

VARIOUS CHECKLISTS

FOR THE FERMI INITIAL EXAMINATION - MARCH 2003

Facility: <u>Fermi Nuclear Station</u>		Date of Examination: <u>3/10-17/2003</u>
Examinations Developed by: <input checked="" type="checkbox"/> Facility / 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/rkw
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	drm/rkw
-120	3. Facility contact briefed on security & other requirements (C.2.c)	drm/rkw
-120	4. Corporate notification letter sent (C.2.d)	drm/rkw
[-90]	[5. Reference material due (C.1.e; C.3.c)]	drm/rkw
-75	6. Integrated examination outline(s) due (C.1.e & f; C.3.d)	drm/rkw
-70	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	drm/rkw
-45	8. Proposed examinations, supporting documentation, and reference materials due (C.1.e, f, g & h; C.3.d)	drm/rkw
-30	9. Preliminary license applications due (C.1.i; C.2.g; ES-202)	drm/rkw
-14	10. Final license applications due and assignment sheet prepared (C.1.i; C.2.g; ES-202)	drm/rkw
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	drm/rkw
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f & h; C.3.g)	drm/rkw
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	drm/rkw
-7	14. Final applications reviewed; assignment sheet updated; waiver letters sent (C.2.g, ES-204)	drm/rkw
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee and authorization granted to give written exams (if applicable) (C.3.k)	drm/rkw
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	drm/rkw
<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>		

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of March 10th - 24, 2003 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 3-10-03 & 3-17-03. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATENOTE
1. TIMOTHY J. Barrett	Ops Training Supervisor	<i>[Signature]</i>	10-8-02	<i>[Signature]</i>	3-15-03
2. Stephen D. Bollinger	Sr. Ops Training Instructor	<i>[Signature]</i>	10/8/02	<i>[Signature]</i>	3/19/03
3. Michael J. Cadden	Sr. Ops. Training Instructor	<i>[Signature]</i>	10-9-02		Note ①
4. Gregory A. Strobel	Gen. Supervisor Ops Training	<i>[Signature]</i>	1-17-03	<i>[Signature]</i>	3/19/03
5. Michael A. Lake	Training Supervisor	<i>[Signature]</i>	11-13-02	<i>[Signature]</i>	3-18-03
6. KIRK SNYDER	Shift Manager	<i>[Signature]</i>	11-25-02	<i>[Signature]</i>	3-18-03
7. ERYMAN BENNETT	NSO	<i>[Signature]</i>	1-17-03	<i>[Signature]</i>	3-19-03
8. RICARDO RAMOS	NSO	<i>[Signature]</i>	1-17-03	<i>[Signature]</i>	3-19-03
9. JAMES RIVET	CRS	<i>[Signature]</i>	1-17-03	<i>[Signature]</i>	3-19-03
10. Michel A. Philippon	Shift Manager	<i>[Signature]</i>	2-11-03	<i>[Signature]</i>	3/20/03
11. Douglas B. Moss	NSO	<i>[Signature]</i>	2-11-03	<i>[Signature]</i>	3/20/03
12. George B. Drayton	NSO	<i>[Signature]</i>	2/1/03	<i>[Signature]</i>	3/21/03
13. William L. Waite	Specialist Science & Engineering	<i>[Signature]</i>	2-10-03	<i>[Signature]</i>	3/18/03
14. Michael D. Duvet	Program Supervisor Initial ops	<i>[Signature]</i>	3/10/03	<i>[Signature]</i>	3/18/03
15. Phillip E. Hecker	ops instructor	<i>[Signature]</i>	3-10-03	<i>[Signature]</i>	3/18/03

NOTES: note ① - Individual was called to Active Military Duty. Individual is unavailable to sign off agreement. Verified with individual that he met the requirements of the Exam Security Agreement. *[Signature]* 3/24/03

Facility Fermi 2 Date of Examination 03-10-03 Operating Test Number:2003-301

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

2. WALK-THROUGH (CATEGORY A & B) CRITERIA				
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 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	ASB	off	RHW BR
b.	The prescribed questions in Category A are predominantly open reference and meet the criteria in Attachment 1 of ES-301.	N/A	NA	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.	ASB	off	RHW BR
d.	At least 20 percent of the JPMs on each test are new or significantly modified.	ASB	off	RHW BR

3. SIMULATOR (CATEGORY C) CRITERIA				
a.	The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.	ASB	off	RHW BR

Printed Name / Signature	S.D. BOLLINGER	Date	
a. Author	Timothy J. Barrett / <i>Timothy Barrett</i> / <i>S.D. Bollinger</i>	1-22-03 / 1-22-03	
b. Facility Reviewer(*)	Greg Strobel / <i>Greg Strobel</i> / <i>Devi R. McNeal</i>	1-22-03	
c. NRC Chief Examiner (#)	Raymond K. Walton / <i>Raymond K. Walton</i> / <i>Devi R. McNeal</i>	2/7/03	
d. NRC Supervisor	Roger D. Linksbury / <i>Roger D. Linksbury</i> / <i>[Signature]</i>	3/4/03	

