Answer Key

Waterford 3 Examination Question
Examination Bank

Examination Question Number 1
QUESTION ID: 5838 **- A**
DESCRIPTION: Power Change as a result of continuous rod withdrawal
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPO TYR **CATEGORY:** THEORY

REFERENCE:	REVISION:	CHANGE:	DATE:
W-3-LP-OPS-TYR05			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A1-AK1.20	3.1	3.3	W-3-LP-OPS-TYR05	5

QUESTION

CEA Reg Group 6 dropped into the core during a reactor power cutback and is being withdrawn. Which of the following would result in the largest positive reactivity addition if a continuous rod withdrawal event were to start and terminate between the given heights? Assume an initial ASI of -0.1 for each case.

A. 10”-20”

B. 40”-50”

C. 100”-110”

D. 140”-150”

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Comp or Analysis	New	41.8/41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 2
QUESTION ID: 5756 **- A**
DESCRIPTION: Effect of opening CEA disconnects for CEAs energized by the hold bus
AUTHOR: avest **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 6/20/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CED **CATEGORY:** SYSTEM

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
457000102	08		9/5/91
OP-004-004	08	02	1/4/2000

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
4.2-A3-AK2.05	2.5	2.8	W-3-LP-OPS-CED00	13

QUESTION

CEA 23 has dropped into the core and its rod bottom light is illuminated on CP-2. Locally a check of the ACTM card shows an abnormal voltage applied to the upper gripper coil. The RAB watch is placing Regulating Group 6 on the hold bus. The RAB watch opens the disconnects for CEAs 20, 21, 22, and 23 after noting that all CEAs are being held by their upper grippers. Which of the following occurs as a result of this action?

A. The reactor remains critical and the CEAs have power applied to the upper gripper from the hold bus only.

B. The reactor remains critical and the CEAs have power applied to the lower gripper from the hold bus only.

C. The reactor remains critical and the CEAs have power applied to the upper gripper and lower gripper from the hold bus only.

D. The reactor trips when the disconnect for any CEA other than CEA 23 is opened because more than one CPC senses a dropped CEA.

ANSWER

A

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 3
QUESTION ID: 3322 **- A**
DESCRIPTION: bases for TIL limits
AUTHOR: avest **REVISION** 2 **REVISION DATE** 8/11/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 8/11/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO **SIMULATOR SETUP**
PLANT SYSTEM: TS **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
TS BASES			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
4.2-A5-AK3.02	3.6	4.2	W-3-LP-OPS-CED00	3

QUESTION

Which of the following is a bases for Transient CEA Insertion Limits?

A. Ensures > 2 % shutdown margin during an excess steam demand accident at Beginning of Cycle.

B. Ensures that Peak Linear Heat Rate limits are not exceeded in assemblies adjacent to inserted CEAs.

C. Ensures axial shape index is maintained within the limits of the UFSAR accident analysis.

D. Ensures the potential effects of a CEA ejection accident are limited to acceptable levels.

ANSWER

D

COMMENTS

Reference Tech Spec Bases Pg. B 3/4 1-5

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Memory or Fundamental	Bank	41.5/41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 4
QUESTION ID: 5757 **- A**
DESCRIPTION: Determine desired status of RCPs
AUTHOR: avest **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 6/20/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: YES
PLANT SYSTEM: PPE **CATEGORY:** PROCEDURE
RCP SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-902-000	08	00	9/8/98
OP-902-002	08	00	9/9/98
OP-902-009	0.1	00	9/9/98

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.1-E11-EA1.03	4.0	4.0	W-3-LP-OPS-PPE01	10

QUESTION

The following conditions are present:

- A reactor trip occurred when RCP 1B tripped
- RCS Pressure - 1100 psia and lowering
- RCS T_H and CETs - 550ºF and stable
- T_C - 545ºF and stable
- Containment Pressure - 16.9 psia and rising
- RCPs 1A, 2A, and 2B are running

The CRS is verifying Standard Post Trip Actions. Based on all current conditions what guidance should the CRS give the PNPO?

A. Secure Reactor Coolant Pump 2A only

B. Secure Reactor Coolant Pump 2B only

C. Secure Reactor Coolant Pumps 1A and 2A

D. Secure All Reactor Coolant Pumps

ANSWER

D

COMMENTS

Provide Steam Tables and Attachment 2-A of OP-902-009 to examinees

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	COMP OR ANALYSIS	NEW	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 5
QUESTION ID: 5758 - A
DESCRIPTION: Requirements to secure RCPs following a loss of CCW
AUTHOR: avest **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 6/20/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPO **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-901-510	03	01	11/3/99		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
4.2-A15/17-AK2.08	2.6	2.6	W-3-LP-OPS-PPO50		3

QUESTION

The plant is at 100% power when a high CCW system temperature occurs. The CCW isolation valves to all RCP seal coolers go closed. The isolation valve for RCP 1A will not re-open. Which of the following is the prescribed course of action?

A. Perform a plant shutdown using OP-901-212, Rapid Plant Power Reduction, and then secure RCP 1A.

B. Fail open the CCW isolation to RCP 1A seal cooler by closing IA Containment Isolation, IA-909.

C. Trip the reactor manually, secure RCP 1A, and implement OP-902-000, Standard Post Trip Actions.

D. Locally open the CCW isolation to RCP 1A seal cooler before reaching a CBO return temp of > 200°F.

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	MEMORY OR FUNDAMENTAL	NEW	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 6
QUESTION ID: 5763 **- A**
DESCRIPTION: Natural circulation cooldown limits and bases
AUTHOR: avest **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 6/20/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPE **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-902-007	09	00	9/9/98
OP-902-002	08	00	9/9/98
OP-902-008	11	00	9/9/98
OP-902-004	08	00	9/9/98
OP-902-005	10	00	9/9/98
OP-902-003	03	00	9/9/98
OP-902-006	08	00	9/9/98

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
2-1-32	3.4	3.8	W-3-LP-OPS-PPE05	7

QUESTION

When performing a natural circulation cooldown between MODE 3 and MODE 5 the cooldown limit is changed from the forced circulation limit of 100°F/hr to _____ to prevent _____.

A. 60°F/hr; impeding natural circulation due to excessive heat removal causing abnormal density changes

B. 50°F/hr; forming a bubble in the head when depressurizing the RCS during the cooldown

C. 30°F/hr; a rapid depressurization of the S/Gs due to lower heat transfer from primary

D. 10°F/hr; excessive thermal stresses due to the differential temperature from bottom to top of vessel

ANSWER

B

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	MEMORY OR FUNDAMENTAL	NEW	41.10/43.2

Waterford 3 Examination Question
Examination Bank

Examination Question Number 7
QUESTION ID: 5798 **- A**
DESCRIPTION: Interrelationship between Emergency Boration and Bus Power
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/11/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CVC PPE **CATEGORY:** PROCEDURE SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-902-000	08	00	9/8/98
SD-CVC			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A24-AK2.04	2.6	2.5	W-3-LP-OPS-PPE01	10
			W-3-LP-OPS-PPE05	2

QUESTION

- A reactor trip occurred due to a loss of offsite power
- Three CEAs did not insert on the trip
- RCS pressure dropped to 1900 psia and is returning to normal
- EDG B automatic and manual starts failed
- The AB busses are aligned to the B train
- Charging Pump A has sequenced on EDG A and is running

Which of the following would be a successful method for performing an emergency boration to the RCS with the existing conditions?

A. Start BAM pump B with a flow path through BAM-133, emergency boration valve from CP-4.

B. Open BAM-113A, BAMT A gravity feed valve and close CVC-186, VCT outlet valve from CP-4.

C. Open CVC-507, RWSP to charging pump suction isolation valve from CP-4.

D. Start HPSI pump A from CP-8 with its suction aligned to the RWSP.

ANSWER

A

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	COMP OR ANALYSIS	NEW	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 8
QUESTION ID: 5830 **- A**
DESCRIPTION: Reason for securing RCPs on CSAS
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPE RCP **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:
TG-902-000			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A26-AK3.03	4.2	4.2	W-3-LP-OPS-PPE01	11

QUESTION

OP-902-000, Standard Post Trip Actions, requires securing all Reactor Coolant Pumps on a CSAS. Which of the following describes the reason for this action?

A. To protect the RCP motors from internal damage due to water spray.

B. To prevent running RCPs without adequate NPSH during a LOCA.

C. To minimize inventory loss from the RCS due to LOCA conditions.

D. To prevent damage to the RCPs due to a loss of CCW flow to the RCPs.

ANSWER

D

COMMENTS

Reference: TG-902-000

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	MEMORY OR FUNDAMENTAL	NEW	41.5/41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 9
QUESTION ID: 5764 **- A**
DESCRIPTION: Diagnose location of a CCW leak
AUTHOR: avest **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 6/20/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CC PPO **CATEGORY:** PROCEDURE SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-901-510 SD-CC	03	01	11/3/99

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A26-AA2.02	2.9	3.6	W-3-LP-OPS-PPO50	1

QUESTION

Given the following conditions:

- The plant is at 100% power
- CCW Makeup Pumps A and B auto started
- Both DCTs are bypassed and isolated
- All CCW pump suction and discharge cross-connect valves are closed
- Train A and B isolations to the AB loop are isolated
- Initially A and B train surge tank dropped and then recovered to normal and stabilized
- Both CCW Makeup Valves and the normal CCW Surge Tank Makeup valve opened and are now closed

Which of the following could cause these indications?

A. A leak on the discharge of CCW Pump A

B. A leak upstream of EDG B Flow Control Valve

C. A leak on the AB Loop Return Header

D. A leak on HPSI Pump AB Seal Cooler Return

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	COMP OR ANALYSIS	NEW	43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 10
QUESTION ID: 3476 **- A**
DESCRIPTION: DRTS ACTIVATION ON HIGH PRESSURE
AUTHOR: avest **REVISION** 1 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/11/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: ATS **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-004-021	00	01	11/2/94
SD-ATS			
SD-PPS			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.1-E29-EA1.12	4.1	4.0	W-3-LP-OPS-ATS00	3

QUESTION

The following plant conditions exist:

- The plant is at 100% power.
- RCS pressure is 2405 psia and rising.
- No Reactor Protection System (RPS) or Diverse Reactor Trip System (DRTS) actuations have been generated
- All RPS and DRTS setpoints have been calibrated to plant design specifications

WHICH of the following results from RCS pressure continuing to rise to 2450 psia?

A. RPS HIGH PZR pressure trip is reached; Reactor Trip Breakers open to de-energize the CEA coils.

B. CPC HIGH PZR pressure Aux Trip is reached; MG set 480 VAC feeder breakers open to de-energize the CEA coils.

C. DRTS HIGH PZR pressure setpoint is reached; CEDM MG set load contactors open to de-energize the CEA coils.

D. DRTS HIGH PZR pressure setpoint is reached; Reactor Trip Breakers open to de-energize the CEA coils.

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	COMP OR ANALYSIS	BANK	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 11
QUESTION ID: 5831 **- A**
DESCRIPTION: Bases for manually feeding the intact S/G after blowdown of the affected S/G, OP-902-004
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPE **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
TG-902-004			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
CE/E05-EK3.3	3.8	4.0	W-3-LP-OPS-PPE04	4

QUESTION

The Excess Steam Demand Recovery Procedure, OP-902-004, requires manual initiation of EFAS and manual feed of the intact steam generator when stabilizing RCS temperature. Why is this required vice allowing automatic initiation of EFAS and feeding of the intact S/G?

A. To ensure the intact steam generator remains a viable heat sink.

B. To supplement heat removal in conjunction with undersized ADVs to limit the RCS heatup.

C. To ensure uninterrupted feed to the intact S/G during cooldown.

D. The automatic initiation logic for EFAS can not be met after blowdown of the affected S/G.

ANSWER

B

COMMENTS

Reference TG-902-004

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	MEMORY OR FUNDAMENTAL	NEW	41.5/41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 12
QUESTION ID: 5790 **- A**

DESCRIPTION: Prioritizing actions for implementation of EOPs
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/6/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/6/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPE **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
OI-038-000	00	01	9/1/99
OP-902-004	08	00	9/9/98

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
2-4-23	2.8	3.8	W-3-LP-OPS-PPE04	8

QUESTION

The following conditions are present:

Pzr Press - 1300 psia and rising
SG1 Press - 700 psia and rising slowly
SG1 Level - 70% WR and slowly lowering
CET Temperature - 430°F and rising
Cntnmt press - 15.1 psia and steady
SG2 Press - 50 psia and lowering
SG2 Level - 2% WR and lowering
Pzr Level - 28% and rising
Loss of Offsite Power has occurred
All ESF actuations and equipment responded as designed

Which of the following actions has the highest priority?

