

Oyster Creek Written Exam; RO Portion

Tier / Group	Randomly Selected K/A	Reason for Rejection
1/2	295033/EK2.04	SGTS is oversampled considering Operating Test Scenarios and JPMs "exercise" SGTS . SGTS also examined in Questions# 23 and 70.
2/1	264000/K1.03	There is no fire protection associated with the emergency diesel generators.
1/1	295031/EA1.01	There is no LPCI at OC. The only low pressure ECCS is Core Spray. Discussed with Fred Guenther and he agreed it was appropriate to use Core Spray in place of LPCI.
2/2	230000/K6.09	Torus sprays are not distinguished from Drywell Sprays in OC EOPs. The only modes of containment spray identified in EOPs are Drywell Spray and Torus Cooling. In addition this K/A was, essentially, a duplicate of 226001/K5.06.
3/1	2.1.10	The examiner reviewed the License Conditions and determined there were very few. None of these appeared to yield good testable material at the RO level. The licensee had requested this K/A be rejected based on a previously approved exam outline.
3/2	2.2.2	This K&A is more appropriately tested during the Operating Test.
2/1	259002/A2.03	This K&A is more appropriately tested during the Operating Test. The Licensee agreed to include a Feedwater failure from level input in one of the scenarios.
2/1	205000/A1.05	This K&A is appropriate for a plant having Shutdown Cooling mode of RHR. Specifically where misoperation of RHR can effect RPV level (from opening the min flow valve, for example). No such relationship exists at OC which has a separate Shutdown Cooling system with no min flow valve discharging to the torus.
2/2	239001/A1.05	Main Steam Line Radiation no longer causes auto closure of MSIVs. There is a question regarding manual response to increasing steam line radiation in Turbine Building.

RO

ES-401

ES-401

BWR SRO Examination Outline

Form ES-401-1

Facility:		Date of Exam:											Exam Level: _____					
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 *	Point Total	K	A	A 2	G *	Total
1. Emergency & Abnormal Plant Evolutions	1	4	4	4				3	2			3	2620					8
	2	1	1	3				1	1			0	477					4
	Tier Totals	5	5	7				4	3			3	4327					12
2. Plant Systems	1	4	2	3	2	2	2	1	3	1	4	2	2326					4
	2	1	0	2	2	2	1	1	1	2	0	0	4312					2
	3												4					
	Tier Totals	5	2	5	4	4	3	2	4	3	4	2	4038					6
3. Generic Knowledge and Abilities Categories				Cat 1		Cat 2		Cat 3		Cat 4		4710		1	2	3	4	7
				3		3		2		2								

- Note:
1. Ensure that at least two topics from every K/A category are sampled within each tier of the RO outline (i.e., the "Tier Totals" in each K/A category shall not be less than two). Refer to Section D.1.c for additional guidance regarding SRO sampling.
 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 400-75 points and the SRO-only exam must total 25 points.
 3. Select topics from many systems and evolutions; avoid selecting more than two or three K/A topics from a given system or evolution unless they relate to plant-specific priorities.
 4. Systems/evolutions within each group are identified on the associated outline.
 5. The shaded areas are not applicable to the category/tier.
 - 6.* 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. The SRO K/As must also be linked to 10 CFR 55.43 or an SRO-level learning objective.
 7. On the following pages, enter the K/A numbers, a brief description of each topic, the topics' importance ratings (IR) for the ~~SRO~~-applicable 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 group and tier totals for each category in the table above; summarize all the SRO-only knowledge and non-A2 ability categories in the columns labeled "K" and "A." Use duplicate pages for RO and SRO-only exams.
 - h. For Tier 3, enter the K/A numbers, descriptions, importance ratings, and point totals on Form ES-401-3.
 - i. Refer to ES-401, Attachment 2, for guidance regarding the elimination of inappropriate K/A statements.

