

**UPDATED CHECKLISTS - ADMINISTERED EXAMINATION
FOR THE FERMI INITIAL EXAM - JANUARY 2008**

Facility: <u>Fermi 2</u>		Date of Examination: <u>01/28/2008</u>
Examination Level: RO <input checked="" type="checkbox"/> SRO <input type="checkbox"/>		Operating Test Number: <u>2008-1</u>
Administrative Topic (See Note)	Type Code*	Describe activity to be performed
Conduct of Operations	C,S,R,D	Perform Thermal Limit Verification (MAPRAT) 293009 Core Thermal Limits GENERIC 2.1.7 - Ability to evaluate plant performance and make operational judgments based on operating characteristics / reactor behavior / and instrument interpretation. RO 4.4 / SRO 4.7
Conduct of Operations	C,S,R,M	Complete and Communicate a Nuclear Plant Technical Data Form (Alert) GENERIC 2.4.39 - Knowledge of the RO's responsibilities in emergency plan implementation. RO 3.9 / SRO 3.8
Equipment Control	S,D	Perform 24.202.03, "HPCI System Piping Filled And Valve Position Verification" 206000 High Pressure Coolant Injection System GENERIC 2.2.12 - Knowledge of surveillance procedures. RO 3.7 / SRO 4.1
Radiation Control	C,S,R,D	Determine Dose Limit Will Be Exceeded and Initiate a Dose Extension. GENERIC 2.3.4 - Knowledge of radiation exposure limits and contamination control / including permissible levels in excess of those authorized. RO 3.2 / SRO 3.7
Emergency Plan		
NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.		
* Type Codes & Criteria: (C)ontrol room, (S)imulator, or Class(R)oom (D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs & RO retakes) (N)ew or (M)odified from bank (≥ 1) (P)revious 2 exams (≤ 1; randomly selected)		

Facility: <u>Fermi 2</u>		Date of Examination: <u>01/28/2008</u>
Examination Level: RO <input type="checkbox"/> SRO <input checked="" type="checkbox"/>		Operating Test Number: <u>2008-1</u>
Administrative Topic (See Note)	Type Code*	Describe activity to be performed
Conduct of Operations	C,S,R,D	Perform Thermal Limit Verification (MAPRAT) 293009 Core Thermal Limits GENERIC 2.1.7 - Ability to evaluate plant performance and make operational judgments based on operating characteristics / reactor behavior / and instrument interpretation. RO 4.4 / SRO 4.7
Conduct of Operations	C,R,S,P	Knowledge of Shift Staffing Requirements GENERIC 2.1.4 - Knowledge of individual licensed operator responsibilities related to shift staffing, such as medical requirements, "no-solo" operation, maintenance of active license status, 10CFR55, etc. RO 3.3 / SRO 3.8
Equipment Control	S,D	Perform 24.202.03, "HPCI System Piping Filled And Valve Position Verification" 206000 High Pressure Coolant Injection System GENERIC 2.2.12 - Knowledge of surveillance procedures. RO 3.7 SRO 4.1
Radiation Control	C,R,S,D	Determine Dose Limit and Complete a Dose Extension GENERIC 2.3.4 - Knowledge of radiation exposure limits under normal or emergency conditions. RO 3.2 / SRO 3.7
Emergency Plan	C,S,R,M	Perform On-Site Protective Actions and Classification for Security Event (Alert) GENERIC 2.4.40 - Knowledge of the SRO's responsibilities in emergency plan implementation. RO 2.7 SRO 4.5
NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.		
* Type Codes & Criteria: (C)ontrol room, (S)imulator, or Class(R)oom (D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs & RO retakes) (N)ew or (M)odified from bank (≥ 1) (P)revious 2 exams (≤ 1 ; randomly selected)		

Facility: <u>Fermi 2</u>		Date of Examination: <u>1/28/2008</u>
Exam Level: RO <input checked="" type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>		Operating Test Number: <u>2008-1</u>
Control Room Systems® (8 for RO); (7 for SRO-I); (2 or 3 for SRO-U, including 1 ESF)		
System / JPM Title	Type Code*	Safety Function
<p>a. Manually Start the RCIC System 217000 Reactor Core Isolation Cooling System A4. Ability to manually operate and/or monitor in the control room: A4.04 Manually initiated controls RO 3.6 / SRO 3.6</p>	D,S	2
<p>b. Respond to Refuel Floor High Radiation 272000 Radiation Monitoring System A2. Ability to (a) predict the impacts of the following on the RADIATION MONITORING SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A2.12 Refuel floor handling accidents/operations RO 3.3 / SRO 4.0</p>	P,D,A,L,S	9
<p>c. Manually Initiate Low Low Set (No Fault) 239002 Relief/Safety Valves A4. Ability to manually operate and/or monitor in the control room: A4.01 SRV's RO 4.4 / SRO 4.4</p>	D,S	3
<p>d. SOP Run of Core Spray System in Test Mode 209001 Low Pressure Core Spray System A2. Ability to (a) predict the impacts of the following on the LOW PRESSURE CORE SPRAY SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A2.06 Inadequate system flow RO 3.2 / SRO 3.2</p>	P,EN,D,A,S	4
<p>e. Restore a RWCU Pump After Oil Sample (Plant Hot) With System Leak and Failure to Isolate 223002 Primary Containment Isolation System /Nuclear Steam Supply Shut-Off A2. Ability to (a) predict the impacts of the following on the PRIMARY CONTAINMENT ISOLATION SYSTEM/NUCLEAR STEAM SUPPLY SHUT-OFF ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A2.03 System logic failures RO 3.0 / SRO 3.3</p>	N,S,A	5
<p>f. Respond to Multiple Rod Drifts and RPS Failure 212000 Reactor Protection System A2. Ability to (a) predict the impacts of the following on the REACTOR PROTECTION SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A2.16 Changing mode switch position RO 4.0 / SRO 4.1</p>	D,A,S	7

