

Facility: Quad Cities Nuclear Power Station														Date of Exam: 7/16/2018					
Tier	Group	RO K/A Category Points												SRO-Only Points					
		K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G*	Total	A2	G*	Total			
1. Emergency and Abnormal Plant Evolution	1	4	3	3	N/A			4	3	N/A			3	20	4	3	7		
	2	1	2	1				1	1				1	7	1	2	3		
	Tier Totals	5	5	4				5	4				4	27	5	5	10		
2. Plant Systems	1	2	2	4	3	2	2	3	2	2	2	2	26	3	2	5			
	2	1	1	1	2	1	1	1	1	1	1	1	12	0	1	2			
	Tier Totals	3	3	5	5	3	3	4	3	3	3	3	38	4	4	8			
3. Generic Knowledge and Abilities Categories					1		2		3		4		10		1	2	3	4	7
					2		3		2		3				2	1	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 outline sections (i.e., except for one category in Tier 3 of the SRO-only section, the "Tier Totals" in each K/A category shall not be less than two). (One Tier 3 radiation control K/A is allowed if it is replaced by a K/A from another Tier 3 category.)

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 outline. Systems or evolutions that do not apply at the facility should be deleted with justification. Operationally important, site-specific systems/evolutions that are not included on the outline should be added. Refer to Section D.1.b of ES-401 for guidance regarding the 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 K/As having an importance rating (IR) of 2.5 or higher. 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/As.

8. On the following pages, enter the K/A numbers, a brief description of each topic, the topics' IRs 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 a category 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 10 CFR 55.43.

G* Generic K/As

* These systems/evolutions must be included as part of the sample (as applicable to the facility) when Revision 3 of the K/A catalog is used to develop the sample plan. They are not required to be included when using earlier revisions of the K/A catalog.

** These systems/evolutions may be eliminated from the sample (as applicable to the facility) when Revision 3 of the K/A catalog is used to develop the sample plan.

ES-401 BWR Examination Outline Emergency and Abnormal Plant Evolutions—Tier 1/Group 1 (RO/SRO)										Form ES-401-1	
E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G*	K/A Topic(s)	IR	#		
295001 (APE 1) Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4		.07					Knowledge of the interrelations between PARTIAL OR COMPLETE LOSS OF FORCED CORE FLOW CIRCULATION and the following: Core flow indication	3.4	1		
295003 (APE 3) Partial or Complete Loss of AC Power / 6	.06						Knowledge of the operational implications of the following concepts as they apply to PARTIAL OR COMPLETE LOSS OF A.C. POWER: Station blackout: Plant-Specific	3.8	2		
					.01		Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF A.C. POWER: Cause of partial or complete loss of A.C. power	3.7	76		
295004 (APE 4) Partial or Total Loss of DC Power / 6			.02				Knowledge of the reasons for the following responses as they apply to PARTIAL OR COMPLETE LOSS OF D.C. POWER: Ground isolation/fault determination	2.9	3		
295005 (APE 5) Main Turbine Generator Trip / 3						2.2.25 2.1.30	Knowledge of the bases in Technical Specifications for limiting conditions for operations and safety limits.	3.2	4		
							Ability to locate and operate components, including local controls.	4.4			
295006 (APE 6) Scram / 1				.01			Ability to operate and/or monitor the following as they apply to SCRAM: RPS	4.2	5		
					.04		Ability to determine and/or interpret the following as they apply to SCRAM: Reactor Pressure	4.1	77		
295016 (APE 16) Control Room Abandonment / 7				.03			Ability to operate and/or monitor the following as they apply to CONTROL ROOM ABANDONMENT: RPIS	3.0	6		
295018 (APE 18) Partial or Complete Loss of CCW / 8						2.4.34 2.4.35	Knowledge of RO tasks performed outside the main control room during an emergency and the resultant operational effects.	4.2	7		
							Knowledge of local auxiliary operator tasks during an emergency and the resultant operational effects.	3.8			
295019 (APE 19) Partial or Complete Loss of Instrument Air / 8			.02				Knowledge of the reasons for the following responses as they apply to PARTIAL OR COMPLETE LOSS OF INSTRUMENT AIR: Standby air compressor operation	3.5	8		
295021 (APE 21) Loss of Shutdown Cooling / 4						2.2.42	Ability to recognize system parameters that are entry-level conditions for Technical Specifications.	3.9	9		
295023 (APE 23) Refueling Accidents / 8	.01						Knowledge of the operational implications of the following concepts as they apply to REFUELING ACCIDENTS: Radiation exposure hazards	3.6	10		
					.05		Ability to determine and/or interpret the following as they apply to REFUELING ACCIDENTS: Entry conditions of emergency plan	4.6	78		
295024 High Drywell Pressure / 5					.06		Ability to determine and/or interpret the following as they apply to HIGH DRYWELL PRESSURE: Suppression pool temperature	4.1	11		
295025 (EPE 2) High Reactor Pressure / 3				.01			Ability to operate and/or monitor the following as they apply to HIGH REACTOR PRESSURE: Main steam line drains	2.9	12		

