Question: 76 (1 point)

Given the following Unit 3 conditions: Initial conditions:

Reactor trip due to loss of Main Feedwater

#### Current conditions:

- ALL sources of feedwater are lost
- SM declares an ALERT due to initiation of HPI Forced Cooling

In accordance with RP/0/A/1000/002 (Control Room Emergency Coordinator Procedure), the SM is permitted to appoint a qualified individual to \_\_\_\_\_.

- A. perform Enclosure 4.3 (Emergency Coordinator Parallel Actions)
- B. perform Enclosure 4.5 (Emergency Classification Termination Criteria)
- C. approve a follow-up notification form if conditions have not changed on Unit 3
- D. approve an off-site notification form for a NOUE on another unit.

Question: 77 (1 point)

Given the following Unit 3 conditions:

#### Initial conditions:

- Reactor in MODE 5
- ALL LTOP requirements established in accordance with Tech Spec 3.4.12 (Low Temperature Overpressure Protection (LTOP) System)

#### Current conditions:

- 3RC-66 (PORV) fails open
- 1) In accordance with OMP 1-18 (Implementation Standard During Abnormal and Emergency Events), closing 3RC-4 \_\_(1)\_\_ require CRS concurrence, if the CRS is available.
- 2) In accordance with Tech Spec 3.4.12, a dedicated LTOP operator \_\_(2)\_\_ allowed as a substitute for an inoperable PORV to prevent exceeding RCS brittle fracture pressure limits.

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

Question: 78 (1 point)

Given the following Unit 1 conditions:

Time = 1000:

- 1A S/G developed a SGTR
- EOP SGTR Tab in progress
- 1A S/G level = 240 inches XSUR slowly decreasing
- SCM = 10°F stable

#### Time = 1040:

- MSLB on 1B SG outside containment and can NOT be steamed
- EOP EHT Tab complete
- 1A S/G has reached the level where water can enter the main steam lines
- Rule 4 has been initiated and the PORV has been opened
- Core SCM = 0°F
- 1) At Time = 1000, the SGTR tab \_\_(1)\_\_ require that the 1A Steam Generator be isolated.
- 2) At Time = 1040, the SGTR tab will direct initiation of the \_\_(2)\_ tab.

- A. 1. does
  - 2. HPI CD
- B. 1. does
  - 2. LOCA CD
- C. 1. does NOT
  - 2. HPI CD
- D. 1. does NOT
  - 2. LOCA CD

Question: 79 (1 point)

Given the following Unit 1 conditions:

- Reactor power = 50% stable
- 1KI and 1KU panelboards are de-energized

Which ONE of the following contains the procedure steps that will be used to maintain Steam Generator pressure and RCS temperature?

- A. AP/23 (Loss of ICS Power)
- B. AP/25 (Standby Shutdown Facility)
- C. EOP Enclosure 5.24 (Operation of the ADVs)
- D. EOP Enclosure 5.42 (Alignment of EFM Pump to Feed SGs)

Question: 80 (1 point)

Given the following Unit 1 conditions:

Time = 1200:

- Reactor trip from 100%
- AP/22 (Loss of Instrument Air) in progress
- Instrument Air (IA) and Auxiliary Instrument Air (AIA) pressure lost to the 1A Turbine Bypass Valves
- 1A SG pressure 935 psig stable
- Maintaining 1A SG pressure with Atmospheric Dump Valves (ADVs) in accordance with EOP Subsequent Actions

Time = 1210:

1A SG Tube Leak = 15 gpm stable

Time = 1230:

- 1A SG Tube Rupture = 180 gpm stable
- EOP SGTR in progress
- 1) At time = 1210, the HIGHEST emergency classification (if any) is \_\_\_(1)\_\_.
- 2) At time = 1230, the HIGHEST emergency classification is \_\_(2)\_\_.

Which ONE of the following completes the statements above?

### REFERENCE PROVIDED DO NOT USE EMERGENCY COORDINATOR JUDGEMENT

- A. 1. NONE
  - 2. ALERT
- B. 1. NONE
  - 2. SITE AREA EMERGENCY
- C. 1. UNUSUAL EVENT
  - 2. ALERT
- D. 1. UNUSUAL EVENT
  - 2. SITE AREA EMERGENCY

### ILT48 ONS SRO NRC Examination

Question: 81 (1 point)

2. are NOT

CT-4
 are

1. CT-4

2. are NOT

C.

