

OPERATING TEST CHECKLISTS AND NRC COMMENTS

FOR THE DRESDEN RETAKE EXAMINATION - JAN 2003

Submitted Operating Test with NRC Comments

Contains the following:

Letter Exelon Cover letter transmitting the operating test

ES-301-3 Operating Test Quality Checklist

ES-301-4 Simulator Scenario Quality Checklist

Three (3) dynamic simulator scenario guides (ES-D-1 & ES-D-2) There were no NRC comments made on the submitted examination. Only one minor change was made to one scenario based on simulator response during the validation of the scenario.

Administered Operating Test

Two (2) dynamic simulator scenario guides (ES-D-1 & ES-D-2)

Exelon Generation
Dresden Generating Station
6500 North Dresden Road
Morris, IL 60450-9765
Tel 815-942-2920

10 CFR 55.40

December 9, 2002

RHLTR: #02-0092

U. S. Nuclear Regulatory Commission
Region III
ATTN: Operator Licensing Branch
801 Warrenville Road
Lisle, IL 60532-4351

Dresden Nuclear Power Station Units 2 and 3
Facility Operating License Nos. DPR-19 and DPR-25
Docket Nos. 50-237 and 50-249

Subject: Submittal of Integrated Initial License Training Examination Materials
Reference: Letter from R. J. Hovey (Exelon Generation Company, LLC) to NRC, "Initial License Re-examination Integrated Examination Outline," dated November 11, 2002

Enclosed are the examination materials in support of the Initial License Examination scheduled for January 21, 2003 at the Dresden Nuclear Power Station (DNPS).
This submittal includes the Integrated Plant Operation Scenario Guides.

These examination materials have been developed in accordance with NUREG-1021, "Operator Licensing Examination Standards," Revision 8 Supplement 1.

Some modifications or adjustments to the examination material may be required prior to examination administration due to plant procedure changes that occur after this submittal. In accordance with NUREG 1021, Revision 8 Supplement 1, Section ES-201, please ensure that these materials are withheld from public disclosure until after the examinations are complete.

Facility: Dresden Date of Examination: 12/10/03 Operating Test Number: 167 01-1 Re-exam

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).	MO	RGL	ym
b. There is no day-to-day repetition between this and other operating tests to be administered during this examination.	N/A		
c. The operating test shall not duplicate items from the applicants' audit test(s)(see Section D.1.a).	MO	RGL	ym
d. Overlap with the written examination and between operating test categories is within acceptable limits.	N/A		
e. It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	MO	RGL	ym

2. WALK-THROUGH (CATEGORY A & B) CRITERIA	a	b*	c#
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 - 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 	N/A		
b. The prescribed questions in Category A are predominantly open reference and meet the criteria in Attachment 1 of ES-301.	N/A		
c. Repetition from operating tests used during the previous licensing examination is within acceptable limits (30% for the walk-through) and do not compromise test integrity.	N/A		
d. At least 20 percent of the JPMs on each test are new or significantly modified.	N/A		

3. SIMULATOR (CATEGORY C) CRITERIA	a	b*	c#
a. The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.	MO	RGL	ym

	Printed Name / Signature	Date
a. Author	<u>MARK OTTEN</u> <i>[Signature]</i>	<u>12/4/02</u>
b. Facility Reviewer(*)	<u>R. GADBOIS</u> <i>[Signature]</i>	<u>12/04/02</u>
c. NRC Chief Examiner (#)	<u>Dell R. McNEIL</u> / <i>[Signature]</i>	<u>12/10/02</u>
d. NRC Supervisor	<u>R.D. Lanksbury</u> / <i>[Signature]</i>	<u>1/7/03</u>

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

Facility: *Dresden*

Date of Exam: *1/21/03*

Scenario Numbers: *112 13*

Operating Test No.: *127 01-1*

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.	<i>MO</i>	<i>RSK</i>	<i>SM</i>
2. The scenarios consist mostly of related events.	<i>MO</i>	<i>RSK</i>	<i>SM</i>
3. Each event description consists of . 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)	<i>MO</i>	<i>RSK</i>	<i>SM</i>
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.	<i>MO</i>	<i>RSK</i>	<i>SM</i>
5. The events are valid with regard to physics and thermodynamics.	<i>MO</i>	<i>RSK</i>	<i>SM</i>
6. Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	<i>MO</i>	<i>RSK</i>	<i>SM</i>
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.	<i>MO</i>	<i>RSK</i>	<i>SM</i>
8. The simulator modeling is not altered.	<i>MO</i>	<i>RSK</i>	<i>SM</i>
9. The scenarios have been validated. Any open simulator performance deficiencies have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.	<i>MO</i>	<i>RSK</i>	<i>SM</i>
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.4 of ES-301.	<i>MO</i>	<i>RSK</i>	<i>SM</i>
11. All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	<i>MO</i>	<i>RSK</i>	<i>SM</i>
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).	<i>MO</i>	<i>RSK</i>	<i>SM</i>
13. The level of difficulty is appropriate to support licensing decisions for each crew position.	<i>MO</i>	<i>RSK</i>	<i>SM</i>

TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.4.D)

	Actual Attributes	a	b*	c#
1. Total malfunctions (5-8)	<i>9 1 7 1 9</i>	<i>MO</i>	<i>RSK</i>	<i>SM</i>
2. Malfunctions after EOP entry (1-2)	<i>2 1 2 1 2</i>	<i>MO</i>	<i>RSK</i>	<i>SM</i>
3. Abnormal events (2-4)	<i>4 1 4 1 4</i>	<i>MO</i>	<i>RSK</i>	<i>SM</i>
4. Major transients (1-2)	<i>1 1 1 1 1</i>	<i>MO</i>	<i>RSK</i>	<i>SM</i>
5. EOPs entered/requiring substantive actions (1-2)	<i>1 1 1 1 1</i>	<i>MO</i>	<i>RSK</i>	<i>SM</i>
6. EOP contingencies requiring substantive actions (0-2)	<i>1 1 2 1 1</i>	<i>MO</i>	<i>RSK</i>	<i>SM</i>
7. Critical tasks (2-3)	<i>3 1 2 1 4</i>	<i>MO</i>	<i>RSK</i>	<i>SM</i>