

FACILITY NAME: _____ Oconee 2014-301 _____

Section 8

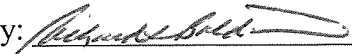
REPORT NUMBER: 2014-301

FINAL RO WRITTEN EXAM

CONTENTS:

- ☒ Final RO Written Exam (75 'as given' questions with changes made during administration annotated)
- ☒ Reference Handouts Provided To Applicants
- ☒ Answer Key

Location of Electronic Files:

Submitted By: 

Verified By: 

U.S. Nuclear Regulatory Commission
Site-Specific RO Written Examination**Applicant Information**

Name:

Date: **06/18/2014**Facility/Unit: **Oconee**Region: I ☐ II ☒ III ☐ IV ☐Reactor Type: W ☐ CE ☐ BW ☒ GE ☐

Start Time:

Finish Time:

Instructions

Use the answer sheets provided to document your answers. Staple this cover sheet on top of the answer sheets. To pass the examination, you must achieve a final grade of at least 80.00 percent. Examination papers will be collected 6 hours after the examination begins.

Applicant Certification

All work done on this examination is my own. I have neither given nor received aid.

Applicant's Signature**Results**Examination Value _____ 75 _____ Points

Applicant's Score _____ Points

Applicant's Grade _____ Percent

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 1
(1 point)

Given the following Unit 1 conditions:

- Reactor power = 100% stable
- 1) 1RC-66 (PORV) will OPEN if the 1RC-66 pilot valve solenoid is inadvertently ____ (1) ____.
 - 2) If 1RC-66 fails OPEN and NO operator action is taken, the reactor will trip on ____ (2) ____ RCS pressure
- A.
 1. energized
 2. Low
 - B.
 1. energized
 2. Variable Low
 - C.
 1. de-energized
 2. Low
 - D.
 1. de-energized
 2. Variable Low
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 2
(1 point)

Given the following Unit 1 conditions:

Time = 1700

- Reactor power = 100%

Time = 1701

- Reactor tripped

Time = 1706

- RCS pressure = 425 psig slowly decreasing
- All SCMs = 0°F and stable
- HPI header A flow = 478 gpm and stable
- 1A and 1B HPI pumps operating
- 1C HPI pump breaker failed open

Which ONE of the following describes what valve must be opened and what flow limit is in effect?

- A. Open 1HP-409 and ensure total HPI flow is ≤ 950 gpm
 - B. Open 1HP-409 and ensure total HPI flow is ≤ 750 gpm
 - C. Open 1HP-410 and ensure total HPI flow is ≤ 950 gpm
 - D. Open 1HP-410 and ensure total HPI flow is ≤ 750 gpm
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 3
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 0400
- Reactor power = 100%

Current conditions:

- Time = 0415
- 1SA-02/D-4 (RC PRESS EMERG LOW) actuated
- RCS pressure = 520 psig decreasing
- RB pressure = 2.7 psig increasing
- ONLY ES Channels 1 and 2 actuated

- 1) The HIGHER pressure that will result in a RCS Low Pressure reactor trip is (1).
- 2) At 0415 and in accordance with EOP Enclosure 5.1 (ES Actuation) (2).

Which ONE of the following completes the statements above?

- A.
 1. 1810 psig
 2. ES Channels 3 through 6 trip push buttons must be depressed
 - B.
 1. 1810 psig
 2. ONLY ES Channels 3 and 4 trip push buttons must be depressed
 - C.
 1. 1850 psig
 2. ES Channels 3 through 6 trip push buttons must be depressed
 - D.
 1. 1850 psig
 2. ONLY ES Channels 3 and 4 trip push buttons must be depressed
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 4
(1 point)

Given the following Unit 2 conditions:

- Reactor power = 100%
- 2HP-31 (RCP Seal Flow Control) failed CLOSED
- ALL individual RCP seal return valves CLOSED
- 2CC-8 (CC Return Block) failed CLOSED

- 1) 2HP-21 (RCP Seal Return) will (1) .
- 2) In accordance with 2AP/14 (Loss of HPI Normal Makeup and/or Seal Injection), the operator will be directed to trip the reactor and (2) .

Which ONE of the following completes the statements above?

- A.
 1. remain OPEN
 2. dispatch an operator to establish SSF RC Makeup
 - B.
 1. automatically CLOSE
 2. dispatch an operator to establish SSF RC Makeup
 - C.
 1. remain OPEN
 2. immediately secure ALL RCP's
 - D.
 1. automatically CLOSE
 2. immediately secure ALL RCP's
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 5
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%
- 1HP-31 (RCP Seal Flow Control) failed CLOSED
- AP/14 (Loss of Normal HPI Makeup and/or RCP Seal Injection) initiated

Current conditions:

- 1HP-31 has been repaired
- Seal injection flow is being re-established to the RCP seals

- 1) RCP seal injection flow is re-established slowly to prevent ____ (1) ____.
- 2) In accordance with AP/14, ____ (2) ____ is/are throttled opened to re-establish RCP seal injection flow.

Which ONE of the following completes the statements above?

- A.
 1. water hammer and possible damage to the RCP thermal barrier
 2. 1HP-31
 - B.
 1. water hammer and possible damage to the RCP thermal barrier
 2. the individual RCP Seal Injection Throttle valves
 - C.
 1. prevent thermal shock and possible damage to the RCP seals
 2. 1HP-31
 - D.
 1. prevent thermal shock and possible damage to the RCP seals
 2. the individual RCP Seal Injection Throttle valves
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 6
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Heatup in progress
- LPI in High Pressure mode

Current conditions:

- 1LP-12 (1A LPI Cooler Outlet) is inadvertently closed and will NOT open
- AP/26 (Loss of Decay Heat Removal) initiated

- 1) AP/26 will direct aligning LPI in the (1) Mode to restore RCS cooling.
- 2) When LPI flow is restored above, flow will be entering the reactor vessel via the (2) .

Which ONE of the following completes the statements above?

- A.
 1. Switchover
 2. "A" CFT nozzle ONLY
 - B.
 1. Switchover
 2. "A" and "B" CFT nozzles
 - C.
 1. Series
 2. "A" CFT nozzle ONLY
 - D.
 1. Series
 2. "A" and "B" CFT nozzles
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 7
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%
- 1A and 1B Letdown Coolers in service

Current conditions:

- 1A Letdown Cooler is removed from service by the RO in the control room

- 1) CC flow to the 1B Letdown Cooler will (1) .
- 2) If letdown temperature increases, control rods will (2) as a result of the reactivity change.

Which ONE of the following completes the statements above?

