
NRC COMMENTS TO INITIAL EXAM SUBMITTAL

INCLUDING ES-410-9 AND OPERATING COMMENTS

FOR THE QUAD CITIES INITIAL EXAMINATION - MAY 2005

| Q# | 1. LOK (F/H) | 2. LOD (1-5) | 3. Psychometric Flaws | | | | | 4. Job Content Flaws | | | | 5. Other | | 6. U/E/S | 7. Explanation |
|-----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|-----------|----------|----------|----------|---|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | |
| 94 | F | 2 | | | | | | | | | | | X | S | New. |
| 95 | F | 3 | | | | | | | | | | | X | S | New. |
| 96+ | F | 3 | | | | | | | | | | | X | E | New. 1) Editorial: In distractor A, change "place" to "placed". 2) In distractor B (correct answer), it mentions inspecting areas for loose parts and foreign material. However, QCFHP 0300-01, Attachment A (Page 1 of 2) does not mention foreign material. Should "foreign material" be deleted? RESOLUTION: 1) Comment incorporated. 2) The phrase "foreign material" was deleted. |
| 97 | F | 2 | | | | | | | | | | | X | S | Bank. |
| 98 | F | 2 | | | | | | | | | | | X | S | Bank. |
| 99+ | F | 2 | | | | | | | | | | | X | E | New. In distractor C (correct answer), change "WHEN doing so will protect fission product barriers" to "WHEN doing so is a necessary part of a mitigation strategy" (to more closely match the wording in the reference provided). RESOLUTION: Comment incorporated. |
| 100 | F | 2 | | | | | | | | | | | X | E | Bank. Editorial: In the question stem, change "Which of the following is NOT a proper action" to "Which of the following is unacceptable". RESOLUTION: Comment incorporated. |

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| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | |
| 1 | F | 2 | | | | | | | | | | | | S | Bank. |
| 2 | H | 2 | | | | | | | | | | | | E | Bank. 1) Change LOK from Fundamental to Higher Cognitive Level. 2) Why is the phrase "After 10 minutes" inserted into the question stem instead of just omitting the phrase? RESOLUTION: 1) Comment incorporated. 2) The phrase "After 10 minutes" was deleted. |
| 3+ | H | 1 | | | | | | | | | | | | U | New. LOD = 1, since can read 120 Volts from Figure and easily get correct answer that the 125 Volt system is malfunctioning. RESOLUTION: Replaced question (Fundamental, New) with one with the same K/A. |
| 4 | F | 2 | | | | | | | | | | | | S | New. |

Instructions

(Refer to Section D of ES-401 and Appendix B for additional information regarding each of the following concepts.)

- Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.
- Enter the level of difficulty (LOD) of each question using a 1 – 5 (easy – difficult) rating scale (questions in the 2 – 4 range are acceptable).
- Check the appropriate box if a psychometric flaw is identified:
 - The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
 - The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length, etc).
 - The answer choices are a collection of unrelated true/false statements.
 - The distractors are not credible; single implausible distractors should be repaired, more than one is unacceptable.
 - One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem).
- Check the appropriate box if a job content error is identified:
 - The question is not linked to the job requirements (i.e., the question has a valid K/A but, as written, is not operational in content).
 - The question requires the recall of knowledge that is too specific for the closed reference test mode (i.e., it is not required to be known from memory).
 - The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
 - The question requires reverse logic or application compared to the job requirements.
- Check questions that are sampled for conformance with the approved K/A and those that are designated SRO-only (K/A and license level mismatches are unacceptable).
- Based on the reviewer's judgment, is the question as written (U)nsatisfactory (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).

A "+" in the "Q#" column indicates that question was reviewed as part of the representative sample of 30 questions.

