ground is suspected, the crew should implement OP-156.06, Ground Isolation and Bus Drop, and ___(2)___.

    A. (1) on AEP-2

       (2) energize the 1B 250 VDC Battery Charger then remove the 1A 250 VDC Battery Charger from service

    B. (1) on AEP-2

       (2) open the 1A 250 VDC Battery Charger DC output breaker allowing the batteries to power the 250 VDC bus and then place the 1B 250 VDC Battery Charger in service

    C. (1) locally in the switchgear room

       (2) energize the 1B 250 VDC Battery Charger then remove the 1A 250 VDC Battery Charger from service

    D. (1) locally in the switchgrear room

       (2) open the 1A 250 VDC Battery Charger DC output breaker allowing the batteries to power the 250 VDC bus and then place the 1B 250 VDC Battery Charger in service

23. Which ONE of the following completes the statements below?

The 125V DC Class 1E batteries are designed to provide power for ___(1)___ hours during a station blackout event.

In addition to load shed, the Dedicated Shutdown Diesel Generator can be used to provide a non-safety-related feed through MCC 1D23 to ___(2)___ safety-related battery charger(s) on EACH train to prolong the battery discharge time.

A. (1) two

(2) one

B. (1) two

(2) both

C. (1) four

(2) one

D. (1) four

(2) both

24. Which ONE of the following completes the statement below?

The Low Starting Air Pressure Interlock inhibits EDG ___(1)___ and will FIRST occur when starting air pressure lowers to ___(2)___ psig.

A. (1) auto starts ONLY

(2) 150

B. (1) auto starts ONLY

(2) 202

C. (1) auto AND manual starts

(2) 150

D. (1) auto AND manual starts

(2) 202

25. Given the following plant conditions:
    - A liquid release is in progress from the Treated Laundry and Hot Shower (TL&HS) Tank
    - REM-*1WL-3540, Treated Laundry and Hot Shower Tank Pump Discharge Monitor, goes into HIGH ALARM during the release

    Which ONE of the following will automatically terminate the release?

    A. The running TREATED H&HS TANK PUMP PUMP trips

    B. 3LHS-296, TREATED L&HS TKS DISCH ISOL VLV, shuts

    C. 3LHS-293 (FCV HK-6193), TRTD L&HS TK TO ENVIRON, shuts

    D. 3LHS-301, TREATED L&HS TKS DISCHARGE TO COOLING TOWER BLOWDOWN, shuts

26. Given the following plant conditions:
    - The unit is operating at 100% power
    - NSW Pump 'B' is operating
    - NSW Pump 'A' is in standby

    Subsequently:
    - ALB-002-7-1, SERV WATER SUPPLY HDR B LOW PRESS, alarms

    After one (1) minute, which ONE of the following identifies the expected Service Water system alignment?

    A. NSW Pump 'B' is running supplying NSW loads and both ESW headers.

       No ESW pumps are running.

    B. NSW Pump 'B' is running supplying NSW loads and the 'A' ESW header.

       ESW Pump 'B' is running supplying the 'B' ESW header.

    C. NSW Pump 'A' is running supplying NSW loads and both ESW headers.

       No ESW pumps are running.

    D. NSW Pump 'A' is running supplying NSW loads and the 'A' ESW header.

       ESW Pump 'B' is running supplying the 'B' ESW header.

27. Given the following plant conditions:
    - The unit is operating at 100% power
    - An Instrument Air leak is occurring
    - Instrument Air pressure is currently 80 psig and stable

    Which ONE of the following predicts the plant response for the current condition?

    A. All FW flow control valves will SHUT

    B. PRZ Spray valves drift to mid-position

    C. RCS letdown flowpath valves drift to mid-position

    D. Gland Steam Seal Spillover Regulator Valve will OPEN

28. Given the following plant conditions:
    - A LOCA has occurred
    - RCS pressure is 600 psig and stable
    - Containment pressure is 11.5 psig and lowering
    - SI has NOT been reset
    - Phase 'A' and 'B' Containment Isolation reset switches have been placed to RESET

    Which ONE of the following identifies the status of the Containment Isolation Phase A and Phase B signals?

	Phase A	Phase B
A.	NOT reset	reset
B.	NOT reset	NOT reset
C.	reset	reset
D.	reset	NOT reset

29. Which ONE of the following completes the statements below regarding recovery of a dropped rod in accordance with AOP-001, Malfunction of Rod Control and Indication System?

    Prior to recovering the dropped rod, the lift coil disconnect switches for all rods except the dropped will be opened in the affected __(1)__.

    During the recovery, withdrawal of the dropped rod will be stopped based on __(2)__.

    A. (1) bank

       (2) step counter position

    B. (1) bank

       (2) DRPI for the affected rod

    C. (1) group ONLY

       (2) step counter position

    D. (1) group ONLY

       (2) DRPI for the affected rod

30. Given the following plant conditions:
    - The unit is operating at 100% power
    - The 'A' Boric Acid Pump is under clearance

    Subsequently:
    - Emergency Bus 1B-SB locks out due to an 86UV failure
    - The crew enters AOP-002, Emergency Boration, due to a dilution event
    - The OATC performs the required valve alignment to provide a boration source

    With regard to AOP-002, which ONE of the following completes the statement below?