A. Isolating the affected Steam Generator
B. Performing Reactor Coolant Pump trip strategy
C. Stabilizing RCS temperature and pressure
D. Verifying HPSI throttle criteria

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	COMP OR ANALYSIS	NEW	41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 13
QUESTION ID: 2349 **- A**
DESCRIPTION: Indications of excessive air inleakage
AUTHOR: avest **REVISION** 2 **REVISION DATE** 7/25/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/25/2000
TYPE: MULTIPLE CHOICE **TIME:** 1 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: AE **CATEGORY:** Procedure

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-003-001	10	01	6/17/99
OP-901-220	02	02	2/15/2000

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A51-AA2.01	2.4*	2.7*	W-3-LP-OPS-PPO20	3

QUESTION

OP-901-220 "Loss of Condenser Vacuum" directs you to "Check local condenser vacuum pump air flow indications to determine if low vacuum is from excessive air in-leakage." Which of the following would be the minimum value indicative of excessive air in-leakage?

A. 5 cfm

B. 10 cfm

C. 15 cfm

D. 30 cfm

ANSWER

B

COMMENTS

Ref: OP-901-220, page 9

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	MEMORY OR FUNDAMENTAL	BANK	43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 14
QUESTION ID: 5834 **- A**
DESCRIPTION: AMI Setpoint on a Reduced Power Condition
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: SBC **CATEGORY:** SYSTEM
RXC

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
SD-SBC			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
4.2-A51-AA1.04	2.5*	2.5*	W-3-LP-OPS-SBC00	7

QUESTION

Reactor power cutback is aligned for service. A plant downpower from 100% power is in progress due to lowering vacuum (two of four circ water pumps tripped). At 85% power the turbine trips as a result of lowering vacuum. If two SBCS valves are out of service, at what power level should an Automatic Motion Inhibit signal be generated?

A. 15%

B. 33%

C. 44%

D. 50%

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	COMP OR ANALYSIS	NEW	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 15
QUESTION ID: 5791 **- A**
DESCRIPTION: Safety Function Parameters For Station Blackout
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/6/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/6/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: YES
PLANT SYSTEM: PPE **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-902-005	10	0	9/9/98		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
2-4-21	3.7	4.3	W-3-LP-OPS-PPE05		4

QUESTION

Which of the following conditions would indicate a need to exit the station Blackout procedure and perform diagnostics?

A. AB-DC Voltage is 0 Volts

B. T_C is 550°F and stable

C. Cntnmt Temp is 170°F, rising slowly

D. Pzr level is 55% and lowering slowly

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Comp or Analysis	New	43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 16
QUESTION ID: 4243 **- B**
DESCRIPTION: Failure mode for ADV on loss of SMC SUPS.
AUTHOR: avest **REVISION** 2 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/11/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPO **CATEGORY:** PROCEDURE SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-901-312	01	03	5/24/99		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
4.2-A57-AK3.01	4.1	4.4	W-3-LP-OPS-PPO30		3

QUESTION

The plant is in the following condition:

- The plant is shutdown
- RCS Cooldown is in progress using the ADVs
- Condenser vacuum has been broken to allow system repairs
- SUPS MC fails

Because the ADV fails _____, the SG 1 ADV must be operated in _____ per OP-901-312.

A. closed, local air control

B. as is, manual (CP-8)

C. as is, manual at the ADV itself

D. open, local air control

ANSWER

A

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Memory or Fundamental	Bank	41.5/41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 17
QUESTION ID: 4646 **- A**
DESCRIPTION: Actions to control CCW temperature on loss of SUPS MB
AUTHOR: avest **REVISION** 2 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/11/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPO **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-901-312	01	03	5/24/99

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A57-AA1.06	3.5	3 5	W-3-LP-OPS-PPO30	3

QUESTION

Power is lost to 120 VAC Vital Instrument Bus MB. Which actions are taken to control and monitor CCW temperature.

A. Locally throttle ACC-126B, CCW HX B TCV. Cycle Train B DCT and WCT Fans as necessary. Monitor temperature by having I&C connect a Transmation Minitemp in CP-49.

B. Locally trip the breaker for ACC Pump B electrically and rack out the breaker. Cycle train B DCT Fans and WCT Fans as necessary. Monitor CCW header temperature using the PMC.

C. Place controller for ACC-126B, CCW HX B TCV in manual to control temperature. Monitor CCW header temperature locally using a hand-held digital pyrometer.

D. Close ACC-110B, ACC Pump B Discharge Isolation Valve. Cycle Train DCT Fans and WCT Fans as necessary. Monitor CCW header temperature using the PMC.

ANSWER

A

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Memory or Fundamental	Bank	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 18
QUESTION ID: 3986 **- B**
DESCRIPTION: Recircing BACT's during release.
AUTHOR: avest **REVISION** 2 **REVISION DATE** 7/25/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/25/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: BM **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-007-001	16	01	6/1/00

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A59-AA2.04	3.2*	3.5	W-3-LP-OPS-BM00	11

QUESTION

How many Boric Acid Condensate Tanks (BACTs) may be placed on recirculation while another BACT is being discharged to Circulating Water? What is the basis for this limitation?

A. One; Boric Acid Condensate Pump A and B have separate and independent recirculation flowpaths.

B. None; part of the release flowpath must be used to recirculate any BACT.

C. None; prevents an inadvertent release of a BACT that has not been sampled and approved for release.

D. None; there is only one recirculation flowpath available for the four BACTs.

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Memory or Fundamental	Bank	43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 19
QUESTION ID: 5839 **- A**
DESCRIPTION: Indications of a RCP Seal Heat Exchanger Leak into CCW
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CC **CATEGORY:** SYSTEM
REFERENCE: **REVISION:** **CHANGE:** **DATE:**
SD-CC

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A62-AA1.05	3.1	3.1	W-3-LP-OPS-PPO40	1

QUESTION

- SDC trains A and B are in service
- RCS pressure is 350 psia

CCW A rad monitor begins a sharply rising trend, followed by a slowly rising trend on the AB and B radiation monitors. What is the most likely source of the rising activity in CCW?

A. CS Pump A Seal Heat Exchanger

B. Shutdown Cooling Heat Exchanger B

C. CVCS Letdown Heat Exchanger

D. Shutdown Cooling Heat Exchanger A

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 20
QUESTION ID: 5836 **- A**
DESCRIPTION: Licensed personnel restrictions for air respirators
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPO **CATEGORY:** ADMIN

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
W-3-LP-RRP-03			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
4.2-A67-AA1.01	3.6	3.6	W-3-LP-RRP-03	18

QUESTION

Which of the following is correct concerning air respirators at Waterford 3?

A. A full SCBA air cylinder is designed to last ~ 1 hr for an individual in average physical condition.

B. When the low pressure alarm sounds on a SCBA ~ 20 minutes of air remains in the air cylinder.

C. Licensed personnel with corrective lens restrictions are required to wear contacts or have respirator glasses available prior to relieving the shift.

D. Fire brigade members are required to take respirator physicals every six months to remain qualified for the fire brigade positions.

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Memory or Fundamental	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 21
QUESTION ID: 5840 **- A**
DESCRIPTION: Basis for matching air pressure at regulator and transducer when taking local contol of ADVs
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/25/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/25/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: MS PPO **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-901-502 SD-MS	05	02	01/06/00

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A68-AK3.06	3.9	4.3	W-3-LP-OPS-PPO51	21

QUESTION

The OP-901-502, Control Room Evacuation attachment for taking local control of Atmospheric Dump Valves requires adjusting the inlet air regulator to match pressure at the outlet of the transducer prior to taking local control. What is the reason for performing this step?

A. To ensure the valve closes prior to taking local control of the valve at the local air station.

B. To equalize pressure across the valve operating piston prior to using the manual handwheel to operate the valve.

C. To allow alignment of Essential Air to the valve without affecting valve position.

D. To ensure the valve does not change position when taking local control of the valve at the local air station.

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Memory or Fundamental	New	41.5, 41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 22
QUESTION ID: 5841 **- A**
DESCRIPTION: Affect of reducing Containment Pressure on offsite dose
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/25/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/25/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CB **CATEGORY:** SYSTEM
PPO
REFERENCE: **REVISION:** **CHANGE:** **DATE:**
SD-CS

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A69-AK1.01	2.6	3.1	W-3-LP-OPS-CS00	5

QUESTION

Which of the following is a function of the Containment Spray System?

A. Reduction of offsite dose by reducing the differential pressure between the containment and the external atmosphere.

B. Reduction of offsite dose by scrubbing of noble gases from the containment atmosphere following a LOCA.

C. Provide cooling of the safety injection sump water post-LOCA prior to a Recirculation Actuation Signal (RAS).

D. Limits corrosion of containment components in a post-LOCA environment by use of chemical injection pumps.

ANSWER

A

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Memory or Fundamental	New	41.8, 41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 23
QUESTION ID: 5833 **- A**
DESCRIPTION: Determining Inadequate Core Cooling Conditions using Subcooled Margin
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: YES
PLANT SYSTEM: PPE **CATEGORY:** PROCEDURE

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
OP-902-002	8	0	9/9/98

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
4.1-E74-EA2.01	4.6	4.9	W-3-LP-OPS-PPE02	11

QUESTION

OP-902-002, Loss of Coolant Accident Recovery Procedure, is being implemented. Which of the following sets of conditions support the criteria to verify single phase natural circulation?

A. 410°F, 400 psia, Loop $\Delta T = 35°F$

B. 448°F, 500psia, Loop $\Delta T = 45°F$

C. 542°F, 1200 psia, Loop $\Delta T = 55°F$

D. 555°F, 1400 psia, Loop $\Delta T = 65°F$

ANSWER

A

COMMENTS

Supply Steam Tables

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Comp or Analysis	New	43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 24
QUESTION ID: 4558 **- A**
DESCRIPTION: T.S. basis for 3.4.7
AUTHOR: avest **REVISION** 1 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/11/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: TS **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
TS 3.4.7 BASES			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
2-2-25	2.5	3.7	W-3-LP-OPS-RCS00	9

QUESTION

Which of the following is the bases for reducing T_{ave} below 500 °F if RCS specific activity exceeds the limits of T.S. 3.4.7?

A. Reducing T_{ave} ensures saturation pressure is below the lowest set pressure of S/G safeties.

B. Reducing T_{ave} increases the adherency of the RCS corrosion film and minimizes crud bursts.

C. Reducing T_{ave} raises the efficiency of the Letdown Ion Exchangers for removal of radioactive ions.

D. Reducing T_{ave} contracts small fuel defects, stopping the release of fission products to the RCS.

ANSWER

A

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/1	Memory or Fundamental	Bank	43.2

Waterford 3 Examination Question
Examination Bank

Examination Question Number 25
QUESTION ID: 5799 **- A**
DESCRIPTION: TS LCO requirements for Charging Pumps
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/11/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CVC **CATEGORY:** PROCEDURE
SYSTEM
SRO LEVEL

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
OP-002-005	15	00	3/21/2000
T.S. 3.1.2.4			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
2-1-33	3.4	4.0	W-3-LP-OPS-CVC00	7

QUESTION

The Reactor is tripped. OP-902-001, Uncomplicated Reactor Trip Recovery, has been entered. 'AB' buses are on the 'A' side. The PNPO notices that the 'A' Charging Pump has tripped on Overcurrent. Charging pump 'AB' is running in lead. The Standby Charging Pump Selector Switch is in the 'A-B' position, and the 'AB' Assignment Switch is in the 'NORM' position.

Which of the following Actions will satisfy the LCO for the Charging Pump Tech Spec, T.S. 3.1.2.4?

A. Take the Standby Charging Pump Selector Switch to the 'B-AB' position.
B. Take the 'AB' Assignment Switch to the 'A' Position.
C. Take the 'AB' Charging Pump to 'AUTO'.
D. Take the Control Switch for the 'B' Charging Pump to 'ON'.

ANSWER

B

COMMENTS

REF: OP-002-005, Chemical and Volume Control. R15, C0. Page 21. Waterford SES Technical Specification 3.1.2.4, Charging Pumps – Operating.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Comp or Analysis	New	43.2, 43.3

Waterford 3 Examination Question
Examination Bank

Examination Question Number 26
QUESTION ID: 5572 **- A**
DESCRIPTION: Determination if HPSI throttle criteria is met during a PZR STM space break.
AUTHOR: bcoble **REVISION** 0 **REVISION DATE** 2/5/99
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/12/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPE **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-902-002	08	00	9/9/98

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A8-AK3.05	4.0	4.5	W-3-LP-OPS-PPE02	24

QUESTION

The following conditions exist:

- The plant tripped on Low Pressurizer pressure.
- RCS Pressure is currently 1200 psia and dropping.
- 200 gpm SI flow to each cold leg loop is indicated on CP-8.
- Containment pressure and Quench Tank pressure are 25 psia and rising together.
- T-cold, T-hot, and Representative CET temperatures indicate 545 °F.
- QSPDS level 4 indicates voided on QSPDS 1 and 2
- Vessel Plenum level on CP-7 reads 60%
- SG #1 and 2 levels are 60% NR and steady

Pressurizer level has come back on scale. Pressurizer level is 45% and is rising rapidly. What action should be taken by the crew due to the rising Pressurizer level?

A. Stop one HPSI pump and throttle flow on the other train one valve at a time.

B. Stop Both HPSI pumps one pump at a time when Pressurizer level reaches 55.6%.

C. Continue to allow full HPSI flow into the RCS even if PZR level reaches 100%.

D. Restore Letdown to service and maximize Letdown flow to maintain Pzr level 33 - 60%.

ANSWER

C

COMMENTS

Pressurizer Safety valve is failed open, plenum level of 80% and subcooled margin of 28 degrees are not met. Ref. OP-902-002 Pg. 21

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Comp or Analysis	Bank	41.5, 41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 27
QUESTION ID: 5802 **- A**
DESCRIPTION: SDM verification during Small Break LOCA
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/13/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/13/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPE **CATEGORY:** PROCEDURE
SRO Level

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**		
OI-038-000	00	01	9/1/99		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
4.1-E9-EA2.32	3.2*	3.6*	W-3-LP-OPS-PPE02		24

QUESTION

The plant has tripped due to a small break LOCA inside Containment. All CEAs are inserted. OP-902-002, Loss of Cooling Accident Recovery, has been entered. RCS Tavg is 545°F. SIAS and CIAS have actuated, and all plant components have operated as designed. What must be done to ensure Shutdown Margin will be maintained during the subsequent cooldown?

A. Verify Emergency Boration occurs during the entire cooldown.
B. Calculate SDM for $\leq$350°F prior to cooling down the plant $\leq$400°F and borate as necessary.
C. Verify that HPSI/LPSI flow rates are in accordance with the EOP curves.
D. Hold Tc at 350°F. Calculate SDM for $\leq$350°F and borate as necessary.

ANSWER

B

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Memory or Fundamental	New	43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 28
QUESTION ID: 5829 **- A**
DESCRIPTION: Mode 4 Viable Charging System Annunciators.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CVC **CATEGORY:** SYSTEM

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**		
OP-500-007	10	02	10/8/97		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
2-4-46	3.5	3.6	W-3-LP-OPS-PPO10		1

QUESTION

The Plant is in Mode 4. RCS pressure is 350 psia, and RCS Tave is 345°F. Charging pump 'B' is running. Which of the following Annunciators would indicate a loss of Charging Pump 'B'?

A. VCT Level Lo-Lo.
B. Charging Pumps Header Pressure Lo.
C. Letdown Regen HX Outlet Temp Hi.
D. Charging Pumps Header Flow Lo.

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Comp or Analysis	New	43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 29
QUESTION ID: 5672 **- N**
DESCRIPTION: Time to exceed 200 degrees after a loss of Shutdown cooling
AUTHOR: avest **REVISION** 0 **REVISION DATE** 6/17/99
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: YES
PLANT SYSTEM: PPO SDC **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-901-131	01	02	11/18/99		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
4.2-A25-AA1.12	3.6	3.5	W-3-LP-OPS-REQ21		3

QUESTION

The plant is in Mode 5 preparing to perform refueling. Steam Generator manways are detensioned but not removed. RCS level is at midloop. The reactor was shutdown 96 hours ago. RCS temperature is 130°F. The running LPSI pump trips. Determine the time to reach Mode 4 conditions.

A. 7 minutes

B. 12 minutes

C. 15 minutes

D. 18 minutes

ANSWER

B

COMMENTS

Supply examinee with Attachment 2 of OP-901-131

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Comp or Analysis	Bank	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 30
QUESTION ID: 5814 **- A**
DESCRIPTION: Failure of PZR BU Heaters In-surge Interlock
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/18/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/18/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPC **CATEGORY:** SYSTEM
REFERENCE: **REVISION:** **CHANGE:** **DATE:**
SD-PLC

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A27-AK1.03	2.6	2.9	W-3-LP-OPS-PLC00	7

QUESTION

What would be the effect if the Pressurizer Backup Heaters failed to energize on a Pressurizer in-surge during a plant transient (assuming no subsequent outsurge immediately)?

A. Pressurizer would become and remain subcooled for a longer period of time.
B. RCS Pressure would slowly lower to trip setpoint due to loss of Heater Capacity.
C. Pressurizer heater wells and surge line would be more subject to thermal shock.
D. More Proportional Heater current will be drawn immediately, then reduce over time.

ANSWER

A

COMMENTS

REF: System Description: Pressurizer Pressure Control (PPC) System

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Comp or Analysis	New	41.8, 41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 31
QUESTION ID: 5808 **- A**
DESCRIPTION: Mode 6 Source Range Failure
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/17/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/17/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: NI **CATEGORY:** PROCEDURE
SRO Level

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
TS 3.9.2			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
4.2-A32-AA2.07	2.8	3.4*	W-3-LP-OPS-REQ04	2

QUESTION

While taking the Mode 6 Tech Spec Logs it is noticed that the previous Startup Channel readings, channels 1 and 2 respectively, were 100/ 120 cps, and the current readings are 100/ 0 cps. Which of the following evolutions should be immediately stopped due to this situation?

A. Raising RCS Boron concentration for 24 hour projected SDM.
B. Ultrasonic Fuel Testing in the Spent Fuel Pool.
C. Removing expended fuel from the core.
D. Removing SDC purification from service.

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Comp or Analysis	New	43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 32
QUESTION ID: 5807 **- A**
DESCRIPTION: Failure of HV to NI Channel 'C'.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/17/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/17/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: NI **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-500-009	05	1	8/16/99		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
4.2-A33-AK2.01	2.4	2.9	W-3-LP-OPS-ENI00		5

QUESTION

The plant is at 100%. CPC Channel ‘C’ LPD and DNBR trips are just received, with the annunciator “Excore Inst Channel ‘C’ Inoperable’. Which of the following would be the likely cause of this condition?

A. Failure of the 10E-4 Bistable for Channel ‘C’.
B. Failure of the 10E-6 Bistable for Channel ‘C’.
C. Failure of CPC Channel ‘C’ Power Supply.
D. Failure of ENI Channel ‘C’ HV Power Supply.

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Memory or Fundamental	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 33
QUESTION ID: 5835 **- A**
DESCRIPTION: Actions on a S/G Tube Leak after Plant Shutdown.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPO **CATEGORY:** PROCEDURE
SRO Level

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
OP-901-202	02	04	6/19/00

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
4.2-A37-AK1.02	3.5	3.9	W-3-LP-OPS-PPO20	4

QUESTION

The Plant is in Mode 3 following a Rapid Plant Downpower due to a #1 S/G tube leak in excess of Tech Spec Limits. OP-901-202, Steam Generator Tube Leakage or High Activity, is implemented. A normal plant cooldown has been performed to 495°F Thot, 2 RCPs have been secured, and S/G #1 is isolated. What is the next major step to mitigate this situation and why?

A. Depressurize the RCS to <950 psia AND within 50 psia of #1 S/G pressure to minimize leakage into #1 S/G.
B. Cooldown and Depressurize the RCS to Shutdown Cooling Entry Conditions to expedite Engineering Evaluations.
C. Commence feed and bleed of #1 S/G via the MFW and BD systems to dilute the radioactive isotopes in solution.
D. Place the controller for #1 ADV to manual and close this valve to prevent an unmonitored release.

ANSWER

A

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Comp or Analysis	New	41.8, 41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 34
QUESTION ID: 5837 **- A**
DESCRIPTION: Flow Rate Versus Pressure and Reading Flow on a SGTR.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: YES
PLANT SYSTEM: PPE **CATEGORY:** PROCEDURE

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
OP-902-009	00	01	12/16/99

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
4.1-E38-EA1.24	3.6*	3.4	W-3-LP-OPS-PPE07	8

QUESTION

A S/G Tube Rupture has occurred in #2 S/G, and OP-902-007, Steam Generator Tube Rupture, has been implemented. RCS pressure is 1200 psia and steady. What is the minimum acceptable flow to each cold leg from the HPSI pumps?

A. Approximately 16 gpm each.
B. Approximately 32 gpm each.
C. Approximately 48 gpm each.
D. Approximately 64 gpm each.

ANSWER

D

COMMENTS

Student is to be given Safety Injection Flow Curves in OP-903-009, Standard Appendices.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 35
QUESTION ID: 5810 **- A**
DESCRIPTION: Manual Contingencies for RTO
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/17/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/17/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: FW **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-902-000	08	00	9/8/98

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.4-E6-EK3.3	3.7	3.8	W-3-LP-OPS-PPE01	10

QUESTION

The Reactor has tripped on Hi S/G Level in the #1 S/G due to the MFRV #1 controller failing high, fully opening #1 MFRV. After the trip MFRV #1 sticks open mechanically. Which of the following contingencies will satisfy RTO conditions for feeding #1 S/G?

A. Take Manual Control of the #1 Master Controller and match feedrates with #2 S/G.
B. Close the MFRV #1 Motor Isolation Valve.
C. Trip the 'A' SGFP.
D. Take Manual Control and Close #1 SUFRV.

ANSWER

B

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Comp or Analysis	New	41.5, 41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 36
QUESTION ID: 5817 **- A**
DESCRIPTION: Actions on a Loss of DC to the 3AB SUPS.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/19/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/19/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: YES
PLANT SYSTEM: ID **CATEGORY:** SYSTEM
SRO LEVEL

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
OP-006-005	10	00	3/12/99

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
4.2-A58-AA1.02	3.1*	3.1	W-3-LP-OPS-ID00	7

QUESTION

The Plant is in Mode 1, 100% Power. The Annunciator, 'SUPS 3AB TROUBLE' was received. The RAB Watch reports that the DC Input Breaker on AB SUPS has tripped. What actions should be taken in this condition?

A. Enter TS 3.8.2.1, DC Sources and shutdown the AB SUPS to prevent damage to the rectifier.
B. Declare the AB Battery Inoperable and enter OP-901-313, Loss of a 125 Volt DC Bus.
C. Verify proper output of the AB SUPS, maintain AB SUPS operating, and inspect both battery chargers.
D. Shutdown the AB SUPS to prevent inverter damage due to operating disconnected from the battery.

ANSWER

D

COMMENTS

Provide Tech Spec 3.8.2.1 and 3.8.3.1 to Examinees

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 37
QUESTION ID: 5820 **- A**
DESCRIPTION: Biological Effects following Acute Exposure from Gaseous Release.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/20/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: RAD **CATEGORY:** FUNDAMENTALS
REFERENCE: **REVISION:** **CHANGE:** **DATE:**
CFR

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A60-AK1.02	2.5	3.1*	EOI-S-LP-GET-RWT01	24

QUESTION

A General Emergency is in progress due to an Interfacing System LOCA, with evidence of some fuel damage. An uncontrolled off-site airborne release was occurring, but was stopped by a Maintenance team. The TSC reports to the Control Room that personnel from that team received a dose of 35 rem each. Which of the following statements is TRUE concerning this amount of exposure?

A. No blood changes and no observable effects.
B. Slight blood changes and no other observable effects.
C. Moderate blood changes and vomiting within 3 hours.
D. Severe blood changes and complete loss of hair.

ANSWER

B

COMMENTS

REF: GET 2 Lesson Plan: EOI-S-LP-RWT01.10 (12/23/99)

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Memory or Fundamental	New	41.8, 41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 38
QUESTION ID: 5822 **- A**
DESCRIPTION: Actions on CROAI Alarm
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/21/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/21/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: HVC RMS **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-901-401	00	00	4/2/93		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
2-4-11	3.4	3.6	W-3-LP-OPS-PPO40		3

QUESTION

CROAI 'B' South (0200.6) went into alarm and has been verified as operating properly. Which of the following actions should be taken in accordance with OP-901-401?

A. Verify both CR Emergency Filtration Units have started.

B. Verify CR Toilet Exhaust Fan 'B' off, and 'A' running.

C. Verify RAB Normal Ventilation secured automatically.

D. Verify Kitchen/Conference Room Exhaust fan off.

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Memory or Fundamenta	New	41.10, 43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 39
QUESTION ID: 5815 **- A**
DESCRIPTION: Actions to Close CS-125A on a Loss of IA with a CSAS
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/19/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/19/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CS IA **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-901-511	04	03	7/3/00
OP-902-008	11	00	9/9/98

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.2-A65-AK3.04	3.0	3.2	W-3-LP-OPS-PPO50	3,6
			W-3-LP-OPS-PPE08	4

QUESTION

A Seismic Event occurred causing a LOCA. A SIAS, CIAS, and CSAS have all actuated. The main IA Header just downstream of the IA dryers also ruptured. Containment Spray Pump 'A' started and subsequently tripped on overload. It is determined to be unavailable. Which of the following is true concerning closure of CS-125A to isolate the affected penetration?

