

**Susquehanna Training Center**  
707 Salem Boulevard  
P.O. Box 467  
Berwick, PA 18603-0467  
570-542-3353

RECEIVED  
REGION 1

2001 MAY 25 AM 10: 13



May 22, 2001

Mr. Herb Williams  
Operating Safety Branch  
United States Nuclear Regulatory Commission  
Region I  
475 Allendale Road  
King of Prussia, PA, 19406-1415

Susquehanna Training Center  
**Senior Reactor Operator and Reactor Operator Initial Examinations**  
**Susquehanna Steam Electric Station, Units 1 and 2**  
**Reference to NIMS Tracking No. 330798**  
PLA 005318 File A14-13D

Dear Mr. Williams:

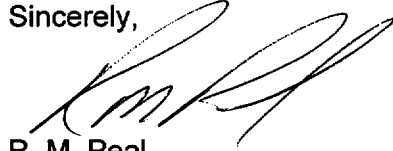
In accordance with NUREG 1021, Rev. 8, Supplement 1, Section ES-201. C.1.e & f, we are submitting for your review and approval the following examination outlines and checklists:

ES-201-2	Examination Outline Quality Checklist
ES-301-1	Administrative Topics Outline
ES-301-2	Control Room Systems and Facility Walkthrough Test Outline
ES-301-4	Simulator Scenario Quality Checklist
ES-D-1	Scenario Outline
ES-301-5	Transient and Event Checklist
ES-301-6	Competencies Checklist
ES-401-1	BWR SRO Examination Outline
ES-401-2	BWR RO Examination Outline
ES-401-5	Generic Knowledge and Ability Outline
ES-401-10	Record of Rejected K/As

Per NUREG 1021, Rev. 8, Supplement 1, Attachment 1, these materials are to be held from public disclosure until after the examinations are complete.

We look forward to your review of the enclosed materials, and resolution of any comments. If you require any additional information regarding these outlines, checklists or other matters relating to this examination, please contact R. Chin, Exam Coordinator, at (570) 542-3553 or (570) 542-1891.

Sincerely,



R. M. Peal  
Manager - Nuclear Training

cc: Response: No

Enclosures

cc: R. E. Chin  
G. J. Fernsler  
J. M. Helsel  
T. R. Markowski  
G. J. Radishofski  
B. R. Stitt  
M. Trump  
Licensing  
NTG File  
Nuc Records - Site

rcseniorrxandrxopinitialexams

REC/RMP/vah

Facility: Susquehanna LLC		Date of Exam: August 10, 2001						Exam Level: SRO					
Tier	Group	K/A Category Points											Point Total
		K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G*	
1. Emergency & Abnormal Plant Evolutions	1	2	3	4				4	6			7	26
	2	3	4	2				1	4			3	17
	Tier Totals	5	7	6				5	10			10	43
2. Plant Systems	1	3	2	2	3	0	2	2	2	3	2	2	23
	2	1	2	1	0	2	1	0	3	0	1	2	13
	3	0	0	1	1	0	1	0	0	1	0	0	4
	Tier Totals	4	4	4	4	2	4	2	5	4	3	4	40
3. Generic Knowledge and Abilities					Cat 1		Cat 2		Cat 3		Cat 4		17
					6	4	3	4					
<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. 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 <math>\pm 1</math> from that specified in the table based on NRC revisions. The final exam must total 100 points.</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 RO 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>													