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E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G*	K/A Topic(s)	IR	#
						2.1.30 2.2.25	Ability to locate and operate components, including local controls. Knowledge of the bases in Technical Specifications for limiting conditions for operations and safety limits.	4.0 4.2	79
295026 (EPE 3) Suppression Pool High Water Temperature / 5		.02					Knowledge of the interrelations between SUPPRESSION POOL HIGH WATER TEMPERATURE and the following: Suppression pool spray:	3.6	13
295027 (EPE 4) High Containment Temperature (Mark III Containment Only) / 5							Mark I Containment. N/A		
295028 (EPE 5) High Drywell Temperature (Mark I and Mark II only) / 5	.01						Knowledge of the operational implications of the following concepts as they apply to HIGH DRYWELL TEMPERATURE: Reactor water level measurement	3.5	14
295030 (EPE 7) Low Suppression Pool Water Level / 5				.06			Ability to operate and/or monitor the following as they apply to LOW SUPPRESSION POOL WATER LEVEL: Condensate storage and transfer (make-up to the suppression pool): Plant-Specific	3.4	15
						2.4.30	Knowledge of events related to system operation/status that must be reported to internal organizations or external agencies, such as the State, the NRC, or the transmission system operator.	4.1	80
295031 (EPE 8) Reactor Low Water Level / 2	.03						Knowledge of the operational implications of the following concepts as they apply to REACTOR LOW WATER LEVEL: Water level effects on reactor power	3.7	16
295037 (EPE 14) Scram Condition Present and Reactor Power Above APRM Downscale or Unknown / 1					.07		Ability to determine and/or interpret the following as they apply to SCRAM CONDITION PRESENT AND REACTOR POWER ABOVE APRM DOWNSCALE OR UNKNOWN: Containment conditions/isolations	4.0	17
295038 (EPE 15) High Offsite Radioactivity Release Rate / 9			.02				Knowledge of the reasons for the following responses as they apply to HIGH OFF-SITE RELEASE RATE: System isolations	3.9	18
					.02		Ability to determine and/or interpret the following as they apply to HIGH OFF-SITE RELEASE RATE: Total number of curies released	3.3	81
600000 (APE 24) Plant Fire On Site / 8		.01					Knowledge of the interrelations between PLANT FIRE ON SITE and the following: Sensors / detectors and valves	2.6	19
						2.4.45	Ability to prioritize and interpret the significance of each annunciator or alarm.	4.3	82
700000 (APE 25) Generator Voltage and Electric Grid Disturbances / 6					.05 .06		Ability to determine and/or interpret the following as they apply to GENERATOR VOLTAGE AND ELECTRIC GRID DISTURBANCES: Operational status of offsite circuit Generator frequency limitations	3.2 3.4	20
K/A Category Totals:	4	3	3	4	3/4	3/3	Group Point Total:	20/7	