ES-401	BWR SRO Examination Outline Emergency and Abnormal Plant Evolutions - Tier 1/Group 1 (RO / SRO)						Form ES-401-1		
E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4						R	2.1.33 Ability to recognize indications for system operating parameters which are entry-level conditions for technical specifications. (CFR: 43.2 / 43.3 / 45.3)	3.4	1
295003 Partial or Complete Loss of AC / 6				R			AA1. Ability to operate and/or monitor the following as they apply to PARTIAL OR COMPLETE LOSS OF A.C. POWER : (CFR: 41.7 / 45.6) AA1.03 Systems necessary to assure safe plant shutdown.....	4.4	1
295004 Partial or Total Loss of DC Pwr / 6					R		AA2. Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF D.C. POWER : (CFR: 41.10 / 43.5 / 45.13) AA2.02 Extent of partial or complete loss of D.C. power.	3.5	1
295005 Main Turbine Generator Trip / 3	R						AK1. Knowledge of the operational implications of the following concepts as they apply to MAIN TURBINE GENERATOR TRIP : (CFR: 41.8 to 41.10) AK1.01 Pressure effects on reactor power.	4.0	1
295006 SCRAM / 1		R					AK2. Knowledge of the interrelations between SCRAM and the following: (CFR: 41.7 / 45.8) AK2.03 CRD hydraulic system...	3.7	1
295016 Control Room Abandonment / 7		R					AK2. Knowledge of the interrelations between CONTROL ROOM ABANDONMENT and the following: (CFR: 41.7 / 45.8) AK2.02 Local control stations: Plant-Specific...	4.0	1

295018 Partial or Total Loss of CCW / 8	R	R					AK1. Knowledge of the operational implications of the following concepts as they apply to PARTIAL OR COMPLETE LOSS OF COMPONENT COOLING WATER : (CFR: 41.8 to 41.10) AK1.01 Effects on component/system operations.6 AK2. Knowledge of the interrelations between PARTIAL OR COMPLETE LOSS OF COMPONENT COOLING WATER and the following: (CFR: 41.7 / 45.8) AK2.02 Plant operations.	3.5/ 3.4	2
295019 Partial or Total Loss of Inst. Air / 8			R				AK3. Knowledge of the reasons for the following responses as they apply to PARTIAL OR COMPLETE LOSS OF INSTRUMENT AIR : (CFR: 41.5 / 45.6) AK3.02 Standby air compressor operation.	3.5	1
295021 Loss of Shutdown Cooling / 4						R	2.1.22. Ability to determine Mode of Operation. (CFR: 43.5 / 45.13)	2.8	1
295023 Refueling Acc Cooling Mode / 8									
295024 High Drywell Pressure / 5						R	EA2. Ability to determine and/or interpret the following as they apply to HIGH DRYWELL PRESSURE: (CFR: 41.10 / 43.5 / 45.13) EA2.04 Suppression chamber pressure: Plant-Specific.	3.9	1
295025 High Reactor Pressure / 3			R				EK3. Knowledge of the reasons for the following responses as they apply to HIGH REACTOR PRESSURE : (CFR: 41.5 / 45.6) EK3.06 Alternate rod insertion: Plant-Specific..	4.2*	1

295026 Suppression Pool High Water Temp. / 5			R		R	<p>EK3. Knowledge of the reasons for the following responses as they apply to SUPPRESSION POOL HIGH WATER TEMPERATURE: (CFR: 41.5 / 45.6)</p> <p>EK3.02 Suppression pool cooling..</p> <p>2.4.21 Knowledge of the parameters and logic used to assess the status of safety functions including:</p> <ol style="list-style-type: none"> 1. Reactivity control 2. Core cooling and heat removal 3. Reactor coolant system integrity 4. Containment conditions 5. Radioactivity release control. (CFR: 43.5 / 45.12) 	3.9/ 3.7	2
295027 High Containment Temperature / 5								
295028 High Drywell Temperature / 5			R			<p>EA1. Ability to operate and/or monitor the following as they apply to HIGH DRYWELL TEMPERATURE: (CFR: 41.7 / 45.6)</p> <p>EA1.02 Drywell ventilation system..</p>	3.9	1
295030 Low Suppression Pool Wtr Lvl / 5			R			<p>EK2. Knowledge of the interrelations between LOW SUPPRESSION POOL WATER LEVEL and the following: (CFR: 41.7 / 45.8)</p> <p>EK2.08 SRV discharge submergence..</p>	3.5	1
295031 Reactor Low Water Level / 2			R			<p>EA1. Ability to operate and/or monitor the following as they apply to REACTOR LOW WATER LEVEL: (CFR: 41.7 / 45.6)</p> <p>EA1.03 Low pressure Core Spray System.</p>	4.4*	1
295037 SCRAM Condition Present and Power Above APRM Downscale or Unknown / 1			R			<p>EK1. Knowledge of the operational implications of the following concepts as they apply to SCRAM CONDITION PRESENT AND REACTOR POWER ABOVE APRM DOWNSCALE OR UNKNOWN: (CFR: 41.8 to 41.10)</p> <p>EK1.02 Reactor water level effects on reactor power.</p>	4.1*	1
295038 High Off-site Release Rate / 9			R			<p>EK1. Knowledge of the operational implications of the following concepts as they apply to HIGH OFF-SITE RELEASE RATE: (CFR: 41.8 to 41.10)</p> <p>EK1.01 Biological effects of radioisotope ingestion.</p>	2.5	1