ES-401 BWR SRO Examination Outline Emergency and Abnormal Plant Evolutions - Tier 1/Group 1										
Form ES-401-1										
E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G	K/A Topic(s)	Imp.	Points	
295003 Partial or Complete Loss of AC Power / 6 PRA: Loss of offsite power, Loss of DC power		X					AK2.06 – Knowledge of the interrelations between PARTIAL OR COMPLETE LOSS OF AC POWER and the following: D.C. electrical loads.	3.5	1	
295003 Partial or Complete Loss of AC Power / 6 PRA: Loss of offsite power					X		AA2.04 – Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF AC POWER: System lineups	3.7	1	
295006 SCRAM / 1			X				AK3.03 – Knowledge of the reasons for the following responses as they apply to SCRAM: Reactor pressure response.	3.9	1	
295006 SCRAM / 1					X		AA2.06 – Ability to determine and/or interpret the following as they apply to SCRAM: Cause of reactor scram.	3.8	1	
295007 High Reactor Pressure / 3		X					AK2.01 – Knowledge of the interrelations between HIGH REACTOR PRESSURE and the following: Reactor/turbine pressure regulating system	3.7	1	
295009 Low Reactor Water Level / 2					X		AA2.01 – Ability to determine and/or interpret the following as they apply to LOW REACTOR WATER LEVEL: Reactor Water Level	4.2	1	
295010 High Drywell Pressure / 5						X	2.4.14 - Knowledge of general guidelines for EOP flowchart use.	3.9	1	
295010 High Drywell Pressure / 5			X				AK3.01 – Knowledge of the reasons for the following responses as they apply to HIGH DRYWELL PRESSURE: Drywell venting	4.0	1	
295013 High Suppression Pool Temp. / 5						X	2.4.6 - Knowledge of symptom based EOP mitigation strategies.	4.0	1	
295013 High Suppression Pool Temp. / 5					X		AA2.01 – Ability to determine and/or interpret the following as they apply to HIGH SUPPRESSION POOL TEMP: Suppression pool temperature	4.0	1	
295014 Inadvertent Reactivity Addition / 1				X			AA1.05 – Ability to operate and or monitor the following as they apply to INADVERTENT REACTIVITY ADDITION: Neutron monitoring system	3.9	1	
295015 Incomplete SCRAM / 1	X						AK1.04 – Knowledge of the operational implications of the following concepts as they apply to INCOMPLETE SCRAM: Reactor pressure: Plant-Specific	3.8	1	
295016 Control Room Abandonment / 7					X		AA2.01 – Ability to determine and/or interpret the following as they apply to CONTROL ROOM ABANDONMENT: Reactor power.	4.1	1	
295017 High Off-site Release Rate / 9				X			AA1.02 – Ability to operate and/or monitor the following as they apply to HIGH OFF-SITE RELEASE RATE: Off-gas system.	3.7	1	
295017 High Off-site Release Rate / 9						X	2.1.6 – Ability to supervise and assume a management role during transients and upset conditions.	4.3	1	
295023 Refueling Accidents / 8				X			AA1.07 - Ability to operate and/or monitor the following as they apply to REFUELING ACCIDENTS: Standby gas treatment.	3.6	1	
295024 High Drywell Pressure / 5		X					EK2.06 – Knowledge of the interrelations between HIGH DRYWELL PRESSURE and the following: Emergency generators	4.0	1	

E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G	K/A Topic(s)	Imp.	Points
295025 High Reactor Pressure / 3	X						EK1.05 – Knowledge of the operational implications of the following concepts as they apply to HIGH REACTOR PRESSURE: Exceeding safety limits.	4.7	1
295025 High Reactor Pressure / 3						X	2.4.14 – Knowledge of general guidelines for EOP flowchart use.	3.9	1
295026 High Suppression Pool Water Temp. / 5						X	2.1.12 – Ability to apply technical specifications for a system.	4.0	1
295030 Low Suppression Pool Water Level / 5						X	2.4.20 – Knowledge of operational implications of EOP warnings / cautions / and notes.	4.0	1
295031 Reactor Low Water Level / 2				X			EA1.05 – Ability to operate and/or monitor the following as they apply to REACTOR LOW WATER LEVEL: Reactor core isolation cooling	4.3	1
295037 SCRAM Condition Present and Power Above APRM Downscale or Unknown / 1 <b>PRA: ATWS</b>					X		EA2.02 – Ability to determine and/or interpret the following as they apply to SCRAM CONDITION PRESENT AND POWER ABOVE APRM DOWNSCALE OR UNKNOWN: Reactor water level.	4.2	1
295037 SCRAM Condition Present and Power Above APRM Downscale or Unknown / 1 <b>PRA: ATWS</b>						X	2.1.20 – Ability to execute procedure steps.	4.2	1
295038 High Off-site Release Rate / 9			X				EK3.02 – Knowledge of the reasons for the following responses as they apply to HIGH OFFSITE RELEASE RATE: System isolations.	4.2	1
500000 High Containment Hydrogen Conc. / 5			X				EK3.06 – Knowledge of the reasons for the following responses as they apply to HIGH CONTAINMENT HYDROGEN CONCENTRATIONS: Operation of wet well vent.	3.7	1
K/A Category Totals:	2	3	4	4	6	7	Group Point Total:		26

