

**OUTLINE SUBMITTAL**

**FOR THE DRESDEN RETAKE EXAMINATION - JAN 2003**

# Outline Submittal

Contains the following:

Outline Submittal Letter from Licensee

ES-201-1	Examination Preparation Checklist
Letter	Exelon cover letter transmitting the Outline
ES-201-2	Examination Outline Quality Checklist
ES-301-5	Transient and Event Checklist
ES-301-6	Competencies Checklist
D-1	Dynamic Simulator Scenario Outline for 3 scenarios
Admin	There were no NRC Comments on the submitted test outlines

Facility: <u>Dresden U2/U3</u>		Date of Examination: <u>01/22/2003</u>
Examinations Developed by: <input checked="" type="radio"/> Facility / <input type="radio"/> NRC (circle one)		
Target Date*	Task Description / Reference	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a & b)	drm
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	drm
-120	3. Facility contact briefed on security & other requirements (C.2.c)	drm
-120	4. Corporate notification letter sent (C.2.d)	drm
[-90]	[5. Reference material due (C.1.e; C.3.c)]	n/a
-75	6. Integrated examination outline(s) due (C.1.e & f; C.3.d)	drm
-70	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	drm
-45	8. Proposed examinations, supporting documentation, and reference materials due (C.1.e, f, g & h; C.3.d)	drm
-30	9. Preliminary license applications due (C.1.i; C.2.g; ES-202)	drm
-14	10. Final license applications due and assignment sheet prepared (C.1.i; C.2.g; ES-202)	drm
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	drm
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f & h; C.3.g)	drm
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	drm
-7	14. Final applications reviewed; assignment sheet updated; waiver letters sent (C.2.g, ES-204)	drm
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee and authorization granted to give written exams (if applicable) (C.3.k)	n/a
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	drm
<p>* Target dates are keyed to the examination date identified in the corporate notification letter. They are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.</p> <p>[ ] Applies only to examinations prepared by the NRC.</p>		

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10 CFR 55.40

November 11, 2002

RHLTR: #02-0085

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: Initial License Re-examination Integrated Examination Outline

Enclosed is the integrated examination outline, which Dresden Nuclear Power Station (DNPS) is submitting for review, comment, and approval for the Initial License Examination, scheduled for the week of January 20, 2003, at DNPS.

This submittal includes outlines for the integrated operational scenarios.

This outline has been developed in accordance with NUREG-1021, "Operator Licensing Examiner Standards," Revision 8, Supplement 1.

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

November 11, 2002  
U. S. Nuclear Regulatory Commission  
Page 2

Should you have any questions concerning this letter, please contact Mr. Jeff Hansen, Regulatory Assurance Manager, at (815) 416-2800.

Respectfully,



*Jul*  
R. J. Hovey  
Site Vice President  
Dresden Nuclear Power Station

Enclosures:

ES-201-2 Examination Outline Quality Checklist  
ES-201-3 Examination Security Agreements  
ES-301-5 Transient and Event Checklist  
ES-301-6 Competencies Checklist  
ES-D-1 Scenario Outlines

cc: NRC Document Control Desk – w/o enclosures  
Region III NRC Regional Administrator - w/o enclosures  
NRC Senior Resident Inspector - Dresden Nuclear Station – w/o enclosures

bcc:

Project Manager- NRR (Unit 2/3) w/o enclosures  
Officer of Nuclear Facility Safety – IDNS w/o enclosures  
Senior Reactor Analyst – NRC Region III w/o enclosures  
Manager of Energy Practice - Winston and Strawn w/o enclosures  
Director Licensing – MWROG w/o enclosures  
Manager Licensing Dresden and Quad Cities – MWROG w/o enclosures  
Station Manager – Dresden Nuclear Power Station w/o enclosures  
Regulatory Assurance Manager – Dresden Nuclear Power Station w/o enclosures  
Training Manager – Dresden Nuclear Power Station w/o enclosures  
Operations Manager – Dresden Nuclear Power Station w/o enclosures  
Shift Operations Superintendent – Dresden Nuclear Power Station w/o enclosures  
Operation Training Supervisor – Dresden Nuclear Power Station w/o enclosures  
R. Wroblewski – Initial License Training Specialist w/o enclosures  
M. Otten – Initial License Training Specialist w/o enclosures  
S. Russell – ROG Operator Licensing w/o enclosures  
Document Control Desk - Licensing (Hard Copy w/o enclosures)  
Document Control Desk - Licensing (Electronic Copy)  
Dresden Regulatory Assurance - Subject File w/o enclosures  
SVP Numerical File – RHLTR: #02-0085 w/o enclosures

