

## Waterford 3 Examination Question Examination Bank

**Examination Question Number 1**

QUESTION ID: 5941 - STATUS: Revision LAST USED  
 DESCRIPTION: Stuck CEA and TS requirements  
 AUTHOR: dvince1 REVISION 1 REVISION DATE 05/13/2002  
 APPROVAL: APPROVAL DATE:  
 REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 05/13/2002  
 TYPE: Multiple Choice TIME: 5 POINTS: 1  
 QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE  
 SPECIAL REFERENCES: X SIMULATOR SETUP  
 PLANT SYSTEM: CED CATEGORY: PROCEDURE  
 TS  
 PPO  
 REFERENCE: REVISION: CHANGE: DATE:  
 TS 3.1.3  
 OP-901-102 03 02 08/07/2001  
 NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE  
 4.2-A5-AK3.04 3.4 4.1 W-3-LP-OPS-PPO10 5

**QUESTION**

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The plant is doing a downpower to 60% to allow maintenance to be done on Main Feedwater Pump A. The plant is at 80% when the PNPO moves Group P in for ASI control. After moving Group P two steps in, CEA 24 (of Group P) drops into the core to zero inches withdrawn. The CRS enters OP-901-102, CEA or CEDMCS Malfunction, and orders a rapid power reduction. Determine what power level the plant will be required to go to?

- A. 70%
- B. 65%
- C. 60%
- D. 50%

**ANSWER**

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C. 60%

**COMMENTS**

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Given student copy of TS 3.1.3.1 and COLR Figure 3.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 2

**QUESTION ID:** 5942 - **STATUS:** Revision **LAST USED**

A

**DESCRIPTION:** RCP Malfunction - Seal Failure

**AUTHOR:** dvince1

**REVISION** 1

**REVISION DATE** 05/10/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 05/10/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** PPO  
RCP

**CATEGORY:** PROCEDURE

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

OP-901-130 02

02 01/25/2001

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

4.2-A15/17-AA1.22

4

4.2

W-3-LP-OPS-PP010

3

### QUESTION

The plant is at 100% power. Given the following data for RCP-2B:

Vapor Seal – 30 psig  
Upper Seal – 294 psig  
Middle Seal – 1272 psig

Which seal has failed?

- A. Vapor Seal
- B. Upper Seal
- C. Middle Seal
- D. Lower Seal

### ANSWER

B. Upper Seal

### COMMENTS

Upper Seal has failed by 70%.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 3

<b>QUESTION ID:</b>	5943	-	<b>STATUS:</b>	Revision	<b>LAST USED</b>	
		<b>A</b>				
<b>DESCRIPTION:</b>	Natural Circulation criteria and contingency actions					
<b>AUTHOR:</b>	dvince1		<b>REVISION</b>	1	<b>REVISION DATE</b>	05/21/2002
<b>APPROVAL:</b>			<b>APPROVAL DATE:</b>			
<b>REFERENCE VERIFIED:</b>	dvince1		<b>VERIFICATION DATE:</b>	05/21/2002		
<b>TYPE:</b>	Multiple Choice		<b>TIME:</b>	5	<b>POINTS:</b>	1
<b>QUIZ ONLY:</b>		<b>CLOSED REFERENCE:</b>	X	<b>OPEN REFERENCE</b>		
<b>SPECIAL REFERENCES:</b>		X	<b>SIMULATOR SETUP</b>			
<b>PLANT SYSTEM:</b>	PPE		<b>CATEGORY:</b>	PROCEDURE		
<b>REFERENCE:</b>		<b>REVISION:</b>		<b>DATE:</b>		
OP-902-002		09		00		04/12/2001
<b>NRC KA NUMBER:</b>		<b>RO</b>		<b>SRO</b>		<b>TRAINING MATERIAL:</b>
C/E A13 – AK1.3		3.1		3.4		<b>OBJECTIVE</b>
						19

## **QUESTION**

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The plant has experienced a LOCA approximately 30 minutes ago. All ESFAS actuations have occurred as required. The following plant conditions exist:

- Pressurizer Pressure is 1800 psia and dropping slowly
- Pressurizer Level is 5% and dropping slowly
- RCS Hot Leg Temperature is 582°F and slowly rising
- RCS Cold Leg Temperature is 540°F and slowly rising
- Representative CET is 584°F and slowly rising
- SG Pressures are 1000 psia
- SG Levels are 70% Wide Range and slowly dropping
- Containment Pressure is 18.1 psia and constant
- All other indications are within required limits.

The CRS has determined that Single Phase Natural Circulation criteria is not being met. What action should be taken to restore Single Phase Natural Circulation?

- A. Carry out the actions of Appendix 11, Void Elimination.
- B. Pressurizer pressure needs to be reduced to allow safety injection flow.
- C. Steam Generator pressure needs to be reduced to restore Natural Circulation.
- D. All charging pumps need to be started to regain pressurizer level.

## **ANSWER**

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- C. Steam Generator pressure needs to be reduced to restore Natural Circulation.

## **COMMENTS**

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Per step 36 of OP-902-002, if Single Phase Natural Circulation criteria is not met, the contingency action is to verify steam generator feeding and steaming. The Tech Guide states that this means steaming the Steam Generator. Give Steam Tables as reference.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 4

**QUESTION ID:** 5944 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** Emergency Boration - SDM required

**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 05/21/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 05/21/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** X **SIMULATOR SETUP**

**PLANT SYSTEM:** PPO **CATEGORY:** PROCEDURE  
TS

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

OP-901-103 01 01 06/19/2000

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**

4.2-A24-AA2.05 3.3 3.9 W-3-LP-OPS-PPO10 3

### QUESTION

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The plant has just entered Mode 6. The Shift Chemist has determined that boron concentration is below the required Refueling Concentration. The crew has initiated Emergency Boration. After 15 minutes, the CRS asks you to calculate Keff for current plant conditions based upon the following data:

- Current RCS Boron Concentration is 2035 ppm
- RCS Tave is 135°F
- 500 EFPD
- Required Shutdown Margin Boron Concentration is 2020 ppm
- TS Shutdown Margin Requirement is 1.5%

- A. 0.98  
B. 0.96  
C. 0.94  
D. 0.92

### ANSWER

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- A. 0.98

### COMMENTS

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Give a copy of OP-903-090, Section 7.5 and Attachment 10.5 and Plant Data Book figures 1.4.1 and 1.4.2 as references.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

<b>Examination Question Number</b> 5				
<b>QUESTION ID:</b>	5945	-	<b>STATUS:</b> Revision	<b>LAST USED</b>
		<b>A</b>		
<b>DESCRIPTION:</b>	CCW and ESFAS			
<b>AUTHOR:</b>	dvince1			
<b>APPROVAL:</b>			<b>REVISION</b> 1	<b>REVISION DATE</b> 05/21/2002
<b>REFERENCE VERIFIED:</b>	dvince1		<b>APPROVAL DATE:</b>	
<b>TYPE:</b>	Multiple Choice		<b>VERIFICATION DATE:</b> 05/21/2002	
<b>QUIZ ONLY:</b>		<b>CLOSED REFERENCE:</b> X	<b>TIME:</b> 5	<b>POINTS:</b> 1
<b>SPECIAL REFERENCES:</b>			<b>OPEN REFERENCE</b>	
<b>PLANT SYSTEM:</b>	CC		<b>SIMULATOR SETUP</b>	
<b>REFERENCE:</b>		<b>REVISION:</b>	<b>CATEGORY:</b> SYSTEM	
OP-002-003	13		<b>CHANGE:</b>	<b>DATE:</b>
OP-902-009	00		02	08/22/2001
			01	12/16/1999
<b>NRC KA NUMBER:</b>	<b>RO</b>	<b>SRO</b>	<b>TRAINING MATERIAL:</b>	<b>OBJECTIVE</b>
4.2-A26-AK3.02	3.6	3.9	W-3-LP-OPS-CC00	5

**QUESTION**

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The following conditions exist:

Plant is at 100% power. CCW system valves are aligned as follows on CP-8:

- CC114A, CCW Pump A to AB Suction Crossconnect      Open
- CC114B, CCW Pump B to AB Suction Crossconnect      Open
- CC115A, CCW Pump AB to A Suction Crossconnect      Open
- CC115B, CCW Pump AB to B Suction Crossconnect      Open
- CC126A, CCW Pump A to AB Discharge Crossconnect      Open
- CC126B, CCW Pump B to AB Discharge Crossconnect      Open
- CC200A, CCW Header A to AB Supply Isolation      Closed
- CC200B, CCW Header B to AB Supply Isolation      Open
- CC501, CCW Non Safety Supply Hdr Isolation      Open
- CC562, CCW Non Safety Return Hdr Isolation      Open
- CC641, CCW to Containment Outside Cntmt Isolation      Closed
- CC710, Cntmt CCW Return Header Inside Cntmt Isolation      Closed
- CC713, NNS Return Hdr Outside Containment Isol      Closed

The Dry Cooling Towers are not bypassed.

Which one of the following could have caused this alignment?

- A. Failure of CCW Surge Tank Level Switch
- B. Leak in Non Safety Supply Header
- C. Inadvertent Safety Injection Actuation Signal (SIAS)
- D. Inadvertent Containment Spray Actuation Signal (CSAS)

**ANSWER**

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D. Inadvertent Containment Spray Actuation Signal (CSAS)

**COMMENTS**

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Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number 6**

**QUESTION ID:** 5946 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** ESDE - adding feedwater to dry SG  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 05/21/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 05/21/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPE **CATEGORY:** PROCEDURE  
 SG  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OI-038-000 01 01 08/23/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 4.2-A40-AK1.07 3.4 4.2 WLP-OPS-PPE08 9

### QUESTION

The main concern with adding feedwater to an empty Steam Generator is a

- A. Possible water hammer
- B. Possible overcooling
- C. Possible tube rupture
- D. Possible feedwater ring damage

### ANSWER

- C. Possible tube rupture

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-1		New
Question History				



## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 7

**QUESTION ID:** 5947 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** RCS Overcooling - heat removal systems  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 05/21/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 05/21/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPE **CATEGORY:** SYSTEM  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-902-004 09 00 04/12/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 CE/A11-AK2.2 3.2 3.4 WLP-OPS-PPE04 7

### QUESTION

A Steam Line Break inside containment has occurred on Steam Generator #1. Steam Generator #1 is empty and Pressurizer pressure has begun to rise. CET temperature is stable. Which one of the following would be a required action taken by the crew in response to the pressurizer pressure rise?

- A. Throttle High Pressure Safety Injection Flow.
- B. Manually initiate Emergency Feedwater Actuation Signal #2.
- C. Isolate Steam Generator #1.
- D. Commence steaming Steam Generator #2 using Steam Bypass Control Valve #1.

### ANSWER

- B. Manually initiate Emergency Feedwater Actuation Signal #2.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 8  
**QUESTION ID:** 5948 - **STATUS:** Revision **LAST USED**  
**A**  
**DESCRIPTION:** Loss of Condenser Vacuum  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 05/22/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 05/22/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPO **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-901-220 02 02 02/15/2000  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 2-4-11 3.4 3.6 WLP-OPS-PPO20 3

### QUESTION

The plant is at 100% power. Condenser vacuum begins to drop. The crew enters OP-901-220, Loss of Condenser Vacuum. Vacuum is now 24.8" Hg and slowly dropping. Based on the current vacuum, what action should the crew take?

- A. Commence a rapid downpower IAW OP-901-212, Rapid Down Power, concurrent with this off-normal.
- B. Commence a normal downpower IAW OP-010-005, Plant Shutdown, concurrent with this off-normal.
- C. Trip the reactor and perform OP-902-000, Standard Post Trip Actions, concurrent with this off-normal.
- D. Continue to attempt to recover vacuum IAW this off-normal.

### ANSWER

- A. Commence a rapid downpower IAW OP-901-212, Rapid Down Power, concurrent with this off-normal.

### COMMENTS

Per OP-901-220, step 4.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-1		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

**Examination Question Number** 9  
**QUESTION ID:** 5949 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** Station Blackout  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 05/22/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 05/22/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPE **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-902-005 11 00 04/12/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 4.1-E55-EK3.02 4.3 4.6 WLP-OPS-PPE05 7

### QUESTION

A Station Blackout has occurred. The crew has diagnosed to OP-902-005, Station Blackout Recovery. The following plant conditions exist:

- Containment pressure is 15.8 psia and slowly rising
- Containment Temperature is 118°F and slowly rising
- Pressurizer level is 34% and slowly dropping
- RCS Temperature is 545°F and slowly rising
- RCS Pressure is 2210 psia and slowly dropping
- EDG A has tripped on Overspeed.
- EDG B is tagged out and not expected to be returned for 30 minutes.
- Both batteries are reading 134 VDC

Based on these conditions, which of the following actions is INCORRECT?

- Close MSIVs.
- Commence a cooldown to 350°F.
- Place Containment Spray control switches to OFF.
- Open selected PAC Cabinet doors.

### ANSWER

- Commence a cooldown to 350°F.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehensive or Analysis		1-1		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

Examination Question Number 10

QUESTION ID: 5950 - A STATUS: Revision LAST USED

DESCRIPTION: Loss of SUPS

AUTHOR: dvince1 REVISION 1 REVISION DATE 05/22/2002

APPROVAL: APPROVAL DATE:

REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 05/22/2002

TYPE: Multiple Choice TIME: 5 POINTS: 1

QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE

SPECIAL REFERENCES: SIMULATOR SETUP

PLANT SYSTEM: ID PPO CATEGORY: PROCEDURE SYSTEM

REFERENCE: REVISION: CHANGE: DATE:

OP-901-312 01 07 03/13/2002

NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE

4.2-A57-AA2 03 3.7 3.9 W-3-LP-OPS-ID00 7

W-3-LP-OPS-PPO30 3

### QUESTION

The plant is at 80% power when SUPS MA trips. Which one of the following will occur?

- A. The reactor will trip due to opening of Reactor Trip Breakers 1 and 2.
- B. Safety Injection Tanks 1A & 2A will inject due to loss of pressure interlocks to their isolation valves.
- C. An EFAS signal will be generated that will open the EFW Isolation valves.
- D. COLSS will be inoperable due to the failure of CEAC #1.

