

**INITIAL EXAMINATION SUBMITTAL COVER LETTER AND**

**COMPLETED CHECKLISTS**

**FOR THE DRESDEN INITIAL EXAMINATION - AUGUST 2004**

Exelon Generation Company, LLC      www.exeloncorp.com  
Dresden Nuclear Power Station  
6500 North Dresden Road  
Morris, IL 60450-9765

June 30, 2004

SVPLTR # 04-0043

U. S. Nuclear Regulatory Commission - Region III  
ATTN: Operator Licensing Branch  
2443 Warrenville Road – Suite 210  
Lisle, IL 60532-4352

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

Subject:      Submittal of Integrated Initial License Training Examination Materials

Enclosed are the examination materials in support of the Initial License Examination scheduled for the week of August 16, 2004, at the Dresden Nuclear Power Station. These examination materials have been developed in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Draft Revision 9. Please note that reference materials are attached to each individual examination question or item.

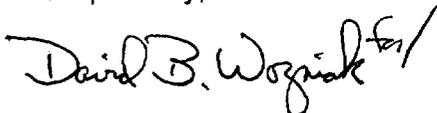
Some minor modifications have been made to the integrated examination outline in order to improve balance and content. These changes improve examination quality and are consistent with guidance in NUREG-1021, Draft Revision 9.

Some modifications or adjustments to the examination material may be required due to procedural changes that occur after this submittal.

In accordance with NUREG 1021, Draft 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 Jeff Hansen, Regulatory Assurance Manager, at (815) 416-2800.

Respectfully,



Danny Bost  
Site Vice President  
Dresden Nuclear Power Station

JUN 30 2004

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

RO/SRO Composite Examination with references attached

Control Room Systems and Facility Walk-Through Job Performance Measures with references attached

Administrative Topic Job Performance Measures with references attached

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 Exam Quality Checklist (Form ES-401-6)

Examination Security Agreements (Form ES-201-3)

Control Room / In-Plant System Outline (Form ES-301-2)

BWR Examination Outline (Form ES-401-1)

Generic Knowledge and Abilities Outline (Tier 3) (Form ES-401-3)

Record of Rejected K/As (Form ES-401-4)

Scenario Outlines (Form ES-D-1)

cc: NRC Document Control Desk - (w/o Enclosures)  
NRC Senior Resident Inspector – (w/o Enclosures)

Facility: Dresden		Date of Examination: 8/16/2004		Operating Test Number: ILT 03-1	
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).	SWB	MW	RKW	
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	SWB	MW	RKW	
c.	The operating test shall not duplicate items from the applicants' audit test(s) (see Section D.1.a).	SWB	MW	MES	*
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.	SWB	MW	RKW	
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	SWB	MW	RKW	
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>· 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>	SWB	MW	RKW	
b.	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.	SWB	MW	RKW	
c.	At least 20 percent of the JPMs on each test are new or significantly modified.	SWB	MW	RKW	
3. SIMULATOR CRITERIA			--	--	--
a.	The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.	SWB	MW	MES	*
		Printed Name / Signature		Date	
a.	Author	SHANNON W. FREY <i>[Signature]</i>		6/21/04	
b.	Facility Reviewer(*)	MARK RUNION <i>[Signature]</i>		6-29-04	
c.	NRC Chief Examiner (#)	Michael E. Bielby <i>[Signature]</i>		8/4/04	
d.	NRC Supervisor	Dell R. McNeil <i>[Signature]</i>		8/5/04	
NOTE: * The facility signature is not applicable for NRC-developed tests # Independent NRC reviewer initial items in Column "c;" chief examiner concurrence is required.					

\* Completed during exam validation (CE did validation) 7/29/04

Facility: Dresden    Date of Exam: 8/16/2004    Scenario Numbers: ILT-N-1 / ILT-N-2 / ILT-N-3    Operating Test No.: ILT 03-1		Initials		
QUALITATIVE ATTRIBUTES		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.	SA	ML	RKW
2.	The scenarios consist mostly of related events.	SA	ML	RKW
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>	SA	ML	RKW
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.	SA	ML	RKW
5.	The events are valid with regard to physics and thermodynamics.	SA	ML	RKW
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	SA	ML	RKW
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.	SA	ML	RKW
8.	The simulator modeling is not altered.	SA	ML	RKW
9.	The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.	SA	ML	MEB
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.	SA	ML	RKW
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	SA	ML	RKW
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).	SA	ML	RKW
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	SA	ML	RKW
TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.5.d)		Actual Attributes		
1.	Total malfunctions (5-8)	7	16	15
2.	Malfunctions after EOP entry (1-2)	2	1	1
3.	Abnormal events (2-4)	3	13	3
4.	Major transients (1-2)	1	1	1
5.	EOPs entered/requiring substantive actions (1-2)	2	12	2
6.	EOP contingencies requiring substantive actions (0-2)	3	12	1
7.	Critical tasks (2-3)	2	14	3