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|-----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|----------|----------|----------|----------|---|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Backward | Q=K/A | SRO Only | | |
| 5 | H | 2 | | | | | | | | | | | | S | New. |
| 6+ | F | 2 | | | | | | | | | | | | E | New. In the question stem, change the word "should" to "are required to". This comment applies in two places in the question stem. <u>RESOLUTION:</u> Comment incorporated. |
| 7 | H | 3 | | | | | | | | | | | | E | New. Change LOK from Fundamental to Higher Cognitive Level. <u>RESOLUTION:</u> Comment incorporated. |
| 8 | H | 3 | | | | | | | | | | | | S | New. |
| 9+ | F | 2 | | | | | | | | | | | | S | Bank. |
| 10 | F | 3 | | | | | | | | | | | | S | New. |
| 11 | H | 3 | | | | | | | | | | | | S | New. |
| 12 | H | 3 | | | | | | | | | | | | S | New. |
| 13+ | F | 2 | | | | | | | | | | | | U | New. Questions associated with background knowledge of the SAMGs are not appropriate for an ILT exam. <u>RESOLUTION:</u> Replaced question (Fundamental, Bank) with one with the same K/A. |
| 14 | H | 2 | | | | X | | | | | | | | U | New. Distractors A and B are not plausible that an increase in torus water temperature would cause a decrease in torus water level or an increase in torus airspace (since almost everyone knows that water expands when heated). Suggest deleting the first three words of each distractor and adding "The resultant" instead. 2) By doing the change suggested in item 1), it would result in distractor B also being correct. Would need to then change distractor B. <u>RESOLUTION:</u> Comments incorporated. |
| 15 | F | 2 | | | | | | | | | | | | E | New. In the question stem and in the distractors, need to delete the word "should" and replace with "shall" or "are required to be".. <u>RESOLUTION:</u> Comment incorporated. |

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|-----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|----------|----------|----------|----------|----------------|---|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Backward | Q=K/A | SRO Only | | | |
| 16+ | F | 3 | X | | | | | | | | | | | | E | New. 1) In the question stem change "RCIC should ..." to "RCIC is ...". 2) With the Torus level at 10.5 feet and Torus pressure at 12.0 psig per the question stem, the QGA-200, Figure L, "Pressure Suppression Pressure" limit would be exceeded and a blowdown would be required per the Primary Containment Pressure leg of the flowchart. <u>RESOLUTION:</u> Comments incorporated. |
| 17 | H | 3 | | | | | | | | | | | | | E | Bank. In distractor B, change wording to "... because RHR systems are injecting at rated flow". <u>NOTE:</u> Question requires reference. <u>RESOLUTION:</u> Comment incorporated. |
| 18 | H | 2 | | | | | | | | | | | | | E | Modified. 1) Parts of QGA-101 should not be available to answer this question. Otherwise, it is a direct lookup. 2) Delete the word "should" from the question stem and replace with "shall". <u>NOTE:</u> Question requires reference. <u>RESOLUTION:</u> 1) QGA-101 will be available as a reference, but part of QGA-101 will be blanked out. 2) Comment incorporated. |
| 19+ | F | 3 | | | | | | | | | | | | | S | New. |
| 20 | F | 2 | | | | X | | | | | | | | | S | New. |
| 21 | H | 3 | | | | | | | | | | | | | E | New. In distractor A delete the words "by the NSO". <u>RESOLUTION:</u> Comment incorporated. |
| 22 | F | 2 | X | | | | | | | | | | | | S | New. The supporting material provided does not support distractor A as the correct answer for all EOP situations in which there is high drywell pressure. QGA 200 does not monitor drywell rad levels when drywell pressure is high. The reference provided is only for QGA 500-4, "RPV Flooding". One could argue that the question stem is misleading. Also, the step in the flowchart for QGA-500-4 that checks for core damage occurring is associated with a transition to the SAMGs, which is not appropriate at the RO level. <u>RESOLUTION:</u> Another reference provided (QCOA 0201-01, "Increasing Drywell Pressure") that supports distractor A as the correct answer. |
| 23+ | H | 2 | | | | X | | | | | | | | | E | Modified. Distractor C is not plausible that an LP Heater String Bypass Valve closed could cause the indications mentioned in the question stem, since one would expect this valve to be closed. Suggest replacing distractor with an SRV that is open. <u>RESOLUTION:</u> Comment incorporated. |