D.

Given the following Unit 1 conditions: Time = 1200• Reactor power = 100% stable AFIS bypassed for maintenance SA-16/C-1 (230 KV Swyd Isolate ES Permit) actuated 230 KV Yellow Bus voltage = 224.2 KV increasing Time = 1201• AP/34 (Degraded Grid) in progress Main Turbine trips due to low grid frequency • 230 KV Yellow Bus voltage = 226.8 KV increasing • RCS pressure = 1245 psig rapidly decreasing • RB pressure = 11.4 psig rapidly increasing • Tave = 545°F slowly decreasing Engineered Safeguards systems... 1) will be energized from (1) . 2) (2) sufficient to maintain Reactor Building pressure within design limits. Which ONE of the following completes the statements above? A. 1. CT-1 2. are B. 1. CT-1

Question: 82 (1 point)

Given the following Unit 3 conditions:

#### Initial conditions:

- Reactor power = 100%
- Control Rod 3 in Group 7 indicates 0% withdrawn
- AP/01 (Unit Runback) initiated

#### Current conditions:

- Reactor power = 70% decreasing
- 1) The AMBER lights on the PI panel will illuminate when a control rod reaches a MINIMUM of \_\_(1)\_\_ inches from its group average.
- 2) In accordance with TS 3.1.4 (Control Rod Group Alignment Limits), the basis for the limit on Reactor power for the given conditions is to maintain \_\_(2)\_\_ within design limits.

- A. 1. > 7
  - 2. Linear Heat Rate
- B. 1. > 7
  - 2. Shutdown Margin
- C. 1. > 9
  - 2. Linear Heat Rate
- D. 1. > 9
  - 2. Shutdown Margin

Question: 83 (1 point)

Given the following Unit 1 conditions:

Time = 1200

- Reactor power = 75% stable
- Group 7 rod position = 72% withdrawn stable
- Makeup to LDST initiated

Time = 1230

- Reactor power = 75% stable
- Group 7 rod position = 55% slowly inserting
- CRS determines Tech Spec 3.2.1 (Regulating Rod Position Limits) requirements are NOT met
- 1) Makeup to the LDST has resulted in an RCS \_\_(1)\_\_ event.
- 2) At Time = 1230, Tech Spec 3.1.1 (Shutdown Margin) requires that the RCS makeup source be either the \_\_(2)\_\_ or the Concentrated Boric Acid Storage Tank.

- A. 1. boration
  - 2. BWST
- B. 1. boration
  - 2. "A" BHUT
- C. 1. dilution
  - 2. BWST
- D. 1. dilution
  - 2. "A" BHUT

Question: 84 (1 point)

Given the following Unit 1 conditions:

#### Initial conditions:

- Reactor power = 100%
- ACB-3 closed

#### Current conditions:

- 2SA-17/A-1 (GEN #1 EMERG. LOCKOUT) actuated
- 1TC, 1TD, and 1TE 4160V switchgear are Locked Out
- Blackout tab in progress
- EOP Enclosure 5.38 (Restoration of Power) has been initiated
- 1) Enclosure 5.38 will ensure that Main Feeder Buses are energized from \_\_(1)\_\_.
- 2) In accordance with the Blackout tab, once the Main Feeder Buses are energized, the CRS will be directed to \_\_(2)\_\_.

- A. 1. CT-5
  - 2. continue in the Blackout Tab
- B. 1. CT-5
  - 2. transfer back to Subsequent Actions Tab
- C. 1. KHU-2
  - 2. continue in the Blackout Tab
- D. 1. KHU-2
  - 2. transfer back to Subsequent Actions Tab

Question: 85 (1 point)

Given the following Unit 1 conditions:

Time = 1200:

- Notified by Unit 2 that 2SA-18/A-11 (TURBINE BSMT WATER EMERGENCY HIGH LEVEL) in alarm
- Reactor tripped from 100%
- EOP Turbine Building Flood (TBF) tab initiated

Time = 1300:

Core SCM = 0°F due to heatup

In accordance with the EOP TBF tab...

- 1) At Time = 1200, initiate feeding SGs with Main and Emergency Feedwater while maintaining a MINIMUM Tave of \_\_(1)\_\_°F.
- 2) At Time = 1300, the CRS is required to implement \_\_(2)\_\_.