A. Essential Air must be aligned to CS-125A before it can be closed per the applicable EOP appendix.
B. CS-125A can be closed using the applicable EOP appendix. Essential Air can be later aligned per OP-901-511, Loss of IA.
C. The N2 Accumulator will provide initial motive force to operate CS-125A when closed from the CP-8 C/S.
D. Close CS-125A using C/S on CP-8 to override CSAS. Align Essential Air per OP-901-511, Loss of IA.

ANSWER

B

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Comp or Analysis	New	41.5, 41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 40
QUESTION ID: 5832 **- A**
DESCRIPTION: Functional Recovery Procedure Use
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/24/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPE **CATEGORY:** PROCEDURE
SRO Level

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-902-008	11	00	9/9/98
OP-100-017	00	01	7/3/00

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.4-E9-EA2.2	3.5	4.0	W-3-LP-OPS-PPE08	9

QUESTION

Which of the following statements is true concerning OP-902-008, Functional Recovery Procedure (FRP)?

A. If multiple events are clearly identified, direct entry may be made into the FRP if the plant was initially in Mode 2.
B. Safety Functions that do not meet the Success Path 1 criteria have the highest priority.
C. More than one safety function may be pursued concurrently if conditions warrant.
D. The FRP procedure may only be exited if conditions are satisfied to enter OP-010-005, Plant Shutdown.

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/2	Memory or Fundamental	New	43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 41
QUESTION ID: 3453 **- A**
DESCRIPTION: Actions required by OP-901-110
AUTHOR: avest **REVISION** 1 **REVISION DATE** 7/12/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/12/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: RR **CATEGORY:**

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-901-110	03	01	9/2/98		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
4.2-A28-AK3.05	3.7	4.1	W-3-LP-OPS-RR00		5

QUESTION

WHICH ONE (1) of the following actions should be performed by the operator if the T_{hot} input to the Reactor Regulating System (RRS) fails HIGH at 50% power?

A. Start additional charging pumps

B. Place Pressurizer Level controller to MANUAL

C. Close letdown stop valve CVC-101

D. Place Letdown Flow controller to MANUAL

ANSWER

B

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/3	Comp or Analysis	Bank	41.5, 41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 42
QUESTION ID: 5800 **- A**
DESCRIPTION: Expected Status of CCW Pump AB following a LOOP
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/12/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/12/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: YES
PLANT SYSTEM: CC **CATEGORY:** PROCEDURE
PPE SYSTEM

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
CWDs Supplied			
SD-CC			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
4.2-A56-AA1.09	3.3	3.3	W-3-LP-OPS-CC00	3

QUESTION

An alignment to replace CCW pump A with CCW Pump AB is in progress due to abnormal vibration on CCW Pump A. A loss of offsite power occurs during the evolution with the following conditions:

- AB busses are aligned to train B
- CCW pump A, AB, and B were running at the time of the loss of power
- CCW AB assignment switch is selected to A
- Both sequencers have timed out
- All automatic actions occurred as expected

Predict the status of the CCW pumps.

A. CCW pump B only is running

B. CCW pumps A and B are running

C. CCW pumps AB and B are running

D. CCW pumps A, AB, and B are running

ANSWER

A

COMMENTS

Supply copies of CWDs 700, 705, 707, 709, 2408, 2341, 2342, 2335, 2385

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/3	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 43
QUESTION ID: 5801 **- A**
DESCRIPTION: Interrelations between SDC and RCS leakage
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/13/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/13/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: YES
PLANT SYSTEM: PPO SP SDC RCS **CATEGORY:** PROCEDURE SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-901-111	01	00	10/15/97
G-167 & 171			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
4.4-A16-AK2.2	3.0	3.2	W-3-LP-OPS-SI00	9

QUESTION

The plant is in Mode 4 at 325°F and 375 psia. SDC A is in standby and steps are being taken to place the train in service. The PNPO opens SI-407A, SDC A Outside Containment Isolation valve; pressurizer level starts to drop rapidly. The PNPO takes action to close SI-407A. The following conditions are observed after SI-407A is closed:

- Pzr level is 2% and recovering with 2 charging pumps operating
- Containment Sump level remained constant
- Reactor Drain Tank level remained constant
- RWSP level rose 2-3% and is now constant

Which of the following could be the cause of the RCS inventory loss?

A. SI-406A lifts

B. SI-408A lifts

C. SI-417A open

D. SI-121A open

ANSWER

C

COMMENTS

Supply G-drawings for SI (G-167)and BM (G-171) Systems

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
1/3	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 44
QUESTION ID: 5826 **- A**
DESCRIPTION: Affect of losing CCW to CEDM Fan coolers
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/22/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/22/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CC **CATEGORY:** SYSTEM
CCS

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
SD-CCS			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
3.1-001-K1.01	3.0*	3.2*	W-3-LP-OPS-CCS00	3

QUESTION

CCW is lost to the running CEDM Fan Coolers while at 100 % power. What is the immediate affect of this malfunction?

A. CEDM coil inlet air loses cooling flow and the CEDM coils heat up.

B. The reactor cavity cooling inlet air loses cooling and Excore NIs heat up.

C. Containment Fan Coolers lose a portion of flow and Containment heats up.

D. CEDM coil exhaust air loses cooling flow and the Containment heats up.

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.2 to 41.9

Waterford 3 Examination Question
Examination Bank

Examination Question Number 45
QUESTION ID: 5824 **- A**
DESCRIPTION: Design features and/or interlocks that minimize leakage from RCP Seals
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/22/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/22/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CC **CATEGORY:** SYSTEM
RCP

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
SD-CC			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
3.4-003-K4.07	3.2	3.4	W-3-LP-OPS-CC00	3

QUESTION

A leak has developed in a RCP seal heat exchanger to CCW. What provides isolation for this condition?

A. The CCW Containment header is isolated on high pressure on the outlet of the heat exchanger by the containment isolation valves.

B. The individual RCP seal heat exchanger CCW return is isolated on high pressure at the outlet of the seal heat exchanger.

C. The individual RCP seal heat exchanger CCW return is isolated on high temperature at the outlet of the seal heat exchanger.

D. An excess flow check valve on the outlet of the heat exchanger will seat on a high flow condition at the outlet of the heat exchanger.

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Memory or Fundamental	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 46
QUESTION ID: 5803 **- A**
DESCRIPTION: Affects of a reference leg leak on VCT level xmtr
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/13/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/13/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CVC **CATEGORY:** SYSTEM
REFERENCE: **REVISION:** **CHANGE:** **DATE:**
SD-CVC

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.1-004-K6.38	2.4	3.2	W-3-LP-OPS-CVC00	3

QUESTION

Wet reference leg level transmitter CVC-ILT-0227 equalizing valve is leaking by its seat. The reference and variable legs have equalized. What effect would this problem have on the operation of the CVC system?

A. RCP Controlled Bleedoff diverts to the Quench Tank due to sensing a high VCT level.

B. The VCT inlet valve diverts to the Holdup Tanks if the C/S is in the AUTO position.

C. Charging pump suction automatically realigns to the Refueling Water Storage Pool.

D. Annunciators are actuated for VCT Level Lo and VCT Level Lo-Lo on Panel CP-4.

ANSWER

B

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 47
QUESTION ID: 5804 **- A**
DESCRIPTION: Letdown Isolation
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/17/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/17/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CVC **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-902-009	0.1	00	09/09/98
SD-CVC			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.1-004-A3.02	3.6	3.6	W-3-LP-OPS-CVC00	4

QUESTION

An RCS Leak of ~ 140 gpm is in progress. The CRS orders a manual actuation of SIAS and CIAS. The PNPO performs the SIAS actuation but fails to actuate CIAS. What would be the status of CVCS isolation valves? Assume that conditions for automatic SIAS and CIAS signals have not been reached.

A. CVC-103, Letdown Containment Isolation Inside Containment is open

B. CVC-109, Letdown Containment Isolation Outside Containment is open

C. RC-606, RCP Controlled Bleed-off Inside Containment Isolation is closed

D. CVC-401, RCP Controlled Bleed-off Outside Containment Isolation is closed

ANSWER

B

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 48
QUESTION ID: 5805 **- A**
DESCRIPTION: Determine the ESFAS Actuated Component that failed to actuate.
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/17/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/17/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: EFW, PPS, MS **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-902-009	0.1	00	09/09/98
SD-PPS			
T.S. 3.3.2			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.2-013-A4.01	4.5	4.8	W-3-LP-OPS-MS00	1
			W-3-LP-OPS-MS00	3

QUESTION

A reactor trip occurred on low SG 1 level due to a Main Feedwater Line Break inside containment. SG 1 and 2 pressures at the time of the trip were 875 psia. Currently conditions are as listed below:

- SG 1 Pressure is 750 psia, SG 2 Pressure is 800 psia
- SG1 level is 17% NR, SG 2 level is 35% NR
- Containment Pressure is 16.5 psia
- RCS Pressure is 1750 psia
- No operator action has occurred

Which of the following would indicate a component that is not in its required position?

A. MS-401A, EFW Pump AB Turbine Steam Supply SG 1, is closed

B. MS-120A, MS Line 1 Upstream Drain Normal Isolation, is open

C. MS-124A, Main Steam Line 1 MSIV SG 1, is closed

D. MS-119A, MS Line 1 Upstream Drain Bypass Isolation, is closed

ANSWER

A

COMMENTS

Reference: Appendix 4, OP-902-009

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 49
QUESTION ID: 5850 **- A**
DESCRIPTION: OP-903-107 Precautions
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 9/28/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 9/28/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: PPS **CATEGORY:** PROCEDURE SYSTEM

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**		
OP-903-107	14	04	7/19/00		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**	
2-1-32	3.4	3.8	W-3-LP-OPS-PPS00	10	
			W-3-LP-OPS-PPS00	11	

QUESTION

During the performance of OP-903-107, Plant Protection System Channel A_B_C_D Functional Test, on Channel 'C', which of the following prevents either inadvertently tripping the reactor or damaging CEDMCS equipment? (Assume no ACTUAL conditions occur that would trip the Reactor)

A. Verifying that Channel 'A' Lo RWSP Level Bistable is not bypassed when testing the ESFAS Matrix portion.
B. When re-closing Trip Circuit Breakers (TCB) verify that TCB-1 is closed before closing TCB-5.
C. Verify that the Test Power Supply on Channel A is energized before placing ANY Bistables to bypass.
D. Verify that TCB-9 is closed if 2 MG sets are operating prior to performing the RPS Matrix Test.

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Memory or Fundamental	New	41.10, 43.2

Waterford 3 Examination Question
Examination Bank

Examination Question Number 50
QUESTION ID: 5825 **- A**
DESCRIPTION: Predict how pulse counters will affect planar radial peaking factors
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/22/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/22/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: COL **CATEGORY:** SYSTEM
REFERENCE: **REVISION:** **CHANGE:** **DATE:**
SD-COL

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.1-014-A1.04	3.5	3.8	W-3-LP-OPS-COL00	2
			W-3-LP-OPS-COL00	4

QUESTION

ASI control is in progress and CEA 20 slips into the core 7" and is subsequently realigned. The pulse counter indication is not reset immediately. What affect does this have on COLSS?

A. The Primary Calorimetric power calculation block will be inaccurate.

B. Planar radial peaking factors applied to other calculations will be inaccurate.

C. The Plant Power Selection block will select Secondary Calorimetric power.

D. The Incore Detector Dynamic Compensation Block will be inaccurate.

ANSWER

B

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 51
QUESTION ID: 5806 **- A**
DESCRIPTION: Affect of a loss of Control Channel NIs has on CEDMCS
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/17/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/17/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CED **CATEGORY:** SYSTEM
SBC
RRS

REFERENCE:	REVISION:	CHANGE:	DATE:
SD-SBC			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.7-015-K3.02	3.3*	3.5*	W-3-LP-OPS-SBC00	1, 7

QUESTION

The Control Channel NI detector output for the selected RRS channel failed low. How would this affect operation of the Control Element Drive Mechanism Control System?

