

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			
1	F	3	X										X		E	Change stem to read: "These operator actions will result in..."
2	H	3											X		S	(Modified)
3	H	3											X		S	
4	F	3											X		S	
5	F	2											X		S	
6	F	2		X									X		U	Q-41 cues the correct answer.
7	H	3											X		S	
8	H	4					X						X		U	(NEW) Distractor D is also correct
9	H	2											X		S	(NEW)
10	H	2											X		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.
  - More than one distractor is not credible.
  - 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)nacceptable (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).

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	Backward	Q=K/A	SRO Only		
11	H	3										X		S	
12	H	2										X		S	(Modified)
13	H	3										X		S	(Modified)
14	F	2										X		S	
15	F	3										X		S	
16	H	2										X		S	
17	F	3										X		S	(Modified)
18	F	2										X		S	
19	F	2										X		S	
20	F							X				X		U	With condition given in stem, all distractors are correct.
21	F	3										X		S	
22	F	2										X		S	
23	F	2										X		S	
24	H	3										X		S	(NEW)
25	H	2										X		S	
26	H	2										X		S	(NEW)
27	H	3										X		S	(NEW)
28	H	3										X		S	
29	H	2										X		S	
30	H	3										X		S	

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	Backward	Q# K/A	SRO Only		
31	F	3	X									X		U	Rewrite or replace.
32	H	3										X		S	
33	F	3										X		S	
34	F	2										X		S	
35	F	2										X		S	
36	H	3										X		S	
37	H	3										X		S	(NEW)
38	H	2										X		S	
39	H	2										X		S	(Modified)
40	H	3										X		S	
41	F	2		X								X		U	Q-6 cues the answer to this question.
42	H	3										X		S	
43	F	2										X		S	
44	F	2										X		S	
45	H	3										X		S	
46	H	3										X		S	
47	H	3										X		S	
48	F	2										X		S	
49	H	3										X		S	(NEW)
50	H	3										X		S	

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	Backward	Q=K/A	SRO Only		
51	F	2										X		S	
52	F	2										X		S	
53	F	2			X							X		U	Collection of true/false statements. Replace.
54	F	2										X		S	(NEW)
55	F	3										X		S	
56	H	2										X		S	
57	H	3										X		S	
58	H	3										X		S	
59	H	3										X		S	(Modified)
60	F	2										X		S	(NEW)
61	H	2										X		S	
62	H	3										X		S	(NEW)
63	H	3										x		S	
64	F	2										X		S	
65	H	2										X		S	(NEW)
66	F	2				X						X		U	Distractors A and C are not credible, the name infers both valves be open.
67	H	3										X		S	(Modified)
68	H	3										X		S	
69	F	2										X		S	(NEW)
70	F	2										X		S	



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			
1	F	3											X		S	Changed stem as suggested.
2	H	3											X		S	(Modified)
3	H	3											X		S	
4	F	3											X		S	
5	F	2											X		S	
6	F	2											X		S	Wrote new Q-6.
7	H	3											X		S	
8	H	4											X		S	(NEW) Changed stem to resolve problem.
9	H	2											X		S	(NEW)
10	H	2											X		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.
  - More than one distractor is not credible.
  - 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)nacceptable (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).

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	Backward	Q=K/A	SRO Only		
11	H	3										X		S	
12	H	2										X		S	(Modified)
13	H	3										X		S	(Modified)
14	F	2										X		S	
15	F	3										X		S	
16	H	2										X		S	
17	F	3										X		S	(Modified)
18	F	2										X		S	
19	F	2										X		S	
20	F											X		S	Comment was incorrect- changed comment.
21	F	3										X		S	
22	F	2										X		S	
23	F	2										X		S	
24	H	3										X		S	(NEW)
25	H	2										X		S	
26	H	2										X		S	(NEW)
27	H	3										X		S	(NEW)
28	H	3										X		S	
29	H	2										X		S	
30	H	3										X		S	

