Name: _____

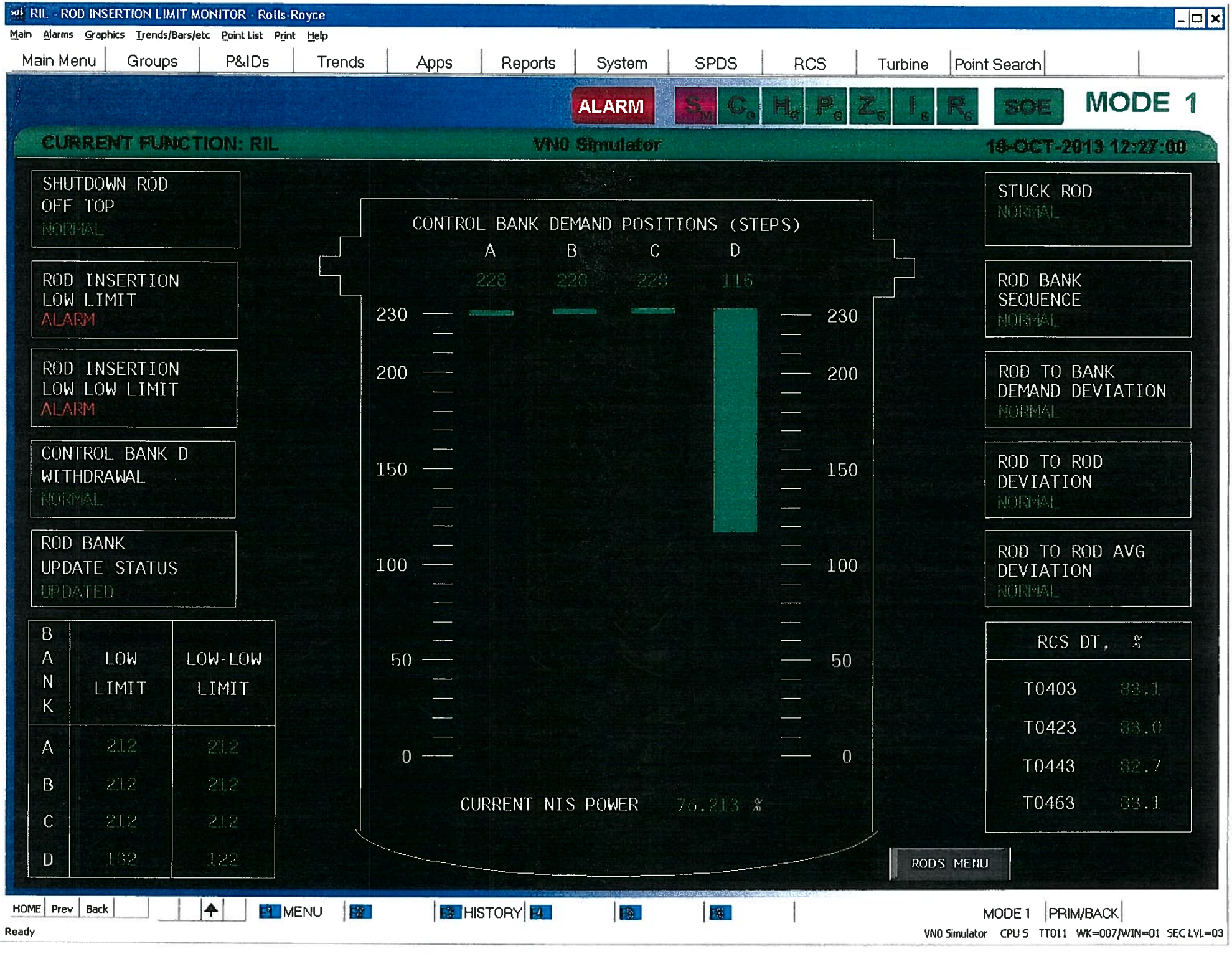
NRC - RO Exam
Student Test

***Start Time*:** _____

***Stop Time*:** _____

List of SRO References

1	19111-C, ECA-1.1 Loss of Emergency Coolant Recirculation	Table in step 7.b (page 7 of 49)
2	19111-C, ECA-1.1 Loss of Emergency Coolant Recirculation	Table 1 (page 45 of 49) Figure 1 (page 46 of 49)
3	11840-1, “Main Turbine Electro-Hydraulic Control (EHC) System Alignment”	
4	DWG 1X4DB194, “EHC Hydr. Power Unit”	
5	Core Operating Limits Report, VEGP Unit 1 Cycle 18, Figure 3, “Rod Bank Insertion Limits versus % of Rate Thermal Power	
6	Plant Computer Data (2 screenshots)	


RIL - ROD INSERTION LIMIT MONITOR - Rolls-Royce
Main Alarms Graphics Trends/Bars/etc Point List Print Help
Main Menu | Groups | P&IDs | Trends | Apps | Reports | System | SPDS | RCS | Turbine | Point Search
ALARM
SOE
MODE 1
CURRENT FUNCTION: RIL
VNO Simulator
16-OCT-2013 12:27:00
SHUTDOWN ROD OFF TOP
NORMAL
ROD INSERTION LOW LIMIT
ALARM
ROD INSERTION LOW LOW LIMIT
ALARM
CONTROL BANK D WITHDRAWAL
NORMAL
ROD BANK UPDATE STATUS
UPDATED
CONTROL BANK DEMAND POSITIONS (STEPS)
A B C D
228 228 228 116
230 200 150 100 50 0
CURRENT NIS POWER 76.213 %
STUCK ROD
NORMAL
ROD BANK SEQUENCE
NORMAL
ROD TO BANK DEMAND DEVIATION
NORMAL
ROD TO ROD DEVIATION
NORMAL
ROD TO ROD AVG DEVIATION
NORMAL
RCS DT, %
T0403 83.1
T0423 83.0
T0443 82.7
T0463 83.1
BANK | LOW LIMIT | LOW-LOW LIMIT
A 212 212
B 212 212
C 212 212
D 132 122
RODS MENU
HOME Prev Back MENU HISTORY MODE 1 PRIM/BACK
Ready
VNO Simulator CPU 5 TT011 WK=007/WIN=01 SEC LVL=03

P002
ROOM TECH SPEC ROUNDS

DESCRIPTION	VALUE	UNITS
CNMT NARROW RANGE PRESS	0.10	PSIG
NSCW SUPPLY HEADER TEMP TRAIN A TEMP	71.6	DEG F
NSCW SUPPLY HEADER TRAIN B TEMP	67.3	DEG F
CNMT LEVEL 2 TEMP	122	DEG F
CNMT LEVEL C TEMP	114	DEG F
CNMT LEVEL B TEMP	115	DEG F
AVERAGE CNMT TEMP	117	DEG F
CNMT SOUTH SUMP LEVEL	21.0	INCHES
REACTOR CAVITY SUMP LEVEL	21.4	INCHES
CNMT NORTH SUMP LEVEL	16.3	INCHES
PRI MET TWR 10M 15 MIN AVE WIND SPEED	2.6	MPH
PRI MET TWR 60M 15 MIN AVE WIND SPEED	6.2	MPH
PRI MET TWR 10M 15 MIN AVE WIND DIR	156	DEGREES
PRI MET TWR 60M 15 MIN AVE WIND DIR	136	DEGREES
PRI MET TOWER 60-10M 15 MIN AVE DELTA TEMP	0.615	DEG F

1.

Given the following:

- Unit 1 is at 100% reactor power.

Which one of the following completes the following statement?

The Rod Control Logic Cabinet is energized from __(1)__ or __(2)__.

	__(1)__	__(2)__
A.	Vital 125 VDC Panel (1AD11)	Vital 120 VAC Panel (1AY1A)
B.	Vital 125 VDC Panel (1AD11)	Regulated 120 VAC Instrument Panel (1NYS)
C.	1A MG Set via a 120 VAC transformer	Vital 120 VAC Panel (1AY1A)
D.	1A MG Set via a 120 VAC transformer	Regulated 120 VAC Instrument Panel (1NYS)

2.

Initial condition:

- Unit 1 is at 8% reactor power.

Current condition:

- 1NAA de-energizes due to a fault on the bus.

Which one of the following completes the following statement?

When conditions stabilize, __(1)__ flow on 1FI-414, RCS Flow Loop 1 will be observed, and

the reactor __(2)__ automatically trip due to the event.

	__(1)__	__(2)__
A.	~113%	will
B.	~113%	will NOT
C.	~6%	will
D.	~6%	will NOT

3.

Initial conditions:

- Unit 1 is at 100% reactor power.
- VCT level is 50%.
- VCT makeup control is in automatic.

Current condition:

- VCT level transmitter, 1LT-112, fails **high**.

Assuming no operator action, which one of the following completes the following statements?

VCT Divert Valve, 1LV-112A, is aligned to the __(1)__.

If actual VCT level lowers to 29%, automatic makeup __(2)__ occur.

	__(1)__	__(2)__
A.	PRT	will
B.	PRT	will NOT
C.	RHUT	will
D.	RHUT	will NOT

4.

Initial conditions:

- Unit 1 is in Mode 5 with solid plant conditions.
- RHR Train 'B' is in service aligned to low pressure letdown.
- RHR Train 'A' is in standby.
- CCP 'A' is in service.

Current condition:

- Instrument air header depressurizes due to an air line break.

Which one of the following completes the following statement?

With no operator action, RCS pressure will __(1)__,

and

per 18028-C, "Loss of Instrument Air," to mitigate the pressure transient, the crew __(2)__ stop RHR pump 'B'.

	__(1)__	__(2)__
A.	increase	will
B.	increase	will NOT
C.	decrease	will
D.	decrease	will NOT

5.

Initial conditions:

- Unit 1 is at 95% reactor power with a power ascension in progress.
- CBD is at 200 steps.

Current conditions:

- ALB10-D06 ROD DEV is received.
- CBD rod M12 DRPI indicates 109 steps.
- 18003-C, "Rod Control System Malfunction," is entered.
- Reactor power has been lowered per 18003-C guidance.

Which one of the following completes the following statement?

Per 18003-C, control rod M12 is considered __(1)__,

and

per 18003-C, the reason for the power reduction is to minimize __(2)__ heat rates and power distribution variances.

	__(1)__	__(2)__
A.	dropped	core
B.	dropped	local
C.	misaligned	core
D.	misaligned	local

6.

