

**PROPOSED EXAMINATION COVER LETTER AND CHECKLISTS**  
**FOR THE PERRY INITIAL EXAM - FEBRUARY 2007**

January 3, 2007  
PY-CEI/OIE--0686L

United States Nuclear Regulatory Commission  
2443 Warrenville Road, Suite 210  
Lisle, Illinois 60532-4351

Attention: Mike Bielby, Chief Examiner  
Operations Branch Region III

Perry Nuclear Power Plant  
Docket No. 50-440  
NRC Initial License Examination Submittal

Dear Mr. Bielby:

In accordance with NUREG-1021, ES-201, enclosed are the proposed examinations, supporting documentation, and reference materials for the NRC initial license examination tentatively scheduled to be administered starting February 26, 2007. The examination materials were developed in accordance with the guidelines specified in NUREG-1021, Revision 9.

NUREG-1021 Forms ES-301-3, ES-301-4, ES-301-5, ES-301-6, ES-401-6, ES-D-1 and ES-D-2, are enclosed with the supporting documentation. Form ES-201-3 was last updated on 11/08/2006 and has not been sent.

Form ES-301-6 has been completed based on the projected class size and license type at this time. The class size and makeup may change prior to the examination date.

The NRC initial license examination outlines were previously submitted with a cover letter dated December 11, 2006. A complete set of outline forms for both the RO and SRO examinations are included in this submittal.

The Simulator Scenarios for the applicant's audit exams have also been included in this submittal.

It is hereby requested that the enclosed examination materials be withheld from public disclosure until after the initial license examinations are completed.

If you have any questions or require additional information, please contact Dan Zielinski at (440) 280-5277.

Sincerely,

Daniel K. Zielinski  
Nuclear Qualification Instructor – Author

Frederick W. Smith  
Facility Representative

Facility: **Perry** Date of Examination: **2/26/2007** Operating Test Number: **2007-01**

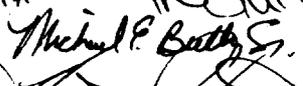
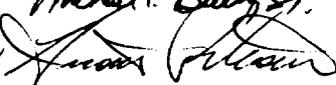
1. General Criteria	Initials		
	a	b*	c#
a. The operating test conforms with the previously approved outline; changes are consistent with sampling requirements (e.g., 10 CFR 55.45, operational importance, safety function distribution).	OL	J	MFB
b. There is no day-to-day repetition between this and other operating tests to be administered during this examination.	OL	J	MFB
c. The operating test shall not duplicate items from the applicants' audit test(s). (see Section D.1.a.)	OL	J	MFB
d. Overlap with the written examination and between different parts of the operating test is within acceptable limits.	OL	J	MFB
e. It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	OL	J	MFB

**2. Walk-Through Criteria**

2. Walk-Through Criteria	a	b*	c#
a. Each JPM includes the following, as applicable: . 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: - 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	OL	J	MFB
b. 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.	OL	J	MFB

**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.	OL	J	MFB
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	Printed Name / Signature	Date
a. Author	DANIEL K. ZIELINSKI 	1-3-2007
b. Facility Reviewer(*)	FREDRICK W. SMITH 	1/3/2007
c. NRC Chief Examiner (#)	Michael E. Bielby 	1/10/07
d. NRC Supervisor	Hirvitori Peterson 	2/20/07

NOTE: \* The facility signature is not applicable for NRC-developed tests.  
 # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.

Facility: **Perry** Date of Exam: **2/26/2007** Operating Test No.: **2007-01**

Applicant	Event Type	Scenarios													T O T A L	Minimum*				
		1			2-37%			3-56%			4-80%									
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION									
		SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP	R		I	U			
RO <input type="checkbox"/> SRO-I <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>	RX				1						1,5						3	1	1	0
	NOR				5									1			2	1	1	1
	I/C				3,6						4,7			3,7,8			7	4	4	2
	MAJ				7,11, 12						6,9			5,9			7	2	2	1
	TS				3,4(2)						4(2)						3	0	2	2
RO <input type="checkbox"/> SRO-I <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>	RX					1								2,5			3	1	1	0
	NOR					5								2			2	1	1	1
	I/C					6,8								3,8, 10	3,7		7	4	4	2
	MAJ					7,11, 12								6,9	5,9		7	2	2	1
	TS													3,4			2	0	2	2
RO <input type="checkbox"/> SRO-I <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>	RX									1,5					2,5		4	1	1	0
	NOR							2,5	3								3	1	1	1
	I/C							4,9, 10	4						4,6		6	4	4	2
	MAJ							7,11, 12	6,9						5,9		7	2	2	1
	TS							4(2)	4(2)								2	0	2	2
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>	RX																	1	1	0
	NOR																	1	1	1
	I/C																	4	4	2
	MAJ																	2	2	1
	TS																	0	2	2

- Instructions:
1. Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the "at-the-controls (ATC)" and "balance-of-plant (BOP)" positions; Instant SROs must do one scenario, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position.
  2. Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (\*) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.
  3. Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.