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| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | |
| 24 | F | 3 | | | | | | | | | | | | S | Bank. |
| 25 | H | 3 | | | | | | | | | | | | S | Bank. |
| 26+ | F | 2 | | | | | | | | | | | | S | New. |
| 27 | H | 2 | | | | | | | | | | | | U | New. 1) There is an unacceptable overlap between this question and JPM SYS-e, in that in both cases the same part of procedure QCOP is used. 2) In the question stem replace the word "should" with "is required to". <u>RESOLUTION:</u> |
| 28 | F | 3 | | | | | | | | | | | | S | New. |
| 29+ | H | 2 | | | | | | | | | | | | S | New. |
| 30 | H | 3 | | | | | | | | | | | | E | New. In distractor A add "at their pressure setpoint" to the end of the distractor (similar to distractor D). <u>RESOLUTION:</u> Comment incorporated. |
| 31 | F | 3 | | | | | | | | | | | | S | New. |
| 32 | H | 2 | | | | | | | | | | | | S | New. <u>NOTE:</u> Question requires reference. |
| 33+ | F | 3 | | | | | | | | | | | | S | New. Would the applicants be expected to know the correct answer from memory? <u>RESOLUTION:</u> Per discussion with facility, applicants are expected to know the correct answer from memory. |
| 34 | F | 3 | | | | | | | | | | | | S | New. |
| 35 | H | 3 | | | | X | | | | | | | | E | New. 1) Distractor D is not plausible that SRM 22 is operable with the SRM not fully inserted. A potential new distractor would be one similar to distractor A, except not allowing fuel movement in the associated and adjacent quadrants. 2) Editorial: In the last sentence of the question stem, add the word "the" before the word "given". <u>RESOLUTION:</u> Comments incorporated. |
| 36+ | F | 3 | | | | | | | | | | | | E | New. Editorial: Add the word "the" at the end of the question stem. <u>RESOLUTION:</u> Comment incorporated. |
| 37 | F | 2 | | | | | | | | | | | | S | New. |

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|-----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|-----------|----------|----------|----------|--|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | |
| 38 | H | 3 | | | | | | | | | | | | S | New. |
| 39+ | F | 2 | | | | | | | | | | | | E | New. Editorial: Add "psig" after "1125" in the question stem. <u>RESOLUTION</u> : Comment incorporated. |
| 40 | F | 2 | | | | | | | | | | | | S | New. |
| 41 | F | 3 | | | | X | | | | | | | | E | New. Distractor C is not plausible that a loss of 125 VDC on Unit 2 would make both the normal and reserve power supplies to the Unit 1 ADS valve solenoids unavailable. <u>RESOLUTION</u> : Comment incorporated. Question was re-phrased and distractors changed such that all are plausible. |
| 42 | F | 2 | | | | | | | | | | | | S | New. |
| 43+ | H | 3 | | | | | | | | | | | | S | New. |
| 44 | H | 3 | | | | | | | | | | | | S | New. On the Written Exam Answer Key for the question, change the "Importance RO" from 3.60 to 2.60. <u>RESOLUTION</u> : Comment incorporated. |
| 45 | F | 3 | | | | | | | | | | | | E | New. In the second sentence in the question stem, reword to delete the word "should" (e.g., "when is the voltage to be compared"). <u>RESOLUTION</u> : Comment incorporated. |
| 46+ | H | 3 | | | | | | | | | | | | E | New. 1) Tech Spec Table 3.3.8.1-1 allows a range of as low as 3885 VAC for the Degraded Voltage setpoint. Also, QOA 900-8 G-12 page 1 states that the "4KV Bus 14-1 Voltage Degraded" alarm setpoint is 3820 V. Thus, to ensure that the Unit is in a condition where the alarm and Degraded Voltage actuation should have occurred, change the voltage in the question stem from "3890 VAC" to "3700 VAC". 2) In the question stem delete the word "should" and replace with "are to". 3) Editorial: In distractor B in the third sentence, change wording to "... CANNOT be restored within 5 minutes, ...". <u>NOTE</u> : Question requires reference. <u>RESOLUTION</u> : Comments incorporated. |
| 47 | F | 3 | | | | | | | | | | | | S | New. |
| 48 | H | 3 | | | | | | | | | | | | S | New. |
| 49+ | F | 2 | | | | | | | | | | | | S | New. |

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| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Backward | Q=K/A | SRO Only | | |
| 50 | H | 3 | | | | | | | | | | | | E | New. Distractor B mentions a "LOCA load shed", but in the question stem it does not state that a LOCA has occurred. Should the question stem be changed to state that a LOCA occurred? <u>RESOLUTION:</u> Comment incorporated. |
| 51 | F | 2 | | | | X | | | | | | | | E | New. Distractor B is not plausible that instrument air is used for breathing air. <u>RESOLUTION:</u> Comment incorporated. Distractor B was changed. |
| 52 | H | 3 | | | | | | | | | | | | S | Modified. |
| 53+ | H | 2 | | | | | | | | | | | | S | New. |
| 54 | H | 3 | | | | | | | | | | | | S | New. |
| 55 | H | 3 | | | | | | | | | | | | S | New. |
| 56+ | F | 2 | | | | | | | | | | | | E | Bank. In the question stem delete the second and third bulleted (-) items, since they are not necessary to answer the question. <u>RESOLUTION:</u> Comment incorporated. |
| 57 | H | 3 | | | | | | | | | | | | S | New. |
| 58 | H | 2 | | | | | | | | | | | | S | New. |
| 59+ | H | 3 | X | | | | | | | | | | | E | New. 1) In the question stem change the Drywell temperature from 290 degF to 240 degF, so that initially one is not at the RPV saturation temperature. Also, change the question stem to state that Drywell temperature is STEADY, so that one would expect temperature to increase when Torus cooling flow is increased on LoopB (and thus taking flow away from Drywell sprays). 2) In the question stem delete the word "sooner". 3) In all the distractors change "may" to "could". <u>RESOLUTION:</u> Comments incorporated. |
| 60 | H | 3 | | | | | | | | | | | | S | Bank. |
| 61 | H | 2 | | | | | | | | | | | | S | New. |