- A. 1. 550
  - 2. the LOSCM Tab
- B. 1. 532
  - 2. the LOSCM Tab
- C. 1. 550
  - 2. Rule 4 (Initiation of HPI Forced Cooling)
- D. 1. 532
  - 2. Rule 4 (Initiation of HPI Forced Cooling)

Question: 86

(1 point)

Given the following Unit 1 conditions:

Time = 1215

- Unit shutdown in progress
- 1A1 RCP in operation
- Tcold = 220°F slowly decreasing
- RCS pressure = 325 psig slowly decreasing
- LPI Cooler outlet temperature = 110°F stable

Time = 1230

- Tcold = 200°F slowly decreasing
- RCS pressure = 275 psig stable
- LPI Cooler outlet temperature = 110°F stable
- 1A LPI Pump is started

Time = 1240

- Tcold = 197°F stable
- 1A1 RCP secured

Time = 1245

- LPI Cooler outlet temperature = 180°F stable
- 1) The RCS cooldown rate \_\_(1)\_\_ violate the maximum cooldown rate allowed per Tech Specs.
- 2) When the 1A LPI pump is started at Time = 1230, the temperature transient that results from the difference in LPI Cooler Outlet temperature and Tcold \_\_(2)\_\_ outside the bounds of the Reactor Vessel stress analysis.

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

Question: 87 (1 point)

Given the following Unit 1 conditions:

#### Initial conditions:

- Reactor power = 100%
- I&E performing Reactor Protective System (RPS) calibration procedure

#### Current conditions:

- The RCS High Pressure trip setpoint is determined to be 2351 psig in 1A and 1B RPS Channels
- 1) The required actual RPS trip setpoint for RCS High Pressure is \_\_(1)\_\_ psig.
- In accordance with the bases of Tech Spec 3.3.1 (Reactor Protective System (RPS) Instrumentation), the 1A and 1B RCS High Pressure Trip Functions are \_\_(2)\_\_.

- A. 1. 2345
  - 2. operable
- B. 1. 2345
  - 2. inoperable
- C. 1. 2355
  - 2. operable
- D. 1. 2355
  - 2. inoperable

### ILT48 ONS SRO NRC Examination

Question: 88 (1 point)

Given the following Unit 1 conditions:

- Reactor power = 100%
- RCS pressure = 2155 psig stable
- RB pressure = 0.1 psig stable
- ES Channel 2 actuation
- 1) AP/42 Enclosure 5.3 (SSF Restoration) \_\_(1)\_\_ required to be performed.
- In accordance with AD-LS-ALL-0006 (Notification/Reportability Evaluation), a 4 hour ENS notification \_\_\_(2)\_\_\_ required.

Which ONE of the following completes the statements above?

#### REFERENCE PROVIDED

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

### ILT48 ONS SRO NRC Examination

Question: 89 (1 point)

Given the following Unit 1 conditions: Time = 0800: • Reactor power = 20% Reactor is being shutdown to repair 1A2 RCP (tripped due to high vibration) Time = 0801: • 1TA loses power · Reactor trip occurs 1RIA-16 in HIGH alarm SGTR tab entered Time = 0830: Power is restored to 1TA Time = 0845: 1A1 RCP restarted per Encl. 5.6 (RCP Restart) SCM = 0°F Time = 0847: SCM = 0°F 1) Per the SGTR tab, initial RCS cooldown is performed by reducing SG pressure in \_\_(1)\_\_ SG(s) to 835 to 845 psig. 2) The EARLIEST time that a transfer to the LOSCM tab is required is \_\_(2)\_\_. Which ONE of the following completes the statements above? 1. one A. 2. 0845 1. one B. 2. 0847 C. 1. both 2. 0845 D. 1. both 2. 0847

Question: 90 (1 point)


- 1) Actuating Unit 1 & 2 Keowee Emergency Start Channel B switch in the Unit 2 Control Room will start \_\_(1)\_\_ KHU(s).
- 2) The switch in part 1 above \_\_(2)\_\_ be used to satisfy the Unit 2 Manual Keowee Emergency Start requirements of Tech Spec 3.3.22 (EPSL Manual Keowee Emergency Start Function).

