

U.S. Nuclear Regulatory Commission
Site-Specific SRO Written Examination

Applicant Information

Name:

Date:

Facility/Unit: Turkey Point Units 3 & 4

Region: II

Reactor Type: W

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 overall, with 70.00 percent or better on the SRO-only items if given in conjunction with the RO exam; SRO-only exams given alone require a final grade of 80.00 percent to pass. You have 8 hours to complete the combined examination, and 3 hours if you are only taking the SRO portion.

Applicant Certification

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

Applicant's Signature

Results

RO/SRO-Only/Total Examination Values ____ / ____ / ____ Points

Applicant's Scores ____ / ____ / ____ Points

Applicant's Grade ____ / ____ / ____ Percent

ATTACHMENT TO L-2010-275

Turkey Point

Questions 1-75 RO

Questions 76-100 SRO only

Examination Answer Key November 10, 2010

1	C	26	C	51	B	76	A
2	A	27	C	52	A	77	C
3	B	28	B	53	A	78	A
4	A	29	A	54	D	79	B
5	A	30	C	55	D	80	C
6	B	31	B	56	B	81	A
7	D	32	C	57	B	82	B
8	B	33	D	58	A	83	B
9	C	34	C	59	A	84	D
10	D	35	D	60	B	85	C
11	D	36	C	61	A	86	A
12	C	37	C	62	D	87	A
13	C	38	D	63	C	88	D
14	C	39	A	64	D	89	B
15	A	40	A	65	D	90	B
16	A	41	B	66	C	91	C
17	D	42	B	67	D	92	B
18	A	43	B	68	D	93	A
19	C	44	D	69	C	94	A
20	C	45	C	70	B	95	B
21	B	46	D	71	B	96	D
22	B	47	C	72	B	97	C
23	C	48	B	73	A	98	B
24	A	49	A	74	A	99	A
25	D	50	B	75	A	100	D

Turkey Point Initial Licensed Examination

List of references to be provided candidates during examination:

Senior Reactor Operator

1. Technical Specification 3.3.1, Reactor Trip System Instrumentation (SRO only)
2. Technical Specification 3.4.6.2, Reactor Coolant System – Operational Leakage (SRO only)
3. Technical Specification 3.4.7, Reactor Coolant System – Chemistry (SRO only)
4. Technical Specification 3.4.9.3, Reactor Coolant System – Overpressure Mitigating Systems (SRO only)
5. Technical Specification 3.7.3, Intake Cooling Water System (SRO only)

Rec'd
11/5/10

3/4.3 INSTRUMENTATION

3/4.3.1 REACTOR TRIP SYSTEM INSTRUMENTATION

LIMITING CONDITION FOR OPERATION

3.3.1 As a minimum, the Reactor Trip System instrumentation channels and interlocks of Table 3.3-1 shall be OPERABLE.

APPLICABILITY: As shown in Table 3.3-1.

ACTION:

As shown in Table 3.3-1.

SURVEILLANCE REQUIREMENTS

4.3.1.1 Each Reactor Trip System instrumentation channel and interlock and the automatic trip logic shall be demonstrated OPERABLE by the performance of the Reactor Trip System Instrumentation Surveillance Requirement specified in Table 4.3-1. |

*Rec'd
11/5/10*

TABLE 3.3-1

REACTOR TRIP SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
1. Manual Reactor Trip	2 2	1 1	2 2	1, 2 3*, 4*, 5*	1 9
2. Power Range, Neutron Flux					
a. High Setpoint	4	2	3	1, 2	2
b. Low Setpoint	4	2	3	1##, 2	2
3. Intermediate Range, Neutron Flux	2	1	2	1##, 2	3
4. Source Range, Neutron Flux					
a. Startup	2	1	2	2#	4
b. Shutdown**	2	0	2	3, 4, 5	5
c. Shutdown	2	1	2	3*, 4*, 5*	9
5. Overtemperature ΔT	3	2	2	1, 2	13
6. Overpower ΔT	3	2	2	1, 2	13
7. Pressurizer Pressure-Low (Above P-7)	3	2	2	1	6
8. Pressurizer Pressure--High	3	2	2	1, 2	6
9. Pressurizer Water Level--High (Above P-7)	3	2	2	1	13
10. Reactor Coolant Flow--Low					
a. Single Loop (Above P-8)	3/loop	2/loop	2/loop	1	6
b. Two Loops (Above P-7 and below P-8)	3/loop	2/loop	2/loop	1	6

Rec'd
11/5/10

TABLE 3.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
11. Steam Generator Water Level--Low-Low	3/stm. gen.	2/stm. gen.	2/stm. gen.	1, 2	6
12. Steam Generator Water Level--Low Coincident With Steam/Feedwater Flow Mismatch	2 stm. gen. level and 2 stm./feed- water flow mismatch in each stm. gen.	1 stm. gen. level coin- cident with 1 stm./feed- water flow mismatch in same stm. gen.	1 stm. gen. level and 2 stm./feed- water flow mismatch in same stm. gen. or 2 stm. gen. level and 1 stm./feedwater flow mismatch in same stm. gen.	1, 2	6
13. Undervoltage--4.16 KV Busses A and B (Above P-7)	2/bus	1/bus on both busses	2/bus	1	12
14. Underfrequency-Trip of Reactor Coolant Pump Breaker(s) Open (Above P-7)	2/bus	1 to trip RCPs***	2/bus	1	11
15. Turbine Trip (Above P-7) a. Autostop Oil Pressure b. Turbine Stop Valve Closure	3 2	2 2	2 2	1 1	12 12

Rec'd
11/5/10

TABLE 3.3-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
16. Safety Injection Input from ESF	2	1	2	1, 2	8
17. Reactor Trip System Interlocks					
a. Intermediate Range Neutron Flux, P-6	2	1	2	2#	7
b. Low Power Reactor Trips Block, P-7	4	2	3	1	7
P-10 Input or Turbine First Stage Pressure	2	1	2	1	7
c. Power Range Neutron Flux, P-8	4	2	3	1	7
d. Power Range Neutron Flux, P-10	4	2	3	1, 2	7
18. Reactor Coolant Pump Breaker Position Trip	1/breaker 1/breaker	1 2	1/breaker 1/breaker	1 1	11 11
a. Above P-8	2	1	2	1, 2	8, 10
b. Above P-7 and below P-8	2	1	2	3*, 4*, 5*	9
19. Reactor Trip Breakers					
a. Above P-8	2	1	2	1, 2	8, 10
b. Above P-7 and below P-8	2	1	2	3*, 4*, 5*	9
20. Automatic Trip and Interlock logic	2 2	1 1	2 2	1, 2 3*, 4*, 5*	8 9

Rec'd
11/5/10

TABLE 3.3-1 (Continued)

TABLE NOTATION

- * When the Reactor Trip System breakers are in the closed position and the Control Rod Drive System is capable of rod withdrawal.
- ** When the Reactor Trip System breakers are in the open position, one or both of the backup NIS instrumentation channels may be used to satisfy this requirement. For backup NIS testing requirements, see Specification 3/4.3.3.3, ACCIDENT MONITORING.
- *** Reactor Coolant Pump breaker A is tripped by underfrequency sensor UF-3A1(UF-4A1) or UF-3B1(UF-4B1). Reactor Coolant Pump breakers B and C are tripped by underfrequency sensor UF-3A2(UF-4A2) or UF-3B2(UF-4B2).
- # Below the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint.
- ## Below the P-10 (Low Setpoint Power Range Neutron Flux Interlock) Setpoint.

ACTION STATEMENTS

- ACTION 1 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or be in HOT STANDBY within the next 6 hours.
- ACTION 2 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:
- a. The inoperable channel is placed in the tripped condition within 6 hours,
 - b. The Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.1.1, and
 - c. Either, THERMAL POWER is restricted to less than or equal to 75% of RATED THERMAL POWER and the Power Range Neutron Flux Trip Setpoint is reduced to less than or equal to 85% of RATED THERMAL POWER within 4 hours; or, the QUADRANT POWER TILT RATIO is monitored per Specification 4.2.4.2.

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TABLE 3.3-1 (Continued)

ACTION STATEMENTS (Continued)

- ACTION 3 - With the number of channels OPERABLE one less than the Minimum Channels OPERABLE requirement and with the THERMAL POWER level:
- Below the P-6 (Intermediate Range Neutron Flux Interlock) Setpoint, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above the P-6 Setpoint, and
 - Above P-6 (Intermediate Range Neutron Flux Interlock) Setpoint but below 10% of RATED THERMAL POWER, restore the inoperable channel to OPERABLE status prior to increasing THERMAL POWER above 10% of RATED THERMAL POWER.
- ACTION 4 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, suspend all operations involving positive reactivity changes.
- ACTION 5 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, suspend all operations involving positive reactivity changes and verify compliance with the SHUTDOWN MARGIN requirements of Specification 3.1.1.1 or 3.1.1.2, as applicable, within 1 hour and at least once per 12 hours thereafter.
- ACTION 6 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed until performance of the next required ANALOG CHANNEL OPERATIONAL TEST provided the inoperable channel is placed in the tripped condition within 6 hours.
- ACTION 7 - With less than the Minimum Number of Channels OPERABLE, within 1 hour determine by observation of the associated permissive annunciator window(s) that the interlock is in its required state for the existing plant condition, or apply Specification 3.0.3.
- ACTION 8 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours; however, one channel may be bypassed for up to 2 hours for surveillance testing per Specification 4.3.1.1, provided the other channel is OPERABLE.
- ACTION 9 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 48 hours or open the Reactor Trip System breakers within the next hour.
- ACTION 10 - With one of the diverse trip features (undervoltage or shunt trip attachment) inoperable, restore it to OPERABLE status within 48 hours or declare the breaker inoperable and apply ACTION 8. The breaker shall not be bypassed while one of the diverse trip features is inoperable, except for the time required for performing maintenance to restore the breaker to OPERABLE status.

rec'd
11/5/10

TABLE 3.3-1 (Continued)

ACTION STATEMENTS (Continued)

- ACTION 11 -With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, be in at least HOT STANDBY within 6 hours.
- ACTION 12 -With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed until performance of the next required ACTUATION LOGIC TEST provided the inoperable channel is placed in the tripped condition within 6 hours. |
- ACTION 13 -With the number of OPERABLE channels one less than the Total number of channels, STARTUP and/or POWER OPERATION may proceed provided the inoperable channel is placed in the tripped condition within 6 hours. For subsequent required DIGITAL CHANNEL OPERATIONAL TESTS the inoperable channel may be placed in bypass status for up to 4 hours. |

*rec'd
11/5/10*

REACTOR COOLANT SYSTEM

OPERATIONAL LEAKAGE

LIMITING CONDITION FOR OPERATING

3.4.6.2 Reactor Coolant System operational leakage shall be limited to:

- a. No PRESSURE BOUNDARY LEAKAGE,
- b. 1 GPM UNIDENTIFIED LEAKAGE,
- c. 150 gallons per day primary-to-secondary leakage through any one steam generator (SG),
- d. 10 GPM IDENTIFIED LEAKAGE from the Reactor Coolant System, and
- e. Leakage as specified in Table 3.4-1 up to a maximum of 5 GPM at a Reactor Coolant System pressure of 2235 ± 20 psig from any Reactor Coolant System Pressure Isolation Valve specified in Table 3.4-1.*

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With any PRESSURE BOUNDARY LEAKAGE, or with primary-to-secondary leakage not within limit, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With any Reactor Coolant System operational leakage greater than any one of the above limits, excluding primary-to-secondary leakage, PRESSURE BOUNDARY LEAKAGE, and leakage from Reactor Coolant System Pressure Isolation Valves, reduce the leakage rate to within limits within 4 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With any Reactor Coolant System Pressure Isolation Valve leakage greater than allowed by 3.4.6.2.e above operation may continue provided:
 1. Within 4 hours verify that at least two valves in each high pressure line having a non-functional valve are in, and remain in that mode corresponding to the isolated condition, i.e., manual valves shall be locked in the closed position; motor operated valves shall be placed in the closed position and power supplies deenergized. Follow applicable ACTION statement for the affected system, and

* Test pressure less than 2235 psig are allowed. Minimum differential test pressure shall not be less than 150 psid. Observed leakage shall be adjusted for the actual test pressure up to 2235 psig assuming the leakage to be directly proportional to pressure differential to the one-half power.