A. Outward motion of Regulating Group CEAs is disabled in all Modes except Manual Individual.

B. All motion of Regulating Group CEAs is disabled except in the Manual Individual Mode.

C. Outward motion of Regulating Group CEAs is disabled in Manual or Auto Sequential Modes.

D. All motion of Regulating Group CEAs is disabled in the Auto Sequential Mode only.

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 52
QUESTION ID: 5809 **- A**
DESCRIPTION: Core Damage Assessment using CETs
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/17/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/17/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: YES
PLANT SYSTEM: EP MCD **CATEGORY:** PROCEDURE SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:
EP-002-090	06	00	10/15/97

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.7-017-A2.02	3.6	4.1	W-3-LP-OPS-MCD07	3

QUESTION

A Loss of Coolant Accident is in progress. The following worst case parameters were noted and recorded on Attachment 7.4 of EP-002-090, Core Damage Assessment:

- CET temperature - 1600°F
- RCS pressure - 1200 psia
- Core Average Power for previous 30 days was 100%

Using Attachment 7.5 of EP-002-090, determine the NRC Fuel Damage Category.

A. No Fuel Damage

B. Initial Cladding Failure

C. Intermediate Clad Failure

D. Major Clad Failure

ANSWER

C

COMMENTS

Provide Table 2 of Att. 7.1 and Att. 7.5 of EP-002-090

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.5, 43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 53
QUESTION ID: 5704 **- N**
DESCRIPTION: Effects of containment pressure on status of CCS
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/13/99
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 8/11/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CCS **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-902-009	00	01	12/16/99
SD-CCS			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.5-022-A1.02	3.6	3.8	W-3-LP-OPS-CCS00	2

QUESTION

The plant is operating in MODE 1 with all system alignments normal when a Main Steam leak occurs inside Containment. The following conditions are noted:

- RCS pressure = 1750 psia
- Containment Temperature = 160°F
- Containment Pressure = 17.0 psia
- All Containment Fan Coolers (CFCs) are OPERABLE
- No manual operator actions have been taken

Determine the expected status of the Containment Cooling System at this point in time.

A. 3 of 4 CFCs running in slow speed and discharging through the safety dampers.

B. 4 of 4 CFCs running in slow speed and discharging through the ring header.

C. 3 of 4 CFCs running in fast speed and discharging through the ring header.

D. 4 of 4 CFCs running in fast speed and discharging through the safety dampers.

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	Bank	41.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 54
QUESTION ID: 3197 **- A**
DESCRIPTION: CS operation on SIAS signal
AUTHOR: avest **REVISION** 3 **REVISION DATE** 8/14/95
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/12/2000
TYPE: Multiple Choice **TIME:** 2 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: CS PPE **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-902-004	08	00	9/9/98
OP-902-002	08	00	9/9/98
OP-009-001	10	00	10/25/99
SD-CS			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.5-026-A3.01	4.3	4.5	W-3-LP-OPS-CS00	3
			W-3-LP-OPS-PPE02	17

QUESTION

Plant conditions are as follows:

- Reactor is shut down
- RCS pressure is 2025 psia
- Containment temperature is 100^{o}F
- Containment pressure is 17.3 psia
- Pressurizer level is 5% and rising slowly

Which of the following describes the response of the Containment Spray (CS) System?

A. CS Pumps start, CS-125A & B open.

B. CS Pumps start, CS-125A & B remain closed

C. CS Pumps remain off, CS-125A & B open

D. SIAS provides permissive, no components actuate

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	Bank	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 55
QUESTION ID: 5823 **- A**
DESCRIPTION: Annunciator Response for CD System
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/21/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/21/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: YES
PLANT SYSTEM: CD **CATEGORY:** PROCEDURE SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
CWD sht. 1376			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
2-4-31	3.3	3.4	W-3-LP-OPS-CD00	3

QUESTION

Condensate Pump C Trip/Trouble annunciator is locked in and the pump continues to run. Which of the following is the cause of this annunciator?

A. Seal water flow < 1 gpm due to a seal water PCV failure

B. The 86A1HR relay actuated due to A1 bus undervoltage

C. The 50N ground relay actuated due to a motor ground

D. One of three 50/51 overcurrent relays has picked up

ANSWER

C and also answer A in accordance with post examination comments

COMMENTS

Supply CWD sht. 1376 to examinees

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 56
QUESTION ID: 5821 **- A**
DESCRIPTION: FWCS Malfunction Affects on RTO
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/20/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/20/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: FW **CATEGORY:** SYSTEM
FWC

REFERENCE:	REVISION:	CHANGE:	DATE:
SD-FWC			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.4-059-A3.02	2.9	3.1	W-3-LP-OPS-FWC00	6

QUESTION

The output of the master controller for FWCS 1 became erratic and was taken to manual with an output of 60%. The level setpoint remains at 68% NR. Subsequently, a reactor trip occurs. Assuming no operator action occurs, what would be the response of the FW system?

A. Level in SG 1 rises to the level setpoint, RTO clears, FW components go to program condition for 60% master controller output.

B. Level in SG 1 rises to HLO setpoint of 81% NR; SUFRV 1 cycles between the HLO and RTO position around the HLO setpoint.

C. Level in SG 1 rises, RTO does not clear, and MFIV 1 goes closed when SG 1 level reaches 96% WR.

D. RTO is disabled, level rises rapidly in SG 1, and MFIV 1 goes closed when SG 1 level reaches 96% WR.

ANSWER

B (THIS QUESTION DELETED IN ACCORDANCE WITH POST EXAMINATION COMMENTS)

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 57
QUESTION ID: 5811 **- A**
DESCRIPTION: Time remaining to initiate SDC
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/17/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/17/2000
TYPE: Multiple Choice **TIME:** 5 **POINTS:** 1
SPECIAL REFERENCES: YES
PLANT SYSTEM: EFW PPE **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-902-009	00	01	12/16/99		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
3.4-061-A1.04	3.9	3.9	W-3-LP-OPS-PPE04		7

QUESTION

A Main Steam Line Break has occurred. A cooldown is desired. The following conditions exist:

- The reactor tripped one hour ago
- Two RCPs are operating
- T_h is 450°F
- Condensate Storage Pool level is 72.7%
- DWST level is 45%
- EFW is supplying the intact Steam Generator

Evaluate Condensate inventory and determine the maximum time remaining to place Shutdown Cooling in service.

A. 7 hrs

B. 10 hrs

C. 14 hrs

D. 21 hrs

ANSWER

C

COMMENTS

Supply Attachments 2-D through 2-G of OP-902-009

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 58
QUESTION ID: 2901 **- A**
DESCRIPTION: Basis for slow EFW flow initiation following total loss of FW
AUTHOR: avest **REVISION** 5 **REVISION DATE** 7/12/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/12/2000
TYPE: Multiple Choice **TIME:** 3 **POINTS:** 1
SPECIAL REFERENCES: NO
PLANT SYSTEM: EFW **CATEGORY:** PROCEDURE
PPE
FW

REFERENCE:	REVISION:	CHANGE:	DATE:	
OI-038-000	00	00	09/15/98	
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
3.4-061-K3.02	4.2	4.4	W-3-LP-OPS-PPE04	5, 6
			W-3-LP-OPS-PPE07	6
			W-3-LP-OPS-PPE06	5

QUESTION

Twenty (20) minutes after a total loss of feedwater event the following plant conditions exist:

- T_h is 548 °F and rising, T_c is 546 °F and rising
- SG #1 level is 0% NR, 55% WR and lowering.
- SG #2 level is 0% NR, 57% WR and lowering.

EFW pump AB is placed in service. What should the initial flowrate be limited to and why?

A. 50 gpm to each S/G. To minimize the thermal shock to the S/G tubes when feedwater is restored.

B. 100 gpm flow to each S/G. To limit the RCS cool down resulting from restoration of feedwater.

C. 150 gpm to each S/G. To limit the possibility of damaging an empty feed ring.

D. 200 gpm to each S/G. To prevent runout of Emergency Feedwater Pump AB.

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	Bank	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 59
QUESTION ID: 5846 **A** **STATUS:** Revision **LAST USED**
DESCRIPTION: Effect of LOOP on battery room exhaust fans
AUTHOR: avest **REVISION** 1 **REVISION DATE** 8/11/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 8/11/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: SVS **CATEGORY:** SYSTEM

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
SD-SVS			
OP-003-026	07	00	12/16/99

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
3.6-063-K1.04	2.2	2.7	W-3-LP-OPS-SVS00	2

QUESTION

Battery A Battery Room Exhaust Fan B is currently running when the 3A to 2A tie breaker trips and EDG A starts and loads. Determine the final status of Battery A Battery Room Exhaust Fans.

A. Both A and B fans are running.

B. Only the A fan is running

C. Only the B fan is running

D. Neither the A nor B fan is running

ANSWER

A

COMMENTS

Ref. OP-003-026 Rev. 7, Chg 0 Pg. 13

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.2 to 41.9

Waterford 3 Examination Question
Examination Bank

Examination Question Number 60

QUESTION ID: 5813 **A** **STATUS:** Draft **LAST USED**

DESCRIPTION: Action to be taken if minimum dilution flow is not met during a release
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/18/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/18/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: BM **CATEGORY:** PROCEDURE
SRO Level

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
SD – Circ Water CE-003-512	0	2	1-17-00

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
3.9-068-A4.02	3.2*	3.1*	W-3-LP-OPS-BM00	8

QUESTION

The plant is in Mode 3 with RCS temperature being controlled by MS-319A, Main Steam Bypass 1A. Steam Generators are being fed with the Auxiliary Feedwater Pump. Boric Acid Condensate Tank B is being discharged to Circ Water. Circ Water Pumps A, B, & C are running. The SUT A feeder to the A1 bus trips open. Which of the following actions should be performed?

A. Verify MS-319A, Main Steam Bypass 1A, shuts if vacuum drops to 14 inhg.

B. Immediately throttle both Atmospheric Dump Valves to 50% open.

C. Immediately secure the Boric Acid Condensate Tank release in progress.

D. Start an EFW pump to feed steam generators due to loss of feedwater.

ANSWER

C

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 61
QUESTION ID: 5827 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Waste Gas Analyzer sample points
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/22/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/22/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: GWM **CATEGORY:** SYSTEM
REFERENCE: **REVISION:** **CHANGE:** **DATE:**
SD - PSL

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.9-071-K5.05	2.1	2.7	W-3-LP-OPS-PSL00	5

QUESTION

The Explosive Gas Monitor required by Technical Specification 3.3.3.11 is capable of sampling from which of the following points:

A. Waste Condensate Tanks gas space

B. Waste Storage Tank gas space

C. Boric Acid Condensate Tanks gas space

D. Volume Control Tank gas space

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Memory or Fundamental	New	41.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 62
QUESTION ID: 5828 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Logic for Fuel Handling Building Isolation Signal Train A
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/24/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/24/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: RMS **CATEGORY:** SYSTEM
REFERENCE: **REVISION:** **CHANGE:** **DATE:**
SD - HVF

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.7-072-K4.02	3.2*	3.4*	W-3-LP-OPS-HVF00	1

QUESTION

What logic is required to automatically start FHB Emergency Filtration Unit A?

A. 1 of 2 Train A Radiation Monitors in high alarm state

B. 2 of 2 Train A Radiation Monitors in high alarm state

C. Any 1 of 4 Train A or B Radiation Monitors in high alarm state

D. Any 2 of 4 Train A or B Radiation Monitors in high alarm state

ANSWER

A

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/1	Memory or Fundamental	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 63
QUESTION ID: 5778 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Prioritization of alarms following a plant trip (LOCA)
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/21/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/21/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: RCS **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-902-000	08	00	9/8/98		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
2-4-45	3.3	3.6	W-3-LP-OPS-PPE01		10

QUESTION

The plant was tripped due to a LOCA inside Containment. Reactor Power is 1.3E-6% and lowering. Primary Pressure is 1335 psia and steady. Tavg is 534°F and slowly lowering. The following ESFAS signals have occurred, and all associated components are operating as required: SIAS, CIAS, MSIS, EFAS-1, and EFAS-2. RCPs 1B and 2B are running. While verifying Standard Post Trip Actions several Control Room Annunciators alarm. Which of the following alarms should be addressed first?

A. QUENCH TANK TEMPERATURE HI (CP-2)

B. CSAS TRAIN A(B) LOGIC INITIATED (CP-2)

C. RAD MONITORING SYS ACTIVITY HI-HI (CP-36)

D. RCP CONTL BLEEDOFF PRESSURE HI (CP-4)

ANSWER

B

COMMENTS

REF: OP-902-000, Standard Post Trip Actions. R8 C0. Page 14.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	New	43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 64
QUESTION ID: 5784 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Closing a SIT outlet valve with RCS pressure > 415 psia.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/22/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/22/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: SI **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:	
OP-009-008	15	02	3/1/2000	
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
3.2-006-A1.04	2.2	2.5	W-3-LP-OPS-SI00	4

QUESTION

The plant is at 100% power. Due to a leak on the outlet of SIT 2A, between the outlet check valve and the outlet isolation valve, closure of SIT 2A Isolation Valve, SI-332A, is desired. As CRS, what actions do you order the shift to perform to close SI-332A?