Initial conditions:

- Unit 1 is in Mode 6 for refueling.
- RHR pump 'B' is in service.
- RHR pump 'A' is tagged out.

Current conditions:

- RHR pump 'B' is stopped to place a fuel assembly in the vicinity of the RCS hot leg nozzle.

- Chemistry requests permission to make a chemical addition to the RCS.

Which one of the following completes the following statement?

Per Tech Spec 3.9.5, "Residual Heat Removal (RHR) and Coolant Circulation - High Water Level," the Chemistry technician __(1)__ allowed to make the chemical addition to the RCS,

and

per Tech Spec 3.9.5, RHR pump 'B' __(2)__ required to be returned to service no later than 1 hour from being stopped.

	__(1)__	__(2)__
A.	is	is
B.	is	is NOT
C.	is NOT	is
D.	is NOT	is NOT

7.

Initial conditions:

- Unit 1 experienced a LOCA.
- 19012-C, "Post-LOCA Cooldown and Depressurization," is in progress.
- Both RHR pumps are stopped.
- RCS temperature and pressure are stable.
- Containment pressure is 4.2 psig and slowly lowering.

Current conditions:

- CCP 'A' was stopped three minutes ago per 19012-C.

- SIP 'B' is stopped per 19012-C.
- Subcooling is 29°F and lowering.

Which one of the following completes the following statements?

When CCP 'A' is stopped, RCS subcooling margin will **initially** __(1)__.

Based on the current conditions, the OATC __(2)__ required to restart an ECCS pump.

	__(1)__	__(2)__
A.	increase	is
B.	increase	is NOT
C.	decrease	is
D.	decrease	is NOT

8.

At time 0100:

- Unit 1 reactor tripped.

At time 0530:

- Safety Injection occurred.
- All RCPs were stopped.

At time 0730:

- RVLIS Full Range is 73% and stable.

- 19111-C, "Loss of Emergency Coolant Recirculation," Step 18b RNO is in progress:

  Step 18b RNO. Establish minimum ECCS flow to remove decay heat by performing the following:

  1) Determine minimum ECCS flow required using the following: TABLE 1 or FIGURE 1.
  2) Throttle ECCS flow to minimum value.

Which one of the following completes the following statement?

Based on the current conditions, the active fuel __(1)__ covered,

and

the crew is required to throttle ECCS flow to approximately __(2)__ per Step 18b RNO.

REFERENCES PROVIDED

	__(1)__	__(2)__
A.	is	225 gpm
B.	is	320 gpm
C.	is NOT	225 gpm
D.	is NOT	320 gpm

9.

Initial conditions:

- Unit 1 is in Mode 5 with solid plant conditions.
- Pressurizer bubble is being established.

Current conditions:

- A transient results in an RCS pressure spike.
- ALB12-E02 PRZR REL TANK HI PRESS is received.
- ALB12-E03 PRZR REL TANK HI TEMP is received.

Which one of the following completes the following statement?

The RHR pump __(1)__ relief valve lifting caused the PRT high pressure condition,

and

per 13004-1, "Pressurizer Relief Tank Operation," recirculation through the RCDT heat exchanger to lower PRT temperature is expected to take approximately __(2)__.

	__(1)__	__(2)__
A.	discharge	1 hour
B.	discharge	8 hours
C.	suction	1 hour
D.	suction	8 hours

10.

Initial condition:

- Unit 1 is operating at 55% reactor power with a plant startup in progress.

Current conditions:

- Both Unit 1 RATs de-energize.
- Both DGs start and re-energize their respective bus.
- No other switchyard components are affected.

Which one of the following completes the following statement?

With no operator action, **one minute after** the RATs de-energize, the Reactor Trip Breakers will be __(1)__,

and

DRPI __(2)__ be available to check control rod positions.

	__(1)__	__(2)__
A.	open	will
B.	open	will NOT
C.	closed	will
D.	closed	will NOT

11.

Initial conditions:

- Unit 1 is at 100% reactor power.
- CCW Train 'A' is in service.
- Multiple CCW Train 'A' low pressure and low flow alarms annunciate, then clear.
- No other alarms were received.

Current conditions:

- CCW Train 'A' pressure and flow are stable.
- 18020-C, "Loss of Component Cooling Water," is entered.

Which one of the following completes the following statement?

A CCW Train 'A' pump has experienced a __(1)__,

and

the standby CCW Train 'A' pump __(2)__ auto start in response to CCW low header pressure.

	__(1)__	__(2)__
A.	locked rotor	did
B.	locked rotor	did NOT
C.	sheared shaft	did
D.	sheared shaft	did NOT

12.

Given the following:

- Unit 1 experienced a small break LOCA.
- 19012-C, "Post-LOCA Cooldown and Depressurization," is in progress.
- RCS pressure is 1315 psig and stable.
- Containment pressure is 3.5 psig.

Which one of the following completes the following statement?

19012-C requires a **minimum** SG NR level of __(1)__,

and

natural circulation flow __(2)__ used in conjunction with break flow to accomplish decay heat removal.

	__(1)__	__(2)__
A.	10%	is
B.	10%	is NOT
C.	32%	is
D.	32%	is NOT

13.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- PORV-455A starts leaking by.
- OATC observes pressurizer pressure indicating 2205 psig and slowly lowering.

- No operator action has been taken.

Which one of the following completes the following statement?

Based on the current conditions, the pressurizer backup heaters __(1)__ be energized, and

if pressure lowers to 2185 psig, both PORV block valves __(2)__ receive a close signal.

	__(1)__	__(2)__
A.	will	will
B.	will	will NOT
C.	will NOT	will
D.	will NOT	will NOT

14.

Initial condition:

- Unit 1 is at 100% reactor power.

Current condition:

- 1NB01-05, Pressurizer Heater Back-Up Gr-A, breaker trips open.

Which one of the following completes the following statement?

Tech Spec 3.4.9, "Pressurizer," requires two groups of pressurizer heaters with __(1)__ capacity of $\geq$150 kW,

and

Pressurizer Heater Back-Up Gr-A __(2)__ a Tech Spec required group of heaters.

	__(1)__	__(2)__
A.	a total	is
B.	a total	is NOT
C.	each having a	is
D.	each having a	is NOT

15.

Initial condition:

- Unit 1 experienced a reactor trip and SI.

Current conditions:

- The OATC aligns ECCS for Cold Leg Recirculation.
- RCS pressure is 1450 psig.
- 19010-C, "Loss of Reactor or Secondary Coolant," is in progress.

Which one of the following completes the following statements?

Prior to the LOCA, each RHR pump is aligned for injection into __(1)__ Cold Legs.

Following alignment to Cold Leg Recirculation, SIPs __(2)__ providing injection **flow** to the core.

	__(1)__	__(2)__
A.	2	are
B.	2	are NOT
C.	4	are
D.	4	are NOT

16.

Initial conditions:

- Unit 1 is at 50% reactor power.
- RCS pressure is 2235 psig.
- Pressurizer level control is selected to CH 459 / 461.
- All pressurizer heaters are manually energized.

Current condition:

- Pressurizer level transmitter, 1LT-461, fails **low**.

- No operator action has been taken.

Which one of the following completes the following statement?

1LV-460, Letdown Isolation Valve, __(1)__ close,

and

the pressurizer backup heaters are __(2)__.

	__(1)__	__(2)__
A.	will	energized
B.	will	de-energized
C.	will NOT	energized
D.	will NOT	de-energized

17.

Given the following:

- Unit 1 is at 100% reactor power.

Which one of the following completes the following statement?

The __(1)__ Reactor Trip protects against Departure from Nucleate Boiling (DNB), and

the Trip Setpoint __(2)__ in response to **lowering** pressurizer pressure.

	__(1)__	__(2)__
A.	OT delta T	remains unchanged
B.	OT delta T	decreases
C.	OP delta T	remains unchanged
D.	OP delta T	decreases

18.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- The bistable(s) for Containment Pressure Channel I (1PT-937) are **de-energized**.
- No Tech Spec actions have been taken.

Which one of the following completes the following statement?

The **minimum** number of **additional** channels required to initiate an actuation signal on High-1 is __(1)__,

and

the **minimum** number of **additional** channels required to initiate an actuation signal on High-3 is __(2)__.

	__(1)__	__(2)__
A.	1	1
B.	1	2
C.	2	1
D.	2	2

19.

Initial condition:

- Unit 1 is at 100% reactor power and stable.

The following DRPI alarms and indications are observed:

- ALB10-D05 RPI URGENT ALARM is lit.
- ALB10-C05 RPI NON URGENT ALARM is lit.
- ALB10-E05 ROD AT BOTTOM is lit.
- Control rod H8 Rod Bottom LED is lit.
- Control rod H8 General Warning LED is flashing.
- Data A and Data B Failure LEDs are flashing.
- No other alarms are received.

Which one of the following completes the following statements?

Control rod H8 __(1)__.

Automatic rod motion and manual rod motion __(2)__ inhibited.

	__(1)__	__(2)__
A.	dropped	are
B.	dropped	are NOT
C.	did NOT drop	are
D.	did NOT drop	are NOT

20.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- A spurious turbine runback occurs and is terminated at 70% reactor power.
- ALB10-F06 DELTA FLUX DEVIATION is received.

Which one of the following completes the following statement?

Per Tech Spec 3.2.3, "Axial Flux Difference (AFD)," the AFD is considered outside limits when a **minimum** of __(1)__ OPERABLE Power Range NI channels indicate outside AFD limits,

and

based on current conditions, per Tech Spec 3.2.3, further reduction in thermal power __(2)__ required.

	__(1)__	__(2)__
A.	1	is
B.	1	is NOT
C.	2	is
D.	2	is NOT

21.

Initial condition:

- Unit 1 is at 100% reactor power.

Current condition:

- ALB08-E03 RCP 1 VIBRATION ALERT is received.

Which one of the following completes the following statement?

Per the applicable Annunciator Response Procedure, the operators are directed to monitor the RCP vibration readings on the __(1)__,

and

per 13003-1, "Reactor Coolant Pump Operation," the RCP maximum operating limit for **frame** vibration is __(2)__ mils.

	__(1)__	__(2)__
A.	plant computer	5
B.	plant computer	20
C.	local vibration monitoring panel	5
D.	local vibration monitoring panel	20

22.

