

Facility: LaSalle			Date of Exam: Nov 13-24, 2000						Exam Level: RO				
Tier	Group	K/A Category Points											Point Total
		K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G *	
1. Emergency & Abnormal Plant Evolutions	1	2	3	3				4	1			0	13
	2	3	3	4				4	3			2	19
	3	2	1	0				1	0			0	4
	Tier Totals	7	7	7				9	4			2	36
2. Plant Systems	1	4	2	3	2	3	2	3	3	2	2	2	28
	2	2	2	2	2	2	1	2	2	1	3	0	19
	3	1	0	0	1	0	0	1	1	0	0	0	4
	Tier Totals	7	4	5	5	5	3	6	6	3	5	2	51
3. Generic Knowledge and Abilities				Cat 1		Cat 2		Cat 3		Cat 4		13	
				3		4		3		3			
<p>Note: 1. Ensure that at least two topics from every K/A category are sampled within each tier (i.e., the "Tier Totals" in each K/A category shall not be less than two).</p> <p>2. Actual point totals must match those specified in the table.</p> <p>3. Select topics from many systems; avoid selecting more than two or three K/A topics from a given system unless they relate to plant-specific priorities.</p> <p>4. Systems/evolutions within each group are identified on the associated outline.</p> <p>5. The shaded areas are not applicable to the category/tier.</p> <p>6.* The generic 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.</p> <p>7. On the following pages, enter the K/A numbers, a brief description of each topic, the topics' importance ratings for the SRO license level, and the point totals for each system and category. K/As below 2.5 should be justified on the basis of plant-specific priorities. Enter the tier totals for each category in the table above.</p>													

Facility: L. 100

ES - 401

Emergency and Abnormal Plant Evolutions - Tier 1 / Group 1

Form ES-401- 2

E/APE #	E/APE Name / Safety Function	K1	K2	K3	A1	A2	G	KA Topic	Imp.	Points
295005	Main Turbine Generator Trip / 3				X			AA1.02 - RPS	3.6	1
295006	SCRAM / 1				X			AA1.01 - RPS	4.2*	1
295007	High Reactor Pressure / 3		X					AK2.01 - Reactor/turbine pressure regulating system	3.5	1
295007	High Reactor Pressure / 3					X		AA2.02 - Reactor power	4.1*	1
295009	Low Reactor Water Level / 2			X				AK3.01 - Recirculation pump run back: Plant-Specific	3.2	1
295010	High Drywell Pressure / 5		X					AK2.04 - Nitrogen makeup system: Plant-Specific	2.6	1
295010	High Drywell Pressure / 5			X				AK3.03 - Radiation level monitoring	3.2	1
295014	Inadvertent Reactivity Addition / 1	X						AK1.01 - Prompt critical	3.7	1
295015	Incomplete SCRAM / 1	X						AK1.02 - Cooldown effects on reactor power	3.9	1
295015	Incomplete SCRAM / 1			X				AK3.01 - Bypassing rod insertion blocks	3.4	1
295025	High Reactor Pressure / 3				X			EA1.01 - Main steam line drains	2.9	1
295037	SCRAM Condition Present and Reactor Power Above APRM Downscale or Unknown / 1		X					EK2.14 - RPIS: Plant-Specific	3.6	1
500000	High Containment Hydrogen Concentration / 5				X			EA1.03 - Containment Atmosphere Control System	3.4	1

K/A Category Totals: 2 3 3 4 1 0

Group Point Total: 13

Facility: L. A. E

ES - 401

Emergency and Abnormal Plant Evolutions - Tier 1 / Group 2

Form ES-401- 2

E/APE #	E/APE Name / Safety Function	K1	K2	K3	A1	A2	G	KA Topic	Imp.	Points
295001	Partial or Complete Loss of Forced Core Flow Circulation / 1		X					AK2.02 - Nuclear boiler instrumentation	3.2	1
295001	Partial or Complete Loss of Forced Core Flow Circulation / 1					X		AA2.06 - Nuclear boiler instrumentation	3.2	1
295003	Partial or Complete Loss of A.C. Power / 6						X	2.1.28 - Knowledge of the purpose and function of major system components and controls.	3.2	1
295003	Partial or Complete Loss of A.C. Power / 6					X		AA2.03 - Battery status: Plant-Specific	3.2	1
295008	High Reactor Water Level / 2				X			AA1.09 - Ability to drain: Plant-Specific	3.3	1
295016	Control Room Abandonment / 7				X			AA1.01 - RPS	3.8	1
295017	High Off-Site Release Rate / 9		X					AK2.08 - SPDS/ERIS/CRIDS/GDS	2.8	1
295017	High Off-Site Release Rate / 9			X				AK3.01 - System isolations	3.6	1
295020	Inadvertent Containment Isolation / 5	X						AK1.02 - Power/reactivity control	3.5	1
295020	Inadvertent Containment Isolation / 5			X				AK3.02 - Drywell/containment pressure response	3.3	1
295026	Suppression Pool High Water Temperature / 5	X						EK1.01 - Pump NPSH	3.0	1
295028	High Drywell Temperature / 5						X	2.4.18 - Knowledge of the specific bases for EOPs.	2.7	1
295030	Low Suppression Pool Water Level / 5	X						EK1.03 - Heat capacity	3.8	1
295033	High Secondary Containment Area Radiation Levels / 9			X				EK3.05 - †Emergency plan	3.6	1
295034	Secondary Containment Ventilation High Radiation / 9		X					EK2.06 - PCIS/NSSSS: Plant-Specific	3.9	1
295038	High Off-Site Release Rate / 9				X			EA1.02 - †Meteorological instrumentation	3.0*	1
295038	High Off-Site Release Rate / 9					X		EA2.04 - Source of off-site release	4.1*	1
600000	Plant Fire On Site / 8			X				AK3.04 - Actions contained in the abnormal procedure for plant fire on site	2.8	1
600000	Plant Fire On Site / 8				X			AA1.08 - Fire fighting equipment used on each class of fire	2.6	1