    For the boration flowpath established, the OATC is required to verify a MINIMUM of ___(1)___ gpm on ___(2)___ Flow.

    A. (1) 30

       (2) FI-110, Emergency Boration

    B. (1) 30

       (2) FI-122A.1, Charging Header

    C. (1) 90

       (2) FI-110, Emergency Boration

    D. (1) 90

       (2) FI-122A.1, Charging Header

31. Given the following plant conditions:
    - Tank Area Drains are being pumped to the Storm Drain System in accordance with OP-120.09.01, Radioactive Floor Drain Collection

    Subsequently:
    - A Refueling Water Storage Tank (RWST) leak occurs
    - REM-01MD-3530, Tank Area Drain Transfer Pumps Monitor, goes into HIGH alarm
    - Contaminated water is filling the retention dike area

    Which ONE of the following completes the statements below?

    1FD-109, FD Tank Area Drain Pump 1X Discharge to Storm Drain Valve, __(1)__ receive an auto shut signal.

    AOP-005, Radiation Monitoring System, __(2)__ direct the operator to verify the Tank Area Floor Drain **SUMP** Pump stopped.

    A. (1) does

       (2) does

    B. (1) does

       (2) does NOT

    C. (1) does NOT

       (2) does

    D. (1) does NOT

       (2) does NOT

32. Given the following plant conditions:
    - Core reload is in progress
    - A spent fuel assembly in the Fuel Handling Building (FHB) is damaged

    FHB area radiation levels are rising with monitor status as follows:
    - RM-*1FR-3565A-SA - HIGH ALARM
    - RM-*1FR-3565B-SB - ALERT
    - No other Spent Fuel Pool Area monitors are in alarm

    Which ONE of the following completes the statement below in accordance with AOP-005, Radiation Monitoring System?

    ___(1)___ train(s) of FHB Ventilation Emergency Exhaust has (have) automatically started and FHB Normal Operating Floor Ventilation ___(2)___ shutdown.

    A. (1) ONLY 'A'

       (2) has

    B. (1) ONLY 'A'

       (2) has NOT

    C. (1) BOTH 'A' and 'B'

       (2) has

    D. (1) BOTH 'A' and 'B'

       (2) has NOT

33. Given the following plant conditions:
    - The unit is in Mode 3
    - Personnel have been sent into Containment to identify a source of leakage
    - Upon exiting Containment, both CNMT Personnel Airlock [PAL] doors failed to seal

    Which ONE of the following completes the statements below?

    Entry into AOP-023, Loss of Containment Integrity, ___(1)___ required.

    In accordance with Technical Specification 3.6.1.3, and OWP-AL, Containment Air Locks, the PAL doors are locked shut by locking the associated ___(2)___ and deactivating the electronic mechanisms used to open the PAL doors.

    A. (1) is

       (2) mechanical operator

    B. (1) is

       (2) manual pumping stations

    C. (1) is NOT

       (2) mechanical operator

    D. (1) is NOT

       (2) manual pumping stations

34. Given the following plant conditions:
    - A faulted Steam Generator inside Containment occurred
    - The faulted Steam Generator was isolated
    - Containment pressure peaked at 12 psig
    - The crew is implementing EOP-ES-1.1, SI Termination, to re-establish RCP seal return flow to the Volume Control Tank (VCT)

    The following annunciators are currently in alarm:
    - ALB-001-5-1, Containment Isolation Phase B
    - ALB-005-1-5B, Seal Water HX CCW Low Flow

    Which ONE of the following identifies (1) the annunciator that must be cleared to allow the re-establishment of RCP seal return flow to the VCT AND (2) the reason why?

    A. (1) ALB-001-5-1

       (2) Allows re-opening of Phase B valves that shut to isolate the seal return flowpath to the VCT.

    B. (1) ALB-001-5-1

       (2) Allows re-opening of Phase B valves that shut to isolate CCW flow to the Seal Water Return Heat Exchanger.

    C. (1) ALB-005-1-5B

       (2) Provides assurance that CCW flow to the Seal Water Return Heat Exchanger is available to provide adequate seal return cooling.

    D. (1) ALB-005-1-5B

       (2) Provides assurance that CCW pressure is sufficient to minimize any in-leakage from the Seal Water Return Heat Exchanger when flow is restored.

35. The crew has transitioned to EOP-E-1, Loss of Reactor or Secondary Coolant, and is presently evaluating if the RHR System is capable of Cold Leg Recirculation.

    Current plant conditions:
    - Offsite power has been lost
    - EDG 1B-SB has tripped
    - CNMT Pressure is 17 psig and rising
    - CNMT Wide Range Sump Level is reading 211 inches
    - RVLIS Full Range Level is reading 38%
    - RCS Wide Range Pressure is reading 225 psig
    - Core Exit Thermocouples are reading 740°F
    - Containment Spray Pump 'A' has tripped

    Which ONE of the following identifies the procedure the crew is required to implement at this time?