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	Backward	Q# K/A	SRO Only		
31	F	3										X		S	Rewrote Q.
32	H	3										X		S	
33	F	3										X		S	
34	F	2										X		S	
35	F	2										X		S	
36	H	3										X		S	
37	H	3										X		S	(NEW)
38	H	2										X		S	
39	H	2										X		S	(Modified)
40	H	3										X		S	
41	F	2										X		S	New Q-6 written.
42	H	3										X		S	
43	F	2										X		S	
44	F	2										X		S	
45	H	3										X		S	
46	H	3										X		S	
47	H	3										X		S	
48	F	2										X		S	
49	H	3										X		S	(NEW)
50	H	3										X		S	



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	Backward	Q=K/A	SRO Only		
51	F	2										X		S	
52	F	2										X		S	
53	F	2										X		S	Wrote new Q.
54	F	2										X		S	(NEW)
55	F	3										X		S	
56	H	2										X		S	
57	H	3										X		S	
58	H	3										X		S	
59	H	3										X		S	(Modified)
60	F	2										X		S	(NEW)
61	H	2										X		S	
62	H	3										X		S	(NEW)
63	H	3										x		S	
64	F	2										X		S	
65	H	2										X		S	(NEW)
66	F	2										X		S	Wrote new Q.
67	H	3										X		S	(Modified)
68	H	3										X		S	
69	F	2										X		S	(NEW)
70	F	2										X		S	



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		
1	H	3										X	X	S	
2	H	3										X	X	S	(NEW)
3	H	3										X	X	S	
4	H	3										X	X	S	
5	H	3										X	x	S	(NEW)
6	H	3										X	X	S	(NEW)
7	F	3										X	X	S	(NEW)
8	F	3										X	X	S	
9	H	3										X	X	S	
10	H	2										X	X	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).
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  - 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.
  - More than one distractor is not credible.
  - 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)nacceptable (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).



**APPENDIX E - REGION IV OPERATING TEST JOB PERFORMANCE MEASURE QUALITY REVIEW MATRIX**

JPM#	1. Dyn (D/S)	2. LOD (1-5)	3. Attributes					4. Job Content Errors		5. U/E/S	6. Explanation (See below for instructions)
			IC Focus	Cues	Critical Steps	Scope (N/B)	Over-lap	Job-Link	Minutia		
JS1	D	3								S	
JS2	S	2								S	
JS3	S	2								S	
JS4	D	3								S	
JS5	D	3								S	
JS6	S	2			X					E	Why is Step 1 critical?
JS7	D	3								S	Not marked as an alternate path JPM.
JS8	D	3								E	Add for evaluator use that no actions are expected to be taken in Step 1.
JP01	S	3			X		X			E	Not marked as an alternate path JPM. Why aren't Steps 2 and 11 critical? RO written exam questions 6 and 41 address the same subjects.
JP2	S	2		X						E	Steps 2 and 4 have the same cue.

APPENDIX E - REGION IV OPERATING TEST JOB PERFORMANCE MEASURE QUALITY REVIEW MATRIX											
JPM#	1. Dyn (D/S)	2. LOD (1-5)	3. Attributes					4. Job Content Errors		5. U/E/S	6. Explanation (See below for instructions)
			IC Focus	Cues	Critical Steps	Scope (N/B)	Overlap	Job-Link	Minutia		
JP03	D	2								S	
RA1-1	S	2								S	
S/RA1-2	S	3								S	
RA2	S	2								E	Piping diagram lists Tag 5 as OPEN. The correct position is CLOSED.
RA3	S	2						X		E	Does candidate determine what REP to use? If so, how is this done?
SA1-1	S	3								S	
SA2	S	2								S	
SA3	S	2								S	
SA4	S	3								E	Steps 4 and 8 have time blanks, do both have to be completed within 15 minutes of Step 1 start time?

#### Instructions for Completing Matrix

This form is not contained in or required by NUREG-1021. Utilities are not required or encouraged to use it. The purpose of this form is to enhance regional consistency in reviewing operating tests. Additional information on these areas may be found in Examination Good Practices Appendix D. Check or mark any item(s) requiring comment and explain the issue in the space provided.