ES-401										
BWR SRO Examination Outline Emergency and Abnormal Plant Evolutions - Tier 1/Group 2										
Form ES-401-1										
E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G	K/A Topic(s)	Imp.	Points	
295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4						X	2.4.48 -- Ability to interpret control room indications to verify the status of operation of system / and understand how operator actions and directives affect plant and system conditions.	3.8	1	
295002 Loss of Main Condenser Vacuum / 3	X						AK1.03 -- Knowledge of the operational implications of the following concepts as they apply to LOSS OF CONDENSER VACUUM: loss of heat sink.	3.8	1	
295004 Partial or Complete Loss of DC Power / 6			X				AK3.01 -- Knowledge of the reasons for the following responses as they apply to PARTIAL OR COMPLETE LOSS OF DC POWER: †Load shedding: Plant specific.	3.1	1	
295005 Main Turbine Generator Trip / 3					X		AA2.07 -- Ability to determine and/or interpret the following as they apply to MAIN TURBINE GENERATOR TRIP: Reactor water level	3.6	1	
295008 High Reactor Water Level / 2					X		AA2.01 -- Ability to determine and/or interpret the following as they apply to HIGH REACTOR WATER LEVEL: Reactor Water Level	3.9	1	
295012 High Drywell Temperature / 5			X				AK3.01 -- Knowledge of the reasons for the following responses as they apply to HIGH DRYWELL TEMPERATURE: Increased drywell cooling.	3.5	1	
295018 Partial or Complete Loss of CCW / 8 <b>PRA: ESW alignment</b>	X						AK1.01 -- Knowledge of the operational implications of the following concepts as they apply to PARTIAL OR COMPLETE LOSS OF CCW: Effects on component/system operation.	3.6	1	
295019 Part. Or Comp. Loss of Inst. Air / 8		X					AK2.03 -- Knowledge of the interrelations between PARTIAL OR COMPLETE LOSS OF INSTRUMENT AIR and the following: Reactor Feedwater.	3.3	1	
295020 Inadvertent Cont. Isolation / 5 & 7		X					AK2.04 -- Knowledge of the interrelations between INADVERTENT CONTAINMENT ISOLATION and the following: RWCU system.	3.1	1	
295021 Loss of Shutdown Cooling / 4		X					AK2.02 -- Knowledge of the interrelations between LOSS OF SHUTDOWN COOLING and the following: Reactor water cleanup.	3.3	1	
295028 High Drywell Temperature / 5	X						EK1.01 -- Knowledge of the operational implications of the following concepts as they apply to HIGH DRYWELL TEMPERATURE: Reactor water level measurement.	3.7	1	
295029 High Suppression Pool Water Level / 5 <b>PRA: HPCI suction transfer bypass</b>		X					EK2.02 -- Knowledge of the interrelations between HIGH SUPPRESSION POOL WATER LEVEL and the following: HPCI: Plant specific.	3.6	1	
295032 High Secondary Containment Area Temperature / 5						X	2.2.4 -- Ability to explain the variations in control board layouts / systems/ instrumentation and procedural actions between units at the facility.	3.0	1	
295033 High Sec. Cont. Area Rad. Levels / 9						X	2.3.10 Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure.	3.3	1	
295034 Sec. Cont. Ventilation High Rad. / 9					X		EA2.01 -- Ability to determine and/or interpret the following as they apply to SECONDARY CONTAINMENT VENTILATION HIGH RADIATION: Ventilation radiation levels.	4.2	1	

ES-401

BWR SRO Examination Outline  
Emergency and Abnormal Plant Evolutions - Tier 1/Group 2

Form ES-401-1

E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G	K/A Topic(s)	Imp.	Points
295036 Secondary Containment High Sump/Area Water Level / 5					X		EA2.02 - Ability to determine and/or interpret the following as they apply to SECONDARY CONTAINMENT HIGH SUMP/AREA WATER LEVEL: Water level in the affected area.	3.1	1
600000 Plant Fire On Site / 8 <i>LER: 2000-010, Smoke Removal System renders CREOASS Inoperable.</i>				X			AA1.05 - Ability to operate and/or monitor the following as they apply to PLANT FIRE ON SITE: Plant and control room ventilation systems.	3.1	1
K/A Category Point Totals:	3	4	2	1	4	3	Group Point Total:		17

ES-401		BWR SRO Examination Outline Plant Systems – Tier 2/Group 1											Form ES-401-1	
System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
202002 Recirculation Flow Control							X					A1.07 – Ability to predict and/or monitor changes in parameters associated with operating the RECIRCULATION FLOW CONTROL SYSTEM controls including: Recirculation loop flow.	3.1	1
203000 RHR/LPCI: Injection Mode						X						K6.02– Knowledge of the effect that a loss or malfunction of the following will have on the RHR/LPCI: INJECTION MODE: D.C. electrical power.	3.0	1
206000 HPCI			X									K3.02 – Knowledge of the effect that a loss or malfunction of the HIGH PRESSURE COOLANT INJECTION SYSTEM will have on following: Reactor pressure control.	3.8	1
209001 LPCS									X			A3.01 - Ability to monitor automatic operations of the LOW PRESSURE CORE SPRAY SYSTEM including: Valve operation.	3.6	1
211000 SLC	X											K1.06- Knowledge of the physical connections and/ cause-effect relationships between STANDBY LIQUID CONTROL SYSTEM and the following: Reactor vessel.	3.7	1
211000 SLC <i>PRA: SLC initiation failure</i>						X						K6.03 – Knowledge of the effect that a loss or malfunction of the following will have on the STANDBY LIQUID CONTROL SYSTEM: A.C. power.	3.3	1
212000 RPS <i>LER 2000-03, Loss of RPS bus B due to VR failure</i> <i>LER 2000-05, RPS B p.s. failure</i>											X	2.4.21 – Knowledge of the parameters and logic used to assess the status of safety functions including: (1) reactivity control, (2) core cooling and heat removal, (3) reactor coolant system integrity, (4) containment conditions, (5) radioactivity release control.	4.3	1
215004 SRM		X										K2.01– Knowledge of electrical power supplies to the following: SRM channels/detectors.	2.8	1
215005 APRM/LPRM									X			A3.04 - Ability to monitor automatic operations of the AVERAGE POWER RANGE MONITOR/LOCAL POWER RANGE MONITOR SYSTEM including: Annunciators and alarm signals.	3.2	1
216000 Nuclear Boiler Instrumentation								X				A2.05 – Ability to (a) predict the impacts of the following on the NUCLEAR BOILER INSTRUMENTATION SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Surveillance testing.	3.1	1



