

PROPOSED EXAMINATION SUBMITTAL

LETTER AND CHECKLISTS

FOR THE QUAD CITIES INITIAL EXAMINATION - MAY 2005

Exelon Generation Company, LLC www.exeloncorp.com
Quad Cities Nuclear Power Station
22710 206th Avenue North
Cordova, IL 61242-9740

SVP-05-017

March 17, 2005

Regional Administrator, Region III
U. S. Nuclear Regulatory Commission
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Submittal of Integrated Initial License Training Examination Materials

Enclosed are the examination materials that support the Initial License Examination scheduled for the weeks of May 2, 2005 and May 9, 2005 at Quad Cities Station.

This submittal includes the Senior Reactor Operator and Reactor Operator Written Examinations, Job Performance Measures, and Integrated Plant Operation Scenario Guides.

These examination materials have been developed in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9. Please note that reference materials are attached to each individual examination question or item.

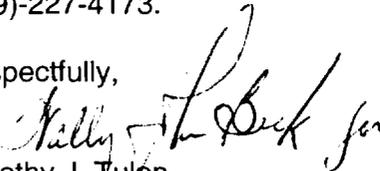
Some minor modifications have been made to the Integrated Examination Outline with regards to the written and operating exams to improve balance and content. These changes improve examination quality and are in compliance with NUREG-1021, Revision 9.

Some modifications or adjustments to the examination material may be required due to procedural changes.

In accordance with NUREG-1021, Revision 9, Section ES-201, please ensure that these materials are withheld from public disclosure until after the examinations are complete.

Should you have any questions concerning this letter, please contact Mr. W. J. Beck, Regulatory Assurance Manager, at (309)-227-2800. For questions concerning examination material, please contact Mark Jensen at (309)-227-3438 or Mike Kaufman at (309)-227-4173.

Respectfully,


Timothy J. Tulon
Site Vice President
Quad Cities Nuclear Power Station

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Enclosures: (Hand delivered to Nicholas Valos, Chief Examiner, NRC Region III)

RO/SRO Composite Examination

Control Room Systems and Facility Walk-Through Job Performance Measures

Administrative Topic Job Performance Measures

Integrated Plant Operation Scenario Guides

Completed Checklists:

Operating Test Quality Checklist – Form ES-301-3

Simulator Scenario Quality Checklist – Form ES-301-4

Transient and Event Checklist – Form ES-301-5

Competencies Checklist – Form ES-301-6

Written Examination Quality Checklist – Form ES-401-6

Examination Security Agreements – Form ES-201-3

Record of Rejected K/As – Form ES-401-4

cc: Chief, Operations Branch – NRC Region III (without enclosures)
NRC Senior Resident Inspector – Quad Cities Station (without enclosures)

Facility: <u>Quad Cities</u>		Date of Examination: <u>5-2-05</u>		Operating Test Number: <u>1</u>	
1. GENERAL CRITERIA		Initials			
		a	b*	c#	
a.	The operating test conforms with the previously approved outline; changes are consistent with sampling requirements (e.g., 10 CFR 55.45, operational importance, safety function distribution).	J	B	NV	
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	J	B	NV	
c.	The operating test shall not duplicate items from the applicants' audit test(s)(see Section D.1 a).	J	B	NV	
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.	J	B	NV	
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	J	B	NV	
2. WALK-THROUGH CRITERIA		--	--	--	
a.	Each JPM includes the following, as applicable: <ul style="list-style-type: none"> • initial conditions • initiating cues • references and tools, including associated procedures • reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee • operationally important specific performance criteria that include: <ul style="list-style-type: none"> - detailed expected actions with exact criteria and nomenclature - system response and other examiner cues - statements describing important observations to be made by the applicant - criteria for successful completion of the task - identification of critical steps and their associated performance standards - restrictions on the sequence of steps, if applicable 	J	B	NV	
a.	Ensure that any changes from the previously approved systems and administrative walk-through outlines (Forms ES-301-1 and 2) have not caused the test to deviate from any of the acceptance criteria (e.g., item distribution, bank use, repetition from the last 2 NRC examinations) specified on those forms and Form ES-201-2.	J	B	NV	
3. SIMULATOR CRITERIA		--	--	--	
The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.		J	B	NV	
		Printed Name / Signature		Date	
a. Author	<u>Mark W. Jensen /</u>	<u>Mark W. Jensen</u>		<u>3-15-05</u>	
b. Facility Reviewer (*)	<u>David M. Bowman /</u>	<u>David M. Bowman</u>		<u>3-16-05</u>	
c. NRC Chief Examiner (#)	<u>Nicholas A. Valos /</u>	<u>Nicholas A. Valos</u>		<u>4-18-05</u>	
d. NRC Supervisor	<u>Hironori Peterson /</u>	<u>Hironori Peterson</u>		<u>4-19-05</u>	
NOTE: * The facility signature is not applicable for NRC-developed tests # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence is required.					

Facility: Quad Cities		Date of Exam: 05/02/05		Scenario Numbers: 1 / 2 / 3 / 4		Operating Test Number: 1		
QUALITATIVE ATTRIBUTES						Initials		
						a	b*	c#
1.	The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the operators into expected events.	ML	B	NU				
2.	The scenarios consist mostly of related events.	ML	B	NU				
3.	Each event description consists of <ul style="list-style-type: none"> the point in the scenario when it is to be initiated the malfunction(s) that are entered to initiate the event the symptoms/cues that will be visible to the crew the expected operator actions (by shift position) the event termination point (if applicable) 	ML	B	NU				
4.	No more than one non-mechanistic failure (e.g., pipe break) is incorporated into the scenario without a credible preceding incident such as a seismic event.	ML	B	NU				
5.	The events are valid with regard to physics and thermodynamics.	ML	B	NU				
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	ML	B	NU				
7.	If time compression techniques are used, the scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given.	ML	B	NU				
8.	The simulator modeling is not altered.	ML	B	NU				
9.	The scenarios have been validated. Pursuant to 10CFR55.46(d), any open simulator performance deficiencies or deviations from the referenced plant have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.	ML	B	NU				
10.	Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered in accordance with Section D.5 of ES-301.	ML	B	NU				
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	ML	B	NU				
12.	Each applicant will be significantly involved in the minimum number of transients and events specified on Form ES-301-5 (submit the form with the simulator scenarios).	ML	B	NU				
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	ML	B	NU				
Target Quantitative Attributes (Per Scenario; See Section D.5.d)				Actual Attributes				
1.	Total malfunctions (5-8)	6 / 8 / 8 / 8		ML	B	NU		
2.	Malfunctions after EOP entry (1-2)	2 / 2 / 3 / 2		ML	B	NU		
3.	Abnormal events (2-4)	4 / 5 / 5 / 4		ML	B	NU		
4.	Major transients (1-2)	2 / 2 / 3 / 3		ML	B	NU		
5.	EOPs entered/requiring substantive actions (1-2)	2 / 1 / 1 / 1		ML	B	NU		
6.	EOP contingencies requiring substantive actions (0-2)	1 / 1 / 2 / 1		ML	B	NU		
7.	Critical tasks (2-3)	3 / 2 / 2 / 3		ML	B	NU		

Facility: Quad Cities				Date of Examination: 5/2/05				Operating Test No.: 1				
Competencies	APPLICANTS											
	RO/SRO-I/ SRO-U				RO/SRO-I/ SRO-U				RO/SRO-I/ SRO-U			
	SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4
Interpret/ Diagnose Events and Conditions	2,3, 4,7, 8,	3,6, 7,8, 9	2,4, 5,7, 8,9, 10	2,4, 5,6, 7	1,5, 6,7, 8	1,2, 4,5, 8,9	1,3, 4,8, 9,10	1,3, 4,6, 8	1-8	1-9	1-10	1-8
Comply With and Use Procedures (1)	2,3, 4,7, 8	3,6, 7,8, 9	2,5, 7,8, 9,10	2,4, 5,6, 7	1,5, 6,7, 8	1,2, 4,5, 8,9	1,3, 4,6, 8,9, 10	1,3, 4,6, 7,8	1-8	1-9	1-10	1-8
Operate Control Boards (2)	2,3, 4,7, 8	3,6, 7,8, 9	2,5, 7,8, 9,10	2,4, 5,6, 7	1,5, 6,7, 8	1,2, 5,9	1,3, 6,8, 9,10	1,3, 4,6, 7,8	N/A	N/A	N/A	N/A
Communicate and Interact	2,3, 4,7, 8	3,6, 7,8, 9	2,4, 5,7, 8,9, 10	2,4, 5,6, 7	1,5, 6,7, 8	1,2, 4,5, 8,9	1,3, 4,6, 8,9, 10	1,3, 4,6, 7,8	1-8	1-9	1-10	1-8
Demonstrate Supervisory Ability (3)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1-8	1-9	1-10	1-8
Comply With and Use Tech Specs. (3)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4,5	4,5	1,4	2,3
Notes: (1) Includes Technical Specification compliance for an RO. (2) Optional for an SRO-U. (3) Only applicable to SROs.												

Instructions:

Circle the applicant's license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant.

Author:

Mark Jensen

NRC Reviewer:

Nicholas A. Valer

Facility: Quad Cities		Date of Exam: 5-2-05		Exam Level: RO/SRO		
Item Description	Initial					
	a	b*	c*			
1. Questions and answers are technically accurate and applicable to the facility.	WJ	B	NV			
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	WJ	B	NV			
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	WJ	B	NV			
4. If more than four RO and two SRO questions are repeated from the last two NRC licensing exam, the facility licensee's sampling process was random and systematic.			NV			
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input checked="" type="checkbox"/> the audit exam was systematically and randomly developed <input type="checkbox"/> the audit exam was completed before the license exam was started <input type="checkbox"/> the examinations were developed independently <input type="checkbox"/> the licensee certifies that there is no duplication <input type="checkbox"/> other (explain)	WJ	B	NV			
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	Modified	New	WJ	B	NV
	13/6	5/2	57/17			
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 KAs support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right.	Memory		CIA	WJ	B	NV
	34 / 11		41 / 14			
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	WJ	B	NV			
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	WJ	B	NV			
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	WJ	B	NV			
11. The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with value on cover sheet	WJ	B	NV			
Printed Name / Signature				Date		
a. Author	Mark W. Jensen / <i>Mark W. Jensen</i>			3-15-05		
b. Facility Reviewer (*)	David M. Bowman / <i>David M. Bowman</i>			3-16-05		
c. NRC Chief Examiner (#)	Nicholas A. Valos / <i>Nicholas A. Valos</i>			4-18-05		
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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.						