

Peach Bottom

License No.: DPR-44, DPR-56 Docket No.: 50-277, 50-278
Operator Licensing Exam Dates: 12/07-12/18/09

NRC Comments on Draft Licensee-Developed Exam (Written & Operating Tests) (Folder 2)

Chief Examiner: T. Fish
TAC No. U01792
Report No.: 50-277/50-278/09-302

Public and Non-Sensitive
NRR-079, SUNSI Review Complete
ADAMS Package Accession No. ML091380320

| Q# | 1. LOK (F/H) | 2. LOD (1-5) | 3. Psychometric Flaws | | | | | 4. Job Content Flaws | | | | 5. Other | | 6. B/M/N | 7. U/E/S | 8. Explanation | |
|----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|----------|----------|----------|----------|----------|----------------|--|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Backward | Q=K/A | SRO Only | | | | |
| 1 | H | 3 | | | | | | | | | | | Y | | N | S | |
| 2 | F | 3 | | | | | | | | | | | Y | | N | S | |
| 3 | F | 2 | | | | | | | | | | | Y | | N | S | |
| 4 | H | 3 | | | | | | | | | | | Y | | B | S | |
| 5 | H | 4 | | | | | | | | | | | Y | | B | S | |
| 6 | H | 3 | | | | | | | | | | | Y | | N | S | |
| 7 | H | 2 | | | | | | | | | | | Y | | M | S | |
| 8 | F | 2 | | | | | | | | | | | Y | | N | S | |

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).
- Enter question source: (B)ank, (M)odified, or (N)ew. Check that (M)odified questions meet criteria of ES-401 Section D.2.f.
- 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).

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|----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|-----------|----------|----------|----------|----------|----------------|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | | |
| 9 | H | 3 | | | | | | | | | | Y | | N | S | |
| 10 | H | 3 | | | | | | | | | | Y | | B | S | |
| 11 | H | 3 | | | | | | | | | | Y | | N | S | |
| 12 | F | 3 | | | | | | | | | | Y | | N | S | |
| 13 | H | 2 | | | | | | | | | | Y | | M | S | |
| 14 | F | 2 | | | | | | | | | | Y | | N | S | |
| 15 | H | 3 | | | | | | | | | | Y | | B | S | |
| 16 | H | 3 | | | | | | | | | | Y | | N | S | |
| 17 | H | 3 | | | | | | | | | | Y | | B | S | |
| 18 | F | 3 | | | | | | | | | | Y | | N | S | |
| 19 | H | 3 | | | | | | | | | | Y | | M | S | |
| 20 | H | 3 | | | | | | | | | | Y | | N | S | |
| 21 | F | 2 | | | | | | | | | | Y | | N | S | |
| 22 | F | 3 | | | | | | | | | | Y | | N | S | |
| 23 | H | 3 | | | | | | | | | | Y | | M | S | |
| 24 | H | 3 | | | | | | | | | | Y | | M | S | |
| 25 | F | 3 | | | | | | | | | | Y | | B | S | |
| 26 | H | 2 | | | | | | | | | | Y | | B | S | |
| 27 | F | 3 | | | | | | | | | | Y | | N | S | |
| 28 | H | 3 | | | | | | | | | | Y | | N | S | |

| Q# | 1. LOK (F/H) | 2. LOD (1-5) | 3. Psychometric Flaws | | | | | 4. Job Content Flaws | | | | 5. Other | | 6. B/M/N | 7. U/E/S | 8. Explanation |
|----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|-----------|----------|----------|----------|----------|---|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | | |
| 29 | H | 2 | | | | | | | | | | Y | | B | S | |
| 30 | F | 2 | | | | | | | | | | Y | | M | S | |
| 31 | F | 3 | | | | | | | | | | Y | | B | S | |
| 32 | F | 3 | | | | | | | | | | Y | | M | S | |
| 33 | H | 2 | | | | | | | | | | Y | | B | S | |
| 34 | H | 2 | | | | | | | | | | Y | | N | S | |
| 35 | H | 2 | | | | | | | | | | Y | | B | S | |
| 36 | F | 3 | | | | | | | | | | Y | | B | S | |
| 37 | H | 4 | | | | | | | | | | Y | | M | S | |
| 38 | H | 4 | | | | | | | | | | Y | | M | S | |
| 39 | H | 3 | | | | | | | | | | Y | | B | S | |
| 40 | F | 2 | | | | | | | | | | Y | | B | S | |
| 41 | H | 2 | | | | | | | | | | Y | | N | S | |
| 42 | H | 2 | | | | | | | | | | Y | | N | S | |
| 43 | F | 3 | | | | | | | | | | Y | | M | S | K/A met: Temperature is based on protecting various internal components, not based on limitation of containment shell |
| 44 | H | 3 | | | | | | | | | | Y | | N | S | |
| 45 | F | 2 | | | | | | | | | | Y | | N | S | |
| 46 | H | 2 | | | | | | | | | | Y | | B | S | |
| 47 | F | 3 | | | | | | | | | | Y | | N | S | |
| 48 | H | 3 | | | | | | | | | | Y | | B | S | K/A met. Valves listed are PCIS valves; PCIS is an ESF |