A. Verify the breaker open for SI-332A, and send an NAO to close SI-332A manually.

B. Close the breaker for SI-332A Take the SI-332A control switch to PRESS OVRD.

C. Take the SI-332A control switch from OPEN to CLOSE and then to PRESS OVRD.

D. Close the breaker for SI-332A. Take the SI-332A control switch to CLOSE.

ANSWER

B

COMMENTS

REF: System Description, Safety Injection. Rev 4. Page 27-28

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	New	41.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 65

QUESTION ID: 5779 **A** **STATUS:** Draft **LAST USED**

DESCRIPTION: PPC relationship with Lo Level Heater Cutout Switch
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/21/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/21/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: PPC **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:	
OP-901-120	02	02	2/23/2000	
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
3.3-010-K4.02	3.0	3.4	W-3-LP-OPS-PLC00	6
			W-3-LP-OPS-PPO10	3

QUESTION

- The Plant is in Mode 3
- RCS Tavg = 545°F
- RCS Pressure = 2225psia.
- Pressurizer Level = 33% and stable

I&C is calibrating 'Pressurizer Pressure Control Channel X'. The Pressurizer Pressure Channel Selector control switch has been re-positioned to Channel Y. The PNPO notices a slowly dropping trend on actual RCS pressure, and the Pressurizer Pressure recorder channel X has been pegged high since starting the calibration. Which of the following is the cause of the RCS pressure drop.

A. Pressurizer Spray valves opened in response to the failed high Pressurizer Pressure control channel.

B. I&C Technicians are working on the wrong Pressurizer Pressure Loop.

C. The Pressurizer Low Level Heater Cutout Switch was not re-positioned to the Channel Y position.

D. Proportional Heater Banks have tripped due to low Pressurizer level.

ANSWER

C

COMMENTS

REF: OP-901-120, Pressurizer Pressure Control Malfunction. R2 C2. Page 7.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 66
QUESTION ID: 5792 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: PLCS - Channel Failure Indications.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/11/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: PLC **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
SD-PLC-01			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.2-011-A2.03	3.8	3.9	W-3-LP-OPS-PLC00	1
			W-3-LP-OPS-PPO10	1

QUESTION

The Plant is at 100%. The Pressurizer Level Control System (PLCS) selected control channel is 'X'. What is the expected response of the CVC system if PLCS Channel X fails low?

A. Pzr Level Instrument Channel X reads '0%', Channel 'Y' reads '56%', minimum letdown flow, and all Charging Pumps are running.
B. Both Pzr Level Channels read '56%', all Charging Pumps are running, and Letdown flow is at zero.
C. Pzr Level Channel X reads '0%', Channel 'Y' reads '56%', Letdown flow is normal, and first backup Charging Pumps has started.
D. Both Pzr Level Channels read '0%', Letdown flow is max, and 1 Charging Pump is running.

ANSWER

A.

COMMENTS

REF: SD – PLCS: SDPLC-01

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	New	41.5, 43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 67
QUESTION ID: 5786 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Effect of PPS bistable on RPS and ESFAS
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/22/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/22/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: PPS **CATEGORY:** SRO LEVEL SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-009-007	05	00	7/1/96		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
3.7-012-K3.04	3.8*	4.1*	W-3-LP-OPS-PPS00		4

QUESTION

The Plant is at 100% power. The CP-10 Bypass pushbutton for PPS Channel A 'Lo PZR Press' fails to the bypass function, giving you the Bistable Bypass alarm on CP-2 and the BYPASS lamp on CP-7. Which of the following describes the effect on the Plant Protection System?

A. Channel 'A' Lo Pressurizer Pressure Trip and Lo Pressurizer Pressure input to SIAS and CIAS are inoperable.

B. Channel 'A' Lo Pressurizer Pressure input to SIAS and CIAS is inoperable.

C. Channel 'A' Lo Pressurizer Pressure Trip and pressure inputs to SIAS, CIAS, and MSIS are inoperable.

D. Channel 'A' pressure inputs to SIAS, CIAS, and MSIS are inoperable.

ANSWER

A

COMMENTS

REF: SD-PPS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 68
QUESTION ID: 5793 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: RRS - Tavg Failure results.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/11/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: RR **CATEGORY:** SYSTEM

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
SD-RRS-01			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
3.7-016-A3.02	2.9*	2.9*	W-3-LP-OPS-RR00	13
			W-3-LP-OPS-RR00	2

QUESTION

The Plant is at 100%. The Tavg Calculator of the in-service RRS fails low. Which of the following is expected as a direct result of this occurrence?

A. Both backup Charging pumps Auto-start.
B. CEDMCS 'Insert CEA' command from the RRS.
C. SBCS Quick Open Block of Valves #1-5 on Reactor Trip.
D. AWP generated to CEDMCS and Annunciator is received.

ANSWER

C

COMMENTS

SD: RRS: Pages 21-22.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 69

QUESTION ID: 5789 **A** **STATUS:** Draft **LAST USED**

DESCRIPTION: Reducing Containment Airborne Activity with a locked in CPIS.

AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/28/2000

REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/28/2000

QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**

PLANT SYSTEM: ARR **CATEGORY:** SYSTEM

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
OP-901-403	01	00	10/29/97

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
3.5-027-K5.01	3.1*	3.4*	W-3-LP-OPS-PPO40	6

QUESTION

The plant is Mode 6. A fuel accident has occurred inside of Containment which has generated a Containment Purge Isolation Signal (CPIS). What can the CRS direct to help reduce the levels of airborne radionuclides inside of Containment?

A. Restart Containment Purge.
B. Start up available ARRS units.
C. Start up a CARS and a SBV train.
D. Align CARS for Containment Pressure Control.

ANSWER

B.

COMMENTS

REF: OP-901-403, High Airborne Activity in Containment. R1 C0. Page 8.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Memory or Fundamental	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 70
QUESTION ID: 5788 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Starting CAR System Post-LOCA
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/27/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/27/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: CAR **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
SD-SBV-01			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.5-028-K1.01	2.5*	2.5	W-3-LP-OPS-SBV00	5

QUESTION

The Plant is in Mode 5, 36 hours Post-LOCA. An SIAS and CIAS had actuated, and Containment pressure is 15.1 psia and lowering. It is desired to run the Containment Atmosphere Release (CAR) system, to help remove H2 from inside Containment once Containment pressure has lowered sufficiently to prevent damage to the CAR system supply fan. Which of the following will allow running of the CAR system?

A. Secure Shield Building Ventillation.
B. Reset the SIAS signal.
C. Start the Annulus Negative Pressure system.
D. Reset the CIAS signal.

ANSWER

D.

COMMENTS

REF: SD – Shield Building Ventilation

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	New	41.9

Waterford 3 Examination Question
Examination Bank

Examination Question Number 71
QUESTION ID: 5794 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Rad Monitor Power Supplies
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/11/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: RMS **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
SD-RMS-01			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.8-029-K2.03	2.3*	2.7	W-3-LP-OPS-RMS00	3

QUESTION

Which of the following Rad Monitors is powered from Safety LVD PDP-360-SA on MCC-312A?

A. PRM-IR-6777, Containment Sump
B. PRM-IR-0100.1S, Plant Stack PIG 'A'.
C. ARM-IR-5001, Control Room ARM.
D. PRM-IR-6710C, RAB HVAC 'D'

ANSWER

B.

COMMENTS

REF: SD RMS: Table 6 – Power Supplies

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Memory or Fundamental	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 72
QUESTION ID: 5780 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Closure of CC-620
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/21/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/21/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: CC **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
SD-CCW-01			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.8-033-A4.02	2.4	2.8	W-3-LP-OPS-CC00	3

QUESTION

All of the following cause closure of CC-620, Fuel Pool Heat Exchanger Temperature Control Valve **EXCEPT**

A. Fuel Handling Building Isolation Signal

B. Safety Injection Actuation Signal

C. Closure of the B To AB Hdr Isol Valves, CC-563/200B

D. Loss of Instrument Air

ANSWER

A

COMMENTS

REF: SD for CCW System. R4. Page 31-32.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Memory or Fundamental	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 73
QUESTION ID: 5797 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Center Voltage affect on ARM reading.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/11/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: RMS **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
SD-RMS-01			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.8-034-K6.02	2.6	3.3	W-3-LP-OPS-RMS00	1

QUESTION

If the detector high voltage of a Fuel Handling Building Isolation ARM lowers significantly, how will this affect the reading of the ARM, and how will it affect actuation of a Fuel Handling Building Isolation Signal (Fuel Handling Accident)?

A. The monitor would read higher than actual area radiation levels, and the actuation would occur at lower than actual area radiation levels.
B. The monitor would read lower than actual area radiation levels, and the actuation would occur at higher than actual area radiation levels.
C. The monitor would read and actuate at normal radiation levels, but would be operating in a lower region of the Six Region Detector Curve.
D. The monitor would read higher than actual area radiation levels, but the actuation would occur at the normal area radiation levels.

ANSWER

B

COMMENTS

REF: Rad Monitoring System SD: Appendix 1:Radiation Principles.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 74
QUESTION ID: 5847 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: TS Basis for Maintaining 2 Operable ECCS trains when RCS is greater than or equal to 500 Degrees
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 8/12/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 8/12/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: SI **CATEGORY:** SYSTEM
SRO Level

REFERENCE:	REVISION:	CHANGE:	DATE:
TS BASES			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.4-035-K3.02	4.0	4.3	W-3-LP-OPS-SI00	7

QUESTION

In Mode 3, when RCS average temperature is greater than or equal to 500°F, Technical Specifications require maintaining 2 independent ECCS subsystems operable. What is the basis of the 500°F limit?

A. Enhance natural circulation by helping to maintain Saturation Margin when RCS temperature is $\geq$ 500°F.
B. Provide enough RCS cooling to help prevent exceeding Containment pressure limits on a LOCA.
C. Provide enough borated water to prevent the core from becoming critical during a MSLB from $\geq$ 500°F.
D. Provide enough inventory makeup to keep the fuel covered during higher levels of decay heat.

ANSWER

C.

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Memory or Fundamental	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 75

QUESTION ID: 5795 **A** **STATUS:** Draft **LAST USED**

DESCRIPTION: EFW 'AB' Overspeed Reset Actions
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/11/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: EFW MS **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-902-005	10	00	9/9/98		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
3.4-039-A4.04	3.8	3.9	W-3-LP-OPS-PPE05		2

QUESTION

The Plant has tripped and is experiencing a Station Blackout. OP-902-005, Station Blackout Recovery, has been implemented. EFAS-1 and EFAS-2 have been received. A fire has occurred and subsequently extinguished in the 'A' Safety Battery Room, resulting in the opening of it's output disconnect. After inspecting the 'AB' EFW pump, the RCA watch reports that it appears to have tripped on overspeed. What actions are necessary to reset the 'AB' EFW pump turbine?

A. NPO closes MS-401B at CP-8. RCA must MS-401A locally. NPO directs the RCA watch to reset the 'AB' EFW Pump turbine Mechanical Overspeed.
B. NPO closes MS-401A and MS-401B at CP-8, and directs the RCA watch to reset the 'AB' EFW pump turbine per the appropriate EOP steps.
C. NPO directs the RCA watch to verify all personnel are clear, and to reset the 'AB' EFW Pump turbine Mechanical Overspeed.
D. NPO closes MS-401B at CP-8. RCA must close MS-401A locally. NPO directs the RCA watch to reset the 'AB' EFW pump turbine per the appropriate EOP steps.

ANSWER

B.

COMMENTS

REF: OP-902-005, Station Blackout Recovery. R10 C0. Page 10.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 76

QUESTION ID: 5849 **A** **STATUS:** Draft **LAST USED**

DESCRIPTION: Appendix R requirements for Essential Chiller B
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 8/15/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 8/15/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: ADM CHW **CATEGORY:** ADMIN PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-002-004 TRM	11	01	4/14/99

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.6-062-A2.11	3.7	4.1	W-3-LP-OPS-CHW00	5
			W-3-LP-OPS-CHW00	9

QUESTION

The Plant is at 100%. The 'AB' Chiller has just been aligned to replace the 'B' Chiller, started, and declared operable. The 'A' Chiller is already running. Which of the following is true concerning this Chiller alignment?

