

# FINAL ADMINISTRATIVE DOCUMENTS

## CONTENTS:

- (X) Exam Preparation Checklist (ES-201-1)
- (X) Final Exam Outline Quality Checklist (ES-201-2)
- (X) Exam Security Agreements (ES-201-3)
- (NA) Final Administrative Topics Outline (ES-301-1)
- (NA) Final Control Room & Walk-Through Test Outline (ES-301-2)
- (NA) Final Operating Test Quality Check Sheet (ES-301-3)
- (NA) Final Simulator Scenario Quality Check Sheet (ES-301-4)
- (NA) Final Transient and Event Check Sheet (ES-301-5)
- (NA) Final Competencies Check Sheet (ES-301-6)
- (X) Final Written Exam Sample Plan (ES-401-1/2)\*
- (X) Final Record of Rejected KAs (ES-401-4)
- (X) Final Written Exam Quality Check Sheet (ES-401-6)
- (X) Final Written Exam Review Work Sheet (ES-401-9)
- (X) Written Exam Grading Quality Check Sheet (ES-403-1)  
(with RO computer answer keys)

## Location of Electronic Files:

Primary Folder:

All applicable documents are attached

\* SAME AS DRAFT (SEE SECTION 1)

Submitted By: 

Verified By 

Facility: <u>McGuire</u>		Date of Examination: <u>WR 11/19/09</u>	OP NA
Examinations Developed by: <u>Facility</u>		NRC	
<u>Written</u>		<u>Written Exam Outline only</u>	
Target Date*	Task Description (Reference)	Chief Examiner's Initials	
-180	1. Examination administration date confirmed (C.1.a; C.2.a and b)	rfa	
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	rfa	
-120	3. Facility contact briefed on security and other requirements (C.2.c)	rfa	
-120	4. Corporate notification letter sent (C.2.d)	rfa	
[-90]	[5. Reference material due (C.1.e; C.3.c; Attachment 2)]	rfa	
{-75}	6. Integrated examination outline(s) due, including Forms ES-201-2, ES-201-3, ES-301-1, ES-301-2, ES-301-5, ES-D-1's, ES-401-1/2, ES-401-3, and ES-401-4, as applicable (C.1.e and f; C.3.d)	rfa	
{-70}	{7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)}	rfa	
{-45}	8. Proposed examinations (including written, walk-through JPMs, and scenarios, as applicable), supporting documentation (including Forms ES-301-3, ES-301-4, ES-301-5, ES-301-6, and ES-401-6), and reference materials due (C.1.e, f, g and h; C.3.d)	rfa	
-30	9. Preliminary license applications (NRC Form 398's) due (C.1.i; C.2.g; ES-202)	rfa	
-14	10. Final license applications due and Form ES-201-4 prepared (C.1.i; C.2.i; ES-202)	rfa	
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	rfa	
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f and h; C.3.g)	rfa	
-7	13. Written examinations <del>and operating tests</del> approved by NRC supervisor (C.2.i; C.3.h)	rfa	
-7	14. Final applications reviewed; 1 or 2 (if >10) applications audited to confirm qualifications / eligibility; and examination approval and waiver letters sent (C.2.i; Attachment 4; ES-202, C.2.e; ES-204)	rfa	
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k)	rfa	
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	NA	
<p>* Target dates are generally based on facility-prepared examinations and are keyed to the examination date identified in the corporate notification letter. They are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.                  [Applies only] {Does not apply} to examinations prepared by the NRC.</p>			

FINAL

RO WRITTEN RETAKE

Facility: <b>McGuire Nuclear Station</b>		Date of Examination: <b>11/19/2009</b>		
Item	Task Description	Initials		
		a	b*	c#
WRITTEN	a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401.	FBK	SLM	D
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.	FBK	SLM	D
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	FBK	SLM	D
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	FBK	SLM	D
SIMULATOR	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications, and major transients.	N/A	N/A	
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity, and ensure that each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s), and that scenarios will not be repeated on subsequent days.	N/A	N/A	
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.	N/A	N/A	
W/T	a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) the required number of control room and in-plant tasks distributed among the safety functions as specified on the form (2) task repetition from the last two NRC examinations is within the limits specified on the form (3) no tasks are duplicated from the applicants' audit test(s) (4) the number of new or modified tasks meets or exceeds the minimums specified on the form (5) the number of alternate path, low-power, emergency, and RCA tasks meet the criteria on the form.	N/A	N/A	N/A
	b. Verify that the administrative outline meets the criteria specified on Form ES-301-1: (1) the tasks are distributed among the topics as specified on the form (2) at least one task is new or significantly modified (3) no more than one task is repeated from the last two NRC licensing examinations	N/A	N/A	
	c. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.	N/A	N/A	
GENERAL	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam sections.	FBK	SLM	D
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	FBK	SLM	D
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	FBK	SLM	D
	d. Check for duplication and overlap among exam sections.	FBK	SLM	D
	e. Check the entire exam for balance of coverage.	FBK	SLM	D
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	FBK	SLM	D
a. Author: <u>Fred B Kirk Jr / Fred B Kirk</u> b. Facility Reviewer (*): <u>Steven L. Mettelles / Steven L. Mettelles</u> c. NRC Chief Examiner (#): <u>RON AIELLO</u> d. NRC Supervisor: <u>MALCOLM T. WIDLOMAN / Malcolm T. Widloman</u>		Date: 11-13-09 11-13-09 11/5/09 11/17/09		
Note: # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. * Not applicable for NRC-prepared examination outlines				