\* CE (M. Bielby) completed during validation week of 7/26/04

OPERATING TEST NO.: ILT 03-1

Applicant Type	Evolution Type	Minimum Number	Scenario Number							
			ILT-N-1		ILT-N-2		ILT-N-3		N/A	
			RO	BOP	RO	BOP	RO	BOP	RO	BOP
RO	Reactivity	1*	N/A No RO Candidates							
	Normal	1								
	Instrument / Component	4*								
	Major	1*								
As RO	Reactivity	1*	N/A	N/A	1	N/A	N/A	N/A	N/A	
	Normal	0	N/A	N/A	N/A	N/A	N/A	N/A		
	Instrument / Component	2*	2,3,4	N/A	2,4,5	3	1,2,3	N/A		
	Major	1	5,6,7	5,6,7	6,7	6,7	4,5	4,5		
As SRO	Reactivity	0	N/A	N/A	1	N/A	N/A	N/A	N/A	
	Normal	1*	N/A	N/A	N/A	N/A	N/A	N/A		
	Instrument / Component	2*	1,2,3,4	N/A	2,3,4,5	N/A	1,2,3	N/A		
	Major	1	5,6,7	5,6,7	6,7	6,7	4,5	4,5		
SRO-I	Reactivity	0	N/A No SRO-U Candidates							
	Normal	1*								
	Instrument / Component	2*								
	Major	1								
SRO-U	Reactivity	0	N/A No SRO-U Candidates							
	Normal	1*								
	Instrument / Component	2*								
	Major	1								

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
  - (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 one-for-one 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 requirement.

Author:

Bluff 6/29/04

NRC Reviewer:

RH Walter 7/2/2004

Competencies	SRO				RO				BOP (4)					
	SCENARIO (ILT-N-)				SCENARIO (ILT-N-)				SCENARIO (ILT-N-)					
	1	2	3	4	1	2	3	4	1	2	3	4		
Interpret / Diagnose Events and Conditions	1-7	1-7	1-5	N/A	2-7	2,4,5 6,7	1-5	N/A	1	3	N/A	N/A		
Comply With and Use Procedures (1)	1-7	1-7	1-5		2-7	1,2,4 5,7	1-5		5,7	1,3,6 7	4,5			
Operate Control Boards (2)	N/A				2,3, 4,6, 7	1,2,4 5,7	1,2,3 5		5,7	6,7	4,5			
Communicate and Interact	1-7	1-7	1-5		2-7	1,2,4 5,7	1-5		5,7	1,3,6 7	1,4,5			
Demonstrate Supervisory Ability (3)	1-7	1-7	1-5		N/A				N/A					
Comply With and Use Tech. Specs. (3)	1,2	3,4	1,2		N/A				N/A					

Notes:

- (1) Includes Technical Specification compliance for an RO.
- (2) Optional for an SRO-U.
- (3) Only applicable to SROs.
- (4) BOP not to be evaluated, surrogate Operator.

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:

Shirley 6/29/04

NRC Reviewer:

RH Walter 7/2/2004

Facility: Dresden		Date of Exam: 8/16/2004		Exam Level: RO/SRO		
Item Description	Initial					
	a	b*	c#			
1. Questions and answers technically accurate and applicable to facility	SMB	MW	RKW			
2. a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available	SMB	MW	RKW			
3. SRO questions are appropriate per Section D.2.d of ES-401	SMB	MW	RKW			
4. Question section and duplication from the last two NRC licensing exams appears consistent with a systematic sampling process.			MFB			
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)	SMB	MW	RKW			
6. Bank use meets limits (no more than 75 percent from the bank at least 10 percent new, and the rest modified); enter the actual RO/ SRO-only question distribution at right	Bank 17/5 <del>18/4</del> MFB 8/16/04	Modified 9/2	New 49/18 <del>48/19</del> MFB 8/16/04	SMB	MW	RKW
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 35 / 6	C/A 40 / 19		SMB	MW	RKW
8. References/handouts provided do not give away answers	SMB	MW	RKW			
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	SMB	MW	RKW			
10. Question psychometric quality and format meet ES, Appendix B, guidelines	SMB	MW	RKW			
11. The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with value on cover sheet	SMB	MW	RKW			
a. Author		Printed Name / Signature		Date		
		SHANNON W. FZEY / <i>[Signature]</i>		6/28/04		
b. Facility Reviewer (*)		MARK RUMON / <i>[Signature]</i>		6-29-04		
c. NRC Chief Examiner (#)		Michael E. Bielby Sr. / <i>[Signature]</i>		8/4/04		
d. NRC Regional Supervisor		Dell R. McNeil / <i>[Signature]</i>		8/5/04		
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.						