<p>g. Manually Initiate Div 1 Emergency Equipment Cooling Water 400000 Component Cooling Water Systems (CCWS) A4. Ability to manually operate and / or monitor in the control room: A4.01 CCW indications and control .RO 3.1 / SRO 3.0</p>	N,A,S	8
<p>h. Shift Operating CRD Pumps 201001 Control Rod Drive Hydraulic System A4. Ability to manually operate and/or monitor in the control room: A4.01 CRD pumps RO 3.1 / SRO 3.1</p>	D,S	1
<p>In-Plant Systems[@] (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)</p>		
<p>j. Defeat ARI Logic Trips 216000: Nuclear Boiler Instrumentation EA1 Ability to operate and/or monitor the following as they apply to scram condition present and reactor power above aprm downscale or unknown : EA1.03 ARI/RT/ATWS: Plant-Specific...RO 4.1 / SRO 4.1</p>	D,R,E	7
<p>k. Place ESF Battery Charger in Service 263000: DC Electrical Distribution A1. Ability to predict and/or monitor changes in parameters associated with operating the D.C. ELECTRICAL DISTRIBUTION controls including: (CFR: 41.5 / 45.5) A1.01 Battery charging / discharging rate RO 2.5 / SRO 2.8</p>	D,R,	6
<p>l. Shift In Service IAS Dryers 300000: Instrument Air System A2. Ability to (a) predict the impacts of the following on the INSTRUMENT AIR SYSTEM and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation: A2.01 Air dryer and filter malfunctions RO 2.9 / SRO 2.8</p>	D,R	8
<p>@ All RO and SRO-I control room (and in-plant) systems must be different and serve different safety functions; all 5 SRO-U systems must serve different safety functions; in-plant systems and functions may overlap those tested in the control room.</p>		
<p>*Type Codes</p>	<p>Criteria for RO / SRO-I / SRO-U</p>	
<p>(A)lternate path (C)ontrol room (D)irect from bank (E)mergency or abnormal in-plant (EN)gineered safety feature (L)ow-Power / Shutdown (N)ew or (M)odified from bank including 1(A) (P)revious 2 exams (R)CA (S)imulator</p>	<p>4-6 / 4-6 / 2-3 ≤ 9 / ≤ 8 / ≤ 4 ≥ 1 / ≥ 1 / ≥ 1 - / - / ≥ 1 (control room system) ≥ 1 / ≥ 1 / ≥ 1 ≥ 2 / ≥ 2 / ≥ 1 ≤ 3 / ≤ 3 / ≤ 2 (randomly selected) ≥ 1 / ≥ 1 / ≥ 1</p>	

Facility: <u>Fermi-2</u>		Date of Examination: <u>01/28/2008</u>
Exam Level: RO <input type="checkbox"/> SRO-I <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>		Operating Test Number: <u>2008-1</u>
Control Room Systems [®] (8 for RO); (7 for SRO-I); (2 or 3 for SRO-U, including 1 ESF)		
System / JPM Title	Type Code*	Safety Function
<p>a. Manually Start the RCIC System 217000 Reactor Core Isolation Cooling System A4. Ability to manually operate and/or monitor in the control room: A4.04 Manually initiated controls RO 3.6 / SRO 3.6</p>	D,S	2
<p>b. Respond to Refuel Floor High Radiation 272000 Radiation Monitoring System A2. Ability to (a) predict the impacts of the following on the RADIATION MONITORING SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A2.12 Refuel floor handling accidents/operations RO 3.3 / SRO 4.0</p>	P,D,A,L,S	9
<p>c. Manually Initiate Low Low Set (No Fault) 239002 Relief/Safety Valves A4. Ability to manually operate and/or monitor in the control room: A4.01 SRV's RO 4.4 / SRO 4.4</p>	D,S	3
<p>d. SOP Run of Core Spray System in Test Mode 209001 Low Pressure Core Spray System A2. Ability to (a) predict the impacts of the following on the LOW PRESSURE CORE SPRAY SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A2.06 Inadequate system flow RO 3.2 / SRO 3.2</p>	P,EN,D,A,S	4
<p>e. Restore a RWCU Pump After Oil Sample (Plant Hot) With System Leak and Failure to Isolate 223002 Primary Containment Isolation System /Nuclear Steam Supply Shut-Off A2. Ability to (a) predict the impacts of the following on the PRIMARY CONTAINMENT ISOLATION SYSTEM/NUCLEAR STEAM SUPPLY SHUT-OFF ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A2.03 System logic failures RO 3.0 / SRO 3.3</p>	N,S,A	5
<p>f. Respond to Multiple Rod Drifts and RPS Failure 212000 Reactor Protection System A2. Ability to (a) predict the impacts of the following on the REACTOR PROTECTION SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A2.16 Changing mode switch position RO 4.0 / SRO 4.1</p>	D,A,S	7

<p>g. Manually Initiate Div 1 Emergency Equipment Cooling Water 400000 Component Cooling Water Systems (CCWS) A4. Ability to manually operate and / or monitor in the control room: A4.01 CCW indications and control .RO 3.1 / SRO 3.0</p>	<p>N,A,S</p>	<p>8</p>
<p>In-Plant Systems[@] (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)</p>		
<p>j. Defeat ARI Logic Trips 216000: Nuclear Boiler Instrumentation EA1 Ability to operate and/or monitor the following as they apply to scram condition present and reactor power above aprm downscale or unknown : EA1.03 ARI/RT/ATWS: Plant-Specific...RO 4.1 / SRO 4.1</p>	<p>D,R,E</p>	<p>7</p>
<p>k. Place ESF Battery Charger in Service 263000: DC Electrical Distribution A1. Ability to predict and/or monitor changes in parameters associated with operating the D.C. ELECTRICAL DISTRIBUTION controls including: (CFR: 41.5 / 45.5) A1.01 Battery charging / discharging rate RO 2.5 / SRO 2.8</p>	<p>D,R,</p>	<p>6</p>
<p>l. Shift In Service IAS Dryers 300000: Instrument Air System A2. Ability to (a) predict the impacts of the following on the INSTRUMENT AIR SYSTEM and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation: A2.01 Air dryer and filter malfunctions RO 2.9 / SRO 2.8</p>	<p>D,R</p>	<p>8</p>
<p>@ All RO and SRO-I control room (and in-plant) systems must be different and serve different safety functions; all 5 SRO-U systems must serve different safety functions; in-plant systems and functions may overlap those tested in the control room.</p>		

*Type Codes	Criteria for RO / SRO-I / SRO-U
(A)lternate path	4-6 / 4-6 / 2-3
(C)ontrol room	
(D)irect from bank	≤ 9 / ≤ 8 / ≤ 4
(E)mergency or abnormal in-plant	≥ 1 / ≥ 1 / ≥ 1
(EN)gineered safety feature	- / - / ≥ 1 (control room system)
(L)ow-Power / Shutdown	≥ 1 / ≥ 1 / ≥ 1
(N)ew or (M)odified from bank including 1(A)	≥ 2 / ≥ 2 / ≥ 1
(P)revious 2 exams	≤ 3 / ≤ 3 / ≤ 2 (randomly selected)
(R)CA	≥ 1 / ≥ 1 / ≥ 1
(S)imulator	