- Determine whether the task is dynamic (D) or static (S). A dynamic task is one that involves continuous monitoring and response to varying parameters. A static task is basically an system reconfiguration or realignment.
- Determine level of difficulty (LOD) using established 1-5 rating scale. Levels 1 and 5 represent inappropriate (low or high) discriminatory level for the license being tested.
- Check the appropriate box when an attribute weakness is identified:
  - The initiating cue is not sufficiently clear to ensure the operator understands the task and how to begin.
  - The JPM does not contain sufficient cues that are objective (not leading).
  - All critical steps (elements) have not been properly identified.
  - Scope of the task is either too narrow (N) or too broad (B).
  - Excessive overlap with other part of operating test or written examination.
- Check the appropriate box when a job content error is identified:
  - Topics not linked to job content (e.g., disguised task, not required in real job).
  - Task is trivial and without safety significance.
- Based on the reviewer's judgment, is the JPM as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- Provide a brief description of problem in the explanation column. Provide conclusion on whether JPM SET criteria satisfied (i.e., number/distribution of safety functions, A.3 and A.4 integrated with parts B/C, Admin topics per section meet ES).

**APPENDIX E - REGION IV OPERATING TEST JOB PERFORMANCE MEASURE QUALITY REVIEW MATRIX (COMMENT RESOLUTION)**

JPM#	1. Dyn (D/S)	2. LOD (1-5)	3. Attributes					4. Job Content Errors		5. U/E/S	6. Explanation (See below for instructions)
			IC Focus	Cues	Critical Steps	Scope (N/B)	Over-lap	Job-Link	Minutia		
JS1	D	3								S	
JS2	S	2								S	
JS3	S	2								S	
JS4	D	3								S	
JS5	D	3								S	
JS6	S	2								S	Removed Step 1 as critical and combined Steps 7& 8 into one critical step.
JS7	D	3								S	Marked as an alternate path JPM.
JS8	D	3								S	Changed Step 1 to state that no action will be taken in this step.
JP01	S	3								S	Marked as an alternate path JPM. Steps 2 and 11 made critical. Rewrote Q-6 in written exam.
JP2	S	2								S	Changed cue in Step 4.

**Instructions for Completing Matrix**

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- Determine whether the task is dynamic (D) or static (S). A dynamic task is one that involves continuous monitoring and response to varying parameters. A static task is basically a system reconfiguration or realignment.
- Determine level of difficulty (LOD) using established 1-5 rating scale. Levels 1 and 5 represent inappropriate (low or high) discriminatory level for the license being tested.
- Check the appropriate box when an attribute weakness is identified:
  - The initiating cue is not sufficiently clear to ensure the operator understands the task and how to begin.
  - The JPM does not contain sufficient cues that are objective (not leading).
  - All critical steps (elements) have not been properly identified.
  - Scope of the task is either too narrow (N) or too broad (B).
  - Excessive overlap with other part of operating test or written examination.
- Check the appropriate box when a job content error is identified:
  - Topics not linked to job content (e.g., disguised task, not required in real job).
  - Task is trivial and without safety significance.
- Based on the reviewer's judgment, is the JPM as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- Provide a brief description of problem in the explanation column. Provide conclusion on whether JPM SET criteria satisfied (i.e., number/distribution of safety functions, A.3 and A.4 integrated with parts B/C, Admin topics per section meet ES).

APPENDIX E - REGION IV OPERATING TEST JOB PERFORMANCE MEASURE QUALITY REVIEW MATRIX (Comment Review)											
JPM#	1. Dyn (D/S)	2. LOD (1-5)	3. Attributes					4. Job Content Errors		5. U/E/S	6. Explanation (See below for instructions)
			IC Focus	Cues	Critical Steps	Scope (N/B)	Over-lap	Job-Link	Minutia		
JP03	D	2								S	
RA1-1	S	2								S	
S/RA1-2	S	3								S	
RA2	S	2								S	Piping diagram changed to list Tag 5 as CLOSED.
RA3	S	2								S	Added a statement so that evaluator knows what the correct actions are.
SA1-1	S	3								S	
SA2	S	2								S	
SA3	S	2								S	
SA4	S	3								S	Changed Step 8 to clarify when 15 minute time will start.