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|-----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|-----------|----------|----------|----------|----------------|--|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | | |
| 62 | H | 2 | | | | X | | | | | | | | | E | New. Distractor B is not plausible that the Steam Seal System will prevent generator seal oil leakage. Does QC have any other oil pumps associated with the turbine (e.g., Seal Oil Backup Pump) that could be placed in the distractor? <u>RESOLUTION:</u> Comment incorporated. Changed distractor B to "NOT change because the Emergency Bearing Oil Pump is still in service". |
| 63+ | F | 3 | | | | | | | | | | | | | S | New. |
| 64 | H | 2 | | | | | | | | | | | | | E | Modified. In the question stem change the beginning of the first sentence from "The plant was ..." to "Unit 1 was ...". <u>RESOLUTION:</u> Comment incorporated. |
| 65 | H | 3 | | | | | | | | | | | | | S | Bank. <u>NOTE:</u> Question requires reference. |
| 66+ | F | 2 | | | | | | | | | | | | | E | New. 1) In the question stem add that Unit 1 is in Mode 2. Due to this delete the mention of Mode 2 in distractor D. 2) Change distractor C to reference something other than an RPV water level that would require entry into the EOPs. 3) Change distractor B from "1006 psig" to "1020 psig", since a pressure of only 1 psig above the Tech Spec limit may key one to the 1005 limit. <u>RESOLUTION:</u> Comments incorporated. |
| 67 | H | | | | | | | | | | | | | | E | New. In the question stem add words to the effect that the reactor is stable with reactor power at 36% and core flow at 52 Mlb/hr. <u>NOTE:</u> Question requires reference. <u>RESOLUTION:</u> Comment incorporated. |
| 68 | H | 2 | | | | | | X | | | | | | | U | Bank. 1) This question is at the SRO level [10CFR55.43(b)(3)]. 2) In the question stem add the words "before implementation", since otherwise distractor D could be considered correct since the procedure itself would have required a 50.59 screening. <u>RESOLUTION:</u> Replaced question (Fundamental, New) with one with the same K/A. |
| 69+ | F | 3 | | | | | | | | | | | | | S | New. This question is at the SRO level [10CFR55.43(b)(2)], unless the ROs have a specific Learning Objective to know the Safety Limits from memory. <u>RESOLUTION:</u> Question is Satisfactory. The ROs have a specific Learning Objective to know the Safety Limits from memory. |

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| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | | |
| 70 | H | 3 | | | | | | | | | | | | | U | Bank. 1) This question is at the SRO level [10CFR55.43(b)(2)]. 2) The correct answer appears to distractor A, since the switch is inoperable when it is valved out (since it is not capable of performing its intended function). <u>RESOLUTION</u> : Replaced question (Fundamental, New) with one with a different K/A. |
| 71 | F | 2 | | | | | | | | | | | | | S | Bank. <u>NOTE</u> : Question requires reference. |
| 72 | H | 2 | | | | | | | | | | | | | E | Bank. 1) In the question stem change "should" to "shall". 2) To make distractor B more plausible, change the time from "60 minutes" to "45 minutes". <u>RESOLUTION</u> : Comment incorporated. |
| 73+ | F | 2 | | | | | | | | | | | | | E | New. In the question stem change "should" to "are required to". <u>RESOLUTION</u> : Comment incorporated. |
| 74 | H | 2 | | | | | | | | | | | | | E | New. In distractors A and C, change "Q(C)OAs" to "QOAs or QCOAs". <u>RESOLUTION</u> : Comment incorporated. |
| 75 | F | 3 | | | | | | | | | | | | | E | New. In the question stem change "should" to "are required to". <u>RESOLUTION</u> : Comment incorporated. |
| 76+ | H | 2 | | | | | | | | | | | X | S | New. | |
| 77 | F | 3 | | | | | | | | | | | X | S | New. | |
| 78 | F | 3 | | | | | | | | | | | X | S | New. | |
| 79+ | H | 3 | | | | | X | | | | | | X | U | <u>Modified</u> . 1) The explanation for distractor C being incorrect is not right. It states that Pressure and Temperature are within the Drywell Spray Initiation Limit. However, the DSIL has not been reached yet. If the DSIL was reached, then distractor C would be the correct answer. 2) The explanation that distractor A is incorrect is that the Heat Capacity Limit is not being threatened because Torus water temperature is lowering. However, the question stem states that Torus water temperature is rising. This would make distractor A also a correct answer. Suggest changing the question stem to state that Torus water temperature is lowering. <u>NOTE</u> : Question requires reference. <u>RESOLUTION</u> : Comments incorporated. | |
| 80 | F | 3 | | | | | | | | | | | X | S | New. | |