- A. 1. ONLY one
  - 2. can
- B. 1. BOTH
  - 2. can
- C. 1. ONLY one
  - 2. can NOT
- D. 1. BOTH
  - 2. can NOT

Question: 91 (1 point)

Given the following Unit 3 plant conditions: Reactor in MODE 1 In accordance with Tech Specs, to prevent exceeding the RCS Pressure Safety Limit... 1) Credit \_\_(1)\_\_ taken for operation of the PORV. 2) Credit is taken for operation of (2) of the Pressurizer Safety Valves. Which ONE of the following completes the statements above? Α. 1. is 2. ONLY one B. 1. is 2. both C. 1. is NOT 2. ONLY one D. 1. is NOT 2. both

Question: 92 (1 point)

Given the following Unit 1 conditions:

- Reactor power = 100%
- Electrical malfunction results in loss of ALL Control Rod position indications
- 1) In accordance with Tech Spec 3.1.7 (Position Indicator Channels), the MAXIMUM time allowed to declare all Control Rods inoperable is \_\_(1)\_\_.
- 2) Assuming indications are NOT restored, Tech Spec 3.1.4 (Control Rod Group alignment limits), \_\_(2)\_\_ require reducing Reactor Power to a MAXIMUM of 60% RTP within 2 hours of declaring all Control Rods inoperable.

Which ONE of the following completes the statements above?

#### REFERENCE PROVIDED

- A. 1. immediately
  - 2. does
- B. 1. immediately
  - 2. does NOT
- C. 1. one hour
  - 2. does
- D. 1. one hour
  - 2. does NOT

Question: 93

(1 point)

Given the following Unit 1 conditions:

Time = 1000:

- Mode 6
- LPI aligned in Normal Decay Heat Removal mode
- 1A and 1B SGs in wet layup
- Fuel Transfer Canal flooded
- 1B LPI pump OOS

Time = 1030:

- ALL available LPI pumps tripped and can NOT be restarted
- 1) At Time = 1000, OP/1/A/1104/004 (Low Pressure Injection System) directs operation of the \_\_(1)\_ LPI pump.
- 2) At Time = 1030, AP/26 (Loss of Decay Heat Removal) directs initiation of Enclosure \_\_(2)\_\_ for heat removal.

- A. 1. 1A
  - 2. 5.18 (SSF Operation for Loss of DHR Events)
- B. 1. 1A
  - 2. 5.7 (DHR Using SF Cooling)
- C. 1. 1C
  - 2. 5.18 (SSF Operation for Loss of DHR Events)
- D. 1.1C
  - 2. 5.7 (DHR Using SF Cooling)

### ILT48 ONS SRO NRC Examination

Question: 94 (1 point)

\_\_\_\_\_

	Given	the	following	Unit 1	conditions
--	-------	-----	-----------	--------	------------

- 1A SG isolated due to a steam line break
- 1B SG has a tube rupture
- 1) Without additional station management approval, the section of the EOP that would be used to cooldown to LPI would be the section using the \_\_(1)\_\_ SG.
- 2) Once RCS temperature and pressure allow alignment of LPI, the \_\_(2)\_ mode will be the INITIAL LPI alignment utilized.

- A. 1. 1A
  - 2. normal DHR
- B. 1. 1A
  - 2. High Pressure
- C. 1. 1B
  - 2. normal DHR
- D. 1. 1B
  - 2. High Pressure

Question: 95

1 point)			

In accordance with the bases of SLC 16.13.1 (Minimum Station Staffing Requirements)					
<ol> <li>the NRC Communicator(1) required to be a licensed or previously licensed SRO.</li> </ol>					
2) the NRC Communicator(2) also be the Off-site Communicator.					
Which ONE of the following completes the statements above?					
A. 1. is 2. can					
B. 1. is 2. can NOT					
C. 1. is NOT 2. can					
D. 1. is NOT 2. can NOT					

Question: 96 (1 point)

In accordance with OP/0/A/1108/001 (Curves and General Information) Encl. 4.17 (Evaluation for Removal of Statalarms/Control Room Indications), which ONE of the following is the MINIMUM level of approval required to remove a Statalarm from service located on 1VB1?

- A. AO Supervisor
- B. Control Room Supervisor
- C. Work Control Center SRO
- D. Shift Manager

### ILT48 ONS SRO NRC Examination

Question: 97 (1 point)

Given the following Unit 3 conditions:

- Fuel offload in progress
- A fuel cask has been dropped in the spent fuel pool causing fuel damage
- 3RIA-6 (Spent Fuel Pool Area Monitor) reaches the High Alarm setpoint
- 1) 3RIA-6 \_\_(1)\_\_ sound a local alarm.
- 2) The HIGHEST classification for this event is an \_\_(2)\_\_.

Which ONE of the following completes the statements above?

### REFERENCE PROVIDED DO NOT USE EMERGENCY COORDINATOR JUDGEMENT

- A. 1. does
  - 2. Unusual Event
- B. 1. does
  - 2. Alert
- C. 1. does NOT
  - 2. Unusual Event
- D. 1. does NOT
  - 2. Alert

Question: 98 (1 point)

Given the following plant conditions:

Time = 0400

- Reactor power = 100%
- 1A GWD tank release in progress at 1/3 Station Limit

Time = 0415

• 3B GWD tank release initiated at 1/3 Station Limit

Time = 0430

- Loss of power to RM-80 skid of 1RIA-37 (Waste Gas Effluent Monitor)
- 1SA-8/B-9 (Process Monitor Radiation High) actuated
- 1SA-8/B-10 (Process Monitor Fault) actuated
- 1) At Time = 0415, the HIGHEST level of approval required by OP/3/A/1104/018 (GWD System) for the 3B GWD tank release is the \_\_(1)\_\_.
- 2) At Time = 0430, GWD-4 \_\_(2)\_\_ AUTOMATICALLY closed.

- A. 1. Unit 3 CRS
  - 2. has NOT
- B. 1. Unit 3 CRS
  - 2. has
- C. 1. SM
  - 2. has NOT
- D. 1. SM
  - 2. has

### ILT48 ONS SRO NRC Examination

Question: 99 (1 point)

Given the following Unit 1 conditions:

Time = 0000

- Reactor power = 75%
- All three seals on the 1B1 RCP fail

Time = 0015

• SCM = 0°F stable

Time = 0019

- 1A1 RCP remains operating
- LOSCM tab in progress
- Rapid depressurization of BOTH steam generators is in progress
- 1) The reason the 1A1 RCP is NOT secured at Time = 0019 is to \_\_(1)\_\_.
- 2) The MINIMUM condition(s) that will allow the section of the LOSCM tab to be performed that reinstates the requirement to adhere to Tech Spec cooldown rate limits is once \_\_(2)\_ is/are greater than 0 degrees F.

- prevent core uncovery that could result from phase separation if the RCP were secured
  - 2. ALL subcooling margins
- provide forced circulation which enhances heat removal even with a two phase mixture
  - 2. ALL subcooling margins
- prevent core uncovery that could result from phase separation if the RCP were secured
  - 2. ANY subcooling margin
- provide forced circulation which enhances heat removal even with a two phase mixture
  - 2. ANY subcooling margin

### ILT48 ONS SRO NRC Examination

Question: 100 (1 point)

1) In accordance with RP/0/A/1000/002 (Control Room Emergency Coordinator Procedure) implementation of the OSAG (1) require the use of 10CFR50.54(x) and (y) provisions. 2) If implemented, 10CFR50.54(x) will require the MINIMUM level of approval to be Which ONE of the following completes the statements above? Α. 1. does 2. a licensed SRO B. 1. does 2. the Emergency Coordinator C. 1. does NOT 2. a licensed SRO D. 1. does NOT

2. the Emergency Coordinator



### Examination KEY for: ILT48 ONS SRO NRC Examin

	Question Number	Answer	
Ī	76	Α	
	77	В	
	78	Α	
	79	С	
	80	D	
	81	С	
	82	Α	
	83	С	
	84	С	
	85	D	
	86	В	
	87	Α	
	88	D	
	89	D	
	90	D	
	91	D	
	92	Α	
	93	В	
	94	D	
	95	Α	
	96	В	
	97	В	
	98	D	
	99	Α	
	100	Α	

### OCONEE 2015-302 SRO Written Exam References

- 1. Question 80 and Question 97: RP/0/A/1000/001, "Emergency Classification," rev 4 (entire procedure)
- 2. Question 88: AD-LS-ALL-0006, "Notification/Reportability Evaluation," rev 0 (entire procedure)
- 3. Question 92: Technical Specifications LCO 3.1.4, "CONTROL ROD Group alignment Limits," p. 3.1.4-1 to 3.1.4-4