### ANSWER

C. An EFAS signal will be generated that will open the EFW Isolation valves.

### COMMENTS

A is wrong because Breakers 1, 2, 5, & 6 open which does not cause a reactor trip. B is wrong because SIT inject on lowering pressure. D is wrong because CEAC #1 is powered from Train B.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-1		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

### Examination Question Number 11

QUESTION ID: 5951 - STATUS: Revision LAST USED  
A  
DESCRIPTION: Loads on ACCW during loss of ACCW  
AUTHOR: dvince1 REVISION 1 REVISION DATE 05/22/2002  
APPROVAL: APPROVAL DATE:  
REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 05/22/2002  
TYPE: Multiple Choice TIME: 5 POINTS: 1  
QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE  
SPECIAL REFERENCES: SIMULATOR SETUP  
PLANT SYSTEM: ACC CATEGORY: SYSTEM  
REFERENCE: REVISION: CHANGE: DATE:  
NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE  
4.2-A62-AA1.02 3.2 3.3 W-3-LP-OPS-CC00 3

### QUESTION

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Which one of the following components would be directly affected by an inadvertent securing of ACCW Pump A?

- A. Essential Chiller A running in Wet Tower mode.
- B. Containment Fan Cooler C running in Fast mode.
- C. CEDM Fan A running in normal mode.
- D. Waste Gas Compressor A running in lead mode.

### ANSWER

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- A. Essential Chiller A running in Wet Tower mode.

### COMMENTS

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Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-1		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

Examination Question Number 12

QUESTION ID: 5952 - STATUS: Revision LAST USED  
A  
DESCRIPTION: Actuation of SBV deluge system  
AUTHOR: dvince1 REVISION 1 REVISION DATE 05/22/2002  
APPROVAL: APPROVAL DATE:  
REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 05/22/2002  
TYPE: Multiple Choice TIME: 5 POINTS: 1  
QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE  
SPECIAL REFERENCES: SIMULATOR SETUP  
PLANT SYSTEM: FPP CATEGORY: SYSTEM  
SBV  
REFERENCE: REVISION: CHANGE: DATE:  
OP-009-004 11 04 04/24/2002  
NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE  
4.2-A67-AA1.09 3 3.3 W-3-LP-OPS-FP00 10  
W-3-LP-OPS-SBV00 4

### QUESTION

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Shield Building Ventilation (SBV) Train A indicates a fire. Which one of the following is TRUE?

- A. SBV Train A Deluge System must be manually actuated on the Fire Detection Main Control Panel to allow water flow.
- B. FP-601A, Reactor Bldg Fire Mn Hdr A FPM-1 Cntmt Isol, must be open to allow water flow to SBV Train A Deluge System.
- C. The local pull station must be operated to allow water flow to SBV Train A Deluge System.
- D. SBV Train A Deluge System isolation valve must be opened to allow water flow to SBV Train A.

### ANSWER

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- D. SBV Train A Deluge System isolation valve must be opened to allow water flow to the SBV Train A.

### COMMENTS

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Per OP-009-004, Step 8.7.1.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-1		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

### Examination Question Number 13

QUESTION ID: 5953 - A STATUS: Revision LAST USED

DESCRIPTION: Evacuation of the CR and EDG

AUTHOR: dvince1 REVISION 1 REVISION DATE 05/22/2002

APPROVAL: APPROVAL DATE:

REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 05/22/2002

TYPE: Multiple Choice TIME: 5 POINTS: 1

QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE

SPECIAL REFERENCES: SIMULATOR SETUP

PLANT SYSTEM: PPO CATEGORY: PROCEDURE

REFERENCE: REVISION: CHANGE: DATE:

NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE

4.2-A68-AK2.07 3.3 3.4 W-3-LP-OPS-PPO51 21

### QUESTION

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During an evacuation of the Control Room with Fire, FR-2367, Appendix R key switch for EDG B, is operated. What is the purpose of this key switch?

- A. Prevents EDG B from tripping.
- B. Electrically isolates EDG B from the Control Room.
- C. Allows EDG B to be controlled from LCP-43, Remote Shutdown Panel.
- D. Starts EDG Train B Mini-sequencer.

### ANSWER

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B. Electrically isolates EDG B from the Control Room.

### COMMENTS

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Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-1		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

Examination Question Number 14

QUESTION ID: 5954 - A STATUS: Revision LAST USED

DESCRIPTION: Loss of Containment Integrity

AUTHOR: dvince1 REVISION 1 REVISION DATE 05/22/2002

APPROVAL: APPROVAL DATE:

REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 05/22/2002

TYPE: Multiple Choice TIME: 5 POINTS: 1

QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE

SPECIAL REFERENCES: SIMULATOR SETUP

PLANT SYSTEM: PPE CATEGORY: PROCEDURE

REFERENCE: REVISION: CHANGE: DATE:

OP-902-002 09 00 03/30/2001

NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE

4.2-A69-AA2.02 3.9 4.4 WLP-OPS-PPE01 6

### QUESTION

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During a LOCA, Containment Spray Pump A trips on overcurrent. The CRS directs overriding and closing the Containment Spray Header Isolation, CS-125A. Why is this done?

- A. To prevent airbinding the Containment Spray System.
- B. To ensure that Containment Spray flow is maintained via the opposite train.
- C. To protect containment integrity.
- D. To reduce EDG loading.

### ANSWER

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C. To protect containment integrity.

### COMMENTS

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Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-1		New
Question History				



# Waterford 3 Examination Question

## Examination Bank

**Examination Question Number** 15

**QUESTION ID:** 5955 - **STATUS:** Revision **LAST USED**

A

**DESCRIPTION:** Inadequate Core Cooling

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/05/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/05/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** X **SIMULATOR SETUP**

**PLANT SYSTEM:** QSP **CATEGORY:** SYSTEM

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

OI-038-000 01 01 08/23/2001

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**

4.1-E74-EA1.12 4.1 4.4 W-3-LP-OPS-QSP00 1

## QUESTION

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A LOCA occurred 25 minutes ago. Assume all ESFAS actuations occurred as required and operator immediate actions and contingency actions have been taken. The following conditions exist:

- Pressurizer Level – 0%
- Pressurizer Pressure – 900 psia
- Loop 1 Thot - 500°F
- Loop 2 Thot - 531°F
- Loop 1 Tcolds - 480°F
- Loop 2 Tcolds - 495°F
- Representative CET - 528°F
- Containment Pressure – 18.1 psia
- CP-2 Subcooled Margin Meter - 30°F
- RVLMS indicates 80% in the Reactor Vessel Head

The CRS is trying to determine Adequate Core Cooling and asks you to verify subcooled margin. You would respond:

- A. Subcooled Margin is 30°F.
- B. Subcooled Margin is 1°F.
- C. Subcooled Margin is 32°F.
- D. Subcooled Margin is 4°F.

## ANSWER

---

D. Subcooled Margin is approximately 4°F.

## COMMENTS

---

Provide copy of Steam Tables and calculator. Per OI-038-000, EOP Expectations/Guidance – below 1000 psia, other indications should be used to determine Subcooled Margin instead of the CP-2 meter. With Natural Circulation conditions (no RCPs due to CSAS at 17.7 psia), Representative CET should be used to determine Subcooled Margin.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-1		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

Examination Question Number 16

QUESTION ID: 5956 - STATUS: Revision LAST USED  
A  
DESCRIPTION: RCS Activity TS  
AUTHOR: dvince1 REVISION 1 REVISION DATE 06/05/2002  
APPROVAL: APPROVAL DATE:  
REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 06/05/2002  
TYPE: Multiple Choice TIME: 5 POINTS: 1  
QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE  
SPECIAL REFERENCES: SIMULATOR SETUP  
PLANT SYSTEM: TS CATEGORY: ADMIN  
REFERENCE: REVISION: CHANGE: DATE:  
TS 3.4.7  
NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE  
2-2-25 2.5 3.7 W-3-LP-OPS-CHM03 14  
W-3-LP-OPS-CHM03 15

### QUESTION

---

If RCS Specific Activity exceeds Technical Specification limits the plant must be placed in Hot Standby and Tav<sub>g</sub> reduced to < 500 degrees F. The basis for the limit of < 500 deg F on Tav<sub>g</sub> is to:

- A. Reduce contamination of secondary systems.
- B. Stay below lift setpoint of the Main Steam Safeties.
- C. Reduce Steam Pressure to prevent possible Tube Rupture.
- D. Increase Recirculation Ratio to help clean up activity.

### ANSWER

---

- B. Stay below lift setpoint of the Main Steam Safeties.

### COMMENTS

---

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-1		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

### Examination Question Number 17

QUESTION ID: 6027 - STATUS: Revision LAST USED  
A  
DESCRIPTION: Continuous CEA Withdrawal and Insertion Limits  
AUTHOR: dvince1 REVISION 1 REVISION DATE 06/18/2002  
APPROVAL: APPROVAL DATE:  
REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 06/18/2002  
TYPE: Multiple Choice TIME: 5 POINTS: 1  
QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE  
SPECIAL REFERENCES: X SIMULATOR SETUP  
PLANT SYSTEM: TS CATEGORY: ADMIN  
REFERENCE: REVISION: CHANGE: DATE:  
TS 3.1.3  
NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE  
4.2-A1-AK1.04 3.7 3.9 WLP-OPS-CED00 8

### QUESTION

---

The plant is doing a downpower to 50% for Feedwater Pump A maintenance. As the downpower commences, the CRS directs the PNPO to commence ASI control. After 1 hour, power is at 73% with Group P at 120 inches withdrawn and Group 6 at 145 inches withdrawn. The CRS directs CEA Insertion for ASI control so as to NOT exceed The Short Term Steady State Insertion Limit. Based upon this order and current power level, CEA Group P can be inserted to \_\_\_\_\_ and CEA Group 6 can be inserted to \_\_\_\_\_. (Assume power does not change any further for this determination.)

- A. 120 inches, 120 inches
- B. 108 inches, 120 inches
- C. 60 inches, 108 inches
- D. 108 inches, 60 inches

### ANSWER

---

D. Restore CEAs to above 120 inches withdrawn within 4 hours or log CEA Insertion hours.

### COMMENTS

---

Provide copy of TS 3.1.3.1, TS 3.1.3.6 and COLR Figures 4 and 5.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 18

**QUESTION ID:** 5957 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** Dropped Control Rod and Indication

**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/05/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/05/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** CEC **CATEGORY:** THEORY

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
4.2-A3-AA2.03 3.6 3.8 W-3-LP-OPS-PPO10 1

### QUESTION

CEA #23 has dropped into the core. The crew has entered OP-901-102, CEA or CEDMCS Malfunction. The first step for dealing with a dropped CEA is to match Tav<sub>g</sub> and Tref. The reason this is done is because:

- A. RCS pressure has increased.
- B. Turbine First Stage Pressure has increased.
- C. RCS temperature has decreased.
- D. Shutdown Margin has decreased.

### ANSWER

C. RCS temperature has decreased.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 19  
**QUESTION ID:** 5958 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** Reactor Trip Recovery  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/05/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/05/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPE **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-902-009 01 00 04/04/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 4.1-E7-EK3.01 4 4.6 WLP-OPS-PPE01 15

### QUESTION

The reactor was at 100% power. Two CEAs fell into the core and the reactor was manually tripped. During Standard Post Trip Actions, the following items were reported:

- Feedwater Pump A tripped on loss of lube oil.
- Startup Feedwater Regulating Valve B had to be manually placed to 20% open.
- The 3 to 2 Tie Breaker for Safety Bus A tripped open and EDG A failed to start.
- Pressurizer Pressure dropped to 2150 psia and all Pressurizer Backup Heaters had to be manually started.

Assuming all other indications are as required, which Emergency Operating Procedure would the crew end up in?

- A. OP-902-001, Reactor Trip Recovery
- B. OP-902-003, Loss of Offsite Power/Loss of Forced Circulation Recovery
- C. OP-902-006, Loss of Main Feedwater Recovery
- D. OP-902-008, Functional Recovery

### ANSWER

- A. OP-902-001, Reactor Trip Recovery

### COMMENTS

- B is wrong because must lose offsite power or all RCPs to reach it via diagnostics.
- C is wrong because still have Feed pump B.
- D is wrong because listed actions do not require entry.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 20

**QUESTION ID:** 5959 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** Pressurizer Steam Space

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/05/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/05/2002

**TYPE:** Multiple Choice

**TIME:** 5 **POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X **OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** TYH

**CATEGORY:** THEORY

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

4.2-A8-AK1.02

3.1

3.7

W-3-LP-OPS-TYH04

21

### QUESTION

A small leak on the top of the pressurizer has occurred. The crew enters OP-901-111, RCS Leakage, and performs a RCS Leakrate. The leakrate calculation determines that unidentified leakage is 1.5 GPM. Previous leakage had been 0.03 GPM. The crew commences a shutdown IAW OP-010-005, Plant Shutdown. During the Shutdown, the Main Spray Valve 1A sticks open and Pressurizer Pressure drops to 2085 psia before the crew can shut the valve. Which of the following is a result of this event?

- A. Unidentified leakage will drop due to the pressure change.
- B. The reactor will trip due to the low pressure.
- C. RVLMS will indicate a partial Reactor Head void due to the low pressure.
- D. Pressurizer level will drop due to the pressure change.

### ANSWER

- A. Unidentified leakage will drop due to the pressure change.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

Examination Question Number 21

QUESTION ID: 5960 - STATUS: Revision LAST USED  
A  
DESCRIPTION: Small Break LOCA and Steam Generators  
AUTHOR: dvince1 REVISION 1 REVISION DATE 06/05/2002  
APPROVAL: APPROVAL DATE:  
REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 06/05/2002  
TYPE: Multiple Choice TIME: 5 POINTS: 1  
QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE  
SPECIAL REFERENCES: SIMULATOR SETUP  
PLANT SYSTEM: PPE CATEGORY: PROCEDURE  
REFERENCE: REVISION: CHANGE: DATE:  
NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE  
4.1-E9-EK2.03 3 3.3 WLP-OPS-PPE02 14

### QUESTION

---

For a Small Break LOCA inside containment, the RCS Heat Removal process can be described as: (Note – assume all ESFAS actuations occurred as required.)