- A.
 1. stay the same
 2. insert
 - B.
 1. stay the same
 2. withdraw
 - C.
 1. increase
 2. insert
 - D.
 1. increase
 2. withdraw
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 8
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 0400
- Reactor power = 100%

Current conditions:

- Time = 0401
- A transient occurs
- RCS pressure decreased to 2141 psig
- RCS pressure = 2142 psig slowly increasing

Which ONE of the following lists ALL of the Pzr heater banks that are energized at 0401?

- A. Bank 1 ONLY
 - B. Banks 1 and 2 ONLY
 - C. Banks 1 and 3 ONLY
 - D. Banks 1, 2, 3 and 4
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 9
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 0400
- Reactor power = 100%

Current conditions:

- Time = 0405
- 1TA lockout occurs
- Reactor power = 90% decreasing
- ONLY one RO is currently in the Unit 1 horseshoe area

1. At 0405, the RO will be directed to perform (1).
2. When initiated, Rule 1 (2) direct tripping the Main Turbine.

Which ONE of the following completes the statements above?

- A. 1. Immediate Manual Actions
 2. will
 - B. 1. Immediate Manual Actions
 2. will NOT
 - C. 1. Rule 1
 2. will
 - D. 1. Rule 1
 2. will NOT
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 10
(1 point)

Given the following Unit 1 conditions:

Time = 0400

- Reactor power = 100%
- TDEFDW pump is OOS

Time = 0401

- Both Main FDW pumps trip
- Loss of 1A to 1FDW-316 occurs

Time = 0410

- 1A SG level = 27 inches XSUR increasing
- 1B SG level = 36 inches XSUR increasing

- 1) At 0410, (1) SG has indications of a tube leak.
- 2) At 0410 and in accordance with Rule 7 (SG Feed Control) the MAXIMUM EFDW flow allowed to each SG is (2) gpm.

Which ONE of the following completes the statements above?

- A.
 1. 1A
 2. 600
 - B.
 1. 1A
 2. 1000
 - C.
 1. 1B
 2. 600
 - D.
 1. 1B
 2. 1000
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 11
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%

Current conditions:

- Total loss of Main and Emergency Feedwater
- LOHT tab in progress
- Rule 4 (Initiation of HPI Forced Cooling) initiated

When Rule 4 is complete, (1) RCP(s) and (2) HPIP(s) will be operating.

Which ONE of the following completes the statement above?

- A. 1. ONLY one
 2. ONLY two
 - B. 1. ONLY one
 2. three
 - C. 1. ONLY two
 2. ONLY two
 - D. 1. ONLY two
 2. three
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 12
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 0400
- A station blackout has occurred

Current conditions:

- Time = 0730
- 1CA bus voltage = 105 VDC

At 0730 and in accordance with the Blackout tab, 1CC-8 (CC Return Block) (1) required to be failed closed because it fails (2).

Which ONE of the following completes the statement above?

- A. 1. is NOT
 2. closed on a loss of IA
 - B. 1. is NOT
 2. closed on a loss of DC power
 - C. 1. is
 2. open on a loss of IA
 - D. 1. is
 2. open on a loss of DC power
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 13
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%
- Switchyard Isolation (LOOP) occurs

Current conditions:

- MFBs energized from Keowee
- AP/11 (Recovery From Loss of Power) Step 4.16 in progress

Step 4.16 "Place transfer switches (N/E) in MAN for all Oconee units receiving power from the normal source (1T, 2T, 3T)."

- 1) A Load Shed (2) occurred on Unit 1.
- 2) The purpose for the above step is to (1) on a subsequent unit trip.

Which ONE of the following completes the statement above?

- A.
 1. has
 2. prevent an out of sync rapid bus transfer
 - B.
 1. has
 2. ensure a "slow" transfer does not occur
 - C.
 1. has NOT
 2. prevent an out of sync rapid bus transfer
 - D.
 1. has NOT
 2. ensure a "slow" transfer does not occur
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 14
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%
- SASS in MANUAL
- PZR level 1 selected

Current conditions:

- 1KVIA de-energized

1) 1HP-120 (RC Volume Control) will throttle (1) .

2) The operator will select Pzr level (2) to restore a valid Pzr level.

Which ONE of the following completes the statements above?

- A. 1. open
 2. 2
 - B. 1. open
 2. 3
 - C. 1. closed
 2. 2
 - D. 1. closed
 2. 3
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 15
(1 point)

Given the following plant conditions:

- 1CA Battery Charger fails
 - Output voltage = 0 VDC
- 1CA Battery voltage = 120 VDC
- 1DCB Bus voltage = 123 VDC
- Unit 2 DCA/DCB Bus voltage = 125 VDC
- Unit 3 DCA/DCB Bus voltage = 127 VDC

Which ONE of the following will automatically supply power to 1DIA panelboard?

- A. 1CA Battery
 - B. Unit 3 DC Bus
 - C. 1DCB Bus
 - D. Unit 2 DC Bus
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 16
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%
- A and B LPSW pumps operating

Current conditions:

- "A" LPSW pump trips due to breaker failure
 - Standby LPSW pump will NOT start
 - AP/24 (Loss of LPSW) initiated
 - LPSW header pressure decreases to 15 psig and is now increasing
- 1) 1LPSW-1121, 1122, 1123, and 1124 closed at a MAXIMUM LPSW header pressure of ____ (2) ____ psig decreasing
- 2) In accordance with AP/24 the above valves are closed to ____ (1) ____.

Which ONE of the following completes the statements above?

- A. 1. 18
 2. prevent subsequent LPSW pump run out
- B. 1. 18
 2. prevent water hammers in the LPSW system
- C. 1. 25
 2. prevent subsequent LPSW pump run out
- D. 1. 25
 2. prevent water hammers in the LPSW system
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 17
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%

Current conditions:

- IA Header pressure = 25 psig decreasing
- Aux IA Header pressure = 100 psig stable
- Letdown temperature = 131°F stable

1HP-5 is ____ (1) ____ because ____ (2) ____.

Which ONE of the following completes the statement above?

- A. 1. open
 2. it is backed up by Nitrogen
 - B. 1. open
 2. it is backed up by Aux IA
 - C. 1. closed
 2. IA Header pressure is low
 - D. 1. closed
 2. it closed on high Letdown temperature
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 18
(1 point)

Given the following Unit 1 conditions:

- Reactor trip due to loss of Main Feedwater
- Emergency Feedwater is NOT available
- Condensate Booster Pump feed has been established
- RCS leak = 80 gpm slowly increasing

Which ONE of the following describes:

1) actions required by the LOHT tab for RCPs?

2) the reason for the actions?