ES-401		BWR Examination Outline Emergency and Abnormal Plant Evolutions—Tier 1/Group 2 RO/SRO						Form ES-401-1	
E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G*	K/A Topic(s)	IR	#
295002 (APE 2) Loss of Main Condenser Vacuum / 3									
295007 (APE 7) High Reactor Pressure / 3						2.4.20	Knowledge of the operational implications of EOP warnings, cautions, and notes.	4.3	83
295008 (APE 8) High Reactor Water Level / 2									
295009 (APE 9) Low Reactor Water Level / 2									
295010 (APE 10) High Drywell Pressure / 5									
295011 (APE 11) High Containment Temperature (Mark III Containment only) / 5							Mark I Containment. N/A		
295012 (APE 12) High Drywell Temperature / 5									
295013 (APE 13) High Suppression Pool Temperature. / 5									
295014 (APE 14) Inadvertent Reactivity Addition / 1				.03			Ability to operate and/or monitor the following as they apply to INADVERTENT REACTIVITY ADDITION: RMCS: Plant-Specific	3.5	21
295015 (APE 15) Incomplete Scram / 1		.04					Knowledge of the interrelations between INCOMPLETE SCRAM and the following: RPS	4.0	22
295017 (APE 17) Abnormal Offsite Release Rate / 9									
295020 (APE 20) Inadvertent Containment Isolation / 5 & 7					.03		Ability to determine and/or interpret the following as they apply to INADVERTENT CONTAINMENT ISOLATION: Reactor power	3.7	84
295022 (APE 22) Loss of Control Rod Drive Pumps / 1					.03		Ability to determine and/or interpret the following as they apply to LOSS OF CRD PUMPS: CRD mechanism temperatures	3.1	23
295029 (EPE 6) High Suppression Pool Water Level / 5	.01						Knowledge of the operational implications of the following concepts as they apply to HIGH SUPPRESSION POOL WATER LEVEL: Containment integrity	3.4	24
295032 (EPE 9) High Secondary Containment Area Temperature / 5		.02					Knowledge of the interrelations between HIGH SECONDARY CONTAINMENT AREA TEMPERATURE and the following: Secondary containment ventilation	3.6	25
295033 (EPE 10) High Secondary Containment Area Radiation Levels / 9						2.4.2	Knowledge of system set points, interlocks and automatic actions associated with EOP entry conditions.	4.6	85
295034 (EPE 11) Secondary Containment Ventilation High Radiation / 9									
295035 (EPE 12) Secondary Containment High Differential Pressure / 5						2.2.12	Knowledge of surveillance procedures.	3.7	26
295036 (EPE 13) Secondary Containment High Sump/Area Water Level / 5			.02				Knowledge of the reasons for the following responses as they apply to SECONDARY CONTAINMENT HIGH SUMP/AREA WATER LEVEL: Reactor SCRAM	2.8	27
500000 (EPE 16) High Containment Hydrogen Concentration / 5									
K/A Category Point Totals:	1	2	1	1	1/1	1/2	Group Point Total:	7/3	