Facility: <u>Fermi-2</u>		Date of Examination: <u>01/28/2008</u>
Exam Level: RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input checked="" type="checkbox"/>		Operating Test Number: <u>2008-1</u>
Control Room Systems [®] (8 for RO); (7 for SRO-I); (2 or 3 for SRO-U, including 1 ESF)		
System / JPM Title	Type Code*	Safety Function
a. Manually Start the RCIC System 217000 Reactor Core Isolation Cooling System A4. Ability to manually operate and/or monitor in the control room: A4.04 Manually initiated controls RO 3.6 / SRO 3.6	D,S	2
b. Respond to Refuel Floor High Radiation 272000 Radiation Monitoring System A2. Ability to (a) predict the impacts of the following on the RADIATION MONITORING SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A2.12 Refuel floor handling accidents/operations RO 3.3 / SRO 4.0	P,D,A,L,S	9
i. Temporary Removal and Restoration of SDC for I&C Surveillances 205000 Shutdown Cooling System (RHR Shutdown Cooling Mode) A4. Ability to manually operate and/or monitor in the control room: A4.01 SDC/RHR pumps RO 3.7 / SRO 3.7 A4.03 SDC/RHR discharge valves RO 3.6 / SRO 3.5 A4.05 Minimum flow valves RO 3.2 / SRO 3.2	N,EN,A,S	4
In-Plant Systems [®] (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)		
j. Defeat ARI Logic Trips 216000: Nuclear Boiler Instrumentation EA1 Ability to operate and/or monitor the following as they apply to scram condition present and reactor power above aprm downscale or unknown : EA1.03 ARI/RT/ATWS: Plant-Specific... RO 4.1 / SRO 4.1	D,R,E	7
k. Place ESF Battery Charger in Service 263000: DC Electrical Distribution A1. Ability to predict and/or monitor changes in parameters associated with operating the D.C. ELECTRICAL DISTRIBUTION controls including: (CFR: 41.5 / 45.5) A1.01 Battery charging / discharging rate RO 2.5 / SRO 2.8	D,R,	6
@ All RO and SRO-I control room (and in-plant) systems must be different and serve different safety functions; all 5 SRO-U systems must serve different safety functions; in-plant systems and functions may overlap those tested in the control room.		

*Type Codes	Criteria for RO / SRO-I / SRO-U
(A)lternate path	4-6 / 4-6 / 2-3
(C)ontrol room	
(D)irect from bank	≤ 9 / ≤ 8 / ≤ 4
(E)mergency or abnormal in-plant	≥ 1 / ≥ 1 / ≥ 1
(EN)gineered safety feature	- / - / ≥ 1 (control room system)
(L)ow-Power / Shutdown	≥ 1 / ≥ 1 / ≥ 1
(N)ew or (M)odified from bank including 1(A)	≥ 2 / ≥ 2 / ≥ 1
(P)revious 2 exams	≤ 3 / ≤ 3 / ≤ 2 (randomly selected)
(R)CA	≥ 1 / ≥ 1 / ≥ 1
(S)imulator	

Facility: Fermi-2		Date of Exam: 1/28/2008		Operating Test Number: 2008-1													
APPLICANT	EVENT TYPE	Scenarios												TOTAL	MINIMUM(*)		
		1			2			3			4						
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION						
		SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP				
														R	I	U	
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input checked="" type="checkbox"/> <input type="checkbox"/>	RX			0		4			3					2	1	1	0
	NOR			1		0			1					2	1	1	1
	I/C			4,6,7		2,4			2,5,6,7,8					10	4	4	2
	MAJ			5,8		4,5,6			7,9					7	2	2	1
	TS			0		0			4,5					2	0	2	2
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input checked="" type="checkbox"/> <input type="checkbox"/>	RX		2			4							0	3	1	1	0
	NOR		0			1							1	1	1	1	1
	I/C		3,9			2,4,7							5	6	4	4	2
	MAJ		5,8,10			4,5,6							7,9	8	2	2	1
	TS		0			2,3							0	2	0	2	2
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/> <input checked="" type="checkbox"/>	RX	2						0		3				2	1	1	0
	NOR	1						1		0				2	1	1	1
	I/C	3,4,6,7,9						7		2,6,7,8				9	4	4	2
	MAJ	5,8,10						4,5,6		7,9				8	2	2	1
	TS	3,4						0						2	0	2	2
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/> <input type="checkbox"/>	RX														1	1	0
	NOR														1	1	1
	I/C														4	4	2
	MAJ														2	2	1
	TS														0	2	2

Instructions:

- Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the "at-the-controls (ATC)" and "balance-of-plant (BOP)" positions. Instant SROs must serve in both the SRO and ATC positions, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position. If an instant SRO *additionally* serves in the BOP position, one (I/C) malfunction can be credited toward the two (I/C) malfunctions required for the ATC position.
- 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 1-for-1 basis.
- 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 requirements specified for the applicant's license level in the right-hand columns.

Facility: Fermi-2		Date of Exam: 1/28/2008									Operating Test Number: 2008-1						
APPLICANT	EVENT TYPE	Scenarios												TOTAL	MINIMUM(*)		
		1			2			3			4						
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION						
		SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP		R	I	U
RO <input checked="" type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/> MAJ <input type="checkbox"/> TS <input type="checkbox"/>	RX			0		4							1	1	1	0	
	NOR			1		0							1	1	1	1	
	I/C			4,6,7		2,4							5	4	4	2	
	MAJ			5,8		4,5,6							5	2	2	1	
	TS			0		0							0	0	2	2	
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input checked="" type="checkbox"/> MAJ <input type="checkbox"/> TS <input type="checkbox"/>	RX		2		4								2	1	1	0	
	NOR		0		1								1	1	1	1	
	I/C		3,9		2,4,7								5	4	4	2	
	MAJ		5,8,10		4,5,6								6	2	2	1	
	TS		0		2,3								2	0	2	2	
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/> MAJ <input checked="" type="checkbox"/> TS <input type="checkbox"/>	RX	2						0					1	1	1	0	
	NOR	1						1					2	1	1	1	
	I/C	3,4,6,7,9						7					6	4	4	2	
	MAJ	5,8,10						4,5,6					6	2	2	1	
	TS	3,4						0					2	0	2	2	
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/> MAJ <input type="checkbox"/> TS <input type="checkbox"/>	RX													1	1	0	
	NOR													1	1	1	
	I/C													4	4	2	
	MAJ													2	2	1	
	TS													0	2	2	

Instructions:

1. Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the "at-the-controls (ATC)" and "balance-of-plant (BOP)" positions. Instant SROs must serve in both the SRO and ATC positions, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position. If an instant SRO *additionally* serves in the BOP position, one (I/C) malfunction can be credited toward the two (I/C) malfunctions required for the ATC position.
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 1-for-1 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 requirements specified for the applicant's license level in the right-hand columns.