Facility: **Perry** Date of Exam: **2/26/2007** Operating Test No.: **2007-01**

Applicant	Event Type	Scenarios													T O T A L	Minimum*		
		1			2-37%			3-56%			4							
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION							
		SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP	R		I	U	
RO <input checked="" type="checkbox"/>	RX								1,5					2	1	1	0	
SRO-I <input type="checkbox"/>	NOR					2,5								2	1	1	1	
	I/C					4,10			4,7					4	4	4	2	
SRO-U <input type="checkbox"/>	MAJ					7,11,12			6,9					5	2	2	1	
	TS														0	2	2	
RO <input type="checkbox"/>	RX				1			1,5						3	1	1	0	
SRO-I <input checked="" type="checkbox"/>	NOR				5			3						2	1	1	1	
	I/C				6,8,9			4						4	4	4	2	
SRO-U <input type="checkbox"/>	MAJ				7,11,12			6,9						5	2	2	1	
	TS							4(2),6						3	0	2	2	
RO <input type="checkbox"/>	RX				1									1	1	1	0	
SRO-I <input type="checkbox"/>	NOR				5				2					2	1	1	1	
	I/C				3,6				3,8,10					5	4	4	2	
SRO-U <input checked="" type="checkbox"/>	MAJ				7,11,12				6,9					5	2	2	1	
	TS				3,4(2)									3	0	2	2	
RO <input type="checkbox"/>	RX														1	1	0	
SRO-I <input type="checkbox"/>	NOR														1	1	1	
	I/C														4	4	2	
SRO-U <input type="checkbox"/>	MAJ														2	2	1	
	TS														0	2	2	

Instructions:

1. Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the "at-the-controls (ATC)" and "balance-of-plant (BOP)" positions; Instant SROs must do one scenario, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position.
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Facility: **Perry** Date of Exam: **2/26/2007** Operating Test No.: **2007-01**

Applicant	Event Type	Scenarios													T O T A L	Minimum*		
		1			2-37%			3-56%			4							
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION							
		SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP	R		I	U	
RO ■	RX				1									1	1	1	0	
SRO-I	NOR				5					2				2	1	1	1	
□	I/C				6,8					3,8,10				5	4	4	2	
SRO-U	MAJ				7,11,12					6,9				5	2	2	1	
□	TS														0	2	2	
RO ■	RX								1,5					2	1	1	0	
SRO-I	NOR					2,5								1	1	1	1	
□	I/C					4,9,10		4,7						5	4	4	2	
SRO-U	MAJ					7,11,12		6,9						5	2	2	1	
□	TS														0	2	2	
RO □	RX			1				1,5						3	1	1	0	
SRO-I	NOR			5				3						2	1	1	1	
□	I/C			3,6				4						3	4	4	2	
SRO-U	MAJ			7,11,12				6,9						4	2	2	1	
■	TS			3,4(2)				4(2)						3	0	2	2	
RO □	RX														1	1	0	
SRO-I	NOR														1	1	1	
□	I/C														4	4	2	
SRO-U	MAJ														2	2	1	
□	TS														0	2	2	

Instructions:

1. Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the "at-the-controls (ATC)" and "balance-of-plant (BOP)" positions; Instant SROs must do one scenario, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position.
2. Reactivity manipulations may be conducted under normal or *controlled abnormal conditions* (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (\*) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.
3. Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.

Facility: <b>Perry</b>		Date of Examination: <b>2/26/2007</b>				Operating Test No.: <b>2007-01</b>										
<b>Competencies</b>	<b>APPLICANTS</b>															
	SRO-I				SRO-I				SRO-I							
	SCENARIO				SCENARIO				SCENARIO							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Interpret/Diagnose Events and Conditions</b>	7	6	3/4	3/5	7	6	3/4	3/5	7	6	3/4	3/5				
<b>Comply With and Use Procedures (1)</b>	1/2	4/5	3/5	3	1/2	4/5	3/5	3	1/2	4/5	3/5	3				
<b>Operate Control Boards (2)</b>	4/5	1/2	1/2	1/2	4/5	1/2	1/2	1/2	4/5	1/2	1/2	1/2				
<b>Communicate and Interact</b>	3/9	11	5	3	3/9	11	5	3	3/9	11	5	3				
<b>Demonstrate Supervisory Ability (3)</b>	10	7	6	5	10	7	6	5	10	7	6	5				
<b>Comply With and Use Tech. Specs. (3)</b>	3/4	3/4	4/6	3/4	3/4	3/4	4/6	3/4	3/4	3/4	4/6	3/4				
<b>Notes:</b> (1) Includes Technical Specification compliance for an RO. (2) Optional for an SRO-U. (3) Only applicable to SROs.																