A. If the 'B' Chiller is not re-aligned and declared operable within the next 7 days, the plant must shut down.
B. The 'AB' Chiller satisfies the Appendix R requirements for the Technical Requirements Manual.
C. The 'B' chilled water loop must be declared inoperable after 3 days if the 'B' Chiller is inoperable.
D. The 'AB' Chiller can replace the 'B' Chiller indefinitely, but a special report must be submitted to the NRC after 30 days.

ANSWER

A.

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	New	41.5, 43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 77
QUESTION ID: 1655 **A** **STATUS:** Approved **LAST USED**
DESCRIPTION: One cranking air valve closed, how does this effect starting EDG
AUTHOR: tmccool **REVISION** 1 **REVISION DATE** 8/15/94
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 8/11/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE** X
PLANT SYSTEM: EDG **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-009-002	17	05	12/15/99

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.6-064-K1.05	3.4	3.9	W-3-LP-OPS-EDG00	01

QUESTION

During performance of Train B Emergency Diesel Generator (EDG) Standby Valve Lineup the Operators inadvertently left the Right Bank Cranking Control Air Shutoff Valve (EGA-301B), in OFF(CLOSED). How does this affect start up of the Train B EDG?

A. Both Air Start Receivers will supply air to all cylinders to start the Train B EDG.

B. The Left Bank Air Start Receiver will supply air to all cylinders to start the Train B EDG.

C. The Left Bank Air Start Receiver will supply air only to the Left Side cylinders to start the Train B EDG.

D. The Right Bank Air Start Receiver will supply air to all cylinders to start the Train B EDG.

ANSWER

B

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	Bank	41.2 to 41.9

Waterford 3 Examination Question
Examination Bank

Examination Question Number 78
QUESTION ID: 5796 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: POST-CIAS invalid RMS information.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 7/11/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 7/11/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: RMS **CATEGORY:** SYSTEM

REFERENCE:	REVISION:	CHANGE:	DATE:
SD-RMS-01			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.7-073-A4.02	3.7	3.7	W-3-LP-OPS-RMS00	2

QUESTION

A medium-break LOCA has occurred. Containment pressure is 22.9 psia and slowly rising. All ESFAS actuations have occurred as designed. Which of the following Rad Monitors provides unreliable information under these conditions?

A. Containment PIG Monitor.
B. Plant Stack WRGM.
C. Containment Purge Monitors.
D. CCW System Liquid Monitors A & B.

ANSWER

A.

COMMENTS

SD: Rad Monitoring System: Page 11.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 79
QUESTION ID: 5787 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: HazMat Safety and Fire Fighting
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/27/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/27/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: GEN **CATEGORY:** SRO LEVEL

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**		
UNT-007-049	05	00	11/20/95		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
3.8-086-K5.04	2.9	3.5*	W-3-LP-OPS-HZT00		5

QUESTION

WHICH fire, presents a significant health hazard to the fire team even after it has been extinguished?

A. Electrical fire in the RAB Water Heater. Heater is de-energized.
B. Paper Recycling Bin on the MSB first floor. Contents have been removed and overhauled.
C. Neutral Grounding Transformer Dielectric. Transformer is de-energized.
D. Oily Lagging fire on a SGFP discharge line. Lagging has been removed and overhauled.

ANSWER

C.

COMMENTS

REF: UNT-007-049

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/2	Memory or Fundamental	New	41.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 80
QUESTION ID: 5819 A **STATUS:** Draft **LAST USED**
DESCRIPTION: Affect of a malfunction of SI-129A during reduced inventory conditions in the RCS
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/20/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: SDC **CATEGORY:**

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
OP-001-003			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
3.4-005-K6.11	2.3	2.7*	W-3-LP-OPS-REQ13	1

QUESTION

- RCS temperature is 120°F and stable
- Shutdown Cooling A is in service
- RWLIS and RCSLMS indicate 13.4 ft
- All applicable actions of OP-001-003, RCS Drain Down have been completed

How would a loss of power to SI-129A, Shutdown Cooling Flow Control Valve, affect the RCS or SDC systems?

A. An RCS cooldown commences

B. An RCS heatup commences

C. LPSI Pump A cavitates due to excessive vortexing

D. LPSI Pump A experiences runout flow conditions

ANSWER

B

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/3	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 81

QUESTION ID: 5818 **A** **STATUS:** Draft **LAST USED**

DESCRIPTION: Evaluate CCW pump operability using IST data
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/20/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: CC PPA **CATEGORY:** SRO Level

REFERENCE:	REVISION:	CHANGE:	DATE:
UNT-006-021	03	01	12/11/97
OP-903-050	16	03	4/17/2000

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.8-008-A3.06	2.5	2.5	W-3-LP-OPS-IST00	5, 6

The pump operability test is in progress for CCW Pump A. The following data was obtained:

- Header Flow = 4760 GPM
- Inboard Vibration - 3V = 0.199 in/sec, 3H = 0.311
- Outboard Vibration - 4V = 0.110, 4H = 0.207, 4A = 0.153
- Discharge Pressure = 99.7 psig
- Suction Pressure = 32.2 psig

Evaluate the operability of CCW pump A and any actions required.

A. Operable; there is no further action required.

B. Operable, trend alert range parameters daily.

C. Operable, double pump surveillance frequency.

D. Inoperable, enter T.S. 3.7.3 and cascading T.S.

ANSWER

C

COMMENTS

Supply a copy of OP-903-050 with acceptable, alert, and required action values filled in. The values filled in for Inboard Vibration 3H should be such that given vibration is in the Alert range.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/3	Comp or Analysis	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 82
QUESTION ID: 2709 **A** **STATUS:** Approved **LAST USED**
DESCRIPTION: Use of WCT Basins as emergency makeup.
AUTHOR: whardin **REVISION** 1 **REVISION DATE** 8/18/94
REFERENCE VERIFIED: whardin **VERIFICATION DATE:** 8/18/94
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE** X
PLANT SYSTEM: ACC **CATEGORY:** System
REFERENCE: **REVISION:** **CHANGE:** **DATE:**
SD - CC

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.4-076-K1.20	3.4*	3.4*	W-3-LP-OPS-CC00	3

QUESTION

The Wet Cooling Tower Basins can be used to provide emergency makeup to which one of the following systems?

A. Condensate system (hotwell makeup)

B. Potable Water system

C. Fuel Pool Cooling and Purification system

D. Emergency Feedwater system

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/3	Memory or Fundamental	Bank	41.2 to 41.9

Waterford 3 Examination Question
Examination Bank

Examination Question Number 83
QUESTION ID: 5816 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Actions required for lowering IA pressure
AUTHOR: avest **REVISION** 0 **REVISION DATE** 7/19/2000
REFERENCE VERIFIED: avest **VERIFICATION DATE:** 7/19/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: IA **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-901-511	04	03	7/3/00

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
3.8-078-A4.01	3.1	3.1	W-3-LP-OPS-PPO50	3

QUESTION

An Instrument Air leak has occurred in the Turbine Building. The CRS notes that instrument air receiver pressure has dropped to 60 psig on CP-1 and the PMC. What course of action should the CRS order?

A. Align Essential Air nitrogen banks 1, 2, 3, and 4 to their associated Instrument Air valves.

B. Commence a plant shutdown in accordance with OP-010-005, Plant Shutdown.

C. Commence a plant shutdown in accordance with OP-901-212, Rapid Plant Power Reduction.

D. Perform a manual reactor trip and go to OP-902-000, Standard Post Trip Actions.

ANSWER

D

COMMENTS

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
2/3	Memory or Fundamental	New	41.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 84
QUESTION ID: 5759 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Waterford 3 Safety Limits
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: RCS **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
TS 2.1.1			

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
2-1-10	2.7	3.9	W-3-LP-OPS-TS00	2
			W-3-LP-OPS-TS03	10

QUESTION

The plant tripped on low DNBR. Actual DNBR dropped to 1.24 during the event. What is the minimum level of permission required to resume critical operations of the unit?

A. Shift Manager

B. Operations Manager

C. General Manager Plant Operations

D. Nuclear Regulatory Commission

ANSWER

D

COMMENTS

REF: Waterford 3 Technical Specification, TS section 2: Safety Limits and Limiting Safety System Settings. Page 2-1. TS section 6.0, Administrative Controls. T.S. 6.7.1.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Comp or Analysis	New	43.51

Waterford 3 Examination Question
Examination Bank

Examination Question Number 85
QUESTION ID: 5760 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Lowering ESFAS Setpoints
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: PPS **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-100-001	17	02	7/13/00		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
2-1-23	3.9	4.0	w-3-lp-ops-ppa00		2

QUESTION

The CRS may direct ESFAS Setpoints to be lowered during the performance of the following plant evolutions, with the EXCEPTION of:

A. A rapid plant cooldown to < 520 °F during a SGTR.

B. A normal plant cooldown to a lower operating mode.

C. A Main Feed Line Break downstream of the MFIV when the affected Steam Generator is blowing down.

D. An RCS depressurization to within 50 psi of the affected Steam Generator pressure during a SGTR.

ANSWER

C

COMMENTS

REF: OP-100-001, Duties and Responsibilities of Operators on Duty. R0 C2. Page 46.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Comp or Analysis	New	

Waterford 3 Examination Question
Examination Bank

Examination Question Number 86
QUESTION ID: 5761 A **STATUS:** Draft **LAST USED**
DESCRIPTION: Actions on a Bottomed Out Reach Rod Valve Indicator
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: VLV **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-100-009	15	05	4/24/2000		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
2-1-29	3.4	3.3	w-3-lp-ops-ppa00		2

QUESTION

While positioning closed a remotely operated manual valve (reach rod), the NAO observes that the valve 'feels' closed, and the valve position indicator pin is bottomed out. Alternate valve position was performed satisfactorily. During follow-up actions on your shift, which of the below tasks is **NOT** required per OP-100-009, Control of Valves and Breakers?

A. Issue an EOS against the reach rod operator.

B. Generate An MAI for the reach rod indicator.

C. Issue Caution Tags for the affected valve.

D. Submit a Work Around for valve position verification.

ANSWER

A

COMMENTS

REF: OP-100-009, "Control of Valves and Breakers. R15 C4. Page 18.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Memory or Fundamental	New	41.10

Waterford 3 Examination Question
Examination Bank

Examination Question Number 87
QUESTION ID: 5762 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Determining cause of a failure of Start-up Channel Indication in Mode 4.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: ENI **CATEGORY:** PROCEDURE
SYSTEM

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**		
OP-903-102	09	07	1/30/2000		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**	
2-1-31	4.2	3.9	W-3-LP-OPS-ENI00	2	
			W-3-LP-OPS-ENI00	5	

QUESTION

The plant is in Mode 4. The SNPO is performing OP-903-102, Safety Channel Nuclear Instrumentation Functional Test, on Channel 'B'. The PNPO notes that Startup Channel 2 has de-energized. What is the cause of Startup Channel 2 de-energizing?

A. The SNPO failed to place Startup High Voltage Control switch to Primary.
B. The SNPO failed to place Startup High Voltage Control switch to Alternate.
C. The SNPO is performing a normal test of the 10^{-4} % bistable functions.
D. The SNPO is performing a normal test of the 10^{-6} % bistable functions.

ANSWER

A

COMMENTS

REF: OP-903-102, Safety Channel Nuclear Instrumentation Functional Test. R9 C7. Page 11.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Comp or Analysis	New	

Waterford 3 Examination Question
Examination Bank

Examination Question Number 88
QUESTION ID: 5765 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Administrative Control of Temporary Alterations
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: ADM **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:		
UNT-005-004	14	00	3/24/2000		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
2-2-11	2.5	3.4*	w-3-lp-ops-ppa00		2

QUESTION

All of the following apply to the administrative control of Temporary Alterations, with the EXCEPTION of:

A. The Shift Manager is responsible for authorizing the installation and removal of Temporary Alterations.

B. Jumpers, controlled per the Operating Procedure, to discharge Waste Condensate Tank A with the LWM Rad Monitor inoperable require a Temporary Alteration.

C. Caution Tags should be placed on any remote or local control switches affected by the Temporary Alteration.

D. Jumpers installed for troubleshooting a pump controller in accordance with specific work instructions and verifications do not require a Temporary Alteration.

ANSWER

B

COMMENTS

REF: UNT-005-004, Temporary Alteration Control. R14 C0. Page 11, 13, 14, 31.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Memory or Fundamental	New	41.10, 43.3

Waterford 3 Examination Question
Examination Bank

Examination Question Number 89
QUESTION ID: 5766 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Tech Spec Application in Mode 4 for SITs
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE** X
PLANT SYSTEM: SI **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:
TS 3.5.1			

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
2-2-22	3.4	4.1	W-3-LP-OPS-SI00	7

QUESTION

The Plant is in Mode 4 performing a plant heatup and pressurization with RCS pressure at 450 psia and rising. SIT tank 2B suddenly depressurizes due to a broken N2 relief valve. The CRS notes the following SIT levels and pressures:

- 1A – 60.7%, 285 psig
- 1B – 60.2%, 235 psig
- 2A – 60.8%, 300 psig
- 2B -- 60.5%, 10 psig

Based on the given information, what Technical Specification Action should the CRS enter?