System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
217000 RCIC	X											K1.02 - Knowledge of the physical connections and/ cause-effect relationships between REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM and the following: Nuclear boiler system.	3.5	1
218000 ADS <i>PRA: Loss of high pressure injection</i> <i>PRA: Rapid depressurization</i>	X											K1.06 - Knowledge of the physical connections and/ cause-effect relationships between AUTOMATIC DEPRESSURIZATION SYSTEM and the following: Safety/relief valves.	3.9	1
223001 Primary CTMT and Auxiliaries		X										K2.09– Knowledge of electrical power supplies to the following: Drywell cooling fans.	2.9	1
223002 PCIS/Nuclear Steam Supply Shutoff										X		A4.03 – Ability to manually operate and/or monitor in the control room: Reset system isolations.	3.5	1
226001 RHR/LPCI Containment Spray Mode								X				A2.13 – Ability to (a) predict the impacts of the following on: RHR/LPCI: CONTAINMENT SPRAY SYSTEM MODE and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Valve logic failure.	2.9	1
239002 SRVs				X								K4.09 – Knowledge of RELIEF/SAFETY VALVE design feature(s) and/or interlocks which provide for the following: Manual opening of the SRV.	3.6	1
241000 Reactor/Turbine Pressure Regulator										X		A4.14 – Ability to manually operate and/or monitor in the control room: Turbine trip.	3.7	1
259002 Reactor Water Level Control									X			A3.03 - Ability to monitor automatic operations of the REACTOR WATER LEVEL CONTROL SYSTEM including: Changes in main steam flow.	3.2	1
261000 SGTS				X								K4.01 – Knowledge of STANDBY GAS TREATMENT SYSTEM design feature(s) and/or interlocks which provide for the following: Automatic system initiation.	3.8	1
262001 AC Electrical Distribution							X					A1.03 – Ability to predict and monitor changes in parameters associated with operating the ELECTRICAL DISTRIBUTION controls including: Bus voltage.	3.1	1

ES-401

BWR SRO Examination Outline  
Plant Systems – Tier 2/Group 1

Form ES-401-1

System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
264000 EDGs <i>PRA: Station blackout</i>				X								K4.02 – Knowledge of EMERGENCY DIESEL GENERATORS design feature(s) and/or interlocks which provide for the following: Emergency generator trips (emergency/LOCA).	4.2	1
264000 EDGs											X	2.4.31 – Knowledge of annunciators alarms and indications / and use of the response instructions.	3.4	1
290001 Secondary CTMT			X									K3.01 – Knowledge of the effect that a loss or malfunction of the SECONDARY CONTAINMENT will have on following: † Offsite radioactive release rates.	4.4	1
K/A Category Point Totals:	3	2	2	3	0	2	2	2	3	2	2	Group Point Total:		23

ES-401

BWR SRO Examination Outline  
Plant Systems - Tier 2/Group 2

Form ES-401-1

System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
201001 CRD Hydraulic								X				A2.11 – Ability to (a) predict the impacts of the following on the CONTROL ROD DRIVE HYDRAULIC SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Valve openings.	2.7	1
201006 RWM								X				A2.05 – Ability to (a) predict the impacts of the following on: ROD WORTH MINIMIZER; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Out of sequence rod movement.	3.5	1
204000 RWCU			X									K3.02 – Knowledge of the effect that a loss of the REACTOR WATER CLEANUP SYSTEM will have on the following: Reactor water level.	3.1	1
205000 Shutdown Cooling						X						K6.03 - Knowledge of the effect that a loss or malfunction of the following will have on the SHUTDOWN COOLING SYSTEM: Recirculation system.	3.2	1
214000 RPIS					X							K5.01 – Knowledge of the operational implications of the following concepts as they apply to ROD POSITION INFORMATION SYSTEM: Reed switches	2.8	1
215003 IRM					X							K5.01 – Knowledge of the operational implications of the following concepts as they apply to INTERMEDIATE RANGE MONITOR (IRM) SYSTEM: Detector operation.	2.7	1
219000 RHR/LPCI: Torus/Pool Cooling Mode		X										K2.02– Knowledge of electrical power supplies to the following: Pumps.	3.3	1
262002 UPS (AC/DC)											X	2.4.50 – Ability to verify system alarm setpoints and operate controls identified in the alarm response manual.	3.3	1
263000 DC Electrical Distribution										X		A4.01 – Ability to manually operate and/or monitor in the control room: Major breakers and control power fuses.	3.5	1
271000 Offgas	X											K1.02 – Knowledge of the physical connections and/or cause-effect relationships between OFFGAS and the following: Process radiation monitoring system.	3.3	1
286000 Fire Protection		X										K2.02– Knowledge of electrical power supplies to the following: Pumps.	3.1	1