600000 Plant Fire On Site / 8			R			AK3 Knowledge of the reasons for the following responses as they apply to PLANT FIRE ON SITE: AK3.04 Actions contained in the abnormal procedure for plant fire on site .	2.8	1
K/A Category Totals:						Group Point Total:	20	/ 8

ES-401	BWR SRO-Examination Outline Plant Systems - Tier 2/Group 1 (RO / SRO)											Form ES-401-1		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
203000 RHR/LPCI: Injection Mode														
205000 Shutdown Cooling	R							R				<p>K1. Knowledge of the physical connections and/or causeeffect relationships between SHUTDOWN COOLING SYSTEM (RHR SHUTDOWN COOLING MODE) and the following: (CFR: 41.2 to 41.9 / 45.7 to 45.8)</p> <p>K1.05 Component cooling water systems .</p> <p>A2. Ability to predict the impact on the SHUTDOWN COOLING SYSTEM (RHR SHUTDOWN COOLING MODE) operation from: (CFR: 41.5 / 45.5)</p> <p>A2.09 Low Reactor water level</p>	3.1/ 3.4	2
206000 HPCI														
207000 Isolation (Emergency) Condenser	R	R										<p>K1. Knowledge of the physical connections and/or causeeffect relationships between ISOLATION (EMERGENCY)CONDENSER and the following: (CFR: 41.2 to 41.9 / 45.7 to 45.8)</p> <p>K1.01 Reactor vessel: BWR-2,3 .</p> <p>K2. Knowledge of electrical power supplies to the following: (CFR: 41.7)</p> <p>K2.02 Initiation logic: BWR-2,3</p>	3.8/ 3.5	2

261000 SGTS								R							A1. Ability to predict and/or monitor changes in parameters associated with operating the STANDBY GAS TREATMENT SYSTEM controls including: (CFR: 41.5 / 45.5) A1.04 Secondary containment differential pressure .	3.0	1
262001 AC Electrical Distribution														R	A4. Ability to manually operate and/or monitor in the control room: (CFR: 41.7 / 45.5 to 45.8) A4.03 Local operation of breakers	3.2	1
262002 UPS (AC/DC)														R	2.1.30 Ability to locate and operate components / including local controls. (CFR: 41.7 / 45.7)	3.9	1
263000 DC Electrical Distribution															A.4 Ability to manually operate and/or monitor in the control room: (CFR 41.7/45.5) A4.03 Battery discharge rate: Plant-Specific	2.7	1
264000 EDGs	R													R	K1. Knowledge of the physical connections and/or cause effect relationships between EMERGENCY GENERATORS (DIESEL/JET) and the following: (CFR: 41.2 to 41.9 / 45.7 to 45.8) K1.03 Fire protection system . K6. Knowledge of the effect that a loss or malfunction of the following will have on the EMERGENCY GENERATORS (DIESEL/JET) : (CFR: 41.7 / 45.7) K6.01 Starting air	2.9/ 3.8	2
300000 Instrument Air													R		K4. Knowledge of (INSTRUMENT AIR SYSTEM) design feature(s) and or interlocks which provide for the following: (CFR: 41.7) K4.02 Cross-over to other air systems	3.0	1