- A.
 - 1. Reduce to one pump per loop
 - 2. To reduce heat input to RCS
 - B.
 - 1. Reduce to one pump per loop
 - 2. To reduce inventory loss from the RCS
 - C.
 - 1. Reduce to ONLY one RCP
 - 2. To reduce heat input to RCS
 - D.
 - 1. Reduce to ONLY one RCP
 - 2. To reduce inventory loss from the RCS
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 19
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%

Current conditions:

- Main Turbine has tripped
- Reactor power = 48% decreasing
- Rule 1 (ATWS/UNPP) in progress
- 1HP-24 will NOT open

- 1) In accordance with Rule 6, (HPI Pump Throttling Limits) (1).
- 2) In accordance with Rule 6, (HPI Pump Throttling Limits) the MAXIMUM reactor power which will allow throttling HPI is (2).

Which ONE of the following completes the statements above?

- A.
 1. throttle total HPI flow \leq 950 gpm (including seal injection)
 2. \leq 1%
 - B.
 1. throttle total HPI flow \leq 950 gpm (including seal injection)
 2. \leq 5%
 - C.
 1. ONLY two HPI pumps are allowed to be operating
 2. \leq 1%
 - D.
 1. ONLY two HPI pumps are allowed to be operating
 2. \leq 5%
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 20
(1 point)

Unit 1 plant conditions:

- Reactor power = 100%
- 50 gpd Tube Leak
- An increase in activity is reported in Chemical Treatment Pond (CTP) #3

Which ONE of the following describes an RIA which if it indicated increasing counts could explain the source of the above increase?

- A. 1RIA-42 (RCW)
 - B. 1RIA-31 (LPI Cooler)
 - C. 1RIA-54 (TBS)
 - D. 1RIA-33 (LW Release)
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 21
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%
- Fire in Unit 1 Cable Room
- AP/50 (Challenging Plant Fire) has been initiated

Current conditions:

- AP/50, Section 4G (Unit 1 Control Room Evacuation) in progress

1) Section 4G will direct the OATC to (1) .

2) The reason the above action is taken is to take (2) .

Which ONE of the following completes the statements above?

- A. 1. 1FDW-315 and 1FDW-316 to MANUAL and close
 2. ensure flow to the SGs can be controlled from the ASD Panel
 - B. 1. 1FDW-315 and 1FDW-316 to MANUAL and close
 2. prevent spurious operation of 1FDW-315 and 1FDW-316 due to fire damage
 - C. 1. 1A and 1B TBVs to MANUAL and control SG pressure from the ADVs
 2. ensure natural circulation develops when the RCPs are secured
 - D. 1. 1A and 1B TBVs to MANUAL and control SG pressure from the ADVs
 2. maximize SG inventory prior to losing secondary pumps due to the fire
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 22
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 0400
- Reactor power = 100%
- 1SA3/B6 (FIRE ALARM) actuated
- The BOP reviews the alarms at the Fire Alarm Control panel

Current conditions:

- Time = 0415
- Fire detector at the Unit 1 Main FDW pumps alarms

1) At 0400, the alarm at the Fire Alarm Control panel will be indicated by (1) .

2) At 0415, 1SA3/B6 (Fire Alarm) (2) reflash.

Which ONE of the following completes the statements above?

- A. 1. a blinking LED ONLY
 2. will
 - B. 1. a blinking LED ONLY
 2. will NOT
 - C. 1. a blinking LED and an audible alarm
 2. will
 - D. 1. a blinking LED and an audible alarm
 2. will NOT
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 23
(1 point)

Given the following Unit 3 conditions:

- Time = 0400
- AP/8 (Loss of Control Room) initiated
- Control Room Evacuation complete due to a non-fire event
- ASDP has been "manned"
- ASDP indications:
 - Turbine Header Pressure = 1011 psig and slowly decreasing
 - TBVs demand is 12% in Automatic and decreasing
 - RCS T Hot = 560°F and slowly decreasing
 - Pzr Level = 140 inches increasing
 - SG SU levels = 48 inches and increasing
 - ALL RCPs are operating

At 0400, which ONE of the following describes the required action(s) (if any) per AP/8 and why?

- A. NO actions are required, the plant is responding as expected.
 - B. Take manual control of TBVs to stabilize SG Pressure.
 - C. Take manual control and cycle 3B HPI pump to stabilize Pzr level.
 - D. Take manual control of FDW Startup Control Valves and lower SG levels.
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 24
(1 point)

Given the following Unit 1 conditions:

- Reactor Power = 36%
- 1RIA-40 Alert and High Alarm actuated
- Letdown Flow = 78 gpm
- Seal Inlet Header flow = 32 gpm
- RC Makeup flow = 85 gpm
- RCP Seal Return Flows :
 - 1A1 = 2.1 gpm
 - 1A2 = 2.2 gpm
 - 1B1 = 2.1 gpm
 - 1B2 = 2.1 gpm
- Pressurizer level = 220 inches stable

1) (1) is required to be entered at this time.

2) The procedure entered above will direct maintaining a Pzr level band of (2) .

Which ONE of the following completes the statements above?

- A. 1. EOP (Emergency Operating Procedure) SGTR Tab
 2. 140 inches – 180 inches
 - B. 1. EOP (Emergency Operating Procedure) SGTR Tab
 2. 220 inches – 260 inches
 - C. 1. AP/31 (Primary to Secondary Leakage)
 2. 140 inches – 180 inches
 - D. 1. AP/31 (Primary to Secondary Leakage)
 2. 220 inches – 260 inches
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 25
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 25% slowly increasing
- Turbine trip

Current conditions:

- Reactor power = 22% decreasing

1) (1) will be used to direct plant activities after the Turbine trip.

2) The expected Steam Generator pressure is (2) psig.

Which ONE of the following completes the statements above?

- A. 1. The UNPP tab
 2. 885
 - B. 1. The UNPP tab
 2. 1010
 - C. 1. AP/1 (Unit Runback)
 2. 885
 - D. 1. AP/1 (Unit Runback)
 2. 1010
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 26
(1 point)

Given the following Unit 1 conditions:

- Turbine Building Flood (TBF) tab initiated
- Main and Emergency Feedwater have been lost

1) In accordance with the TBF tab RCS decay heat will be removed using (1) .

2) This heat removal method is chosen because (2) .

Which ONE of the following completes the statements above?