Facility: Fermi-2	Date of Examination: 1/28/2008	Operating Test No.: 2008-1														
Competencies	APPLICANTS															
	RO <input type="checkbox"/>	RO <input type="checkbox"/>	RO <input type="checkbox"/>	RO <input type="checkbox"/>												
	SRO-I <input checked="" type="checkbox"/>	SRO-I <input checked="" type="checkbox"/>	SRO-I <input type="checkbox"/>	SRO-I <input type="checkbox"/>												
	SRO-U <input type="checkbox"/>	SRO-U <input type="checkbox"/>	SRO-U <input checked="" type="checkbox"/>	SRO-U <input type="checkbox"/>												
	SCENARIO				SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	B O P	A T C	S R O		A T C	S R O	B O P		S R O	B O P	A T C					
Interpret/ Diagnose Events and Conditions	4,5,6,7, 8	2,3,4,5, 6,8	1,2,3,4, 5,6,7,9		3,5,8,9, 10	2,3,4,5, 6,7,8	1,3,5,7, 9		3,4,5,6, 7,8,9, 10	1,3,4,5, 6,7,8	2,3,4,5, 6,7,8,9					
Comply With and Use Procedures (1)	1,4,5,6, 7,8	2,4,5	2,3,4,5, 6,7,8,9		2,3,5,8, 10	2,3,4,5, 6,7,8	1,3,5,7		1,2,3,4, 5,6,8,9, 10	1,3,4	2,3,4,6, 7,8,9					
Operate Control Boards (2)	1,4,5,6, 7,8	2,4,5,6, 8			2,3,5,8, 9,10		1,3,5,7, 9		1,3,4,5, 6,7,8	2,3,6,7, 8,9						
Communicate and Interact	1,4,5,6, 7,8	2,3,4,5, 6,8	1,2,3,4, 5,6,7,8, 9	3	2,3,5,8, 9,10	1,2,3,4, 5,6,7,8	1,3,5,7, 9		1,2,3,4, 5,6,7,8, 9,10	1,3,4,5, 6,7,8	2,3,4,5, 6,7,8,9					
Demonstrate Supervisory Ability (3)			1,2,3,4, 5,6,7,8, 9			1,2,3,4, 5,6,7,8			1,2,3,4, 5,6,7,8, 9,10							
Comply With and Use Tech Specs. (3)			2,4,5			2,3			3,4							
Notes: (1) Includes Technical Specification compliance for an RO. (2) Optional for an SRO-U. (3) Only applicable to SROs.																

Instructions:

Check 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.

Facility: Fermi-2	Date of Examination: 1/28/2008	Operating Test No.: 2008-1														
Competencies	APPLICANTS															
	RO <input checked="" type="checkbox"/>	RO <input type="checkbox"/>	RO <input type="checkbox"/>	RO <input type="checkbox"/>												
	SRO-I <input type="checkbox"/>	SRO-I <input checked="" type="checkbox"/>	SRO-I <input type="checkbox"/>	SRO-I <input type="checkbox"/>												
	SRO-U <input type="checkbox"/>	SRO-U <input type="checkbox"/>	SRO-U <input checked="" type="checkbox"/>	SRO-U <input type="checkbox"/>												
	SCENARIO				SCENARIO				SCENARIO				SCENARIO			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	B O P	A T C			A T C	S R O			S R O	B O P						
Interpret/ Diagnose Events and Conditions	4,5,6,7, 8	2,3,4,5, 6,8			3,5,8,9, 10	2,3,4,5, 6,7,8			3,4,5,6, 7,8,9, 10	1,3,4,5, 6,7,8						
Comply With and Use Procedures (1)	1,4,5,6, 7,8	2,4,5			2,3,5,8, 10	2,3,4,5, 6,7,8			1,2,3,4, 5,6,8,9, 10	1,3,4						
Operate Control Boards (2)	1,4,5,6, 7,8	2,4,5,6, 8			2,3,5,8, 9,10					1,3,4,5, 6,7,8						
Communicate and Interact	1,4,5,6, 7,8	2,3,4,5, 6,8			2,3,5,8, 9,10	1,2,3,4, 5,6,7,8			1,2,3,4, 5,6,7,8, 9,10	1,3,4,5, 6,7,8						
Demonstrate Supervisory Ability (3)						1,2,3,4, 5,6,7,8			1,2,3,4, 5,6,7,8, 9,10							
Comply With and Use Tech Specs. (3)						2			3,4							
Notes: (1) Includes Technical Specification compliance for an RO. (2) Optional for an SRO-U. (3) Only applicable to SROs.																

Instructions:

Check 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.

Facility:		Fermi 2007 NRC Exam		Date of Exam:		1/21/2008												
Tier	Group	RO K/A Category Points										SRO-Only Points						
		K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G *	Total	A2	G*	Total		
1. Emergency & Plant Evolutions	1	3	3	4				3	4			3	20	4	3	7		
	2	1	1	1				1	1			2	7	2	1	3		
	Tier Totals	4	4	5				4	5			5	27	6	4	10		
2. Plant Systems	1	2	2	2	3	3	2	2	3	2	2	3	26	2	3	5		
	2	1	1	1	1	1	1	2	1	1	1	1	12	0	1	3		
	Tier Totals	3	3	3	4	4	3	4	4	3	3	4	38	3	5	8		
3. Generic Knowledge & Abilities Categories					1		2		3		4		10	1	2	3	4	7
					2		3		2		3			1	2	2	2	

- Note:
1. Ensure that at least two topics from every applicable K/A category are sampled within each tier of the RO and SRO-only outlines (i.e., except for one category in Tier 3 of the SRO-only outline, the "Tier Totals" in each K/A category shall not be less than two).
 2. The point total for each group and tier in the proposed outline must match that specified in the table. The final point total for each group and tier may deviate by ±1 from that specified in the table based on NRC revisions. The final RO exam must total 75 points and the SRO-only exam must total 25 points.
 3. Systems/evolutions within each group are identified on the associated outline; systems or evolutions that do not apply at the facility should be deleted and justified; operationally important, site-specific systems that are not included on the outline should be added. Refer to section D.1.b of ES-401, for guidance regarding elimination of inappropriate K/A statements.
 4. Select topics from as many systems and evolutions as possible; sample every system or evolution in the group before selecting a second topic for any system or evolution.
 5. Absent a plant specific priority, only those KAs having an importance rating (IR) of 2.5 or higher shall be selected. Use the RO and SRO ratings for the RO and SRO-only portions, respectively.
 6. Select SRO topics for Tiers 1 and 2 from the shaded systems and K/A categories.
 - 7.* The generic (G) K/As in Tiers 1 and 2 shall be selected from Section 2 of the K/A Catalog, but the topics must be relevant to the applicable evolution or system. Refer to Section D.1.b of ES-401 for the applicable K/A's
 8. On the following pages, enter the K/A numbers, a brief description of each topic, the topics' importance ratings (IR) for the applicable license level, and the point totals (#) for each system and category. Enter the group and tier totals for each category in the table above. If fuel handling equipment is sampled in other than Category A2 or G* on the SRO-only exam, enter it on the left side of Column A2 for Tier 2, Group 2 (Note #1 does not apply). Use duplicate pages for RO and SRO-only exams.
 9. For Tier 3, select topics from Section 2 of the K/A Catalog, and enter the K/A numbers, descriptions, IRs, and point totals (#) on Form ES-401-3. Limit SRO selections to K/As that are linked to 10CFR55.43

