

2003 Initial License Class NRC Exam Analysis, Comments Incorporated

Question	Record #	Correct Answer	Question Avg.	87	90	84	83	82	83	81	83
RAW POINTS				87	90	84	83	82	83	81	83
1	1111	c	50%	c	c	d	c	b	c	d	d
2	14036	c	88%	c	d	c	c	c	c	c	c
3	1099	d	100%	d	d	d	d	d	d	d	d
4	14035	d	25%	c	d	b	b	b	d	b	b
5	14670	b	100%	b	b	b	b	b	b	b	b
6	19124	d	88%	d	d	a	d	d	d	d	d
7	5084	c	100%	c	c	c	c	c	c	c	c
8	14043	a	100%	a	a	a	a	a	a	a	a
9	14045	c	63%	b	c	b	b	c	c	c	c
10	2931	b	100%	b	b	b	b	b	b	b	b
11	10081	a	88%	a	a	a	a	a	b	a	a
12	5155	b	63%	b	c	c	c	b	b	b	b
13	14040	b/d	88%	d	b	d	b	c	d	b	d
14	14050	b	63%	b	b	b	d	d	b	d	b
15	19090	d	100%	d	d	d	d	d	d	d	d
16	1507	d	100%	d	d	d	d	d	d	d	d
17	14032	a	75%	a	a	a	a	a	b	a	b
18	19051	a	88%	a	a	a	a	a	a	c	a
19	16513	b	100%	b	b	b	b	b	b	b	b
20	1058	d	63%	d	c	c	d	d	c	d	d
21	5425	a/b	100%	a	a	b	a	a	a	a	a
22	5608	c	100%	c	c	c	c	c	c	c	c
23	14679	a	75%	a	a	a	d	a	b	a	a
24	14451	d	50%	b	b	d	b	b	d	d	d
25	14027	c	50%	d	c	a	c	a	c	d	c
26	2521	b	100%	b	b	b	b	b	b	b	b
27	14039	d	100%	d	d	d	d	d	d	d	d
28	14024	b	100%	b	b	b	b	b	b	b	b
29	1208	c	100%	c	c	c	c	c	c	c	c
30	19096	b	100%	b	b	b	b	b	b	b	b
31	1744	b	100%	b	b	b	b	b	b	b	b
32	4029	b	100%	b	b	b	b	b	b	b	b
33	14028	d	100%	d	d	d	d	d	d	d	d
34	2127	c	100%	c	c	c	c	c	c	c	c
35	14033	a	100%	a	a	a	a	a	a	a	a
36	14025	d	50%	b	d	b	d	d	d	b	b
37	5348	b	100%	b	b	b	b	b	b	b	b
38	19084	b	100%	b	b	b	b	b	b	b	b
39	14004	a	88%	b	a	a	a	a	a	a	a
40	14014	a	88%	a	a	a	a	c	a	a	a
41	8970	d	25%	a	a	b	c	c	d	a	d
42	3995	c	88%	c	c	c	c	c	c	c	a
43	14048	d	88%	d	d	d	d	d	d	a	d
44	14042	d	100%	d	d	d	d	d	d	d	d
45	6226	c	100%	c	c	c	c	c	c	c	c
46	5247	d	88%	d	d	d	d	d	d	b	d
47	13407	d	100%	d	d	d	d	d	d	d	d
48	14000	c	100%	c	c	c	c	c	c	c	c
49	2403	c	100%	c	c	c	c	c	c	c	c