Initial condition:

- Unit 1 is at 100% reactor power.

Current condition:

- CVCS makeup capability is lost.

Which one of the following completes the following statements?

As VCT level begins to slowly lower, VCT pressure is __(1)__ maintained.

If VCT pressure were to lower from 25 to 18 psig, RCP seal #1 leak-off flow rates would __(2)__.

	__(1)__	__(2)__
A.	automatically	decrease
B.	automatically	increase
C.	manually	decrease
D.	manually	increase

23.

Given the following:

- Unit 1 is in Mode 3 following a steam line break in containment.
- Only Train 'A' containment cooling units are available.
- Containment temperature is 241°F and slowly rising.
- Containment pressure is 11 psig and slowly rising.

Which one of the following completes the following statement?

SG NR level instruments on the QMCB will indicate __(1)__ than actual level,

and

the instrument inaccuracies __(2)__ a **direct** result of changes in containment pressure.

	__(1)__	__(2)__
A.	lower	are
B.	lower	are NOT
C.	higher	are
D.	higher	are NOT

24.

Given the following:

- Unit 1 requires Emergency Boration.
- Shift Supervisor directs Emergency Boration through the BIT flow path.

Which one of the following completes the following statement?

For the selected Emergency Boration flow path, 13009-1, "CVCS Reactor Makeup Control System," directs the operator to establish a **minimum** flow rate to the RCS greater than __(1)__ gpm,

and

the boron concentration for the **source** used above is required to be between __(2)__ ppm.

	__(1)__	__(2)__
A.	30	2400 - 2600
B.	30	7000 - 7700
C.	87.5	2400 - 2600
D.	87.5	7000 - 7700

25.

Given the following:

- Unit 1 reactor trip and SI occurred due to a LOCA.
- Containment Spray (CS) actuated.

Which one of the following completes the following statement?

During the ECCS injection phase, CS pumps and ECCS pumps __(1)__ suction header(s) **penetrating** the RWST,

and

the CS pumps' sump suction valves __(2)__ automatically open on LO-LO RWST level.

	__(1)__	__(2)__
A.	share a common	will
B.	share a common	will NOT
C.	have separate	will
D.	have separate	will NOT

26.

Given the following:

- An SI occurred and has NOT been reset.
- An LOSP occurs a few minutes later.
- 1AA02 is powered from DG1A.
- 1BA03 is powered from DG1B.

While the DGs are operating, an electrical perturbation results in the following:

- DG1A 186A lockout relay energizes (Generator Differential).
- DG1B 186B lockout relay energizes (Phase Overcurrent).

Which one of the following describes the current condition of the Containment Spray discharge valves?

1HV-9001A, Containment Spray Pump 'A' Discharge Isolation, __(1)__ have power available,

and

1HV-9001B, Containment Spray Pump 'B' Discharge Isolation, __(2)__ have power available.

	__(1)__	__(2)__
A.	does	does
B.	does	does NOT
C.	does NOT	does
D.	does NOT	does NOT

27.

Initial conditions:

- Unit 1 is at 100% reactor power.
- One group of pressurizer backup heaters is energized in manual.
- Pressurizer pressure control is selected to CH 455 / 456.

Current condition:

- Pressurizer pressure transmitter, 1PT-455, fails **low**.

Which one of the following completes the following statement?

In response to the failure, the remaining pressurizer backup heaters will __(1)__,

and

the pressurizer spray valve controllers will demand full __(2)__ position.

	__(1)__	__(2)__
A.	energize	open
B.	energize	closed
C.	remain off	open
D.	remain off	closed

28.

Initial conditions:

- Unit 1 is at 100% reactor power.
- Containment Spray pump 'A' is tagged out.

Current conditions:

- Large break LOCA occurs.
- 19010-C, "Loss of Reactor or Secondary Coolant," is in progress.
- Containment Spray pump 'B' trips.
- Containment pressure is 22 psig.
- Containment hydrogen concentration is 5.1%.

Which one of the following completes the following statement?

The **preferred** method for reducing containment hydrogen concentration is __(1)__ the containment atmosphere,

and

a(n) __(2)__ path entry condition exists for 19251-C, "Response to High Containment Pressure."

	__(1)__	__(2)__
A.	diluting	red
B.	diluting	orange
C.	purging	red
D.	purging	orange

29.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- ATWT is in progress.
- The reactor trip and bypass breakers will NOT open locally.

Which one of the following completes the following statement?

Per 19211-C, "Response to Nuclear Power Generation / ATWT," the Control Rod Drive MG Set __(1)__ breakers will be opened,

and

P-4 __(2)__ be generated when the MG set breakers are locally opened.

	__(1)__	__(2)__
A.	input	will
B.	input	will NOT
C.	output	will
D.	output	will NOT

30.

Initial conditions:

- Unit 1 reactor startup is in progress.
- Critical data is being collected per 12003-C, "Reactor Startup (Mode 3 to Mode 2)."

Current condition:

- Intermediate Range N35 fails **bottom** of scale.

Which one of the following completes the following statement?

Based on the current conditions, the SR BLOCK PERMISSIVE P-6 light on the BPLB __(1)__ remain lit,

and

placing the affected channel's Level Trip switch in BYPASS per 18002-C, "Nuclear Instrumentation System Malfunction," aligns NI __(2)__ power to the SSPS input relay.

	__(1)__	__(2)__
A.	will	control
B.	will	instrument
C.	will NOT	control
D.	will NOT	instrument

31.

Given the following:

- Unit 1 is in Mode 6.
- Preparation for fuel movement is in progress in the Fuel Handling Building.

- The following radiation monitors are in service:

  - ARE-2532A/B, Fuel Handling Building Effluent Radiogas Monitors
  - 1RE-008, Fuel Handling Building Area Monitor

Which one of the following completes the following statement?

ARE-2532A/B __(1)__ be monitored and the alarm setpoints adjusted from the SRDC panel,

and

1RE-008 __(2)__ be monitored and the alarm setpoints adjusted from the SRDC panel.

	__(1)__	__(2)__
A.	can	can
B.	can	can NOT
C.	can NOT	can
D.	can NOT	can NOT

32.

Initial conditions:

- Unit 1 experienced a SGTR.
- 19030-C, "Steam Generator Tube Rupture," is in progress.
- 1NAA is de-energized due to a bus fault.
- AFW flow to all intact SGs is approximately 50 gpm.
- All intact SG NR levels are approximately 40% and stable.

Current condition:

- Crew is preparing to perform a maximum rate cooldown.

Which one of the following completes the following statements?

Per 19030-C, prior to initiating a maximum rate cooldown, AFW flow to **intact** SGs __(1)__ required to be raised.

The cooldown is initiated per Step 17 using __(2)__.

	__(1)__	__(2)__
A.	is	ARVs
B.	is	steam dumps
C.	is NOT	ARVs
D.	is NOT	steam dumps

33.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- Unit 1 reactor trips.
- RTB 'B' fails to open.

Which one of the following completes the following statement?

With no operator action, RCS temperature will be controlled at approximately __(1)__ by the __(2)__.

	__(1)__	__(2)__
A.	557° F	steam dumps
B.	557° F	ARVs
C.	559° F	steam dumps
D.	559° F	ARVs

34.

Initial conditions:

- Unit 1 is at 100% reactor power.
- Train 'A' sequencer simulated software sequence test is in progress per 13540A-1, "Safety Features Sequencer System - Train A."
- Containment Coolers #1, 2, 5, and 6 are running in high speed.

Current conditions:

- A steam line rupture occurs on SGs #1 and 2.
- In 3 seconds the following parameter trends occur:
  - SG pressures lower from 900 psig to 600 psig.
  - Containment pressure has risen to 14 psig.

- Reactor trip, Safety Injection, and Steam Line Isolation occur.

Which one of the following completes the following statement?

The Steam Line Isolation was initiated by __(1)__,

and

Train 'A' Containment Coolers will be running in __(2)__ speed.

	__(1)__	__(2)__
A.	containment High-2	high
B.	containment High-2	low
C.	SG low pressure	high
D.	SG low pressure	low

35.

Given the following:

- Unit 1 is at 25% reactor power.
- Power ascension is in progress.

Which one of the following completes the following statement?

As turbine load is increased while maintaining Tavg on program, main steam header pressure will __(1)__,

and

the method used to maintain Tavg on program during the power increase that results in the MOST negative MTC is __(2)__.

A. (1) decrease

   (2) control rod withdrawal with boron concentration held constant

B. (1) decrease

   (2) boron concentration reduction with control rod position held constant

C. (1) increase

   (2) control rod withdrawal with boron concentration held constant

D. (1) increase

   (2) boron concentration reduction with control rod position held constant

36.

At time 1100:

- Unit 1 is at 11% reactor power.
- The Control Room is evacuated due to a fire per 18038-1, "Operation From Remote Shutdown Panels."
- MFP 'A' is tripped prior to exiting the Control Room.

At time 1105:

- Personnel established local control of all components per 18038-1.
- SG NR levels have lowered to 55%.
- Shift Supervisor gives direction to, "Verify **all** AFW pumps running."

Which one of the following completes the following statement?

The MDAFW Pumps __(1)__ require manual start,

and

the TDAFW Pump __(2)__ require manual start.

	__(1)__	__(2)__
A.	will	will
B.	will	will NOT
C.	will NOT	will
D.	will NOT	will NOT

37.

Given the following:

- 19100-C, "Loss of All AC Power," is in progress on Unit 1.
- The crew is performing Step 29, "Depressurize intact SGs to 300 psig."
- UO could NOT stop depressurizing SGs at 300 psig.
- All SGs reach 175 psig before the depressurization is stopped.

Which one of the following completes the following statement?

A potential exists for __(1)__ to occur, which could result in **immediate** __(2)__.

A. (1) nitrogen injection from the accumulators

   (2) core uncovery

B. (1) nitrogen injection from the accumulators

   (2) disruption of natural circulation flow

C. (1) voiding in the reactor vessel

   (2) core uncovery

D. (1) voiding in the reactor vessel

   (2) disruption of natural circulation flow

38.

Initial condition:

- Loss of off-site power has occurred.

Current condition:

- 19002-C, "Natural Circulation Cooldown," is in progress.

Which one of the following completes the following statements?

Loop deltaT is expected to __(1)__ as natural circulation flow is **first** being established.

