Facilit	y: Fermi 2 Date of Examination: 6/17/19 Operating Test No.	mber:	2019-1	
	1. General Criteria		Initial	5
		а	b*	Car
a.	The operating test conforms to the previously approved outline; changes are consistent with sampling requirements (e.g., 10 CFR 55.45, operational importance, safety function distribution).	4	or,	D
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	2	et	D
C.	The operating test shall not duplicate items from the applicants' audit test(s) (see Section D.1.a.).	9	11	4)
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.	2	W	D
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	7	W	A
	2. Walkthrough Criteria			
a.	Each JPM includes the following, as applicable:			
	<ul> <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—</li> <li>detailed expected actions with exact criteria and nomenclature</li> <li>system response and other examiner cues</li> </ul>	2	et	
	<ul> <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>		Ü	
b.	Ensure that any changes from the previously approved systems and administrative walkthrough outlines (Forms ES-301-1 and ES-301-2) have not caused the test to deviate from any of the acceptance criteria (e.g., item distribution, bank use, repetition from the last two NRC examinations) specified on those forms and Form ES-201-2.	7	W	40
	3. Simulator Criteria			SAR
	ssociated simulator operating tests (scenario sets) have been reviewed in accordance with ES-301-4, and a copy is attached.	9	et	D
a. b. c. d.	Author  Facility Reviewer (*)  NRC Chief Examiner (#)  NRC Supervisor  Printed Name/Signature  Scott Scripts  Scott Scripts  Pland K. Hennele  Scott Scripts  RHSC A. EDWARD  RHSC A. EDWARD	تغير	4/3 4/3 6/	te 4/19 5/19
	facility licensee signature is not applicable for NRC-developed tests. independent NRC reviewer initials items in column "c"; the chief examiner concurrence is required.			

rac	cility: Fermi 2 Date of Exam: 6/17/19 Scenario Numbers: 1 / 2 /	3 Operation	T Test	140 20	15-1
	QUALITATIVE ATTRIBUTES			Initials	T ,
_			а	b*	C <sup>4</sup>
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.		0	w	P
2.	The scenarios consist mostly of related events.			W	1
Each event description consists of the following:  the point in the scenario when it is to be initiated  the malfunction(s) or conditions 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)		д	W	P	
4.	The events are valid with regard to physics and thermodynamics.		9	W	K
5.	Sequencing and timing of events is reasonable and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.		12	U	4
3.	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.		2	w	J.
7.	The simulator modeling is not altered.		1	er	1
3.	The scenarios have been validated. Pursuant to 10 CFR 55.46(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.			er	7
9.	Scenarios are new or significantly modified in accordance with Section D.5 of ES-301.			de	4
0.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).		1	W	1
11.	The scenario set provides the opportunity for each applicant to be evaluated in each of the applicable rating factors. (Competency rating factors as described on Forms ES-303-1 and ES-303-3.)			at	7
12.	<ol> <li>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).</li> </ol>			et	7
13.	<ol> <li>Applicants are evaluated on a similar number of preidentified critical tasks across scenarios, when possible.</li> </ol>		3-	40	7
14.	The level of difficulty is appropriate to support licensing decisions for each crew p	osition.	7-	W	19
	Target Quantitative Attributes per Scenario (See Section D.5.d)	Actual Attributes			
١,	Malfunctions after EOP entry (1-2)	2/1/1	7	W	1
2.	Abnormal events (2–4)	21413	2-	100	19
3.	Major transients (1–2)	2/2/1	2	W	1
١	EOPs entered/requiring substantive actions (1–2)	2/1/1	2	w	1
j.,	Entry into a contingency EOP with substantive actions (≥ 1 per scenario set)	1/1/1	2	W	1
S.	Preidentified critical tasks (≥ 2)	21212	2	W	14

<sup>\*</sup> The facility licensee signature is not applicable for NRC-developed tests.
# An independent NRC reviewer initials items in column "c"; chief examiner concurrence is required.