- A. Forced Circulation using the Reactor Coolant Pumps
- B. Single Phased Natural Circulation using the Emergency Feedwater Pumps
- C. Two Phased Natural Circulation using the Steam Bypass Control System
- D. Break Heat Removal using the Main Feedwater Pumps

### ANSWER

---

- B. Single Phased Natural Circulation using the Emergency Feedwater Pumps

### COMMENTS

---

On Small Break LOCAs, Containment Spray Actuation and Main Steam Isolation would occur so Reactor Coolant Pumps, Steam Bypass Control and MFW Pumps would not be available.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-2		New
Question History				



## Waterford 3 Examination Question

## Examination Bank

Examination Question Number 22

QUESTION ID: 5961 - STATUS: Revision LAST USED  
A  
DESCRIPTION: Large Break LOCA versus ESDE  
AUTHOR: dvince1 REVISION 1 REVISION DATE 06/05/2002  
APPROVAL: APPROVAL DATE:  
REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 06/05/2002  
TYPE: Multiple Choice TIME: 5 POINTS: 1  
QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE  
SPECIAL REFERENCES: SIMULATOR SETUP  
PLANT SYSTEM: PPE CATEGORY: PROCEDURE  
REFERENCE: REVISION: CHANGE: DATE:  
OP-902-009 01 00 04/04/2001  
NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE  
4.1-E11-EA2.13 3.7\* 3.7\* WLP-OPS-PPE02 15

### QUESTION

---

Given the following plant conditions:

- Reactor is tripped with 2 CEAs stuck out.
- Pressurizer Level is 0%.
- Pressurizer Pressure is 1485 psia and dropping slowly.
- Representative CET temperature is 581 °F and rising slowly.
- Steam Generator Pressures are 988 psia and steady.
- Containment Pressure is 16.9 psia and rising slowly.
- Assume all actuations occurred as required.

What event has occurred?

- A. Steam Generator Tube Rupture
- B. Excess Steam Demand inside Containment
- C. Loss of Coolant Accident
- D. Loss of Forced Circulation

### ANSWER

---

- C. Loss of Coolant Accident

### COMMENTS

---

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

Examination Question Number 23

QUESTION ID: 5962 - STATUS: Revision LAST USED  
A  
DESCRIPTION: VCT Level and Makeup  
AUTHOR: dvince1 REVISION 1 REVISION DATE 06/05/2002  
APPROVAL: APPROVAL DATE:  
REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 06/05/2002  
TYPE: Multiple Choice TIME: 5 POINTS: 1  
QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE  
SPECIAL REFERENCES: SIMULATOR SETUP  
PLANT SYSTEM: CVC CATEGORY: PROCEDURE  
PPO  
REFERENCE: REVISION: CHANGE: DATE:  
OP-901-113 01 01 11/12/1999  
NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE  
4.2-A22-AA1.08 3.4 3.3 W-3-LP-OPS-PPO10 4

### QUESTION

---

The plant is at 100% power when the VCT LEVEL LO-LO annunciator is received. The PNPO reports that the VCT Level indication on CP-2 reads 0% and that the PMC VCT Level indication is 40%. Which of the following will immediately occur as a result of this failure?

- A. Charging Pump suction will shift to the RWSP.
- B. VCT Makeup will start if aligned for Auto.
- C. Charging Pumps will trip.
- D. Letdown will auto divert to BMS.

### ANSWER

---

- B. VCT Makeup will start if aligned for Auto.

### COMMENTS

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Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 24

**QUESTION ID:** 5963 - **STATUS:** Revision **LAST USED**

**DESCRIPTION:** Loss of SDC and LPSI pumps

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/05/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/05/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** PPO  
SDC

**CATEGORY:** PROCEDURE

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

OP-901-131

02

00

01/08/2002

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

4.2-A25-AK2.02

3.2\*

3.2

WLP-OPS-REQ21

6

### QUESTION

The plant is in Mode 5 with Reduced Inventory with both SDC Trains in service. The dedicated SDC watch reports the following:

- LPSI Pump B Flow Lost Alarm
- SDC Trouble Alarm
- LPSI Pump B Amperage reads 5 amps and steady
- LPSI Pump B Flow indicates a steady 1500 GPM

What has occurred?

- A. LPSI Pump B Minimum Flow Recirc valve has failed open.
- B. LPSI Pump B is air bound.
- C. LPSI Pump B is at runout condition.
- D. LPSI Pump B is cavitating.

### ANSWER

- B. LPSI Pump B is air bound.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 25

**QUESTION ID:** 5964 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** ATWS - Manual Trip  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/05/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/05/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** ATS **CATEGORY:** SYSTEM  
 PPE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-902-000 09 00 02/12/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 4.1-E29-EK3.10 4.1 4.1 WLP-OPS-PPE01 10  
 W-3-LP-OPS-ATS 3

### QUESTION

The plant is at 100% power when a Reactor Power Cutback occurs due to an equipment malfunction (card failure). CEA #1 falls into the core following the Reactor Power Cutback. The CRS orders a manual reactor trip but the manual trip buttons do not work. The PNPO initiates a manual trip using the DRTS pushbuttons. Assuming everything functions as required and all CEAs insert, which of the following statement is TRUE for actions taken for this event?

- A. The MG Set Load Contactors will be open, MG Sets are running and the Reactor Trip Breakers will be closed.
- B. The MG Set Load Contactors will be closed, MG Sets are running and the Reactor Trip Breakers will be open.
- C. The MG Set Load Contactors will be open, MG Sets are tripped and the Reactor Trip Breakers will be closed.
- D. The MG Set Load Contactors will be closed, MG Sets are tripped and the Reactor Trip Breakers will be open.

### ANSWER

- A. The MG Set Load Contactors will be open, MG Sets are running and the Reactor Trip Breakers will be closed.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

Examination Question Number 26

QUESTION ID: 5965 - A STATUS: Revision LAST USED

DESCRIPTION: ENI Startup Channels and Power Restoration

AUTHOR: dvince1 REVISION 1 REVISION DATE 06/05/2002

APPROVAL: APPROVAL DATE:

REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 06/05/2002

TYPE: Multiple Choice TIME: 5 POINTS: 1

QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE

SPECIAL REFERENCES: SIMULATOR SETUP

PLANT SYSTEM: ENI CATEGORY: SYSTEM

REFERENCE: REVISION: CHANGE: DATE:

OP-004-008 06 01 03/20/2002

NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE

4.2-A32-AA1.01 3.1\* 3.4\* W-3-LP-OPS-ENI00 4

### QUESTION

---

The plant is at 90% power following a downpower for work on Heater Drain Pump A. Startup Channel A was removed for maintenance and the Startup HV Control Selector Switch is aligned to the OFF position. Maintenance has been completed and the NPO goes to realign the Startup Channel to service. The NPO inadvertently turns the Startup HV Control Selector Switch to ON and walks away. What is a possible effect of this action?

- A. Audio Count Rate amplifier automatically turns off.
- B. The associated Boron Dilution Monitor fails low.
- C. CPC A trip on DNBR and LPD occurs.
- D. Startup Channel A detector is damaged.

### ANSWER

---

- D. Startup Channel A detector is damaged.

### COMMENTS

---

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 27  
**QUESTION ID:** 5966 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** SG Tube Leak  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/05/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/05/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPO **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-901-202 03 00 04/11/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 2-3-11 2.7 3.2 WLP-OPS-PPO20 4

### QUESTION

The plant has experienced a Steam Generator Tube Leak. OP-901-202, Steam Generator Tube Leakage or High Activity, has been entered. The plant is currently shutdown and carrying out the actions of OP-901-202. RCS Pressure is higher than the isolated Steam Generator pressure. The isolated SG Narrow Range level is 79% and rising. If the SG Level is not brought under control, what could occur?

- A. Water hammer of the Main Steam piping.
- B. Opening of Main Steam Safeties.
- C. Dilution of the RCS boron concentration.
- D. Contamination of the Main Condenser.

### ANSWER

B. Opening of Main Steam Safeties.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehensive or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 28

**QUESTION ID:** 5967 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** SGTR and Natural Circulation

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/05/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/05/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:**

**CATEGORY:**

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

OP-902-007

10

0

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

4.1-E38-EA2.09

4.2

4.2

WLP-OPS-PPE07

4

### QUESTION

Following a SGTR with a concurrent Loss of Offsite Power, which ONE of the following would indicate Natural Circulation criteria is met?

- A. All available charging pumps running with 88 gpm of flow.
- B. Loop delta T is 40 degrees F.
- C. High Pressure Safety Injection flow is 200 gpm per loop.
- D. That is 545 degrees F and slowly rising.

### ANSWER

B. Loop delta T is 40 degrees F.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 29

**QUESTION ID:** 5968 - **A**      **STATUS:** Revision      **LAST USED**

**DESCRIPTION:** Loss of Main Feedwater - interlocks

**AUTHOR:** dvince1      **REVISION** 1      **REVISION DATE** 06/10/2002

**APPROVAL:**      **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1      **VERIFICATION DATE:** 06/10/2002

**TYPE:** Multiple Choice      **TIME:** 5      **POINTS:** 1

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

**SPECIAL REFERENCES:**      **SIMULATOR SETUP**

**PLANT SYSTEM:** RXC      **CATEGORY:** SYSTEM

**REFERENCE:**      **REVISION:**      **CHANGE:**      **DATE:**  
OP-004-015      08      00      05/31/2001

**NRC KA NUMBER:**      **RO**      **SRO**      **TRAINING MATERIAL:**      **OBJECTIVE**  
CE/EO6 EK2.1      3.3      3.7      WLP-OPS-RXC00      1

### QUESTION

For Feedwater Pump A, which ONE of the following would cause a Reactor Power Cutback?

- A. Feedwater pump speed controller fails to 0% output.
- B. 2 of 2 Speed Sensor Pickup probes (SSPU) fail Off.
- C. 2 of 2 Control Oil Pressure read less than 60 psig.
- D. Duplex Oil Filter reaches 20 psid.

### ANSWER

C. 2 of 2 Control Oil Pressure read less than 60 psig.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-2		New
Question History				



## Waterford 3 Examination Question

## Examination Bank

Examination Question Number 30

QUESTION ID: 5969 - A STATUS: Revision LAST USED

DESCRIPTION: Loss of DC Power - battery chargers

AUTHOR: dvince1 REVISION 1 REVISION DATE 06/10/2002

APPROVAL: APPROVAL DATE:

REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 06/10/2002

TYPE: Multiple Choice TIME: 5 POINTS: 1

QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE

SPECIAL REFERENCES: SIMULATOR SETUP

PLANT SYSTEM: DC CATEGORY:

REFERENCE: REVISION: CHANGE: DATE:

TS 3.8.2.1

NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE

4.2-A58-AK1.01 2.8 3.1\* W-3-LP-OPS-PPO30 5

### QUESTION

---

Battery Charger 3B1 is tagged out for maintenance. Battery Charger 3B2 trips on overcurrent. It takes the shift crew 30 minutes to restore Battery Charger 3B1 to service. Battery 3B-S voltage reaches 108 volts before Battery Charger 3B1 is restored. The Battery Charger is restored to service and Battery 3B-S voltage is reading 132 volts. Which ONE of the following statements is true following restoration?

- A. Restore Battery Charger 3B2 to OPERABLE status within the next 2 hours.
- B. Perform Surveillance Requirement 4.8.2.1a.1 within 7 days.
- C. No action is required per TS 3.8.2.1.
- D. Verify parameters listed in Table 4.8-2 meet the Category B limits within 7 days.

### ANSWER

---

- D. Verify parameters listed in Table 4.8-2 meet the Category B limits within 7 days.

### COMMENTS

---

Give copy of TS 3.8.2.1.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question

## Examination Bank

Examination Question Number 31

QUESTION ID: 5970 - A STATUS: Revision LAST USED

DESCRIPTION: Waste Gas Release and E-Plan

AUTHOR: dvince1 REVISION 1 REVISION DATE 06/10/2002

APPROVAL: APPROVAL DATE:

REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 06/10/2002

TYPE: Multiple Choice TIME: 5 POINTS: 1

QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE

SPECIAL REFERENCES: SIMULATOR SETUP

PLANT SYSTEM: GWM CATEGORY: PROCEDURE  
PPO

REFERENCE: REVISION: CHANGE: DATE:  
OP-901-413 00 01 08/14/2000

NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE  
4.2-A60-AK3.01 2.9 4.2 W-3-LP-OPS-PPO40 3

### QUESTION

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A Gaseous Waste Release is in progress from Gas Decay Tank A. A Waste Gas Activity Hi alarm comes in on CP-4. Which ONE of the following is TRUE in relation to this event?

- A. GWM-309, Waste Gas Discharge Flow Control Valve, must be shut by the NPO.
- B. The Shift Manager will evaluate need to activate the Emergency Plan.
- C. GWM-305A, Gas Decay Tank A Discharge Isolation, will automatically close.
- D. The CRS should enter OP-901-414, Effluent Discharge High Radiation.

### ANSWER

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- B. The Shift Manager will evaluate need to activate the Emergency Plan.

### COMMENTS

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Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 32

**QUESTION ID:** 5971 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** ARM Annunciator Response Actions

**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/10/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/10/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** ARM **CATEGORY:** PROCEDURE

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
OP-901-402 02 00 08/18/2000

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
4.2-A61-AK3.02 3.4 3.6 W-3-LP-OPS-PPO40 1  
WLP-OPS-RMS 3

### QUESTION

The plant is at 100% power. The Rad Monitoring Sys Activity Hi-Hi annunciator alarms. The RM-11 shows the Charging Pump Rooms Area Rad Monitor (ARM-IRE-5023) and the HVAC Duct PIG A (PRM-IRE-6710A) are in alarm. All other plant indications are normal and stable. Given this information, which Off Normal procedure would the crew enter?

- A. OP-901-402, High Airborne Activity in the Reactor Auxiliary Building
- B. OP-901-413, Waste Gas Discharge High Radiation
- C. OP-901-111, Reactor Coolant System Leakage
- D. OP-901-112, Charging or Letdown Malfunction

### ANSWER

- A. OP-901-402, High Airborne Activity in the Reactor Auxiliary Building

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 33  
**QUESTION ID:** 5972 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** OP-902-008 Exit  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/10/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/10/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPE **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-902-008 12 00 04/12/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 CE/E09-EK3.2 3.0 3.5 WLP-OPS-PPE08 5

### QUESTION

The plant has experienced a Loss of Coolant Accident Inside Containment concurrent with and Excess Steam Demand Event. All ESFAS actuations have occurred as required. All acceptance criteria for the implemented success path for each Safety Function is being satisfied. The crew is now evaluating exiting OP-902-008. Given the current plant conditions, which ONE of the following is NOT a procedure that the crew would exit to from OP-902-008?

- A. OP-010-005, Plant Shutdown
- B. OP-902-009, Appendix 1, Diagnostic Flow Chart
- C. OP-902-002, Loss of Coolant Accident
- D. A procedure developed by the TSC.

### ANSWER

- A. OP-010-005, Plant Shutdown

### COMMENTS

OP-010-005 requires operating RCP and MFW – all ESFAS actuations would have MSIS (No MFW possible) and CSAS (No RCPs).

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		1-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 34

**QUESTION ID:** 5973 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** Pzr Level Control Malfunction and Changing Power  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/11/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/11/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** X **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPO **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-901-110 03 01 09/02/1998  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 4.2-A28-AK3.04 2.9\* 3 W-3-LP-OPS-PPO10 3

### QUESTION

The plant is at 100% power when a Pressurizer Level Setpoint Malfunction occurs. The crew has entered OP-901-110, Pressurizer Level Malfunction. What would be the minimum level of operation for Pressurizer Level if the plant had to drop power to 95%?

- A. 44%
- B. 41%
- C. 38%
- D. 31%

### ANSWER

B. 41%

### COMMENTS

Give copy of OP-901-110, Attachment 1, Pzr level vs. Tave Curve, and Plant Data Book Section 2.2.1, RCS Temperature Control Bands vs. Power.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 35

QUESTION ID: 3318 - B STATUS: Draft LAST USED  
 DESCRIPTION: IA pressure for RX trip (similar to RO NRC EXAM 1994)  
 AUTHOR: bcoble REVISION 0 REVISION DATE 03/24/1999  
 APPROVAL: APPROVAL DATE:  
 REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 06/18/2002  
 TYPE: Multiple Choice TIME: 5 POINTS: 1  
 QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE  
 SPECIAL REFERENCES: SIMULATOR SETUP  
 PLANT SYSTEM: IA CATEGORY: Procedure  
 PPO  
 REFERENCE: REVISION: CHANGE: DATE:  
 OP-901-511 04 03 07/03/2000  
 NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE  
 4.2-A65-AA2.06 3.6\* 4.2 W-3-LP-OPS-AIR00 5  
 W-3-LP-OPS-PPO50 4

### QUESTION

Given the following:

- The plant is at 100 % power when the following alarms are received:
  - INST AIR PRESS BACKUP VLV OPEN
  - INST AIR DRYERS BYPASSED
  - INSTRUMENT AIR RECEIVER PRESSURE HI/LO
- The PMC mimic AIR indicates excessive IA usage and rising.
- On CP-1, IA pressure is reading 60 psig and dropping.
- The crew is in OP-901-511, Instrument Air Malfunction.

What action should be taken?

- A. Commence a rapid plant shutdown IAW OP-901-212, Rapid Plant Downpower.
- B. Commence a normal plant shutdown IAW OP-010-005, Plant Shutdown.
- C. Trip the main turbine and perform OP-901-101, Reactor Power Cutback, concurrently with this procedure.
- D. Trip the reactor and perform OP-902-000, Standard Post Trip Actions, concurrently with this procedure.

### ANSWER

- D. Trip the reactor and perform OP-902-000, Standard Post Trip Actions, concurrently with this procedure.

### COMMENTS

Rewrote question to make it more comprehension/analysis type. Dave Vincent 6/19/2002

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-3		Modified Bank
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 36

**QUESTION ID:** 5974 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** RCS Leakage and Annunciator

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/11/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/11/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** PPO

**CATEGORY:** PROCEDURE

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

OP-500-012

18

00

06/25/2001

OP-901-111

01

05

06/14/2001

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

CE/A16-AK1.3

3.2

3.5

W-3-LP-OPS-PPO10

1

### QUESTION

The plant is at 85% power for Heater Drain Pump maintenance. A Containment Water Leakage Hi alarm is received. The Containment Weir indicates 5 GPM and steady. Charging and Letdown mismatch shows a rising trend? All other indications are normal. Which ONE of the following is the cause of this?

- A. Leak into the CCW AB Header from the RCS causing CCW reliefs to lift
- B. Leak from Containment Fan Coolers
- C. Leak from the RCS
- D. Leak from the Reactor Drain Tank

### ANSWER

C. Leak from the RCS

### COMMENTS

Note – Reference material OP-500-012, revision do not match because of Procedure Revision Policy that only revises the affected attachment of the Annunciator Response and not all attachments.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		1-3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 37

**QUESTION ID:** 1257 - **STATUS:** Approved **LAST USED**  
A

**DESCRIPTION:** CEA Pulse Counter response to Reactor Trip.  
**AUTHOR:** kkirka **REVISION** 1 **REVISION DATE** 06/26/1997  
**APPROVAL:** mlangan **APPROVAL DATE:** 07/17/1997  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/11/2002  
**TYPE:** MULTIPLE CHOICE **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE** X  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** CED **CATEGORY:** SYSTEM  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.1-001-K4.01 3.5 3.8 W-3-LP-OPS-CED00 17

### QUESTION

All CEA's are initially at 150". CHOOSE the correct CEA Pulse Counter indication following a reactor trip in which all CEA's fully insert.

- A. Green LEL lights on CEDMCs Panel illuminate
- B. Rod Bottom light on the Core Mimic illuminate
- C. Selected Individual CEA Display indicates 150"
- D. Selected CEA Group Display indicates 0"

### ANSWER

- D. Selected CEA Group Display indicates 0"

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-1		Bank
Question History				



## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 38  
**QUESTION ID:** 6029 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** Post Trip Xenon **A**  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/23/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/23/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** TYR **CATEGORY:** THEORY  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.1-001-K5.85 3.5 3.7 W-3-LP-OPS-TYR06 7

### QUESTION

The reactor has just tripped from 100% power at 13 EFPD. How long will it take for xenon to reach its pre-trip value?

- A. 70 to 80 hours
- B. 40 to 50 hours
- C. 20 to 30 hours
- D. 6 to 10 hours

### ANSWER

C. 20 to 30 hours

### COMMENTS

Rewrite of question #3891.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-1		Modified Bank
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 39

**QUESTION ID:** 5975 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** RCP and Containment Isolation Valves

**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/11/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/11/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** PPO **CATEGORY:** PROCEDURE  
RCP

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

OP-901-411 01 02 07/30/2001

OP-500-008 15 00 03/27/2002

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**

3.4-003-K6.04 2.8 3.1 W-3-LP-OPS-RCPO0 6

### QUESTION

A small RCS leak occurs in RCP 1A seal cooler. CCW AB Rad Monitor activity is rising. Which one of the following would be an action taken for this event?

- A. Open the RCP 1A CCW Isolation valve on CP-2.
- B. Open CC-710, CCW to Containment Isolation.
- C. Isolate the NNS Component Cooling Water Header.
- D. Trip the Reactor and secure all reactor coolant pumps.

### ANSWER

- A. Open the RCP 1A CCW Isolation valve on CP-2.

### COMMENTS

Note – Reference material OP-500-008, revision does not match because of Procedure Revision Policy that only revises the affected attachment of the Annunciator Response and not all attachments.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 40  
**QUESTION ID:** 5976 - **STATUS:** Revision **LAST USED**  
**A**  
**DESCRIPTION:** CVCS and effects on RCS Temp & Pressure  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/11/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/11/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** CVC **CATEGORY:** SYSTEM  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-002-005 18 00 04/12/2002  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.1-004-K3.06 3.4 3.6 wlp-ops-cvc00 6  
 W-3-LP-OPS-PSC04 28

### QUESTION

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The plant is at 100% power. The CVCS Ion Exchanger Bypass Switch, CVC-140, is selected to the Ion Exchanger position for testing. The Letdown Heat Exchanger Temperature Control Valve, CC-636, controller fails closed. Letdown Heat Exchanger outlet temperature rises to 180°F. Assuming no operator action, which one of the following would occur as a result of this event?

- A. CVC-140 will automatically bypass.
- B. RCS temperature will lower.
- C. Pressurizer level will rise.
- D. Volume Control Tank will divert.

### ANSWER

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- B. RCS temperature will lower.

### COMMENTS

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RCS temperature lowers as the IX resin breaks down and releases boron with temperature increase.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 41  
**QUESTION ID:** 3458 - **STATUS:** Approved **LAST USED**  
**A**  
**DESCRIPTION:** CVC-101 Auto Closures.  
**AUTHOR:** NRC **REVISION** 0 **REVISION DATE** 01/06/1995  
**APPROVAL:** tbrown **APPROVAL DATE:** 01/11/1995  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/11/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE** X  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** CVC **CATEGORY:** SYSTEM  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-002-005 18 00 04/12/2002  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.2-004-A2.07 3.4 3.7 W-3-LP-OPS-CVC00 3

### QUESTION

WHICH ONE (1) of the following sets of signals will AUTOMATICALLY close the Letdown Stop valve (CVC-101)?

- A. CIAS or HIGH letdown heat exchanger outlet temperatures.
- B. CIAS or HIGH regenerative heat exchanger outlet temperature.
- C. SIAS or HIGH letdown heat exchanger outlet temperatures.
- D. SIAS or HIGH regenerative heat exchanger outlet temperature.

### ANSWER

D. SIAS or HIGH regenerative heat exchanger outlet temperature.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-1		Bank
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 42  
**QUESTION ID:** 5977 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** ESFAS - bus power supplies  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/11/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/11/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPS **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-009-007 05 01 02/08/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.2-013-K2.01 3.6\* 3.8 WLP-OPS-PPS00 2

### QUESTION

The plant is at 100% power. Maintenance is being performed on PPS Channel A and all PPS Channel A bistables are bypassed. The technician inadvertently de-energizes PPS Channel A completely. Which one of the following is TRUE as a result of this action?

- A. The bistable bypasses are no longer in effect.
- B. The reactor will trip.
- C. Safety Injection Actuation will occur.
- D. Excore Nuclear Instrumentation Safety Channel A will de-energize.

### ANSWER

- D. Excore Nuclear Instrumentation Safety Channel A will de-energize.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 43  
**QUESTION ID:** 5978 - **STATUS:** Revision **LAST USED**  
**A**  
**DESCRIPTION:** Inadvertent RAS  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/11/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/11/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPO **CATEGORY:** SYSTEM  
 SI  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-901-504 02 01 06/03/2002  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.2-013-A2.06 3.7\* 4 W-3-LP-OPS-PPO50 3  
 WLP-OPS-SI00 3

### QUESTION

If the plant is at 100% power and an inadvertent Recirculation Actuation Signal (RAS) occurred, which of the following would be a potential concern? Assume no surveillances in progress.

- A. Loss of Low Pressure Safety Injection Pumps due to trip signal.
- B. Loss of Safety Injection suction due to SI-106A & B, ESF Pump Suction RWSP Valves, closing.
- C. Loss of Safeguards Pumps recirculation protection due to SI-120A & B, SI Pumps Recirc Isol Valves, closing.
- D. Potential Containment Isolation concern due to SI-602A & B, ESF Pumps Suction SI Sump Valves, opening.

### ANSWER

- D. Potential Containment Isolation concern due to SI-602A & B, ESF Pumps Suction SI Sump Valves, opening.

### COMMENTS

Note – A is wrong because the trip signal is in for only 1 second and the pumps can be restarted. B&C are wrong because SI-106s and SI-120s do not get a close signal. D is correct because SI-602s are part of the Containment Isolation requirement.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 44  
**QUESTION ID:** 5979 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** ENI and criticality  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/11/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/11/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** ENI **CATEGORY:** PROCEDURE  
 PPN  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-010-003 01 02 04/03/2002  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.7-015-K5.05 4.1 4.4 WLP-OPS-PPN01 3

### QUESTION

A reactor startup is in progress. The plant had shutdown after 50 EFPD to repair a RCP seal. The PNPO is withdrawing Regulating Group 6 to 50 inches withdrawn. After the withdrawal is completed, the PNPO determines that 3 doublings have occurred by looking at Startup Channels. As the next CEA movement is begun, when should the PNPO be expecting criticality to occur?

- A. When the Reactor Engineer determines it using the 1/M plot.
- B. When the 5<sup>th</sup> doubling occurs.
- C. At all times.
- D. When the CEAs are withdrawn to the critical rod height position.

### ANSWER

- C. At all times.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 45  
**QUESTION ID:** 5980 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** ENI and Boron Dilution Monitors  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/11/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/11/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** ENI **CATEGORY:** SYSTEM  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-903-001 25 00 05/30/2002  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.7-015-A3.03 3.9 3.9 W-3-LP-OPS-ENI00 4

### QUESTION

The plant has been shutdown for 8 days going into a refueling outage. The following alarms are received on CP-4, Cabinet G – RCS Boron Chnl 1 Dilution Hi and RCS Boron Chnl 2 Dilution Hi. The PNPO reports the following plant conditions:

- Reactor power is 10 x E-7% and stable.
- RCS Temperature is 150 degrees F and stable
- RCS Boron Dilution Monitor #1 process is reading 2 x 10<sup>2</sup> CPS
- RCS Boron Dilution Monitor #1 setpoint is reading 3 x 10<sup>2</sup> CPS
- RCS Boron Dilution Monitor #2 process is reading 3.8 x 10<sup>2</sup> CPS
- RCS Boron Dilution Monitor #2 setpoint is reading 5.6 x 10<sup>2</sup> CPS

Based on this information, the crew should:

- A. Declare the RCS Boron Dilution Monitors inoperable.
- B. Commence Emergency Boration.
- C. Switch the ENI Startup High Voltage Control Switches to Primary.
- D. Adjust the RCS Boron Dilution Monitors setpoints to less than or equal to 2 times process.