    A. EOP-FR-Z.2, Response to Containment Flooding

    B. EOP-FR-C.2, Response to Degraded Core Cooling

    C. EOP-FR-C.1, Response to Inadequate Core Cooling

    D. EOP-FR-Z.1, Response to High Containment Pressure

36. Which ONE of the following completes the statements below in accordance with EOP-E-3, Steam Generator Tube Rupture?

    The ruptured SG PORV controller setpoint is required to be adjusted to ___(1)___ and placed in AUTO to prevent lifting the SG code safety valves.

    If the ruptured SG PORV fails OPEN, the operator has a MAXIMUM time of ___(2)___ minutes to shut the associated PORV block valve per the SGTR Dose Analysis.

    A. (1) 1135 psig (87%)

       (2) 10

    B. (1) 1135 psig (87%)

       (2) 20

    C. (1) 1145 psig (88%)

       (2) 10

    D. (1) 1145 psig (88%)

       (2) 20

37. Given the following plant conditions:
    - Core offload is in progress

    Subsequently:
    - An irradiated fuel assembly is damaged and has been fully withdrawn from the core
    - AOP-013, Fuel Handling Accident, has been entered
    - Containment area radiation levels are rising with monitor status as follows:
        - RM-01CR-3561ASA - not in alarm
        - RM-01CR-3561BSB - ALERT
        - RM-01CR-3561CSA - not in alarm
        - RM-01CR-3561DSB - HIGH ALARM

    Which ONE of the following completes the statements below?

    Containment Ventilation Isolation ___(1)___ automatically initiated.

    For the conditions above, AOP-013 ___(2)___ require the fuel assembly to be placed in a safe storage location prior to making the announcement to evacuate Containment.

    A. (1) has

       (2) does

    B. (1) has

       (2) does NOT

    C. (1) has NOT

       (2) does

    D. (1) has NOT

       (2) does NOT

38. The unit was operating at 100% power when a Reactor trip occurred.

Which ONE of the following completes the statements below?

Xenon-135 concentration will decay to zero (xenon-free) ___(1)___ hours following the Reactor trip.

In accordance with EOP-ES-0.1, Reactor Trip Response, the operator will ensure that Source Range detectors energize when Intermediate Range flux FIRST lowers to ___(2)___ AMPS.

A. (1) 30 - 40

(2) 5×10^{-11}

B. (1) 30 - 40

(2) 1×10^{-10}

C. (1) 70 - 80

(2) 5×10^{-11}

D. (1) 70 - 80

(2) 1×10^{-10}

39. Given the following plant conditions:
    - A break in the Pressurizer steam space has resulted in a small break LOCA
    - The crew is implementing EOP-ES-1.2, Post LOCA Cooldown and Depressurization
    - RCS temperature is stable

Which ONE of the following completes the statements below?

The steam dumps will be operated in the ___(1)___ Mode of Control.

The operator must depress the OUTPUT ___(2)___ pushbutton to initiate an RCS cooldown to cold shutdown conditions.

A. (1) T-AVG

   (2) RAISE

B. (1) T-AVG

   (2) LOWER

C. (1) Steam Pressure

   (2) RAISE

D. (1) Steam Pressure

   (2) LOWER

40. Given the following plant conditions:
    - The unit was operating at 100% power when a LOCA occurred
    - 1CS-11, Letdown Isolation, was shut to isolate the break in accordance with EOP-ECA-1.2, LOCA Outside Containment

    Subsequently:
    - The crew is implementing EOP-ES-1.1, SI Termination
    - Safety Injection has been terminated and minimum charging flow established

    Which ONE of the following completes the statements below?

    In accordance with EOP-ES-1.1, a MINIMUM PRZ level of ___(1)___% is required to allow excess letdown to be established.

    Per the Background Document for EOP-ES-1.1, the reason for establishing excess letdown is to offset ___(2)___.

    A. (1) 25

       (2) RCP seal injection ONLY

    B. (1) 25

       (2) BOTH RCP seal injection and charging flow

    C. (1) 40

       (2) RCP seal injection ONLY

    D. (1) 40

       (2) BOTH RCP seal injection and charging flow

41. Which ONE of the following completes the statements below regarding transferring the RHR system from the RWST to the Containment (CNMT) sumps (recirculation mode) during a large break LOCA?

    The CNMT Sump to RHR Pump Suction valves will open automatically on ___(1)___ level.

    The RWST to RHR Pump Suction valves will ___(2)___.