ES-401		BWR SRO Examination Outline Plant Systems - Tier 2/Group 2										Form ES-401-1		
System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
290003 Control Room HVAC											X	2.1.28 – Knowledge of the purpose and function of major system components and controls.	3.3	1
400000 Component Cooling Water								X				A2.01 – Ability to (a) predict the impacts of the following on: COMPONENT COOLING WATER SYSTEM and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Loss of CCW pump.	3.4	1
K/A Category Point Totals:	1	2	1	0	2	1	0	3	0	1	2	Group Point Total:	13	

BWR SRO Examination Outline Plant Systems - Tier 2/Group 3													Form ES-401-1	
System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
215001 Traversing In-Core Probe <b>LER 99-008</b>				X								K4.01 – Knowledge of TRAVERSING IN-CORE PROBE design feature(s) and/or interlocks which provide for the following: Primary containment isolation.	3.5	1
233000 Fuel Pool Cooling and Cleanup			X									K3.02 – Knowledge of the effect that a loss or malfunction of the FUEL POOL COOLING AND CLEANUP will have on the following: Fuel pool water level.	3.2	1
288000 Plant Ventilation									X			A3.01 – Ability to monitor automatic operations of the PLANT VENTILATION SYSTEMS including: Isolation/initiation signals	3.8	1
290002 Reactor Vessel Internals						X						K6.09 - Knowledge of the effect that a loss or malfunction of the following will have on the REACTOR VESSEL AND INTERNALS: LPCS.	3.3	1
K/A Category Point Totals:	0	0	1	1	0	1	0	0	1	0	0	Group Point Total:		4
Plant-Specific Priorities														
System / Topic							Recommended Replacement for...				Reason		Points	
Plant-Specific Priorities coincided with randomly selected KA's.														
Plant-Specific Priority Total: (limit 10)														

Category	K/A#	Topic	Imp.	Points
Conduct of Operations	2.1.2	Knowledge of operator responsibilities during all modes of plant operation.	4.0	1
	2.1.4	Knowledge of shift staffing requirements.	3.4	1
	2.1.10	Knowledge of conditions and limitations in the facility license.	3.9	1
	2.1.12	Ability to apply technical specifications for a system.	4.0	1
	2.1.25	Ability to obtain and interpret station reference materials such as graphs / monographs / and tables which contain performance data.	3.1	1
	2.1.32	Ability to explain and apply system limits and precautions.	3.8	1
	Total			6
Equipment Control	2.2.4	Ability to explain the variations in control board layouts / systems / instrumentation and procedural actions between units at a facility.	3.0	1
	2.2.21	Knowledge of pre and post maintenance operability requirements.	3.5	1
	2.2.26	Knowledge of refueling administrative requirements.	3.7	1
	2.2.34	Knowledge of the process for determining the internal and external effects on core reactivity.	3.2	1
	Total			4
Radiation Control	2.3.2	Knowledge of facility ALARA program.	2.9	1
	2.3.10	Ability to perform procedures to reduce excessive levels of radiation and guard against radiation exposure.	3.3	1
	2.3.11	Ability to control radiation releases.	3.2	1
	Total			3

Category	K/A#	Topic	Imp.	Points
Emergency Procedures/Plan	2.4.9	Knowledge of low power / shutdown implications in accident (e.g. LOCA or loss of RHR) mitigation strategies.	3.9	1
	2.4.27	Knowledge of fire in the plant procedure.	3.5	1
	2.4.29	Knowledge of the emergency plan.	4.0	1
	2.4.40	Knowledge of the SRO's responsibilities in emergency plan implementation.	4.0	1
	Total			4
Tier 3 Point Total (RO/SRO)				17

Facility: Susquehanna LLC		Date of Exam: August 10, 2001											Exam Level: RO	
Tier	Group	K/A Category Points											Point Total	
		K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G *		
1. Emergency & Abnormal Plant Evolutions	1	2	2	3				2	2			2	13	
	2	3	4	3				2	3			4	19	
	3	0	1	0				1	1			1	4	
	Tier Totals	5	7	6				5	6			7	36	
2. Plant Systems	1	3	2	2	3	1	2	2	3	3	3	4	28	
	2	2	2	2	1	1	2	1	3	1	2	2	19	
	3	0	0	1	1	0	1	0	0	1	0	0	4	
	Tier Totals	5	4	5	5	2	5	3	6	5	5	6	51	
3. Generic Knowledge and Abilities				Cat 1		Cat 2		Cat 3		Cat 4		13		
				5		3		2		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. 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 <math>\pm 1</math> from that specified in the table based on NRC revisions. The final exam must total 100 points.</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 RO 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>														