Fac	cility: Fermi 2 Date of Exam: 6/17/19 Scenario Numbers: 4 / 5	/ 6 Operatir	ng Test I	No.: 201	19-1
	QUALITATIVE ATTRIBUTES			Initials	
			a	b*	C*
1,	The initial conditions are realistic in that some equipment and/or instrumentation but it does not cue the operators into expected events.	may be out of service,	2	w	D
2.	The scenarios consist mostly of related events.		2	W	4
3.	Each event description consists of the following:  the point in the scenario when it is to be initiated				
	<ul> <li>the malfunction(s) or conditions 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
4.	The events are valid with regard to physics and thermodynamics.		7	W	10
5.	Sequencing and timing of events is reasonable and allows the examination team evaluation results commensurate with the scenario objectives.	n to obtain complete	2	W	P
6.	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.			w	P
7.	The simulator modeling is not altered.			ef	19
8.	The scenarios have been validated. Pursuant to 10 CFR 55.46(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.			u	40
9.	Scenarios are new or significantly modified in accordance with Section D.5 of ES-301,			W	D
10.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).			w	P
11.	<ol> <li>The scenario set provides the opportunity for each applicant to be evaluated in each of the applicable rating factors. (Competency rating factors as described on Forms ES-303-1 and ES-303-3.)</li> </ol>			a	B
12.	<ol><li>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).</li></ol>			w	D
13.	<ol> <li>Applicants are evaluated on a similar number of preidentified critical tasks across scenarios, when possible.</li> </ol>			et	A
14. The level of difficulty is appropriate to support licensing decisions for each crew position.			2	4	D
	Target Quantitative Attributes per Scenario (See Section D.5.d)	Actual Attributes	22	425	-
1.	Malfunctions after EOP entry (1–2)	1/1//	2	ur	
2.	Abnormal events (2–4)	21212	8	W	À
3.	Major transients (1–2)	2/1/1	2	W	43
4.	EOPs entered/requiring substantive actions (1–2)	1/2/	2	w	D
5.	Entry into a contingency EOP with substantive actions (≥ 1 per scenario set)	1/1/1	2	W	D
6.	Preidentified critical tasks (≥ 2)	21212	2	w	1

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Faci	lity: Fermi 2 Date of Exam: 6/17/19 Scenario Numbers: 7	Operatir	ig rest l	NO.:201	9-1
QUALITATIVE ATTRIBUTES			Initials		
			а	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.		5	et	I
2.	The scenarios consist mostly of related events.		G	ut	4
3.	Each event description consists of the following:				V
	<ul> <li>the point in the scenario when it is to be initiated</li> <li>the malfunction(s) or conditions 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>		0	af	4
4.	The events are valid with regard to physics and thermodynamics.		a	at	A
5.	Sequencing and timing of events is reasonable and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.		$\gamma$	est	1
5.	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.		4	ut	À
<b>.</b>	The simulator modeling is not altered.		7	ur	7
3.	The scenarios have been validated. Pursuant to 10 CFR 55.46(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.		4	U	1
3.	Scenarios are new or significantly modified in accordance with Section D.5 of ES-301.			Ut	4
10:	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).		2	at	7
11	The scenario set provides the opportunity for each applicant to be evaluated in each of the applicable rating factors. (Competency rating factors as described on Forms ES-303-1 and ES-303-3.)		N	U	4
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).		2	111	9
13	<ol> <li>Applicants are evaluated on a similar number of preidentified critical tasks across scenarios, when possible.</li> </ol>		a	w	9
14.	The level of difficulty is appropriate to support licensing decisions for each crew	position.	2	W	13
	Target Quantitative Attributes per Scenario (See Section D.5.d)	Actual Attributes	***		L
 I.	Malfunctions after EOP entry (1–2)	1 / /	W	Ur	1
2.	Abnormal events (2–4)	4 / /	0	111	1
3.	Major transients (1–2)	1 1	W	44	7
1.	EOPs entered/requiring substantive actions (1–2)	\ / /	A	44	1
5.	Entry into a contingency EOP with substantive actions (≥ 1 per scenario set)	0''	8	4	7
 6.	Preidentified critical tasks (≥ 2)	7.11	2	46	1

The facility licensee signature is not applicable for NRC-developed tests.
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