The number of available CRDM fans __(2)__ affect the required RCS subcooling that must be maintained during the 19002-C natural circulation cooldown.

	__(1)__	__(2)__
A.	rise	does
B.	rise	does NOT
C.	lower	does
D.	lower	does NOT

39.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- An LOSP occurs.
- 19100-C, "Loss of All AC Power," is in progress.
- 1DD1 bus voltage is 103 VDC and lowering.

Which one of the following completes the following statement?

Per 19100-C, 1DD1 __(1)__ required to be removed from service at this time,

and

the reason for removing 1DD1 from service is to prevent __(2)__.

	__(1)__	__(2)__
A.	is	battery damage
B.	is	an excessive buildup of hydrogen
C.	is NOT	battery damage
D.	is NOT	an excessive buildup of hydrogen

40.

Given the following conditions:

- Unit 1 reactor power is being raised from 30% to 50%.

Which one of the following completes the following statement?

As reactor power increases, the BFRVs will continue to open until __(1)__ reaches 40%, and subsequently the BFRVs will __(2)__.

A. (1) first stage turbine power

   (2) remain as-is

B. (1) first stage turbine power

   (2) fully close

C. (1) steam flow

   (2) remain as-is

D. (1) steam flow

   (2) fully close

41.

Given the following:

- Unit 1 CVCS mixed bed demin resin transfer is in progress.
- A valve failure causes a liquid release on 'C' level of the Auxiliary Building, which results in airborne radioactivity.

Which one of the following completes the following statement?

The airborne radioactivity release will be monitored by __(1)__,

and

the running Auxiliary Building HVAC units __(2)__ automatically trip.

A. (1) ARE-0014, Waste Gas Processing System Effluent Monitor

(2) will NOT

B. (1) 1RE-12442C, Plant Vent Radiogas Particulate (Low Range)

(2) will NOT

C. (1) ARE-0014, Waste Gas Processing System Effluent Monitor

(2) will

D. (1) 1RE-12442C, Plant Vent Radiogas Particulate (Low Range)

(2) will

42.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- A reactor trip occurs due to a feedwater transient.
- ALB13-E04 FWI SI OR P14 SG HI-HI LVL is received.

Which one of the following completes the following statements?

The MFPs __(1)__ automatically trip.

In order to open the BFIVs, the reactor trip breakers __(2)__ required to be cycled.

	__(1)__	__(2)__
A.	do	are
B.	do	are NOT
C.	do NOT	are
D.	do NOT	are NOT

43.

Radiation monitors are as follows:

- 1RE-002, Containment Low Range Area Monitor
- 1RE-003, Containment Low Range Area Monitor
- 1RE-2565, Containment Vent Monitor

Initial conditions:

- Unit 1 is in Mode 6.
- Core offload is in progress.

Current condition:

- ALB06-E01 CNMT VENT ISO ACTUATION is received.

Which one of the following completes the following statement?

A **high** radiation level of 15 mrem/hour has been exceeded on __(1)__,

and

the **high** radiation condition __(2)__ latch in on the SRDC panel.

	__(1)__	__(2)__
A.	1RE-002/1RE-003	does
B.	1RE-002/1RE-003	does NOT
C.	1RE-2565	does
D.	1RE-2565	does NOT

44.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- An electrical fault results in the following indications:
  - 1HV-5106, TDAFW Steam Admission Valve, red and green handswitch lights are out.
  - 1FV-5132 and 5134, MDAFW SGs #2 and 3 Discharge Throttle Valves, red, green, and white lights are out.

Which one of the following completes the following statement?

A loss of Train 'C' __(1)__ power has occurred,

and

a loss of Train 'B' __(2)__ power has occurred.

	__(1)__	__(2)__
A.	125 VDC	480 VAC
B.	125 VDC	125 VDC
C.	480 VAC	480 VAC
D.	480 VAC	125 VDC

45.

Initial conditions:

- Unit 1 is at 100% reactor power.
- 1AY2A is de-energized.

Current condition:

- Safety Injection is actuated.

Which one of the following completes the following statement?

DG1A __(1)__ automatically start,

and

the Train 'A' sequencer __(2)__ run the Safety Injection load sequence.

	__(1)__	__(2)__
A.	will	will
B.	will	will NOT
C.	will NOT	will
D.	will NOT	will NOT

46.

Initial conditions:

- Unit 1 is at 100% reactor power.
- DG1A is tagged out for maintenance.
- 1CY1A is powered by its alternate supply.

Current condition:

- Unit 1 experiences an LOSP.

Which one of the following completes the following statement?

The alternate supply for 1CY1A is a(n) __(1)__,

and

immediately following the LOSP, 1CY1A will be __(2)__.

	__(1)__	__(2)__
A.	inverter	energized
B.	inverter	de-energized
C.	regulated transformer	energized
D.	regulated transformer	de-energized

47.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- Unit 1 reactor is tripped.
- 19100-C, "Loss of All AC Power," is in progress.

Which one of the following completes the following statement?

In order to control the TDAFW discharge valves to SGs #1 and 4 from the main control room, battery __(1)__ power must be conserved,

and

to minimize battery drain, 1-PDIC-5180A, TDAFW pump speed controller, __(2)__ permitted to be used to control TDAFW flow to the SGs.

	__(1)__	__(2)__
A.	1AD1B	is
B.	1AD1B	is NOT
C.	1CD1B	is
D.	1CD1B	is NOT

48.

Given the following:

- Unit 1 is at 100% reactor power.
- DG1A is in its normal standby alignment.

Which one of the following completes the following statement?

Handswitch 1HS-4414B, DSL GEN 1A UNIT/PARALLEL, was taken to the __(1)__ position when placing DG1A in standby alignment,

and

its associated blue indicating light is __(2)__.

	__(1)__	__(2)__
A.	unit	lit
B.	unit	NOT lit
C.	parallel	lit
D.	parallel	NOT lit

49.

Initial condition:

- Unit 1 is at 7% reactor power.

Current condition:

- Instrument air line to 1FV-0121, CVCS Charging Flow Control Valve, is severed.

Which one of the following completes the following statement?

With no operator action, seal injection flow to the RCPs will __(1)__,

and

a reactor trip __(2)__ occur on pressurizer level.

	__(1)__	__(2)__
A.	increase	will
B.	increase	will NOT
C.	decrease	will
D.	decrease	will NOT

50.

Given the following:

- Unit 1 is in a refueling outage.

- Core reload is in progress.
- The personnel air lock is being used for access.
- The equipment hatch is open.
- Designated personnel are available to close the equipment hatch and airlock.

Which one of the following completes the following statements?

Per Tech Spec 3.9.4, "Containment Penetrations," __(1)__ personnel air lock door(s) must be capable of being closed.

Per Tech Spec 3.9.4, the equipment hatch must be capable of being closed by a minimum of __(2)__ bolts.

	__(1)__	__(2)__
A.	1	4
B.	1	8
C.	2	4
D.	2	8

51.

Initial condition:

- Unit 1 Waste Gas Decay Tank release is in progress.

Current condition:

- ARE-0014, Waste Gas Processing Effluent Monitor, is in **intermediate** alarm.
- No operator action has been taken.

Which one of the following completes the following statement?

ARV-0014, Plant Vent Radwaste Gas, isolation valve is __(1)__,

and

the position of ARV-0014 can be verified __(2)__.

A. (1) open

(2) on the IPC in the Control Room

B. (1) open

(2) locally on the Gaseous Waste Panel

C. (1) closed

(2) on the IPC in the Control Room

D. (1) closed

(2) locally on the Gaseous Waste Panel

52.

TR title as follows:

- TR 13.3.6, "Fuel Handling Building Post Accident Ventilation Actuation Instrumentation (common system)"

Initial conditions:

- Fuel movement is in progress in Unit 1 spent fuel pool.
- ARE-2533A/B, Fuel Handling Building Effluent Radiogas Monitor, is OOS.
- ARE-2532A/B, Fuel Handling Building Effluent Radiogas Monitor, is in service.

Current conditions:

- 1RE-008, Fuel Handling Building Area Monitor, detector fails **high**.
- Chemistry has removed 1RE-008 from service.

Which one of the following completes the following statement?

The personnel in the SFP area __(1)__ alerted to the failed detector by an audible alarm,

and

per TR 13.3.6, 1RE-008 __(2)__ required to be in service for movement of irradiated fuel in the SFP.

	__(1)__	__(2)__
A.	were	is
B.	were	is NOT
C.	were NOT	is
D.	were NOT	is NOT

53.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- 1RE-1950, ACCW - Liquid, radiation level trends up and then stabilizes.
- ACCW surge tank level increases slightly and then stabilizes.

Which one of the following completes the following statement?

A __(1)__ heat exchanger tube leak has occurred,

and

the ACCW surge tank level stabilized due to an automatic isolation of the flow path due to high __(2)__.

	__(1)__	__(2)__
A.	letdown	flow
B.	letdown	temperature
C.	thermal barrier	flow
D.	thermal barrier	temperature

54.

Initial conditions:

- Unit 1 is at 100% reactor power.
- ACCW pump #1 is running.
- ACCW pump #2 is in standby.

Current conditions:

- An SI occurred and **has** been reset.
- 5 minutes later, RAT '1A' experiences a fault.
- DG1A re-energizes 1AA02 and completes the load sequence.

Which one of the following completes the following statement?

Based on the given sequence of events, ACCW pump #1 __(1)__ be running,

and

ACCW pump #2 __(2)__ be running.

	__(1)__	__(2)__
A.	will	will
B.	will	will NOT
C.	will NOT	will
D.	will NOT	will NOT

55.

Initial condition:

- Unit 1 is at 100% reactor power.

Current condition:

- 18017-C, "Abnormal Grid Disturbances / Loss of Grid," Section 'A' for "Degraded Grid Conditions," is in progress.

Which one of the following completes the following statement?

Per 18017-C, the DGs are __(1)__ to ensure availability,

and

the Main Generator is operated within the acceptable region of the reactive capability curve to prevent damage to the __(2)__ windings.

A. (1) maintained in standby alignment

   (2) Main Generator

B. (1) maintained in standby alignment

   (2) Reserve Auxiliary Transformer

C. (1) started and carrying the 1E buses

   (2) Main Generator

D. (1) started and carrying the 1E buses

   (2) Reserve Auxiliary Transformer

56.