Facility: <u>Dresden</u>		Date of Examination: <u>1/20/03</u>		
Item	Task Description	Initials		
		a	b*	c#
1. W R I T T E N	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.	[Redacted]	[Redacted]	[Redacted]
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.	[Redacted]	[Redacted]	[Redacted]
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	[Redacted]	[Redacted]	[Redacted]
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	[Redacted]	[Redacted]	[Redacted]
2. S I M	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, and major transients.	MO	PS	DM
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity; ensure each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s)*, and scenarios will not be repeated over successive days.	MO	PS	DM
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.	MO	PS	DM
3. W / T	a. Verify that: (1) the outline(s) contain(s) the required number of control room and in-plant tasks, (2) no more than 30% of the test material is repeated from the last NRC examination, (3)* no tasks are duplicated from the applicants' audit test(s), and (4) no more than 80% of any operating test is taken directly from the licensee's exam banks.	[Redacted]	[Redacted]	[Redacted]
	b. Verify that: (1) the tasks are distributed among the safety function groupings as specified in ES-301, (2) one task is conducted in a low-power or shutdown condition, (3) 40% of the tasks require the applicant to implement an alternate path procedure, (4) one in-plant task tests the applicant's response to an emergency or abnormal condition, and (5) the in-plant walk-through requires the applicant to enter the RCA.	[Redacted]	[Redacted]	[Redacted]
	c. Verify that the required administrative topics are covered, with emphasis on performance-based activities.	[Redacted]	[Redacted]	[Redacted]
	d. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on successive days.	[Redacted]	[Redacted]	[Redacted]
4. G E N E R A L	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	MO	PS	DM
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	MO	PS	DM
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	MO	PS	DM
	d. Check for duplication and overlap among exam sections.	MO	PS	DM
	e. Check the entire exam for balance of coverage.	MO	PS	DM
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	MO	PS	DM
a. Author	Printed Name / Signature		Date	
b. Facility Reviewer (*)	<u>MARK OTTEN / [Signature]</u>		<u>1/20/03</u>	
c. NRC Chief Examiner (#)	<u>K. AD BOIS / [Signature]</u>		<u>1/18/02</u>	
d. NRC Supervisor	<u>DELL R. McNEIL / [Signature]</u>		<u>1/12/02</u>	
	<u>R. D. Hanksbury / [Signature]</u>		<u>12/16/02</u>	
Note:	* Not applicable for NRC-developed examinations. # Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required.			

OPERATING TEST NO.: ILT 01-1 Retest

Applicant Type	Evolution Type	Minimum Number	Scenario Number		
			ILT-R-1	ILT-R-2	ILT-R-3
RO	Reactivity	1	2	1	2
	Normal	1	1*	2*	1*
	Instrument / Component	4	3, 4* / 5, 6*	3, 4*, 5 / 6*	3, 4* / 5, 6*
	Major	1	7	7	7

\* RO in position as ANSO

As RO	Reactivity	1	No SRO-I Candidates for ILT 01-1 Retest
	Normal	0	
	Instrument / Component	2	
	Major	1	
SRO-I			
As SRO	Reactivity	0	No SRO-I Candidates for ILT 01-1 Retest
	Normal	1	
	Instrument / Component	2	
	Major	1	
SRO-U			
SRO-U	Reactivity	0	No SRO-U Candidates for ILT 01-1 Retest
	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.4.d) but must be significant per Section C.2.a of Appendix D.
  - (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:

NRC Reviewer:



Competencies	Applicant # 2 RO/SRO-I/SRO-U <i>NSO Position</i>			Applicant # 3 RO/SRO-I/SRO-U <i>ANSO Position</i>		
	SCENARIO			SCENARIO		
	ILT-R-1	ILT-R-2	ILT-R-3	ILT-R-1	ILT-R-2	ILT-R-3
Understand and Interpret Annunciators and Alarms	3,5,7-8	3, 5-8	3, 5, 7-8	4, 6-8	4, 6-8	3-4, 6-8
Diagnose Events and Conditions	3,5,7-8	3, 5-8	3, 5, 7-8	4, 6-8	4, 6-8	3-4, 6-8
Understand Plant and System Response	2,3,5, 7-8	1, 3, 5-8	2-5, 7-8	1, 4, 6-8	2, 4, 6-8	1, 3-4, 6-8
Comply With and Use Procedures (1)	2,3,5, 7-8	1-3, 5-8	2-5, 7-8	1, 4, 6-8	2, 4, 6-8	1, 3-4, 6-8
Operate Control Boards	2-3, 5, 7-8	1, 3, 5, 7-8	2-3, 5, 7-8	1, 4, 6-8	2, 4, 6-8	1, 4, 6-8
Communicate and Interact With the Crew	2-8	1-3, 5-8	2-8	1, 4-8	2, 4, 6-8	1, 3-8
Demonstrate Supervisory Ability (2)	N/A	N/A	N/A	N/A	N/A	N/A
Comply With and Use Tech. Specs. (2)	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

(1) Includes Technical Specification compliance for an RO.

(2) 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:

*[Signature]*

NRC Reviewer:

*[Signature]*

Facility: Dresden

Scenario No: ILT-R-1

Op-Test No: ILT 01-1 Retest

Examiners: \_\_\_\_\_

Operators: \_\_\_\_\_

Initial Conditions: 15% reactor power, IRM channel 15 OOS, Unit 3 is in Mode 1

Turnover: Unit startup in progress; transfer auxiliary power to transformer 21, then continue power ascension.

Event No.	Malfunction Number	Event Type*		Event Description
1	NA	N	ANSO SRO	Transfer Aux power from TR-22 to TR-21
2	NA	R	NSO SRO	Raise reactor power by withdrawing control rods
3	RDFAILF5	I	NSO SRO	RPIS failure for rod F5
4	MGMATMF	I	ANSO SRO	Failure of the main generator voltage regulator in automatic
5	RRDMBSTP	C	NSO SRO	Trip of the 2B recirc pump
6	HP6	C	ANSO SRO	Trip of the 2A circ water pump with a failure of the 2B circ water pump to start
7	B12 AW4	M	ALL	Failure of RPS to deenergize and ARI to initiate
8	HP5		ANSO SRO	Loss of main condenser vacuum / Failure of SBLC to inject

\* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

Facility: Dresden

Scenario No: ILT-R-2

Op-Test No: ILT 01-1 Retest

Examiners: \_\_\_\_\_ Operators: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Initial Conditions: Approximately 9.0 Mlbm/hr feedwater flow, IRM channel 15 OOS, Unit 3 is in Mode 1

Turnover: A downpower is in progress to remove the 2C RFP from service for maintenance.

Event No.	Malfunction Number	Event Type*		Event Description
1	NA	R	NSO SRO	Lower reactor power by reducing recirc flow
2	NA	N	ANSO SRO	Secure the 2C RFP
3	RRMBUNST	I	NSO SRO	2B Recirc pump speed signal failure
4	MRGCRDE	I	ANSO SRO	Fails the east CRD area ARM downscale
5	RDFCFHI	I	NSO SRO	Failure of the CRD flow control controller
6	K70	C	ANSO SRO	Trip of the feed breaker to Bus 29
7	I21	M	ALL	Steam leak in the drywell
8	K23 B12		ANSO SRO	Loss of Bus 23-1 / RPS failure to scram

\* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

Facility: Dresden		Scenario No: ILT-R-3		Op-Test No: ILT 01-1 Retest	
Examiners: _____			Operators: _____		
_____			_____		
_____			_____		
Initial Conditions: 15% reactor power, IRM channel 15 OOS, Unit 3 is in Mode 1					
Turnover: Unit startup in progress; synchronize the Main Generator to the grid, then continue power ascension.					
Event No.	Malfunction Number	Event Type*		Event Description	
1	NA	N	ANSO SRO	Synchronize Main Generator to the grid	
2	NA	R	NSO SRO	Raise reactor power by withdrawing control rods	
3	RLMLFBF	I	NSO SRO	A blown fuse causes a lockup of the LFRV	
4	ICSPDFT	I	ANSO SRO	A setpoint drift causes a spurious Isolation Condenser initiation	
5	FWICP1	C	NSO SRO	High amps on the 2A condensate pump	
6	Q21	C	ANSO SRO	Trip of the 2A Service water pump	
7	HPRBBRKP RADFFD	M	ALL	Unisolable steam leak in the reactor building from the HPCI line with a fuel element failure	
8	RDFHYDK		NSO SRO	Rods fail to insert due to a hydraulic lock	

\* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor