		Level:	RO	SRO	
EXAMINATION OUTLINE CROSS-REFERENCE:		Tier#		2	
		Group # K/A#		3	
		Importance Rating		005-K5.09 3.4	
Proposed Overtiens	***************************************	importance Rainig	>	J.+	
Proposed Question:					
See Attached					
Proposed Answer: See attack	hed	4			
Explanation (Why the distractors are	e incorrect):				
A flow rate of 2800 gpm is required	during boron dilution.	The low flow alarm f	for the LPI pump is	2800 gpm.	
Technical Reference(s): T.S. 3.1	.1.2, Boron Dilution	Reference Attached:			
			(Attach if no previously previous		
			previously pr	ovided)	
		——————————————————————————————————————			
Proposed references to be provided t	o applicants during exan	nination:			
Learning Objective (As available):	OPS-GOP-431-01K				
Question Source:	Bank #				
	Modified Bank #		lote changes or attac	ch parent)	
	New	<u>X</u>			
Question History	Previous NRC Exam				
Question Thistory	Previous Quiz / Test	<del></del>			
Question Cognitive Level:	Memory or Fundamen		<del></del>		
	Comprehension or Ar	101y515 <u>A</u>			
10 CFR Part 55 Content:	55.41				
	55.43 <u>X</u>				
		3			
Comments (Why is it an upper level	question):				
The examinee needs to determine the	at the low flow alarm is l	ess than 2800 gpm s	o boron dilution is	required to be	
stopped per Tech. Spec. 3.1.1.2.					
	•				

# The following plant conditions exist:

- The plant is in Mode 5.
- Boron concentration of the RCS is being reduced for a startup.
- RCS temperature is 125°F.
- RCS pressure is 50 psig
- DH Pump 1 is in operation.
- The following annunciator has just come in alarm: 3-1-H, LP INJ 1 FLOW LO. Indicated Decay Heat System flow is 2700 gpm.

### Which one of the following actions should be taken?

- a. Stop DH Pump 1 and place DH Pump 2 in service from the BWST.
- b. Shift suction on DH Pump 1 to the BWST.
- c. Verify shutdown margin greater than  $1\% \Delta K/K$ .
- d. Close MU 39, Batch Flow Controller.

#### Answer:

d.

		Level:	RO	SRO
		Tier #		2
EXAMINATION OUTLINE CROSS-REFERENCE:		Group #		3
		K/A#	0	07-A3.01
		Importance Rating		2.9
Proposed Question: See Attached				
See / Ittached				<del></del>
Proposed Answer:	See attached			4
Explanation (Why the dis				
The quench tank can only	discharge to the RC drain tank.			
Technical Reference(s):	Dwg. OS-001A, Sht. 3		Reference At	
			(Attach if not previously pr	
Proposed references to be	provided to applicants during exan	nination:		
	browner or abbreviate married errors			
Learning Objective (As a	vailable): OPS-SYS-104-03K			
Question Source:	Bank #			
OLC-6463	Modified Bank #	X (Note	changes or attac	ch parent)
4	New		C	• /
Overtion History	Drawiova NDC Ever			
Question History	Previous NRC Exam Previous Quiz / Test			
Question Cognitive Level		ntal Knowledge X		
	Comprehension or A	nalysis		
10 CFR Part 55 Content:	55.41 <u>X</u> 55.43	2		
Comments (Why is it an u	nner level question):			
Comments (why is it air t	pper level question).			
				-

### **ORIGINAL**

## Question:

A small leak in the PORV results in a rising quench tank level. Quench tank level is normally controlled by discharging excess water to which one of the following destinations?

- a. RC drain tank
- b. Miscellaneous waste drain tank
- c. Containment normal sump
- d. Primary water storage tank

Answer:

a.

A leak in the PORV results in a increase in quench tank temperature and level. Quench tank level is normally controlled by discharging excess water to which one of the following?

- a. RC drain tank
- b. Miscellaneous waste drain tank
- c. Containment normal sump
- d. Clean waste receiver tank

#### Answer:

a.

		Level:		RO	SRO
		Tier#	•		2
EXAMINATION OUTLINE CROSS-REFEREN		Group #			3
		K/A#		008	-K4.02
		Importance Ra	iting		2.7
Proposed Question:					
See Attached					
		~			
Proposed Answer: See attached	d				
Explanation (Why the distractors are in	correct):				
a. Makeup header CC1460 isolates a	t 35".				
b. HPI pump comes off essential hear	der				
c. CTMT header isolates at 35".					
Technical Reference(s): DB-OP-02	523.02			Reference Attac	ched:
				(Attach if not	. 1 1
				previously prov	ided)
Proposed references to be provided to a	applicants during exan	nination:			
•					
Learning Objective (As available): Ol	PS-SVS-304-02K				
Question Source:	Bank #		OT 4 1		Δ.
	Modified Bank # New	X	(Note ch	anges or attach	parent)
	New				
Question History	Previous NRC Exam				
•	Previous Quiz / Test				
Question Cognitive Level:	Memory or Fundame				
	Comprehension or A	naiysis	<u>X</u>		
10 CFR Part 55 Content:	55.41 X				
10 Of R 1 art 33 Content.	55.43				
		v			
Comments (Why is it an upper level qu	estion):				
The examinee must be able to determine	e that Auxiliary Build	ling non-essentia	l header is	isolated at 45"	and it supplies
cooling to the waste gas compressor.	io mai raminary Band			isolated at 15	and it supplies

The following plant conditions exist:

- The plant is operating at 100% power.
- Annunciator Alarm 11-3-A, CCW SURGE TK LVL LO, has just come in.
- CCW surge tank level indicates 42 inches.

Which one of the following pieces of equipment would be of concern if operating?

- a. MU Pump 1
- b. HPI Pump 1
- c. RCP 1-1
- d. Waste Gas Compressor 1

Answer:

d.

		Level:	RO	SRO
	OSS-REFERENCE:	Tier #		2
EXAMINATION OUTLINE CRO		Group #		3
		K/A#		041-A3.02
		Importance Ra	ating	3.4
Proposed Question:				
See Attached				
See 7 ktdeffed		•		
Proposed Answer: See attache	d			
Explanation (Why the distractors are in	ncorrect):			
b. Reactor power will not increase.				
c. Steam pressure control remains at	870 psig.			
d. Steam pressure control remains at				
d. Steam pressure control remains at	o / o psig.			
Technical Reference(s): Dwg. M-5	33-175, ICS Integrated	l Master Digital		ce Attached:
			(Attach i	
			previous	ly provided)
Learning Objective (As available): O	PS-SYS-202-06K			,
Question Source:	Bank # Modified Bank # New	X	(Note changes or	attach parent)
Question History	Previous NRC Exam			
	Previous Quiz / Test			
Question Cognitive Level:	Memory or Fundame Comprehension or Ar		X	
10 CFR Part 55 Content:	55.41 <u>X</u> 55.43	,		
Comments (Why is it an upper level qu	restion).			
The examinee must be able to predict plant response on a closure of MSIVs and the effects it has on reactor power and				
steam pressure control.				

Reactor power is 4% when the MSIVs inadvertently close.

Which one of the following describes plant response?

- a. Steam pressure control shifts to the AVVs at 870 psig, reactor power remains the same
- b. Steam pressure control shifts to the AVVs at 870 psig, reactor power will increase.
- c. Steam pressure control shifts to the AVVs at 995 psig, reactor power remains the same.
- d. Steam pressure control shifts to the AVVs at 995 psig, reactor power will increase.

Answer:

a.