**Instructions for Completing Matrix**  
 This form is not contained in or required by NUREG-1021. Utilities are not required or encouraged to use it. The purpose of this form is to enhance regional consistency in reviewing operating tests. Additional information on these areas may be found in Examination Good Practices Appendix D. Check or mark any item(s) requiring comment and explain the issue in the space provided.

- Determine whether the task is dynamic (D) or static (S). A dynamic task is one that involves continuous monitoring and response to varying parameters. A static task is basically an system reconfiguration or realignment.
- Determine level of difficulty (LOD) using established 1-5 rating scale. Levels 1 and 5 represent inappropriate (low or high) discriminatory level for the license being tested.
- Check the appropriate box when an attribute weakness is identified:
  - The initiating cue is not sufficiently clear to ensure the operator understands the task and how to begin.
  - The JPM does not contain sufficient cues that are objective (not leading).
  - All critical steps (elements) have not been properly identified.
  - Scope of the task is either too narrow (N) or too broad (B).
  - Excessive overlap with other part of operating test or written examination.
- Check the appropriate box when a job content error is identified:
  - Topics not linked to job content (e.g., disguised task, not required in real job).
  - Task is trivial and without safety significance.
- Based on the reviewer's judgment, is the JPM as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- Provide a brief description of problem in the explanation column. Provide conclusion on whether JPM SET criteria satisfied (i.e., number/distribution of safety functions, A.3 and A.4 integrated with parts B/C, Admin topics per section meet ES).



**APPENDIX N - REGION IV OPERATING TEST SCENARIO REVIEW MATRIX**

Scen Set	1 ES	2 TS	3 Crit	4 IC	5 Pred	6 TL	7 L/C	8 Eff	9 U/E/S	10 Explanation (See below for instructions)
1	y	y	y	y	y	y	y	y	S	
2	Y	Y	Y	Y	Y	Y	Y	Y	S	
3	Y	Y	Y	Y	Y	Y	Y	Y	E	Appears to be only one critical task.

**Instructions for Completing Matrix**

This form is not contained in or required by NUREG-1021. Utilities are not required or encouraged to use it. The purpose of this form is to enhance regional consistency in reviewing operating test scenario sets. Additional information on these areas may be found in Examination Good Practices Appendix D. Check or mark any item(s) requiring comment and explain the issue in the space provided.

1. ES: ES-301 checklists 4, 5, & 6 satisfied.
2. TS: Set includes SRO TS actions for each SRO, with required actions explicitly detailed.
3. Crit: Each manipulation or evolution has explicit success criteria documented in Form ES-D-2.
4. IC: Out of service equipment and other initial conditions reasonably consistent between scenarios and not predictive of scenario events and actions.
5. Pred: Scenario sequence and other factors avoid predictability issues.
6. TL: Time line constructed, including event and process triggered conditions, such that scenario can run without routine examiner cuing.
7. L/C: Length and complexity for each scenario in the set is reasonable for the crew mix being examined, such that all applicants have reasonably similar exposure and events are needed for evaluation purposes.
8. Eff: Sequence of events is reasonably efficient for examination purposes, especially with respect to long delays or interactions.
9. Based on the reviewer's judgment, is the scenario set as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
10. Provide a brief description of problem in the explanation column

**APPENDIX N - REGION IV OPERATING TEST SCENARIO REVIEW MATRIX (Comment Resolution)**

Scen Set	1 ES	2 TS	3 Crit	4 IC	5 Pred	6 TL	7 L/C	8 Eff	9 U/E/S	10 Explanation (See below for instructions)
1	y	y	y	y	y	y	y	y	S	
2	Y	Y	Y	Y	Y	Y	Y	Y	S	
3	Y	Y	Y	Y	Y	Y	Y	Y	S	Modified scenario to include additional Critical Tasks.

**Instructions for Completing Matrix**

This form is not contained in or required by NUREG-1021. Utilities are not required or encouraged to use it. The purpose of this form is to enhance regional consistency in reviewing operating test scenario sets. Additional information on these areas may be found in Examination Good Practices Appendix D. Check or mark any item(s) requiring comment and explain the issue in the space provided.

1. ES: ES-301 checklists 4, 5, & 6 satisfied.
2. TS: Set includes SRO TS actions for each SRO, with required actions explicitly detailed.
3. Crit: Each manipulation or evolution has explicit success criteria documented in Form ES-D-2.
4. IC: Out of service equipment and other initial conditions reasonably consistent between scenarios and not predictive of scenario events and actions.
5. Pred: Scenario sequence and other factors avoid predictability issues.
6. TL: Time line constructed, including event and process triggered conditions, such that scenario can run without routine examiner cuing.
7. L/C: Length and complexity for each scenario in the set is reasonable for the crew mix being examined, such that all applicants have reasonably similar exposure and events are needed for evaluation purposes.
8. Eff: Sequence of events is reasonably efficient for examination purposes, especially with respect to long delays or interactions.
9. Based on the reviewer's judgment, is the scenario set as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
10. Provide a brief description of problem in the explanation column

**PVNGS 2003 NRC License Examination**

**Operating Examination**

**Description of Modifications**

<b>General</b>			
<b>Item</b>	<b>Modification</b>	<b>Source</b>	<b>Date</b>
SRO Exam as Given	Question #44 and #48 were the same question. There were 101 questions on the exam. Question # 49 was used twice. Question # 48 was deleted and the remaining numbers on the exam were resequenced in order. The exam now correctly shows 100 questions in their proper sequence. (75 questions from the RO test, 25 SRO questions distributed throughout to make the 100 question SRO Exam)	PV	7/11/03

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**PVNGS 2003 NRC License Examination**

**Operating Examination**

**Description of Modifications**

<b>Written Examination</b>						
<b>(ES401-5) Question #</b>	<b>Modification</b>			<b>Source</b>	<b>Date</b>	
RO 66	<b>C</b>	The question has two invalid distractors. The stem asked for valves or hatches. Two of the distractors are flanges.			EV	7/9/03
	<b>R</b>	A new question was written to replace this one.				
SRO 2	<b>C</b>	The comment statement on the 401-5 form states that "at least 3 hrs" has passed since the LOCA occurred while the question stem states that 2 and a half hours has passed since the LOCA started.			PV	7/10/03
	<b>R</b>	The comment statement should read that "at least <u>2</u> hours" has passed.				
RO 15	<b>C</b>	The correct answer needs to be changed to state: must immediately trip the <u>reactor</u> instead of immediately trip the <u>turbine</u> to match the AOP requirement.			PV	7/10/03
	<b>R</b>	The answer has been revised as noted above.				
RO 47	<b>C</b>	Need to clarify why PCN-V118 can not be open unless the Refuel Pool level and the Fuel Canal level are both >131 ft. 10 inches actual level.			PV	7/10/03
	<b>R</b>	The ES-401-5 comment area has been revised as noted above.				
RO 52	<b>C</b>	Clarified question stem to state: Which ONE of the following is true regarding Spent Fuel Pool Cooling related Control Room Board or Recorder indications? To say: Which ONE of the following is true regarding Spent Fuel Pool Cooling <u>as</u> related <u>to</u> Control Room Board or Recorder indications?			PV	7/10/03
	<b>R</b>	The ES-401-5 comment area has been revised as noted above.				

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**PVNGS 2003 NRC License Examination  
 Operating Examination  
 Description of Modifications**

<b>Administrative Walkthrough</b>			
<b>Admin #</b>	<b>Modification</b>	<b>Source</b>	<b>Date</b>
SA3	Changed JPM reference to KA catalog # 2.3.6 and associated SRO Importance level to 3.1. This KA number better reflects the JPM task standard.	PV	5/1/03

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**PVNGS 2003 NRC License Examination  
 Operating Examination  
 Description of Modifications**

<b>Job Performance Measure</b>			
<b>JPM #</b>	<b>Modification</b>	<b>Source</b>	<b>Date</b>

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**PVNGS 2003 NRC License Examination**

**Operating Examination**

**Description of Modifications**

<b>Operating (Scenario) Test</b>			
<b>Scenario #</b>	<b>Modification</b>	<b>Source</b>	<b>Date</b>
2	Combined event 1 & 2 into a single event. Eliminated credit for a Component Malfunction. No operator action was required for this previous 2 <sup>nd</sup> event (DG Trip).	EV	7/3/03
	<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>		

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