Outline 1
Written Examination Outline
Emergency and Abnormal Plant Evolutions – Tier 1 Group 1

EAPE # / Name Safety Function	K1	K2	K3	A1	A2	G	K/A Topic(s)	Imp.	Q#
295004 Partial or Total Loss of DC Pwr / 6						X	2.2.25 - Knowledge of bases in technical specifications for limiting conditions for operations and safety limits.	4.2	76
295016 Control Room Abandonment / 7						X	2.4.4 - Ability to recognize abnormal indications for system operating parameters that are entry-level conditions for emergency and abnormal operating procedures.	4.7	77
295024 High Drywell Pressure / 5					X		EA2.01 - Ability to determine and/or interpret the following as they apply to HIGH DRYWELL PRESSURE: Drywell pressure	4.4	78
295025 High Reactor Pressure / 3					X		EA2.06 - Ability to determine and/or interpret the following as they apply to HIGH REACTOR PRESSURE: Reactor water level	3.8	79
295030 Low Suppression Pool Water Level / 5					X		EA2.01 - Ability to determine and/or interpret the following as they apply to LOW SUPPRESSION POOL WATER LEVEL: Suppression pool level	4.2	80
295038 High Off-site Release Rate / 9					X		EA2.03 - Ability to determine and/or interpret the following as they apply to HIGH OFF-SITE RELEASE RATE: Radiation levels	4.3	81
600000 Plant Fire On-site / 8						X	2.4.41 - Knowledge of the emergency action level thresholds and classifications.	4.6	82
295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4			X				AK3.05 - Knowledge of the reasons for the following responses as they apply to PARTIAL OR COMPLETE LOSS OF FORCED CORE FLOW CIRCULATION: Reduced loop operating requirements: Plant-Specific	3.2	39
295003 Partial or Complete Loss of AC / 6					X		AA2.03 - Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF A.C. POWER: Battery status: Plant-Specific	3.2	40
295004 Partial or Total Loss of DC Pwr / 6					X		AA2.01 - Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF D.C. POWER: Cause of partial or complete loss of D.C. power	3.2	41
295005 Main Turbine Generator Trip / 3					X		AA2.05 - Ability to determine and/or interpret the following as they apply to MAIN TURBINE GENERATOR TRIP: Reactor power	3.8	42
295006 SCRAM / 1		X					AK2.07 - Knowledge of the interrelations between SCRAM and the following: Reactor pressure control	4.0	43
295016 Control Room Abandonment / 7			X				AK3.03 - Knowledge of the reasons for the following responses as they apply to CONTROL ROOM ABANDONMENT: Disabling control room controls	3.5	44
295018 Partial or Total Loss of CCW / 8			X				AK3.06 - Knowledge of the reasons for the following responses as they apply to PARTIAL OR COMPLETE LOSS OF COMPONENT COOLING WATER: Increasing cooling water flow to heat exchangers	3.3	45
295019 Partial or Total Loss of Inst. Air / 8					X		AA2.01 - Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF INSTRUMENT AIR: Instrument air system pressure	3.5	46
295021 Loss of Shutdown Cooling / 4		X					AK2.07 - Knowledge of the interrelations between LOSS OF SHUTDOWN COOLING and the following: Reactor	3.1	47

Outline 1
Written Examination Outline
Emergency and Abnormal Plant Evolutions – Tier 1 Group 1

EAPE # / Name Safety Function	K1	K2	K3	A1	A2	G	K/A Topic(s)	Imp.	Q#
							recirculation		
295023 Refueling Accidents / 8	X						AK1.01 - Knowledge of the operational implications of the following concepts as they apply to REFUELING ACCIDENTS : Radiation exposure hazards	3.6	48
295024 High Drywell Pressure / 5						X	2.1.27 - Knowledge of system purpose and/or function.	3.9	49
295025 High Reactor Pressure / 3	X						EK1.04 - Knowledge of the operational implications of the following concepts as they apply to HIGH REACTOR PRESSURE : Decay heat generation	3.6	50
295026 Suppression Pool High Water Temp. / 5	X						EK1.01 - Knowledge of the operational implications of the following concepts as they apply to SUPPRESSION POOL HIGH WATER TEMPERATURE : Pump NPSH	3.0	51
295031 Reactor Low Water Level / 2		X					EK2.03 - Knowledge of the interrelations between REACTOR LOW WATER LEVEL and the following: Low pressure core spray	4.2	52
295028 High Drywell Temperature / 5				X			EA1.01 - Ability to operate and/or monitor the following as they apply to HIGH DRYWELL TEMPERATURE : Drywell spray: Mark-I&II.	3.8	53
295030 Low Suppression Pool Water Level / 5				X			EA1.02 - Ability to operate and/or monitor the following as they apply to LOW SUPPRESSION POOL WATER LEVEL: RCIC: Plant-Specific	3.4	54
295037 SCRAM Condition Present and Power Above APRM Downscale or Unknown / 1						X	2.1.25 - Conduct of Operations: Ability to interpret reference materials, such as graphs, curves, tables, etc.	3.9	55
295038 High Off-site Release Rate / 9						X	2.1.32 - Conduct of Operations: Ability to explain and apply all system limits and precautions.	3.8	56
600000 Plant Fire On-site / 8			X				AK3.04 - Knowledge of the reasons for the following responses as they apply to PLANT FIRE ON SITE: Actions contained in the abnormal procedure for plant fire on site	2.8	57
700000 Generator Voltage and Electric Grid Disturbances				X			AA1.03 - Ability to operate and/or monitor the following as they apply to GENERATOR VOLTAGE AND ELECTRIC GRID DISTURBANCES: Voltage regulator controls.	3.8	58
K/A Category Totals:	3	3	4	3	8	6	Group Point Total:	20/7	

Outline 1
Written Examination Outline
Emergency and Abnormal Plant Evolutions – Tier 1 Group 2