BWR Examination Outline														Form ES-401-1	
Plant Systems—Tier 2/Group 1 (RO/SRO)															
System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G*	K/A Topic(s)	IR	#	
203000 (SF2, SF4 RHR/LPCI) RHR/LPCI: Injection Mode							.05					Ability to predict and/or monitor changes in parameters associated with operating the RHR/LPCI: INJECTION MODE (PLANT SPECIFIC) controls including: Suppression pool level	3.8	28	
205000 (SF4 SCS) Shutdown Cooling						.05						Knowledge of the effect that a loss or malfunction of the following will have on the SHUTDOWN COOLING SYSTEM (RHR SHUTDOWN COOLING MODE): Component cooling water systems	3.2	29	
											2.2, 3.8	Knowledge of conditions and limitations in the facility license.	4.5	86	
206000 (SF2, SF4 HPCIS) High-Pressure Coolant Injection									.09			Ability to monitor automatic operations of the HIGH PRESSURE COOLANT INJECTION SYSTEM including: Response to system isolation: BWR-2,3,4	4.2	30	
207000 (SF4 IC) Isolation (Emergency) Condenser												BWR 3 with RCIC. N/A			
209001 (SF2, SF4 LPCS) Low-Pressure Core Spray		.02										Knowledge of electrical power supplies to the following: Valve power	2.5	31	
209002 (SF2, SF4 HPCS) High-Pressure Core Spray												BWR 3 with HPCI. N/A			
211000 (SF1 SLCS) Standby Liquid Control	.09											Knowledge of the physical connections and/or cause-effect relationships between STANDBY LIQUID CONTROL SYSTEM and the following: Core spray system: Plant-Specific RWCU	3.2	32	
	.05											Ability to (a) predict the impacts of the following on the STANDBY LIQUID 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 SBLC tank heaters	3.4	87	
212000 (SF7 RPS) Reactor Protection							.01					Ability to predict and/or monitor changes in parameters associated with operating the REACTOR PROTECTION SYSTEM controls including: RPS motor-generator output voltage	2.8	33	
								.16				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: Changing mode switch position	4.1	88	
215003 (SF7 IRM) Intermediate-Range Monitor							.06					Ability to (a) predict the impacts of the following on the INTERMEDIATE RANGE MONITOR (IRM) SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Faulty range switch	3.0	34	

ES-401		BWR Examination Outline Plant Systems—Tier 2/Group 1 (RO/SRO)											Form ES-401-1	
System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G*	K/A Topic(s)	IR	#
215004 (SF7 SRMS) Source-Range Monitor				.06								Knowledge of SOURCE RANGE MONITOR (SRM) SYSTEM design feature(s) and/or interlocks which provide for the following: IRM/SRM interlock	3.2	35
215005 (SF7 PRMS) Average Power Range Monitor/Local Power Range Monitor			.03									Knowledge of the effect that a loss or malfunction of the AVERAGE POWER RANGE MONITOR/LOCAL POWER RANGE MONITOR SYSTEM will have on following: Reactor manual control system: Plant-Specific	3.3	36
					.02							Knowledge of the operational implications of the following concepts as they apply to AVERAGE POWER RANGE MONITOR/LOCAL POWER RANGE MONITOR SYSTEM: Effects of voids on LPRM indication	2.7	37
217000 (SF2, SF4 RCIC) Reactor Core Isolation Cooling			.02									Knowledge of the effect that a loss or malfunction of the REACTOR CORE ISOLATION COOLING SYSTEM (RCIC) will have on following: Reactor vessel pressure	3.6	38
									.06			Ability to monitor automatic operations of the REACTOR CORE ISOLATION COOLING SYSTEM (RCIC) including: Lights and alarms	3.5	39
218000 (SF3 ADS) Automatic Depressurization			.01									Knowledge of the effect that a loss or malfunction of the AUTOMATIC DEPRESSURIZATION SYSTEM will have on following: Restoration of reactor water level after a break that does not depressurize the reactor when required	4.4	40
											2.4.9	Knowledge of low power/shutdown implications in accident (e.g., loss of coolant accident or loss of residual heat removal) mitigation strategies.	3.8	41
223002 (SF5 PCIS) Primary Containment Isolation/Nuclear Steam Supply Shutoff			.01									Knowledge of PRIMARY CONTAINMENT ISOLATION SYSTEM/NUCLEAR STEAM SUPPLY SHUT-OFF design feature(s) and/or interlocks which provide for the following: Redundancy	3.0	42
										.06		Ability to manually operate and/or monitor in the control room: Confirm initiation to completion	3.6	43
239002 (SF3 SRV) Safety Relief Valves					.02							Knowledge of the effect that a loss or malfunction of the following will have on the RELIEF/SAFETY VALVES: Air (Nitrogen) supply: Plant-Specific	3.4	44
259002 (SF2 RWLCS) Reactor Water Level Control			.03									Knowledge of REACTOR WATER LEVEL CONTROL SYSTEM design feature(s) and/or interlocks which provide for the following: Reactor feedpump runout protection: MDFP	2.8	45
								.03				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 reactor water level input	3.7	89

