

**PROPOSED EXAMINATION SUBMITTAL  
FOR THE PALISADES INITIAL EXAM - JULY 2008**



Entergy Nuclear Operations, Inc.  
Palisades Nuclear Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043

April 29, 2008

NUREG-1021

Mr. Dell McNeil  
U.S. Nuclear Regulatory Commission  
Region III  
2443 Warrenville Road  
Suite 210  
Lisle, IL 60532-4352

Palisades Nuclear Plant  
Dockets 50-255 and 72-07  
License No. DPR-20

Initial License Examination Materials

Dear Mr. McNeil:

Entergy Nuclear Operations, Inc. is submitting the initial license examination for the Palisades Nuclear Plant, in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1. The initial license examination is scheduled for July 7 through July 11, 2008. The following materials are enclosed:

- ES 201-3, Examination Security Agreement (updated)
- ES 301-3, Operating Test Quality Checklist
- ES 301-4, Simulator Scenario Quality Checklist
- ES-301-5, Transient and Event Checklist (updated)
- ES 301-6, Competencies Checklist
- System/Control Room Job Performance Measures (11)
- Administrative Job Performance Measures (8)
- Scenarios (3)
- Form ES-D-1, Scenario Outline, for Scenario #2 (updated)
- Form ES-D-2, Required Operator Actions (one form for each event)

**APR 30 2008**

Mr. Dell McNeil  
Page 2

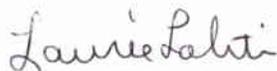
- ES 401-6, Written Examination Quality Checklist
- RO Written Exam (ready to give with handouts)
- RO Written Examination Key with supporting references
- SRO Written Exam (ready to give with handouts)
- SRO Written Exam Key with supporting references

In accordance with NUREG-1021, ES-201, Attachment 1, these materials shall be withheld from public disclosure until after the examinations are complete.

Please contact Jeffrey Iliff at (269) 764-2974 if you have any questions regarding this submittal.

Summary of Commitments

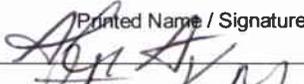
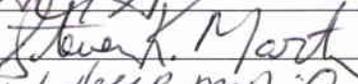
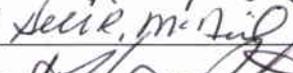
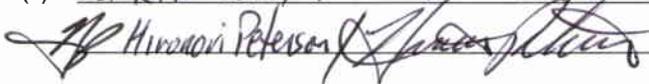
This letter contains no new commitments and no revisions to existing commitments.



Laurie A. Lahti  
Licensing Manager  
Palisades Nuclear Plant

Enclosure (1)

CC Administrator, Region III, USNRC (w/o enclosure)  
Project Manager, Palisades, USNRC (w/o enclosure)  
Resident Inspector, Palisades, USNRC (w/o enclosure)  
Document Control Desk, USNRC (w/o enclosure)