ES-401		BWR RO Examination Outline Emergency and Abnormal Plant Evolutions - Tier 1/Group 1						Form ES-401-2	
E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G	K/A Topic(s)	Imp.	Points
295005 Main Turbine Generator Trip / 3					X		AA2.07 – Ability to determine and/or interpret the following as they apply to MAIN TURBINE GENERATOR TRIP: Reactor water level	3.5	1
295006 SCRAM / 1			X				AK3.03 – Knowledge of the reasons for the following responses as they apply to SCRAM: Reactor pressure response	3.8	1
295007 High Reactor Pressure / 3		X					AK2.01 – Knowledge of the interrelations between HIGH REACTOR PRESSURE and the following: Reactor/turbine pressure regulating system	3.5	1
295009 Low Reactor Water Level / 2					X		AA2.01 – Ability to determine and/or interpret the following as they apply to LOW REACTOR WATER LEVEL: Reactor Water Level	4.2	1
295010 High Drywell Pressure / 5						X	2.4.14 - Knowledge of general guidelines for EOP flowchart use.	3.0	1
295010 High Drywell Pressure / 5			X				AK3.01 – Knowledge of the reasons for the following responses as they apply to HIGH DRYWELL PRESSURE: Drywell venting	3.8	1
295014 Inadvertent Reactivity Addition / 1				X			AA1.05 – Ability to operate and or monitor the following as they apply to INADVERTENT REACTIVITY ADDITION: Neutron monitoring system	3.9	1
295015 Incomplete SCRAM / 1	X						AK1.04 – Knowledge of the operational implications of the following concepts as they apply to INCOMPLETE SCRAM: Reactor pressure: Plant-Specific	3.8	1
295024 High Drywell Pressure / 5		X					EK2.06 – Knowledge of the interrelations between HIGH DRYWELL PRESSURE and the following: Emergency generators	3.9	1
295025 High Reactor Pressure / 3	X						EK1.05 – Knowledge of the operational implications of the following concepts as they apply to HIGH REACTOR PRESSURE: Exceeding safety limits.	4.4	1
295031 Reactor Low Water Level / 2				X			EA1.05 – Ability to operate and/or monitor the following as they apply to REACTOR LOW WATER LEVEL: Reactor core isolation cooling	4.3	1
295037 SCRAM Condition Present and Power Above APRM Downscale or Unknown / 1 <b>PRA: ATWS</b>						X	2.1.20 – Ability to execute procedure steps.	4.3	1
500000 High Containment Hydrogen Conc. / 5			X				EK3.06 – Knowledge of the reasons for the following responses as they apply to HIGH CONTAINMENT HYDROGEN CONCENTRATIONS: Operation of wet well vent.	3.1	1
K/A Category Totals:	2	2	3	2	2	2	Group Point Total:		13

ES-401

BWR RO Examination Outline  
Emergency and Abnormal Plant Evolutions - Tier 1/Group 2

Form ES-401-2

E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G	K/A Topic(s)	Imp.	Points
295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4						X	2.4.48 – Ability to interpret control room indications to verify the status of operation of system / and understand how operator actions and directives affect plant and system conditions.	3.5	1
295002 Loss of Main Condenser Vacuum / 3	X						AK1.03 – Knowledge of the operational implications of the following concepts as they apply to LOSS OF CONDENSER VACUUM: loss of heat sink.	3.6	1
295003 Partial or Complete Loss of AC Power / 6 <i>PRA: Loss of offsite power, Loss of DC power</i>		X					AK2.06 – Knowledge of the interrelations between PARTIAL OR COMPLETE LOSS OF AC POWER and the following: D.C. electrical loads.	3.4	1
295004 Partial or Complete Loss of DC Power / 6			X				AK3.01 – Knowledge of the reasons for the following responses as they apply to PARTIAL OR COMPLETE LOSS OF DC POWER: †Load shedding: Plant specific.	2.6	1
295008 High Reactor Water Level / 2					X		AA2.01 – Ability to determine and/or interpret the following as they apply to HIGH REACTOR WATER LEVEL: Reactor Water Level	3.9	1
295012 High Drywell Temperature / 5			X				AK3.01 – Knowledge of the reasons for the following responses as they apply to HIGH DRYWELL TEMPERATURE: Increased drywell cooling.	3.5	1
295013 High Suppression Pool Temp. / 5						X	2.4.6 - Knowledge of symptom based EOP mitigation strategies.	3.1	1
295016 Control Room Abandonment / 7					X		AA2.01 – Ability to determine and/or interpret the following as they apply to CONTROL ROOM ABANDONMENT: Reactor power.	4.1	1
295017 High Off-site Release Rate / 9				X			AA1.02 – Ability to operate and/or monitor the following as they apply to HIGH OFF-SITE RELEASE RATE: Off-gas system.	3.5	1
295018 Partial or Complete Loss of CCW / 8 <i>PRA: ESW alignment</i>	X						AK1.01 – Knowledge of the operational implications of the following concepts as they apply to PARTIAL OR COMPLETE LOSS OF CCW: Effects on component/system operation.	3.5	1
295019 Part. Or Comp. Loss of Inst. Air / 8		X					AK2.03 – Knowledge of the interrelations between PARTIAL OR COMPLETE LOSS OF INSTRUMENT AIR and the following: Reactor Feedwater.	3.2	1
295020 Inadvertent Cont. Isolation / 5 & 7		X					AK2.04 – Knowledge of the interrelations between INADVERTENT CONTAINMENT ISOLATION and the following: RWCU system.	3.1	1
295026 High Suppression Pool Water Temp. / 5						X	2.1.12 – Ability to apply technical specifications for a system.	2.9	1
295028 High Drywell Temperature / 5	X						EK1.01 – Knowledge of the operational implications of the following concepts as they apply to HIGH DRYWELL TEMPERATURE: Reactor water level measurement.	3.5	1