### ANSWER

- D. Adjust the RCS Boron Dilution Monitors setpoints to less than or equal to 2 times process.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				



## Waterford 3 Examination Question Examination Bank

<b>Examination Question Number</b> 46				
<b>QUESTION ID:</b>	5981 - A	<b>STATUS:</b>	Revision	<b>LAST USED</b>
<b>DESCRIPTION:</b>	CETs and Superheat			
<b>AUTHOR:</b>	dvince1	<b>REVISION</b>	1	<b>REVISION DATE</b> 06/12/2002
<b>APPROVAL:</b>		<b>APPROVAL DATE:</b>		
<b>REFERENCE VERIFIED:</b>	dvince1	<b>VERIFICATION DATE:</b>	06/12/2002	
<b>TYPE:</b>	Multiple Choice	<b>TIME:</b>	5	<b>POINTS:</b> 1
<b>QUIZ ONLY:</b>	<b>CLOSED REFERENCE:</b> X	<b>OPEN REFERENCE</b>		
<b>SPECIAL REFERENCES:</b>	<b>SIMULATOR SETUP</b>			
<b>PLANT SYSTEM:</b>	MCD	<b>CATEGORY:</b>	SYSTEM	
<b>REFERENCE:</b>	<b>REVISION:</b>	<b>CHANGE:</b>	<b>DATE:</b>	
OP-902-009	00	01	12/16/1999	
OP-902-002	09	00	04/12/2001	
<b>NRC KA NUMBER:</b>	<b>RO</b>	<b>SRO</b>	<b>TRAINING MATERIAL:</b>	<b>OBJECTIVE</b>
3.7-017-K5.03	3.7	4.1	WLP-OPS-MCD03	2

**QUESTION**

---

A Loss of Coolant Accident has occurred concurrent with a loss of power to the 3A Safety Bus. Plant conditions are as follows:

- RCS Pressure – 1318 PSIA and slowly dropping
- Representative CET - 581°F and slowly dropping
- RCS Tcold - 568°F and slowly dropping
- Pressurizer Level – 0%
- RVLMS – 40% Plenum Level
- RWSP – 89% and slowly dropping
- Steam Generator Level #1 – 58% WR and slowly dropping
- Steam Generator Level #2 – 59% WR and slowly dropping
- EFW flow to both Steam Generators – 0 gpm
- Charging Pump B running
- HPSI flow – 55 GPM per loop
- LPSI flow – 0 GPM per loop
- Containment Pressure – 18.5 psia and stable
- Containment temperature - 238°F and stable

Assuming that all ESFAS actuations occurred as required, state which Safety Function criteria is NOT met

- A. RCS Inventory Control
- B. RCS Pressure Control
- C. Core Heat Removal
- D. RCS Heat Removal

**ANSWER**

---

- C. Core Heat Removal

**COMMENTS**

---

Give copy of SFSC for OP-902-002 (pages 51-60), OP-902-009, Appendix 2A, 2B, and 2C, and copy of steam tables.

Note – D is the wrong choice because per Operations Expectations, SG Levels are met until EFW fails to work in automatic and start feeding at 55% WR.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 47

**QUESTION ID:** 5982 - **STATUS:** Revision **LAST USED**

**DESCRIPTION:** CFC Fans and Power

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/12/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/12/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** CCS

**CATEGORY:** SYSTEM

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

OP-500-002

14

00

03/20/2002

OP-008-003

05

01

02/27/1997

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

3.5-022-K2.01

3.0\*

3.1

WLP-OPS-CCS00

4

### QUESTION

Containment Fan Coolers A, B, and C are running in Fast. An annunciator on Panel B, TRN A Cntmt Cooler Vlv Power Lost, goes into alarm. The RAB watch reports that CCS-EBKR-60A-17, Containment Cooling Train A CCW Valves, is in the trip-free position. The SNPO reports that Containment Fan Cooler A CCW Isolation Valves are indicating no power. What is the amount of Component Cooling Water to Containment Fan Cooler A?

- A. 700 GPM
- B. 0 GPM
- C. 1400 GPM
- D. 1000 GPM

### ANSWER

- A. 700 GPM

### COMMENTS

Per CWD 1134 these valves are energized to close. The CFC Flow Control Valve controls the amount of flow to the CFCs. So with the isolation valves failed open, CFC flow is 700 GPM (normal for Fast). B is wrong because there will still be flow, C is wrong because this is the amount for Slow speed. D is wrong because there is no 1000 GPM flow for these valves. Note – Reference material OP-500-008, revision does not match because of Procedure Revision Policy that only revises the affected attachment of the Annunciator Response and not all attachments.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 48

**QUESTION ID:** 5983 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** CEDM Fans and Interlocks

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/12/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/12/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** CCS

**CATEGORY:** SYSTEM

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

OP-008-004

05

03

04/04/2002

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

3.5-022-K4.04

2.8

3.1

WLP-OPS-CCS00

5

### QUESTION

One of the automatic functions associated with the Control Element Drive Mechanism Fans is \_\_\_\_\_.

- A. Starting when the Reactor Trip Breakers are closed in.
- B. Stopping when a Containment Isolation Actuation Signal occurs.
- C. Starting when the EDG Sequencer times out its load block.
- D. Stopping when a Safety Injection Actuation Signal occurs.

### ANSWER

D. Stopping when a Safety Injection Actuation Signal occurs.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 49  
**QUESTION ID:** 5984 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** Condensate and MFW  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/12/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/12/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** CD **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-902-008 12 00 04/12/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.4-056-K1.03 2.6\* 2.6 WLP-OPS-CD00 7  
 WLP-OPS-PPE08 9

### QUESTION

A Station Blackout concurrent with a loss of Emergency Feedwater Pump AB has occurred. Steam Generator levels are approaching 55% WR when the 6.9KV Bus 1A is re-energized. The CRS directs restoring SG Inventory. Given current plant conditions, how will this be accomplished?

- A. Restore available feedwater path and use Auxiliary Feedwater Pump.
- B. Depressurize one Steam Generator to less than 500 psia and use Condensate Pump A.
- C. Verify Main Feedwater Pump A DC Oil Pump running and use Main Feedwater Pump A.
- D. Initiate Emergency Feedwater Actuation Signal #1 and use Emergency Feedwater Pump A.

### ANSWER

- B. Depressurize one Steam Generator to less than 500 psia and use Condensate Pump A.

### COMMENTS

Per OP-902-008, HR-2, step 40 (page 190). A is wrong because AFW pump is powered by the 1B bus. C is wrong because the MFWP cannot be restarted without the 2A bus. D is wrong because EFW A is powered by the 3A bus.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 50

QUESTION ID: 5985 - STATUS: Revision LAST USED  
 DESCRIPTION: CD Pump A Valve and CWD  
 AUTHOR: dvince1 REVISION 1 REVISION DATE 06/12/2002  
 APPROVAL: APPROVAL DATE:  
 REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 06/12/2002  
 TYPE: Multiple Choice TIME: 5 POINTS: 1  
 QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE  
 SPECIAL REFERENCES: X SIMULATOR SETUP  
 PLANT SYSTEM: CWD CATEGORY: ADMIN  
 REFERENCE: REVISION: CHANGE: DATE:  
 NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE  
 2-1-24 2.8 3.1 W-3-LP-OPS-CWD00 5

### QUESTION

Using CWD 1372, determine which ONE of the following is FALSE concerning the Condensate Pump A Discharge Valve.

- A. The limit switch contact “b%” is open until the valve is greater than 20% open.
- B. The annunciator panel referenced for this CWD is Panel F.
- C. This valve can only be opened and closed locally.
- D. The valve number is CD-144A.

### ANSWER

- A. The limit switch contact “b%” is open until the valve is greater than 20% open.

### COMMENTS

Provide CWD 1372 as a reference.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 51  
**QUESTION ID:** 5986 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** MFW Pump Trips **A**  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/12/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/12/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** FWP **CATEGORY:** SYSTEM  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-003-033 00 02 01/08/2002  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.4-059-K4.16 3.1\* 3.2\* W-3-LP-OPS-FWP00 6

### QUESTION

The plant has downpowered to 45% for repairs to Heater Drain Pumps. Condensate Pump C has been secured for tagging. The crew is briefing securing Main Feedwater Pump A. Condensate Pump B trips. What is the status of the Main Feedwater Pumps? (Assume Feedwater Suction Pressure is adequate.)

- A. Both Main Feedwater Pumps are tripped.
- B. Main Feedwater Pump B is tripped.
- C. Main Feedwater Pump A is tripped.
- D. Both Main Feedwater Pumps are running.

### ANSWER

- D. Both Main Feedwater Pumps are running.

### COMMENTS

This trip is only active when <39% Power.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 52

**QUESTION ID:** 5987 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** FW Pumps and Power Levels

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/12/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/12/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** FWP

**CATEGORY:** SYSTEM

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

OP-010-003

01

02

04/03/2002

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

3.4-059-A1.03

2.7\*

2.9\*

WLP-OPS-PPN01

3

### QUESTION

The plant is starting up and has now reached 1% power. Based on this power level, which ONE of the following would be the next action taken by the crew?

- A. Complete Critical Data Logsheet.
- B. Manually remove High Log Power Level Trip Bypasses.
- C. Start a Main Feedwater Pump.
- D. Place COLSS in service.

### ANSWER

C. Start a Main Feedwater Pump.

### COMMENTS

Note – critical data taken at 5 E-4%, High Log Power Level Trip is bypassed at 0.257%, and COLSS is placed in service at 15%.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				



## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 53  
**QUESTION ID:** 5988 - **STATUS:** Revision **LAST USED**  
**A**  
**DESCRIPTION:** EFW and inventory  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/12/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/12/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** EFW **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-902-006 09 00 04/12/2001  
 OP-902-009 01 00 12/16/1999  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.4-061-K1.07 3.6 3.8 WLP-OPS-EFW00 5

### QUESTION

---

The crew has diagnosed to OP-902-006, Loss of Main Feedwater Recovery. All Emergency Feedwater Pumps actuated as required. Steam Generator levels are being maintained 50-70% Narrow Range using EFW in manual. While performing Safety Function Status Checks, the STA notes that the Condensate Storage Pool is 14% level. What action should the crew take for this information?

- A. Start the Auxiliary Feedwater Pump to supply feedwater.
- B. Ensure EFW in automatic and allow level to control at 68-71% Wide Range.
- C. Align one train of ACCW to the suction of the EFW pumps.
- D. Verify Condensate Storage Pool automatic makeup is functioning correctly.

### ANSWER

---

- C. Align one train of ACCW to the suction of the EFW pumps.

### COMMENTS

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Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 54

**QUESTION ID:** 5989 - **STATUS:** Revision **LAST USED**

A

**DESCRIPTION:** Loss of EFW Pumps & TS

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/12/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/12/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:** X

**SIMULATOR SETUP**

**PLANT SYSTEM:** EFW

**CATEGORY:** ADMIN

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

3.4-061-K6.02

2.6

2.7

WLP-OPS-EFW00

9

### QUESTION

The plant is at 100% power. Emergency Feedwater Pump A is tagged out for maintenance. An overcurrent relay on Emergency Feedwater Pump B trips causing the pump to be inoperable. Based on this, which action should be taken?

- A. Enter TS 3.7.1.2d
- B. Enter TS 3.7.1.2e
- C. Enter TS 3.7.1.2f
- D. Enter TS 3.0.3

### ANSWER

- A. Enter TS 3.7.1.2d

### COMMENTS

Provide copy of TS 3.7.1.2

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 55

**QUESTION ID:** 5990 - **STATUS:** Revision **LAST USED**

A

**DESCRIPTION:** LWM and Waste Gas Vent Header

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/12/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/12/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** GWM **CATEGORY:** SYSTEM

LWM

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**

3.9-068-K1.02 2.5 2.6 W-3-LP-OPS-LWM00 3

### **QUESTION**

---

The Liquid Waste Management System interfaces with the Gaseous Waste Management System via the

- A. Gas Surge Header
- B. Gas Analyzer
- C. Vent Gas Collection Header
- D. Gas Surge Tank

### **ANSWER**

---

C. Vent Gas Collection Header

### **COMMENTS**

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Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 56

**QUESTION ID:** 5991 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** GWM and Ventilation

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/12/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/12/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** GWM

**CATEGORY:** SYSTEM

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

3.9-071-K3.04

2.7

2.9

WLP-OPS-GWM00

1

WLP-OPS-RMS

3

### QUESTION

The PNPO is venting the Volume Control Tank to the Gas Surge Tank. The packing for GWM-501, Gas Surge Tank Drain Isolation, blows out. Assuming the airborne radioactivity in the RAB reaches the alarm setpoint for the Plant Stack and HVAC Duct PIG D radiation monitors, which one of the following describes the status of the RAB Ventilation Systems?

- A. CVAS Fans will be running.
- B. RAB Normal Exhaust Fan will be tripped.
- C. SBV Fans will be running.
- D. RAB Ventilation Systems will not change.

### ANSWER

- D. RAB Ventilation Systems will not change.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 57  
**QUESTION ID:** 5992 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** GWM and releases  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/12/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/12/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** X **SIMULATOR SETUP**  
**PLANT SYSTEM:** GWM **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-007-003 14 00 01/11/2002  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.9-071-A4.06 2.8 3.3 WLP-OPS-GWM00 11

### QUESTION

Chemistry has sent the Gaseous Waste Release Permit to the Control Room for discharging Gas Decay Tank A. The CRS asks you to verify Meteorological Conditions are suitable for discharging the Gas Decay Tank. The PMC shows the following Meteorological Data information:

- Wind Speed is 2.5 m/s.
- Wind Direction is 50 degrees
- Delta T is 1.43 degrees C
- Air Temperature is 28.5 degrees C
- Sigma Theta is 13.9 degrees

Based upon the above information, the following is the status of the requirements to discharge the Gas Decay Tank:

- A. Avoid Batch Gaseous Releases
- B. No Meteorological Restrictions on Gaseous Releases
- C. Releases Permitted for Stability Classes A-E.
- D. No release is permitted.

### ANSWER

B. No Meteorological Restrictions on Gaseous Releases

### COMMENTS

Give copy of OP-007-003, Gaseous Waste Management System, Attachment 11.5, Meteorological Conditions Requirements

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 58  
**QUESTION ID:** 5993 - **STATUS:** Revision **LAST USED**  
**A**  
**DESCRIPTION:** HVF and ARM  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/12/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/12/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** X **SIMULATOR SETUP**  
**PLANT SYSTEM:** ARM **CATEGORY:** ADMIN  
 HVF  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 TRM 3.3.3  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.7-072-K1.03 3.6\* 3.7\* w-3-lp-ops-hvf00 7

### QUESTION

I&C Maintenance wants to perform a calibration check on ARM-IRE-0300.1s, Fuel Handling Building Isolation Radiation Monitor. The other 3 FHB Isolation Radiation Monitors will be unaffected. Using the applicable sections of the Technical Requirements Manual, determine what action should be taken.

- A. No action required.
- B. Adjust Radiation Monitor Channel alarm/trip setpoint within 4 hours.
- C. Start the opposite Fuel Handling Building Emergency Filtration Train.
- D. Suspend movement of fuel within the Spent Fuel Pool.