EAPE # / Name Safety Function	K1	K2	K3	A1	A2	G	K/A Topic(s)	Imp.	Q#
295008 High Reactor Water Level / 2					X		AA2.05 - Ability to determine and/or interpret the following as they apply to HIGH REACTOR WATER LEVEL : Swell	3.1	83
295012 High Drywell Temperature / 5						X	2.2.22 - Knowledge of limiting conditions for operations and safety limits.	4.7	84
295033 High Secondary Containment Area Radiation Levels / 9					X		EA2.02 - Ability to determine and/or interpret the following as they apply to HIGH SECONDARY CONTAINMENT AREA RADIATION LEVELS : Equipment operability	3.2	85
295008 High Reactor Water Level / 2	X						AK1.01 - Knowledge of the operational implications of the following concepts as they apply to HIGH REACTOR WATER LEVEL : Moisture carryover	3.0	59
295010 High Drywell Pressure / 5					X		AA2.06 - Ability to determine and/or interpret the following as they apply to HIGH DRYWELL PRESSURE : Drywell temperature	3.6	60
295012 High Drywell Temperature / 5				X			AA1.01 - Ability to operate and/or monitor the following as they apply to HIGH DRYWELL TEMPERATURE : Drywell ventilation system	3.5	61
295022 Loss of CRD Pumps / 1						X	2.4.11 - Knowledge of abnormal condition procedures.	4.0	62
295032 High Secondary Containment Area Temperature / 5			X				EK3.03 - Knowledge of the reasons for the following responses as they apply to HIGH SECONDARY CONTAINMENT AREA TEMPERATURE : Isolating affected systems	3.8	63
295033 High Secondary Containment Area Radiation Levels / 9						X	2.4.45 - Emergency Procedures / Plan: Ability to prioritize and interpret the significance of each annunciator or alarm.	4.1	64
295036 Secondary Containment High Sump/Area Water Level / 5		X					EK2.03 - Knowledge of the interrelations between SECONDARY CONTAINMENT HIGH SUMP/AREA WATER LEVEL and the following: Radwaste	2.8	65
K/A Category Totals:	1	1	1	1	3	3	Group Point Total:		7/3

**Outline 1
Written Examination Outline
Plant Systems – Tier 2 Group 1**

System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	Imp.	Q#
-----------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---	------	----

223002 PCIS/Nuclear Steam Supply Shutoff											X	2.2.36 - Ability to analyze the effect of maintenance activities, such as degraded power sources, on the status of limiting conditions for operations.	4.2	86
218000 ADS								X				A2.06 - Ability to (a) predict the impacts of the following on the AUTOMATIC DEPRESSURIZATION SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: ADS initiation signals present	4.3	87
215003 IRM											X	2.4.31 - Emergency Procedures / Plan: Knowledge of annunciator alarms, indications, or response procedures.	4.1	88
215005 APRM / LPRM								X				A2.10 - Ability to (a) predict the impacts of the following on the AVERAGE POWER RANGE MONITOR/LOCAL POWER RANGE MONITOR SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions Changes in void concentration	2.9	89
262001 AC Electrical Distribution											X	2.4.8 - Knowledge of how abnormal operating procedures are used in conjunction with EOPs.	4.5	90
203000 RHR/LPCI: Injection Mode	X											K1.01 - Knowledge of the physical connections and/or cause- effect relationships between RHR/LPCI: INJECTION MODE (PLANT SPECIFIC) and the following: Condensate storage and transfer system: Plant-Specific	2.8	1
205000 Shutdown Cooling								X				A1.01 - Ability to predict and/or monitor changes in parameters associated with operating the SHUTDOWN COOLING SYSTEM (RHR SHUTDOWN COOLING MODE) controls including: Heat exchanger cooling flow	3.3	2
206000 HPCI									X			A2.04 - Ability to (a) predict the impacts of the following on the HIGH PRESSURE COOLANT INJECTION SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A.C. failures: BWR-2,3,4	2.7	3
209001 LPCS			X									K3.03 - Knowledge of the effect that a loss or malfunction of the LOW PRESSURE CORE SPRAY SYSTEM will have on following: Emergency generators	2.9	4
211000 SLC	X											K1.02 - Knowledge of the physical connections and/or cause- effect relationships between STANDBY LIQUID CONTROL SYSTEM and the following: Core plate differential pressure indication	2.7	5

Outline 1
Written Examination Outline
Plant Systems – Tier 2 Group 1

System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	Imp.	Q#	
212000 RPS									X			A3.05 - Ability to monitor automatic operations of the REACTOR PROTECTION SYSTEM including: SCRAM instrument volume level.	3.9	6
215003 IRM											X	2.4.31 Knowledge of annunciator alarms, indications, or response procedures.	4.2	7
215003 IRM		X										K2.01 - Knowledge of electrical power supplies to the following: IRM channels/detectors	2.5	8
215004 Source Range Monitor				X								K4.01 - Knowledge of SOURCE RANGE MONITOR (SRM) SYSTEM design feature(s) and/or interlocks which provide for the following: Rod withdrawal blocks	3.7	9
215005 APRM / LPRM					X							K5.04 - Knowledge of the operational implications of the following concepts as they apply to AVERAGE POWER RANGE MONITOR/LOCAL POWER RANGE MONITOR SYSTEM : LPRM detector location and core symmetry	2.9	10
217000 RCIC											X	2.2.44 - Equipment Control: Ability to interpret control room indications to verify the status and operation of a system, and understand how operator actions and directives effect plant and system conditions.	4.2	11
218000 ADS						X						K6.04 - Knowledge of the effect that a loss or malfunction of the following will have on the AUTOMATIC DEPRESSURIZATION SYSTEM : Air supply to ADS valves: Plant-Specific	3.6	12
223002 PCIS/Nuclear Steam Supply Shutoff										X		A4.06 - Ability to manually operate and/or monitor in the control room: Confirm initiation to completion	3.6	13
239002 SRVs						X						K6.05 - Knowledge of the effect that a loss or malfunction of the following will have on the RELIEF/SAFETY VALVES : Discharge line vacuum breaker	3.0	14
239002 SRVs					X							K5.04 - Knowledge of the operational implications of the following concepts as they apply to RELIEF/SAFETY VALVES : Tail pipe temperature monitoring	3.3	15
259002 Reactor Water Level Control								X				A2.05 - Ability to (a) predict the impacts of the following on the REACTOR WATER LEVEL CONTROL SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Loss of applicable plant air systems	3.2	16
261000 SGTS			X									K3.04 - Knowledge of the effect that a loss or malfunction of the STANDBY GAS TREATMENT SYSTEM will have on following: High pressure coolant injection system: Plant-Specific	3.1	17

