Attachment A Facility Comments for Question # 43

Comment:

The facility recommends accepting D as an alternate acceptable answer.

The initial power level for the question was 100% when a large break LOCA occurs. Containment pressure peaks at 15 psig, resulting in a CIB/Quench Spray actuation. The A quench spray pump is identified in the question as needing an immediate shutdown. The applicants were asked to identify "the **MINIMUM** action **REQUIRED**" to shutdown the A quench spray pump, however it did not specify if this was the minimum actions electrically or procedurally required.

If the candidate assumed the question was asking for the electrical minimum action that would allow the pump to be secured, resetting the A train CIB actuation, and then taking the A quench spray pump to stop, they would select answer C. These actions are correct and would allow the pump to be secured per the electrical control schematic, but are not per procedural guidance.

However if the candidate assumed the minimum actions required per procedure, then both trains of CIB are reset and then the pump is placed in PULL-TO-LOCK, as is performed in [1OM-53A.1.ES-1.3] Transfer To Cold Leg Recirculation (step 8), which is the procedure that would secure the quench spray pumps for a similar condition. The standard operating practice for a piece of equipment shutdown and to protect the equipment from automatically starting would be to take the control switch to the PULL-TO-LOCK position. This action supports the selection of answer D.

Per question #43 "Reset CIB Train A and B, then place [1QS-P-1A] Pump Control Switch in PULL-TO-LOCK" was choice D. If the candidate assumed that the question was asking the minimum procedurally required actions then answer D would be selected; since answer C is not procedurally addressed.

Based on this information, the facility recommends accepting D as an alternate acceptable answer.

43. The plant is at 100% power.

A large break LOCA occurs and all systems function as designed.

- Containment Pressure peaked at 15.0 psig
- A local operator has identified an issue with Quench Spray Pump [1QS-P-1A], which requires an immediate shutdown

Which of the following is the **MINIMUM** action **REQUIRED** to secure the 1A Quench Spray pump?

A. Place [1QS-P-1A] Pump Control Switch in STOP.

B. Place [1QS-P-1A] Pump Control Switch in PULL- TO - LOCK.

C. Reset CIB Train A, then place [1QS-P-1A] Pump Control Switch to STOP.

D. Reset CIB Train A and B, then place [1QS-P-1A] Pump Control Switch in PULL- TO - LOCK.

Answer: C

Explanation/Justification:

A. Incorrect. The pump will not stop with a CIB signal present.
B. Incorrect. The pump will not stop even in PTL with a CIB signal present, The pump would not start if the switch was in PTL prior to the CIB signal being generated. This may lead the student to select this distractor.
C. Correct. Must determine that a CIB signal is generated , then understand the control logic for the QS pump. CIB for the associated Train A must be Reset, then the pump will stop via the Control Switch.
D. Incorrect. Only CIB for the associated Train A must be Reset not both, then the pump will stop via the Control Switch in stop or PTL, this action will secure the pump but is more than the minimum action required.

Sys #	System	Category	KA Statement
026	Containment Spray System (CSS)	A4 Ability to manually operate and/or monitor in the control room:	Containment spray reset switches

K/A# A4.05 **K/A Importance** 3.5 **Exam Level** RO

References provided to Candidate None **Technical References:** 1OM-13.5 Figure 13-8 (LSK-027-009A)
1OM-13.1.D pg 3

Question Source: New

Question Cognitive Level: High - Comprehension **10 CFR Part 55 Content:** (CFR: 41.7 / 45.5 to 45.8)

Objective:

Number	Title	
ES-1.3	**Transfer To Cold Leg Recirculation**	**Issue 2 Revision 1**

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
8	Check If Quench Spray Should Be Stopped	
	a. Check RWST level - GREATER THAN 2 FEET	a. Stop quench spray as follows: 1) Reset CIB. 2) Stop Quench Spray Pumps AND place in PULL-TO-LOCK. 3) Close [MOV-1QS-101A,B] Quench Spray Disch Valves. 4) Initiate makeup to the RWST from the spent fuel pool in accordance with 1OM-7.4.Q, "Makeup To The Refueling Water Storage Tank".

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NRC Response to Post-Exam Comment on 2014 BV Unit 1 Written Exam

Q#43- NRC Response to Post –Exam Comment

The NRC AGREES with the proposed change. RO Question #43 has TWO correct answers. Key Answer C is correct. Distracter Choice D is also a correct answer. Distracter Choices A and B are NOT correct answers.

Two of seven applicants missed this question. One applicant selected Distracter Choice D (incorrect action, more than minimum required). One applicant selected Distracter Choice B (incorrect action with CIB signal being generated). None of the applicants asked for any clarification of the question during exam administration.

The licensee proposes Distracter Choice D as a second correct answer. Key answer C is correct because it properly identifies the minimum steps required to electrically secure the quench spray pump with a CIB signal present. Distracter Choice D also correctly identifies the steps required procedurally to secure the quench spray pump with a CIB signal present. There are two and only two correct answers. Choices C and D will be accepted as correct.