Initial conditions:

- Unit 1 is at 100% reactor power.
- Air Compressors #1 and #3 are in service.

Current conditions:

- ALB01-C06 SERVICE AIR HDR LO PRESS is received.
- 1PI-9377, Service Air Header Pressure, on the QMCB lowered to 92 psig and is now stable at 105 psig.

- No operator action has been taken.

Which one of the following completes the following statement?

All air compressors in AUTO-PTL __(1)__ currently running,

and

1-PV-9375, Service Air Dryer Inlet Isolation Valve, __(2)__ closed.

	__(1)__	__(2)__
A.	are	is
B.	are	is NOT
C.	are NOT	is
D.	are NOT	is NOT

57.

Initial condition:

- Unit 1 at 100% reactor power.

Current condition:

- The running fire water jockey pump trips.

Which one of the following completes the following statement?

The standby fire water jockey pump __(1)__ automatically start as fire header pressure lowers,

and

the electric fire pump's automatic start setpoint is __(2)__ psig.

	__(1)__	__(2)__
A.	will	95
B.	will	110
C.	will NOT	95
D.	will NOT	110

58.

Initial conditions:

- LOCA has occurred on Unit 1.
- 19000-C, "Reactor Trip or Safety Injection," is entered.
- Verification of Immediate Operator Actions is complete.
- Containment pressure is 23.8 psig.

Current conditions:

- ALB06-D06 CNMT SPRAY ACTUATION is NOT lit.
- ALB06-E06 CNMT ISO PHASE A ACTUATION is NOT lit.

Which one of the following completes the following statement?

The **first** required action in 19000-C to be performed by the crew is to actuate __(1)__,

and

this action will be taken using __(2)__ direction.

	__(1)__	__(2)__
A.	CIA	Foldout Page
B.	CIA	OATC Initial Actions
C.	Containment Spray	Foldout Page
D.	Containment Spray	OATC Initial Actions

59.

Given the following:

- A LOCA with SI actuation occurred on Unit 1.
- SI can NOT be reset.

Which one of the following completes the following statement?

The CIA signal __(1)__ be reset,

and

the CVI signal __(2)__ be reset.

	__(1)__	__(2)__
A.	can	can
B.	can	can NOT
C.	can NOT	can
D.	can NOT	can NOT

60.

Initial condition:

- Unit 1 is in Mode 3.

Current condition:

- Operators are preparing to withdraw the shutdown banks per 12003-C, "Reactor Startup (Mode 3 to Mode 2)."

Which one of the following completes the following statement?

Per 12003-C, the crew is required to notify __(1)__ of the reactor startup prior to Mode 2 entry,

and

a "Mode 2" log entry is required when __(2)__ bank withdrawal commences.

A. (1) the Power Control Center by GenComm Web

   (2) control

B. (1) plant personnel by page announcement

   (2) control

C. (1) the Power Control Center by GenComm Web

   (2) shutdown

D. (1) plant personnel by page announcement

   (2) shutdown

61.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- ARE-2532A, FHB - Effluent Radiogas, fails **high**.
- ALB05-C03 HIGH RADIATION ALARM is received.

Which one of the following completes the following statement?

When ALB05-C03 is received, Train 'B' FHB Post Accident Filter Unit __(1)__ automatically start,

and

when the FHB Isolation Reset handswitch is taken to RESET, the white light illuminating alerts the operator that the actuation signal __(2)__ present.

	__(1)__	__(2)__
A.	will	is
B.	will	is NOT
C.	will NOT	is
D.	will NOT	is NOT

62.

Given the following:

- Unit 1 Control Room is being evacuated due to a fire.
- The operating crew is fully staffed.

Which one of the following completes the following statement?

Per 18038-1, "Operation From Remote Shutdown Panels," the __(1)__ will be dispatched to Shutdown Panel 'C' (TDAFW Pump Room),

and

the **preferred** method for establishing communications between all stations is via __(2)__.

	__(1)__	__(2)__
A.	Unit Operator	sound powered telephones (red box)
B.	Unit Operator	bridge phone extension 3145, codes 123# or 234#
C.	Systems Operator	sound powered telephones (red box)
D.	Systems Operator	bridge phone extension 3145, codes 123# or 234#

63.

Initial conditions:

- Unit 1 is at 45% reactor power.
- EHC Pump 'A' discharge filter #8 is in service.
- EHC Pump 'A' discharge filter #4 is tagged out for replacement.

Current conditions:

- The following EHC Pump 'A' discharge filter #4 valve tags are ready for release:

  1-1615-U4-592, EHC HYD PUMP 'A' DISCH FILTER #4 INLET ISO
  1-1615-U4-593, EHC HYD PUMP 'A' DISCH FILTER #4 OUTLET ISO

- EHC Pump 'A' discharge filter #8 is to remain in service.

Which one of the following completes the following statement?

Both valves will be __(1)__ after the tagout is released to standby alignment,

and

if EHC pressure were to lower to 1000 psig, the reactor __(2)__ trip.

REFERENCES PROVIDED

	__(1)__	__(2)__
A.	OPEN	would
B.	OPEN	would NOT
C.	CLOSED	would
D.	CLOSED	would NOT

64.

Procedure title as follows:

- 14807A-1, "Train 'A' Motor Driven Auxiliary Feedwater Pump and Check Valve Inservice and Response Time Test"

At time 1000:

- Unit 1 is at 7% reactor power with a startup in progress.
- MDAFW pump 'A' discharge valves, 1HV-5137 and 1HV-5139, to the SGs are closed by the UO to perform a surveillance per 14807A-1.

At time 1005:

- MDAFW pump 'A' is started.

At time 1010:

- MDAFW pump 'A' is stopped.

At time 1015:

- Train 'A' MDAFW system is returned to normal standby alignment.

Which one of the following completes the following statement?

During performance of the surveillance and per Tech Spec 3.7.5, "Auxiliary Feedwater (AFW) System," the UO would track an LCO not met (out-of-service) time of __(1)__ minutes,

and

if a Train 'A' MDAFW actuation signal were received during the surveillance when the discharge valves were closed, the valves would __(2)__.

	__(1)__	__(2)__
A.	10	automatically open
B.	10	remain closed
C.	15	automatically open
D.	15	remain closed

65.

Initial conditions:

- Unit 1 is in Mode 5.
- RCS level has been lowered to 192 feet to remove the reactor head.
- ALARA briefing is in progress for closing the Equipment Hatch.

Current conditions:

- The Unit Operator is performing a surveillance that specifies an Independent Verification (IV) of a manual valve inside containment.

- The area where the valve is located has the following conditions:
  - Airborne contamination is 0.1 DAC.
  - The operator is expected to receive 15 mrem of dose while performing the IV.

Per NMP-GM-005-002, "Human Performance Tools Instruction," which one of the following identifies the reason for waiving the IV?

A. 15 mrem exposure

B. Plant Mode of operation

C. RCS at reduced inventory

D. 0.1 DAC airborne contamination

66.

Initial condition:

- Unit 1 is at 11% reactor power with a startup in progress following a refueling outage.

Current condition:

- ALB15-C01 HIGH RADIATION ALARM is received due to SG tube leakage.

Which one of the following completes the following statement?

1RE-0724, Steam Line Radiation, __(1)__ available to monitor SG activity,

and

the monitor is designed to detect __(2)__ radiation.

	__(1)__	__(2)__
A.	is	noble gas
B.	is	nitrogen-16
C.	is NOT	noble gas
D.	is NOT	nitrogen-16

67.

Initial condition:

- Unit 1 and Unit 2 are at 100% reactor power.

Current conditions:

- Unit 1, ALB05-C03 HIGH RADIATION ALARM is received.
- 1RE-12116, Control Room Air Intake Radiogas Monitor (Train 'A'), **red** indication light is illuminated on the SRDC.

- Unit 2 has **no** radiation monitor in alarm.

Which one of the following completes the following statement?

The **Unit 1**, Train 'B' CREFS unit __(1)__ automatically start,

and

the **Unit 2**, Train 'B' CREFS unit __(2)__ automatically start.

	__(1)__	__(2)__
A.	will	will
B.	will	will NOT
C.	will NOT	will
D.	will NOT	will NOT

68.

Given the following:

- Both Unit 1 and Unit 2 are at 100% reactor power.
- A fire occurs in the Fuel Handling Building as a result of a **seismic** event.

Which one of the following completes the following statement?

The __(1)__ pumps and piping are designed to provide firefighting water following the seismic event,

and

per 13903-C, "Fire Protection System Operation," the seismic flow path __(2)__ be automatically aligned.

	__(1)__	__(2)__
A.	NSCW	will
B.	NSCW	will NOT
C.	Diesel fire	will
D.	Diesel fire	will NOT

69.

Initial conditions:

- Unit 1 is at 100% reactor power.
- ALB13-A01 STM GEN 1 FLOW MISMATCH is received.

Current conditions:

- RCS pressure is 2237 psig and rising.
- Main generator output is 1225 MWe and rising.

Which one of the following completes the following statements?

Based on the current conditions, a __(1)__ line break is in progress.

Per 10020-C, "EOP and AOP Rules of Usage," isolating the main steam lines on a secondary fault __(2)__ an approved early operator action.

	__(1)__	__(2)__
A.	feed	is
B.	feed	is NOT
C.	steam	is
D.	steam	is NOT

70.

Initial condition:

- 19010-C, "Loss of Reactor or Secondary Coolant," is in use.

Current conditions:

- Step 11, "Check if ECCS flow should be reduced," is in progress with the following conditions:
  - RCS pressure is 1335 psig and stable.
  - Pressurizer level is 30% and stable.
  - CETCs are 550°F.
  - The highest WR Thot is 540°F.
  - Containment pressure is 4.5 psig.
  - All SG NR levels are <10% with 200 gpm AFW flow to each SG.

Which one of the following completes the following statement?

Based on the current conditions, ECCS flow __(1)__ be reduced because __(2)__.

A. (1) can

   (2) all termination criteria have been satisfied

B. (1) can NOT

   (2) pressurizer level and RCS subcooling do not meet termination criteria

C. (1) can NOT

   (2) RCS subcooling and secondary heat sink do not meet termination criteria

D. (1) can NOT

   (2) pressurizer level is the only termination criterion not met

71.

Initial condition:

- The crew is performing 19112-C, "LOCA Outside Containment."