ES-401		BWR Examination Outline Plant Systems—Tier 2/Group 1 (RO/SRO)											Form ES-401-1	
System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G*	K/A Topic(s)	IR	#
261000 (SF9 SGTs) Standby Gas Treatment			.06 .02									Knowledge of the effect that a loss or malfunction of the STANDBY GAS TREATMENT SYSTEM will have on following: Primary containment oxygen content; Mark I&II Off-site Release Rate	3.0 3.6	46
262001 (SF6 AC) AC Electrical Distribution							.04					Ability to predict and/or monitor changes in parameters associated with operating the A.C. ELECTRICAL DISTRIBUTION controls including: Load currents	2.7	47
262002 (SF6 UPS) Uninterruptable Power Supply (AC/DC)								.01				Ability to (a) predict the impacts of the following on the UNINTERRUPTABLE POWER SUPPLY (A.C./D.C.) ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Under voltage	2.6	48
263000 (SF6 DC) DC Electrical Distribution					.01							Knowledge of the operational implications of the following concepts as they apply to D.C. ELECTRICAL DISTRIBUTION: Hydrogen generation during battery charging	2.6	49
											.03	Ability to manually operate and/or monitor in the control room: Battery discharge rate: Plant-Specific	2.7	50
264000 (SF6 EGE) Emergency Generators (Diesel/Jet) EDG	.02											Knowledge of the physical connections and/or cause-effect relationships between EMERGENCY GENERATORS (DIESEL/JET) and the following: D.C. electrical distribution	3.3	51
											2.2.44	Ability to interpret control room indications to verify the status and operation of a system, and understand how operator actions and directives affect plant and system conditions.	4.4	90
300000 (SF8 IA) Instrument Air		.01										Knowledge of electrical power supplies to the following: Instrument air compressor	2.8	52
400000 (SF8 CCS) Component Cooling Water											2.1.19 2.1.27	Ability to use plant computers to evaluate system or component status. Knowledge of system purpose and/or function.	3.9	53
510000 (SF4 SWS*) Service Water (Normal and Emergency)												Rev. 2 to K/A Catalog used. N/A		
K/A Category Point Totals:	2	2	4	3	2	2	3	2/3	2	2	2/2	Group Point Total:	26/5	