Outline 1
Written Examination Outline
Plant Systems – Tier 2 Group 1

System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	Imp.	Q#
261000 SGTS								X				3.2	18
262001 AC Electrical Distribution					X							3.1	19
203000 RHR/LPCI Injection Mode							X					3.9	20
263000 DC Electrical Distribution									X			3.3	21
263000 DC Electrical Distribution										X		3.8	22
264000 EDGs				X								2.6	23
300000 Instrument Air				X								2.8	24
300000 Instrument Air									X			2.9	25
400000 Component Cooling Water		X										2.9	26
K/A Category Totals:	2	2	2	3	3	2	2	5	2	2	6	Group Point Total: 26/5	

Outline 1
Written Examination Outline
Plant Systems – Tier 2 Group 2

System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	Imp.	Q#
-----------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---	------	----

219000 RHR/A.PCI Torus/Pool Cooling Mode											X	2.4.11 - Knowledge of abnormal condition procedures.	4.2	91
223001 Primary Containment System and Auxiliaries											X	2.2.42 Ability to recognize system parameters that are entry-level conditions for Technical Specifications.	4.6	92
271000 Off-gas								X				A2.17 - Ability to (a) predict the impacts of the following on the OFFGAS SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Reactor power changes	3.1	93
201002 RMCS						X						K6.01 - Knowledge of the effect that a loss or malfunction of the following will have on the REACTOR MANUAL CONTROL SYSTEM : Select matrix power	2.5	27
204000 RWCU									X			A3.01 - Ability to monitor automatic operations of the REACTOR WATER CLEANUP SYSTEM including: System pressure downstream of the pressure regulating valve: LP-RWCU	3.3	28
214000 RPIS								X				A2.02 - Ability to (a) predict the impacts of the following on the ROD POSITION INFORMATION SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Reactor SCRAM	3.6	29
215001 Traversing In-core Probe				X								K4.01 - Knowledge of TRAVERSING IN-CORE PROBE design feature(s) and/or interlocks which provide for the following: Primary containment isolation: Mark-I&II(Not-BWR1)	3.4	30
215002 RBM					X							K5.01 - Knowledge of the operational implications of the following concepts as they apply to ROD BLOCK MONITOR SYSTEM : Trip reference selection: Plant-Specific	2.6	31
234000 Fuel Handling Equipment							X					A1.03 - Ability to predict and/or monitor changes in parameters associated with operating the FUEL HANDLING EQUIPMENT controls including: core reactivity level	3.4	32
201001 Control Rod Drive Hydraulic System							X					A1.10 - Ability to predict and/or monitor changes in parameters associated with operating the CONTROL ROD DRIVE HYDRAULIC SYSTEM controls including: CRD cooling water flow	2.8	33
245000 Main Turbine Gen. / Aux.	X											K1.06 - Knowledge of the physical connections and/or cause- effect relationships between MAIN TURBINE GENERATOR AND AUXILIARY SYSTEMS and the following: Component cooling water systems	2.6	34
256000 Reactor Condensate			X									K3.02 - Knowledge of the effect that a loss or malfunction of the REACTOR CONDENSATE SYSTEM will have on following: CRD hydraulics system	3.2	35
271000 Off-gas										X		A4.03 - Ability to manually operate and/or monitor in the control room: System temperatures	2.8	36

Outline 1
Written Examination Outline
Plant Systems – Tier 2 Group 2

System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	Imp.	Q#
272000 Radiation Monitoring		X										2.6	37
288000 Plant Ventilation											X	3.4	38
K/A Category Totals:	1	1	1	1	1	1	2	2	1	1	3	Group Point Total: 12/3	

K2.05 - Knowledge of electrical power supplies to the following: Reactor building ventilation monitors: Plant-Specific

2.2.40 - Equipment Control: Ability to apply technical specifications for a system.

Facility:		Outline 1		Date:			
Category	K/A #	Topic	RO		SRO-Only		
			IR	Q#	IR	Q#	
1. Conduct of Operations	2.1.43	Ability to use procedures to determine the effects on reactivity of plant changes, such as RCS temperature, secondary plant, fuel depletion, etc.			4.3	94	
	2.1.41	Knowledge of the refueling process.	2.8	66			
	2.1.5	Ability to use procedures related to shift staffing, such as minimum crew complement, overtime limitations, etc.	2.9	67			
	Subtotal			2		1	
2. Equipment Control	2.2.14	Knowledge of the process for controlling equipment configuration or status.			4.3	95	
	2.2.35	Ability to determine Technical Specification Mode of Operation.			4.5	96	
	2.2.38	Knowledge of conditions and limitations in the facility license.	3.6	68			
	2.2.13	Knowledge of tagging and clearance procedures.	4.1	69			
	2.2.40	Ability to apply technical specifications for a system.	3.4	70			
	Subtotal			3		2	
3. Radiation Control	2.3.5	Ability to use radiation monitoring systems, such as fixed radiation monitors and alarms, portable survey instruments, personnel monitoring equipment, etc.			2.9	97	
	2.3.4	Knowledge of radiation exposure limits under normal or emergency conditions.			3.7	98	
	2.3.13	Knowledge of Radiological Safety Procedures pertaining to licensed operator duties, such as response to radiation monitor alarms, containment entry requirements, fuel handling responsibilities, access to locked high radiation areas, aligning filters, etc.	3.4	71			
	2.3.15	Knowledge of radiation monitoring systems, such as fixed radiation monitors and alarms, portable survey instruments, personnel monitoring equipment, etc.	2.9	72			
	Subtotal			2		2	

4. Emergency Procedures / Plan	2.4.20	Knowledge of operational implications of EOP warnings, cautions, and notes.			4.3	99
	2.4.23	Knowledge of the bases for prioritizing emergency procedure implementation during emergency operations.			4.4	100
	2.4.1	Knowledge of EOP entry conditions and immediate action steps.	4.6	73		
	2.4.27	Knowledge of "fire in the plant" procedures.	3.4	74		
	2.4.43	Knowledge of emergency communications systems and techniques.	3.2	75		
		Subtotal			3	2
Tier 3 Point Total					10	7