Current condition:

- RCS pressure is 1500 psig.

Which one of the following completes the following statement?

Per 19112-C, the **first** system to be isolated from the RCS to attempt leak isolation is __(1)__,

and

per 19112-C, to determine if the leak is isolated, the operator is directed to check for rising RCS __(2)__.

	__(1)__	__(2)__
A.	SI	subcooling
B.	SI	pressure
C.	RHR	subcooling
D.	RHR	pressure

72.

Initial conditions:

- Unit 1 reactor tripped.
- 19231-C, "Response to Loss of Secondary Heat Sink," is in use.
- Bleed and Feed has been initiated.
- 1AA02 is faulted.
- SIP 'B' is running.
- 1PORV-455 is CLOSED.
- 1PORV-456 is OPEN.

Current conditions:

- ALB07-C06 CHARGING PUMP OVERLOAD TRIP is received.
- ALB07-B06 CHARGING LINE HI/LO FLOW is received.
- CCP 'B' handswitch green and amber lights are lit.

Which one of the following completes the following statement?

Per 19231-C, the minimum requirement for the RCS **Feed** path __(1)__ met,

and

the Reactor Head vents must be __(2)__ to delay core uncovery.

	__(1)__	__(2)__
A.	is	opened
B.	is	verified closed
C.	is NOT	opened
D.	is NOT	verified closed

73.

Initial condition:

- A steam line break inside containment occurred on Unit 1.

Current conditions:

- RCS cold leg temperature is slowly lowering.
- RCS pressure is slowly lowering.
- 19241-C, "Response to Imminent Pressurized Thermal Shock Condition," is in progress.

Which one of the following completes the following statement?

Per 19241-C major operator actions, the in-progress RCS cooldown __(1)__ required to be stopped,

and

the in-progress RCS depressurization __(2)__ required to be stopped.

	__(1)__	__(2)__
A.	is	is
B.	is	is NOT
C.	is NOT	is
D.	is NOT	is NOT

74.

Initial conditions:

- Large break LOCA occurred on Unit 1.
- Containment pressure is 23 psig.
- Both Containment Spray (CS) Pumps are running.
- RWST level is 26% and lowering.
- Four Containment Coolers are running in low speed.

Current conditions:

- 19111-C, "Loss of Emergency Coolant Recirculation," is in progress.
- The crew is at the step to "Determine Containment Spray requirements."

Which one of the following completes the following statement?

Per 19111-C, for the current conditions, __(1)__ CS pump(s) is(are) required to be running,

and

when a CS pump is stopped, its discharge valve __(2)__ automatically close.

REFERENCES PROVIDED

	__(1)__	__(2)__
A.	0	will
B.	0	will NOT
C.	1	will
D.	1	will NOT

75.

Given the following:

- Large break LOCA is in progress on Unit 1.
- 1RE-002, 1RE-003, 1RE-005, and 1RE-006, Containment Area Radiation, are in **high** alarm.
- 19013-C, "Transfer to Cold Leg Recirculation," is in progress.
- The crew just completed realigning Containment Spray suctions.

Which one of the following completes the following statement?

Per 19013-C, if dose rates will not allow reading local suction and discharge pressure indications, proper operation of Containment Spray shall be verified by observing containment __(1)__ lowering,

and

per 19010-C, "Loss of Reactor or Secondary Coolant," Containment Spray is required to remain in the recirculation mode for no less than __(2)__ hours.

	__(1)__	__(2)__
A.	pressure	1.5
B.	pressure	2
C.	temperature	1.5
D.	temperature	2

Name: _____

NRC - SRO Exam
Student Test

***Start Time*:** _____

***Stop Time*:** _____

1.

Procedure titles as follows:

- 18003-C, "Rod Control System Malfunction"
- 19000-C, "Reactor Trip or Safety Injection"
- NMP-EP-110-GL03, "VEGP EALS - ICs, Threshold Values And Basis"

Initial conditions:

- Unit 1 reactor startup is in progress per 12003-C, "Reactor Startup (Mode 3 to Mode 2)."
- Source range instruments, NI-31/32, each indicate ~100 cps.

Current conditions:

- When CBA rods are withdrawn to 50 steps, they continue to step outward after the Rod Motion Switch is released.
- 18003-C is entered.
- NI-31/32 each indicate ~1000 cps.
- The reactor did NOT trip using the first reactor trip handswitch.
- The reactor tripped using the second reactor trip handswitch.

Which one of the following completes the following statements?

Per 18003-C, following the reactor trip, the operating crew will __(1)__ 19000-C.

An emergency classification threshold value __(2)__ been exceeded per NMP-EP-110-GL03.

REFERENCES PROVIDED

	__(1)__	__(2)__
A.	initiate	has
B.	initiate	has NOT
C.	go to	has
D.	go to	has NOT

2.

Initial conditions:

- Unit 1 reactor power lowered due to an inadvertent turbine runback.
- ALB10-C04 ROD BANK LO LIMIT was received.
- ALB10-D04 ROD BANK LO-LO LIMIT was received.

Current conditions:

- Main turbine load has been stabilized.
- RCS Tavg is 2°F below Tref.
- The OATC has requested a 2-step rod withdrawal for temperature control.

Which one of the following completes the following statement?

Based on the current conditions and using the Plant Computer data provided, ALB10-D04 __(1)__ valid,

and

based on the current conditions and NMP-OS-001, "Reactivity Management Program," guidance, the Shift Supervisor is __(2)__ to authorize a 2-step control rod withdrawal for Tavg control.

REFERENCES PROVIDED

	__(1)__	__(2)__
A.	is	allowed
B.	is	NOT allowed
C.	is NOT	allowed
D.	is NOT	NOT allowed

3.

Initial conditions:

- Unit 1 experienced a small break LOCA.
- 19000-C, "Reactor Trip or Safety Injection," is in progress.
- Loop 3 RCS Tcold instrumentation is NOT available.

Current condition:

- RCS pressure is 1350 psig and slowly lowering.

Which one of the following completes the following statement?

Stopping the RCPs is required to minimize the risk of __(1)__,

and

per the Bases of Tech Spec 3.3.3, "Post Accident Monitoring (PAM) Instrumentation," for diverse indication of Loop 3 RCS Tcold temperature, the operator __(2)__ directed to use Loop 3 steam generator pressure.

	__(1)__	__(2)__
A.	core uncovery	is
B.	core uncovery	is NOT
C.	RCP damage	is
D.	RCP damage	is NOT

4.

Procedure titles as follows:

- 19000-C, "Reactor Trip or Safety Injection"
- 13003-1, "Reactor Coolant Pump Operation"
- 18005-C, "Partial Loss of Flow"

Initial condition:

- Unit 1 is at 16% reactor power with a startup in progress.

Current conditions:

- ALB08-A04 RCP 1 NO. 2 SEAL LKOF HI FLOW is received.
- ALB08-A05 RCP 1 CONTROLLED LKG HI/LO FLOW is received.
- 1FI-160A, #1 Seal Leak-Off, for RCP #1 is indicating 6.0 gpm.

Which one of the following completes the following statement?

RCP #1, seal __(1)__ has failed,

and

per 13003-1, the Shift Supervisor will direct the crew to __(2)__.

	__(1)__	__(2)__
A.	#1	initiate 18005-C
B.	#1	trip the reactor and initiate 19000-C
C.	#2	initiate 18005-C
D.	#2	trip the reactor and initiate 19000-C

5.

Initial conditions:

- Unit 1 is at 100% reactor power.
- CCW pump #5 is tagged out for maintenance.
- 1-LSLL-1854, CCW Surge Tank level switch for CCW pump #3, has failed.
- ALB02-A05 CCW TRAIN A SURGE TK LO-LO LVL is received.

Current conditions:

- ALB02-A06 CCW TRAIN A LO HDR PRESS is received.
- ALB02-B06 CCW TRAIN A LO FLOW is received.

Which one of the following completes the following statement?

Based on the current conditions, the Demin Water Makeup Valve to the CCW Train 'A' Surge Tank __(1)__ automatically opened,

and

per Tech Spec 3.7.7, "Component Cooling Water (CCW) System," Train 'A' CCW is declared __(2)__.

	__(1)__	__(2)__
A.	has	OPERABLE
B.	has	inoperable
C.	has NOT	OPERABLE
D.	has NOT	inoperable

6.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- ALB12-F01 PRZR SAFETY RELIEF DISCH HI TEMP is received.
- PRT level, temperature, and pressure are all increasing.
- CVCS charging flow is 122 gpm.
- All RCP seal injection and #1 seal return flows are within normal operating range.
- CVCS letdown is isolated.
- Pressurizer level is 55% and stable.

Which one of the following completes the following statement?

Per Tech Spec 3.4.13, "RCS Operational Leakage," the RCS leakage is classified as __(1)__,

and

per NMP-EP-110, "Emergency Classification Determination and Initial Action," the Shift Manager is required to declare as a minimum a(n) __(2)__.

REFERENCES PROVIDED

	__(1)__	__(2)__
A.	identified	NOUE
B.	identified	Alert
C.	unidentified	NOUE
D.	unidentified	Alert

7.

Initial conditions:

- Unit 1 is at 100% reactor power.
- Containment Cooler #1 high speed fan breaker trips.

Current conditions:

- ALB01-E06 CNMT HI TEMP is received.
- IPC data for containment temperature is collected.

Which one of the following completes the following statement?

Based on the IPC data provided, the Tech Spec Surveillance for containment temperature (Tech Spec SR 3.6.5.1) __(1)__ within Tech Spec limits,

and

per the applicable ARP and SOP, the crew is required, as a minimum, to __(2)__.

REFERENCES PROVIDED

A. (1) is

(2) start one additional Containment Cooler

B. (1) is

(2) stop Containment Cooler #2, then start an additional pair of Containment Coolers

C. (1) is NOT

(2) start one additional Containment Cooler

D. (1) is NOT

(2) stop Containment Cooler #2, then start an additional pair of Containment Coolers

8.

At time 1055:

- Unit 1 is in Mode 5.
- Containment integrity is NOT established.
- Pressurizer level is 27%.
- All Pressurizer Safety Valves are removed.

At time 1100:

- An LOSP occurs.
- DG1A trips on overspeed.
- RHR pump 'B' will NOT start following the load sequence.
- RCS temperature is 200°F and increasing.

Which one of the following completes the following statement?