*rec'd
11/5/10*

REACTOR COOLANT SYSTEM
OPERATIONAL LEAKAGE
LIMITING CONDITION FOR OPERATION (Continued)

2. The leakage* from the remaining isolating valves in each high pressure line having a valve not meeting the criteria of Table 3.4-1, as listed in Table 3.4-1, shall be determined and recorded daily. The positions of the other valves located in the high pressure line having the leaking valve shall be recorded daily unless they are manual valves located inside containment.

Otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- d. With any Reactor Coolant System Pressure Isolation Valve leakage greater than 5 gpm, reduce leakage to below 5 gpm within 1 hour, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.4.6.2.1 Reactor Coolant System operational leakages shall be demonstrated to be within each of the above limits by:

- a. Monitoring the containment atmosphere gaseous or particulate radioactivity monitor at least once per 12 hours.
- b. Monitoring the containment sump level at least once per 12 hours.
- c.** Performance of a Reactor Coolant System water inventory balance at least once per 72*** hours; and
- d. Monitoring the Reactor Head Flange Leakoff System at least once per 24 hours; and
- e. Verifying primary-to-secondary leakage is ≤ 150 gallons per day through any one SG at least once per 72*** hours.

4.4.6.2.2 Each Reactor Coolant System Pressure Isolation Valve specified in Table 3.4-1 shall be demonstrated OPERABLE by verifying leakage* to be within its limit:

- a. At least once per 18 months.
- b. Prior to entering MODE 2 whenever the plant has been in COLD SHUTDOWN for 7 days or more and if leakage testing has not been performed in the previous 9 months, and
- c. Prior to returning the valve to service following maintenance, repair or replacement work on the valve.

* To satisfy ALARA requirements, leakage may be measured indirectly (as from the performance of pressure indicators) if accomplished in accordance with approved procedures and supported by computations showing that the method is capable of demonstrating valve compliance with the leakage criteria.

** Not applicable to primary-to-secondary leakage.

*** Not required to be performed until 12 hours after establishment of steady state operation.

rec'd
11/5/10

REACTOR COOLANT SYSTEM

3/4.4.7 CHEMISTRY

LIMITING CONDITION FOR OPERATION

3.4.7 The Reactor Coolant System chemistry shall be maintained within the limits specified in Table 3.4-2.

APPLICABILITY: At all times.

ACTION:

MODES 1, 2, 3 and 4:

- a. With any one or more chemistry parameter in excess of its Steady-State Limit but within its Transient Limit, restore the parameter to within its Steady-State Limit within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours; and
- b. With any one or more chemistry parameter in excess of its Transient Limit, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.

At All Other Times:

With the concentration of either chloride or fluoride in the Reactor Coolant System in excess of its Steady-State Limit for more than 24 hours or in excess of its Transient Limit, reduce the pressurizer pressure to less than or equal to 500 psig, if applicable, and perform an engineering evaluation to determine the effects of the out-of-limit condition on the structural integrity of the Reactor Coolant System; determine that the Reactor Coolant System remains acceptable for continued operation prior to increasing the pressurizer pressure above 500 psig or prior to proceeding to MODE 4.

SURVEILLANCE REQUIREMENTS

4.4.7 The Reactor Coolant System chemistry shall be determined to be within the limits by analysis of those parameters at the frequencies specified in Table 4.4-3.

*rec'd
11/5/10*

TABLE 3.4-2
REACTOR COOLANT SYSTEM
CHEMISTRY LIMITS

<u>PARAMETER</u>	<u>STEADY STATE LIMIT</u>	<u>TRANSIENT LIMIT</u>
Dissolved Oxygen*	≤ 0.10 ppm	≤ 1.00 ppm
Chloride**	≤ 0.15 ppm	≤ 1.50 ppm
Fluoride**	≤ 0.15 ppm	≤ 1.50 ppm

* Limit not applicable with average reactor coolant temperature less than or equal to 250°F.

** Not required when reactor is defueled and RCS forced circulation is unavailable.

*rec'd
11/15/10*

REACTOR COOLANT SYSTEM

OVERPRESSURE MITIGATING SYSTEMS

LIMITING CONDITION FOR OPERATION

3.4.9.3 The high pressure safety injection flow paths to the Reactor Coolant System (RCS) shall be isolated, and at least one of the following Overpressure Mitigating Systems shall be OPERABLE:

- a. Two power-operated relief valves (PORVs) with a lift setting of ≤ 468 psig, or
- b. The RCS depressurized with a RCS vent of greater than or equal to 2.20 square inches.

APPLICABILITY

MODES 4 (when the temperature of any RCS cold leg is less than or equal to 275°F), 5, and 6 with the reactor vessel head on.

ACTION:

- a. With the high pressure safety injection flow paths to the RCS unisolated, restore isolation of these flow paths within 4 hours.
- b. With one PORV inoperable in MODE 4 (when the temperature of any RCS cold leg is less than or equal to 275°F), restore the inoperable PORV to OPERABLE status within 7 days or depressurize and vent the RCS through at least a 2.20 square inch vent within the next 8 hours.
- c. With one PORV inoperable in Modes 5 or 6 with the reactor vessel head on, either (1) restore the inoperable PORV to OPERABLE status within 24 hours, or (2) complete depressurization and venting of the RCS through at least a 2.20 square inch vent within a total of 32 hours, or (3) complete depressurization and venting of the RCS through at least one open PORV and associated block valve within a total of 32 hours.
- d. With both PORVs inoperable, either restore one PORV to OPERABLE status or complete depressurization and venting of the RCS through at least a 2.20 square inch vent within 24 hours.
- e. In the event either the PORVs or a 2.20 square inch vent is used to mitigate an RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the PORVs or RCS vent(s) on the transient, and any corrective action necessary to prevent recurrence. A Special Report is not required when such a transient is the result of water injection into the RCS for test purposes with an open vent path.
- f. The provisions of Specification 3.0.4 are not applicable.

*Rec'd
11/5/10*

PLANT SYSTEMS

3/4.7.3 INTAKE COOLING WATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.3 The Intake Cooling Water System (ICW) shall be OPERABLE with:

- a. Three ICW pumps, and
- b. Two ICW headers.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

- a. With only two ICW pumps with independent power supplies OPERABLE, restore the inoperable ICW pump to OPERABLE status within 14 days or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. The provisions of Specification 3.0.4 are not applicable.
- b. With only one ICW pump OPERABLE or with two ICW pumps OPERABLE but not from independent power supplies, restore two pumps from independent power supplies to OPERABLE status within 72 hours or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With only one ICW header OPERABLE, restore two headers to OPERABLE status within 72 hours or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.7.3 The Intake Cooling Water System (ICW) shall be demonstrated OPERABLE:

- a. At least once per 31 days by verifying that each valve (manual, power-operated, or automatic) servicing safety-related equipment that is not locked, sealed, or otherwise secured in position is in its correct position; and
- b. At least once per 18 months during shutdown, by verifying that:
 - 1) Each automatic valve servicing safety-related equipment actuates to its correct position on a SI test signal, and
 - 2) Each Intake Cooling Water System pump starts automatically on a SI test signal.
 - 3) Interlocks required for system operability are OPERABLE.

Rec'd
11/5/10

TURKEY POINT 2010 NRC EXAM

Question 1

- Unit 4 has experienced a reactor trip and safety injection.
- Off-site power has been lost.
- The crew has determined that the safety injection was due to Pressurizer PORV PORV-4-455C leaking by.
- When the RO attempted to close Block Valve MOV-4-536, the red and green valve position lights extinguished.
- RCS pressure is 1100 psig and lowering.
- The SNPO reports the breaker for MOV-4-536 is NOT mechanically tripped and the thermal overload is tripped.

Which ONE of the following identifies the minimum actions required for the SNPO to restore Control Room indication for MOV-4-536 and the effect on Pressurizer level if MOV-4-536 cannot be closed?

- A. Depress the thermal overload pushbutton and cycle the breaker OFF then ON
The Pressurizer will fill
- B. Depress the thermal overload pushbutton and cycle the breaker OFF then ON
The Pressurizer will empty
- C. Only depress the thermal overload pushbutton
The Pressurizer will fill
- D. Only depress the thermal overload pushbutton
The Pressurizer will empty

TURKEY POINT 2010 NRC EXAM

Question 2

- Both units are at 100% power.
- An ECO will be hung to isolate CCW to the 3A HHSI Pump.

Which ONE of the following completes the following statements?

Unit 4 _____ (1) _____ to apply the action statement for Technical Specification 3.5.2, ECCS Subsystems – Tavg Greater than or Equal to 350°F.

A LOCA on **Unit 3** would have adequate ECCS flow for _____ (2) _____.

- | | _____ (1) _____ | _____ (2) _____ |
|----|-----------------|--------------------------------|
| A. | is required | all size breaks |
| B. | is required | only breaks less than 4 inches |
| C. | is NOT required | all size breaks |
| D. | is NOT required | only breaks less than 4 inches |

TURKEY POINT 2010 NRC EXAM

Question 3

- Unit 4 is at 100% power.
- There are no available Charging Pumps.
- The crew has isolated letdown.
- Total RCP seal return is 9 gpm.

In accordance with 4-OSP-041.1, Reactor Coolant System Leak Rate Calculation, which ONE of the following identifies how long it will take the Pressurizer level to decrease by 1%?

- A. 1.5 to 2 minutes
- B. 4.5 to 5 minutes
- C. 9.5 to 10 minutes
- D. 11 to 11.5 minutes

TURKEY POINT 2010 NRC EXAM

Question 4

Initial conditions:

- Unit 4 is in Mode 4.
- The RCS is water solid.
- RCS pressure is 350 psig.
- RHR is in service.
- Overpressure Mitigation System (OMS) primary and backup status lights are "ON."

Subsequently:

- A momentary pressure excursion to 600 psig causes the following annunciators to actuate:
 - A 3/2, OMS HI PRESS ALERT
 - A 3/3, OMS CONTROL ACTIVATED
- After 10 seconds RCS pressure returns to its previous value.

In accordance with 4-ONOP-050, Loss of RHR, which ONE of the following identifies the required operator action?

NOTE: MOV-4-750 and 751 are Normal RHR Suction from Loop Valves.

- A. Depress the Interrupt Pushbuttons for MOV-4-750 and MOV-4-751 before the valves reach their full close position.
- B. Depress the Interrupt Pushbuttons for MOV-4-750 and MOV-4-751 immediately after the valves have both fully closed.
- C. Stop all running charging pumps.
- D. Reduce charging pump speed.

TURKEY POINT 2010 NRC EXAM

Question 5

Operators are responding to a LOCA on Unit 3.

- Containment pressure peaked at 26 psig.
- The Pressurizer level is off-scale low.
- No Charging Pumps are running.
- The crew is re-establishing charging flow.
- Seal Water Return temperatures are 245° F.

Which ONE of the following describes the status of CCW to the RCP thermal barriers and why the local seal injection valves are closed before starting the Charging Pump in accordance with BD-ONOP-041.1, Reactor Coolant Pump Off-Normal Basis Document?

CCW flow to the RCP thermal barriers has...

- A. been lost.
Cold seal injection flow will cause RCP seal damage.
- B. been lost.
Maximum charging flow to the RCS loops via the normal charging path is required.
- C. NOT been interrupted.
Maximum charging flow to the RCS loops via the normal charging path is required.
- D. NOT been interrupted.
Cold seal injection flow will cause RCP seal damage.

TURKEY POINT 2010 NRC EXAM

Question 6

- Unit 3 is at 100% power.
- PT-3-444, Pressurizer Pressure Control Channel, fails to 1500 psig.

Which ONE of the following completes both of the following statements after the channel failure?

The control signal (% controller output) indication on Pressurizer Pressure Controller PC-3-444J will be ____ (1) _____. Pressurizer pressure will increase until ____ (2) _____.

____ (1) _____ _____ (2) _____

- | | | |
|----|------|-------------------|
| A. | 0% | the reactor trips |
| B. | 0% | a PORV opens |
| C. | 100% | the reactor trips |
| D. | 100% | a PORV opens |

TURKEY POINT 2010 NRC EXAM

Question 7

Initial conditions:

- Unit 3 is at 100% power.
- The crew has completed all required actions in 3-ONOP-059.8, Power Range Nuclear Instrument Malfunction, in response to failed Power Range Nuclear Instrument N-41.
- N-41 is still out of service.