**Instructions:**

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

<b>Facility: Perry</b>	<b>Date of Examination: 2/26/2007</b>				<b>Operating Test No.: 2007-01</b>											
<b>Competencies</b>	<b>APPLICANTS</b>															
	<b>RO</b>				<b>SRO-I</b>				<b>SRO-U</b>							
	<b>SCENARIO</b>				<b>SCENARIO</b>				<b>SCENARIO</b>							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Interpret/Diagnose Events and Conditions</b>	7	6	3/4	3/5	7	6	3/4	3/5	7	6	3/4	3/5				
<b>Comply With and Use Procedures (1)</b>	1/2	4/5	3/5	3	1/2	4/5	3/5	3	1/2	4/5	3/5	3				
<b>Operate Control Boards (2)</b>	4/5	1/2	1/2	1/2	4/5	1/2	1/2	1/2	4/5	1/2	1/2	1/2				
<b>Communicate and Interact</b>	3/9	11	5	3	3/9	11	5	3	3/9	11	5	3				
<b>Demonstrate Supervisory Ability (3)</b>					10	7	6	5	10	7	6	5				
<b>Comply With and Use Tech. Specs. (3)</b>					3/4	3/4	4/6	3/4	3/4	3/4	4/6	3/4				
<b>Notes:</b>																
(1) Includes Technical Specification compliance for an RO.																
(2) Optional for an SRO-U.																
(3) Only applicable to SROs.																

**Instructions:**

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

Facility: <b>Perry</b>	Date of Examination: <b>2/26/2007</b>				Operating Test No.: <b>2007-01</b>											
<b>Competencies</b>	<b>APPLICANTS</b>															
	RO				RO				SRO-U							
	SCENARIO				SCENARIO				SCENARIO							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Interpret/Diagnose Events and Conditions	7	6	3/4	3/5	7	6	3/4	3/5	7	6	3/4	3/5				
Comply With and Use Procedures (1)	1/2	4/5	3/5	3	1/2	4/5	3/5	3	1/2	4/5	3/5	3				
Operate Control Boards (2)	4/5	1/2	1/2	1/2	4/5	1/2	1/2	1/2	4/5	1/2	1/2	1/2				
Communicate and Interact	3/9	11	5	3	3/9	11	5	3	3/9	11	5	3				
Demonstrate Supervisory Ability (3)									10	7	6	5				
Comply With and Use Tech. Specs. (3)									3/4	3/4	4/6	3/4				
<b>Notes:</b> (1) Includes Technical Specification compliance for an RO. (2) Optional for an SRO-U. (3) Only applicable to SROs.																

**Instructions:**

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

Facility: <b>Perry</b>	Date of Exam: <b>2/26/2007</b>	Exam Level: RO / <sup>MCS</sup> SRO	
	Initial		
	a	b*	c*
1. Questions and answers are technically accurate and applicable to the facility.	02	f	MCS
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	02	f	MCS
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	02	f	MCS
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).	02	f	MCS
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: _x_ the audit exam was systematically and randomly developed, or _ the audit exam was completed before the license exam was started, or _x_ the examinations were developed independently, or _ the licensee certifies that there is no duplication, or _ other (explain)	02	f	MCS
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
	27/30	6/7	42/63
<small>MCS - 22/12</small>	02	f	MCS
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	C/A	
	31/37	44/63	
<small>MCS - 41/24</small>	02	f	MCS
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	02	f	MCS
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.	02	f	MCS
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	02	f	MCS
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.	02	f	MCS
Printed Name / Signature		Date	
a. Author	<i>Dr. Z. G. ... / D. ...</i>		1-3-2007
b. Facility Reviewer (*)	<i>Frederick W. ...</i>		1/3/2007
c. NRC Chief Examiner (#)	<i>Theresa E. ... / Michael ...</i>		1/11/07
d. NRC Regional Supervisor	<i>Alvin ...</i>		2/26/07
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.			