K/A Category Totals: 3 3 4 4 3 2

Group Point Total: 19

Facility: Lashae

ES - 401

Emergency and Abnormal Plant Evolutions - Tier 1 / Group 3

Form ES-401- 2

E/APE #	E/APE Name / Safety Function	K1	K2	K3	A1	A2	G	KA Topic	Imp.	Points
295021	Loss of Shutdown Cooling / 4	X						AK1.04 - Natural circulation	3.6	1
295023	Refueling Accidents / 8		X					AK2.07 - Standby gas treatment/FRVS	3.6	1
295032	High Secondary Containment Area Temperature / 5				X			EA1.05 - Affected systems so as to isolate damaged portions	3.7	1
295036	Secondary Containment High Sump/Area Water Level / 5	X						EK1.01 - Radiation releases	2.9	1

K/A Category Totals: 2 1 0 1 0 0

Group Point Total: 4

Facility: LaSalle

ES - 401

Plant Systems - Tier 2 / Group 1

Form ES-401- 2

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
201001	Control Rod Drive Hydraulic System / 1	X											K1.10 - Control rod drive mechanisms	2.8	1
202002	Recirculation Flow Control System / 1		X										K2.02 - Hydraulic power unit: Plant-Specific	2.6	1
202002	Recirculation Flow Control System / 1								X				A2.07 - Loss of feedwater signal inputs: Plant-Specific	3.3	1
203000	RHR/LPCI: Injection Mode (Plant Specific) / 2								X				A2.17 - Keep fill system failure	3.3	1
203000	RHR/LPCI: Injection Mode (Plant Specific) / 2										X		A4.02 - System valves	4.1*	1
209001	Low Pressure Core Spray System / 2		X										K2.02 - Valve power	2.5*	1
209001	Low Pressure Core Spray System / 2							X					A1.03 - Reactor water level	3.8	1
209002	High Pressure Core Spray System (HPCS) / 2				X								K4.07 - Override of reactor water level interlock: Plant-Specific	3.5	1
211000	Standby Liquid Control System / 1					X							K5.06 - Tank level measurement	3.0	1
211000	Standby Liquid Control System / 1			X									K3.02 - Core spray line break detection system: Plant-Specific	3.0*	1
212000	Reactor Protection System / 7	X											K1.10 - Main turbine	3.2	1
212000	Reactor Protection System / 7				X								K4.02 - The prevention of a reactor SCRAM following a single component failure	3.5	1
215003	Intermediate Range Monitor (IRM) System / 7								X				A2.07 - Failed recorder	2.5	1
215003	Intermediate Range Monitor (IRM) System / 7											X	2.2.22 - Knowledge of limiting conditions for operations and safety limits.	3.4	1
215004	Source Range Monitor (SRM) System / 7									X			A3.01 - Meters and recorders	3.2	1
215005	Average Power Range Monitor/Local Power Range Monitor System / 7					X							K5.04 - LPRM detector location and core symmetry	2.9	1

Facility: LaSalle

ES - 401

Plant Systems - Tier 2 / Group 1

Form ES-401- 2

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic	Imp.	Points
216000	Nuclear Boiler Instrumentation / 7						X						K6.02 - D.C. electrical distribution	2.8	1
216000	Nuclear Boiler Instrumentation / 7									X			A3.01 - Relationship between meter/recorder readings and actual parameter values: Plant-Specific	3.4	1
218000	Automatic Depressurization System / 3											X	2.1.28 - Knowledge of the purpose and function of major system components and controls.	3.2	1
223001	Primary Containment System and Auxiliaries / 5			X									K3.01 - Secondary containment	3.6	1
223002	Primary Containment Isolation System/Nuclear Steam Supply Shut-Off / 5						X						K6.06 - Various process instrumentation	2.8	1
239002	Relief/Safety Valves / 3							X					A1.05 - Reactor water level	3.7	1
241000	Reactor/Turbine Pressure Regulating System / 3	X											K1.08 - Control/governor valves	3.6	1
259001	Reactor Feedwater System / 2					X							K5.03 - Turbine operation: TDRFPs-Only	2.8	1
259001	Reactor Feedwater System / 2							X					A1.06 - Feedwater heater level	2.7	1
259002	Reactor Water Level Control System / 2			X									K3.07 - Reactor water level indication	3.4*	1
264000	Emergency Generators (Diesel/Jet) / 6	X											K1.04 - Emergency generator cooling water system	3.2	1
264000	Emergency Generators (Diesel/Jet) / 6										X		A4.01 - Adjustment of exciter voltage	3.3	1