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| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Backward | Q=K/A | SRO Only | | | |
| 81 | H | 2 | | | | | | | | | | | X | E | New. To increase the Level of Difficulty of the question, suggest asking "... that would REQUIRE a site assembly (if a site assembly is only REQUIRED at the Site Area Emergency level and above). <u>NOTE:</u> Question requires reference. <u>RESOLUTION:</u> Comment incorporated. | |
| 82 | H | 2 | | | | | | | | | | | | X | E | Modified. The suggested reference is QCOA 0010-12 Attachment C pages 4 and 5. To avoid directing the applicant to the correct answer, suggest giving the applicant the <u>entire copy</u> of QCOA 0010-12 (if this information would not assist answering any other question). <u>NOTE:</u> Question requires reference. <u>RESOLUTION:</u> Comment incorporated. |
| 83+ | H | 2 | | | | | | | | | | | | X | S | Bank. |
| 84 | H | 1 | | | | | | | | | | | | X | U | New. With the Tech Spec references provided, this question is a direct lookup and LOD = 1. <u>RESOLUTION:</u> Comment incorporated. Revised question so that no references are required. |
| 85 | F | 2 | | | | | | | | | | | | X | S | Bank. <u>NOTE:</u> Question requires reference. |
| 86+ | H | 3 | | | | | | | | | | | | X | U | New. 1) With Tech Spec 3.5.1 provided as a reference, answering the second part of the question becomes a direct lookup. Suggest changing the question stem so that Loop A becomes the broken discharge line for Core Spray instead of Loop B. The correct answer then becomes distractor D, based on entering LCO 3.0.3 (13 hour clock to Mode 3), with LCO 3.0.3 not provided as a reference. 2) On the Written Exam Answer Key for the question, change the "Importance RO" from 3.20 to 3.30, and change the "Importance SRO" from 3.20 to 3.60. <u>RESOLUTION:</u> 1) Comment incorporated. Also, deleted Tech Spec 3.5.1 as a reference. 2) Comment incorporated. |

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|-----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|----------|----------|----------|----------|----------------|--|
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| 87 | H | 3 | | | | | | | | | | | | X | E | Bank. 1) All of Tech Spec 5.5.7 should be provided as reference material instead of just Tech Spec 5.5.7.d to ensure an evaluation is required of the surveillance results that results in calling the "A" Train of SBGT inoperable (i.e., so that more than just the applicable Tech Spec section is provided). 2) Tech Spec 3.6.4.3 is not required as a reference since the applicant should know Tech Spec actions that are required within one hour or less. 3) Editorial: In the distractors, change "SGT" to "SBGT" (similar to the abbreviation in the question stem). 4) In distractors A and C, change to the following for Unit 2: "Enter LCO 3.0.3 ". 5) On the Written Exam Answer Key for the question, change the "Importance RO" from 2.50 to 3.40, and change the "Importance SRO" from 3.30 to 4.00. <u>NOTE:</u> Question requires reference. <u>RESOLUTION:</u> Comments incorporated. |
| 88 | H | 2 | | | | | | | | | | | | X | E | New. 1) In the question stem at 0012 hours, add "DG" after "SBO". 2) In distractor D delete the words after "This event is NOT reportable". <u>NOTE:</u> Question requires reference. <u>RESOLUTION:</u> Comments incorporated. |
| 89+ | H | 2 | | | | | | | | | | | | X | S | New. <u>NOTE:</u> Question requires reference. |
| 90 | H | 2 | | | | | | | | | | | | X | S | New. On the Written Exam Answer Key for the question, change the K/A# from "xxxxx.A2.09" to "xxxxx.A2.12". <u>RESOLUTION:</u> Comment incorporated. |
| 91 | H | 3 | | | | | X | | | | | | | X | E | New. With Reactor pressure at 400 psig, would the RHR pumps inject or is this pressure above their shutoff head (i.e., would the statement in QGA-100 to maximize injection using preferred sources apply to the RHR pumps if one is above their shutoff head)? <u>NOTE:</u> Question requires reference. <u>RESOLUTION:</u> Comment incorporated. The question stem was changed so that Reactor pressure is at 300 psig (below RHR pump shutoff head). The statement in QGA-100 to maximize injection using preferred sources applies to the RHR pumps even if above their shutoff head (also, Reactor pressure is lowering per the question stem and thus would soon be below the RHR pump shutoff head). |
| 92 | F | 3 | | | | | | | | | | | | X | S | New. |
| 93+ | H | 2 | | | | | | | | | | | | X | S | New. <u>NOTE:</u> Question requires reference. |