- A.
 - 1. HPI Forced Cooling
 - 2. "Raw" lake water will damage the SG's
 - B.
 - 1. HPI Forced Cooling
 - 2. SSF-ASW suction source is CCW and ALL CCW pumps will be secured
 - C.
 - 1. SSF-ASW
 - 2. of anticipation of losing Condensate Booster Pumps
 - D.
 - 1. SSF-ASW
 - 2. of anticipation of losing LPSW pumps
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 27
(1 point)

Given the following Unit 1 conditions:

- Core SCM = 0°F
- LOCA Cooldown tab in progress
- CETC's = 395°F slowly decreasing

- 1) In accordance with the LOCA CD tab (1) is required to be opened to establish the normal Boron dilution flow path.
- 2) The above valve will be operated from the (2) Control Room

Which ONE of the following completes the statements above?

- A.
 1. 1LP-103 (Post LOCA Boron Dilute)
 2. Unit 1
 - B.
 1. 1LP-103 (Post LOCA Boron Dilute)
 2. SSF
 - C.
 1. 1LP-105 (Post LOCA Boron Dilute To LPI Suction)
 2. Unit 1
 - D.
 1. 1LP-105 (Post LOCA Boron Dilute To LPI Suction)
 2. SSF
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 28
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 0400:00
- Reactor power = 100%
- 1B1 RCP Amps = 527

Current conditions:

- Time = 0400:01
- 1B1 RCP Amps = 255

Reactor power will ____ (1) ____ and feedwater will ____ (2) ____.

Which ONE of the following completes the statement above?

- A. 1. decrease
 2. re-ratio
 - B. 1. decrease
 2. NOT re-ratio
 - C. 1. stay the same
 2. re-ratio
 - D. 1. stay the same
 2. NOT re-ratio
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 29
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 0400
- Reactor power = 15%

Current conditions:

- Time = 0430
- RCS temperature = 535 °F decreasing
- RCS pressure = 2040 psig decreasing
- Pzr level = 200 inches decreasing
- LDST level = 65 inches decreasing

- 1) The HIGHER LDST level that will automatically align the HPI pumps suction to the BWST is (1) inches.
- 2) At 0430, the reactor (2) automatically tripped on low RCS pressure.

Which ONE of the following completes the statements above?

- A.
 1. 58
 2. has
 - B.
 1. 58
 2. has NOT
 - C.
 1. 38
 2. has
 - D.
 1. 38
 2. has NOT
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 30
(1 point)

Given the following Unit 1 conditions:

- Reactor in MODE 5
- LPI is aligned in the Normal Decay Heat Removal flowpath

1) Aligning LPI to the Purification Demineralizers (1) require the use of pneumatic valves.

2) 1C LPI Pump (2) the desired LPI pump to use during this alignment.

Which ONE of the following completes the statements above?

- A. 1. does
 2. is
 - B. 1. does
 2. is NOT
 - C. 1. does NOT
 2. is
 - D. 1. does NOT
 2. is NOT
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 31

(1 point)

Given the following Unit 3 plant conditions:

- Reactor in MODE 5
- LPI in normal DHR alignment

____(1)____ temperatures will be used to ensure compliance with Tech Spec allowed cooldown rates and ____ (2)____ will be used to adjust cooldown rate.

Which ONE of the following completes the statement above?

- A. 1. LPI Cooler Outlet
 2. LPSW flow
 - B. 1. LPI Cooler Outlet
 2. LPI flow
 - C. 1. Core Exit Thermocouples
 2. LPSW flow
 - D. 1. Core Exit Thermocouples
 2. LPI flow
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 32
(1 point)

Given the following Unit 1 conditions:

- RCS cooldown in progress
- RCS pressure = 1780 psig slowly decreasing

The HPI ES bypass permissive is activated at a MAXIMUM RCS pressure of (1) psig and (2) require manual actions to be re-instated when RCS pressure is returned to normal operating pressure.

Which ONE of the following completes the statement above?

- A. 1. 1715
 2. will
 - B. 1. 1715
 2. will NOT
 - C. 1. 1740
 2. will
 - D. 1. 1740
 2. will NOT
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 33
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%

Current conditions:

- ES Channels 1 – 8 actuated
- EOP Enclosure 5.1 (ES Actuation) initiated
- HPI Flow Train A = 520 gpm
- HPI Flow Train B = 468 gpm
- RC Make Up Flow = 160 gpm
- Seal Inlet Header Flow = 32 gpm

In accordance with the EOP, _____ is/are required to be throttled to prevent HPI pump runout.

Which ONE of the following completes the statement above?

- A. 1HP-26 ONLY
 - B. 1HP-27 ONLY
 - C. 1HP-26 and 1HP-27
 - D. NO valve
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 34
(1 point)

Given the following Unit 1 conditions:

- OP/1/A/1103/002, (Filling and Venting RCS) Enclosure 4.14 (Establishing Pzr Steam Bubble And RCS Final Vent) in progress
- Quench Tank level = 82 inches
- Quench Tank pressure = 0.5 psig
- The Pressurizer is vented to the Quench Tank for 30 minutes

Which ONE of the following describes QT parameters that would indicate that Pzr Steam Bubble Formation is complete?

	QT level (inches)	QT pressure (psig)
A.	82.1	0.6
B.	84.1	0.6
C.	82.1	2.5
D.	84.1	2.5

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 35
(1 point)

Which ONE of the following will result in the Standby Component Cooling pump receiving an automatic start signal?

- A. CC Total Flow = 568 gpm
 - B. CRD Outlet HDR Flow = 136 gpm
 - C. Component Cooling system pressure = 95 psig
 - D. ONE Main Feeder Bus de-energized for 21 seconds
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 36
(1 point)

Given the following Unit 1 conditions:

- BWST Temperature = 85°F
- LDST Temperature = 105°F
- RCS pressure = 685 psig
- PZR level = 235 inches stable

- 1) The (1) is an allowable suction source for Auxiliary Pressurizer Spray.
- 2) The reason for the applicable limit in accordance with SLC 16.5.8 (Pressurizer) is to reduce (2) .

Which ONE of the following completes the statements above?

- A.
 1. LDST ONLY
 2. reduce thermal stress on the Pzr spray nozzle
 - B.
 1. LDST or the BWST
 2. reduce thermal stress on the Pzr spray nozzle
 - C.
 1. LDST ONLY
 2. prevent exceeding the high Pzr level limit
 - D.
 1. LDST or the BWST
 2. prevent exceeding the high Pzr level limit
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 37
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%
- 1RC-1 failed OPEN
- RCS pressure = 2150 psig decreasing
- AP/44 (Abnormal Pressurizer Pressure Control) initiated

Current conditions:

- 1RC-3 failed OPEN

1) RCS pressure will (1) .

2) AP/44 will initially direct stopping the (2) to help mitigate the failure.

Which ONE of the following completes the statements above?