K/A Category Totals: 4 2 3 2 3 2 3 3 2 2 2

Group Point Total: 28

Facility: LaSalle

ES - 401

Plant Systems - Tier 2 / Group 2

Form ES-401-2

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
204000	Reactor Water Cleanup System / 2									X			A3.03 - Response to system isolations	3.6	1
214000	Rod Position Information System / 7					X							K5.01 - Reed switches	2.7	1
215002	Rod Block Monitor System / 7		X										K2.03 - APRM channels: BWR-3, 4, 5	2.8	1
215002	Rod Block Monitor System / 7		X										K2.01 - RBM channels: BWR-3, 4, 5	2.5*	1
226001	RHR/LPCI: Containment Spray System Mode / 5			X									K3.01 - Containment/drywell/suppression chamber pressure	3.6	1
230000	RHR/LPCI: Torus/Suppression Pool Spray Mode / 5	X											K1.05 - A.C. electrical	3.2	1
230000	RHR/LPCI: Torus/Suppression Pool Spray Mode / 5							X					A1.10 - System lineup	3.7	1
239001	Main and Reheat Steam System / 3				X								K4.02 - Automatic isolation and opening of drain valves: Plant-Specific	3.1	1
245000	Main Turbine Generator and Auxiliary Systems / 4										X		A4.07 - Turbine valve position	2.9	1
262001	A.C. Electrical Distribution / 6										X		A4.05 - Voltage, current, power, and frequency on A.C. buses	3.3	1
262002	Uninterruptable Power Supply (A.C./D.C.) / 6						X						K6.01 - A.C. electrical power	2.7	1
262002	Uninterruptable Power Supply (A.C./D.C.) / 6	X											K1.02 - RFPT control: Plant-Specific	2.8	1
263000	D.C. Electrical Distribution / 6					X							K5.01 - Hydrogen generation during battery charging	2.6	1
271000	Offgas System / 9										X		A4.01 - Reset system isolations	2.8	1
271000	Offgas System / 9							X					A1.12 - Process radiation monitoring indications	3.1	1
286000	Fire Protection System / 8			X									K3.02 - Personnel protection	3.2	1

Facility: LaSalle

ES - 401

Plant Systems - Tier 2 / Group 2

Form ES-401- 2

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
290003	Control Room HVAC / 9				X								K4.01 - System initiations/reconfiguration: Plant-Specific	3.1	1
290003	Control Room HVAC / 9								X				A2.02 - Extreme environmental conditions	3.1	1
300000	Instrument Air System (IAS) / 8								X				A2.01 - Air dryer and filter malfunctions	2.9	1

K/A Category Totals: 2 2 2 2 2 1 2 2 1 3 0

Group Point Total: 19



Facility: LaSalle

ES - 401

Plant Systems - Tier 2 / Group 3

Form ES-401- 2

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
233000	Fuel Pool Cooling and Clean-up / 9							X					A1.01 - Surge tank level	2.6	1
288000	Plant Ventilation Systems / 9	X											K1.06 - Plant air systems	2.7	1
290002	Reactor Vessel Internals / 5								X				A2.05 - †Exceeding thermal limits	3.7	1
290002	Reactor Vessel Internals / 5				X								K4.01 - 2/3 core coverage following a DBA LOCA	3.7	1

K/A Category Totals: 1 0 0 1 0 0 1 1 0 0 0

Group Point Total: 4

Facility: LaSalle

BWR RO Examination Outline

Form ES-401-5

Generic Category	KA	KA Topic	Imp	Points
Conduct of Operations	2.1.25	Ability to obtain and interpret station reference materials such as graphs, monographs, and tables which contain performance data.	2.8	1
	2.1.7	Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation.	3.7	1
	2.1.21	Ability to obtain and verify controlled procedure copy.	3.1	1
Category Total:			3	
Emergency Plan	2.4.6	Knowledge symptom based EOP mitigation strategies.	3.1	1
	2.4.17	Knowledge of EOP terms and definitions.	3.1	1
	2.4.12	Knowledge of general operating crew responsibilities during emergency operations.	3.4	1
Category Total:			3	
Equipment Control	2.2.12	Knowledge of surveillance procedures.	3.0	1
	2.2.28	Knowledge of new and spent fuel movement procedures.	2.6	1
	2.2.26	Knowledge of refueling administrative requirements.	2.5	1
	2.2.13	Knowledge of tagging and clearance procedures.	3.6	1
Category Total:			4	
Radiation Control	2.3.9	Knowledge of the process for performing a containment purge.	2.5	1
	2.3.2	Knowledge of facility ALARA program.	2.5	1
	2.3.11	Ability to control radiation releases.	2.7	1
Category Total:			3	
Generic Total:			13	