ES-401		BWR Examination Outline Plant Systems—Tier 2/Group 2 (RO/SRO)											Form ES-401-1	
System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G*	K/A Topic(s)	IR	#
230000 (SF5 RHR SPS) RHR/LPCI: Torus/Suppression Pool Spray Mode											2.4.35 2.4.36 2.4.37 2.4.8	Knowledge of local auxiliary operator tasks during an emergency and the resultant operational effects. Knowledge of RO tasks performed outside the main control room during an emergency and the resultant operational effects. Knowledge of how abnormal operating procedures are used in conjunction with EOPs.	3-8 4-2 3.8	60
233000 (SF9 FPCCU) Fuel Pool Cooling/Cleanup														
234000 (SF8 FH) Fuel-Handling Equipment														
239001 (SF3, SF4 MRSS) Main and Reheat Steam														
239003 (SF9 MSVLCS) Main Steam Isolation Valve Leakage Control														
241000 (SF3 RTPRS) Reactor/Turbine Pressure Regulating								.14 2.0				Ability to (a) predict the impacts of the following on the REACTOR/TURBINE PRESSURE REGULATING SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Loss of main turbine PMG: Plant-Specific Low reactor/turbine pressure regulating system oil level: Plant-Specific	2-7 2.5	61
245000 (SF4 MTGEN) Main Turbine Generator/Auxiliary					.06							Knowledge of the operational implications of the following concepts as they apply to MAIN TURBINE GENERATOR AND AUXILIARY SYSTEMS: Turbine shaft sealing	2.5	62
256000 (SF2 CDS) Condensate						.09 .06						Knowledge of the effect that a loss or malfunction of the following will have on the REACTOR CONDENSATE SYSTEM: Offgas system-Reactor Feedwater system	2-6 3.3	63
259001 (SF2 FWS) Feedwater														
268000 (SF9 RW) Radwaste										.01		Ability to manually operate and/or monitor in the control room: Sump integrators	3.4	64
271000 (SF9 OG) Offgas														
272000 (SF7, SF9 RMS) Radiation Monitoring											2.4.21	Knowledge of the parameters and logic used to assess the status of safety functions, such as reactivity control, core cooling and heat removal, reactor coolant system integrity, containment conditions, radioactivity release control, etc.	4.4	93
286000 (SF8 FPS) Fire Protection		.02										Knowledge of electrical power supplies to the following: Pumps	2.9	65
288000 (SF9 PVS) Plant Ventilation														
290001 (SF5 SC) Secondary Containment														
290003 (SF9 CRV) Control Room Ventilation														
290002 (SF4 RVI) Reactor Vessel Internals														
51001 (SF8 CWS*) Circulating Water												Rev. 2 to K/A Catalog used. N/A		
K/A Category Point Totals:	1	1	1	2	1	1	1	1/1	1	1	1/2	Group Point Total:	12/3	

Facility: Quad Cities Nuclear Power Station		Date of Exam: 7/16/2018				
Category	K/A #	Topic	RO		SRO-only	
			IR	#	IR	#
1. Conduct of Operations	2.1.37	Knowledge of procedures, guidelines, or limitations associated with reactivity management.	4.3	66		
	2.1.39	Knowledge of conservative decision making practices.	3.6	67		
	2.1.20	Ability to interpret and execute procedure steps.			4.6	94
	2.1.28	Knowledge of the purpose and function of major system components and controls.			4.1	95
	2.1.					
	Subtotal			2		2
2. Equipment Control	2.2.1	Ability to perform pre-startup procedures for the facility, including operating those controls associated with plant equipment that could affect reactivity.	4.5	68		
	2.2.13	Knowledge of tagging and clearance procedures.	4.1	69		
	2.2.41	Ability to obtain and interpret station electrical and mechanical drawings.	3.5	70		
	2.2.21	Knowledge of pre- and post-maintenance operability requirements.			4.1	96
	2.2.					
	Subtotal			3		1
3. Radiation Control	2.3.4	Knowledge of radiation exposure limits under normal or emergency conditions.	3.2	71		
	2.3.14	Knowledge of radiation or contamination hazards that may arise during normal, abnormal, or emergency conditions or activities.	3.4	72		
	2.3.6	Ability to approve release permits.			3.8	97
	2.3.15	Knowledge of radiation monitoring systems, such as fixed radiation monitors and alarms, portable survey instruments, personnel monitoring equipment, etc.			3.1	98
	2.3.					
	Subtotal			2		2
4. Emergency Procedures/Plan	2.4.19	Knowledge of EOP layout, symbols, and icons.	3.4	73		
	2.4.37	Knowledge of the lines of authority during implementation of the emergency plan.	3.0	74		
	2.4.47	Ability to diagnose and recognize trends in an accurate and timely manner utilizing the appropriate control room reference material.	4.2	75		
	2.4.6	Knowledge of EOP mitigation strategies.			4.7	99
	2.4.31 2.4.14	Knowledge of annunciator alarms, indications, or response procedures. Knowledge of general guidelines for EOP usage.			4.4 4.5	100
	2.4.					
	Subtotal			3		2
Tier 3 Point Total				10		7