### ANSWER

A. No action required.

### COMMENTS

Provide copy of TRM 3.3.3.1 and TRM 3.9.12.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 59

**QUESTION ID:** 5994 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** HVC and ARM  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/12/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/12/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** ARM **CATEGORY:** SYSTEM  
 HVC  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-901-401 00 01 08/06/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.7-072-A3.01 2.9\* 3.1 W-3-LP-OPS-HVC00 2  
 WLP-OPS-RMS 2

### QUESTION

The crew is performing OP-903-051, Control Room Emergency Filtration Unit Operability Check, for Train A. Control Room Emergency Filtration Unit A has been running for 3 hours. Maintenance is doing an inspection of CROAIs and accidentally actuates ARM-IRE-0200.1, CROAI A North Radiation Monitor. Which one of the following will be TRUE about Control Room Ventilation?

- A. Control Room Emergency Filtration Unit B will be running.
- B. Control Room Normal Ventilation Fans will be tripped.
- C. Control Room Toilet Exhaust Fans will be tripped.
- D. Kitchen/Conference Room Exhaust Fan will be running.

### ANSWER

- C. Control Room Toilet Exhaust Fans will be tripped.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-1		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 60  
**QUESTION ID:** 5995 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** RCS and TS 3.4.1.3  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/12/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/12/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** X **SIMULATOR SETUP**  
**PLANT SYSTEM:** RCS **CATEGORY:** ADMIN  
 TS  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 TS 3.4.1  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.4-002-K6.02 3.6 3.8 W-3-LP-OPS-RCS00 8

### **QUESTION**

---

The plant is in Mode 4. Reactor Coolant Pump 1A and SDC Train A are running. SDC Train B and RCP 2A are out of service. A Loss of Offsite Power occurs. Both Emergency Diesels start and re-energize the safety busses. SDC Train A is verified running. In relation to the Reactor Coolant System Technical Specifications, what is the applicable action for this event?

- A. Immediately initiate corrective action and be in Mode 5 within twenty-four hours.
- B. Suspend all operations involving a reduction in boron concentration.
- C. No action required for up to one hour as long as no operations causing dilution occur.
- D. Ensure Pressurizer Level is greater than 26% (900 cubic feet).

### **ANSWER**

---

- A. Immediately initiate corrective action and be in Mode 5 within twenty-four hours.

### **COMMENTS**

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Provide copy of TS 3.4.1.3

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-2		New
Question History				



## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 61  
**QUESTION ID:** 5996 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** ESF Bypasses  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/12/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/12/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPS **CATEGORY:** SYSTEM  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-010-003 01 02 04/03/2002  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.2-006-K4.21 4.1 4.3 WLP-OPS-PPS00 4

### QUESTION

The plant is shutdown and in Mode 5. A plant heatup is commenced. Which of the following is FALSE concerning the RPS/ESFAS Pressurizer Pressure Bypass on CP-7.

- A. It is operated using a key switch.
- B. This bypass must be manually removed when RCS Pressure is greater than 500 PSIA.
- C. Can be operated from LCP-43, Remote Shutdown Panel.
- D. Cannot be enabled until Pressurizer Pressure is less than 400 PSIA.

### ANSWER

B. This bypass must be manually removed when RCS Pressure is greater than 500 PSIA.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 62

**QUESTION ID:** 5997 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** OP-901-120 and loss of all Pzr Heaters  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/12/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/12/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPO **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-901-120 02 02 02/23/2000  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.3-010-K6.03 3.2 3.6 W-3-LP-OPS-PPO10 4

### QUESTION

In the event that all Pressurizer Heaters are lost and cannot be immediately restored, OP-901-120, Pressurizer Pressure Control Malfunction, requires shifting the Pressurizer Level Setpoint Source from Reactor Regulating System (RRS) to CP-2 (RTGB). What is the purpose of this action?

- A. Ensures Pressurizer can be maintained at upper band until heaters repaired.
- B. RRS will not control Pressurizer Level correctly with all Pressurizer Heaters failed.
- C. Defeats the Pressurizer Level input into the Pressurizer Pressure Controller.
- D. Allows maintaining Pressurizer Level constant during required plant shutdown.

### ANSWER

- D. Allows maintaining Pressurizer Level constant during required plant shutdown.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 63

**QUESTION ID:** 5998 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** Pzr Level Control and Loss of Charging Pumps  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/12/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/12/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPO **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-901-112 02 03 10/18/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.2-011-A2.04 3.5 3.7 W-3-LP-OPS-PPO10 6

### QUESTION

A large leak has occurred in the Charging Pump Discharge Header and flow cannot be established through the normal Charging Pump discharge path. The crew enters OP-901-112, Charging or Letdown Malfunction, and will restore Charging flow by aligning the Charging Header to HPSI and:

- A. Starting HPSI Pump A and aligning SI-506A, HPSI Hot Leg Injection Flow Control Valve.
- B. Starting HPSI Pump A and aligning any HPSI Cold Leg Injection Valve.
- C. Aligning SI-506A, HPSI Hot Leg Injection Flow Control Valve and starting any Charging Pump.
- D. Aligning any HPSI Cold Leg Injection Valve and starting any Charging Pump.

### ANSWER

- D. Aligning any HPSI Cold Leg Injection Valve and starting any Charging Pump.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 64

**QUESTION ID:** 5999 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** RCS Inventory in OP-902-000

**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/12/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/12/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** PPE **CATEGORY:** PROCEDURE

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

OP-902-000 09 00 02/12/2001

OI-038-000 01 01 08/23/2001

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**

2-4-1 4.3 4.6 WLP-OPS-PPE01 11

### QUESTION

The reactor was tripped due to a lube oil emergency on RCP 1A. The crew is carrying out OP-902-000, Standard Post Trip Actions. The PNPO notes that the Reactor Regulating System Hot Leg Indicator, RC-ITI-0111X, has failed high and Pressurizer Level setpoint is high also. The PNPO reports this and that all charging pumps are running. Pressurizer level is approaching 60%. What should the crew do about this failure?

- A. Take no action until Standard Post Trip Actions are completed.
- B. Enter OP-901-110, Pressurizer Level Control Malfunction, and perform concurrently with OP-902-000.
- C. Place the Pressurizer Level Controller in manual and adjust Pressurizer Level as needed.
- D. Secure two charging pumps by placing their control switches to Off.

### ANSWER

- C. Place the Pressurizer Level Controller in manual and adjust Pressurizer Level as needed.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 65  
**QUESTION ID:** 6000 - A **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** PPS Trips  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/16/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/16/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPS **CATEGORY:** SYSTEM  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-009-007 05 01 02/08/2001  
 TS 3.3.1  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.7-012-A3.06 3.7 3.7 WLP-OPS-PPS00 9  
 WLP-OPS-TS04 1

### QUESTION

The plant is at 100%. CPC A LPD and DNBR bistables are in bypass for I&C Maintenance. I&C will be causing these bistables to trip and reset. While this is going on, CPC B fails and trips its LPD and DNBR bistables. What actions should the crew take as a result of this event? Assume I&C cannot restore CPC A within the next 2 hours.

- A. Bypass CPC B LPD and DNBR bistables within 1 hour.
- B. Remove CPC A bistables from bypass and bypass CPC B bistables within 1 hour.
- C. Perform a warm restart of CPC B within 1 hour.
- D. Place CPC B LPD and DNBR bistables in trip within 1 hour.

### ANSWER

D. Place CPC B LPD and DNBR bistables in trip within 1 hour.

### COMMENTS

Provide copy of TS 3.3.1. Based upon actual event in plant.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehensive or Analysis		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 66

**QUESTION ID:** 6001 - **STATUS:** Revision **LAST USED**

**DESCRIPTION:** Rod Bottom Lights & Immediate Operator Actions

**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/16/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/16/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** CED **CATEGORY:** SYSTEM

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
3.1-014-K4.03 3.2 3.4 W-3-LP-OPS-CED00 17

### QUESTION

The plant is at 100% power when CEA #1 drops into the core. The crew enters OP-901-102, CEDMCS or CEA Malfunction, and are performing a downpower brief. After the brief is completed, the PNPO notes that CEA #2 rod bottom light is now illuminated and CEA #2 is indicating zero inches on CP-2 but the Lower Electrical Limit is not illuminated. A lamp test verifies LEL is functioning. The CEAC CRT for CEAC #1 on CP-2 shows CEA #2 inserted with a dotted line. Based on this information the crew should:

- A. Continue the downpower.
- B. Trip the reactor.
- C. Evaluate Technical Specification 3.1.3.2, CEA Position Indicating Channels.
- D. Enter OP-901-102, subsection E5, CEA Position Indication Malfunction, and perform concurrently.

### ANSWER

- B. Trip the reactor.

### COMMENTS

The rod bottom light comes off a different set of switches than the RSPT. Also, it resets the pulse counters.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 67

**QUESTION ID:** 3475 - **STATUS:** Approved **LAST USED**  
**DESCRIPTION:** T-Cold failed low  
**AUTHOR:** NRC **REVISION** 0 **REVISION DATE** 01/06/1995  
**APPROVAL:** tbrown **APPROVAL DATE:** 01/11/1995  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/16/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE** X  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** RR **CATEGORY:** SYSTEM  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.7-016-A2.01 3.0\* 3.1\* W-3-LP-OPS-RR00 5

### QUESTION

The following conditions exist:

The plant is at 100% power

The selected control channel T-Cold fails LOW

Select the correct response of calculated Delta-T power as a result of this failure.

- A. Tavg lowers, Delta-T power lowers.
- B. Tavg increases, Delta-T power rises.
- C. Tavg lowers, Delta-T power rises.
- D. Tavg rises, Delta-T power lowers.

### ANSWER

C. Tavg lowers, Delta T rises.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-2		Bank
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 68

**QUESTION ID:** 6002 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** Containment Spray & Containment Sump Level

**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/16/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/16/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** CS **CATEGORY:** SYSTEM

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
3.5-026-A1.03 3.5 3.5 WLP-OPS-CS00 1

### QUESTION

Which ONE of the following ensures adequate suction for the Containment Spray Pumps following a Recirculation Actuation Signal (RAS)?

- A. Trisodium Phosphate Dodecahydrate baskets in Containment Sump.
- B. Open throat nozzles in Containment Discharge line.
- C. Mesh screens in Containment Sump.
- D. Shutdown Cooling Heat Exchanger.

### ANSWER

C. Mesh screens in Containment Sump.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-2		New
Question History				



## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 69

QUESTION ID: 4118 - A STATUS: Approved LAST USED

DESCRIPTION: Auto closure of CAP-101 (NRC SRO EXAM 95)

AUTHOR: NRC REVISION 0 REVISION DATE 01/15/1996

APPROVAL: tbrown APPROVAL DATE: 02/07/1996

REFERENCE VERIFIED: dvince1 VERIFICATION DATE: 06/16/2002

TYPE: Multiple Choice TIME: 5 POINTS: 1

QUIZ ONLY: CLOSED REFERENCE: X OPEN REFERENCE X

SPECIAL REFERENCES: SIMULATOR SETUP

PLANT SYSTEM: HVR CATEGORY: SYSTEM

REFERENCE: REVISION: CHANGE: DATE:

NRC KA NUMBER: RO SRO TRAINING MATERIAL: OBJECTIVE

3.8-029-K4.03 3.2 3.5 W-3-LP-OPS-HVR00 1

### QUESTION

Given the following:

- The plant is at 100% power
- A containment purge is in progress per OP-002-010, “RAB HVAC and Containment Purge”
- RAB Vent Mode selector switch is in “Containment Purge”

WHICH ONE (1) of the following will AUTOMATICALLY close containment air purge (CAP) inlet damper CAP-101?

- A. CAP Exhaust valves CAP-203, 204, and 205 reach greater than 52° OPEN
- B. A Hi (ALERT) alarm actuates on ARM-IRI-5024S (Containment Purge Isolation Area Rad Monitor)
- C. Containment pressure is at -6.0 inches water below atmospheric
- D. RAB normal exhaust flow decreases to 62,000 scfm

### ANSWER

- D. RAB normal exhaust flow decreases to 62,000 scfm

### COMMENTS

Used on 1995 NRC SRO Exam.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-2		Bank
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 70

**QUESTION ID:** 6003 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** Spent Fuel Pool Cooling

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/16/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/16/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** FS

**CATEGORY:** PROCEDURE

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

OP-002-006

15

06

04/13/2002

OP-901-513

02

00

06/02/1998

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

3.8-033-K3.03

3

3.3

W-3-LP-OPS-FS00

4

### QUESTION

The Spent Fuel Pool is on Purification and Spent Fuel Pool Pump A is running. A leak occurs in the Fuel Pool Purification Pump suction line. If no action is taken, all of the following will occur due to the leak EXCEPT?

- A. Rising Spent Fuel Pool Temperature
- B. Spent Fuel Pool Pump A trip
- C. Uncovery of Spent Fuel Bundles
- D. Fuel Pool Purification Pump trip

### ANSWER

C. Uncovery of Spent Fuel Bundles

### COMMENTS

Siphon breakers prevent uncovery of spent fuel bundles

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 71  
**QUESTION ID:** 6004 - A **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** SG & ESF  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/16/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/16/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** EFW **CATEGORY:** SYSTEM  
 SG  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.4-035-K1.14 3.9 4.1 WLP-OPS-EFW00 2

### QUESTION

The plant has been tripped due to a loss of both Main Feedwater Pumps. Emergency Feedwater Actuation Signals 1 and 2 have actuated. Currently, both Steam Generators are 25% Narrow Range and dropping slowly. If Steam Generator #1's Wide Range level indication on the A side was to fail to 50% WR, which ONE of the following describes the EFW Flow Control Valve Train A alignment to SG #1?

- A. EFW Flow Control Valve would open to maintain 200 GPM.
- B. EFW Flow Control Valve would open to maintain 400 GPM.
- C. EFW Flow Control Valve would open fully.
- D. EFW Flow Control Valve would not open.

### ANSWER

- A. EFW Flow Control Valve would open to maintain 200 GPM.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 72

**QUESTION ID:** 6005 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** SG & Tube Rupture  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/16/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/16/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** SG **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OI-038-000 01 01 08/23/2001  
 OP-902-007 10 00 04/12/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.4-035-A4.06 4.5 4.6 WLP-OPS-PPE07 8

### QUESTION

A Steam Generator Tube Rupture with a concurrent loss of offsite power has occurred. Following the rapid cooldown to 520°F Thot, which ONE of the following actions dealing with the isolation step is TRUE?