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 11/16/09 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 11/16/09. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1. FRED B Kirk JR	SRO / Exam Lead	<i>[Signature]</i>	7/15/09	<i>[Signature]</i>	11-20-09	
2. H. Clark Fletcher	Ops Training Instructor / Exam Team	<i>[Signature]</i>	8/13/09	<i>[Signature]</i>	11-21-09	
3. STEVEN A. HELMS	OPS TRNG SUPERVISOR	<i>[Signature]</i>	8/21/09	<i>[Signature]</i>	11-30-09	
4. Dennis C. Killough	LIT / Workstation Support	<i>[Signature]</i>	8/24/09	<i>[Signature]</i>	12-7-09	
5. Nicholas S. Smith	LIT / Work Station Support	<i>[Signature]</i>	8/24/09	<i>[Signature]</i>	12-7-09	
6. Vickie McGinnis	OPSTrng Admin Support	<i>[Signature]</i>	8/26/09	<i>[Signature]</i>	12-7-09	
7. Willy Killete	OPS TRNG / OPS TRNG Super.	<i>[Signature]</i>	9/25/09	<i>[Signature]</i>	11/23/09	
8. NATHAN POSTON	OPS TRAINING	<i>[Signature]</i>	9/28/09	<i>[Signature]</i>	11/30/09	
9. Scotty W WARREN	RO / HLP TRAINING	<i>[Signature]</i>	9/29/09	<i>[Signature]</i>	11/20/09	
10. Wayne Flynn	RO / OPS Shift	<i>[Signature]</i>	10/1/09	<i>[Signature]</i>	12/18/09	
11. Steven Mosteller	SRO / Facility Representative	<i>[Signature]</i>	10/5/09	<i>[Signature]</i>	11-24-09	
12. Scotty Bradshaw	MNS Training Mgr / TM	<i>[Signature]</i>	10/7/09	<i>[Signature]</i>	12-7-09	
13. DOUGLAS C WAREFIELD	RO / HLP TRAINING	<i>[Signature]</i>	10/8/09	<i>[Signature]</i>	12-1-09	
14. Joseph F. Hussey	SOM / OPS STAFF	<i>[Signature]</i>	9/15/09	<i>[Signature]</i>	12-7-09	signature for 12/7/09
15. Scott W. Moser	SRO / OPS Shift	<i>[Signature]</i>	10-26-09	<i>[Signature]</i>	12-7-09	

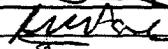
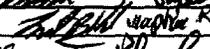
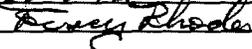
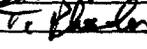
NOTES:

**1. Pre-Examination**

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 4/16/09 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

**2. Post-Examination**

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 11/16/09. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	Michael L. Dexter	RO / OPS SWIFT		11-17-09		12/18/09	
2.	ROBERT M. PARK	OPR MANAGER		11-12-09		12/17/09	
3.	Tracy D. Rhodes	OPS Shift CTR Mgr		11-18-09		12/17/09	
4.	<del>Wade</del> 11/20/09						
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							

NOTES:



Facility: McGuire Nuclear Station      Date of Exam: 11/19/2009      Exam Level: RO  SRO

Item Description	Initial		
	a	b*	c*
1. Questions and answers are technically accurate and applicable to the facility.	FBK	SLM	✓
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	FBK	SLM	✓
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	N/A	N/A	NA
4. The sampling process was random and systematic (If more than 4 RO or 2 SRO questions were repeated from the last 2 NRC licensing exams, consult the NRR OL program office).	FBK	SLM	✓
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: ___ the audit exam was systematically and randomly developed; or ___ the audit exam was completed before the license exam was started; or <input checked="" type="checkbox"/> the examinations were developed independently; or ___ the licensee certifies that there is no duplication; or ___ other (explain)	FBK	SLM	✓
6. Bank use meets limits (no more than 75 percent from the bank, at least 10 percent new, and the rest new or modified); enter the actual RO / SRO-only question distribution(s) at right.	Bank 36 / -	Modified 3 / -	New 36 / -
7. Between 50 and 60 percent of the questions on the RO exam are written at the comprehension/ analysis level; the SRO exam may exceed 60 percent if the randomly selected K/As support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right.	Memory 31 / -	C/A 44 / -	
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	FBK	SLM	✓
9. Question content conforms with specific K/A statements in the previously approved examination outline and is appropriate for the tier to which they are assigned; deviations are justified.	FBK	SLM	✓
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	FBK	SLM	✓
11. The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with the value on the cover sheet.	FBK	SLM	✓

Printed Name / Signature	Date
a. Author: Fred BKirk Jr / <i>[Signature]</i>	11-13-09
b. Facility Reviewer (*): Steven L. Mosteier / <i>[Signature]</i>	11-13-09
c. NRC Chief Examiner (#): Ron Arisolo / <i>[Signature]</i>	11/13/09
d. NRC Regional Supervisor: Malcolm T. Widman / <i>[Signature]</i>	11/17/09

Note: \* The facility reviewer's initials/signature are not applicable for NRC-developed examinations.  
 # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.