Facility: <u>Palisades</u>		Date of Examination: <u>July 2008</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).	A	SKM	DM	
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	A	SKM	DM	
c.	The operating test shall not duplicate items from the applicants' audit test(s) (see Section D.1.a).	A	SKM	DM	
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.	A	SKM	DM	
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	A	SKM	DM	
2. WALK-THROUGH CRITERIA		--	--	--	
a.	Each JPM includes the following, as applicable: <ul style="list-style-type: none"> <li>• initial conditions</li> <li>• initiating cues</li> <li>• references and tools, including associated procedures</li> <li>• reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee</li> <li>• operationally important specific performance criteria that include:                         <ul style="list-style-type: none"> <li>- detailed expected actions with exact criteria and nomenclature</li> <li>- system response and other examiner cues</li> <li>- statements describing important observations to be made by the applicant</li> <li>- criteria for successful completion of the task</li> <li>- identification of critical steps and their associated performance standards</li> <li>- restrictions on the sequence of steps, if applicable</li> </ul> </li> </ul>	A	SKM	DM	
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.	A	SKM	DM	
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.		A	SKM	DM	
		Printed Name / Signature		Date	
a. Author	<u>Jeffrey C. Iliff</u> / 			<u>4/29/2008</u>	
b. Facility Reviewer (*)	<u>Steven K. Martin</u> / 			<u>4/29/2008</u>	
c. NRC Chief Examiner (#)	<u>Deil R. McNeil</u> / 			<u>5/28/08</u>	
d. NRC Supervisor	 <u>Howard Peterson</u>			<u>7/01/08</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: <u>Palisades</u>		Date of Exam: <u>July 2008</u>		Scenario Numbers: <u>1 / 2</u>		Operating Test Number: <u>1</u>		
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.	A	JKY	DM				
2.	The scenarios consist mostly of related events.	A	JKY	DM				
3.	Each event description consists of <ul style="list-style-type: none"> <li>the point in the scenario when it is to be initiated</li> <li>the malfunction(s) that are entered to initiate the event</li> <li>the symptoms/cues that will be visible to the crew</li> <li>the expected operator actions (by shift position)</li> <li>the event termination point (if applicable)</li> </ul>	A			DM			
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.	A	JKY	DM				
5.	The events are valid with regard to physics and thermodynamics.	A	JKY	DM				
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	A	JKY	DM				
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.	A	JKY	DM				
8.	The simulator modeling is not altered.	A	JKY	DM				
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.	A	JKY	DM				
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.	A	JKY	DM				
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	A	JKY	DM				
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).	A	JKY	DM				
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	A	JKY	DM				
<b>Target Quantitative Attributes (Per Scenario; See Section D.5.d)</b>						<b>Actual Attributes</b>		
1.	Total malfunctions (5-8)	6 / 5		A	JKY	DM		
2.	Malfunctions after EOP entry (1-2)	1 / 2		A	JKY	DM		
3.	Abnormal events (2-4)	3 / 2		A	JKY	DM		
4.	Major transients (1-2)	1 / 1		A	JKY	DM		
5.	EOPs entered/requiring substantive actions (1-2)	2 / 2		A	JKY	DM		
6.	EOP contingencies requiring substantive actions (0-2)	1 / 1		A	JKY	DM		
7.	Critical tasks (2-3)	4 / 4		A	JKY	DM		

Facility: <u>Palisades</u>		Date of Exam: <u>July 2008</u>		Exam Level: RO <input checked="" type="checkbox"/> SRO <input checked="" type="checkbox"/>		
Item Description	Initial					
	a	b*	c#			
1. Questions and answers are technically accurate and applicable to the facility.	<i>A</i>	<i>SKM</i>	<i>DM</i>			
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	<i>A</i>	<i>SKM</i>	<i>DM</i>			
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	<i>A</i>	<i>SKM</i>	<i>DM</i>			
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 exam, consult the NRR OL program office).			<i>DM</i>			
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; or <input type="checkbox"/> the audit exam was completed before the license exam was started; or <input type="checkbox"/> the examinations were developed independently; or <input type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> other (explain)	<i>A</i>	<i>SKM</i>	<i>DM</i>			
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	<i>A</i>	<i>SKM</i>	<i>DM</i>
	43 / 4	3 / 1	29 / 20			
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		C/A	<i>A</i>	<i>SKM</i>	<i>DM</i>
	34 / 10		41 / 15			
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	<i>A</i>	<i>SKM</i>	<i>DM</i>			
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	<i>A</i>	<i>SKM</i>	<i>DM</i>			
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	<i>A</i>	<i>SKM</i>	<i>DM</i>			
11. The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with value on cover sheet	<i>A</i>	<i>SKM</i>	<i>DM</i>			
Printed Name / Signature			Date			
a. Author	<u>Jeffrey C. Iliff / <i>Jeffrey C. Iliff</i></u>		<u>4/29/2008</u>			
b. Facility Reviewer (*)	<u>Steven K. Martin / <i>Steven K. Martin</i></u>		<u>4/29/2008</u>			
c. NRC Chief Examiner (#)	<u>Dell R. McNeil / <i>Dell R. McNeil</i></u>		<u>5/15/08</u>			
d. NRC Regional Supervisor	<u>AP Hironaka Peterson / <i>AP Hironaka Peterson</i></u>		<u>7/01/08</u>			
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.					