At time 1115, the Shift Manager must declare a(n) __(1)__ per NMP-EP-110, "Emergency Classification Determination and Initial Action,"

and

per NMP-EP-111, "Emergency Notifications," the NRC is required to be notified of the declaration no later than time __(2)__.

REFERENCES PROVIDED

	__(1)__	__(2)__
A.	NOUE	1200
B.	NOUE	1215
C.	Alert	1200
D.	Alert	1215

9.

At time 1000:

- Unit 1 is at 100% reactor power.

At time 1005:

- ALB04-A03 ACCW RCP 1 CLR LOW FLOW is received.
- ALB04-A04 ACCW RCP 1 CLR OUTLET HI TEMP is received.
- 18022-C, "Loss of Auxiliary Component Cooling Water," is entered.

At time 1007:

- RCP #1 seal water inlet temperature is 220°F and rising at 1°F per minute.
- RCP #1 motor stator winding temperature is 307°F and rising at 1°F per minute.

Which one of the following completes the following statement?

__(1)__ temperature is the **first** parameter which will require stopping the RCP,

and

after the reactor is tripped, the Shift Supervisor directs the OATC to stop the affected RCP per __(2)__ direction.

A. (1) Motor stator winding

   (2) 18022-C, "Loss of Auxiliary Component Cooling Water"

B. (1) Motor stator winding

   (2) 19000-C, "Reactor Trip or Safety Injection"

C. (1) Seal water inlet

   (2) 18022-C, "Loss of Auxiliary Component Cooling Water"

D. (1) Seal water inlet

   (2) 19000-C, "Reactor Trip or Safety Injection"

10.

Initial condition:

- Unit 1 reactor trip and SI occurred.

Current conditions:

- 19011-C, "SI Termination," Step 21, is in progress to evaluate if a bubble exists in the pressurizer.
- Controlling pressurizer level channel, 1LT-459, fails **low**.
- Actual pressurizer level is 92% and slowly rising.

Which one of the following completes the following statement?

Per 10020-C, "EOP and AOP Rules of Usage," the Shift Supervisor __(1)__ direct the use of 18001-C, "Systems Instrumentation Malfunction," guidance to restore pressurizer heaters to service while performing 19011-C actions,

and

in response to actual pressurizer level, the Shift Supervisor __(2)__ required to transition to 19261-C, "Response to High Pressurizer Level."

	__(1)__	__(2)__
A.	may	is NOT
B.	may	is
C.	may NOT	is NOT
D.	may NOT	is

11.

At time 1000:

- Unit 1 is in Mode 6.
- Source Range NI-31/32 each indicate ~10 cps.

At time 1005:

- QMCB SR NI-32 meter is indicating bottom of scale.
- All protection channel I bistable lights are lit.
- ALB34-C01 120V AC PANELS 1BY1B 1BY2B TROUBLE is received.

At time 1015:

- SR NI-32 is re-energized from 1NLP39.
- Functional Testing has been performed with satisfactory results.

Which one of the following completes the following statements?

Per Tech Spec LCO 3.9.3, "Nuclear Instrumentation," __(1)__ Source Range channels are required to be OPERABLE.

At **time 1015**, Source Range channel NI-32 __(2)__ considered OPERABLE per the Tech Spec 3.9.3 Bases.

	__(1)__	__(2)__
A.	1	is
B.	1	is NOT
C.	2	is
D.	2	is NOT

12.

Procedure 13719-1, "Spent Fuel Pool Cooling and Purification," sections as follows:

- Section 4.2.2, "SFP Makeup from the RWST through the SFP Purification Loop"
- Section 4.2.4, "SFP Makeup from the RMWST"

Initial conditions:

- Unit 1 is defueled.
- Transfer canal is drained for transfer cart inspection.
- Spent fuel shuffle is in progress in the FHB.

Current conditions:

- ALB05-E02 SPENT FUEL PIT LO LEVEL is received.
- Personnel in the FHB report SFP level is slowly lowering.
- 18030-C, "Loss of Spent Fuel Pool Level or Cooling," is entered.

Which one of the following completes the following statement?

To mitigate the consequences of the event, the Shift Supervisor is required to direct makeup to the SFP using 13719-1, Section __(1)__,

and

per the Bases of Tech Spec 3.7.15, "Fuel Storage Pool Water Level," maintaining the required minimum water level in the SFP __(2)__ ensure adequate iodine decontamination factors are met for a fuel handling accident.

	__(1)__	__(2)__
A.	4.2.2	does
B.	4.2.2	does NOT
C.	4.2.4	does
D.	4.2.4	does NOT

13.

At time 1000:

- Unit 1 is at 100% reactor power.
- 18009-C, "Steam Generator Tube Leak," is in progress.
- SG sample results indicate high activity on SG #1.

At time 1020:

- 1RE-0724, Steam Line Rad Monitor, indicates 105 gpd.
- 1RE-0810, SJAE Exhaust Rad Monitor, indicates 120 gpd.
- 1RE-0724 ROC is 55 gpd/hour.
- 1RE-0810 ROC is 60 gpd/hour.

Which one of the following completes the following statement?

Per Tech Spec 3.4.13, "RCS Operational Leakage," the primary to secondary leakage __(1)__ exceed the limit,

and

per 18009-C, the Shift Supervisor is required to initiate __(2)__ to lower reactor power.

	__(1)__	__(2)__
A.	does	18013-C, "Rapid Power Reduction"
B.	does	12004-C, "Power Operation (Mode 1)"
C.	does NOT	18013-C, "Rapid Power Reduction"
D.	does NOT	12004-C, "Power Operation (Mode 1)"

14.

Procedure titles are as follows:

- 18034-1, "Loss of Class 1E 125 VDC Power"
- 19000-C, "Reactor Trip or Safety Injection"

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- All Train 'A' MSIV red and green handswitch lights extinguish.
- All Train 'A' MFIV red and green handswitch lights extinguish.
- RTB 'A' red and green lights extinguish.
- RCP #1 1E breaker red and green handswitch lights extinguish.
- Channel I TSLB bistable lights illuminate.

Which one of the following completes the following statement?

The Shift Supervisor __(1)__ required to enter 18034-1,

and

the Shift Supervisor __(2)__ required to enter 19000-C.

	__(1)__	__(2)__
A.	is	is
B.	is	is NOT
C.	is NOT	is
D.	is NOT	is NOT

15.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- The Shift Supervisor discovers the 24 hour Channel Check for Train 'A' NSCW basin level, 1LI-1606, was missed.
- The last performance of the 24 hour Channel Check was 0030 on 5-11-14.
- Time of discovery of the missed surveillance was 1700 on 5-12-14.

- A risk evaluation will NOT be performed.

Which one of the following describes the status of the applicable LCO?

A. The LCO was NOT met as of 0030 on 5-12-14.

B. The LCO was NOT met as of 0630 on 5-12-14.

C. The LCO is met provided the missed surveillance is performed satisfactorily no later than 1700 on 5-13-14.

D. The LCO is met provided the missed surveillance is performed satisfactorily no later than 2300 on 5-13-14.

16.

Initial conditions:

- Unit 1 is at 100% reactor power.
- SI Pump 'A' is tagged out.

Current conditions:

- Train 'B' NSCW supply header pressure is 75 psig and lowering.
- Train 'B' NSCW supply header flow is 25,000 gpm.
- Train 'B' NSCW return header flow is 10,000 gpm.
- 18021-C, "Loss of Nuclear Service Cooling Water System," is entered.

Which one of the following completes the following statement?

Per 18021-C, the crew is required to __(1)__ the standby Train 'B' NSCW pump,

and

after completing the actions of 18021-C, the Shift Supervisor will determine per 10008-C, "Recording Limiting Conditions for Operation," that a LOSF __(2)__ exist.

	__(1)__	__(2)__
A.	start	does
B.	start	does NOT
C.	place in PTL	does
D.	place in PTL	does NOT

17.

Initial condition:

- Unit 1 is at 100% reactor power.

Current conditions:

- The following reactor coolant Dose Equivalent I-131 trends are recorded:

TIME	ACTIVITY (μCi/gm)
1130	0.8
1145	1.1
1200	1.3
1215	1.6

Which one of the following completes the following statement?

The **first** time that Tech Spec LCO 3.4.16, "RCS Specific Activity," is NOT met is __(1)__,

and

per the Bases of Tech Spec 3.4.16, "RCS Specific Activity," the required action to reduce RCS Tavg below 500°F if the gross specific activity is exceeded is to prevent opening of the __(2)__.

	__(1)__	__(2)__
A.	1145	Atmospheric Relief Valves
B.	1145	Main Steam Safety Valves
C.	1215	Atmospheric Relief Valves
D.	1215	Main Steam Safety Valves

18.

Given the following:

- Unit 1 is at 100% reactor power.

Which one of the following completes the following statement?

Per Tech Spec 3.7.16, "Secondary Specific Activity," the specific activity of the secondary coolant shall be ≤ __(1)__ μCi/gm Dose Equivalent I-131,

and

operating within this limit ensures that the off-site dose will be limited to within a small fraction of the 10 CFR 100 dose guideline values in the event of a __(2)__.

	__(1)__	__(2)__
A.	0.1	steam line break
B.	0.1	loss of all AC power
C.	1.0	steam line break
D.	1.0	loss of all AC power

19.

Given the following:

- Unit 1 is at 3% reactor power and increasing following an outage.
- Unit 2 is at 100% reactor power.
- The Shift Manager and the following assigned personnel are in the control room:

Unit 1	**Unit 2**
Shift Supervisor	Shift Supervisor
Reactivity Management SRO	1 NPO*
2 NPOs*	

(*) NPO - Individual with a Reactor Operator License.

Which one of the following completes the following statement?

Per TR 15.1, "Unit Staffing," the total number of NPOs assigned __(1)__ meet the minimum required for the given conditions,

and

per NMP-OS-001, "Reactivity Management Program," any changes to the Unit 1 **reactivity plan** must be approved by the __(2)__.

	__(1)__	__(2)__
A.	does	Reactivity Management SRO
B.	does	Shift Supervisor
C.	does NOT	Reactivity Management SRO
D.	does NOT	Shift Supervisor

20.

Initial condition:

- ALB34-D01 125 VDC SWGR 1AD1 TROUBLE is received due to a bus ground.