- A. 1. continue to decrease below the reactor trip setpoint
 2. 1A1 RCP ONLY
 - B. 1. continue to decrease below the reactor trip setpoint
 2. 1A1 and 1A2 RCP
 - C. 1. be maintained above the reactor trip setpoint
 2. 1A1 RCP ONLY
 - D. 1. be maintained above the reactor trip setpoint
 2. 1A1 and 1A2 RCP
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 38
(1 point)

Which ONE of the following would result in a trip of the 1D RPS Channel AND the 1D CRD Breaker?

- A. 1D RPS channel Manual Trip keyswitch is placed in the trip position
 - B. Reactor Building Pressure Switch in the 1D RPS channel fails OPEN
 - C. Loss of 1DCB panelboard
 - D. Loss of the 1KVID panelboard
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 39
(1 point)

Given the following Unit 1 conditions:

- Reactor power = 100%
- 1A RPS Thot RTD fails HIGH

Which ONE of the following describes:

- 1) ALL RPS trips affected by the failure?
 - 2) the action preferred, in accordance with OP/1/A/1105/014 (Control Room Instrumentation Operation And Information)?
- A. 1. RCS High Outlet Temperature ONLY
 2. Place MANUAL TRIP Keyswitch in "TRIP".
- B. 1. RCS High Outlet Temperature ONLY
 2. Place affected RPS Channel MANUAL BYPASS keyswitch in "BYP".
- C. 1. RCS High Outlet Temperature and RCS Variable Low Pressure
 2. Place MANUAL TRIP Keyswitch in "TRIP".
- D. 1. RCS High Outlet Temperature and RCS Variable Low Pressure
 2. Place affected RPS Channel MANUAL BYPASS keyswitch in "BYP".
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 40
(1 point)

Given the following Unit 1 conditions:

- Main Steam Line break inside the Reactor Building
- RCS pressure decreased to 974 psig and is now increasing
- Reactor Building pressure increased to 34 psig and is now decreasing

Which ONE of the following lists ALL ECCS systems that have actuated?

- A. HPI ONLY
 - B. HPI AND Core Flood ONLY
 - C. HPI AND LPI ONLY
 - D. HPI, LPI, AND Core Flood
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 41
(1 point)

Given the following Unit 3 conditions:

Initial conditions:

- Time = 0400
- Reactor power = 100%
- 3A HPI Pump operating

Current conditions:

- Time = 0401
- Reactor tripped due to SBLOCA
- ES Digital Channels 2, 4, and 6 failed to automatically actuate

At 0405, which ONE of the following lists only safety related components that will be in their ES condition?

ASSUME NO OPERATOR ACTIONS

- A. KHU #2 / 3HP-5
 - B. 3B HPI Pump / 3PR-10
 - C. KHU #2 / 3A LPI Pump
 - D. 3B HPI Pump / 3LPSW-24
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 42
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 50% stable

Current conditions:

- LBLOCA occurs
- 1TC de-energized

Which ONE of the following describes the status of the below listed Reactor Building Cooling Units five (5) minutes after ES actuates?

ASSUME NO OPERATOR ACTIONS

	<u>1A RBCU</u>	<u>1B RBCU</u>
A.	LOW	LOW
B.	LOW	OFF
C.	OFF	LOW
D.	OFF	OFF

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 43
(1 point)

Given the following plant conditions:

- SBLOCA has occurred on Unit 1
- Reactor Building Pressure = 11.2 psig slowly decreasing
- Unit 2 Reactor Power = 100%

Which ONE of the following describes the actions directed by Enclosure 5.1 (ES Actuation) to ensure the required LPSW flow exists in the 1A LPI cooler?

- A. Place 1LPSW-251 in "FAIL OPEN" ONLY
 - B. Place 1LPSW-251 in "FAIL OPEN" AND fully open 1LPSW-4
 - C. Place 1LPSW-251 in "FAIL OPEN" AND Throttle LPSW flow to approximately 3000 gpm using 1LPSW-4
 - D. Place 1LPSW-251 in "FAIL OPEN" AND Throttle LPSW flow to approximately 5200 gpm using 1LPSW-4
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 44
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 75% stable

Current conditions:

- 1A TBVs fail OPEN

- 1) (1) will be used to mitigate this event.
- 2) Reactor power will increase and then stabilize at (2) .

Which ONE of the following completes the statements above?

- A.
 1. OP/1/A/1106/001 (Turbine Generator)
 2. a higher power slightly above pre-transient value
 - B.
 1. OP/1/A/1106/001 (Turbine Generator)
 2. approximately the pre-transient value
 - C.
 1. AP/1/A/1700/028 (ICS Instrument Failures)
 2. a higher power slightly above pre-transient value
 - D.
 1. AP/1/A/1700/028 (ICS Instrument Failures)
 2. approximately the pre-transient value
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 45
(1 point)

Given the following Unit 3 conditions:

- Time = 0400
- Reactor power = 70% stable
- 3B2 RCP trips

At 0430, which ONE of the following describes the response in FDW pump suction flows that has occurred over the previous 30 minutes?

- A. 3A FDW Pump suction flow has increased AND 3B FDW Pump suction flow has decreased
 - B. 3B FDW Pump suction flow has increased AND 3A FDW Pump suction flow has decreased
 - C. 3A AND 3B FDW Pump suction flows have decreased
 - D. 3A AND 3B FDW Pump suction flows remain unchanged
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 46
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Unit cooldown in progress
- 1A and 1B MD EFDWPs operating
- EOP Enclosure 5.9 (Extended EFDW Operation) in progress

Current conditions:

- UST level = 3.5 feet decreasing

In accordance with EOP Enclosure 5.9,

- 1) both MD EFDWPs are required to be secured at the HIGHER UST level of less than (1) .
- 2) vacuum is (2) to be broken prior to the MD EFDWPs taking suction on the Hotwell.

Which ONE of the following completes the statements above?

- A.
 1. one foot
 2. required
 - B.
 1. one foot
 2. NOT required
 - C.
 1. one inch
 2. required
 - D.
 1. one inch
 2. NOT required
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 47
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 100%
- 1DCA Bus Voltage = 125 VDC
- 1DCB Bus Voltage = 126 VDC
- 2DCA Bus Voltage = 127 VDC
- 2DCB Bus Voltage = 127 VDC

Current conditions:

- 1XS1 incoming feeder breaker trips

Based on the current conditions, which ONE of the following is correct regarding the DC power systems?

ASSUME NO OPERATOR ACTIONS

- A. 1DCA will be powered from the standby charger
 - B. 1DCB loads will be powered from Battery 1CB
 - C. 1KX Inverter will be powered from 1DCB
 - D. 1DIC Inverter will be powered from 1DCB
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 48
(1 point)

- 1) 600 volt MCC 1XS2 is normally powered from a power string that begins at 4 KV switchgear (1) .
- 2) If the normal power supply to 1XS2 is lost, the alternate power supply (2) automatically energize 1XS2.