QUAD CITIES MAY 2005 INITIAL LICENSE EXAM OPERATING EXAM COMMENTS

| # | Source | Comment | Resolution |
|----|---|---|-----------------------|
| 1. | Scenario No. 1 Scenario Outline Sheet | For Event 2, change the Event Type for the SRO from "R" to "N", since only the RO can get credit for an "R". | Comment incorporated. |
| 2. | Scenario No. 1 Event 5 Page 5 of 10 | Add Tech Spec 3.5.1 Conditions F and H as applicable to this event. [Comment during onsite validation] | Comment incorporated. |
| 3. | Scenario No. 1 Event 8 Page 8 of 10 | Add steps required to start the SSMP from the hardcard. [Comment during onsite validation] | Comment incorporated. |
| 4. | Scenario No. 1 Event 8 Page 9 of 10 | In the SRO action to verify recirc pumps and drywell coolers tripped, delete the requirement that this is a Critical Task, since this action is only a verification of an action that should have occurred automatically. [Comment during onsite validation] | Comment incorporated. |
| 5. | Scenario No. 2 (Not Validated - Extra Spare) Scenario Outline Sheet | For Event 6, change the Event Type for the SRO from "R" to "N", since only the RO can get credit for an "R". | Comment incorporated. |
| 6. | Scenario No. 2 (Not Validated - Extra Spare) Scenario Outline Sheet | Need to add to the "Turnover" that APRM #1 is bypassed (per "Summary" on next page of scenario). | Comment incorporated. |
| 7. | Scenario No. 3 Scenario Outline Sheet | For Event 5, change the Event Type for the SRO from "R" to "N", since only the RO can get credit for an "R". | Comment incorporated. |
| 8. | Scenario No. 3 Scenario Outline Sheet | In the "Turnover", delete the statement that HPCI is OOS, since if HPCI was OOS it would cause a Tech Spec 3.0.3 entry during Event 1, which is not desirable. [Comment during onsite validation] [NOTE: This comment makes Event 1 initially Unsatisfactory.] | Comment incorporated. |
| 9. | Scenario No. 4 (Validated Spare) Scenario Outline Sheet | Move Event 2 ("A" CRD pump trip) to after the current Event 4, in case the crew decides to scram the Reactor during this event. [Comment during onsite validation] | Comment incorporated. |