Subsequently:

- Unit 3 experiences a loss of 120V Instrument Bus 3P07.
- The red and green reactor trip breaker lights are extinguished on the RCO Console and on VPB.

Which ONE of the following explains these breaker light indications and the status of the reactor trip breakers?

- A. 120V Instrument Bus 3P07 provides power to the reactor trip breaker light indications. The reactor trip breakers are open.
- B. 120V Instrument Bus 3P07 provides power to the reactor trip breaker light indications; however, the reactor trip breakers failed to open (remain closed).
- C. Two power range channels tripped and the reactor trip breakers are open.
- D. Two power range channels tripped; however the reactor trip breakers failed to open (remain closed).

TURKEY POINT 2010 NRC EXAM

Question 8

- The crew is performing 4-ONOP-071.2, Steam Generator Tube Leakage.
- The crew reduced power to less than 5% and has just tripped the reactor.

In accordance with 4-ONOP-071.2, which ONE of the following identifies a subsequent plant condition that requires the crew to manually initiate safety injection?

- A. Pressurizer level steady at 14% with charging at maximum and letdown automatically isolated
- B. Pressurizer level at 19% and decreasing with charging at maximum and letdown isolated
- C. With makeup in automatic, Charging Pump suction swaps to the RWST due to low level in the VCT
- D. STA performs 4-OSP-041.1, RCS Leak Rate Calculation, and reports a RCS leak rate of 150 gpm

TURKEY POINT 2010 NRC EXAM

Question 9

Initial conditions:

- Unit 4 is at 100% power.
- The B AFW Pump is out of service.

Subsequently, Unit 4 experiences a loss of Main Feedwater.

Which ONE of the following identifies:

- 1) the AFW Pumps auto start signal and
 - 2) in accordance with 4-EOP-ES-0.1, Reactor Trip Response, how the AFW Pumps are required to be operated to ensure over-heating does not occur?
- A. 2/3 narrow range levels less than 10% on any one Steam Generator
An AFW Pump is required to be shutdown within one hour of the initial start signal
- B. 2/3 narrow range levels less than 10% on at least two Steam Generators
An AFW Pump is required to be shutdown within one hour of the initial start signal
- C. 2/3 narrow range levels less than 10% on any one Steam Generator
An AFW Pump is required to be shutdown within one hour of operating at less than 60 gpm
- D. 2/3 narrow range levels less than 10% on at least two Steam Generators
An AFW Pump is required to be shutdown within one hour of operating at less than 60 gpm

TURKEY POINT 2010 NRC EXAM

Question 10

Which ONE of the following completes the following statement in accordance with BD-EOP-ECA-0.0, Loss of All AC Power Basis Document?

The 3A, 4A, and Spare Batteries design basis is to supply their shutdown loads for a minimum of (1) , provided the non-essential DC loads are de-energized no later than (2) after a loss of all AC power event.

- | | <u> (1) </u> | <u> (2) </u> |
|----|--------------------|--------------------|
| A. | 1 hour | 15 minutes |
| B. | 1 hour | 30 minutes |
| C. | 2 hours | 30 minutes |
| D. | 2 hours | 60 minutes |

TURKEY POINT 2010 NRC EXAM

Question 11

- PTN has experienced a loss of the switchyard.
- All EDGs are supplying their respective 4kV busses.

Which ONE of the following completes both statements for these conditions?

There will be (1) Control Room Air Handlers running.

The Control Room Air Handler Compressor/Fan indications are available (2).

(1) (2)

- | | | |
|----|---|---|
| A. | 1 | at Control Room Rack 4QR81 & 4QR82 AND at the air handler |
| B. | 1 | only at the air handler |
| C. | 3 | at Control Room Rack 4QR81 & 4QR82 AND at the air handler |
| D. | 3 | only at the air handler |

TURKEY POINT 2010 NRC EXAM

Question 12

- Unit 3 is at 50% power.
- Multiple annunciators simultaneously alarm.
- The bottom two rows of bistable lights on VPB go out.

Which ONE of the following 120V Vital Instrument Panels has been lost?

- A. 3P06
- B. 3P07
- C. 3P08
- D. 3P09

TURKEY POINT 2010 NRC EXAM

Question 13

Initial conditions:

- Unit 3 is in Mode 3.
- Vital 480V MCC 3B is out of service.

Subsequently:

- Vital DC Bus 3D23 loses power due to a fault on the bus.
- The crew is restoring power to DC Bus 3D23 in accordance with 3-ONOP-003.5, Loss of DC Bus 3D23 and 3D23A (3B).
- The fault has been isolated.

Which ONE of the following identifies the battery charger that is still available and the required methodology for re-energizing Vital DC Bus 3D23 in accordance with 3-ONOP-003.5?

- A. 3B1; the ONOP requires energizing the bus by FIRST closing the battery output breaker and THEN aligning the charger
- B. 3B1; the ONOP requires energizing the bus by FIRST aligning the charger THEN closing the battery output breaker
- C. 3B2; the ONOP requires energizing the bus by FIRST closing the battery output breaker and THEN aligning the charger
- D. 3B2; the ONOP requires energizing the bus by FIRST aligning the charger THEN closing the battery output breaker

TURKEY POINT 2010 NRC EXAM

Question 14

- Unit 4 VARs are 225 MVARs in the lead with 20 MVAR oscillations.
- Megawatts are stable at 750 MWe.
- Annunciator E 8/2, GEN FIELD FORCING/ VOLT REG LIMITING, is in alarm.
- At the Exciter Switchgear, the MINIMUM EXCITATION module #5 light is on.

In accordance with 4-ONOP-090, Abnormal Generator MW/MVAR Oscillation, which ONE of the following is the required action?

- A. Place the AC Voltage Regulator to lower
- B. Place the DC Voltage Regulator to lower
- C. Place the AC Voltage Regulator to raise
- D. Place the DC Voltage Regulator to raise

TURKEY POINT 2010 NRC EXAM

Question 15

- 3-EOP-ECA-1.2, LOCA Outside Containment, has been entered.
- The crew closed MOV-3-744A & B, RHR Discharge to Cold Leg Isolation Valves.
- The leak is between the 3B RHR Heat Exchanger and 3-HCV-758, RHR HX Outlet Flow Control Valve.

Which ONE of the following completes the following statement?

In accordance with 3-EOP-ECA-1.2, isolation of the LOCA outside containment can be verified based on ____ (1) ____.

Local operator actions ____ (2) ____ for Alternate RHR to be available for plant cooldown.

- | | <u> (1) </u> | <u> (2) </u> |
|----|---|------------------------|
| A. | increasing RCS pressure | are required |
| B. | increasing RCS pressure | are NOT required |
| C. | decreasing Auxiliary Building radiation | are required |
| D. | decreasing Auxiliary Building radiation | are NOT required |

TURKEY POINT 2010 NRC EXAM

Question 16

Unit 3 has experienced a safety injection.

Which ONE of the following reflects the order of the steps listed in 3-EOP-FR-H.1 for systems / components that the crew must attempt to use to reestablish flow to the Steam Generators?

- A. 1) Main Feedwater, 2) Standby Feedwater, 3) Condensate
- B. 1) Main Feedwater, 2) Condensate, 3) Standby Feedwater
- C. 1) Standby Feedwater, 2) Main Feedwater, 3) Condensate
- D. 1) Standby Feedwater, 2) Condensate, 3) Main Feedwater

TURKEY POINT 2010 NRC EXAM

Question 17

The crew is performing 4-EOP-ECA-1.1, Loss of Emergency Coolant Recirculation.

Which ONE of the following states:

- 1) the Makeup System primary water and boric acid flow rates that are in accordance with 4-EOP-ECA-1.1 and
 - 2) in accordance with BD-EOP-ECA-1.1 (basis for ECA-1.1) the reason for those flowrates?
- A. 1) 40 gpm primary water and 60 gpm boric acid
 2) Maximum blended flow that can be maintained through the blender.
- B. 1) 40 gpm primary water and 60 gpm boric acid
 2) Provides a blend of about 2000 ppm
- C. 1) 60 gpm primary water and 40 gpm boric acid
 2) Maximum blended flow that can be maintained through the blender.
- D. 1) 60 gpm primary water and 40 gpm boric acid
 2) Provides a blend of about 2000 ppm

TURKEY POINT 2010 NRC EXAM

Question 18

- The crew is performing 4-EOP-ECA-2.1, Uncontrolled Depressurization of All Steam Generators.
- The crew has NOT been able to close the MSIVs.
- All Steam Generator pressures are 50 psig.

Which ONE of the following identifies (1) the required BOP actions to control Steam Generator levels in accordance with 4-EOP-ECA-2.1 and (2) the reason for those actions in accordance with Basis Document BD-EOP-ECA-2.1?

The BOP is required to...

- A. establish an alternate feedwater supply equal to 25 gpm per S/G then isolate AFW.
to keep the S/G tubes wet
- B. establish an alternate feedwater supply equal to 25 gpm per S/G then isolate AFW.
to prevent entry into 4-EOP-FR-H.1, Loss of Secondary Heat Sink
- C. continue to use AFW feedwater flow equal to 25 gpm per S/G.
to keep the S/G tubes wet
- D. continue to use AFW feedwater flow equal to 25 gpm per S/G.
to prevent entry into 4-EOP-FR-H.1, Loss of Secondary Heat Sink

TURKEY POINT 2010 NRC EXAM

Question 19

- Unit 4 Bank D rods were at 150 steps.
- The rods are in automatic.
- Bank D rods are experiencing a continuous rod withdrawal.

Which ONE of the following completes the following statements?

The RCO console NARPI indication will change _____ (1) _____.

In accordance with 4-ONOP-028, Reactor Control System Malfunction, the required operator action is to _____ (2) _____.

- A. after each step
place the Rod Motion Control Selector switch to MAN
- B. after each step
trip the reactor and enter 4-EOP-E-0, Reactor Trip or Safety Injection
- C. every time the rods move 2.5 steps
place the Rod Motion Control Selector switch to MAN
- D. every time the rods move 2.5 steps
trip the reactor and enter 4-EOP-E-0, Reactor Trip or Safety Injection

TURKEY POINT 2010 NRC EXAM

Question 20

- Unit 3 is retrieving a dropped rod in accordance with 3-ONOP-028.3 Attachment 1, Dropped RCC, Dropped Rod Recovery.
- The dropped rod is in Bank D Group 2.
- Alarm B 9/4, ROD CONTROL URGENT FAILURE, alarms during the retrieval.

Which ONE of the following completes the following statement?

Alarm B 9/4 is due to a (1) alarm on Bank D (2) .

 (1) (2)

- | | | |
|----|---------------|---------|
| A. | Logic Cabinet | Group 1 |
| B. | Logic Cabinet | Group 2 |
| C. | Power Cabinet | Group 1 |
| D. | Power Cabinet | Group 2 |

TURKEY POINT 2010 NRC EXAM

Question 21

- An ATWS has occurred on Unit 4.
- The crew has entered 4-EOP-FR-S.1, Response to Nuclear Power Generation/ATWS.
- The crew is establishing emergency boration.
- The 4A and 4B Boric Acid Transfer Pumps tripped and cannot be started.

Which ONE of the following identifies the next required action to commence emergency boration in accordance with 4-EOP-FR-S.1?

- A. Open MOV-4-350, Emergency Borate Valve
- B. Close LCV-4-115C, VCT Outlet Isolation Valve, and locally open the breaker
- C. Start an additional Charging Pump
- D. Locally open 4-356, Manual Emergency Boration Valve

TURKEY POINT 2010 NRC EXAM

Question 22

- Unit 4 is at 100% power.
- Vacuum is 26" Hg.
- The BOP rapidly reduced load and annunciator C 8/3, STEAM DUMP ARMED/ACTUATED, actuated.

Which ONE of the following predicts if annunciators C 8/3, and E 6/3, CONDENSER LO VACUUM TRIP, will be in alarm with condenser vacuum at 24" Hg?

	<u>C 8/3</u>	<u>E 6/3</u>
A.	Actuated	Actuated
B.	Actuated	NOT Actuated
C.	NOT Actuated	Actuated
D.	NOT Actuated	NOT Actuated

TURKEY POINT 2010 NRC EXAM

Question 23

The Unit 3 RO is preparing to commence a release of Gas Decay Tank A in accordance with 0-NOP-061.14A, Waste Gas Disposal System Controlled Release of Gas Decay Tank A.