**McGuire 2009-302**

Q#/ Q#	1. LOK (C/A)	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			
<p>Instructions</p> <p>[Refer to Section D of ES-401 and Appendix B for additional information regarding each of the following concepts.]</p> <ol style="list-style-type: none"> <li>Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.</li> <li>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).</li> <li>Check the appropriate box if a psychometric flaw is identified:                     <ul style="list-style-type: none"> <li>The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).</li> <li>The stem or distracters contain cues (i.e., clues, specific determiners, phrasing, length, etc).</li> <li>The answer choices are a collection of unrelated true/false statements.</li> <li>One or more distracters is not credible.</li> <li>One or more distracters is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem).</li> </ul> </li> <li>Check the appropriate box if a job content error is identified:                     <ul style="list-style-type: none"> <li>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).</li> <li>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).</li> <li>The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).</li> <li>The question requires reverse logic or application compared to the job requirements.</li> </ul> </li> <li>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).</li> <li>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?</li> <li>At a minimum, explain any "U" ratings (e.g., how the Appendix B psychometric attributes are not being met).</li> </ol> <p style="text-align: center;">RO/SRO Combined Question</p> <p><b>Generic:</b></p> <p>CAF = Check at Facility                      DV = Discriminatory Value                      NP = Non plausible                      On the fill in the blank Qs: State "Which one of the following completes the statement below" One of many examples is Q 8. Many questions marked green require this statement.</p>																
1	M	2					X						Y	N	E	003A1.02 Stem: Underline and/or cap the word "minimum" RFA 10/27/09 Approved RFL 11/09/09
2	M	2					X						Y	N	E	003A301 Swap B with C so values are increasing

Q#	1. LOK (C/A)	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			
																D: Why would flow go up given this failure and these conditions? RFA 10/08/09 Accepted 10/27/09 Approved RFA 11/05/09
3	M	2											Y	N	<b>S</b>	004K5.49 No comment at this time RFA 10/27/09 Approved RFA 11/09/09
4	C	3				X							N	N	<b>U</b>	005G2.4.50 The second part of distracters A and B do not state any manual or automatic actions. That action is not much different then the correct answer a stated in C. Potentially A and C are both correct answers. Modify the second parts of A and B. This Q is U because of two potentially correct answers. RFA 10/27/09 Approved RFA 11/09/09
5	C	3					X						N	N	<b>E</b>	006K2.01 Please justify why 2EMXA and 2ELXA are plausible. Neither the distracter analysis nor the reference material supports their plausibility. This E is U until justified due to two NP distracters. RFA 10/27/09 Added feeder to stem of question. Approved RFA 11/09/09
6	M	1				X							N	N	<b>U S</b>	006K2.04 This Q has low DV. Increase DV by adding a second valve to each choice:  A. XZ incorrect B. XY correct C. ZY incorrect D.. WZ incorrect  This Q is U because of low DV RFA 10/27/09 Changes from W to Z correct for second distracter distracter addition Approved RFA 11/09/09
7	C	3					X						N	N	<b>E</b>	007A1.01 The containment floor and equipment sump plausibility is not justified. The distracter analysis says the floor is used

Q#/ Q#	1. LOK (C/A)	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			
																<p>sometimes but doesn't say when. Consider changing A2 and C2 to the radwaste facility or something or justify plausibility.</p> <p>This Q is E until A2 and C2 are either justified or replaced.</p> <p>RFA 10/27/09</p> <p>Approved RFA 11/09/09</p>
8	C	3					X						N	N	E	<p>008A2.03</p> <p>Change motor bearing temperatures to 190. This will give C1 and D1 more plausibility.</p> <p>RFA 10/27/09</p> <p>Approved RFA 11/09/09</p>
9	C	3					X						N	N	E	<p>010K6.04</p> <p>It's common knowledge that the Pzr relief valves discharge to the PRT. If the PRT ruptures, it will result in a lower pressure. This also is common knowledge. Therefore, distracter C is NP. Change C to increase, increase.</p> <p>RFA 10/27/09</p> <p>Approved RFA 11/09/09</p>
10	C	3	X										N	N	E	<p>012K6.03</p> <p>The 3<sup>rd</sup> bullet is not required because they were never declared inoperable.</p> <p>RFA 10/27/09</p> <p>Approved RFA 11/09/09</p>
11	C	3					X						N	N	E	<p>013A4.03</p> <p>I don't think you need the word ONLY in A because an auto SI will NOT reoccur until the timer has timed out as in B. You can also rewrite A as follows: After the SI reset pushbuttons are depressed and the RTBs have been cycled, an auto SI reinitiation can <u>immediately</u> occur. (Note, this is wrong because the timer has not timed out yet)</p> <p>Distracter A is NP as written.</p> <p>RFA 10/27/09</p> <p>Approved RFA 11/09/09</p>
12	M	2											Y	N	S E	<p>013K1.01</p> <p>No comment at this time</p> <p>RFA 10/27/09</p> <p>Approved RFA 11/09/09</p> <p>Changed question to use Containment Spray logic instead of SI logic based on validation feedback results. This changed the correct answer to 'B'. This also changed the question from an 'S' to an 'E'.</p>

Q#	1. LOK (C/A)	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			
13	C	3				X							N	N	U	<p>Changed Approved RFA 11/12/09</p> <p>022A203</p> <p>Under these conditions, I am not sure that swapping to high speed on their normal power is plausible. Suggest changing "A" and "C" part (2) to swap to slow speed on their emergency power.</p> <p>U because Potentially 2 NP distracters.</p> <p>Part 2 of the KA is not met (<b>facility identified</b>). Use procedures to correct, control or mitigate... If you cannot meet the entire KA, you have to meet at least the second part.</p> <p><b>CE: Reissue a new KA if necessary.</b></p> <p>RFA 10/08/09</p> <p><b>Revisited</b></p> <p><b>A2 needs to read "will remain in slow speed ...."</b></p> <p><b>Part 2 of the KA still not met. CAF</b></p> <p><b>RFA 10/27/09</b></p> <p><b>Changed distracters per Chief Examiner's comments.</b></p> <p>Approved RFA 11/05/09</p>
14	C	3				X							N	N	U	<p>025K5.02</p> <p>Whether the ice sublimates or melts, the result is a higher containment temperature which yields higher pressures. Factor in melting instead of pressure. KA is not affected. B2 and D2 are NP.</p> <p>This Q is U due to 2 NP distracters.</p> <p>RFA 10/27/09</p> <p>Approved RFA 11/05/09</p>
15	C	3					X						Y	N	E	<p>026A208</p> <p>CAF: Do you expect the applicants to know what 1NI-185A is? If you state the valve nomenclature, would that give away the answer?</p> <p>RFA 10/08/09</p> <p><b>Revisited</b></p> <p><b>The valve nomenclature was added</b></p> <p><b>RFA 10/27/09</b></p> <p>Approved RFA 11/05/09</p>
16	C	3					X						Y	N	E	<p>026G2.2.12</p> <p>I am not sure C2 is plausible with the valves open. Please re-evaluate this. If the disch valvs are open, a basic understanding of fig 7.1 of the reference renders this choice NP.</p> <p>RFA 10/27/09</p> <p>Admin Approved 11/12/09</p>

Q#/ Q#	1. LOK (C/A)	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			
17	C	3	X										N	N	<b>E S</b>	<p>Approved RFA 11/08/09</p> <p>039K3.04</p> <p>Since aux steam is normally isolated at 100% power, change the stem power level to 85%. This will give B and C more plausibility.</p> <p>RFA 10/27/09</p> <p>Went from "E" to "S" because more plausibility and distractor.</p> <p>Approved RFA 11/08/09</p>
18	C	3					X						Y	N	<b>E</b>	<p>059K302</p> <p>Choice "C": Change P-11 to 1960 psig. This way they have to know what pressure P-11 is. This will increase plausibility and make the answer less obvious</p> <p>RFA 10/08/09</p> <p><b>Revisited</b></p> <p><b>Additional comment:</b></p> <p>D is NP for set of events given. For this level of exam and knowledge, failure to recall that P-11 resets is not likely. Therefore D is not plausible. I suggest the following:</p> <p><b>A. Following the CF isolation reset or when the SG Hi-Hi level cleared.</b></p> <p><b>B When the SG Hi-Hi level cleared ONLY</b></p> <p><b>C. Following the CF isolation reset or when pressure increased above 1955 psig.</b></p> <p><b>D. when pressure increased above 1955 psig ONLY</b></p> <p>RFA 10/27/09</p> <p>Approved RFA 11/08/09</p>
19	C	3					X						Y	N	<b>E</b>	<p>059K3.03</p> <p>Too much teaching in all distracters/choices. Furthermore, the second parts may give away the correct answer.</p> <p>Reduce to the following:</p> <p><b>A. The feedwater regulating valves on A and D SGs only will open.</b></p> <p><b>B. The feedwater regulating valves will remain in the same position for all SGs</b></p> <p><b>C. All feedwater regulating valves will open to feed all SG (WR or NR) levels to 65%.</b></p> <p><b>D. The feedwater regulating valves on B and C SGs will open to increase the (WR or NR) levels to 65%.</b></p> <p>RFA 10/27/09</p> <p>Added ONLY to distracters A and C</p>

Q#	1. LOK (C/A)	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			
20	M	2											Y	N	S	<p>Approved RFA 11/09/09</p> <p>061K1.01 No comment at this time RFA 10/27/09</p> <p>Approved RFA 11/09/09</p>
21	C	3					X						Y	N	E	<p>062K4.10 Need boundary for D. As written, D could be potentially correct since if it takes 30 s or so to return to normal. Suggestion for D: Loads will auto swap back to the inverter as soon as inverter over current is detected to be less than 120% RFA 10/27/09</p> <p>Approved RFA 11/09/09</p>
22	M	1				X							N	N	U	<p>063K2.01 This Q has low DV. Suggested fix: A. D/G Fuel Oil Booster Pump and FWPT A Emergency Oil Pump(s) B. FWPT A Emergency Oil Pump(s) and Reactor Trip Switchgear Control C. <b>Turbine Emergency Bearing Oil Pump and Turbine Backup Vapor Extractor(s)</b> D. Turbine Emergency Bearing Oil Pump and D/G Fuel Oil Booster Pump This Q is U because of low DV RFA 10/27/09</p> <p>Approved RFA 11/09/09</p>
23	M	2	X										N	N	E	<p>064A3.01 Move the WOOTF statement to the top. CAF: Look at A1 and C1 and make sure that they are not subsets of B1 and D1 because 235 psig is between both choices. You might consider using an actual value where the limits have to be applied instead. RFA 10/27/09 Changed the pressure range for distracters 'B' and 'D' to 210 - 225 PSIG.</p> <p>Approved RFA 11/09/09</p>
24	C	2				X							Y	N	U	<p>064K608 Since ref is provided, and there is no mention of problems with DG starting air, the second part of A and B are NP. Why not change to 7 days and put a particulate bullet in the stem that is within the limits. Unless I am missing something, this Q is U because of 2 NP distracters. RFA 10/27/09</p>

Q#	1. LOK (C/A)	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			
																Removed as a requirement Approved RFA 11/09/09
25	M	2				X							Y	N	<b>U</b>	073A403 In accordance with the reference, it appears that a source check is required not a setpoint check. Please re-verify correct answer.. The stem ask for a requirement. The word "Ensure" (distracters "C" and "D") are NOT "requirements". These two distracters will be immediately eliminated. U because "C" and "D" are NP RFA 10/08/09 <b>Revisited</b> The stem asks for a requirement. C and D are "verify" steps. A and B are performance steps. If the stem asked for a requirement, then the applicant will rule out C and D because they are NOT performance steps. RFA 10/27/09 Added ONLY to distracters 'A' and 'B' and changed distracters 'C' to "Start the associated sample pump AND have RP perform a setpoint check and changed 'D' to to "Start the associated sample pump AND have RP perform a source check" Approved RFA 11/09/09
26	M	2					X						N	N	<b>E</b>	076K4.06 With train separation being common knowledge, I do not believe that D is plausible since the suction is common from SNSWP. Replace D. RFA 10/27/09 Approved RFA 11/09/09
27	C	3											Y	N	<b>S</b>	078A3.01 No comment at this time RFA 10/27/09 Approved RFA 11/09/09
28	M	2					X						N	N	<b>E</b>	103A4.03 If C was correct, D would be also. Modify C or D or add an ONLY to C. RFA 10/27/09 Approved RFA 11/09/09
29	C	2					X						N	N	<b>E</b>	002K3.03 "No impact" (distracter B) is not plausible especially with fans in high speed. Replace B

Q#	1. LOK (C/A)	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			
																RFA 10/27/09 Removed "and" from distractor D. Removed the NO IMPACT statement from distractors C and D. Approved RFA 11/09/09
30	M	2					X						N	N	E	014A1.02 A is a subset of B. If C was correct so would D. Psychometrics need to be addressed. RFA 10/27/09 Approved RFA 11/09/09
31	C	3					X						Y	N	E	017K601 I do not see where "A" is plausible given the circumstances. Replace "A" or prove plausibility. RFA 10/08/09 <b>CAF: Must demonstrate plausibility</b> RFA 10/27/09 Modified stem of question to add "at time of discovery" and modified distractor D to add "immediately restore and chemical to OPERABLE." Approved RFA 11/09/09
32	C	3	X										Y	N	E	029A2.03 Identify the procedure that must be used to support the second part of the KA. ..... and how can it be stabilized as stated in procedure _____. RFA 10/28/09 Moved operating procedure word to body of question. Changed stem to make all listed items. Approved RFA 11/09/09
33	M	2											Y	N	S	034A303 <b>Revisited</b> No comment at this time RFA 10/28/09 Approved RFA 11/09/09
34	M	2											Y	N	S	045K4.13 No comment at this time RFA 10/28/09 Approved RFA 11/09/09

Q#/ Q#	1. LOK (C/A)	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		
35	M	2										Y	N	S	055K1.06 No comment at this time RFA 10/28/09 Approved RFA 11/09/09
36	M	2	X									Y	N	E	068G2.4.50 Stem: Delete the word "is." The reference provided does not support answer and choices. Facility demonstrate and provide proper reference during review. RFA 10/28/09 Approved RFA 11/09/09
37	C	3										Y	N	S	071A4.14 The KA says to operate and/or monitor in the CR. Rad alarms are a form of monitoring. KA is met. No additional comments at this time RFA 10/28/09 Approved RFA 11/09/09
38	M	2	X			X						Y	N	U	075K2.03 If 1TB supplies power to 1ETB, then C is also a potentially correct answer. The stem is not specific enough. This Q is U because of potentially two correct answers. RFA 10/28/09 Approved RFA 11/09/09
39	M	2	X			X						Y	N	U	EPE007G2.4.2 The KA match is OK for actions that should have occurred on EOP entry. "Main feed pump turbines are tripped" is not plausible without something in the stem that might drive the applicant to thinking so. Add something in the stem like a failed annunciator that might elude the applicant to thinking so. This Q is U because of two NP distracters. RFA 10/28/09 Approved RFA 11/09/09
40	C	3										Y	N	S	APE008AK1.01 Double jeopardy with Q 9: This Q is not double jeopardy with Q 9 because 9 dealt with a ruptured PRT. This Q deals with the usage of the mollier diagram. I am researching the SRO ONLY aspect of this. RFA 10/28/09 Approved RFA 11/09/09
41															APE015/017AK2.08

Q#	1. LOK (C/A)	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			
	M	2	X				X						Y	N	E	All choices involve teaching. Additionally, the stem does not solicit much of the info included. Since the Q is comprehensive, redesign it to a two part Q. RFA 10/28/09 Changed all distracters for consistency and balance and removed wording that was teaching in the answers. Approved RFA 11/10/09
42	M	2											Y	N	S	APE022AK102 <b>Revisited</b> No comment at this time RFA 10/28/09 Approved RFA 11/09/09
43	C	3	X										Y	N	E S E	APE026AA2.04 I think 120°F is NOT plausible because it is too low. Consider using a higher temperature. At what temp does the resin burn? Something higher than 138 would also be acceptable. RFA 10/28/09 Changed to 343 after plausibility for 120°F was accepted Approved RFA 11/09/09 Following final validation on 11/11/09, the stem of the question was revised to add "due to reactivity effects" after the first blank to clarify that the question was asking for the change in NC system temperature due to the release of boron from the demineralizer and not the potential change due to the increase in letdown/charging temperature. This changed the question from an 'S' to an 'E'. Changed approved RFA 11/12/09
44	C	2	X			X							Y	N	U E	APE027AK3.04 Stem: 1 <sup>st</sup> bullet: Change "has" to "have". Psychometrics: As written, B is also a correct answer. Additionally, if C was correct, so would D. This Q is U because of multiple correct answers. RFA 10/28/09 After discussion with why B and D are not necessarily correct, instruction accepted as existing Approved RFA 11/09/09 Following final validation on 11/11/09, changed first two bullets to set initial conditions as a Steam Break as opposed to a Pressurizer Safety Valve stuck open to improve the plausibility of the initial conditions. Change approved RFA 11/12/09

Q#/ Q#	1. LOK (C/A)	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			
45	M	2											Y	N	<b>S</b>	EPE029G2.4.2 No comment at this time RFA 10/28/09 <i>Approved RFA 11/08/09</i>
46	M	2	X					X					Y	N	<b>E</b>	EPE038EA1.10 This Q is confusing. NSD-513 states that the best method is EMF-33 and the secondary method is the N-16 monitor. The Q stem asks what the best indication is to determine that a SG tube leak has occurred. The stem seems to contradict the ref material slightly by the way it is worded.  Facility please re-evaluate. RFA 10/28/09 <i>Approved RFA 11/08/09</i>
47	C	3						X					Y	N	<b>E</b>	APE040AK1.01 Distracter D is NP. Replace D with a statement that would cause a CD without stating so. For example opening a valve or series in the primary or secondary that would cause a CD would be acceptable. RFA 10/28/09 <i>Approved RFA 11/08/09</i>
48	C	3											Y	N	<b>S</b>	Ape054AA2.08 No comment at this time RFA 10/28/09 <i>Approved RFA 11/08/09</i>
49	M	2				X							Y	N	<b>U</b>	EPE055EK3.02 A is NP because there is nothing in the stem to indicate that NC system subcooling has been lost or challenged. There is nothing in the reference to support the use or potential use of CLAs in this case.. Distracters A and B do not appear to be plausible. This Q is U until it is proved otherwise. RFA 10/28/09 <i>Added bullet regarding use of subcooling. Moved bullet to departmental/OTM and then SW path into actual question. Approved RFA 11/08/09</i>
50	C	3											Y	N	<b>S</b>	APE056AA2.37 No comment at this time RFA 10/28/09 <i>Approved RFA 11/08/09</i>
51	M	2	X					X					Y	N	<b>E</b>	APE057AA1.06 To be consistent, state in B, C, and D the procedure you

Q#	1. LOK (C/A)	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			
																will go to after completing the IAs. RFA 10/28/09 <i>Approved RFA 11/09/09</i>
52	M	2											Y	N	<b>S</b>	APE058AK3.02 No comment at this time RFA 10/28/09 <i>Approved RFA 11/09/09</i>
53	C	3	X				X						Y	N	<b>E</b>	APE062AA1.05 Reverse the WOOTF statement and put it up front. The discussion (distracter analysis) does not line up with the Q. Please re-evaluate. However, the reference does support the correct answer. RFA 10/28/09 <i>Reviewed RFA 11/09/09</i> <i>Approved RFA 11/16/09</i>
54	C	2				X							Y	N	<b>U</b>	WE04EK2.2 If the graph wasn't marked then I would agree with the distracter analysis for distracters B and D. However, since the graph is incrementally marked, it is not possible to misread it on the horizontal axis. Therefore, 380 GPM is not plausible. I do not have a suggested fix for this problem unless you can provide a curve that doesn't have the 2-9 incremental markings. This Q is U because 2 distracters are not plausible. RFA 10/28/09 <i>Approved RFA 11/10/09</i>
55	C	1				X							Y	N	<b>U</b>	WE05EK2.1 It is common knowledge that an SI signal isolates FW and that FW cannot be regained until SI has been reset. This Q is U because it has no DV. RFA 10/28/09 <i>Replaced K/A with WE05 EK2.2. Reapproved question with modified question stem text.</i> <i>Approved RFA 11/19/09</i>
56	C	3	X				X	X					Y	Y	<b>U</b>	WE11G2.4.8 B and D are not plausible because you asked them in the stem WOOTF describes the requirements or implementing... Therefore B and D are automatically ruled out. Change stem: WOOTF describes whether or not AP-22 can be implemented in conjunction with ECA-1.1. (something to that affect)

Q#	1. LOK (C/A)	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			
																I agree that this Q may be SRO ONLY Replace the Q or request a new KA. RFA 10/28/09 <i>Changed distractor 'B' to 'A' and 'B' distractors are 'as' Added 'Large peak' before LCA in stem of question. Approved RFA 11/10/09</i>
57	C	3	X									Y	N	E	APE003AK1.07 Please re-evaluate the assumption in the question. If they know Xenon did not change, then power did not change and reactivity did not change. This may key them to the answer. Can the assumption be removed without affecting the question? RFA 10/28/09 <i>Added 'steady state' to stem of question and improved references stating that Xenon concentration has not changed. Approved RFA 11/10/09</i> Following final validation on 11/11/09, changed distracters A1 and D1 to 'increases' instead of 'decreases'. This was done since decreasing could be considered correct if the Operator were to perform a SDM determination as opposed to considering the actual change in SDM. If a determination was performed the SDM calculation would yield a decrease in SDM due to the large penalty imposed for a dropped rod (much larger than the actual rod worth for a dropped rod). So, even though ACTUAL SDM does not change, the calculated SDM will always decrease for a dropped rod. Also, in the stem of the question changed the bullet regarding rod motion to say that temperature was restored through manual rod motion instead of automatic rod motion. Also, added a bullet to say that boron concentration has not changed so that the Operator will have all necessary parameters to determine the effect of the dropped rod on SDM. Changed approved RFA 11/12/09	
58	C	3	X				X					Y	N	S	APE005AK2.02 D is not plausible because the stem stated that there was no indication that the rod is mechanically bound in the 4 <sup>th</sup> bullet. To state in D that it cannot be moved is a contradiction to the stem. The distracter analysis for D is not acceptable. Modify or replace distracter D. RFA 10/29/09 <i>Third bullet related to rod being mechanically bound</i>	