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

Facility: Fermi 2		Date of Exam: 3-10-03		Scenario Numbers: 1 / 2 /		Operating Test No.: 2003-301			
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.	DB	AK	RHW	BN				
2.	The scenarios consist mostly of related events.	DB	AK	RHW	BN				
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)	DB	AK	RHW	BN				
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.	DB	AK	RHW	BN				
5.	The events are valid with regard to physics and thermodynamics.	DB	AK	RHW	BN				
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	DB	AK	RHW	BN				
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.	N A	NA	N/A					
8.	The simulator modeling is not altered.	DB	AK	RHW	BN				
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.	DB	AK	RHW	BN				
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.	DB	AK	RHW	BN				
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	DB	AK	RHW	BN				
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).	DB	AK	RHW	BN				
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	DB	AK	RHW	BN				
TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.4.D)		Actual Attributes		--	--	--			
1.	Total malfunctions (5-8)	5/ 6 /		DB	AK	RHW	BN		
2.	Malfunctions after EOP entry (1-2)	1/ 2 /		DB	AK	RHW	BN		
3.	Abnormal events (2-4)	3/ 3 /		DB	AK	RHW	BN		
4.	Major transients (1-2)	1/ 1 /		DB	AK	RHW	BN		
5.	EOPs entered/requiring substantive actions (1-2)	2/ 2 /		DB	AK	RHW	BN		
6.	EOP contingencies requiring substantive actions (0-2)	0/ 1 /		DB	AK	RHW	BN		
7.	Critical tasks (2-3)	2/ 3 /		DB	AK	RHW	BN		

Facility: Fermi 2		Date of Exam: 03/10/03		Exam Level: RO/SRO		
Item Description	Initial					
	a	b*	c#			
1. Questions and answers technically accurate and applicable to facility	AB	AK	RW AK			
2. a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available	AB	AK	RW AK			
3. RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401	AB	AK	RW AK			
4. Question selection and duplication from the last two NRC licensing exams appears consistent with a systematic sampling process			RW AK			
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input 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 checked="" type="checkbox"/> the licensee certifies that there is no duplication; or other (explain)	AB	AK	RW AK			
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 question distribution at right	Bank	Modified	New			
	59	8	33			
7. Between 50 and 60 percent of the questions on the exam (including 10 new questions) are written at the comprehension/analysis level; enter the actual question distribution at right	Memory		C/A			
	41		59			
8. References/handouts provided do not give away answers	AB	AK	RW AK			
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	AB	AK	RW AK			
10. Question psychometric quality and format meet ES, Appendix B, guidelines	AB	AK	RW AK			
11. The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet	AB	AK	RW AK			
Printed Name / Signature			Date			
a. Author	S.D. BOLLINGER / <i>S.D. Bollinger</i>		1/23/03			
b. Facility Reviewer (*)	Gren Strobel / <i>Gren Strobel</i>		1/23/03			
c. NRC Chief Examiner (#)	Raymond W. WALTON / <i>Raymond Walton</i> / Bill R. McNeil / <i>Bill R. McNeil</i> / Sec. R. M. H. / <i>Sec. R. M. H.</i>		2/3/03			
d. NRC Regional Supervisor	RD Linksbury / <i>RD Linksbury</i>		3/4/03			
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.						

Facility: Fermi 2		Date of Exam: 03/10/03		Exam Level: RO/SRO		
Item Description	Initial					
	a	b*	c#			
1. Questions and answers technically accurate and applicable to facility	AB	WH	RAW/SM			
2. a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available	OS	WH	RAW/SM			
3. RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401	AS	WH	RAW/SM			
4. Question selection and duplication from the last two NRC licensing exams appears consistent with a systematic sampling process			RAW/SM			
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input 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 checked="" type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> other (explain)	OS	WH	RAW/SM			
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 question distribution at right	Bank	Modified	New	AS	WH	RAW/SM
	65	6	29			
7. Between 50 and 60 percent of the questions on the exam (including 10 new questions) are written at the comprehension/analysis level; enter the actual question distribution at right	Memory		C/A	AS	WH	RAW/SM
	47		53			
8. References/handouts provided do not give away answers	AS	WH	RAW/SM			
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	AS	WH	RAW/SM			
10. Question psychometric quality and format meet ES, Appendix B, guidelines	AS	WH	RAW/SM			
11. The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet	AS	WH	RAW/SM			
Printed Name / Signature				Date		
a. Author	S.D. BOLLINGER / <i>S.D. Bollinger</i>			1/23/03		
b. Facility Reviewer (*)	Grey Strobel / <i>Grey Strobel</i>			1/23/03		
c. NRC Chief Examiner (#)	Raymond Walton / <i>Raymond Walton</i>			2/3/03		
d. NRC Regional Supervisor	RD Leaksburg / <i>RD Leaksburg</i>			3/4/03		
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.						

Facility: <u>FERMI U2</u>		Date of Exam: <u>3/17/03</u>		Exam Level: <u>RO/SRO</u>	
Item Description	Initials				
	a	b	c		
1. Clean answer sheets copied before grading	<u>PM</u>	<u>RAW</u>	<u>SM</u>		
2. Answer key changes and question deletions justified and documented	<u>PM</u>	<u>RAW</u>	<u>N/A</u> <u>SM</u>		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	<u>PM</u>	<u>RAW</u>	<u>SM</u>		
4. Grading for all borderline cases (80% +/- 2%) reviewed in detail	<u>PM</u>	<u>RAW</u>	<u>SM</u>		
5. All other failing examinations checked to ensure that grades are justified	<u>PM</u>	<u>RAW</u>	<u>SM</u>		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	<u>PM</u>	<u>RAW</u>	<u>SM</u>		
Printed Name / Signature		Date			
a. Grader	<u>Phillip Young</u>			<u>3/24/03</u>	
b. Facility Reviewer(*)	<u>Raymond Walter</u>			<u>3/24/03</u>	
c. NRC Chief Examiner (*)	<u>William R. Mitchell</u>			<u>3/24/03</u>	
d. NRC Supervisor (*)	<u>JR</u>			<u>3/26/03</u>	
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					