In accordance with 0-NOP-061.14A which ONE of the following identifies:

- 1) how the RO is required to adjust the R-14, Plant Vent Gaseous Effluent Monitor, HIGH ALARM thumbwheel and
- 2) when the release is required to be terminated?

Adjust the thumbwheel to match the...

- A. "Maximum Expected Monitor Reading" listed on the Gas Decay Tank Release Permit.
Terminate the release if at any time during the release the Auxiliary Building Fan configuration changes.
- B. "Maximum Expected Monitor Reading" listed on the Gas Decay Tank Release Permit.
Terminate the release if the outside wind direction changes.
- C. "R-14 setpoint" specified on the Gas Decay Tank Release Permit.
Terminate the release if at any time during the release the Auxiliary Building Fan configuration changes.
- D. "R-14 setpoint" specified on the Gas Decay Tank Release Permit.
Terminate the release if the outside wind direction changes.

TURKEY POINT 2010 NRC EXAM

Question 24

The following plant conditions exist when the crew enters 3-EOP-ES-0.0, Rediagnosis.

- RCS Pressure is 100 psig and slowly lowering.
- Pressurizer Level is off-scale low.
- All SG Pressures are 500 psig and slowly lowering.
- All the MSIVs are closed.
- RCS Subcooling is 0°F.
- S/G A, B, C narrow range levels are 12%, 10%, 5% and slowly rising.
- AFW flow to the A, B, C S/Gs is 150, 130, 120 gpm and stable.
- Containment Pressure is 22 psig and slowly lowering.
- Containment Temperature is 200°F and lowering.
- Containment Sump level is increasing.

In accordance with 3-EOP-ES-0.0, which of the following states the procedure the crew is required to transition to?

- A. E-1, Loss of Reactor or Secondary Coolant
- B. E-2, Faulted Steam Generator Isolation
- C. ECA-2.1, Uncontrolled Depressurization of All Steam Generators
- D. E-3, Steam Generator Tube Rupture

TURKEY POINT 2010 NRC EXAM

Question 25

- The crew is performing 4-EOP-ES-0.4, Natural Circulation Cooldown With Steam Void In Vessel (Without RVLMS).
- The crew is performing Step 5 "Try To Start One RCP."

In accordance with 4-EOP-ES-0.4, which ONE of the following identifies the Pressurizer level and the basis for the required level in accordance with BD-EOP-ES-0.4, Basis Document?

- A. Between 20 and 25% to prevent the Pressurizer going solid
- B. Between 20 and 25% to maintain Pressurizer level on scale when the reactor upper head void collapses
- C. Less than 68% to prevent the Pressurizer going solid
- D. Greater than 68% to maintain Pressurizer level on scale when the reactor upper head void collapses

TURKEY POINT 2010 NRC EXAM

Question 26

Which ONE of the following identifies the minimum Containment Recirculation Sump level that requires the crew to enter 3-EOP-FR-Z.2, Response to Containment Flooding, and "who" the crew is required to provide sump level and activity level values to?

- A. 428 inches; Technical Support Center
- B. 428 inches; Nuclear Chemistry
- C. 447 inches; Technical Support Center
- D. 447 inches; Nuclear Chemistry

TURKEY POINT 2010 NRC EXAM

Question 27

- An event has occurred in the plant that has resulted in a radioactive release in the containment.
- A Site Area Emergency has been declared.

Which ONE of the following actions is directed by 3-EOP-FR-Z.3, Response to High Containment Radiation Level?

- A. Lineup the Post Accident Containment Ventilation System as directed by the Technical Support Center.
- B. Perform Post Accident Containment Ventilation Alternate Air Pressurization using 3-OP-094, Containment Post Accident Monitoring Systems.
- C. Verify Containment and Control Room Ventilation Isolation and verify at least two Emergency Containment Filter Fans running.
- D. Reduce containment activity levels with dilution flow using the Containment Purge System.

TURKEY POINT 2010 NRC EXAM

Question 28

- Unit 3 is at 8% power.
- Breaker 3AA05, 3A 4kV Bus Feed from Unit 3 Startup Transformer, trips open.

Which ONE of the following identifies how many RCPs will lose 4 kV power and whether the reactor will automatically trip?

- A. Only one RCP; the reactor will automatically trip
- B. Only one RCP; the reactor will NOT automatically trip
- C. Two RCPs; the reactor will automatically trip
- D. Two RCPs; the reactor will NOT automatically trip

TURKEY POINT 2010 NRC EXAM

Question 29

- Unit 3 is at 100% power.
- The 45 gpm letdown orifice is in service.
- Blended makeup flow is set for 60 gpm.

With no operator action, which ONE of the following failures will result in the Pressurizer heaters de-energizing *and remaining de-energized?*

- A. LT-3-115, VCT Level Transmitter, fails high
- B. LT-3-112, VCT Level Transmitter, fails high
- C. Instrument Air is lost to CV-3-204, Letdown from Regen Heat Exchanger Isolation
- D. Instrument Air is lost to HCV-3-121, Charging Flow to Regen Heat Exchanger

TURKEY POINT 2010 NRC EXAM

Question 30

- Unit 3 has experienced a LOCA.
- Containment temperature is 200°F.
- RHR flow is 0 gpm.

In accordance with 3-EOP-E-1, Loss of Reactor or Secondary Coolant, which ONE of the following completes the following statements?

The maximum RCS pressure that the RHR Pumps are allowed to be left operating is (1).

If RCS pressure is above this pressure, the maximum time the RHR Pumps are allowed to run is (2).

- | | <u>(1)</u> | <u>(2)</u> |
|----|------------|------------|
| A. | 250 psig | 44 minutes |
| B. | 250 psig | 60 minutes |
| C. | 650 psig | 44 minutes |
| D. | 650 psig | 60 minutes |

TURKEY POINT 2010 NRC EXAM

Question 31

Initial conditions:

- Unit 4 is performing a core reload.
- The 4A RHR Pump is out of service.
- The 4B RHR Pump has been running continuously for the past 24 hours.
- RHR flow is 3500 gpm.

Subsequently:

- The RHR flow is interfering with the fuel assembly insertion.
- The Manipulator Crane Operator has requested that the 4B RHR Pump be stopped or RHR flow be reduced to less than 1000 gpm.

Which ONE of the following identifies the allowances and / or restrictions for RHR flow during the core reload, in accordance with Technical Specification 3.9.8, Residual Heat Removal and Coolant Circulation?

The 4B RHR Pump is ...

- A. allowed to be stopped, but only for up to one hour provided core outlet temperature is maintained 10°F below saturation.
- B. allowed to be stopped, but only for up to one hour provided no operations are permitted that can cause a reduction in RCS boron concentration.
- C. NOT allowed to be stopped; however, the flow may be reduced to less than 1000 gpm provided RCS temperature is maintained less than 140°F.
- D. NOT allowed to be stopped and flow is NOT allowed to be reduced while the core reload is in progress.

TURKEY POINT 2010 NRC EXAM

Question 32

- Unit 3 has experienced a large break LOCA.
- The 3A RHR Pump breaker tripped when it was sequenced on and cannot be closed.
- The crew is establishing cold leg recirculation in accordance with 3-EOP-ES-1.3, Transfer to Cold Leg Recirculation.
- When the crew attempted to open the RHR Suction To Containment Recirc Sump Valves, the following occurred:
 - MOV-3-860A and MOV-3-860B did NOT open.
 - MOV-3-861A and MOV-3-861B opened.

Given the current alignment, which ONE of the following identifies the minimum required action(s), if any, to establish a suction flowpath to the 3B RHR Pump?

- A. A flowpath already exists to the suction of the 3B RHR Pump. No further action is required to establish the flowpath.
- B. Opening both MOV-3-860A **AND** MOV-3-860B is required to establish a flowpath to the 3B RHR Pump.
- C. Opening MOV-3-860A **OR** MOV-860B is required to establish a flowpath to the 3B RHR Pump.
- D. **ONLY** opening MOV-3-860B will establish a flowpath to the 3B RHR Pump. Opening MOV-3-860A will NOT establish a flowpath to the 3B RHR Pump.

TURKEY POINT 2010 NRC EXAM

Question 33

Initial conditions:

- Unit 3 is at 100% power.
- Operators are raising Pressurizer Relief Tank (PRT) level in accordance with the appropriate plant procedure.

Subsequently, annunciator A 7/1, PRT HI/LO LEVEL, HI PRESS/TEMP actuates.

Which ONE of the following predicts the position of CV-3-519A, Primary Water Containment Isolation Valve, and CV-3-519B, PRT Primary Water Makeup Valve, after the annunciator alarmed?

	<u>CV-3-519A</u>	<u>CV-3-519B</u>
A.	SHUT	OPEN
B.	SHUT	SHUT
C.	OPEN	SHUT
D.	OPEN	OPEN

TURKEY POINT 2010 NRC EXAM

Question 34

- The crew is preparing to place RHR in service in accordance with 4-OP-050, Residual Heat Removal System.
- All RCS temperatures are 360°F.
- The 4A ICW/CCW Heat Exchanger is out of service.
- Both RHR Heat Exchangers will be valved in.

Which ONE of the following completes both statements in accordance with 4-OP-050, and Technical Specification 3.7.2, Component Cooling Water System?

The crew is required to place ____ CCW Pumps(s) to PULL-TO-LOCK position.

Entry to an action statement for Technical Specification 3.7.2 _____ required for this mode.

- A. one; is
- B. one; is NOT
- C. two; is
- D. two; is NOT

TURKEY POINT 2010 NRC EXAM

Question 35

- Unit 3 is at 100% power.
- Alarm H 8/6, CCW HEAD TANK HI/LO LEVEL, has actuated.
- Head Tank level is 10% and decreasing slowly.
- The RO momentarily places the MOV-3-832, Primary Water Makeup to CCW Surge Tank, control switch to the OPEN position and obtains dual indication.
- The CCW Head Tank level is still decreasing slowly.

In accordance with the alarm response procedure for alarm H 8/6, which ONE of the following actions is required?

- A. Split CCW headers
- B. Start a second Primary Water Pump
- C. Trip the reactor and stop all RCPs
- D. Hold the handswitch for MOV-3-832 OPEN longer

TURKEY POINT 2010 NRC EXAM

Question 36

- Unit 3 is at 100% power.
- A Pressurizer PORV is leaking by.
- PRT pressure is 2 psig.

Which ONE of the following completes the following statements?

The PORV tailpipe temperature on VPA will indicate approximately (1).

With no operator action, PORV tailpipe temperature indication (2) to determine which PORV is leaking by.

- A. 220°F can be used
- B. 400°F can be used
- C. 220°F can NOT be used
- D. 400°F can NOT be used

TURKEY POINT 2010 NRC EXAM

Question 37

Which ONE of the following completes the following statements?

In accordance with 0-ADM-536, Technical Specification Bases Control Program for the Reactor Trip System Instrumentation Setpoints, the (1) trip provides protection to prevent DNB.

The trip setpoint is reduced if (2) .

- | | <u>(1)</u> | <u>(2)</u> |
|----|------------|--------------------------------|
| A. | OPΔT | Pressurizer pressure decreases |
| B. | OPΔT | Tavg rate of change increases |
| C. | OTΔT | Pressurizer pressure decreases |
| D. | OTΔT | Tavg rate of change increases |

TURKEY POINT 2010 NRC EXAM

Question 38

Initial conditions on Unit 4:

- The crew is cooling down in accordance with 4-GOP-305, Hot Standby to Cold Shutdown.
- The MSIVs are closed.
- RCS pressure is 1900 psig.
- Tcolds are 520°F.
- All operator actions to continue the cooldown have been completed.

Subsequently:

- The 4C S/G steamline breaks outside containment.
- 4C S/G pressure decreases to 0 psig.

Which ONE of the following predicts the status of annunciators C 8/6 and C 9/3 for these plant conditions?

NOTE:

C 8/6 is SG C STEAM LINE HI Δ P SI

C 9/3 is MAIN STEAMLINE HI Δ P

- A. C 8/6 and C 9/3 will both be in alarm.
- B. Both C 8/6 and C 9/3 will NOT be in alarm.
- C. C 8/6 will be in alarm. C 9/3 will NOT be in alarm.
- D. C 8/6 will NOT be in alarm. C 9/3 will be in alarm.

TURKEY POINT 2010 NRC EXAM

Question 39

- Unit 4 is at 50% power.
- PT-4-455, Pressurizer Pressure Protection Pressure Transmitter, has failed high.
- The appropriate actions have been taken in accordance with 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels.

Subsequently, PT-4-456, Pressurizer Pressure Protection Pressure Transmitter, fails low.

Which ONE of the following describes how the plant will respond and the reason for that response?

An automatic Safety Injection will...

- A. occur because 2 of 3 bistables are below the setpoint of 1730 psig.
- B. occur because 2 of 3 bistables are below the setpoint of 1835 psig.
- C. NOT occur because it requires 2 of 3 bistables below setpoint of 1730 psig.
- D. NOT occur because it requires 2 of 3 bistables below setpoint of 1835 psig.

TURKEY POINT 2010 NRC EXAM

Question 40

- Unit 3 has experienced LOOP.
- The 3A and 3B 4kV Busses sole power supplies are the 3A and 3B EDGs, respectively.
- The crew has transitioned to 3-EOP-ES-0.1, Reactor Trip Response.

Which ONE of the following identifies whether or not the Normal Containment Coolers (NCCs) and CRDM Cooling Fans can be restarted?

	<u>NCCs</u>	<u>CRDM Fans</u>
A.	Can be re-started	Can be re-started
B.	Can be re-started	Can NOT be re-started
C.	Can NOT be re-started	Can be re-started
D.	Can NOT be re-started	Can NOT be re-started

TURKEY POINT 2010 NRC EXAM

Question 41

Which ONE of the following identifies the 3A S/G Blowdown Valve(s) that will automatically close on a Containment Phase A isolation signal?

Note:

CV-3-6275A is 3A S/G Blowdown Isolation Valve

MOV-3-1427 is 3A S/G Blowdown Sample Valve

FCV-3-6278A is 3A S/G Blowdown Flow Control Valve

- A. Only CV-3-6275A
- B. Only CV-3-6275A and MOV-3-1427
- C. Only CV-3-6275A and FCV-3-6278A
- D. CV-3-6275A, MOV-3-1427, and FCV-3-6278A

TURKEY POINT 2010 NRC EXAM

Question 42

Initial conditions:

- Unit 4 is at 100% power.
- The 4C LC is de-energized.

Subsequently:

- Unit 4 experienced a LOCA.
- The 4B Sequencer failed to operate.
- Containment pressure exceeded the Spray actuation setpoint.

Which ONE of the following states how the Containment Spray Pump Discharge Valves, MOV-4-880A and B, will respond?

	<u>MOV-4-880A</u>	<u>MOV-4-880B</u>
A.	Remain closed	Remain closed
B.	Remain closed	Automatically open
C.	Automatically open	Remain closed
D.	Automatically open	Automatically open

TURKEY POINT 2010 NRC EXAM

Question 43

- Unit 4 is at 100% power.
- The 4A S/G Steam Dump to Atmosphere valve pressure transmitter, PT-4-1606, slowly fails high.

Which ONE of the following:

- 1) describes the maximum power the reactor will reach and
- 2) in accordance with 0-ADM-200, Conduct of Operations, the correct operator response?

Between...

- A. 1) 102 and 104%
 2) Insert control rods
- B. 1) 102 and 104%
 2) Lower turbine load
- C. 1) 106 and 108 %
 2) Insert control rods
- D. 1) 106 and 108 %
 2) Lower turbine load

TURKEY POINT 2010 NRC EXAM

Question 44

Initial conditions:

- Unit 4 has been at 30% power for the past hour.
- The 4A SGFP breaker was racked out on a clearance.

Subsequently:

- The 4B SGFP shaft seized.
- All Steam Generator narrow range levels initially dropped off scale low.
- All Steam Generator narrow range levels are at 40-45%.

Which ONE of the following identifies actions the BOP will be required to take to clear the AFW auto start signals?

	<u>Reset AMSAC</u>	<u>Take the 4B SGFP control switch to OFF</u>
A.	Required	Required
B.	Required	NOT Required
C.	NOT Required	NOT Required
D.	NOT Required	Required

TURKEY POINT 2010 NRC EXAM

Question 45

- Unit 4 is at 100% power.
- Instrument Bus 4P09 loses power.

In accordance with 4-ONOP-003.9 Loss of 120V Vital Instrument Panel 4P09, which ONE of the following describes the Steam Generator level controls, if any, that will remain in automatic and the correct operator response?

- A. 4A and 4C S/Gs will remain in automatic.
Control 4B S/G level using changes in Blowdown flow.
- B. 4A and 4C S/Gs will remain in automatic.
Control 4B S/G level using its controller in manual.
- C. No S/G level control will remain in automatic.
Control all S/G levels using changes in Blowdown flow.
- D. No S/G level control will remain in automatic.
Control all S/G levels using their controllers in manual.

TURKEY POINT 2010 NRC EXAM

Question 46

- Unit 3 is at 100% power.
- Unit 4 is at 3% power.

Which ONE of the following completes the following statements?

In accordance with Tech Spec 3.7.1.3, Condensate Storage Tank, the minimum required CST volume is _____ (1) _____.

If AFW actuates on Unit 4, with no operator action, the AFW Pumps will take suction from _____ (2) _____.

- | | (1) | (2) |
|----|-----------------|--------------------|
| A. | 210,000 gallons | Unit 4 CST only |
| B. | 210,000 gallons | Units 3 and 4 CSTs |
| C. | 420,000 gallons | Unit 4 CST only |
| D. | 420,000 gallons | Units 3 and 4 CSTs |

TURKEY POINT 2010 NRC EXAM

Question 47

- Unit 3 has experienced a LOOP.
- The 3A EDG locked out.

Which ONE of the following predicts the availability of the Unit 3 QSPDS Channel A if the 3A 120 Volt Vital Instrument Bus was initially powered by:
1) the Constant Voltage Transformer (CVT) or
2) the A Spare Inverter?

Consider each of the above cases separately.

	Initially from the <u>CVT</u>	Initially from the <u>A Spare Inverter</u>
A.	Available	Available
B.	Available	NOT Available
C.	NOT Available	Available
D.	NOT Available	NOT Available

TURKEY POINT 2010 NRC EXAM

Question 48

Which ONE of the following describes the effect of placing the yellow NORMAL/ISOLATE switch to ISOLATE on the 3B HHSI Pump breaker cubicle?

- A. Enables the control switch on the 3B HHSI Pump's cubicle door
- B. Substitutes backup fuses into the 3B HHSI Pump trip and close circuits
- C. Disables the local push-button start for the 3B HHSI Pump
- D. Disables the 3B HHSI Pump breaker trip signal from bus stripping

TURKEY POINT 2010 NRC EXAM

Question 49

Which ONE of the following completes the following statements?

In accordance with Technical Specification 3.8.1, A.C. Sources, the **MINIMUM** required volume of fuel oil in the **Unit 4A** EDG Fuel Oil Day Tank is _____ (1) _____.

In accordance with Design Basis Document – Emergency Power System, this is enough fuel oil for the **4A EDG** to operate for _____ (2) _____.

- | | _____ (1) _____ | _____ (2) _____ |
|----|-----------------|---------------------------|
| A. | 230 gallons | between one and two hours |
| B. | 650 gallons | between one and two hours |
| C. | 2000 gallons | approximately one day |
| D. | 4000 gallons | approximately one day |

TURKEY POINT 2010 NRC EXAM

Question 50

The ANPO reports A and B Air Receivers for the 4A EDG are at 155 psig and the associated Air Compressor will not load.

In accordance with 4-ARP-097.DG, Diesel Generator Panel Annunciator Response, which ONE of the following identifies if the 4A EDG is OPERABLE and the required response to the above event?

- A. OPERABLE start the 4A EDG Diesel Air Compressor
- B. NOT OPERABLE start the 4A EDG Diesel Air Compressor
- C. OPERABLE Cross-tie with the 4B EDG starting air
- D. NOT OPERABLE Cross-tie with the 4B EDG starting air

TURKEY POINT 2010 NRC EXAM

Question 51

- Unit 3 is at 100% power.
- PRMS-3-20, Reactor Coolant Letdown Monitor, is increasing.
- Chemistry gives the following report:
 - Dose equivalent iodine has not changed.
 - RCS gross activity has increased.

Which ONE of the following identifies the type of detector utilized by PRMS-3-20 and the operational implication of these sample results?

- A. Scintillation; sample results indicate a crud burst has occurred.
- B. Geiger Mueller; sample results indicate a crud burst has occurred.
- C. Scintillation; sample results indicate a fuel cladding leak has occurred.
- D. Geiger Mueller; sample results indicate a fuel cladding leak has occurred.

TURKEY POINT 2010 NRC EXAM

Question 52

Which ONE of the following describes the effect of a large break LOCA on the CCW and ICW Systems?

Flow through the CCW ____ (1) ____ header significantly rises.

The ICW flow through the ICW/CCW Heat Exchanger ____ (2) ____.

- | | <u> (1) </u> | <u> (2) </u> |
|----|------------------------|------------------------|
| A. | A | increases |
| B. | A | remains the same |
| C. | B | increases |
| D. | B | remains the same |

TURKEY POINT 2010 NRC EXAM

Question 53

Initial conditions:

- Unit 4 is at 100% power.
- The 4A CCW Pump breaker is racked out for maintenance.
- The 4B and 4C CCW Pumps are aligned to independent power supplies.

Subsequently, Unit 4 experiences a Loss of Off-Site Power.

Which ONE of the following predicts the final status of the 4C CCW Pump?

- A. Aligned to the 4A 4kV Bus and running
- B. Aligned to the 4A 4Kv Bus and NOT running
- C. Aligned to the 4B 4kV Bus and running
- D. Aligned to the 4B 4Kv Bus and NOT running

TURKEY POINT 2010 NRC EXAM

Question 54

- The Instrument Air Compressor control switches are in a normal alignment with 3CM in lead.
- Unit 3 air receiver air pressure has been cycling between 100 psig and 105 psig for the last two hours.
- The pressure at the air filters is the same as at the air receiver.

Which ONE of the following completes the following statement?

Instrument Air Compressor _____ (1) _____ is cycling on load. Alarm I 6/1, INST AIR SYSTEM HI TEMP / LO PRESS _____ (2) _____.

_____ (1) _____ (2) _____

- A. 3CD is in alarm
- B. 3CD is NOT in alarm
- C. 4CM is in alarm
- D. 4CM is NOT in alarm

TURKEY POINT 2010 NRC EXAM

Question 55

- Unit 3 is in Mode 1.
- Containment average temperature is 118°F.
- Containment pressure is negative 0.8 psig.

Which ONE of the following completes the following statement?

In accordance with Technical Specification 3.6.1.4, Containment Systems – Internal Pressure, Containment pressure is ____ (1) ____.

In accordance with Technical Specification 3.6.1.5, Containment Systems – Air Temperature, the operator is ____ (2) ____.

	(1)	(2)
A.	required to be increased	required to track hours
B.	within limits at the present value	required to track hours
C.	required to be increased	NOT required to track hours
D.	within limits at the present value	NOT required to track hours

TURKEY POINT 2010 NRC EXAM

Question 56

Initial conditions:

- Unit 3 is at 100% power
- The crew is taking Unit 3 off-line in accordance with 3-ONOP-100, Fast Load Reduction.

Immediately after starting the downpower, alarm B 9/4, ROD CONTROL URGENT FAILURE, actuated.

In accordance with 3-ONOP-100, which ONE of the following describes the effect of annunciator B 9/4 on rod motion and how ΔI will respond during the downpower?

- A. Rod motion is inhibited
 ΔI will trend in the negative direction during the downpower.
- B. Rod motion is inhibited
 ΔI will trend in the positive direction during the downpower.
- C. Rod motion is NOT inhibited
 ΔI will trend in the negative direction during the downpower.
- D. Rod motion is NOT inhibited
 ΔI will trend in the positive direction during the downpower.

TURKEY POINT 2010 NRC EXAM

Question 57

Which ONE of the following completes both statements?

The PAHMS (AE-3-6307A and AE-3-6307B) are required to be placed in service within _____ following a valid SI signal, in accordance with 3-EOP-E-0 Attachment 3, Reactor Trip or Safety Injection, Prompt Actions Verification.

Alarm I 6/5, PAHMS TROUBLE, alarm setpoint is ____ hydrogen in Containment.

- A. 30 minutes; 2%
- B. 30 minutes; 4%
- C. 60 minutes; 2%
- D. 60 minutes; 4%

TURKEY POINT 2010 NRC EXAM

Question 58

- Unit 3 is at 100% power.
- No maintenance is being performed on the Spent Fuel Pit.
- The level in the Spent Fuel Pit is one inch below the alarm setpoint for H 1/1, SFP LO LEVEL

Which ONE of the following identifies the setpoint for alarm H 1/1 and whether an action for Technical Specification 3.9.11, Water Level – Storage Pool, is required to be entered?

- A. 56' 10" Tech Spec 3.9.11 action is required to be entered
- B. 56' 10" Tech Spec 3.9.11 action is NOT required to be entered
- C. 57' 2" Tech Spec 3.9.11 action is required to be entered
- D. 57' 2" Tech Spec 3.9.11 action is NOT required to be entered

TURKEY POINT 2010 NRC EXAM

Question 59

- Unit 3 is at 100% power.
- PT-3-447, First Stage Pressure, has failed low.

Which ONE of the following completes the following statements?

The Steam Dumps to Condenser are ____ (1) ____.

In accordance with Technical Specification 3.3.1 Reactor Trip Instrumentation, verify AT POWER TRIPS BLOCKED white light on VPA is ____ (2) ____ within one hour.

- | | <u> (1) </u> | <u> (2) </u> |
|----|------------------------|------------------------|
| A. | Armed | NOT lit |
| B. | Armed | lit |
| C. | NOT Armed | NOT lit |
| D. | NOT Armed | lit |

TURKEY POINT 2010 NRC EXAM

Question 60

Unit 3 is at 15% NI power.

Which ONE of the following completes the following statements?

Two turbine auto stop oil pressures less than 45 psig will cause a turbine trip
____(1)_____.

The reason for this/these trip(s) is to ____ (2) ____.

- A. (1) only
(2) protect the turbine
- B. (1) and a subsequent reactor trip
(2) anticipate a potential loss of heat sink
- C. (1) only
(2) prevent excessive cooldown of the RCS
- D. (1) and a subsequent reactor trip
(2) prevent excessive cooldown of the RCS

TURKEY POINT 2010 NRC EXAM

Question 61

Initial conditions:

- Unit 3 is at 60% power.
- Both Steam Generator Feed Pumps are running.
- The 3B Condensate Pump is out of service with its breaker racked out.

Subsequently, the 3C Condensate Pump breaker trips open.

Which ONE of the following predicts the earliest time that a Steam Generator Feedpump will automatically trip and the required procedure?

Five seconds after...

- A. the 3C Condensate Pump breaker trips
3-ONOP-089, Turbine Runback
- B. the 3C Condensate Pump breaker trips
3-ONOP-100, Fast Load Reduction
- C. Feedpump suction pressure drops to 200 psig
3-ONOP-089, Turbine Runback
- D. Feedpump suction pressure drops to 200 psig
3-ONOP-100, Fast Load Reduction

TURKEY POINT 2010 NRC EXAM

Question 62

- A liquid release and a gaseous release are in progress.
- The power supply breaker to PRMS Rack 3QR66 tripped open.
- The breaker has been re-closed to re-energize the rack.
- No other operator actions have been taken.

Which ONE of the following describes how RCV-014 and RCV-018 will respond if the RO resets the Hi alarm on the respective PRMS drawers?

NOTE:

RCV-014 is Gaseous Release Header Isolation Valve

RCV-018 is Liquid Release Header Isolation Valve

	<u>RCV-014</u>	<u>RCV-018</u>
A.	Automatically re-open	Automatically re-open
B.	Remain closed	Remain closed
C.	Automatically re-open	Remain closed
D.	Remain closed	Automatically re-open

TURKEY POINT 2010 NRC EXAM

Question 63

Which ONE of the following completes the following statements in accordance with 4-EOP-E-0, Reactor Trip or Safety Injection, foldout page?

The minimum CHRRMS value at which adverse values are required to be used is (1) .

Adverse values are no longer required to be used when it has been determined that the integrated dose has not exceeded (2) .

- | | <u> (1) </u> | <u> (2) </u> |
|----|------------------------|------------------------|
| A. | 1.3×10^4 R/Hr | 10^6 Rads |
| B. | 1.3×10^4 R/Hr | 1.3×10^5 Rads |
| C. | 1.3×10^5 R/Hr | 10^6 Rads |
| D. | 1.3×10^5 R/Hr | 1.3×10^5 Rads |

TURKEY POINT 2010 NRC EXAM

Question 64

- Units 3 and 4 are at 100% power.
- The crews are performing 0-ONOP-013, Loss of Instrument Air.
- No Instrument Air compressor can be started.
- The Turbine Operator (TO) has been directed to open the 4 inch Service Air Supply to Unit 3 / Unit 4 Tie Valve, 40-2059.
- The TO reports that 40-2059 cannot be opened.

In accordance with 0-ONOP-013, which ONE of the following describes the first required action?

Direct the TO ...

- A. to start a temporary diesel air compressor and open Supply Valve, 3-40-857.
- B. to open the Service Air Supply Valve from Units 1 and 2, IAS-051.
- C. to open the Instrument Air Supply Valve from Units 1 and 2, 40-358.
- D. to open the 2 inch Service Air Supply to Unit 3/Unit 4 Tie Valve, 40-215.

TURKEY POINT 2010 NRC EXAM

Question 65

Which ONE of the following states the order of the sources of pressurization to the Fire Protection System as demand increases from normal operations to full load?

- A. Service Water System, Jockey Fire Pump, Electric Fire Pump
- B. Electric Fire Pump, Diesel Fire Pump, Service Water System
- C. Electric Fire Pump, Jockey Fire Pump, Diesel Fire Pump
- D. Service Water System, Electric Fire Pump, Diesel Fire Pump

TURKEY POINT 2010 NRC EXAM

Question 66

In accordance with NAP-402, Conduct of Operations, which ONE of the following identifies:

- 1) an example of an activity the RO "at the controls" is allowed to perform and
 - 2) whether a person in a licensed supervisory position, such as the Unit Supervisor (US) assigned to command and control responsibilities, is allowed to assume the operator "at the controls" position if it becomes necessary for the operator "at the controls" to perform other duties?
- A. 1) answering phone calls / radio transmissions
 2) Is allowed
- B. 1) reviewing clearances
 2) Is allowed
- C. 1) answering phone calls / radio transmissions
 2) Is NOT allowed
- D. 1) reviewing clearances
 2) Is NOT allowed

TURKEY POINT 2010 NRC EXAM

Question 67

- The Operations Department Logbook Program is out of service and the Reactor Operator (RO) is making entries in the hard bound logbook.
- Unit 3 entered Mode 1 at 10:35.
- The log entry for entering Mode 1 was NOT made.
- Other log entries were made after 10:35.
- It is now 11:15

In accordance with 0-ADM-204, Operations Narrative Logbooks, which ONE of the following is the proper log entry for this situation?

- A. 10:35 – Entered Mode 1 – Late Entry at 11:15
- B. 11:15 – at 10:35 Entered Mode 1 – Late Entry
- C. 10:35 – Late Entry at 11:15; Entered Mode 1
- D. 11:15 – Late Entry; at 10:35 Entered Mode 1

TURKEY POINT 2010 NRC EXAM

Question 68

Which ONE of the following activities is numerically listed FIRST in 3-GOP-305, Hot Standby to Cold Shutdown?

- A. Place OMS in service
- B. Collapse the Pressurizer bubble
- C. Secure the last Reactor Coolant Pump
- D. Place the Residual Heat Removal System in service

TURKEY POINT 2010 NRC EXAM

Question 69

Which ONE of the following describes a difference between Unit 3 and Unit 4 EDGs?

- A. Unit 3 EDGs have additional trips during a NORMAL START that the Unit 4 EDGs do NOT have.
- B. Unit 3 EDGs have additional trips during an EMERGENCY START that the Unit 4 EDGs do NOT have.
- C. Unit 4 EDGs have additional trips during a NORMAL START that the Unit 3 EDGs do NOT have.
- D. Unit 4 EDGs have additional trips during an EMERGENCY START that the Unit 3 EDGs do NOT have.

TURKEY POINT 2010 NRC EXAM

Question 70

In accordance with 0-ADM-209, Equipment Tagging and Labeling, which ONE of the following identifies the meaning of a purple colored bar at a value on a meter?

- A. Alarm setpoint
- B. Tech Spec limit
- C. Unit trip
- D. Equipment limit

TURKEY POINT 2010 NRC EXAM

Question 71

Unit 3 is at 100% power.

Consider the following two cases:

Case 1

- Annunciator B 1/4, RCP A/B/C TRIP, is to be taken out of service on an ECO.
- B 1/4 will be out of service for two days.

Case 2

- Annunciator B 1/4, RCP A/B/C TRIP, is to be taken out of service on a TSA.
- B 1/4 will be returned to service the same shift.

In accordance with ODI-CO-039, Annunciator Status Log, which ONE of the following completes both of the following statements?

For case 1, Annunciator B 1/4 is (1) to be entered in the Annunciator Status Log.

For case 2, Annunciator B 1/4 is (2) to be entered in the Annunciator Status Log.

- | | <u>(1)</u> | <u>(2)</u> |
|----|--------------|--------------|
| A. | required | required |
| B. | required | NOT required |
| C. | NOT required | required |
| D. | NOT required | NOT required |

TURKEY POINT 2010 NRC EXAM

Question 72

- A Turkey Point employee is performing work in the Pipe and Valve Room.
- The dose rate is 210 mRem/hour.
- The employee's exposure to date for the year is 280 mRem.
- The employee has an NRC Form 4, Cumulative Occupational Exposure History, on file.

In accordance with O-ADM-600, Radiation Protection Manual, what is the maximum time the employee can stay in this area without requiring a dose extension?

- A. 48 minutes
- B. 205 minutes
- C. 634 minutes
- D. 1348 minutes

TURKEY POINT 2010 NRC EXAM

Question 73

- Two letdown orifices are in service on Unit 3.
- The Unit 3 Charging Pump Room has been surveyed and posted by RP and the general area is 110 mrem/hr.
- The SNPO is performing his/her rounds and is signed onto RWP-001, Operations Department Routine Activities, and all required shiftly briefs have been completed.

Which ONE of the following identifies:

- 1) if this RWP allows the SNPO to enter the Charging Pump Room without HP coverage and
- 2) the minimum dosimetry required for the SNPO to enter the Charging Pump Room?

- | | | |
|----|----------------|--|
| A. | is allowed | Personal Alarm Module (PAM) OR Telemetric Dosimeter |
| B. | is allowed | Personal Alarm Module (PAM) AND Telemetric Dosimeter |
| C. | is NOT allowed | Personal Alarm Module (PAM) OR Telemetric Dosimeter |
| D. | is NOT allowed | Personal Alarm Module (PAM) AND Telemetric Dosimeter |

TURKEY POINT 2010 NRC EXAM

Question 74

- Unit 4 is at 80% power.
- 4A1 Intake Well has a 1.6 foot water fall that is slowly increasing.
- 4A2 Intake Well has a 2.1 foot water fall that is slowly increasing.
- 4B1 Intake Well has a 2.6 foot water fall that is slowly increasing.
- 4B2 Intake Well has a 3.1 foot water fall that is slowly increasing.

Which ONE of the following identifies the minimum required operator action in accordance with 4-ONOP-011, Screen Wash System / Intake Malfunction?

- A. A reactor trip is required first, then the 4B1 and 4B2 Circulating Water Pumps are required to be tripped.
- B. A reactor trip is required, but the 4B1 and 4B2 Circulating Water Pumps are required to be tripped before the reactor trip.
- C. A reactor trip is NOT required; immediately trip 4B2 Circulating Water Pumps then enter 4-ONOP-100, Fast Load Reduction. Tripping 4B1 Circulating Water Pump is NOT required at this time.
- D. A reactor trip is NOT required; first enter 4-ONOP-100, Fast Load Reduction, and reduce power to less than 60%. Then trip 4B1 and 4B2 Circulating Water Pumps.

TURKEY POINT 2010 NRC EXAM

Question 75

Which ONE of the following identifies an EOP procedure transition that requires a "crew briefing" in accordance with 0-ADM-211, Emergency and Off-Normal operating Procedure Usage?

- A. 3-EOP-E-1, Response to Loss of Reactor or Secondary Coolant
- B. 3-EOP-FR-S.1, Response to Nuclear Power Generation/ATWS
- C. 3-EOP-E-3, Steam Generator Tube Rupture
- D. 3-EOP-ECA-0.0, Loss of All AC Power

TURKEY POINT 2010 NRC EXAM

Question 76

- **Unit 3** tripped from 100% power.
- Unit 4 remains at 100% power.
- The crew is performing 3-EOP-ES-0.1, Reactor Trip Response.
- The Unit 3 BOP is performing 3-NOP-075, Auxiliary Feedwater System, to stop the AFW Pumps.
- The BOP has performed the actions in 3-NOP-075 for clearing the AFW auto start signals.
- The AFW AUTO START white lights on 3QR50 and 3QR51 are lit.

Which ONE of the following identifies:

- 1) whether the AFW Pumps can be stopped remotely from the Control Room and
 - 2) whether, in accordance with Tech Spec 3.7.1.2, Auxiliary Feedwater System, a required action for **Unit 4** will exist after all the AFW Pumps have been stopped?
- A. 1) Stopping the AFW Pumps requires local operator action.
 2) A required action statement in accordance with Tech Spec 3.7.1.2 must be entered on Unit 4.
- B. 1) Stopping the AFW Pumps requires local operator action.
 2) No required action statements for AFW will exist on Unit 4.
- C. 1) The AFW Pumps can be stopped from the Control Room (no local operator actions are required).
 2) A required action statement in accordance with Tech Spec 3.7.1.2 must be entered on Unit 4.
- D. 1) The AFW Pumps can be stopped from the Control Room (no local operator actions are required).
 2) No required action statements for AFW will exist on Unit 4.

TURKEY POINT 2010 NRC EXAM

Question 77

- Unit 4 has tripped and safety injection actuated due to a stuck open Pressurizer PORV.
- The PORV block valve failed in the intermediate position.
- The crew is performing 4-EOP-E-1, Loss of Reactor or Secondary Coolant.
- RCS pressure is 1350 psig and steady.
- RCS subcooling is 50°F and steady.
- CET subcooling is 52°F and steady.
- Pressurizer level is 30% and steady.
- Containment temperature is 100°F.

In accordance with 3-EOP-E-1, which ONE of the following identifies the procedure the crew is required to transition to and the reason why maximum charging is established in accordance with the EOP Basis Document?

NOTE:

3-EOP-ES-1.1 is SI Termination

3-EOP-ES-1.2 is Post LOCA Cooldown and Depressurization

- A. 3-EOP-ES-1.1; allow stopping HHSI Pumps in subsequent steps
- B. 3-EOP-ES-1.1; keep the RCP seals cooled
- C. 3-EOP-ES-1.2; allow stopping HHSI Pumps in subsequent steps
- D. 3-EOP-ES-1.2; keep the RCP seals cooled

TURKEY POINT 2010 NRC EXAM

Question 78

- Unit 3 is at 100% power.
- The following alarms actuated:
 - A 4/1, PORV / SAFETY VALVE OPEN
 - A 9/2, PZR CONTROL HI / LO PRESS
 - A 9/5, PZR PRESSURE CONTROLLER HI OUTPUT
- The RO closed the appropriate PORV.
- The STA determined the identified RCS leak rate to be 8 gpm with the PORV closed.
- The RO then closed the appropriate PORV block valve.
- Identified RCS leak rate returned to its initial value of 0.05 gpm.

Which ONE of the following identifies the PORV that is isolated and, in accordance with 0-ADM-536, Technical Specification Bases Control Program, whether the isolated PORV is OPERABLE?

- A. PCV-3-455C is isolated and is OPERABLE.
- B. PCV-3-455C is isolated and is **NOT** OPERABLE.
- C. PCV-3-456 is isolated and is OPERABLE.
- D. PCV-3-456 is isolated and is **NOT** OPERABLE.

TURKEY POINT 2010 NRC EXAM

Question 79

Initial conditions:

- Unit 3 was at **80 MW(e)** during a plant startup.
- Unit 4 was at 100% power.

Subsequently:

- Units 3 and Unit 4 were manually tripped due to a loss of the switchyard.
- The 3A EDG locked out.
- Both Unit 4 EDGs failed to start.
- While performing 3-EOP-E-0 Step 2 (Reactor Trip or Safety Injection – Verify Turbine Trip) the Unit 3 BOP observes the following indications:
 - All turbine stop valves closed
 - 2 turbine control valves remain open
 - The Mid and East GCBs open

Which ONE of the following identifies 1) whether the Response Not Obtained (RNO) column for E-0 Step 2 is required to be entered and 2) whether 3-EOP-ES-0.1, Reactor Trip Response, Attachment 2, Reactor Trip Response with Minimum Required Equipment, is required to be entered on Unit 3?

- A. RNO column is required; Attachment 2 is NOT required on Unit 3
- B. RNO column is NOT required; Attachment 2 is required on Unit 3
- C. RNO column is required; Attachment 2 is required on Unit 3
- D. RNO column is NOT required; Attachment 2 is NOT required on Unit 3

TURKEY POINT 2010 NRC EXAM

Question 80

Unit 3 is at 100% power.

Consider each of the following situations separately.

Situation (1): Which ONE of the following identifies in accordance with 3-NOP-019, Intake Cooling Water System, the minimum required action when an ICW Pump has been operated for greater than 20 minutes at greater than 18,500 gpm.

Situation (2): Which ONE of the following identifies whether Technical Specification 3.0.3 entry is required when ICW/CCW strainer isolation valves have been closed and ICW flow through the CCW Heat Exchangers has been less than the minimum required for greater than five minutes.

(Reference provided)

	<u>Situation (1)</u>	<u>Situation (2)</u>
A.	Vibration and ΔP testing is required once flow has been reduced to less than 18,500 gpm.	TS 3.0.3 entry NOT required.
B.	Declare the pump inoperable until the flow has been reduced to less than 18,500 gpm.	TS 3.0.3 entry NOT required.
C.	Vibration and ΔP testing is required once flow has been reduced to less than 18,500 gpm.	TS 3.0.3 entry required.
D.	Declare the pump inoperable until the flow has been reduced to less than 18,500 gpm.	TS 3.0.3 entry required.

TURKEY POINT 2010 NRC EXAM

Question 81

- Unit 3 has experienced a main steam line break downstream of the MSIVs.
- The crew is performing 3-EOP-ECA 2.1, Uncontrolled Depressurization Of All Steam Generators.
- When the crew closed 3C MSIV, 3C S/G level and pressure began slowly increasing.
- The lowest Tcold during this event was 400°F.

In accordance with 3-EOP-ECA-2.1, which one of the following describes the required procedure transition and, in accordance with 0-EPIP-20101, Duties of Emergency Coordinator - Fission Product Barrier Table Worksheet, the highest required classification, if any?

- A. Return to 3-EOP-E-2, Faulted Steam Generator Isolation; not a classifiable event
- B. Return to 3-EOP-E-2, Faulted Steam Generator Isolation; Alert
- C. Enter 3-EOP-E-3, Steam Generator Tube Rupture; not a classifiable event
- D. Enter 3-EOP-E-3, Steam Generator Tube Rupture; Alert

TURKEY POINT 2010 NRC EXAM

Question 82

Unit 3 is at 100% power.

Which ONE of the following identifies (1) the maximum allowed solution temperature without entering into an action for Technical Specification 3.1.2.5, Borated Water Sources – Operating, and (2) in accordance with O-ADM-536, Technical Specification Bases Control Program, the basis for that limit?

- A. 96°F; Containment integrity and large break LOCA analysis assumptions
- B. 100°F; Containment integrity and large break LOCA analysis assumptions
- C. 96°F; Containment Spray Pump and HHSI NPSH during a large break LOCA
- D. 100°F; Containment Spray Pump and HHSI NPSH during a large break LOCA

TURKEY POINT 2010 NRC EXAM

Question 83

Initial conditions:

- Unit 4 Tavg is 547°F.
- Unit 4 Pressurizer pressure is 2235 psig.
- The crew is performing 4-GOP-301, Hot Standby to Power Operation.
- The crew is diluting to the critical boron concentration.
- The reactor trip breakers are open.

Subsequently:

- Alarm B 4/3, SOURCE RANGE LOSS OF DETECTOR VOLTAGE, actuates.
- The crew verifies one Source Range and two Gamma metric detectors are OPERABLE.

Which ONE of the following identifies the cause of alarm B 4/3, and in accordance with Technical Specification 3.3.1, Reactor Trip Instrumentation, whether the dilution may continue?

(Reference provided)

The cause of Alarm B 4/3 is a blown...

- A. control power fuse.
The dilution is allowed to continue.
- B. instrument power fuse.
The dilution is allowed to continue.
- C. control power fuse.
The dilution is NOT allowed to continue.
- D. instrument power fuse.
The dilution is NOT allowed to continue.

TURKEY POINT 2010 NRC EXAM

Question 84

- A reactor startup is in progress on Unit 4 in accordance with 4-GOP-301, Hot Standby to Power Operations.
- The RO is maintaining power steady for 1/m data collection with the following conditions:
 - Overlap has just occurred between the source and intermediate ranges.
 - The following readings are noted on the Source Range and Intermediate Range NIS Channels:
 - ❖ N-31 1.8×10^3 cps
 - ❖ N-32 1.8×10^3 cps
 - ❖ N-35 2×10^{-11} amps
 - ❖ N-36 2×10^{-11} amps
 - Subsequently, with no rod motion, the following occurs:
 - ❖ Alarm B 2/1, P-6/P-10 NOT SATISFIED, actuates.
 - ❖ POWER ABOVE P-6 on VPA illuminates.

Which ONE of the following predicts an additional alarm that has actuated and identifies the maximum allowed power in accordance with Technical Specifications Table 3.3-1, Reactor Trip Instrumentation?

(Reference provided)

- A. B 5/2, INTERM RANGE LOSS OF DETECTOR VOLTAGE 10%
- B. B 5/2, INTERM RANGE LOSS OF DETECTOR VOLTAGE 1×10^{-10} amps
- C. B 5/3, INTERM RANGE N-35 LOSS OF COMP VOLTAGE 10%
- D. B 5/3, INTERM RANGE N-35 LOSS OF COMP VOLTAGE 1×10^{-10} amps

TURKEY POINT 2010 NRC EXAM

Question 85

- The crew is performing 3-ONOP-100, Fast Load Reduction, due to unexpected decreasing Main Condenser vacuum.
- Plant conditions are:
 - Generator load 600 MWe and stable
 - Condenser vacuum 21" Hg and stable

Which ONE of the following identifies whether continued turbine operation is allowed in accordance with 3-ONOP-014, Main Condenser Loss of Vacuum, and the required notification(s) in accordance with 0-ADM-115, Notification of Plant Events?

- A. Continued turbine operation is allowed.
ONLY the Assistant Operations Manager or Designee is required to be notified.
- B. Continued turbine operation is allowed.
Plant Management members and NRC Resident are required to be notified.
- C. Continued turbine operation is NOT allowed.
The NRC is required to be notified within 4 hours of the manual reactor trip.
- D. Continued turbine operation is NOT allowed.
The NRC is required to be notified within 8 hours of the manual reactor trip.

TURKEY POINT 2010 NRC EXAM

Question 86

- Unit 3 is increasing power from 60% to 100% using dilution only.
- Chemistry reports the following:
 - All RCS Chemistry parameters were in spec before the power change.
 - Chlorides in the RCS during the power change have reached 0.4 ppm.
 - The source of the chlorides has been traced to the water treatment plant, which did not automatically isolate as designed.
 - Make-up water sources have chlorides at 0.2 ppm.
 - The in-service mixed bed demineralizer effluent chloride concentration is the same as the RCS concentration.

Which ONE of the following completes the following statements?

In accordance 0-ONOP-041.10, Primary Chemistry Deviation from Limits, the correct method to reduce the RCS chlorides is to ____ (1) ____.

In accordance with Technical Specification 3.4.7, Reactor Coolant System – Chemistry, the required action is to ____ (2) ____.

(Reference provided)

- | | ____ (1) ____ | ____ (2) ____ |
|----|--|---|
| A. | swap mixed bed demineralizers and increase letdown flow to 120 gpm | reduce chlorides to less than 0.15 ppm within 24 hours |
| B. | swap mixed bed demineralizers and increase letdown flow to 120 gpm | be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours. |
| C. | bypass the mixed bed demineralizers and perform RCS feed and bleed | reduce chlorides to less than 0.15 ppm within 24 hours |
| D. | bypass the mixed bed demineralizers and perform RCS feed and bleed | be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours. |

TURKEY POINT 2010 NRC EXAM

Question 87

Initially Unit 3 was at 100% power.

Subsequently:

- Calorimetric power decreased to 99.90% and stabilized.
- The RO diagnosed a problem with TCV-3-144, Non-Regen HX Temp Control Valve.

Which ONE of the following describes:

- 1) the method for controlling TCV-3-144 in accordance with 3-OP-047, CVCS – Charging and Letdown, and
- 2) in accordance with NAP-402, Conduct of Operations, the required classification for this reactivity issue?

Place TC-3-144A, L/D Temp Controller, in MANUAL and take TCV-3-144 in the...

- A.
 - 1) open direction.
 - 2) This is a Reactivity Event Precursor.
- B.
 - 1) closed direction.
 - 2) This is a Reactivity Event Precursor.
- C.
 - 1) open direction.
 - 2) This is a Reactivity Event.
- D.
 - 1) closed direction.
 - 2) This is a Reactivity Event.

TURKEY POINT 2010 NRC EXAM

Question 88

The following conditions exist on Unit 4:

- RCS temperature is 390°F.
- I&C reports that both PORVs are inoperable and cannot be opened.
- The PORVs can be returned to service in 72 hours.
- The crew is cooling down the RCS because RCS pressure boundary leakage exceeds the Tech Spec allowed value.

Which ONE of the following identifies the required actions and / or limitations with cooling down the plant in accordance with Tech Specs?

(Reference provided)

- A. The cooldown must be stopped before the average RCS temperature reaches 350°F.
- B. The cooldown may continue below 350°F; however, it must be stopped before any cold leg temperature reaches 275°F.
- C. The cooldown must continue to less than or equal to 200°F average RCS temperature ONLY if all RCP breakers are racked out before any cold leg temperature reaches 275°F.
- D. The cooldown must continue to less than or equal to 200°F average RCS temperature and the RCS must be vented through at least a 2.20 square inch vent within 24 hours after any cold leg temperature reaches 275°F.

TURKEY POINT 2010 NRC EXAM

Question 89

- At 1200 Unit 3 experienced a safety injection due to a LOCA.
- At 1203 Containment pressure was at 17 psig when the US directed the BOP to perform 3-EOP-E-0 Attachment 3, Reactor Trip or Safety Injection Prompt Action Verifications.
- At 1204 Containment pressure reached 22 psig and the BOP has completed Attachment 3 step 1.
- 10 CETs are at 800°F.

Which ONE of the following identifies the status of Containment Spray and, in accordance with 0-EPIP-20101, Duties of Emergency Coordinator, the highest required classification for this event?

- A. Containment Spray Pumps are running.
Alert
- B. Containment Spray Pumps are running.
Site Area Emergency
- C. Containment Spray Pumps are NOT running.
Alert
- D. Containment Spray Pumps are NOT running.
Site Area Emergency

TURKEY POINT 2010 NRC EXAM

Question 90

- R-14, Plant Vent Gaseous Monitor, is inoperable.
- It is desired to release Waste Gas Decay Tank F.

In accordance with the ODCM Table 3.1-1, Radioactive Gaseous Effluent Monitoring Instrumentation, which ONE of the following completes both of the following statements?

The contents of Waste Gas Decay Tank F may be released to the environment provided that:

At least two independent samples of ____ (1) ____, and

At least two technically qualified members of the facility staff independently verify the ____ (2) ____.

- A. (1) Waste Gas Decay Tank F are analyzed prior to initiating the release
(2) release rate calculations only
- B. (1) Waste Gas Decay Tank F are analyzed prior to initiating the release
(2) release rate calculations and discharge valve lineup
- C. (1) Plant Vent Stack effluent are analyzed during the release
(2) release rate calculations only
- D. (1) Plant Vent Stack effluent are analyzed during the release
(2) release rate calculations and discharge valve lineup

TURKEY POINT 2010 NRC EXAM

Question 91

Initial conditions:

- Unit 3 is at 50% power.
- Channel Select Pressurizer Level Control is selected to CH 1&2.
- 3-LT-460, Pressurizer Level Transmitter, fails high.
- The crew tripped all appropriate bistables in accordance with 3-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels.

Subsequently:

- 3-SMI-041.11, Pressurizer Level Protection Loops Quarterly Test, grace period expires in 6 hours.

Which ONE of the following:

- 1) identifies how Charging Pump speed responded to the initial failure of 3-LT-460 and
- 2) whether the tripped bistables are permitted to be bypassed in accordance with Technical Specification Table 3.3-1, Reactor Trip Instrumentation, to allow performance of 3-SMI-041.11?

(Reference provided)

Charging Pump speed ...

- A.
 - 1) decreased.
 - 2) It is permitted to bypass the bistables to perform 3-SMI-041.11.
- B.
 - 1) decreased
 - 2) It is NOT permitted to bypass the bistables to perform 3-SMI-041.11.
- C.
 - 1) remained the same
 - 2) It is permitted to bypass the bistables to perform 3-SMI-041.11.
- D.
 - 1) remained the same.
 - 2) It is NOT permitted to bypass the bistables to perform 3-SMI-041.11.

TURKEY POINT 2010 NRC EXAM

Question 92

- Unit 4 has experienced a large break LOCA.
- The crew is preparing to exit 4-EOP-E-0, Reactor Trip or Safety Injection.
- RVLMS indicates zero.
- Gamma metrics indication is increasing on the CPS scale.
- Source Range Nuclear Instruments N-31 and N-32 are increasing.
- Intermediate Range Nuclear Instruments N-35 and N-36 are off-scale low.

Which ONE of the following explains the above indications and the required procedure transition?

- A. Voiding in the downcomer has increased neutron leakage.
Transition to 4-EOP-FR-I.3, Response to Voids in Reactor Vessel.
- B. Voiding in the downcomer has increased neutron leakage.
Transition to 4-EOP-E-1, Loss of Reactor or Secondary Coolant.
- C. Shutdown margin is decreasing.
Transition to 4-EOP-FR-I.3, Response to Voids in Reactor Vessel.
- D. Shutdown margin is decreasing.
Transition to 4-EOP-E-1, Loss of Reactor or Secondary Coolant.

TURKEY POINT 2010 NRC EXAM

Question 93

- Both units are at 100% power
- A Containment Purge is required on Unit 3 and will be performed in accordance with 3-NOP-053, Containment Purge System.

In accordance with 3-NOP-053, which ONE of the following identifies if the Plant General Manager's permission is required to perform the purge and the action required to energize the purge valves?

- A. Required; Install fuses
- B. NOT Required; Install fuses
- C. Required; Turn on the breakers
- D. NOT Required; Turn on the breakers

TURKEY POINT 2010 NRC EXAM

Question 94

The Shift Manager is the Site Emergency Coordinator and has just determined the Emergency Action Level and is ready to communicate this information and the upgrade criteria to the Control Room crew.

Which ONE of the following is the required communication protocol, including its approximate length, in accordance with 0-ADM-211, Emergency and Off Normal Operating Procedure Usage?

- A. Update; 30 seconds
- B. Update; 1 to 3 minutes
- C. Brief; 30 seconds
- D. Brief; 1 to 3 minutes

TURKEY POINT 2010 NRC EXAM

Question 95

In accordance with 0-OSP-040.4, Estimated Critical Conditions (ECC), which ONE of the following states the minimum position(s) that can:

- 1) approve an ECC and
- 2) grant permission to continue the startup, if after the third doubling the projected point of criticality (from the 1/M plot) is 350 pcm different than the predicted ECC rod height?

	<u>Approve an ECC</u>	<u>Permission to continue the startup</u>
A.	Reactor Engineering Supervisor	Reactor Engineering Supervisor and Shift Manager
B.	Shift Manager	Only Shift Manager
C.	Reactor Engineering Supervisor	Only Shift Manager
D.	Shift Manager	Reactor Engineering Supervisor and Shift Manager

TURKEY POINT 2010 NRC EXAM

Question 96

Both units are at 100% power.

In accordance with 0-ADM-701, Control of Plant Work Activities, which ONE of the following activities is allowed as Tool Pouch Maintenance?

- A. Tightening a flange upstream of the 3A MSIV
- B. Replacing air filters for the Dressout Facility air handler inside the RCA
- C. Adjusting the packing on MOV-3-869, Safety Injection to Hot Leg Isolation
- D. Replacing a missing handwheel on 3-30-598, 3B Heater Drain Pump Suction Drain Valve

TURKEY POINT 2010 NRC EXAM

Question 97

In accordance with 0-ADM-009, Containment Entries when Containment Integrity is Established, which ONE of the following:

- 1) identifies which two people are required to conduct the Attachment 2 Containment Entry Brief and
- 2) what the focus of the SRO Brief is required to be?

	(1)	(2)
A.	Radiation Protection Supervisor and SRO	Confined space entry requirements
B.	Safety Supervisor and SRO	Ensuring equipment, tools, materials are removed to preclude restriction of the RHR Pump suctions during a LOCA
C.	Radiation Protection Supervisor and SRO	Ensuring equipment, tools, materials are removed to preclude restriction of the RHR Pump suctions during a LOCA
D.	Safety Supervisor and SRO	Confined space entry requirements

TURKEY POINT 2010 NRC EXAM

Question 98

Which ONE of the following completes the following statements?

The Technical Specification 3.4.8, Reactor Coolant System – Specific Activity, limit for dose equivalent I-131 in the Reactor Coolant System is _____.

During an emergency, in order to declare an ACTUAL LOSS of the fuel clad barrier, the dose equivalent I-131 in the Reactor Coolant must be at least _____ in accordance with 0-EPIP-20101, Duties of Emergency Coordinator - Fission Product Barrier Table Worksheet.

- A. 1 $\mu\text{Ci/gm}$; 60 $\mu\text{Ci/gm}$
- B. 1 $\mu\text{Ci/gm}$; 300 $\mu\text{Ci/gm}$
- C. 100/E-bar; 60 $\mu\text{Ci/gm}$
- D. 100/E-bar; 300 $\mu\text{Ci/gm}$

TURKEY POINT 2010 NRC EXAM

Question 99

Which ONE of the following completes both of the following statements?

An Unusual Event is an unplanned loss of Safety System Annunciation or Indication in the Control Room for at least _____ (1) _____ or longer.

If an Unusual Event is declared, the Communicator will use the _____ (2) _____ Phone to contact the State Warning Point.

- | | _____ (1) _____ | _____ (2) _____ |
|----|-----------------|-------------------------------|
| A. | 15 minutes | Hot Ring Down |
| B. | 15 minutes | Emergency Notification System |
| C. | 30 minutes | Hot Ring Down |
| D. | 30 minutes | Emergency Notification System |

TURKEY POINT 2010 NRC EXAM

Question 100

- A LOCA has occurred on Unit 4.
- The crew is preparing to exit 4-EOP-E-0, Reactor Trip or Safety Injection.
- The STA reports the following current conditions:
 - RCS pressure 30 psig and steady
 - Containment pressure 25 psig and rising slowly
 - Containment temperature 210°F increasing slowly
 - Narrow range S/G levels all steady at 10%
 - Total AFW flow 320 gpm
 - CETs 710°F and rising
 - Pressurizer level off scale low
 - RWST level 150,000 gallons

Which ONE of the following identifies the procedure that is required to be implemented at this time?

- A. 4-EOP-FR-C.2, Response to Degraded Core Cooling
- B. 4-EOP-FR-H.1, Response to Loss of Secondary Heat Sink
- C. 4-EOP-E-1, Loss of Reactor or Secondary Coolant
- D. 4-EOP-ES-1.3, Transfer to Cold Leg Recirculation