    A. (1) lowering RWST

       (2) remain open until shut by an operator

    B. (1) lowering RWST

       (2) begin to shut five seconds after the CNMT Sump to RHR Pump Suction Valves reach the full open position

    C. (1) rising CNMT sump

       (2) remain open until shut by an operator

    D. (1) rising CNMT sump

       (2) begin to shut five seconds after the CNMT Sump to RHR Pump Suction Valves reach the full open position

42. Given the following plant conditions:
    - EOP-FR-C.1, Response to Inadequate Core Cooling, is being implemented
    - Containment pressure is 2.5 psig
    - Maximum Core Exit Thermocouples (CET) temperatures are 1305°F
    - All SGs have been depressurized to 130 psig
    - Support conditions have been established to the 'B' and 'C' RCPs ONLY

    Subsequent to the above conditions:
    - RCP 'C' was started and CET temperatures are now 1250°F and lowering
    - The crew is evaluating if additional RCPs can be started to provide core cooling

    Current SG narrow range levels are:
    - SG 'A' level is 35%
    - SG 'B' level is 15%
    - SG 'C' level is 39%

    Which ONE of the following identifies the operator action(s) required to be taken NEXT in accordance with EOP-FR-C.1?

    A. Start RCP 'A'

    B. Start RCP 'B'

    C. Re-establish a heat sink in at least one SG

    D. Open the PRZ PORVs and RCS vent valves

43. In accordance with AOP-018, Reactor Coolant Pump Abnormal Conditions, which ONE of the following completes the statements below?

    If all RCP seal cooling is lost for greater than a MINIMUM of ___(1)___ minutes, a controlled restoration of seal injection flow must be done.

    The basis for this requirement is to ___(2)___.

    A. (1) 4

       (2) preclude increased seal leakage

    B. (1) 4

       (2) protect against potential pump radial bearing damage

    C. (1) 10

       (2) preclude increased seal leakage

    D. (1) 10

       (2) protect against potential pump radial bearing damage

44. Given the following plant conditions:
    - The unit is operating in Mode 5
    - The RCS is in solid plant operation
    - Both trains of RHR are aligned in the Shutdown Cooling Mode

    Subsequently:
    - A large RCS leak developed

    Conditions are as follows:
    - The crew has aligned flow through the BIT with 'A' CSIP in service as directed by AOP-020, Loss of RCS Inventory or Residual Heat Removal While Shutdown
    - Core Exit Thermocouples continue to rise
    - RCS water level continues to lower

    Which ONE of the following completes the statement below regarding the action required by AOP-020 to lower Core Exit Thermocouple temperatures?

    __(1)__ with flow through __(2)__.

    A. (1) Start the 'B' CSIP

       (2) 1SI-3 and 1SI-4, BIT Outlet Valves

    B. (1) Start the 'B' CSIP

       (2) 1SI-52, Alternate High Head SI to Cold Leg Valve

    C. (1) Align 'A' RHR Pump for Low Head SI

       (2) 1SI-340, Low Head SI Train A to Cold Leg Valve

    D. (1) Align 'A' RHR Pump for Low Head SI

       (2) 1SI-359, Low Head SI Trains A & B to Hot Leg valve

45. Given the following plant conditions:
    - The unit is operating at 100% power
    - ALB-005-6-1, CCW Surge Tank High-Low Level, has just alarmed
    - The OATC reports that CCW Surge Tank level is 39% and trending lower

    Which ONE of the following automatic actions must be verified in accordance with APP-ALB-005?

    A. 1DW-15, Makeup Valve, has opened

    B. CCW Drain Tank Transfer Pump has tripped

    C. CCW Holdup Tank Transfer Pump has tripped

    D. CCW flow to the GFFD and RCS Sample Panel has isolated

46. Given the following plant conditions:
    - The unit is in Mode 3 at normal operating pressure
    - Pressurizer (PRZ) Pressure Control is in AUTO

    Subsequently:
    - A PRZ pressure transmitter failure occurs
    - PRZ pressure channel indications are:
        - PI-444 2050 psig
        - PI-445 2500 psig
        - PI-455 2050 psig
        - PI-456 1950 psig
        - PI-457 2050 psig

    Which ONE of the following completes the statements below regarding the expected conditions of the PRZ PORVs and spray valves?

    PRZ PORVs 1RC-116 (PCV-445B) and 1RC-118 (PCV-445A) will be __(1)__.

    The PRZ spray valves (PCV-444C and PCV-444D) will be __(2)__.

    (Assume NO operator actions)

    A. (1) OPEN

       (2) OPEN

    B. (1) OPEN

       (2) SHUT

    C. (1) SHUT

       (2) OPEN

    D. (1) SHUT

       (2) SHUT

47. Which ONE of the following completes the statements below regarding an ATWS?

Reactor Trip Breaker shunt trip coils are ___(1)___ to actuate devices.

In accordance with EOP-FR-S.1, Response to Nuclear Power Generation/ATWS, if the Reactor fails to trip following opening of the Reactor Trip and Bypass Breakers locally, the next PREFERRED action is to open the rod drive MG set ___(2)___ breakers.