- A. Isolate the affected Steam Generator by initiating Main Steam Isolation Signal.
- B. If both Steam Generators have activity, isolate the one with the highest Wide Range level.
- C. Although Blowdown valves fail close on a loss of power, the switches should be aligned to close.
- D. The Atmospheric Dump Valve should be placed in manual and closed.

### ANSWER

- C. Although Blowdown valves fail close on a loss of power, the switches should be aligned to close.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 73

**QUESTION ID:** 6006 - **STATUS:** Revision **LAST USED**

**DESCRIPTION:** Malfunctioning ADV

**AUTHOR:** dvincl

**REVISION** 1 **REVISION DATE** 06/16/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvincl

**VERIFICATION DATE:** 06/16/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** MS

**CATEGORY:**

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

3.4-039-A2.04

3.4

3.7

W-3-LP-OPS-MS00

4

### QUESTION

A controller failure causes Atmospheric Dump Valve #2 to open fully. The operators begin running back the Main Turbine to compensate for the failure. What amount of power should the operators expect to remove?

- A. 2.5%
- B. 5.0%
- C. 7.5%
- D. 10%

### ANSWER

B. 5.0%

### COMMENTS

A rewrite of question # 273B

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-2		Modified Bank
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 74

**QUESTION ID:** 6007 - **STATUS:** Revision **LAST USED**

**DESCRIPTION:** Offsite Power sources

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/16/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/16/2002

**TYPE:** Multiple Choice

**TIME:** 5 **POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X **OPEN REFERENCE**

**SPECIAL REFERENCES:** X

**SIMULATOR SETUP**

**PLANT SYSTEM:** ED  
TS

**CATEGORY:** ADMIN

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

TS 3.8.1

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**

3.6-062-K1.04 3.7 4.2 WLP-OPS-TS04 1

### QUESTION

The plant is at 50% power. Startup Transformer A is tagged out for repair. Technical Specification 3.8.1.1a has been entered and the OP-903-066, Electrical Breaker Alignment Check, was completed 2 hours ago. While this is being worked on, the EDG System Engineer calls and states that the last surveillance run on EDG B showed that the air receivers did not function as required. The System Engineer states that EDG B should be considered inoperable. The SM declares EDG B inoperable. Based on this information, what action should be taken?

- A. Run EDG A within 8 hours.
- B. Restore Startup Transformer to operability within 12 hours.
- C. Be in Hot Standby in the next 2 hours.
- D. Restore EDG B to operability within 72 hours.

### ANSWER

- B. Restore Startup Transformer to operability within 12 hours.

### COMMENTS

Give a copy of TS 3.8.1.1.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 75

**QUESTION ID:** 6008 - **STATUS:** Revision **LAST USED**

A

**DESCRIPTION:** Loss of DC Battery AB

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/16/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/16/2002

**TYPE:** Multiple Choice

**TIME:** 5 **POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X **OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** DC

**CATEGORY:** SYSTEM

**REFERENCE:** OP-901-313

01

**CHANGE:** 04

**DATE:** 06/14/2001

**NRC KA NUMBER:** 3.6-063-K2.01

**RO** 2.9\*

**SRO** 3.1\*

**TRAINING MATERIAL:** W-3-LP-OPS-PPO30

**OBJECTIVE** 4

### QUESTION

A loss of Battery AB bus will cause all of the following EXCEPT?

- A. CCW Pump AB cannot be started nor aligned to replace CCW Pump A.
- B. If EFW AB Pump is running, it will roll to a stop due to steam isolations failing closed.
- C. If EFW AB Pump is running it will overspeed due to failure of governor valve.
- D. Manual control of the 31 AB Bus breakers is lost.

### ANSWER

- B. If EFW AB Pump is running, it will roll to a stop due to steam isolations failing closed.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 76

**QUESTION ID:** 6009 - **A**      **STATUS:** Revision      **LAST USED**

**DESCRIPTION:** EDG Automatic Starts

**AUTHOR:** dvince1

**REVISION** 1      **REVISION DATE** 06/16/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/16/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** EDG

**CATEGORY:** SYSTEM

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

3.6-064-A3.01

4.1

4

W-3-LP-OPS-EDG00

2

### QUESTION

Which ONE of the following is TRUE about the Emergency Diesel Generator 'A' Air Compressors?

- A. Both are required to be operable to maintain the EDG operable.
- B. Both are powered from the non-safety side of their respective MCCs.
- C. Both automatically start on a SIAS or Undervoltage signal.
- D. Both have receivers that contain enough air for five EDG starts each.

### ANSWER

D. Both have receivers that contain enough air for five EDG starts each.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-2		New
Question History				



## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 77

**QUESTION ID:** 1996 - **STATUS:** Approved **LAST USED**  
A

**DESCRIPTION:** Auto actions on high alarm CW Rad. Monitor  
**AUTHOR:** TPM **REVISION** 0 **REVISION DATE** 08/05/1991  
**APPROVAL:** rfletch **APPROVAL DATE:** 11/25/1997  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002  
**TYPE:** MULTIPLE CHOICE **TIME:** 2 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE** X  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** BD **CATEGORY:** SYSTEM  
RMS  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
OP-003-010 16 02 08/21/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
3.7-073-K4.01 4 4.3 W-3-LP-OPS-BD00 2

### QUESTION

While discharging Blowdown to Circ Water, the Blowdown Radiation Monitor Alarms (high) with the Activity reading continuing to rise slowly. Five minutes later the Circ Water Radiation Monitors Alarms. Which of the following best describes the automatic action, which should have occurred.

- A. BD-303, Blowdown to Circ Water and Metal Waste Pond Isolation valve, auto closes when the BLOWDOWN Radiation Monitor High Alarm is received.
- B. BD-303, Blowdown to Circ Water and Metal Waste Pond Isolation Valve, auto closes when the CIRC Water Radiation Monitor High Alarm is received.
- C. BD-303, Blowdown to Circ Water and Metal Waste Pond Isolation Valve, auto closes with HIGH CIRC Water Radiation providing the operator places the key switch to close position.
- D. BD-303 Blowdown to Circ Water and Metal Waste Pond Isolation Valve, auto closes when the Circ Water Radiation ALERT Alarm is received.

### ANSWER

B. BD-303, Blowdown to Circ Water and Metal Waste Pond Isolation Valve, auto closes when the CIRC Water Radiation Monitor High Alarm is received.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-2		Bank
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 78

**QUESTION ID:** 6010 - **STATUS:** Revision **LAST USED**

**DESCRIPTION:** CW Pumps Start limitations

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/17/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/17/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** CW

**CATEGORY:** PROCEDURE

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

OP-003-006

11

06

06/05/2002

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

2-1-20

4.3

4.2

WLP-OPS-CW00

8

### QUESTION

The crew is starting up the Circulating Water System. The River Water Supply Pump is running. Circ Water Pump B has been started and is running normally. The CRS directs starting Circ Water Pump A and C. Which of the following describes starting these Circ Water Pumps?

- A. The River Water Supply Pump must be stopped prior to starting the second Circ Water Pump.
- B. The second Circ Water Pump will start as soon as the control switch is taken to start.
- C. The third Circ Water Pump may be started once the white Hold Light of the second Circ Water Pump extinguishes.
- D. Three Condenser Waterboxes are required to be in service prior to starting the third Circ Water Pump.

### ANSWER

- C. The third Circ Water Pump may be started once the white Hold Light of the second Circ Water Pump extinguishes.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 79

**QUESTION ID:** 6011 - A **STATUS:** Revision **LAST USED**

**DESCRIPTION:** Fire Protection and Fire Doors

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/17/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/17/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** FPP

**CATEGORY:** ADMIN

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

FP-001-015  
TRM 3.7.11

17

00

05/28/2002

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

3.8-086-A1.03

2.7

3.2\*

W-3-LP-OPS-FP00

5

### **QUESTION**

While making watchstation rounds, the RCA watch reports that Door 171, -35 RAB Access to SI Pump Room A, has a broken door latch and will not close. Based on this information, the crew should declare Door 171 inoperable and:

- A. Declare Controlled Ventilation Area System Trains A Inoperable.
- B. Establish a continuous fire watch.
- C. Verify Door 170, -35 RAB Access to SI Pump Room A, operable by testing CVAS system.
- D. Log SI Pump Room A air temperatures at least once per hour.

### **ANSWER**

- C. Verify Door 170, -35 RAB Access to SI Pump Room A, operable by testing CVAS system.

### **COMMENTS**

Give copy of TRM 3.7.11, TS 3.7.7, and Attachment 8.4 & 8.5 of FP-001-015.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-2		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 80  
**QUESTION ID:** 6012 - **STATUS:** Revision **LAST USED**  
**A**  
**DESCRIPTION:** SDC and Nil Ductility  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/17/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** SDC **CATEGORY:** SYSTEM  
 TYH THEORY  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.4-005-K5.01 2.6 2.9 W-3-LP-OPS-SI00 1  
 WLP-OPS-TYH10 12

### QUESTION

In Mode 5 with RCS Loops filled, the plant is protected from brittle fracture events by ensuring:

- A. Reactor Coolant Pumps all de-energized.
- B. Shutdown Cooling Suction Header Relief valves are aligned for service.
- C. Pressurizer level is less than 33% full.
- D. Steam Generator temperature is at least 100°F above the RCS Temperature.

### ANSWER

B. Shutdown Cooling Suction Header Relief valves are aligned for service.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 81

**QUESTION ID:** 6013 - **STATUS:** Revision **LAST USED**

**DESCRIPTION:** Quench Tank Rupture disk

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/17/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/17/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** RCS

**CATEGORY:** SYSTEM

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

3.5-007-K3.01

3.3

3.6

W-3-LP-OPS-RCS00

6

### QUESTION

A Steam Generator Tube Rupture has occurred. The crew is taking actions in OP-902-007, Steam Generator Tube Rupture Recovery. Due to the CIAS, \_\_\_\_\_ is aligned to the Quench Tank and could eventually result in rising containment pressure.

- A. Reactor Vessel Gasket Leak Off
- B. Pressurizer Vent System
- C. Containment Vent Header
- D. RCP Control Bleedoff

### ANSWER

D. RCP Control Bleedoff

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 82

**QUESTION ID:** 4120 - **STATUS:** Approved **LAST USED**  
N

**DESCRIPTION:** Response of CCW pump AB and system with SIAS and LOOP

**AUTHOR:** bmather **REVISION** 1 **REVISION DATE** 06/29/1996

**APPROVAL:** tbrown **APPROVAL DATE:** 07/05/1996

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** CC **CATEGORY:** SYSTEM

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
3.8-008-A3.08 3.6\* 3.7\* W-3-LP-OPS-CC00 02, 05

### QUESTION

CCW pumps B and AB are operating. Although CCW pump AB is replacing A the AB bus is powered from the B-side. The "CCW pump A Unavailable" alarm is locked in. Which of the following describes the status of the CCW system in the event of a concurrent loss of offsite power and SIAS?

- A. CCW pumps B & AB running
- B. CCW pumps A & B running
- C. Only CCW pump B running
- D. All CCW pumps running

### ANSWER

- C. Only CCW pump B running

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-3		Bank
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 83

**QUESTION ID:** 6014 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** H2 Recombiners and ignition

**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/17/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** HRA **CATEGORY:** PROCEDURE

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
3.5-028-A2.02 3.5 3.9 W-3-LP-OPS-HRA00 1

### QUESTION

A Loss of Coolant Accident has occurred. The Hydrogen Analyzers were put in service and now show H2 concentration in Containment is 4%. What is the concern with this concentration?

- A. Corrosion
- B. Detonation
- C. Flammability
- D. Self Sustaining Reaction

### ANSWER

C. Flammability

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 84  
**QUESTION ID:** 6015 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** SBCS & RCS  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/17/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** SBC **CATEGORY:** SYSTEM  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
3.4-041-K1.05 3.5 3.6 W-3-LP-OPS-SBC00 3  
W-3-LP-OPS-SBC00 4

### QUESTION

The Steam Bypass Control System Permissive Signal uses \_\_\_\_\_ as a bias to enable the system to respond quickly to plant disturbances.

- A. Pressurizer Pressure
- B. RCS Temperature
- C. Steam Flow
- D. Secondary Pressure

### ANSWER

- A. Pressurizer Pressure

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-3		New
Question History				



## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 85  
**QUESTION ID:** 6016 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** Loading Turbine **A**  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/17/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** X **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPN **CATEGORY:** PROCEDURE  
 TUR  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-010-004 01 01 04/16/2002  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 2-1-32 3.4 3.8 W-3-LP-OPS-TUR00 9

### QUESTION

The plant is at 13% power. The Turbine is ready to roll. The HP Turbine 1<sup>st</sup> Stage Metal Temperature is 205 degrees F. MS Crossover Header Temperature is 250 degrees F. Governor End Bearing 1 Temperature is 115 degrees F. Using OP-010-004, Attachment 9.5, Turbine Startup, determine the acceleration rate, initial load, and hold time at initial load.

- A. 110 RPM, 58 MW and 50 minutes
- B. 180 RPM, 58 MW and 45 minutes
- C. 60 RPM, 58 MW and 55 minutes
- D. 180 RPM, 58 MW and 50 minutes

### ANSWER

- D. 180 RPM, 58 MW and 50 minutes

### COMMENTS

Give copy of OP-010-004, Attachment 9.5, Turbine Startup

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		2-3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 86  
**QUESTION ID:** 6017 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** ACCW **A**  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/17/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** ACC **CATEGORY:** SYSTEM  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-002-001 12 09 06/05/2002  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 3.4-076-A2.01 3.5\* 3.7\* W-3-LP-OPS-CC00 3

### QUESTION

Which ONE of the following signals/interlocks will trip a running Auxiliary Component Cooling Water pump?

- A. SIAS until loaded on Sequencer
- B. Low CCW Temperature
- C. Ground on ACCW Pump Breaker
- D. Low Dry Cooling Tower Basin Level

### ANSWER

C. Ground on ACCW Pump Breaker

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 87

**QUESTION ID:** 6028 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** Instrument Air Dryer Pressure setpoint

**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/21/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/21/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** AIR **CATEGORY:** SYSTEM

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
OP-003-016 10 02 03/20/2002

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
3.8-078-A3.01 3.1 3.2 WLP-OPS-AIR00 4

### QUESTION

The Instrument Air Dryers bypass at \_\_\_\_\_.