Current conditions:

- Per NMP-AD-002, "Problem Solving and Troubleshooting Guidelines," a troubleshooting plan has been written.
- As part of the plan, operations personnel will open various breakers and maintenance personnel will open links to measure resistance inside the 1AD1 panel.

Which one of the following completes the following statement?

This type of Troubleshooting Monitoring is called __(1)__,

and

the tracking of the equipment out-of-service time while troubleshooting 1AD1 is the responsibility of the __(2)__ Department.

A. (1) Intrusive

   (2) Maintenance

B. (1) Intrusive

   (2) Operations

C. (1) Non-Intrusive

   (2) Maintenance

D. (1) Non-Intrusive

   (2) Operations

21.

Given the following:

- Unit 1 is at 100% reactor power.
- The following RWST parameters are recorded:

  Temperature is 47°F.
  Level is 93%.

Which one of the following completes the following statement?

Tech Spec action is required for RWST __(1)__,

and

the Tech Spec Basis for this parameter limit is to ensure __(2)__.

A. (1) Level

   (2) sufficient borated water to support the ECCS during the injection phase of a design basis **main steam line break**

B. (1) Level

   (2) sufficient borated water to support the ECCS during the injection phase of a design basis **loss of coolant accident**

C. (1) Temperature

   (2) that the amount of cooling provided from the RWST during the heatup phase of a **main steam line break** is consistent with safety analysis assumptions

D. (1) Temperature

   (2) that the amount of cooling provided from the RWST during the heatup phase of a **main feed line break** is consistent with safety analysis assumptions

22.

Initial condition:

- A General Emergency has been declared.

Current conditions:

- A first responder is briefed to rescue an injured worker.
- Health Physics estimates the first responder will receive 11 rem TEDE dose while performing the rescue.

Which one of the following completes the following statement?

Per 91301-C, "Emergency Exposure Guidelines," the dose received by the first responder during the rescue __(1)__ be added to the responder's occupational non-emergency exposure,

and

the **lowest** level of approval required to authorize the first responder's rescue exposure is the __(2)__.

	__(1)__	__(2)__
A.	will	Health Physics Supervisor
B.	will	Emergency Director
C.	will NOT	Health Physics Supervisor
D.	will NOT	Emergency Director

23.

Given the following:

- A Systems Operator (SO) will make multiple entries into AB-A-33 to place the CVCS cation demineralizer in service.
- The SO will use RWP 14-0108 (red RWP).
- The SO will exceed the Annual Administrative 4000 mrem per year TEDE limit during the task.

Which one of the following completes the following statement?

The SO __(1)__ required to receive an ALARA briefing prior to **each** AB-A-33 entry,

and

per NMP-HP-001, "Radiation Protection Standard Practices," the __(2)__ is the **lowest** level of approval required to exceed the Administrative dose limit.

	__(1)__	__(2)__
A.	is	Health Physics Manager
B.	is	Plant Manager
C.	is NOT	Health Physics Manager
D.	is NOT	Plant Manager

24.

At time 1000:

- Unit 1 is in Mode 6.

At time 1005 the following alarms are received:

- ALB32-D02 RESV AUX XFMR 1NXRA HI SIDE PHOC LOR TRIP
- ALB32-E02 RESV AUX XFMR 1NXRB HI SIDE PHOC LOR TRIP

- ALB35-A10 DG1A TRIP OVERSPEED
- ALB35-F10 DG1A EMERGENCY START
- ALB36-A01 4160V SWGR 1AA02 TROUBLE

- ALB37-A01 4160V SWGR 1BA03 TROUBLE alarms, then subsequently clears.
- ALB38-F10 DG1B EMERGENCY START

Current time is 1025:

Based on the current time, which one of the following is the correct Emergency Classification required to be declared?

REFERENCES PROVIDED

A. Alert Emergency (CA3)

B. Alert Emergency (SA5)

C. Notification of Unusual Event (SU1)

D. Notification of Unusual Event (CU3)

25.

Initial conditions:

- Unit 1 experienced a LOCA.
- 19111-C, "Loss of Emergency Coolant Recirculation," was entered.
- RCS cooldown to cold shutdown has been initiated.
- RWST level is 8% and slowly lowering.

Current condition:

- Critical Safety Function Status Tree (CSFST) is ORANGE on Integrity.

Which one of the following completes the following statement?

The crew is required to __(1)__,

and

then the Shift Supervisor __(2)__ required to transition to 19241-C, "Response to Imminent Pressurized Thermal Shock Condition."

A. (1) stop all pumps taking suction from the RWST

   (2) is

B. (1) reduce ECCS flow from the RWST to one running train

   (2) is

C. (1) stop all pumps taking suction from the RWST

   (2) is NOT

D. (1) reduce ECCS flow from the RWST to one running train

   (2) is NOT

ANSWER KEY REPORT
for NRC - RO Exam Test Form: 0

#	ID	Points	Type	Answers 0
1	001K2.03 1	1.00	MCS	D
2	003A3.04 1	1.00	MCS	D
3	004K6.09 1	1.00	MCS	D
4	005A2.02 1	1.00	MCS	B
5	005AK3.05 1	1.00	MCS	D
6	005K5.09 1	1.00	MCS	C
7	006A1.06 1	1.00	MCS	C
8	006G2.4.47 1	1.00	MCS	A
9	007A2.02 1	1.00	MCS	D
10	007EA2.06 1	1.00	MCS	C
11	008A1.03 1	1.00	MCS	C
12	009EK2.03 1	1.00	MCS	A
13	010A3.02 1	1.00	MCS	A
14	010K6.02 1	1.00	MCS	C
15	011EK2.02 1	1.00	MCS	C
16	011K6.03 1	1.00	MCS	B
17	012K5.01 1	1.00	MCS	B
18	013K6.01 1	1.00	MCS	D
19	014A1.02 1	1.00	MCS	D
20	015A2.04 1	1.00	MCS	C
21	015AA1.23 1	1.00	MCS	C
22	022AK3.01 1	1.00	MCS	B
23	022K3.02 1	1.00	MCS	D
24	024AG2.2.22 1	1.00	MCS	C
25	026K1.01 1	1.00	MCS	B
26	026K2.02 1	1.00	MCS	C
27	027AK2.03 1	1.00	MCS	B
28	028K1.01 1	1.00	MCS	B
29	029EG2.4.34 1	1.00	MCS	D
30	033AG2.2.44 1	1.00	MCS	A
31	034A4.01 1	1.00	MCS	B
32	038EA2.05 1	1.00	MCS	B
33	039K4.02 1	1.00	MCS	C
34	040AG2.2.36 1	1.00	MCS	D
35	045K5.17 1	1.00	MCS	B
36	054AA1.02 1	1.00	MCS	C
37	055EK1.02 1	1.00	MCS	B
38	056AK1.01 1	1.00	MCS	A
39	057AK3.01 1	1.00	MCS	A
40	059A4.03 1	1.00	MCS	D
41	059AK2.02 1	1.00	MCS	B
42	059K4.19 1	1.00	MCS	A
43	061AA2.03 1	1.00	MCS	A
44	061K2.01 1	1.00	MCS	A
45	062K3.02 1	1.00	MCS	B
46	062K4.07 1	1.00	MCS	D
47	063A1.01 1	1.00	MCS	C

ANSWER KEY REPORT
for NRC - RO Exam Test Form: 0

#	ID	Points	Type	Answers 0
48	064G2.1.31 1	1.00	MCS	A
49	065AA2.08 1	1.00	MCS	B
50	069AA2.02 1	1.00	MCS	A
51	071A3.03 1	1.00	MCS	B
52	072K3.02 1	1.00	MCS	B
53	073K1.01 1	1.00	MCS	C
54	076K2.04 1	1.00	MCS	A
55	077AK3.02 1	1.00	MCS	A
56	078A4.01 1	1.00	MCS	B
57	086K4.02 1	1.00	MCS	D
58	103A2.03 1	1.00	MCS	C
59	103K1.08 1	1.00	MCS	A
60	G2.1.14 1	1.00	MCS	B
61	G2.1.28 1	1.00	MCS	A
62	G2.1.8 1	1.00	MCS	C
63	G2.2.15 1	1.00	MCS	C
64	G2.2.23 1	1.00	MCS	C
65	G2.3.13 1	1.00	MCS	A
66	G2.3.15 1	1.00	MCS	D
67	G2.3.5 1	1.00	MCS	B
68	G2.4.25 1	1.00	MCS	B
69	G2.4.45 1	1.00	MCS	A
70	WE02EA1.03 1	1.00	MCS	B
71	WE04EK1.03 1	1.00	MCS	D
72	WE05EA1.02 1	1.00	MCS	A
73	WE08EK1.02 1	1.00	MCS	B
74	WE11G2.1.25 1	1.00	MCS	D
75	WE16EK2.02 1	1.00	MCS	A
SECTION 1 (75 items)		**75.00**		

ANSWER KEY REPORT
for NRC - SRO Exam Test Form: 0

#	ID	Points	Type	Answers 0
1	001AA2.04 1	1.00	MCS	D
2	001G2.1.19 1	1.00	MCS	A
3	003G2.4.3 1	1.00	MCS	A
4	004G2.2.44 1	1.00	MCS	B
5	008A2.02 1	1.00	MCS	D
6	008AG2.4.41 1	1.00	MCS	A
7	022G2.1.19 1	1.00	MCS	B
8	025AG2.4.30 1	1.00	MCS	D
9	026AA2.06 1	1.00	MCS	A
10	028AG2.4.8 1	1.00	MCS	A
11	032AA2.03 1	1.00	MCS	C
12	033A2.03 1	1.00	MCS	A
13	055G2.1.23 1	1.00	MCS	C
14	058AA2.03 1	1.00	MCS	A
15	062AG2.2.12 1	1.00	MCS	C
16	076A2.02 1	1.00	MCS	C
17	076AG2.4.47 1	1.00	MCS	B
18	G2.1.34 1	1.00	MCS	A
19	G2.1.37 1	1.00	MCS	B
20	G2.2.20 1	1.00	MCS	B
21	G2.2.25 1	1.00	MCS	B
22	G2.3.4 1	1.00	MCS	D
23	G2.3.7 1	1.00	MCS	B
24	G2.4.46 1	1.00	MCS	D
25	WE11EA2.02 1	1.00	MCS	A
SECTION 1 (25 items)		**25.00**		