Which ONE of the following completes the statements above?

- A. 1. 1TD
 2. will
 - B. 1. 1TD
 2. will NOT
 - C. 1. 1TE
 2. will
 - D. 1. 1TE
 2. will NOT
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 49
(1 point)

Given the following station conditions:

Initial conditions:

- All three units Reactor power = 100%

Current conditions:

- All Unit's 4160v Main Feeder Busses are de-energized
- Unit 1, 2, and 3 EOP Blackout tabs in progress

Which ONE of the following describes the required status of Unit 1 Essential Inverters per EOP Enclosure 5.38 (Restoration of Power) and why?

Unit 1's Essential Inverters _____.

- A. remain energized to provide power to ES channels
 - B. remain energized to provide control power to 4160v
 - C. are de-energized to prevent inverter damage
 - D. are de-energized to extend the life of available batteries
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 50
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 0400
- Reactor power = 100%
- SL1 and SL2 closed
- ACB-4 closed

Current conditions:

- Time = 0401
- RCS pressure = 200 psig decreasing
- Switchyard Isolation occurs
- Keowee Unit 2 Emergency Locked out

1A and 1B LPI pumps will be_____.

Which ONE of the following completes the statement above?

- A. manually energized from CT-5
 - B. automatically energized from CT-5
 - C. manually energized from Keowee Unit 1
 - D. automatically energized from Keowee Unit 1
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 51
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 1200
- Reactor power = 35% stable
- 1A steam generator tube leak = 2.1 gpd stable
- RCS activity = 0.25 $\mu\text{Ci/ml}$ DEI increasing

Current conditions:

- Time = 1400
- NO change in 1A SG tube leak rate
- RCS activity = 0.65 $\mu\text{Ci/ml}$ DEI and increasing

Which ONE of the following describes the response of the radiation monitors between 1200 and 1400?

- A. 1RIA-16 (Main Steam Line Monitor) AND 1RIA-40 (CSAE Off-gas) increase.
 - B. 1RIA-16 (Main Steam Line Monitor) increased while 1RIA-40 (CSAE Off-gas) remain constant.
 - C. 1RIA-59 (N-16 monitor) AND 1RIA-40 (CSAE Off-gas) increase.
 - D. 1RIA-59 (N-16 monitor) increased while 1RIA-40 (CSAE Off-gas) remain constant.
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 52
(1 point)

Given the following Unit 1 and 2 conditions:

Initial conditions:

- A & B LPSW pump operating

Current conditions:

- 1SA9/A9 LPSW HEADER A PRESS LOW
- A LPSW pump amps = 15 - 35 fluctuating
- B LPSW pump amps = 55 stable
- LPSW HDR PRESS = rapidly fluctuating between 60 & 75 psig

1) The A LPSW pump ____ (1) ____.

2) AP/24 (Loss of LPSW) will direct ____ (2) ____.

Which ONE of the following completes the statements above?

- A.
 - 1. is cavitating
 - 2. placing the Unit 1/2 STANDBY LPSW PUMP AUTO START CIRCUIT in DISABLE then stopping LPSW Pump A and starting LPSW Pump C
 - B.
 - 1. has a sheared shaft
 - 2. placing the Unit 1/2 STANDBY LPSW PUMP AUTO START CIRCUIT in DISABLE then stopping LPSW Pump A and starting LPSW Pump C
 - C.
 - 1. is cavitating
 - 2. starting LPSW Pump C then stopping LPSW Pump A
 - D.
 - 1. has a sheared shaft
 - 2. starting LPSW Pump C then stopping LPSW Pump A
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 53
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 0400
- Reactor power = 100%

Current conditions:

- Time = 0415
- RCS pressure = 248 psig decreasing

- 1) At 0415, (1) LPSW pumps will be supplying loads on Unit 1.
- 2) The B LPSW pump is powered from (2).

Which ONE of the following completes the statements above?

- A.
 1. ONLY two
 2. 1TD ONLY
 - B.
 1. ONLY two
 2. 1TD or 2TD
 - C.
 1. three
 2. 1TD ONLY
 - D.
 1. three
 2. 1TD or 2TD
-

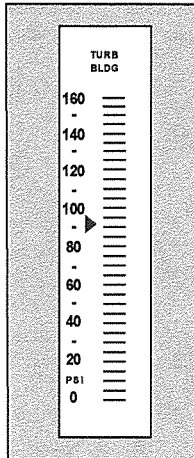
Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 54
(1 point)

Given the following plant conditions:

- Large IA leak occurs
- Service air header pressure = 87 psig decreasing
- Turbine Building air header pressure per gage below:



Which ONE of the following describes the air compressors that will be operating?

The Primary IA Compressor AND...

- A. Diesel Air Compressors ONLY
 - B. Diesel Air Compressors AND AIA Compressors
 - C. AIA Compressors AND Backup IA Compressors
 - D. Backup IA Compressors ONLY
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 55
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 0400
- Reactor power = 100%

Current conditions:

- Time = 0415
- RCS pressure = 1500 psig decreasing
- RB pressure = 1.2 psig increasing
- EOP Enclosure 5.1 (ES Actuation) initiated

- 1) At 0415, 1LPSW-15 is (1).
- 2) If closed due to ES actuation and in accordance with Enclosure 5.1, prior to opening 1LPSW-15, the associated (2).

Which ONE of the following completes the statements above?

- A.
 1. open
 2. voter is taken to override
 - B.
 1. open
 2. ES channel(s) is/are taken to manual
 - C.
 1. closed
 2. voter is taken to override
 - D.
 1. closed
 2. ES channel(s) is/are taken to manual
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 56
(1 point)

Given the following Unit 1 conditions:

Time = 0400

- Reactor trip from 100% power due to a loss of offsite power
- Forced Cooldown (FCD) tab in progress
- Tcold = 550°F stable

Time = 0500

- RCS pressure = 2155 psig stable
- A Natural Circulation cooldown is initiated
- 1RC-159 (RX Vessel Head Vent) will NOT open

- 1) At 0400 and in accordance with the FCD tab, the MAXIMUM allowable cooldown rate is (2) .
- 2) During the cooldown, Reactor Vessel head voids (1) expected to occur.

Which ONE of the following completes the statements above?