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Question	Record #	Correct Answer	Question Avg.	PO	PO	PO	SLO	SLO	SLO	SLO	SLO
50	19034	a	100%	a	a	a	a	a	a	a	a
51	14001	c	88%	c	c	c	c	c	b	c	c
52	16472	b	100%	b	b	b	b	b	b	b	b
53	16485	b	88%	b	b	b	b	b	d	b	b
54	54	b	38%	c	a	b	a	b	c	b	a
55	14047	b	88%	b	b	b	b	a	b	b	b
56	5268	b	100%	b	b	b	b	b	b	b	b
57	5332	d	100%	d	d	d	d	d	d	d	d
58	5333	d	100%	d	d	d	d	d	d	d	d
59	14023	c	100%	c	c	c	c	c	c	c	c
60	19082	c	63%	c	c	b	c	c	d	a	c
61	5730	b	88%	b	b	b	a	b	b	b	b
62	14019	d	100%	d	d	d	d	d	d	d	d
63	14021	b	100%	b	b	b	b	b	b	b	b
64	16483	b	75%	b	b	b	b	b	d	d	b
65	19068	b	100%	b	b	b	b	b	b	b	b
66	14046	d	100%	d	d	d	d	d	d	d	d
67	4243	d	50%	d	c	d	d	b	c	d	c
68	12215	c	100%	c	c	c	c	c	c	c	c
69	12209	d	100%	d	d	d	d	d	d	d	d
70	13673	b	100%	b	b	b	b	b	b	b	b
71	16796	a	100%	a	a	a	a	a	a	a	a
72	14426	a	100%	a	a	a	a	a	a	a	a
73	4214	b	63%	b	b	d	b	c	b	a	b
74	5127	d	100%	d	d	d	d	d	d	d	d
75	2167	d	100%	d	d	d					
76	1290	b	100%	b	b	b					
77	5092	c	100%	c	c	c					
78	3724	c	100%	c	c	c					
79	14041	b	33%	b	c	c					
80	3973	c	100%	c	c	c					
81	3085	c	100%	c	c	c					
82	18311	c	100%	c	c	c					
83	14053	c	100%	c	c	c					
84	3302	a	100%	a	a	a					
85	14038	a	100%	a	a	a					
86	14496	a	100%	a	a	a					
87	14034	b	0%	d	d	d					
88	3286	c	100%	c	c	c					
89	1238	b	33%	a	b	a					
90	2816	b	100%	b	b	b					
91	19100	c	100%	c	c	c					
92	5401	d	33%	c	d	c					
93	5070	c	100%	c	c	c					
94	16441	c	100%	c	c	c					
95	14003	d	100%	d	d	d					
96	14026	b	100%	b	b	b					
97	19123	a	67%	d	a	a					
98	16466	c	100%	c	c	c					
99	13406	a	100%	a	a	a					
100	12222	b	0%	c	c	a					

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Question	Record #	Correct Answer	Question Avg.	RO	RO	RO	SRO	SRO	SRO	SRO	SRO
75	768	a	100%				a	a	a	a	a
76	5101	c	0%				b	b	b	b	b
77	5468	d	100%				d	d	d	d	d
78	14052	a	40%				a	c	a	b	c
79	32	a	0%				d	c	c	c	c
80	36	a	20%				d	a	b	b	b
81	44	b	80%				b	b	b	b	c
82	4002	d	80%				a	d	d	d	d
83	38	d	80%				d	c	d	d	d
84	48	b	40%				a	b	b	a	d
85	114	a	60%				a	d	b	a	a
86	42	c	20%				c	d	d	a	b
87	16415	a	80%				b	a	a	a	a
88	24	d	80%				d	d	d	b	d
89	40	a	80%				a	c	a	a	a
90	46	a	100%				a	a	a	a	a
91	47	d	40%				c	d	b	d	b
92	30	b	100%				b	b	b	b	b
93	34	a	100%				a	a	a	a	a
94	16569	c	100%				c	c	c	c	c
95	28	b	80%				b	b	b	b	c
96	5668	d	80%				c	d	d	d	d
97	9015	c	100%				c	c	c	c	c
98	5760	d	80%				d	d	d	d	a
99	12218	b	100%				b	b	b	b	b
100	9684	d	80%				d	d	b	d	d
SCORE (%)				87.0	90.0	84.0	83.0	82.0	83.0	81.0	83.0
RO	16	"a" responses		SRO	20	"a" responses					
	30	"b" responses			28	"b" responses					
	27	"c" responses			20	"c" responses					
	25	"d" responses			30	"d" responses					
Value for color change				60							
Total RO Points				100		Total SRO Points				100	
RO Average				87.0		SRO Average				82.4	
Overall Average				84.1							