A. (1) energize

(2) motor

B. (1) energize

(2) generator output

C. (1) de-energize

(2) motor

D. (1) de-energize

(2) generator output

48. Given the following plant conditions:
    - A tube rupture occurred in the 'A' SG
    - Offsite power was lost
    - The crew completed EOP-E-3, Steam Generator Tube Rupture, and transitioned to EOP-ES-3.1, Post-SGTR Cooldown Using Backfill

    The following plant conditions presently exist:
    - 6.9 KV Aux Buses 'A' and 'C' have been re-energized
    - The crew is preparing to restart an RCP

    Which ONE of the following completes the statement below?

    In accordance with EOP-ES-3.1, the __(1)__ RCP should be started FIRST to minimize any challenges to __(2)__.

    A. (1) 'A'

       (2) vessel integrity

    B. (1) 'A'

       (2) core reactivity

    C. (1) 'C'

       (2) vessel integrity

    D. (1) 'C'

       (2) core reactivity

49. Given the following plant conditions:
    - A complete loss of all feedwater sources occurred
    - RCS bleed and feed has been initiated

    Subsequently:
    - All SGs are completely dry and depressurized
    - Auxiliary Feedwater (AFW) capability is restored
    - RCS temperature is stable

    Which ONE of the following completes the statements below?

    In accordance with EOP-FR-H.1, Response to a Loss of Secondary Heat Sink, one intact SG will be fed using AFW at __(1)__ KPPH.

    The reason ONLY one SG is fed is to ensure __(2)__.

    A. (1) 50

       (2) a failure due to excessive thermal stresses is limited to one SG

    B. (1) 50

       (2) RCS cooldown rates are maintained within Technical Specification limits

    C. (1) 200

       (2) a failure due to excessive thermal stresses is limited to one SG

    D. (1) 200

       (2) RCS cooldown rates are maintained within Technical Specification limits

50. Given the following plant conditions:
    - The unit is operating 100% power
    - OST-1073, 1B-SB Emergency Diesel Generator Operability Test, in progress
    - Emergency Diesel Generator 1B-SB is loaded to 6300 KW while operating in parallel with the grid

    Subsequently:
    - EDG 1B-SB output breaker (126) trips open then recloses

    Which ONE of the following identifies an event that would cause breaker 126 to operate in this manner?

    A. Safety Injection actuates

    B. A loss of offsite power occurs

    C. A Main Generator lockout trips

    D. Breaker 124, Aux Bus 1E to Emergency Bus B-SB, opens

51. Given the following plant conditions:
    - The unit is in Mode 6
    - 'A-SA' Safety Train is in service
    - Core Alterations are in progress
    - Nuclear Flux Monitoring System (NFMS) N60 is being substituted for SR N31
    - Source Range (SR) N32 is providing audible count rate in the MCR and CNMT

    In accordance with Technical Specifications, which ONE of the following identifies a condition that would require suspension of Core Alterations?

    A. RWST level lowers to 23%

    B. 'B' EDG is declared inoperable

    C. Instrument Bus IDP-1B-SII de-energizes

    D. Reactor cavity water level at the 23' 10" mark (above the flange)

52. Given the following plant conditions:
    - A LOCA has occurred
    - 'A' ESW Booster Pump has tripped
    - Containment pressure is 28 psig

    Which ONE of the following completes the statement below?

    In accordance with EOP-FR-Z.1, Response to High Containment Pressure, ESW to the 'A' Train Containment Fan Coolers is isolated to prevent _____.

    A. an unmonitored release from Containment to the ESW system

    B. infusion of hydrogen into the ESW system from the Containment atmosphere

    C. damage to the Containment fan coolers from water hammer if the ESW Booster pump is restarted

    D. damage to the containment fan coolers from water hammer due to ESW flashing to steam in piping inside Containment due to low fan cooler flow

53. Given the following plant conditions:
    - The unit is operating at 100% power
    - Air Compressor 1C is the lead compressor
    - Air Compressor 1B is under clearance for inspection
    - Air Compressor 1A is in STANDBY and isolated from CAS Panel
    - Instrument Air header pressure is 110 psig

    Subsequently:
    - Instrument Air header pressure begins to lower steadily

    With regard to AOP-017, Loss of Instrument Air, which ONE of the following completes the statements below?

    The HIGHEST value that Air Compressor 1A will start on lowering Instrument Air header pressure is ___(1)___ psig.

    If Instrument Air header pressure continues to lower, the operators are FIRST required to manually trip the Reactor when pressure lowers to ___(2)___ psig.

    A. (1) 96

       (2) 60

    B. (1) 96

       (2) 35

    C. (1) 90

       (2) 60

    D. (1) 90

       (2) 35

54. Given the following plant conditions:
    - The unit is operating at 100% power
    - MDAFW pump 'B' is under clearance

    Subsequently the following occurs:
    - A manual Reactor Trip was initiated due to a loss of the 'A' MFP
    - The TDAFW pump tripped after starting
    - MDAFW flow control valves are full open
    - Total AFW flow is 212 KPPH and lowering
    - SG NR levels are 41% and lowering
    - Containment pressure is 2.8 psig and stable

    Which ONE of the following would be the FIRST set of conditions that would require entry into EOP-FR-H.1, Response to Loss of Secondary Heat Sink?