Q#/ Q#	1. LOK (C/A)	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			
																correct answer. Currently, the Q is U because of two correct answers. RFA 10/29/09 Modified stem of question and correct answers to say will instead of may Approved RFA 11/10/09 Changed to new question. Original question was determined to be SRO level knowledge following final validation on 11/11/09. Changed approved RFA 11/12/09
62	M	2										Y	N	<b>S</b> <b>E</b>	APE068G2.1.28 No comment at this time RFA 10/29/09 Revised question for better readability. Changed from S to E as a result. Approved RFA 11/10/09	
63	M	2										Y	N	<b>S</b>	WE03EK3.2 No comment at this time RFA 10/29/09 Approved RFA 11/10/09	
64	C?	2										Y	N	<b>E</b>	WE09EA1.1 I think this is a comprehensive Q since a fair amount of evaluation is required. RFA 10/29/09 Changed question to be a SRO Approved RFA 11/10/09	
65	C	3										Y	N	<b>S</b> <b>E</b>	WE13G2.2.37 No comment at this time RFA 10/29/09 Fixed typo (added to) on second bullet and improved clarity. Changed from S to E. Approved RFA 11/10/09	
66	M	2										Y	N	<b>S</b>	G2.1.28 No comment at this time RFA 10/29/09 Approved RFA 11/10/09	
67	M	2										N	N	<b>U</b>	G2.1.30 This Q does not have anything to do with locating/operating local controls. I suggest writing a Q where the CR had to be evacuated and the operator has to report to a local station to operated equipment. This Q is U because the KA is not met	

Q#	1. LOK (C/A)	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			
																RFA 10/29/09 Question was replaced by a completely new question related to interpretation of the 357 Diesel Generator Enclosure Approved RFA 11/10/09
68	C	3											Y	N	<b>S</b> <b>E</b>	G2.1.31 No comment at this time RFA 10/29/09 Added: bits of conditions to stem and question and bolded (important pressure, 325 and 368 in the answers. Changed from "S" to "E". Approved RFA 11/10/09
69	M	2					X						Y	N	<b>E</b>	G2.2.21 Remove double period from "A" and "C" Distracter analysis: "D" what does "the exposure will be greater if you wear the respirator" have to do with this Q? "B" and "D": remove "to provide ..." as this is teaching. Plus it is additional information that is not needed. RFA 10/09/09 <b>Revisited</b> <b>There is way too much teaching in all of the choices. Reduce as follows:</b> <b>A. 1ND-15B is interlocked with 1ND-58A (TRAIN A ND TO NV &amp; NI).</b> <b>B. 1ND-15B would cause one ND train to become inoperable.</b> <b>C. 1ND-15B is interlocked with 1NI-136B.</b> <b>D. Both trains of ND will become inoperable.</b>  <b>Put all of the reasons in the distracter analysis.</b> RFA 10/29/09 <b>Rewrote per Chief Examiner's suggestion.</b> Approved RFA 11/10/09
70	C	2											Y	N	<b>S</b> <b>E</b>	G2.2.35 I think C and D will immediately be eliminated but it meets NUREG requirements. The Q is OK as is. RFA 10/29/09

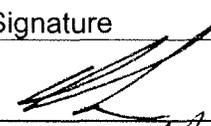
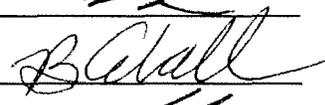
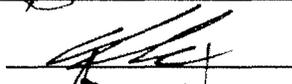
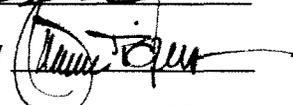
Q#/ Q#	1. LOK (C/A)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward	Q= K/A	SRO Only			
																Modified stem and distractors. Changed from $\leq$ to $\geq$ . Approved RFA 11/10/09
71	C	2					X					Y	N	E		G2.3.12 D is not plausible for this failed fuel event. It is common knowledge to redirect letdown. Replace D. RFA 10/29/09 Replaced distractor with "diver's letdown to the recycle holdup tank" and changed stem to say "in accordance with AP-18" Approved RFA 11/10/09
72	C	2					X					Y	N	E		G2.3.14 Distractor A is weak. This is too important of an evolution to be evaluated and approved by an NLO. Replace A. Distractor C: State a reason instead of "under these conditions" RFA 10/29/09 Modified stem and distractors. Approved RFA 11/10/09
73	C	2					X					Y	N	E		G2.3.7 D is not plausible as written. D: Change to: "should" to "must" and "could" to "will" RFA 10/29/09 Modified distractors. Approved RFA 11/10/09
74	C	2										Y	N	S E		G2.4.16 No comment at this time RFA 10/29/09 Approved RFA 11/10/09 Modified stem to add "termination signal" and changed distractor D to "E-1". Changed from $\leq$ to $\geq$ . Approved RFA 11/10/09





\* Independent of whether or not it met the KA, mis-classified WRT RO/SRO, or required grammar or *minor* enhancement.