QUAD CITIES MAY 2005 INITIAL LICENSE EXAM OPERATING EXAM COMMENTS

| # | Source | Comment | Resolution |
|-----|--|--|-----------------------|
| 10. | Scenario No. 4 (Validated Spare) Scenario Outline Sheet | For Event 5, change the Event Type as follows: - BOP gets a "C" - RO gets an "R" - SRO gets a "C" | Comment incorporated. |
| 11. | Scenario No. 4 (Validated Spare) Event 5 Page 6 of 11 | Make the "A" TBCCW pump trip embedded in Event 5 a separate event (Event 6). | Comment incorporated. |
| 12. | Scenario No. 4 (Validated Spare) Events 7, 8 Page 9 of 11, Page 10 of 11 | Delete mention of the Lead Examiner ("LE") directing the simulator operator to perform certain actions. The examiners can not be involved in the scenario. Change to have the applicant contact the simulator operator to perform certain actions. | Comment incorporated. |
| 13. | Scenario No. 4 (Validated Spare) Event 8 Page 10 of 11 | For the SRO/RO actions to report RPV level, delete these as Critical Tasks. [Comment during onsite validation] | Comment incorporated. |
| 14. | Generic Comment for All JPMs | Need a Task Standard specified for each JPM per the Examiner Standards, Appendix C, page 3 of 10. | Comment incorporated. |
| 15. | JPM SYS-c Page 8 of 15 | For step D.2.a,b, add: Verifies closed MO 1-2301-5. | Comment incorporated. |
| 16. | JPM SYS-c Page 12 of 15 | Add step F.7.f to verify the Emergency Oil Pump is off. | Comment incorporated. |
| 17. | JPM SYS-c Page 13 of 15 | For step F.7.i, add to the "Standard": - Pump discharge pressure \leq 1250 psig | Comment incorporated. |
| 18. | JPM SYS-d Page 8 of 10 | For step F.2.h, rewrite the "Standard" to reflect that the "A" RHR pump is started approximately 2 seconds after the discharge valve starts to open. [Comment during onsite validation] | Comment incorporated. |
| 19. | JPM SYS-d Page 8 of 10 | Delete step F.2.k from the JPM, since this step would be performed after the JPM is already complete per the Initiating Cue. [Comment during onsite validation] | Comment incorporated. |

QUAD CITIES MAY 2005 INITIAL LICENSE EXAM OPERATING EXAM COMMENTS

| # | Source | Comment | Resolution |
|-----|---------------------------------------|---|------------------------|
| 20. | JPM SYS-e Page 6 of 10 | Change "Site Emergency" to "Site Area Emergency". | Comment incorporated. |
| 21. | JPM SYS-e Page 6 of 10 | Add to the "Initiating Cue" that RPS and ESS are energized. [Comment during onsite validation] | Comment incorporated. |
| 22. | JPM SYS-f Page 7 of 10 | Can not have the Evaluator asking the simulator operator to request that the speed droop be set to "0". Need to have the applicant call the simulator operator to have this action completed. | Comment incorporated. |
| 23. | JPM SYS-g Page 7 of 9 | After step F.5, add a CUE that alarm 901-3 C16 is in alarm, since the applicant would not be able to verify this alarm from the back panel while holding the TRIP CHECK pushbutton in. [Comment during onsite validation] | Comment incorporated. |
| 24. | JPM SYS-g Page 8 of 9 | This JPM is listed as an Alternate Path on this page. However, this JPM is not an alternate Path, since there is no success path after the surveillance test failure associated with the failure of the high trip setpoint to work properly. The JPM Outline Sheet correctly lists this JPM as not an Alternate path. | Comment incorporated. |
| 25. | JPM SYS-j Page 4 of 8 | Change the "Initial Conditions" as follows: - Add that all control rods are in. - Change "Unit Supervisor" to "Shift Manager" to agree with wording in procedure QCOP 1100-08. - Add that the SBLC tank in not available. [Comments during onsite validation] | Comments incorporated. |
| 26. | JPM SYS-k Page 5 of 7 | Make the first step to obtain the procedure and equipment to be used a Critical Step. [Comment during onsite validation] | Comment incorporated. |
| 27. | Admin JPM AD-SRO-1 Page 4 of 10 | Change so that it does not state that the simulator is needed for this JPM? | Comment incorporated. |
| 28. | Admin JPM AD-SRO-1 Page 4 of 10 | Add procedure QCOA 4100-11 as a procedure that is available to the applicant during the administration of the JPM. [Comment during onsite validation] | Comment incorporated. |
| 29. | Admin JPM AD-SRO-1 Page 7 of 10 | In the "Step" column, add an asterisk to show that step D.2.c(4) is a Critical Step, and another asterisk to show that the step just after step D.2.c(4) is a Critical Step. | Comment incorporated. |