ES-401

BWR RO Examination Outline  
Emergency and Abnormal Plant Evolutions - Tier 1/Group 2

Form ES-401-2

E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G	K/A Topic(s)	Imp.	Points
295029 High Suppression Pool Water Level / 5 <b>PRA: HPCI suction transfer bypass.</b>		X					EK2.02 – Knowledge of the interrelations between HIGH SUPPRESSION POOL WATER LEVEL and the following: HPCI: Plant specific.	3.4	1
295033 High Sec. Cont. Area Rad. Levels / 9						X	2.3.10 Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure.	2.9	1
295034 Sec. Cont. Ventilation High Rad. / 9					X		EA2.01 – Ability to determine and/or interpret the following as they apply to SECONDARY CONTAINMENT VENTILATION HIGH RADIATION: Ventilation radiation levels.	3.8	1
295038 High Off-site Release Rate / 9			X				EK3.02 – Knowledge of the reasons for the following responses as they apply to HIGH OFFSITE RELEASE RATE: System isolations.	3.9	1
600000 Plant Fire On Site / 8 <b>LER: 2000-010, Smoke Removal System renders CREOASS inoperable.</b>				X			AA1.05 - Ability to operate and/or monitor the following as they apply to PLANT FIRE ON SITE: Plant and control room ventilation systems.	3.0	1
K/A Category Point Totals:	3	4	3	2	3	4	Group Point Total:		19

ES-401

BWR RO Examination Outline  
Emergency and Abnormal Plant Evolutions - Tier 1/Group 3

Form ES-401-2

E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G	K/A Topic(s)	Imp.	Points
295021 Loss of Shutdown Cooling / 4		X					AK2.02 – Knowledge of the interrelations between LOSS OF SHUTDOWN COOLING and the following: Reactor water cleanup.	3.2	1
295023 Refueling Accidents / 8				X			AA1.07 - Ability to operate and/or monitor the following as they apply to REFUELING ACCIDENTS: Standby gas treatment.	3.6	1
295032 High Secondary Containment Area Temperature / 5						X	2.2.4 – Ability to explain the variations in control board layouts / systems/ instrumentation and procedural actions between units at the facility.	2.8	1
295036 Secondary Containment High Sump/Area Water Level / 5					X		EA2.02– Ability to determine and/or interpret the following as they apply to SECONDARY CONTAINMENT HIGH SUMP/AREA WATER LEVEL: Water level in the affected area.	3.1	1
K/A Category Point Totals:	0	1	0	1	1	1	Group Point Total:		4

ES-401		BWR RO Examination Outline Plant Systems – Tier 2/Group 1										Form ES-401-2		
System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
201001 CRD Hydraulic								X				A2.11 – Ability to (a) predict the impacts of the following on the CONTROL ROD DRIVE HYDRAULIC SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Valve openings.	2.6	1
201002 RMCS			X									K3.01 – Knowledge of the effect that a loss or malfunction of the REACTOR MANUAL CONTROL SYSTEM will have on following: Ability to move control rods.	3.4	1
202002 Recirculation Flow Control							X					A1.07 – Ability to predict and/or monitor changes in parameters associated with operating the RECIRCULATION FLOW CONTROL SYSTEM controls including: Recirculation loop flow.	3.1	1
202002 Recirculation Flow Control											X	2.4.10 Knowledge of annunciator response procedures.	3.0	1
203000 RHR/LPCI: Injection Mode						X						K6.02– Knowledge of the effect that a loss or malfunction of the following will have on the RHR/LPCI: INJECTION MODE: D.C. electrical power.	2.8	1
206000 HPCI			X									K3.02 – Knowledge of the effect that a loss or malfunction of the HIGH PRESSURE COOLANT INJECTION SYSTEM will have on following: Reactor pressure control.	3.8	1
209001 LPCS									X			A3.01 - Ability to monitor automatic operations of the LOW PRESSURE CORE SPRAY SYSTEM including: Valve operation.	3.6	1
211000 SLC	X											K1.06- Knowledge of the physical connections and/ cause-effect relationships between STANDBY LIQUID CONTROL SYSTEM and the following: Reactor vessel.	3.7	1
211000 SLC <i>PRA: SLC initiation failure</i>						X						K6.03 – Knowledge of the effect that a loss or malfunction of the following will have on the STANDBY LIQUID CONTROL SYSTEM: A.C. power.	3.2	1
212000 RPS <i>LER 2000-03, Loss of RPS bus B due to VR failure</i> <i>LER 2000-05, RPS B p.s. failure</i>											X	2.4.21 – Knowledge of the parameters and logic used to assess the status of safety functions including: (1) reactivity control, (2) core cooling and heat removal, (3) reactor coolant system integrity, (4) containment conditions, (5) radioactivity release control.	3.7	1