    All SG NR levels are __(1)__ % AND total AFW flow is __(2)__ KPPH.

    A. (1) 39

       (2) 195

    B. (1) 39

       (2) 205

    C. (1) 24

       (2) 195

    D. (1) 24

       (2) 205

55. Given the following plant conditions:
    - The unit was operating at 100% power when a Reactor Trip and Safety Injection occurred due to a steam line break in Containment on the 'B' SG

    Current plant conditions are as follows:
    - Containment pressure is 28 psig

    Which ONE of the following identifies the set of valves listed below that the operator must ensure are in the SHUT position using Attachment 3, Safeguards Actuation Verification, of EOP-E-0, Reactor Trip or Safety Injection, for the conditions above?

    1. All MSIV's
    2. 1MS-70, Main Steam B to Aux FW Turbine
    3. 'B' SG MDAFW AND TDAFW motor isolation valves
    4. ONLY 'B' MSIV
    5. All Blowdown isolation valves
    6. 1SI-3, BIT Outlet

    A. 1, 2, and 3

    B. 4, 5, and 6

    C. 1, 3, and 5

    D. 2, 4, and 6

56. Given the following plant conditions:
    - A Steam Generator tube rupture occurred
    - The Reactor was tripped and Safety Injection actuated
    - All offsite power was lost following the Reactor trip

    Subsequently:
    - The crew is at the step in EOP-E-3, Steam Generator Tube Rupture, to depressurize the RCS to restore inventory

    Which ONE of the following completes the statements below?

    In accordance with EOP-E-3, the RCS will be depressurized using __(1)__.

    Due to the loss of power during depressurization, the __(2)__.

    A. (1) one PRZ PORV

       (2) Reactor Vessel upper head may void resulting in a rapidly rising PRZ level

    B. (1) one PRZ PORV

       (2) Steam Generator tubes may void causing a loss of natural circulation

    C. (1) Auxiliary Spray

       (2) Reactor Vessel upper head may void resulting in a rapidly rising PRZ level

    D. (1) Auxiliary Spray

       (2) Steam Generator tubes may void causing a loss of natural circulation

57. A failure of the compensating voltage for Intermediate Range channel NI-35 occurs resulting in NI-35 stabilizing at $2E^{-10}$ amps during a Reactor shutdown.

    Which ONE of the following completes the statement below?

    IF Intermediate Range channel NI-36 output lowers to less than P-6, THEN _____ will automatically energize.

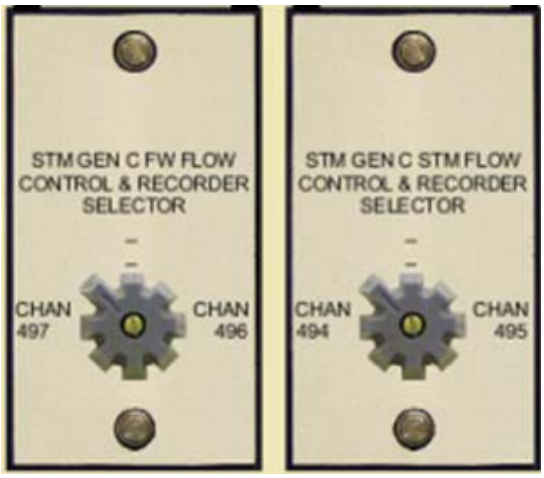
    A. BOTH SR NIs

    B. NEITHER SR NI

    C. ONLY SR channel NI-31

    D. ONLY SR channel NI-32

58. Given the following plant conditions:
    - The unit is operating at 100% power
    - The 'C' SG Control and Recorder Selector switches are as follows:



Subsequently:
- The controlling 'C' SG Feed Flow channel fails high
- Annunciator ALB-014-6-1A, SG C FW > STM Flow Mismatch, alarms

Which ONE of the following completes the statements below?

Immediately after the failure, the 'C' SG FRV will start to go ___(1)___.

Once 'C' SG level is under operator control, OP-134, Feedwater System, will direct the operator to select ___(2)___ to restore automatic water level control.

A. (1) OPEN

   (2) STM GEN C FW Flow Chan 496 ONLY

B. (1) SHUT

   (2) STM GEN C FW Flow Chan 496 ONLY

C. (1) OPEN

   (2) STM GEN C FW Flow Chan 496 AND STM GEN C STM Flow Chan 495

D. (1) SHUT

   (2) STM GEN C FW Flow Chan 496 AND STM GEN C STM Flow Chan 495

59. Which ONE of the following identifies the 480V power supply for S-1B, Containment Airborne Radioactivity Removal (ARR) Fan?