- A.
 1. < 50°F/hr
 2. are
 - B.
 1. < 50°F/hr
 2. are NOT
 - C.
 1. ≤ 50°F / ½ hr
 2. are
 - D.
 1. ≤ 50°F / ½ hr
 2. are NOT
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 57
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- A LOCA occurs from 100% power
- Multiple equipment failures have occurred

Current conditions:

- LOCA CD tab in progress
- A significant increase is noted on the Source Range

- 1) A transfer to the ICC tab is required (2).
- 2) A possible cause for the increase of the Source Range is significant voiding in the (1).

Which ONE of the following completes the statements above?

- A. 1. when ANY SCM indicates superheat
 2. core
- B. 1. when ANY SCM indicates superheat
 2. downcomer
- C. 1. ONLY when the Core SCM indicates superheat
 2. core
- D. 1. ONLY when the Core SCM indicates superheat
 2. downcomer
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 58
(1 point)

Given the following Unit 1 conditions:

- Reactor power = 100%

1) ICS AUTO power to the TBVs is supplied by (1) .

2) ICS HAND power to the TBVs is supplied by (2) .

Which ONE of the following completes the statements above?

- A. 1. 1KI
 2. 1KU
 - B. 1. 1KI
 2. 1KX
 - C. 1. 1KU
 2. 1KI
 - D. 1. 1KU
 2. 1KX
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 59

(1 point)

Given the following Unit 1 conditions:

- Refueling in progress
- RB Purge in operation

- 1) If the RB Main Purge fan trips due an RIA alarm, Spent Fuel Pool level will (1).
- 2) When the RB Main Purge fan trips above, PR valves (2) will automatically close.

Which ONE of the following completes the statements above?

- A.
 1. increase
 2. 2 through 5 ONLY
 - B.
 1. increase
 2. 1 through 6
 - C.
 1. decrease
 2. 2 through 5 ONLY
 - D.
 1. decrease
 2. 1 through 6
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 60
(1 point)

Given the following plant conditions:

Initial conditions:

- Time = 0400
- "A" SFP pump operating

Current conditions:

- Time = 0401
- Spent Fuel Storage Cask has been dropped in Unit 1&2 SFP
- Spent Fuel damage is visible
- RIA-6 and RIA-41 HIGH alarms actuate
- Spent Fuel Pool level = -3.5 feet decreasing

- 1) The Unit (1) Reactor Building Purge filters will be used to reduce off site releases.
- 2) At 0401, the "A" SFP pump is (2).

Which ONE of the following completes the statements above?

- A. 1. 1
 2. ON
- B. 1. 1
 2. OFF
- C. 1. 2
 2. ON
- D. 1. 2
 2. OFF
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 61
(1 point)

Given the following Unit 1 conditions:

- Reactor power = 100%
- 1SA-02/B-11 (ICS AUTO POWER FAILURE)

As a result of the above failure:

- 1) 1HP-120 (RC Volume Control) is operable in (1) .
- 2) The Turbine Bypass Valves are operable in (2) .

Which ONE of the following completes the statements above?

- A.
 1. HAND ONLY
 2. HAND or AUTO
 - B.
 1. HAND ONLY
 2. HAND ONLY
 - C.
 1. HAND or AUTO
 2. HAND or AUTO
 - D.
 1. HAND or AUTO
 2. HAND ONLY
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 62
(1 point)

Given the following Unit 1 conditions:

Time = 1200:00

- Reactor power = 80% stable
- 1A and 1B CBP operating

Time = 1201:00

- 1A CBP trips
- Feedwater Pump suction pressure = 225 psig slowly decreasing

Time = 1203:00

- Feedwater Pump suction pressure = 220 slowly increasing

Which ONE of the following describes the:

- 1) runback rate (%/min) inserted at 1201:00 to ICS?
- 2) procedure that will be directed by the Procedure Director at 1203:00?

- A.
 1. 25
 2. AP/1/A/1700/001 (Unit Runback)
 - B.
 1. 25
 2. EOP
 - C.
 1. 20
 2. AP/1/A/1700/001 (Unit Runback)
 - D.
 1. 20
 2. EOP
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 63
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Reactor power = 75% stable
- Diamond and BOTH FDW Masters in MANUAL

Current conditions:

- Reactor power = 63% decreasing
 - Control Rod Group 5 Rod 6 Asymmetric Alarm light on the PI panel is lit
 - Control Rod Group 5 Rod In Limit light on the PI panel is lit
 - Asymmetric Fault light on Diamond Panel is lit
- 1) The Asymmetric Alarm light indicates that the rod is misaligned from the group average by a MINIMUM of (1) inches.
 - 2) In accordance with AP/1 (Plant Runback), a MANUAL power reduction (2) required.

Which ONE of the following completes the statements above?

- A. 1. 7
 2. is
 - B. 1. 7
 2. is NOT
 - C. 1. 9
 2. is
 - D. 1. 9
 2. is NOT
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 64
(1 point)

Given the following Unit 1 conditions:

- A unit shutdown is in progress due to a primary to secondary leak
- Reactor power = 32% decreasing

- 1) ____ (1) ____ provides the operator with a readout in GPM.
- 2) At this time, the above RIA ____ (2) ____ procedurally allowed to be used to determine the primary to secondary leak rate.

Which ONE of the following completes the statements above?

- A. 1. 1RIA-16 (Main Steam Line Monitor)
 2. is
- B. 1. 1RIA-16 (Main Steam Line Monitor)
 2. is NOT
- C. 1. 1RIA-59 (N-16 monitor)
 2. is
- D. 1. 1RIA-59 (N-16 monitor)
 2. is NOT
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 65
(1 point)

Given the following Unit 2 conditions:

Initial conditions:

- Reactor power = 100%
- A and B LPSW pumps operating
- Switchyard Isolate occurs

Current conditions:

- Unit 2 MFB 1 & 2 energized

1) Unit 1 & 2 LPSW is supplied via the ECCW (1).

2) A and B LPSW pumps will restart (2) after power is restored.

Which ONE of the following completes the statements above?

- A. 1. first siphon
 2. immediately
 - B. 1. second siphon
 2. immediately
 - C. 1. first siphon
 2. 10 seconds
 - D. 1. second siphon
 2. 10 seconds
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 66
(1 point)

Given the following Unit 1 conditions:

- "B" Shift is on duty
- The OATC asks to be temporarily relieved to go to the canteen.
- The BOP has previously received a formal turnover on the unit.

Which ONE of the following describes whose permission is required to turn over the OATC position to the BOP and items that are required to be included in the turnover per OMP 2-01 (Duties and Responsibilities of On-Shift Operations Personnel)?