400000 Component Cooling Water			R									R K3. Knowledge of the effect that a loss or malfunction of the CCWS will have on the following: (CFR: 41.7 / 45.6) K3.01 Loads cooled by CCWS 2.2.25 Knowledge of bases in technical specifications for limiting conditions for operations and safety limits. (CFR: 43.2)	2.9/ 2.5	2
K/A Category Point Totals:												Group Point Total:		2 6 / 4

ES-401		BWR SRO-Examination Outline Plant Systems - Tier 2/Group 2 (RO / SRO)										Form ES-401-1		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
201001 CRD Hydraulic						R						K6. Knowledge of the effect that a loss or malfunction of the following will have on the CONTROL ROD DRIVE HYDRAULIC System : (CFR: 41.7 / 45.7) K6.02 Condensate storage tanks	3.0	1
201002 RMCS				R								K4. Knowledge of REACTOR MANUAL CONTROL SYSTEM design feature(s) and/or interlocks which provide for the following: (CFR: 41.7) K4.05 "Notch override" rod withdrawal .	3.3	1
201003 Control Rod and Drive Mechanism														
201004 RSCS														
201005 RCIS														
201006 RWM				R								K4. Knowledge of ROD WORTH MINIMIZER SYSTEM (RWM) (PLANT SPECIFIC) design feature(s) and/or interlocks which provide for the following: (CFR: 41.7) K4.06 Correction of out of sequence rod positions: P-Spec	3.2	1
202001 Recirculation			R									K3. Knowledge of the effect that a loss or malfunction of the RECIRCULATION SYSTEM will have on following: (CFR: 41.7 / 45.4) K3.03 Reactor power .	3.9	1
202002 Recirculation Flow Control			R									K3. Knowledge of the effect that a loss or malfunction of the RECIRCULATION FLOW CONTROL SYSTEM will have on following: (CFR: 41.7 / 45.4) K3.02 Reactor power .	4.0	1
204000 RWCU	R											K1. Knowledge of the physical connections and/or causeeffect relationships between REACTOR WATER CLEANUP SYSTEM and the following: (CFR: 41.2 to 41.9 / 45.7 to 45.8) K1.01 Reactor vessel .	3.1	1

ES-401		Generic Knowledge and Abilities Outline (Tier 3)			Form ES-401-53	
Facility:		Date of Exam:			Exam Level:	
Category	K/A #	Topic	RO		SRO-Only	
			IR	#	IR	#
1. Conduct of Operations	2.1.2	knowledge of operator responsibilities during all modes of operation. (CFR: 41.10 / 45.13)	3.0	1		
	2.1.12	Ability to apply TS for a system. (CFR: 43.1 / 45.13)	2.9	1		
	2.1.23	Ability to perform specific system and integrated plant procedures during different modes of operation. (CFR: 41.10 / 43.5 / 45.12)	3.9	1		
		Subtotal				
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. (CFR: 45.1)	3.7	1		
	2.2.11	Knowledge of the process for controlling temporary changes. (CFR: 41.10 / 43.3 / 45.13)	2.5	1		
	2.2.26	Knowledge of refueling administration requirements (43.5/45.13)	2.5	1		
	Subtotal					
3. Radiation Control	2.3.2	Knowledge of facility ALARA program. (CFR: 41.12 / 43.4 / 45.9 / 45.10)	2.5	1		
	2.3.9	Knowledge of the process for performing a containment purge. (CFR: 43.4 / 45.10)	2.5	1		

	Subtotal					
4. Emergency Procedures / Plan	2.4.29	Knowledge of the emergency plan. (CFR: 43.5 / 45.11)	2.6	1		
	2.4.50	Ability to verify system alarm setpoints and operate controls identified in the alarm response manual. (CFR: 45.3)	3.3	1		
		Subtotal				
Tier 3 Point Total (RO/SRO)				4310		477

SRO

Facility:		Date of Exam:											Exam Level: _____					
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 *	Point Total	K	A	A 2	G *	Total
1. Emergency & Abnormal Plant Evolutions	1												2620	0	0	4	4	8
	2												477	0	0	2	2	4
	Tier Totals												4327	0	0	6	6	12
2. Plant Systems	1												2326	0	0	1	3	4
	2												1312	0	0	1	1	2
	3												4					
	Tier Totals												4038	0	0	2	4	6
3. Generic Knowledge and Abilities Categories				Cat 1	Cat 2	Cat 3	Cat 4						1710	1	2	3	4	7
														2	2	1	2	