<b>Question Status</b>	
<b>S (19)</b>	Question is Sat with NO Comments
<b>E(42)</b>	Editorial Changes Needed
<b>E*</b>	Questionable Editorial
<b>U (14)</b>	Question is All Hosed Up
<b>S?(0)</b>	Questionable
<b>S*(0)</b>	Question and stem sat - editorial elsewhere
<b>N*(0)</b>	Partially met KA

Facility: McGuire		Date of Exam: Nov 19, 2009		Exam Level: RO		
Item Description				Initials		
				a	b	c
1.	Clean answer sheets copied before grading			rfa	b/c	rfa
2.	Answer key changes and question deletions justified and documented			NA	NA	NA
3.	Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)			rfa	b/c	rfa
4.	Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail			rfa	b/c	rfa
5.	All other failing examinations checked to ensure that grades are justified			rfa	b/c	rfa
6.	Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants			rfa	b/c	rfa
Printed Name/Signature					Date	
a. Grader	Ronald F. Aiello / 			11/30/09		
b. Facility/NRC Reviewer(*)	Bruno Caballero / 			11/30/09		
c. NRC Chief Examiner (*)	Ronald F. Aiello / 			11/30/09		
d. NRC Supervisor (*)	Malcolm T. Widmann / 			11/30/09		
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.						

# Pearson NCS Test Sheet 100

Form No. 106173

Reorder Form No. 106173  
1-800-367-6627  
Fax 1-507-451-4513  
valuebridge.ncspearson.com

ANSWER KEY INFO.			
# OF KEYS			
ITEM COUNT			
0	0	0	2
1	1	1	3
2	2	2	4
3	3		
4	4		
5	5		
6	6		
7	7		
8	8		
9	9		

PERFORMANCE ASSESSMENT				
E C T I V I T Y	% OF TOTAL SCORE		POINTS EARNED	
	0	100%	0	100
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3		3	3
4	4		4	4
5	5		5	5
6	6		6	6
7	7		7	7
8	8		8	8
9	9		9	9

Copyright © 1995, 2001 NCS Pearson, Inc.  
All rights reserved. Printed in U.S.A.

BAR CODE

**SCORING & PRINTING OPTIONS:**

RESCORE     MULTIPLE ANSWER SCORING  
 CORRECT ANSWER     MARK X     TOTAL ONLY

MARK ONLY ONE

- KEY ID**  
A B C D
- T F
- 1 A ● C D E
  - 2 A B ● D E
  - 3 A B C ● E
  - 4 A B ● D E
  - 5 ● B C D E
  - 6 A ● C D E
  - 7 A ● C D E
  - 8 A ● C D E
  - 9 A ● C D E
  - 10 A B ● D E
  - 11 A B ● D E
  - 12 A ● C D E
  - 13 A B ● D E
  - 14 ● B C D E
  - 15 A B ● D E
  - 16 A ● C D E
  - 17 ● B C D E
  - 18 A ● C D E
  - 19 ● B C D E
  - 20 A ● C D E
  - 21 ● B C D E
  - 22 A ● C D E
  - 23 A B ● D E
  - 24 ● B C D E
  - 25 A ● C D E

- T F
- 26 A ● C D E
  - 27 A B C ● E
  - 28 A ● C D E
  - 29 ● B C D E
  - 30 A ● C D E
  - 31 A B ● D E
  - 32 ● B C D E
  - 33 A B ● D E
  - 34 A B ● D E
  - 35 ● B C D E
  - 36 A ● C D E
  - 37 ● B C D E
  - 38 ● B C D E
  - 39 A B C ● E
  - 40 ● B C D E
  - 41 A ● C D E
  - 42 A B ● D E
  - 43 A ● C D E
  - 44 ● B C D E
  - 45 A B ● D E
  - 46 A B C ● E
  - 47 A B ● D E
  - 48 A B C ● E
  - 49 A B C ● E
  - 50 ● B C D E

- T F
- 51 A B ● D E
  - 52 A ● C D E
  - 53 A ● C D E
  - 54 ● B C D E
  - 55 A ● C D E
  - 56 ● B C D E
  - 57 A B ● D E
  - 58 A B ● D E
  - 59 ● B C D E
  - 60 ● B C D E
  - 61 ● B C D E
  - 62 A B ● D E
  - 63 A B ● D E
  - 64 A B ● D E
  - 65 A ● C D E
  - 66 A B C ● E
  - 67 A B C ● E
  - 68 ● B C D E
  - 69 ● B C D E
  - 70 A ● C D E
  - 71 A B C ● E
  - 72 A B ● D E
  - 73 A ● C D E
  - 74 A B C ● E
  - 75 A B ● D E

- T F
- 76 A B C D E
  - 77 A B C D E
  - 78 A B C D E
  - 79 A B C D E
  - 80 A B C D E
  - 81 A B C D E
  - 82 A B C D E
  - 83 A B C D E
  - 84 A B C D E
  - 85 A B C D E
  - 86 A B C D E
  - 87 A B C D E
  - 88 A B C D E
  - 89 A B C D E
  - 90 A B C D E
  - 91 A B C D E
  - 92 A B C D E
  - 93 A B C D E
  - 94 A B C D E
  - 95 A B C D E
  - 96 A B C D E
  - 97 A B C D E
  - 98 A B C D E
  - 99 A B C D E
  - 100 A B C D E

NUMBER CORRECT	
PERCENT CORRECT	
ROSTER NUMBER	
SCORE	
RESCORE	



COMBINED POINTS EARNED	
COMBINED PERCENT CORRECT	
LETTER GRADE	
SCORE	
RESCORE	



NAME 2009 MNS RO RETAKE

SUBJECT ANSWER KEY

PERIOD                      DATE

**MARKING INSTRUCTIONS**

Use a No. 2 Pencil

A ● C D E  
Fill oval completely

A B C D E  
Erase cleanly

STUDENT ID NUMBER

0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9