| Q# | 1. LOK (F/H) | 2. LOD (1-5) | 3. Psychometric Flaws | | | | | 4. Job Content Flaws | | | | 5. Other | | 6. B/M/N | 7. U/E/S | 8. Explanation |
|----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|----------|----------|----------|----------|----------|---|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Backward | Q=K/A | SRO Only | | | |
| 49 | H | 3 | | | | | | | | | | Y | | N | S | |
| 50 | F | 2 | | | | | | | | | | Y | | B | S | |
| 51 | F | 2 | | | | | | | | | | Y | | N | S | K/A met. Interpreting DW pressure includes knowing consequences of high DW pressure |
| 52 | H | 2 | | | | | | | | | | Y | | B | S | |
| 53 | H | 3 | | | | | | | | | | Y | | B | S | |
| 54 | H | 3 | | | | | | | | | | Y | | N | S | |
| 55 | H | 2 | | | | | | | | | | Y | | N | S | |
| 56 | H | 2 | | | | | | | | | | Y | | N | S | |
| 57 | F | 2 | | | | | | | | | | Y | | N | S | |
| 58 | H | 3 | | | | | | | | | | Y | | B | S | |
| 59 | H | 3 | | | | | | | | | | Y | | M | S | |
| 60 | H | 3 | | | | | | | | | | Y | | B | S | |
| 61 | F | 2 | | | | | | | | | | Y | | M | S | |
| 62 | H | 2 | | | | | | | | | | Y | | N | S | |
| 63 | F | 2 | | | | | | | | | | Y | | M | S | |
| 64 | F | 2 | | | | | | | | | | Y | | B | S | |
| 65 | F | 3 | | | | | | | | | | Y | | B | S | |
| 66 | H | 2 | | | | | | | | | | Y | | B | S | |
| 67 | F | 2 | | | | | | | | | | Y | | B | S | |
| 68 | F | 3 | | | | | | | | | | Y | | N | S | |

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|----|--------------|--------------|-----------------------|------|-----|-------------|---------|----------------------|---------|---------|-----------|----------|----------|----------|----------|---|
| | | | Stem Focus | Cues | T/F | Cred. Dist. | Partial | Job-Link | Minutia | #/units | Back-ward | Q=K/A | SRO Only | | | |
| 69 | F | 2 | | | | | | | | | | Y | | B | S | |
| 70 | F | 3 | | | | X | | | | | | Y | | B | E | Added bullet to stem that no dose extension is required |
| 71 | H | 2 | | | | | | | | | | Y | | B | S | |
| 72 | H | 3 | | | | | | | | | | Y | | B | S | |
| 73 | F | 3 | | | | | | | | | | Y | | N | S | |
| 74 | H | 2 | | | | | | | | | | Y | | B | S | K/A met. Operators use the monitors to confirm CREV response. |
| 75 | F | 2 | | | | | | | | | | Y | | N | S | |
| 76 | H | 3 | | | | | | | | | | Y | Y | N | S | |
| 77 | H | 3 | | | | | | | | | | Y | Y | N | S | |
| 78 | F | 2 | | | | | | | | | | Y | Y | N | S | |
| 79 | H | 2 | | | | | | | | | | Y | Y | N | S | |
| 80 | H | 2 | | | | | | | | | | Y | Y | B | S | |
| 81 | H | 3 | | | | | | | | | | Y | Y | M | S | |
| 82 | H | 3 | | | | | | | | | | Y | Y | M | S | |
| 83 | H | 2 | | | | | | | | | | Y | Y | N | S | |
| 84 | H | 2 | | | | | | | | | | Y | Y | N | S | |
| 85 | F | 2 | | | | | | | | | | Y | N | B | U | Not SRO-only because original part (2) answer choices were IAs for ROs. Revised procedural actions in (2) to be SRO specific. |
| 86 | H | 2 | | | | | | | | | | Y | Y | B | S | |
| 87 | H | 2 | | | | | | | | | | Y | Y | B | S | |
| 88 | H | 2 | | | | | | | | | | Y | Y | N | S | |

To: Todd Fish, Chief Examiner
From: Fred Bruns, Peach Bottom Regulatory Exam Author
Subject: Revisions to Peach Bottom Operating Exam Materials for the
December 2009 Initial NRC License Examination
Date: November, 16, 2009

The following materials were revised based on comments from the NRC Examination Team during the on-site exam preparation held November 2 – 4, 2009.

A. Administrative JPMs:

1. Modified critical versus non-critical steps for 1 RO and 1 SRO Conduct of Operations JPM.
2. Clarified time-critical criteria for the RO Emergency Plan JPM.
3. Modified the associated K/A for the SRO Radiation Control JPM (on the JPM and Form ES-301-1).
4. Made additional editorial changes to various JPMs based on NRC examiner comments.

B. Control Room JPMs:

1. Modified critical versus non-critical steps for 1 JPM.
2. Made editorial changes to various JPMs based on NRC examiner comments.

C. In-plant JPMs:

1. Expanded the scope of 1 JPM such that the task is performed on 2 components vice 1.
2. Made editorial changes to various JPMs based on NRC examiner comments.

D. Simulator scenarios:

1. Scenario 1 – minor changes to Simulator Operator instructions.
2. Scenario 2 – minor scripting addition to Event 6.
3. Scenario 3:
 - a. Modified the setup conditions such that a system is available at the beginning of the scenario, but is unavailable later in the scenario (removed during Event 7).
 - b. Modified scripting for Event 7 (see above).
4. Scenario 4 – none.
5. Revised Form ES-D-1 for scenario 3.