ES-401		BWR SRO Examination Outline Emergency and Abnormal Plant Evolutions - Tier 1/Group 1 (RO / SRO)						Form ES-401-1	
E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4						S	AA2. Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF FORCED CORE FLOW CIRCULATION : (CFR: 41.10 / 43.5 / 45.13) AA2.01 Power/flow map8	3.8	1
295003 Partial or Complete Loss of AC / 6									
295004 Partial or Total Loss of DC Pwr / 6						S	2.1.33 Ability to recognize indications of DC System operating parameters which are entry level for TS. (CFR: 43.2 / 43.5 / 45.3)	4.0	1
295005 Main Turbine Generator Trip / 3									
295006 SCRAM / 1						S	AA2. Ability to determine and/or interpret the following as they apply to SCRAM : (CFR: 41.10 / 43.5 / 45.13) AA2.02 Control rod position.	4.4*	1
295016 Control Room Abandonment / 7									
295018 Partial or Total Loss of CCW / 8									
295019 Partial or Total Loss of Inst. Air / 8						S	2.2.27 Knowledge of the refueling process. (CFR: 43.6 / 45.13)	3.5	1
295021 Loss of Shutdown Cooling / 4									
295023 Refueling Acc Cooling Mode / 8									
295024 High Drywell Pressure / 5						S	EA2. Ability to determine and/or interpret the following as they apply to HIGH DRYWELL PRESSURE: (CFR: 41.10 / 43.5 / 45.13) EA2.02 Drywell temperature.	4.0	1
295025 High Reactor Pressure / 3									
295026 Suppression Pool High Water Temp. / 5									
295027 High Containment Temperature / 5									

295028 High Drywell Temperature / 5					S	2.4.20 Knowledge of operational implications of EOP warnings / cautions / and notes. (CFR: 41.10 / 45.13)	4.0	1
295030 Low Suppression Pool Wtr Lvl / 5								
295031 Reactor Low Water Level / 2					S	EA2. Ability to determine and/or interpret the following as they apply to REACTOR LOW WATER LEVEL : (CFR: 41.10 / 43.5 / 45.13) EA2.02 Reactor power.	4.2*	1
295037 SCRAM Condition Present and Power Above APRM Downscale or Unknown / 1								
295038 High Off-site Release Rate / 9								
600000 Plant Fire On Site / 8					S	2.4.27 Knowledge of fire in the plant procedure. (CFR: 41.10 / 43.5 / 45.13)	3.5	1
K/A Category Totals:					4	4	Group Point Total:	20 / 8

ES-401		BWR SRO Examination Outline Emergency and Abnormal Plant Evolutions - Tier 1/Group 2 (RO / SRO)						Form ES-401-1	
E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
295002 Loss of Main Condenser Vac / 3						S	2.4.31 Knowledge of annunciators alarms and indications / and use of the response instructions. (CFR: 41.10 / 45.3)	3.4	1
295007 High Reactor Pressure / 3									
295008 High Reactor Water Level / 2									
295009 Low Reactor Water Level / 2						S	AA2. Ability to determine and/or interpret the following as they apply to LOW REACTOR WATER LEVEL : (CFR: 41.10 / 43.5 / 45.13) AA2.03 Reactor water cleanup blowdown rate..... 2.9 2.9		1
295010 High Drywell Pressure / 5									
295011 High Containment Temp / 5									
295012 High Drywell Temperature / 5						S	2.4.44 Ability to recognize abnormal indications for system operating parameters which are entry level conditions for Emergency Operating Procedures [related to High Drywell temperature] (CFR: 41.10 / 43.5 / 45.13)	4.0	1
295013 High Suppression Pool Temp. / 5									
295014 Inadvertent Reactivity Addition / 1						S	AA2.03 Ability to determine and/or interpret the cause of reactivity addition as it applies to inadvertent reactivity addition (CFR: 41.10 / 43.5 / 45.13)	4.3	1
295015 Incomplete SCRAM / 1									
295017 High Off-site Release Rate / 9									
295020 Inadvertent Cont. Isolation / 5 & 7									
295022 Loss of CRD Pumps / 1									
295029 High Suppression Pool Wtr Lvl / 5									