- A. 105 psig
- B. 100 psig
- C. 95 psig
- D. 90 psig

### ANSWER

C. 95 psig

### COMMENTS

Rewrite of question 2293A. Dave Vincent 6/20/02

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		2-3		Modified Bank
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 88

**QUESTION ID:** 6018 - **STATUS:** Revision **LAST USED**

**DESCRIPTION:** Conduct of Operations - NPO Responsibilities

**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/17/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** PPA **CATEGORY:** ADMIN

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

OP-100-001 18 02 03/23/2002

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**

2-1-1 3.7 3.8 WLP-OPS-EXP00 2

### QUESTION

In accordance with OP-100-001, Operations Standards and Management Expectations, the Nuclear Plant Operator has the responsibility to do all of the following EXCEPT:

- A. Authorize placement of Clearances in Mode 5 if designated by SM to do so.
- B. Manually trip the reactor if approaching an automatic trip setpoint.
- C. Take immediate actions in accordance with annunciator responses, abnormal and emergency procedures in order to return the unit to a safe condition.
- D. Take actions necessary to maintain unit parameters within Limiting Safety System Settings for normal operations.

### ANSWER

- B. Manually trip the reactor if approaching an automatic trip setpoint.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 89  
**QUESTION ID:** 6019 - **STATUS:** Revision **LAST USED**  
**A**  
**DESCRIPTION:** TS 3.0.3  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/17/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** TS **CATEGORY:** ADMIN  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 TS 3.0.3  
 TS 3.7.3  
 TS 3.7.4  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 2-1-12 2.9 4 WLP-OPS-TS02 6

### QUESTION

Plant is at 100% power. AB Bus is aligned to the B side. A relay failure causes Dry Cooling Tower B to bypass and the crew enters TS 3.7.4a. As soon as this action is completed, CCW Pump A trips on overcurrent. The crew enters OP-901-510, Component Cooling Water Malfunction, and aligns CCW Pump AB to replace CCW Pump A. What further action should the crew take?

- A. Enter TS 3.7.3.
- B. Enter cascading Tech Specs on Train A.
- C. Enter cascading Tech Specs for Train A and Train B.
- D. Enter TS 3.0.3.

### ANSWER

D. Enter TS 3.0.3.

### COMMENTS

Provide copies of TS 3.7.3 & 3.7.4. We do not cascade on two trains.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehensive or Analysis		3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 90  
**QUESTION ID:** 6020 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** Mode of Operation  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/17/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** TS **CATEGORY:** ADMIN  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 2-1-22 2.8 3.3 W-3-LP-OPS-TS00 3

### QUESTION

Hot Standby is defined as a Keff of \_\_\_\_\_ and an average coolant temperature of \_\_\_\_\_.

- A.  $< 0.99, 350^{\circ}\text{F} < T_{\text{avg}} > 200^{\circ}\text{F}$
- B.  $< 0.99, \geq 350^{\circ}\text{F}$
- C.  $< 0.99, \leq 200^{\circ}\text{F}$
- D.  $\geq 0.99, \geq 350^{\circ}\text{F}$

### ANSWER

B.  $< 0.99, \geq 350^{\circ}\text{F}$

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 91

**QUESTION ID:** 6021 - **STATUS:** Revision **LAST USED**  
A

**DESCRIPTION:** Clearance Procedure & MOVs

**AUTHOR:** dvince1

**REVISION** 1 **REVISION DATE** 06/17/2002

**APPROVAL:**

**APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1

**VERIFICATION DATE:** 06/17/2002

**TYPE:** Multiple Choice

**TIME:** 5

**POINTS:** 1

**QUIZ ONLY:**

**CLOSED REFERENCE:** X

**OPEN REFERENCE**

**SPECIAL REFERENCES:**

**SIMULATOR SETUP**

**PLANT SYSTEM:** PPA

**CATEGORY:** ADMIN

**REFERENCE:**

**REVISION:**

**CHANGE:**

**DATE:**

UNT-005-003

16

03

05/29/2002

**NRC KA NUMBER:**

**RO**

**SRO**

**TRAINING MATERIAL:**

**OBJECTIVE**

2-2-13

3.6

3.8

W-3-LP-OPS-CLR00

16

### QUESTION

Which ONE of the following is TRUE if a Motor Operated Valve is being tagged for isolation and must be manually closed?

- A. The Clearance's Tagged Position must be changed to "Manually Closed".
- B. The MOV must be manually stroked to prove operability.
- C. The System Engineer must concur with closing the MOV manually.
- D. The MOV should be manually cracked off its shut seat when clearing the Danger Tag.

### ANSWER

D. The MOV should be manually cracked off its shut seat when clearing the Danger Tag.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 92

**QUESTION ID:** 2395 - **STATUS:** Approved **LAST USED**  
A

**DESCRIPTION:** Actions for exceeding safety limit on RCS pressure

**AUTHOR:** mjesse **REVISION** 1 **REVISION DATE** 10/18/1994

**APPROVAL:** tbrown **APPROVAL DATE:** 10/26/1994

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002

**TYPE:** MULTIPLE CHOICE **TIME:** 1 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** TS **CATEGORY:** Procedure

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

TS 2.1.2

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**

2-2-22 3.4 4.1 W-3-LP-OPS-RCS00 8

### QUESTION

The plant is in Mode 3. The Primary Operator reports that Pressurizer Pressure indicates 2775 psia on all four safety channel meters. DETERMINE which of the following actions apply.

- A. Reduce pressure to less than 2750 psia within 1 hour, be in Hot Standby within 1 hour.
- B. Reduce pressure to less than 2750 psia within 5 minutes. Notify NRC as soon as possible not to exceed 1 hour.
- C. Be in Hot Standby within 1 hour. Notify NRC as soon as possible not to exceed 1 hour.
- D. Be in Hot Standby within the next 6 hours, be in Hot Shutdown within the following 6 hours, and be in Cold Shutdown within the subsequent 24 hours (TS 3.0.3).

### ANSWER

- B. Reduce pressure to less than 2750 psia within 5 minutes. Notify NRC as soon as possible not to exceed 1 hour.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		3		Bank
Question History				



## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 93

**QUESTION ID:** 6022 - **STATUS:** Draft **LAST USED**

A

**DESCRIPTION:** Refueling Procedures

**AUTHOR:** **REVISION** 0 **REVISION DATE** 06/17/2002

**APPROVAL:** **APPROVAL DATE:**

**REFERENCE VERIFIED:** **VERIFICATION DATE:**

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** RF **CATEGORY:** ADMIN

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
RF-001-001 09 00 12/12/2001

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
2-2-26 2.5 3.7 W-3-LP-OPS-REQ04 3

### QUESTION

During Refueling, the \_\_\_\_\_ has the authority to suspend Core Alterations.

- A. Fuel Handling Supervisor
- B. Fuel Handling Engineer
- C. Core Physics Monitor
- D. Refueling Contractor

### ANSWER

A. Fuel Handling Supervisor

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 94

**QUESTION ID:** 3445 - **B**      **STATUS:** Draft      **LAST USED**

**DESCRIPTION:** CNTMT building entries, areas designated as very high radiation areas

**AUTHOR:** bcoble      **REVISION** 0      **REVISION DATE** 04/02/1999

**APPROVAL:**      **APPROVAL DATE:**

**REFERENCE VERIFIED:** dvince1      **VERIFICATION DATE:** 06/17/2002

**TYPE:** Multiple Choice      **TIME:** 5      **POINTS:** 1

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

**SPECIAL REFERENCES:**      **SIMULATOR SETUP**

**PLANT SYSTEM:** PPA      **CATEGORY:** Oral Board  
Procedure

**REFERENCE:**      **REVISION:**      **CHANGE:**      **DATE:**

HP-001-213      11      02      06/06/2002

**NRC KA NUMBER:**      **RO**      **SRO**      **TRAINING MATERIAL:**      **OBJECTIVE**

2-3-10      2.9      3.3      W-3-LP-OPS-PPA01      2

### **QUESTION**

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The three areas where access is forbidden when the reactor is in Mode 1 in accordance with HP-001-213, Control of Reactor Containment Building Power Entries are:

- A. Safety Injection Sump, Containment Sump, and the Reactor Cavity
- B. Hot and Cold Leg “D” ring Wall penetrations, Safety Injection Sump, and the Reactor Cavity.
- C. Hot and Cold Leg “D” ring Wall penetrations, Containment Sump, and the Reactor Cavity.
- D. Hot and Cold Leg “D” ring Wall penetrations, Safety Injection Sump, and the Containment Sump

### **ANSWER**

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- C. Hot and Cold Leg “D” ring Wall penetrations, Containment Sump, and the Reactor Cavity.

### **COMMENTS**

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Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		3		Bank
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 95  
**QUESTION ID:** 6023 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** Hi Radiation Area  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/17/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 HP-001-107 14 02 03/06/2002  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 2-3-2 2.5 2.9 WLP-OPS-PPA00 3

### QUESTION

Entry into a High Radiation Area

- A. Requires Shift Manager and Radiation Protection Superintendent's permission.
- B. Will always be done with a Health Physics Escort.
- C. Can be exempted from RWP requirements if done under emergency conditions.
- D. Will need a key since these areas are always locked.

### ANSWER

- C. Can be exempted from RWP requirements if done under emergency conditions.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 96  
**QUESTION ID:** 6024 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** Containment Purge  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/17/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/17/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** CAP **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-002-010 14 00 12/06/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 2-3-9 2.5 3.4 W-3-LP-OPS-HVR00 8

### QUESTION

The plant has initiated Containment Purge to raise the Oxygen level in Containment. While doing the purge, the TGB watch reports that the portable barometer reading on the RAB roof is reading 29.85 INHG. The PMC shows that Containment to Ambient Differential Pressure is 11.3 INWC. The CRS asks you to calculate Containment Pressure IAW OP-903-001, Att 11.15, Containment Pressure Calculation. What pressure do you report?

- A. 15.15 PSIA
- B. 15.09 PSIA
- C. 15.06 PSIA
- D. 15.00 PSIA

### ANSWER

B. 15.09 PSIA

### COMMENTS

Must add 0.05 to the barometer reading. Provide copy of OP-903-001, Att 11.15, Containment Pressure Calculation.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehensive or Analysis		3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 97

**QUESTION ID:** 3520 - **STATUS:** Approved **LAST USED**  
A

**DESCRIPTION:** Determine which actuations have occurred based on indications

**AUTHOR:** NRC **REVISION** 0 **REVISION DATE** 01/06/1995

**APPROVAL:** tbrown **APPROVAL DATE:** 01/11/1995

**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/18/2002

**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1

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

**SPECIAL REFERENCES:** **SIMULATOR SETUP**

**PLANT SYSTEM:** PPE **CATEGORY:** PROCEDURE  
PPS

**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**

**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
2-4-2 3.9 4.1 W-3-LP-OPS-PPE01 11

### QUESTION

The following plant conditions exist:

- A feedline break has occurred inside containment.
- Containment pressure is 17.4 psia.
- Containment radiation levels are normal.
- PZR pressure is 1825 psia.
- RWSP level is 90%.
- S/G #1 is at 925 psia and 50% WR.
- S/G #2 is at 580 psia and 20% WR.

WHICH ONE (1) of the following groups of actuation signals should have occurred?

- A. SIAS, MSIS, CIAS, EFAS-1
- B. SIAS, MSIS, CIAS, EFAS-2
- C. SIAS, CIAS, CSAS, EFAS-1
- D. MSIS, CSAS, CIAS, EFAS-2

### ANSWER

- A. SIAS, MSIS, CIAS, EFAS-1

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Comprehension or Analysis		3		Bank
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 98  
**QUESTION ID:** 6025 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** Identifying Post Accident Instrumentation  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/18/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/18/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 2-4-3 3.5 3.8 WLP-OPS-MCD05 1

### QUESTION

At Waterford 3, Post Accident Monitoring Instrumentation is designated by:

- A. The instrument identification number (UNID) will have a "S" at the end of the number.
- B. An orange border around the nameplate.
- C. The instrument lettering is colored red.
- D. By location on the control panel.

### ANSWER

- B. An orange border around the nameplate.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 99  
**QUESTION ID:** 6026 - **STATUS:** Revision **LAST USED**  
**DESCRIPTION:** EOP Terms - Verifying SIAS initiation  
**AUTHOR:** dvince1 **REVISION** 1 **REVISION DATE** 06/18/2002  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/18/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** PPE **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OI-038-000 01 01 08/23/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 2-4-17 3.1 3.8 WLP-OPS-PPE08 9

### QUESTION

The CRS has asked you to verify SIAS Initiation, which one of the following should be checked?

- A. SIAS alarms and status lights.
- B. HPSI pump flow is acceptable.
- C. SIAS alarms, status lights, pump status and flow control valves open.
- D. Pumps status and flow control valves open.

### ANSWER

C. SIAS alarms, status lights, pump status and flow control valves open.

### COMMENTS

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		3		New
Question History				

## Waterford 3 Examination Question Examination Bank

**Examination Question Number** 100  
**QUESTION ID:** 5776 - **STATUS:** Draft **LAST USED**  
**A**  
**DESCRIPTION:** Immediate Operator Actions on Control Room Evacuation.  
**AUTHOR:** dcassid **REVISION** 0 **REVISION DATE** 06/21/2000  
**APPROVAL:** **APPROVAL DATE:**  
**REFERENCE VERIFIED:** dvince1 **VERIFICATION DATE:** 06/18/2002  
**TYPE:** Multiple Choice **TIME:** 5 **POINTS:** 1  
**QUIZ ONLY:** **CLOSED REFERENCE:** X **OPEN REFERENCE**  
**SPECIAL REFERENCES:** **SIMULATOR SETUP**  
**PLANT SYSTEM:** ADM **CATEGORY:** PROCEDURE  
**REFERENCE:** **REVISION:** **CHANGE:** **DATE:**  
 OP-901-502 06 02 01/03/2001  
**NRC KA NUMBER:** **RO** **SRO** **TRAINING MATERIAL:** **OBJECTIVE**  
 2-4-49 4 4 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. Verify SGFPs are in Reactor Trip Override.

### COMMENTS

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

Used on 2000 NRC SRO Initial Written Examination.

Cognitive Level	Tier-Group	RO	SRO	Question Source
Memory or Fundamental Knowledge		3		Bank
Question History	Used on 2000 NRC SRO Initial Written Examination			