A. MCC 1B21-SB

B. MCC 1E11

C. Bus 1B1

D. Bus 1D2

60. Given the following plant conditions:
    - The unit was operating at 100% power when a LOCA develops inside Containment

    Subsequently:
    - Containment pressure rises to a peak value of 12 psig
    - Containment hydrogen concentration is 0.5%

    Current plant conditions:
    - Safety Injection System is aligned for Cold Leg Recirculation
    - Containment hydrogen concentration is 5%
    - Containment pressure is 3.5 psig

    Which ONE of the following completes the statements below in accordance with OP-125, Hydrogen Monitoring System (HMS)?

    The Containment Isolation Phase __(1)__ signal must be reset to allow aligning the Hydrogen Monitoring System from Standby to Continuous Sample Mode.

    The Hydrogen Purge System __(2)__ designed to be placed in service based on the current plant conditions.

    A. (1) A

       (2) is

    B. (1) A

       (2) is NOT

    C. (1) B

       (2) is

    D. (1) B

       (2) is NOT

61. Core reload is in progress in accordance with GP-009, Refueling Cavity, Refueling and Drain of the Refueling Cavity, Modes 5-6-5

Which ONE of the following completes the statements below?

The Manipulator Crane Overload Interlock stops hoist up travel when the hoist load reaches a MINIMUM of ___(1)___ lbs above the weight of the mast and fuel assembly to prevent fuel damage.

In accordance with GP-009, core reload must be suspended if BOTH Source Range channels count rates rise by a MINIMUM factor of ___(2)___.

A. (1) 150

(2) two

B. (1) 150

(2) five

C. (1) 430

(2) two

D. (1) 430

(2) five

62. Given the following plant conditions:
    - A waste gas release is in progress
    - WPB Stack 5 PIG Monitor, REM-*1WV-3546, exceeds the HIGH ALARM setpoint

    Which ONE of the following identifies how the release will be automatically terminated?

    A. 3WG-230, Gas Decay Tanks to Plant Vent Isolation Valve, SHUTS

    B. 3WG-229, WG Decay Tanks E & F to Plant Vent Valve, SHUTS

    C. Filtered Exhaust Fans, E-46, E-47, E-48, and E-49 TRIP

    D. Running Waste Gas Compressor TRIPS

63. Which ONE of the following is an input to the Containment Critical Safety Function Status Tree (CSF-5)?

A. RM-01CR-3589SA, High Range Containment Post Accident

B. REM-01LT-3502ASA, Containment RCS Leak Detection

C. RM-01CR-3561BSB, Containment Ventilation Isolation

D. REM-01LT-3502B, Containment Pre-Entry Purge

64. Given the following plant conditions:
- The unit is operating at 100% power
- 'A' Normal Service Water (NSW) Pump is running

Subsequently:
- The 'A' Emergency Service Water (ESW) Pump control switch is taken to START

Which ONE of the following completes the statements below regarding the Service Water valve alignment two (2) minutes following the pump start?

1SW-39, NSW Supply to 'A' ESW Header, will be ___(1)___.

1SW-276, ESW to NSW Common Return, will be ___(2)___.

A. (1) SHUT

(2) SHUT

B. (1) SHUT

(2) OPEN

C. (1) OPEN

(2) SHUT

D. (1) OPEN

(2) OPEN

65. Given the following plant conditions:
    - Fire header pressure is 145 psig
    - No fire pumps are running

    Subsequently:
    - A fire occurs on site
    - Fire header pressure lowers to 70 psig for 30 seconds then recovers

    Which ONE of the following completes the statements below?

    In addition to the Jockey Pump, ___(1)___ will automatically start.

    After the fire is OUT, the Jockey Pump ___(2)___ secure automatically when fire header pressure is fully restored.

    A. (1) ONLY the Motor Driven Fire Pump

       (2) will

    B. (1) ONLY the Motor Driven Fire Pump

       (2) will NOT

    C. (1) BOTH the Motor and Diesel Driven Fire Pumps

       (2) will

    D. (1) BOTH the Motor and Diesel Driven Fire Pumps

       (2) will NOT

66. Which ONE of the following completes the statement below in accordance with AD-OP-ALL-1000, Conduct of Operations?

    If needed to protect the plant, ___(1)___ can authorize resetting a protective device without knowing the cause provided a(an) ___(2)___ condition is NOT evident.

    A. (1) ONLY the Shift Manager

       (2) thermal overload

    B. (1) ONLY the Shift Manager

       (2) overcurrent

    C. (1) the Shift Manager OR Control Room Supervisor

       (2) thermal overload

    D. (1) the Shift Manager OR Control Room Supervisor

       (2) overcurrent

67. Given the following plant conditions:
    - A post-maintenance lineup is being performed
    - Circuit Breaker 1A-SA-5, Charging/SI Pump 1A-SA Breaker, is being racked in

    Which ONE of the following completes the statements below in accordance with AD-HU-ALL-0005, Human Performance Tools?

    For this evolution, verification of "racked in" status for the breaker MUST ___(1)___.

    Circuit Breaker 1A-SA-5 ___(2)___ require Independent Verification.