- A. Unit 1 Control Room SRO / review of Ops Guides and outstanding R&Rs
 - B. Unit 1 Control Room SRO / review RCS temperature/pressure and operating band
 - C. Any "B" shift SRO / review of Ops Guides and outstanding R&Rs
 - D. Any "B" shift SRO / review RCS temperature/pressure and operating band
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 67
(1 point)

Given the following Unit 1 conditions:

Time = 0400

- Generator output = 850 MWe stable
- Generator Hydrogen pressure = 50 psig stable

Time = 0500

- Generator output = 600 MWe stable
- Generator Hydrogen pressure = 30 psig stable

- 1) At 0500 and in accordance with OP/1/A/1106/001 Encl. 4.5 (Capability Curve), the MAXIMUM MVARs allowed is approximately (1) .
- 2) If needed, MVARs can be changed by using the (2) .

Which ONE of the following completes the statements above?

REFERENCE PROVIDED

- A.
 1. 340
 2. Voltage Adjuster (AUTO)
 - B.
 1. 340
 2. Turbine Speed Changer
 - C.
 1. 370
 2. Voltage Adjuster (AUTO)
 - D.
 1. 370
 2. Turbine Speed Changer
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 68
(1 point)

Which ONE of the following is the LOWER limit on RCS activity that would require entry into AP/21 (RCS Activity)?

- A. Xe-133 = 0.25 $\mu\text{Ci/gm}$
 - B. Xe-133 = 1.0 $\mu\text{Ci/gm}$
 - C. DEI = 0.25 $\mu\text{Ci/gm}$
 - D. DEI = 1.0 $\mu\text{Ci/gm}$
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 69
(1 point)

Given the following Unit 1 conditions:

Time = 0000

- Unit shutdown in progress
- Reactor power = 2.5% decreasing

Time = 2300

- RCS Tave = 240°F decreasing

1) At 0000, the reactor is in MODE (1) .

2) At 2300, the reactor is in MODE (2) .

Which ONE of the following completes the statements above?

A. 1. 1
 2. 4

B. 1. 1
 2. 5

C. 1. 2
 2. 4

D. 1. 2
 2. 5

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 70

(1 point)

Given the following Unit 1 conditions:

- Reactor power = 100%
- Group 3 Rod 6 drops into the core
- Rod cannot be recovered

Which ONE of the following describes action(s) required and the associated MAXIMUM completion time(s) in accordance with TS 3.1.5 (Safety Rod Position Limits)?

- A. Verify SDM within 1 hour ONLY
 - B. Verify SDM within 30 minutes ONLY
 - C. Verify SDM within 1 hour AND reduce reactor power to less than 60% within 1 hour
 - D. Verify SDM within 30 minutes AND reduce reactor power to less than 60% within 1 hour
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 71
(1 point)

Given the following Unit 1 conditions:

- Reactor power = 100%

Which ONE of the following describes a condition that would require entry into a Tech Spec ACTIONS table?

- A. UST level = 7.6 feet
 - B. Pressurizer = 291 inches
 - C. 1D RPS channel in Manual bypass
 - D. 230KV Dacus Black and White lines isolated
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 72
(1 point)

Given the following Unit 1 conditions:

- Reactor in MODE 5
- Reactor Building Main Purge in operation

Which ONE of the following will cause the RB Purge fan to trip?

- A. Inadvertent actuation of ES Channel 5
 - B. 1RIA-45 reaches HIGH alarm setpoint
 - C. Suction piping pressure = 5 inches of water vacuum
 - D. 1PR-3 (RB PURGE CONTROL) 5% open
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 73
(1 point)

An RWP that you are preparing to work under states that the highest dose rate in a particular area (at 30 cm) is 325 mR/hr. When you arrive at the work site, a flashing yellow light is noted in the entry path to the area.

1. How would an area with the dose rate specified in the RWP be designated?
 2. What is the significance of the flashing yellow light?
-
- A.
 1. Radiation Area
 2. Radiography is in progress
 - B.
 1. High Radiation Area
 2. Radiography is in progress
 - C.
 1. Radiation Area
 2. The area has been designated as a "Locked" High Radiation Area
 - D.
 1. High Radiation Area
 2. The area has been designated as a "Locked" High Radiation Area
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 74
(1 point)

Given the following Unit 1 conditions:

Initial conditions:

- Time = 0400
- CTPB = 75% stable
- 1A HPI pump operating
- Transient occurs

Current conditions:

- Time = 0405
- CTPB = 76% stable
- Letdown Flow = 78 gpm stable
- HPI Flow Train A = 176 gpm decreasing slowly

In accordance with OMP 1-18 (Implementation Standard During Abnormal and Emergency Events) at 0405:

- 1) Unit 1 (1) considered stable.
- 2) RCS makeup flow (2) within normal makeup capability.

Which ONE of the following completes the statements above?

- A. 1. is
 2. is
 - B. 1. is
 2. is NOT
 - C. 1. is NOT
 2. is
 - D. 1. is NOT
 2. is NOT
-

Oconee Nuclear Station

ILT45 ONS RO NRC Examination

Question: 75

(1 point)

- 1) The emergency facility that assumes responsibility for communications with offsite Agencies, including the NRC once it is activated, is the (1) .
- 2) The lowest classification level that requires this facility's activation is a/an (2) .

Which ONE of the following completes the statements above?

- A.
 1. Technical Support Center (TSC)
 2. Alert
 - B.
 1. Technical Support Center (TSC)
 2. Site Area Emergency
 - C.
 1. Operations Support Center (OSC)
 2. Alert
 - D.
 1. Operations Support Center (OSC)
 2. Site Area Emergency
-

Reference List for: ILT45 ONS RO NRC Examination

OP/1106/001 Encl. 4.5

Examination KEY for: ILT45 ONS RO NRC Examina

<i>Question Number</i>	<i>Answer</i>
1	B
2	A
3	B
4	D
5	D
6	B
7	D
8	C
9	B
10	C
11	B
12	D
13	C
14	B
15	D
16	B
17	B
18	A
19	C
20	C
21	B
22	C
23	D
24	B
25	C

Examination KEY for: ILT45 ONS RO NRC Examina

<i>Question Number</i>	<i>Answer</i>
26	D
27	B
28	A
29	D
30	B
31	B
32	B
33	D
34	B
35	A
36	A
37	B
38	D
39	D
40	C
41	C
42	C
43	B
44	D
45	D
46	A
47	C
48	B
49	D
50	B

Examination KEY for: ILT45 ONS RO NRC Examina

<i>Question Number</i>	<i>Answer</i>
51	A
52	A
53	D
54	D
55	B
56	A
57	D
58	A
59	A
60	D
61	D
62	D
63	A
64	D
65	A
66	B
67	C
68	C
69	C
70	A
71	B
72	B
73	D
74	C
75	A