295032 High Secondary Containment Area Temperature / 5											
295033 High Secondary Containment Area Radiation Levels / 9											
295034 Secondary Containment Ventilation High Radiation / 9											
295035 Secondary Containment High Differential Pressure / 5											
295036 Secondary Containment High Sump/Area Water Level / 5											
500000 High CTMT Hydrogen Conc. / 5											
K/A Category Point Totals:					2	2	Group Point Total:				7 4

ES-401	BWR SRO Examination Outline Plant Systems - Tier 2/Group 1 (RO / SRO)											Form ES-401-1		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
203000 RHR/LPCI: Injection Mode														
205000 Shutdown Cooling														
206000 HPCI														
207000 Isolation (Emergency) Condenser														
209001 LPCS														
209002 HPCS														
211000 SLC														
212000 RPS														
215003 IRM								S				A2. 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: (CFR: 41.5 / 45.6) A2.04 Up scale or down scale trips	3.8	1
215004 Source Range Monitor														
215005 APRM / LPRM														
217000 RCIC														
218000 ADS														
223002 PCIS/Nuclear Steam Supply Shutoff														
239002 SRVs														
259002 Reactor Water Level Control														
261000 SGTS														

ES-401		BWR SRO-Examination Outline Plant Systems - Tier 2/Group 2 (RO / SRO)										Form ES-401-1		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	K/A Topic(s)	IR	#
201001 CRD Hydraulic														
201002 RMCS														
201003 Control Rod and Drive Mechanism														
201004 RSCS														
201005 RCIS														
201006 RWM														
202001 Recirculation														
202002 Recirculation Flow Control														
204000 RWCU														
214000 RPIS														
215001 Traversing In-core Probe														
215002 RBM														
216000 Nuclear Boiler Inst.														
219000 RHR/LPCI: Torus/Pool Cooling Mode														
223001 Primary CTMT and Aux.														
226001 RHR/LPCI: CTMT Spray Mode														
230000 RHR/LPCI: Torus/Pool Spray Mode														
233000 Fuel Pool Cooling/Cleanup														
234000 Fuel Handling Equipment														
239001 Main and Reheat Steam														
239003 MSIV Leakage Control														
241000 Reactor/Turbine Pressure Regulator														
245000 Main Turbine Gen. / Aux.														
256000 Reactor Condensate														

ES-401		Generic Knowledge and Abilities Outline (Tier 3)			Form ES-401-53	
Facility:		Date of Exam:			Exam Level:	
Category	K/A #	Topic	RO		SRO-Only	
			IR	#	IR	#
1. Conduct of Operations						
	2.1.33	Ability to recognize indications for system operating parameters which are entry conditions for TS (CFR 43.2/43.3/45.3)			4.0	1
	2.1.14	Knowledge of system status criteria which requires notification of plant personnel (CFR 43.5/45.12)			3.3	1
	2.1.					
	2.1.					
	Subtotal					2
2. Equipment Control						
	2.2.21	Knowledge of pre and post maintenance operability requirements. (CFR: 43.2)			3.5	1
	2.2.26	Knowledge of refueling administrative requirements (CFR 45.3/45.13)			3.7	1
	2.2.					
	2.2.					
	2.2.					
Subtotal					2	
3. Radiation Control						
	2.3.9	Knowledge of the process for performing a containment purge (CFR 43.4/45.10)			3.4	1
	2.3.					
	2.3.					
	2.3.					

4. Emergency Procedures / Plan	2.4.36	Knowledge of chemistry / health physics tasks during emergency operations. (CFR: 43.5)			2.8	1
	2.4.41	Knowledge of the emergency action level thresholds and classifications. (CFR: 43.5 / 45.11)			4.1	1
	2.4.					
	2.4.					
	2.4.					
	2.4.					
	Subtotal					
Tier 3 Point Total (RO/SRO)				4310		477