    A. (1) be performed LOCALLY

       (2) does

    B. (1) be performed LOCALLY

       (2) does NOT

    C. (1) use the MCB indicating light

       (2) does

    D. (1) use the MCB indicating light

       (2) does NOT

68. Which ONE of the following completes the statement below in accordance with OMM-002, Shift Turnover Package?

    With the unit in Mode 4, the MINIMUM shift crew composition must include ___(1)___ Reactor Operator(s) and ___(2)___ Auxiliary Operator(s).

    A. (1) one

       (2) one

    B. (1) one

       (2) two

    C. (1) two

       (2) one

    D. (1) two

       (2) two

69. A Reactor startup is in progress in accordance with GP-004, Reactor Startup (Mode 3 to Mode 2).

Which ONE of the following completes the statements below?

In accordance with AD-OP-ALL-0203, Reactivity Management, the dedicated Reactor Operator for this evolution ___(1)___ be one of the Reactor Operators on the crew.

A NOTE in GP-004 states that most startups will use ___(2)___ steps on Bank D as the target for criticality.

A. (1) can

(2) 90

B. (1) can

(2) 130

C. (1) can NOT

(2) 90

D. (1) can NOT

(2) 130

70. Given the following plant conditions:
    - The Reactor is shutdown for a scheduled refueling outage
    - An RCS cooldown is in progress IAW GP-007, Normal Plant Cooldown

    The following information is a plot of the cooldown:

TIME	RCS Tcold
0830	516°F
0845	505°F
0900	487°F
0915	477°F
0930	465°F
0945	441°F
1000	405°F
1015	378°F
1030	363°F

    Of the times listed below, when was the Technical Specification RCS cooldown rate limit FIRST exceeded?

    A. 0900

    B. 0930

    C. 1000

    D. 1030

71. Which ONE of the following completes the statements below regarding operation of the DISCP (RMS) Human Machine Interface?

    Operators may navigate between screens and choose options using the __(1)__.

    Only the __(2)__ can be used to control the functions of the safety-related monitors.

    (DISCP = Distributed Instrumentation and Control System Platform)

    A. (1) keyboard ONLY

       (2) RM-23

    B. (1) keyboard ONLY

       (2) DICSP

    C. (1) mouse AND keyboard

       (2) RM-23

    D. (1) mouse AND keyboard

       (2) DICSP

72. Given the following:
    - A valve lineup will be performed in the RCA
    - Highest general radiation levels are 20 mrem/hr
    - Highest general area contamination levels are 1,000 dpm/100 cm^2
    - The valve lineup requires accessing one valve 10 feet in the overhead

    Which ONE of the following completes the statement below in accordance with PD-RP-ALL-0001, Radiation Worker Responsibilities?

    The RWP Self-Briefing process is _____.

    A. allowed for the given conditions

    B. NOT allowed due to the overhead work

    C. NOT allowed due to the area radiation levels

    D. NOT allowed due to the area contamination levels

73. Which ONE of the following completes the statements below in accordance with AD-OP-ALL-1001, Conduct of Abnormal Operations?

    If a crew member recognizes entry conditions are met for an Event Procedure, then a ___(1)___ will be used to notify the crew.

    Event Procedure immediate actions ___(2)___ require CRS concurrence to perform.

    A. (1) Crew Update

       (2) do

    B. (1) Crew Update

       (2) do NOT

    C. (1) Focus Brief

       (2) do

    D. (1) Focus Brief

       (2) do NOT

74. Given the following plant conditions:
    - The unit is operating at 100% power

    Subsequently:
    - At 0800, a loss of MCB annunciators occurred and the crew entered AOP-037, Loss of Main Control Room Annunciators
    - The CRS determined that the following Alarm Light Boxes (ALBs) were lost:
        - ALB-001, Containment Spray & Accumulator System
        - ALB-002, Emergency Service Normal Service Water System
        - ALB-003, Miscellaneous Systems
        - ALB-004, RHR/RWST System

    Which ONE of the following completes the statement below regarding the required action per plant procedures for loss of these ALBs?

    __(1)__ must be first logged no LATER than __(2)__.

    A. (1) Containment sump level

       (2) 0810

    B. (1) Containment sump level

       (2) 0900

    C. (1) Temperature and level for both reservoirs

       (2) 0810

    D. (1) Temperature and level for both reservoirs

       (2) 0900

75. Given the following plant conditions:
    - The Reactor has tripped and Safety Injection has actuated due to a large break Loss of Coolant Accident (LOCA)
    - The crew is implementing EOP-E-1, Loss of Reactor or Secondary Coolant
    - The OATC reports the following for Critical Safety Function Status Trees:
        - Containment - Orange
        - Subcriticality - Orange
        - Heat Sink - Red
        - Integrity - Red

    Which ONE of the following identifies the procedure required to be entered?

    A. EOP-FR-P.1, Response to Imminent Pressurized Thermal Shock

    B. EOP-FR-H.1, Response to Loss of Secondary Heat Sink

    C. EOP-FR-Z.1, Response to High Containment Pressure

    D. EOP-FR-S.1, Response to Nuclear Generation/ATWS