Question Number	Record Number	Pass %	Comment	Recommendation
RO/SRO 1	1111	50	There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to identify which breakers trip if excessive amps flow when the Diesel is in parallel with the grid. The student text (COR001-01-01 and COR002-08-02) adequately address the breaker trips and interlocks.	Cover this information during NRC post-exam review for current license class. (Notification 10254273)
RO/SRO 4	14035	25	There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to determine the effect on VARs and field amps when underexcited and grid voltage increases.	Revise student text (COR001-13-01) to address this condition. (Notification 10254366) Cover this information during NRC post-exam review for current license class. (Notification 10254273)

Question Number	Record Number	Pass %	Comment	Recommendation
RO/SRO 13	14040	50/88	<p>The test item had the operator predict how core spray would respond to an initiation signal while in full flow test and above the shutoff head for Core Spray. The test item did not specify a specific time frame to assess the Core Spray parameters. As the full-flow test valve is very fast and the minimum flow valve is very slow, the initial response will be to approach shutoff head, then lower to a discharge pressure slightly lower than shutoff head.</p> <p>After discussion with chief examiner, will also accept "b". See formal submittal for details.</p>	<p>Modify the test item to specify evaluation after valves have completed repositioning for existing conditions. (Notification 10254338)</p> <p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>

Question Number	Record Number	Pass %	Comment	Recommendation
RO/SRO 21	5425	13/100	<p>The test item choices are confusing as choice "a" can be read as there are no inputs that currently have AC power. Choice "b" is confusing in that it states irrespective of reactor pressure when reactor pressure must exceed 1080 psig once for LLS to arm. The stem states no operator action will be taken, but to arm irrespective of reactor pressure, the control switch must be manipulated.</p> <p>The test item required the candidate to determine the effect a loss of RPS has on the operation of LLS logic.</p> <p>After discussion with chief examiner, will also accept "a". See formal submittal for details.</p>	<p>Reword choice "a" to "all relays providing input into the LLS logic are DC powered." Reword choice "b" to remove "irrespective of reactor pressure" (Notification 10254489)</p> <p>Revise student text (COR002-16-02) to address how RPS logic and power interface with LLS, including the effect a loss of RPS power has on LLS logic. (Notification 10254490)</p> <p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>
RO/SRO 24	14451	50	<p>There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to determine the effect a failed flow transmitter will have on RCIC operation. The student text explicitly covers this failure and its effects.</p>	<p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>

Question Number	Record Number	Pass %	Comment	Recommendation
RO/SRO 25	14027	50	There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to calculate a temperature change and then apply the temperature change to a pressure change.	Consider adding a fundamentals review module to initial license class to address the theory items in 55.41. (Notification 10254491) Cover this information during NRC post-exam review for current license class. (Notification 10254273)
RO/SRO 36	14025	50	There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to know if the Core Spray break detection sensed above or below core plate pressure. The SLC student text erroneously identifies the sparger as the input into the Core Spray break detection (below core plate).	Revise SLC student text to correctly describe the connections and cause/effect relationship for the Core Spray break detection (COR002-29-02) (Notification 10254492) Cover this information during NRC post-exam review for current license class. (Notification 10254273)
RO/SRO 41	8970	25	There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to know the bases of the MCPR safety limit from memory.	Cover this information during NRC post-exam review for current license class. (Notification 10254273)