A. 3.5.1.f

B. 3.5.1.g.

C. 3.5.1.h.

D. 3.0.3

ANSWER

D

COMMENTS

Supply Student with Tech Spec 3.5.1.
REF: Technical Specifications, 3.5.1, Safety Injection Tanks. Page 3/4 5-1 and 5-2.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Comp or Analysis	New	43.2

Waterford 3 Examination Question
Examination Bank

Examination Question Number 90

QUESTION ID: 5767 **A** **STATUS:** Draft **LAST USED**

DESCRIPTION: Actions taken during Refuel Ops with a Rising Count Rate
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: FHS **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**	
RF-005-001	07	01	2/17/99	
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
2-2-27	2.6	3.5	W-3-LP-OPS-FHS00	10
			W-3-LP-OPS-REQ04	7

QUESTION

The plant is in Mode 6 with Core Alterations in progress. A fuel assembly has been inserted approximately 30" into the core when audible count rate starts a slow, steady rise. The Control Room informs the Refueling Machine Operator that source counts in the Control Room are rising on both Startup Channels beyond that expected for the move. What action should the Fuel Handling Supervisor order?

A. Direct the Control Room to start an Airborne Radioactivity Removal unit.

B. Direct the Refueling Machine Operator to withdraw the last fuel assembly inserted.

C. Direct the Control Room to commence Emergency Boration.

D. Direct the Refueling Machine Operator to ungrapple the fuel assembly and evacuate.

ANSWER

B.

COMMENTS

REF: RF-005-001, Fuel Movement. R7 C1. Page 5.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Memory or Fundamental	New	43.6

Waterford 3 Examination Question
Examination Bank

Examination Question Number 91
QUESTION ID: 5769 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Examples of Core Alterations
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: ADM **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:
RF-007-001	07	00	2/10/97
RF-001-001	07	01	1/4/2000

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
2-2-28	2.6	3.5	W-3-LP-OPS-REQ04	7

QUESTION

Which of the following is considered a Core Alteration?

A. Coupling 5 Finger CEAs

B. Rx Vessel Test Specimen removal

C. Removal of the Upper Guide Structure

D. Initial Reactor Vessel Head removal

ANSWER

C

COMMENTS

REF: RF-001-001, Refueling Administration. R7 C0. Page 72

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Memory or Fundamental	New	43.7

Waterford 3 Examination Question
Examination Bank

Examination Question Number 92
QUESTION ID: 5768 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Resonsibilities of NPO during Fuel Movement
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: FHS **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:
RF-005-001	07	01	2/17/99

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
2-2-30	2.6	3.3	W-3-LP-OPS-REQ04	3

QUESTION

In Mode 6, which of the following is **NOT** the responsibility of the PNPO or SNPO (if stationed)?

A. Verify proper Source Range instrumentation requirements are met prior to and during fuel movement.

B. Maintain continuous communications with the required refueling stations during all core alterations.

C. Emergency Borate if the actual boron concentration falls below the minimum refueling concentration.

D. Monitor Reactor Cavity water level using available water level indicating systems during fuel movement.

ANSWER

B

COMMENTS

REF: RF-001-001, Fuel Movement. R7 C0. Page 13.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Memory or Fundamental	New	

Waterford 3 Examination Question
Examination Bank

Examination Question Number 93
QUESTION ID: 5770 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Areas NOT to enter inside of the Containment Building in Mode 1
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: CB **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	REVISION:	CHANGE:	DATE:		
HP-001-213	10	01	2/10/2000		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
2-3-1	2.6	3.0	w-3-lp-ops-ppa00		2

QUESTION

The plant is at 100% Power. OP-901-111, Reactor Coolant System Leak has been implemented due to a 2 gpm RCS leak. Preparations are being made for a Containment entry to locate the leak. During your pre-job brief, which of the following areas inside Containment will you prohibit entering?

A. Reactor Vessel Annulus, Pressurizer Cubicle, and Regenerative Heat Exchanger Room Lower Level.

B. Hot and Cold Leg penetration through the 'D' Ring Wall, Reactor Cavity, and the Pressurizer Cubicle.

C. Regenerative Heat Exchanger Room lower level, Reactor Vessel, and Hot and Cold Leg penetrations through the 'D' Ring wall.

D. Hot and Cold Leg penetration through the 'D' Ring Wall, Reactor Cavity, and the Reactor Vessel annulus.

ANSWER

D

COMMENTS

REF: HP-001-213, Control of Reactor Containment Building Power Entries. R10 C1. Page 5.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Memory or Fundamental	New	41.12, 43.4

Waterford 3 Examination Question
Examination Bank

Examination Question Number 94
QUESTION ID: 5771 A **STATUS:** Draft **LAST USED**
DESCRIPTION: Requirements to Discharge WCT to Circ Water
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: LWM **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:
CE-003-512	00	02	1/17/2000
OP-007-004	14	03	6/12/98

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
2-3-6	2.1	3.1	W-3-LP-OPS-LWM00	8

QUESTION

- The plant is in Mode 5
- Main Condenser Waterboxes B1, B2, C1 and C2 are out of service to clean condenser tubes
- The LWM discharge flow instrument is inoperable.
- The LWM Rad Monitor is inoperable.
- The Low Level Trip of WCT Pump A is out of service

A Release Permit has been issued by the Shift Chemist to discharge WCT A to Circ Water. Which of the following must be done to approve release of WCT A?

A. Restore one of the required Waterboxes to service.

B. Restore the LWM discharge flow instrument to operable.

C. Restore the Low Level Trip for WCT Pump A to service.

D. Restore the LWM radiation Monitor to operable.

ANSWER

A

COMMENTS

REF: OP-007-004, Liquid Waste Management System. R14 C3. Pages 7, 22-23.
*Supply Student with Reference of applicable section of OP-007-004.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Comp or Analysis	New	43.4

Waterford 3 Examination Question
Examination Bank

Examination Question Number 95
QUESTION ID: 5772 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Condition required to secure a Containment Purge
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/20/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/20/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: CAP **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
OP-002-010	13	05	4/11/2000

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
2-3-8	2.3	3.2	W-3-LP-OPS-TS00	3

QUESTION

The plant is in Mode 4, with Containment Purge in progress. Annual accumulated Containment Purge time for Tech Spec tracking is 65.2 hours. Which of the following conditions, requires you to direct securing Containment Purge?

A. The Containment Purge duration is 25.0 hours.

B. Ambient barometric pressure indicates 30.4 INHG.

C. Loss of the data link from Met Towers to PMC > 1 hour.

D. The plant changes modes from Mode 4 to Mode 3.

ANSWER

A

COMMENTS

REF: T.S. 3.6.1.7. *Supply Tech Spec 3.6.1.7 to student.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Comp or Analysis	New	43.4

Waterford 3 Examination Question
Examination Bank

Examination Question Number 96
QUESTION ID: 5773 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Fuel Handling Incident Action
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/21/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/21/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: HVF **CATEGORY:** PROCEDURE
SYSTEM

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**		
OP-901-405	01	00	7/5/97		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
2-3-10	2.9	3.3	W-3-LP-OPS-PPO40		3

QUESTION

An automatic Fuel Handling Building Isolation (Fuel Handling Accident) signal occurred and all systems/ equipment in the FHB are operating as designed. Which of the following MANUAL actions must be taken for this event?

A. Start a Fuel Handling Building Emergency Filtration Unit.

B. Secure Fuel Handling Building Normal Ventilation system.

C. Start the Fuel Handling Building WRGM sample pump.

D. Start a Fuel Handling Building HV Room Exhaust Fan.

ANSWER

C

COMMENTS

REF: OP-901-405, Fuel Handling Incident. R1 C0. Page 9.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Memory or Fundamental	New	43.4

Waterford 3 Examination Question
Examination Bank

Examination Question Number 97
QUESTION ID: 5774 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Methods of checking Safety Functions during EOP Implementation
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/21/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/21/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: ADM **CATEGORY:** PROCEDURE

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**
op-100-017	00	01	7/3/00

NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**	**OBJECTIVE**
2-4-22	3.0	4.0	W-3-LP-OPS-PPE01	4

QUESTION

Safety Functions are checked during EOP implementation by each of the following methods with the exception of:

A. Safety Function Status Check section of each Optimal Recovery Procedure.

B. The performance of Standard Post Trip Actions.

C. Safety Function Status Check section of the Functional Recovery Procedure.

D. The performance of the Diagnostic Flowchart.

ANSWER

D

COMMENTS

REF: OP-100-017, Administrative Procedure Emergency Operating Procedure Implementation Guide. R0 C0. Page 16.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Memory or Fundamental	New	43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 98
QUESTION ID: 5775 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: SM/CRS Actions on Plant Sabotage
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/21/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/21/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: ADM **CATEGORY:** PROCEDURE
SRO LEVEL

REFERENCE:	**REVISION:**	**CHANGE:**	**DATE:**		
UNT-006-010	16	3	5/28/98		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
2-4-28	2.3	3.3	w-3-lp-ops-ppa00		2

QUESTION

The RAB Watch reports a suspicious looking device in the bottom of a CEDMCS cabinet. The suspect device has a timer that is running. The SM/CRS carry out the following actions with the exception of:

A. Directing the NAO to move to a safe distance and await security personnel.

B. Calling 911 and requesting St. Charles Sheriff's Office send bomb experts.

C. Performing notification of the NRC via the ENS within1 hour.

D. Contacting the Security Shift Supervisor and the Operations Manager.

ANSWER

B

COMMENTS

REF: UNT-006-010, Event Notification and Reporting. R16 C3. Page 39. *Supply student attachment from UNT-006-010.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Memory or Fundamental	New	41.19, 43.5

Waterford 3 Examination Question
Examination Bank

Examination Question Number 99
QUESTION ID: 5776 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Immediate Operator Actions on Control Room Evacuation.
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/21/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/21/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: ADM **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:
OP-901-502	05	02	1/6/2000

NRC KA NUMBER:	RO	SRO	TRAINING MATERIAL:	OBJECTIVE
2-4-49	4.0	4.0	W-3-LP-OPS-PPO51	2

QUESTION

The following are Immediate Actions in accordance with OP-901-502, Control Room Evacuation, with the exception of:

A. Trip the Reactor and verify all CEAs fully inserted.

B. Verify SGFPs are in Reactor Trip Override.

C. Reset the Moisture Separator Reheater controls.

D. Verify Pressurizer Spray Valve Selector Switch is in Both.

ANSWER

B

COMMENTS

REF: OP-901-502, Evacuation of the Control Room and Subsequent Plant Shutdown. R5 C2. Page 5.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Memory or Fundamental	New	41.10, 43.2

Waterford 3 Examination Question
Examination Bank

Examination Question Number 100
QUESTION ID: 5777 **A** **STATUS:** Draft **LAST USED**
DESCRIPTION: Actions in response to Alarm on Reactor Startup
AUTHOR: dcassid **REVISION** 0 **REVISION DATE** 6/21/2000
REFERENCE VERIFIED: dcassid **VERIFICATION DATE:** 6/21/2000
QUIZ ONLY: **CLOSED REFERENCE:** X **OPEN REFERENCE**
PLANT SYSTEM: PPS **CATEGORY:** PROCEDURE

REFERENCE:	REVISION:	CHANGE:	DATE:		
OP-500-009	05	1	8/16/99		
NRC KA NUMBER:	**RO**	**SRO**	**TRAINING MATERIAL:**		**OBJECTIVE**
2-4-50	3.3	3.3	W-3-LP-OPS-PPN01		3

QUESTION

A plant startup and power ascension is in progress. Reactor Power is at 1.5E-4% and rising slowly. Annunciator D-13 on Alarm Panel K, Logarithmic Pwr Hi By-Pass, was just received. In response to this alarm, what action will the CRS direct to ensure power ascension can continue to Mode 1?

A. Manually bypass the Hi Log Power Trip for each channel at CP-10.

B. Verify that Hi Log Power Trip auto bypass feature occurs on all channels.

C. Manually bypass the Hi Log Power Trip for each channel at CP-7.

D. Verify that Hi Log Power Trip auto bypass removal occurs on all channels.

ANSWER

C

COMMENTS

REF: OP-500-009, Control Room Cabinet K. R5 C1. Page 53.

Tier/Group (SRO)	Cognitive Level	Question Source	10 CFR Part 55 Content
3	Memory or Fundamental	New	