Tier / Group	Randomly Selected K/A	Reason for Rejection
1 / 1	295027 / EK2.03	Fermi-2 is equipped with a Mark I Drywell / Torus. Mark III Containment is NA. Kept same Statement number. Randomly reselected EPE 295031. (295031 EK2.03)
1 / 1	295021 / AK2.06	Fermi-2 RHR Head Spray is not used. Kept same APE number. Randomly reselected statement AK2.07 (295021 AK2.07)
1 / 1	295028 / EA1.04	Double Jeopardy with 295010 / AA2.06. Both randomly selected topics relate Drywell Temperature and Pressure. Kept same EPE 295028. Randomly reselected statement EA1.01 (295028 EA1.01)
1 / 1	295004 / 2.2.4	Fermi-2 is a Single Unit plant. Multi-unit KA Statement is NA. Kept same APE 295004, randomly reselected Statement 2.2.25. (295004 2.2.25)
1 / 1	295024 / EA2.07	Fermi-2 is equipped with a Mark I Drywell / Torus. Mark III Containment is NA. Kept same EPE number. Randomly reselected statement EA2.01 (295024 EA2.01)
1 / 1	600000 / 2.2.40	Plant Fire On Site – Ability to apply Technical Specifications for a System is not relevant. Kept same APE. Randomly reselected statement 2.4.41 (600000 2.4.41)
2 / 1	215003 / 2.4.30	Low Operational Validity. Intermediate Range Monitors have no conditions which require an RO to notify organizations or agencies. Kept same System number. Randomly reselected statement 2.4.31. (215003 2.4.31)
2 / 1	262002 / A1.02	Fermi-2 Uninterruptible Power Supplies do not include Motor Generators. Only remaining A1 statement in 262002 has RO Importance below 2.5. Kept same Statement number. Randomly reselected System 203000. (203000 A1.02)
2 / 1	239002 / K5.06	Double Jeopardy with 239002 / K6.05. Both randomly selected topics involve SRV Tailpipe Vacuum Breaker operation. Kept same System 239002. Randomly reselected statement K5.04 (239002 K5.04)
2 / 1	207000 / 2.1.23	Fermi-2 is not equipped with an Isolation Condenser. Kept same Statement number. Randomly reselected System 223002. (223002 2.1.23)
2 / 1	207000 / A2.06	Fermi-2 is not equipped with an Isolation Condenser. Kept same Statement number. Randomly reselected System 218000. (218000 A2.06)
2 / 2	239003 / A1.07	Fermi-2 MSIV-LCS is abandoned in place. Kept same statement number. Randomly reselected System 201001. (201001 A1.07)
2 / 2	239003 / 2.1.23	Fermi-2 MSIV-LCS is abandoned in place. 2.1.23 is previously used on SRO System 223002. Randomly reselected System and statement (223001 2.1.20)

Tier / Group	Randomly Selected K/A	Reason for Rejection
2 / 2	219000 / 2.4.23	Statement 2.4.23 is not specified in NUREG 1021 (SUP1) ES-401 page 4 of 34 as an appropriate Tier 1 or 2 Generic. Randomly reselected statement 2.4.11. (219000 2.4.11)
3	2.3.13	Double Jeopardy for SRO candidates, same Tier 3 Generic selected on RO exam. Randomly reselected statement 2.3.4 (Generic 2.3.4)
1 / 1	295024 / 2.1.27	Could not write an appropriate RO Level question regarding High Drywell Pressure - Knowledge of a system purpose or function without Double Jeopardy. Randomly reselected statement 2.2.22. 295024 2.2.22
1 / 2	295007 / AK1.02	Double Jeopardy with 295025 EK1.04 Knowledge of the operational implications of the following concepts as they apply to HIGH REACTOR PRESSURE : Decay heat generation. Randomly reselected APE 295008. Kept same Statement. 295008 AK1.02
1 / 2	295022 / 2.4.18	Loss of CRD Pumps has no relation to Knowledge of specific bases for EOPs. Randomly reselected statement 2.4.11. Kept same APE. 295022 2.4.11
1 / 2	295036 / EK2.02	Secondary Containment High Water Level has no association with the Post-Accident Sampling System. Randomly reselected statement EK2.03. Kept same EPE. 295036 EK2.03
3	2.2.15	Double Jeopardy with Operating Exam JPM. System Lineup is used to verify system status. Randomly reselected statement 2.2.13.
1 / 1	295016 / 2.1.30	Topic is not unique to SRO duties; ROs are also required to locate and operate components, including local controls. Randomly reselected statement 2.4.4. Kept same APE. 295016 2.4.4
1 / 1	295030 / EA2.04	Drywell/ suppression chamber differential pressure is not relevant to Low Suppression Pool Level at Fermi-2. Randomly reselected statement EA2.01. Kept same EPE. 295030 EA2.01
1 / 2	295012 / 2.2.39	High Drywell Temperature has no relation to Knowledge of less than or equal to one hour Technical Specification action statements for systems. Randomly reselected statement 2.2.22. Kept same APE. 295012 2.2.22
2 / 1	223002 / 2.1.23	Could not write an appropriate LOD LOK question for the SRO Level question using this statement. Randomly reselected statement 2.2.36. Kept same System. 223002 2.2.36
2 / 1	262001 / 2.1.19	Topic is not unique to SRO duties; ROs are also required to use plant computers to evaluate system or component status. Randomly reselected statement 2.4.8 Kept same System. 262001 2.4.8

Tier / Group	Randomly Selected K/A	Reason for Rejection
2 / 1	223001 / 2.1.20	Could not write an appropriate SRO Level question regarding Primary Containment and Auxiliaries – ability to interpret and execute procedure steps. Randomly reselected statement 2.2.40. Kept same System. 223001 2.2.42
2 / 1	212000 A3.06	Double Jeopardy with 295005 AA2.05. Both topics relate Main Turbine Generator Trip / Scram association with Reactor Power. Randomly reselected statement A3.05. Kept same System. 212000 A3.05
1 / 1	295024 / 2.2.22	Low Operational Validity. At Fermi-2, High Drywell Pressure EOP entry condition is met prior to exceeding High Drywell Pressure LCO. Addressing an LCO vice mitigating accident condition has Low Operational Validity. Randomly reselected statement 2.1.27. Kept same EPE 295024. 295024 2.1.27
1 / 1	295026 / EK1.02	Could not write an appropriate RO Level question regarding Knowledge of the operational implications of the following concepts as they apply to SUPPRESSION POOL HIGH WATER TEMPERATURE: Steam condensation. Randomly reselected statement EK1.01. Kept same EPE 295026. 295026 EK1.01
3	2.2.43	Could not write an appropriate RO Level question regarding tracking inoperable alarms, this is an SRO task. Randomly reselected statement 2.2.38.
2 / 1	261000 / K3.06	Could not write an appropriate RO Level question regarding Primary Containment Oxygen content. Randomly reselected statement K3.04. Kept same System. 261000 K3.04
2 / 2	234000 / A1.02	Low Operational Validity. Randomly reselected statement A1.03. Kept same System. 234000 A1.03
2 / 2	201001 / A1.07	Could not write an appropriate RO Level question. Randomly reselected statement A1.10. Kept same System. 201001A1.10
1 / 2	295008 / AA2.02	Could not write an appropriate SRO Level question. Randomly reselected statement AA2.05. Kept same APE. 295008 AA2.05