Question Number	Record Number	Pass %	Comment	Recommendation
RO/SRO 54	54	38	There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to know the sequence of steps to stop and prevent feedwater injection from memory. This was a recent procedure change. All incorrect choices included placing the Feedwater Level controllers in MDEM vice the required MDVP.	Cover this information during NRC post-exam review for current license class. Include why MDVP mode is used and why MDEM is not. (Notification 10254273)
RO/SRO 67	4243	50	There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to calculate and apply the 25% extension allowed for Tech Spec surveillances. The students were provided with Tech Spec SR 3.0.2 which supports this concept.	Cover this information during NRC post-exam review for current license class. (Notification 10254273)

Question Number	Record Number	Pass %	Comment	Recommendation
RO 79	14041	33	<p>There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to know the effect that temperature has on radionuclide adsorption.</p> <p>The training material adequately addresses this issue.</p>	<p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>
RO 87	14034	0	<p>There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to know the effect that a loss of DC power has on a running DG.</p> <p>The training material adequately addresses this issue.</p>	<p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>
RO 89	1238	33	<p>The stem should have specified "reset and remain reset"</p> <p>The test item required the candidate to know how to reset a control rod drift indication.</p>	<p>Modify the question to specify "reset and remain reset" (Notification 10254493)</p> <p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>

Question Number	Record Number	Pass %	Comment	Recommendation
RO 92	5401	33	There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to know the effect that a loss of RPS has on RBM with an edge control rod selected. The student had to determine the selected rod was an edge rod.	Cover this information during NRC post-exam review for current license class. (Notification 10254273)
RO 100	12222	0	There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to know the minimum actions required when changing RWPs while staying in the RCA.	Cover this information during NRC post-exam review for current license class. (Notification 10254273)
SRO 76	5101	0	There is nothing technically or psychometrically wrong with this test item. The test item required the candidate to know the maximum number of bundles allowed outside a shipping container and the normal storage area.	Consider improving the objectives and training material pertaining to refueling administrative requirements. (Notification 10252611) Cover this information during NRC post-exam review for current license class. (Notification 10254273)

Question Number	Record Number	Pass %	Comment	Recommendation
SRO 78	14052	40	<p>There is nothing technically or psychometrically wrong with this test item.</p> <p>The test item required the candidate to know the normal valve alignment and physical response for the primary containment when venting.</p>	<p>Consider adding a description of this containment response (as well as response if nitrogen is isolated). (Notification 10254514)</p> <p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>
SRO 79	32	0	<p>“No operator action” was included in the stem twice.</p> <p>The test item required the candidate predict the containment response to an MSIV closure from full power with no operator action.</p>	<p>Remove the second “no operator action” from the question stem. (Notification 10254515)</p> <p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>
SRO 80	36	20	<p>There is nothing technically or psychometrically wrong with this test item.</p> <p>The test item required the candidate to know the purpose of the metal part of the Reactor Building (blowout panel protection for tornado loads).</p> <p>Description of these is not contained in the Containment student text (COR002-03-02).</p>	<p>Add description and function of the Reactor Building blowout panels to the Containment student text (COR002-03-02). Include discussion of the steam tunnel blowout plug as well. (Notification 10254516)</p> <p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>

Question Number	Record Number	Pass %	Comment	Recommendation
SRO 84	48	40	<p>There is nothing technically or psychometrically wrong with this test item.</p> <p>The test item required the candidate to evaluate provided Technical Specifications to determine testing requirements for a control rod drive mechanism.</p>	<p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>
SRO 86	42	20	<p>There is nothing technically or psychometrically wrong with this test item.</p> <p>The test item required the candidate to recall from memory the bases (plant design) for the jet pumps. Existing objectives require this knowledge from memory.</p>	<p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>
SRO 91	47	40	<p>There is nothing technically or psychometrically wrong with this test item.</p> <p>The test item required the candidate to recall from memory whether to use SGT during initial containment purge and why/why not.</p>	<p>Cover this information during NRC post-exam review for current license class. (Notification 10254273)</p>