QUAD CITIES MAY 2005 INITIAL LICENSE EXAM OPERATING EXAM COMMENTS

| # | Source | Comment | Resolution |
|-----|---|--|--|
| 30. | Admin JPM AD-SRO-3 | For Equipment Control, replace the JPM titled "Review Temporary Change package to Determine if it can be Accepted for Operation", and replace with JPM titled "Review Abnormal Component Position Sheet". Reason: The original JPM took too long during site validation (before the NRC on-site validation) to complete (could take as long as 90 minutes). [NOTE: This comment makes Admin JPM AD-SRO-3 initially Unsatisfactory.] | JPM replaced with a new one that satisfies the same K/A (K/A 2.2.11). |
| 31. | Admin JPM AD-SRO-3 Page 7 of 9 | To provide more flexibility for the applicant, change so that the Critical Step is to <u>EITHER</u> add the Control Switch <u>OR</u> the breaker and control power fuses to the Abnormal Component Position Sheet. [Comment during onsite validation] | Comment incorporated. |
| 32. | Admin JPM AD-SRO-3 | In the OP-AA-108-101, Attachment 2, Abnormal Component Position Sheet, change so that valve 2-1099-96 is listed as Uncapped and open instead of valve 2-1099-100A (since only valve 2-1099-96 has a cap adjacent to it). | Comment incorporated. |
| 33. | Admin JPM AD-RO-4 | Is this JPM task (developing a Pre-Job briefing for NLOs and selecting NLOs to perform a radiation area related task) part of the job of an RO? | On 4/6/05 verified with site that this JPM is part of the job for an RO. |
| 34. | Admin JPM AD-SRO-4 Admin JPM AD-RO-4 Page 1 of 10 | Change the title of the JPM to "Select Personnel for Radiation Work" to better reflect the task of the JPM. [Comment during onsite validation] | Comment incorporated. |
| 35. | Admin JPM AD-SRO-4 Admin JPM AD-RO-4 Page 5 of 20 | Change the "Initiating Cue" so that the task is to calculate the expected dose for the job, determine who and who can not perform the job, and why a person can or can not perform the job. Add Critical Steps to determine the expected dose for the job, and the reasons why each applicable person can not perform the radiation related work. [Comment during onsite validation] [NOTE: This comment makes Admin JPM AD-SRO-4 and Admin JPM AD-RO-4 initially Unsatisfactory.] | Comment incorporated. |
| 36. | Admin JPM AD-SRO-5 Page 4 of 11 | Add procedure EP-MW-114-100 as a procedure that is available to the applicant during the administration of the JPM. [Comment during onsite validation] | Comment incorporated. |
| 37. | Admin JPM AD-SRO-5 Page 8 of 11 | Change to make it a Critical Step to identify the correct EAL number. | Comment incorporated. |

QUAD CITIES MAY 2005 INITIAL LICENSE EXAM OPERATING EXAM COMMENTS

| # | Source | Comment | Resolution |
|-----|---|---|-----------------------|
| 38. | Admin JPM AD-RO-1 Page 8 of 11 | Change to make step D.5.f a Critical Step to make a plant announcement to assemble the Fire Brigade. | Comment incorporated. |
| 39. | Admin JPM AD-RO-1 Page 8 of 11 | In the "CUE" near the top of the page, change "SECURITY Modules" to "EMERGENCY Modules". [Comment during onsite validation] | Comment incorporated. |
| 40. | Admin JPM AD-RO-1 Page 8 of 11 | Change so that the applicant can use <u>EITHER</u> the plant radio or the APB-1 key to transmit the messages for steps D.5.f and D.5.f (1). [Comment during onsite validation] | Comment incorporated. |
| 41. | Admin JPM AD-RO-2 Page 6 of 12 | In Step H.1.a, have an offsite power line OOS but such that there are still 2 other offsite power lines available (e.g., have line 0403 OOS). | Comment incorporated. |
| 42. | Admin JPM AD-RO-2 Page 8 of 12 | For Steps H.1.l.(1) and H.1.l.(3), change the CUE to just say that this step is not met. [Comment during onsite validation] | Comment incorporated. |
| 43. | Admin JPM AD-RO-2 Page 9 of 12 | In Step H.3.b, have the NLO return Attachment D with all steps signed off, but with a comment that would result in an Acceptance Criteria not being met. Make this step a Critical Step. | Comment incorporated. |
| 44. | Admin JPM AD-RO-2 Page 9 of 12 | In Step H.3.b, change " Attachment D" to "Attachment D and E". [Comment during onsite validation] | Comment incorporated. |
| 45. | Admin JPM AD-RO-2 Page 10 of 12 | Change Step H.5 to a Critical Step, with the critical being to identify that 1) Transformer 12 feed to Bus 14 is not available, and 2) to identify the deficiency inserted into Attachment D performed by the local operator. [NOTE: This comment makes Admin JPM AD-RO-2 initially Unsatisfactory.] | Comment incorporated. |
| 46. | Admin JPM AD-RO-3 Page 4 of 9 | Add print M - 43 to the list of prints available to the applicant. [Comment during onsite validation] | Comment incorporated. |