ES-401 BWR RO Examination Outline Plant Systems – Tier 2/Group 1													Form ES-401-2	
System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
215003 IRM					X							K5.01 – Knowledge of the operational implications of the following concepts as they apply to INTERMEDIATE RANGE MONITOR (IRM) SYSTEM: Detector operation.	2.6	1
215004 SRM		X										K2.01 – Knowledge of electrical power supplies to the following: SRM channels/detectors.	2.6	1
215005 APRM/LPRM									X			A3.04 - Ability to monitor automatic operations of the AVERAGE POWER RANGE MONITOR/LOCAL POWER RANGE MONITOR SYSTEM including: Annunciators and alarm signals.	3.2	1
216000 Nuclear Boiler Instrumentation								X				A2.05 – Ability to (a) predict the impacts of the following on the NUCLEAR BOILER INSTRUMENTATION SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Surveillance testing.	2.8	1
216000 Nuclear Boiler Instrumentation										X		A4.02 – Ability to manually operate and/or monitor in the control room: Channel select controls.	3.3	1
217000 RCIC	X											K1.02 - Knowledge of the physical connections and/ cause-effect relationships between REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM and the following: Nuclear boiler system.	3.5	1
218000 ADS <b>PRA: Loss of high pressure injection</b> <b>PRA: Rapid depressurization</b>	X											K1.06 - Knowledge of the physical connections and/ cause-effect relationships between AUTOMATIC DEPRESSURIZATION SYSTEM and the following: Safety/relief valves.	3.9	1
223001 Primary CTMT and Auxiliaries		X										K2.09– Knowledge of electrical power supplies to the following: Drywell cooling fans.	2.7	1
223002 PCIS/Nuclear Steam Supply Shutoff										X		A4.03 – Ability to manually operate and/or monitor in the control room: Reset system isolations.	3.6	1
239002 SRVs				X								K4.09 – Knowledge of RELIEF/SAFETY VALVE design feature(s) and/or interlocks which provide for the following: Manual opening of the SRV.	3.7	1

System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
241000 Reactor/Turbine Pressure Regulator										X		A4.14 – Ability to manually operate and/or monitor in the control room: Turbine trip.	3.8	1
259001 Reactor Feedwater							X					A1.05 – Ability to predict and/or monitor changes in parameters associated with operating the REACTOR FEEDWATER SYSTEM controls including: RFP turbine control valve position.	2.8	1
259002 Reactor Water Level Control									X			A3.03 - Ability to monitor automatic operations of the REACTOR WATER LEVEL CONTROL SYSTEM including: Changes in main steam flow.	3.2	1
259002 Reactor Water Level Control											X	2.2.2 – Ability to manipulate the console controls as required to operate the facility between shutdown and designated power levels.	4.0	1
261000 SGTS				X								K4.01 – Knowledge of STANDBY GAS TREATMENT SYSTEM design feature(s) and/or interlocks which provide for the following: Automatic system initiation.	3.7	1
261000 SGTS								X				A2.14 – Ability to (a) predict the impacts of the following on the STANDBY GAS TREATMENT SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: High system pressure.	3.0	1
264000 EDGs PRA: Station blackout				X								K4.02 – Knowledge of EMERGENCY DIESEL GENERATORS design feature(s) and/or interlocks which provide for the following: Emergency generator trips (emergency/LOCA).	4.0	1
264000 EDGs											X	2.4.31 – Knowledge of annunciators alarms and indications / and use of the response instructions.	3.3	1
K/A Category Point Totals:	3	2	2	3	1	2	2	3	3	3	4	Group Point Total:		28

ES-401		BWR RO Examination Outline Plant Systems - Tier 2/Group 2											Form ES-401-2	
System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
201003 Control Rod and Drive Mechanism						X						K6.02 - Knowledge of the effect that a loss or malfunction of the following will have on the CONTROL ROD AND DRIVE MECHANISM: Reactor pressure.	3.0	1
201006 RWM								X				A2.05 - Ability to (a) predict the impacts of the following on: ROD WORTH MINIMIZER; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Out of sequence rod movement.	3.1	1
202001 Recirculation									X			A3.04 - Ability to monitor automatic operations of the RECIRCULATION SYSTEM including: Lights and alarms.	3.2	1
204000 RWCU			X									K3.02 - Knowledge of the effect that a loss of the REACTOR WATER CLEANUP SYSTEM will have on the following: Reactor water level.	3.1	1
205000 Shutdown Cooling						X						K6.03 - Knowledge of the effect that a loss or malfunction of the following will have on the SHUTDOWN COOLING SYSTEM: Recirculation system.	3.1	1
214000 RPIS					X							K5.01 - Knowledge of the operational implications of the following concepts as they apply to ROD POSITION INFORMATION SYSTEM: Reed switches	2.7	1
215002 RBM	X											K1.02 - Knowledge of the physical connections and/ cause-effect relationships between ROD BLOCK MONITOR SYSTEM and the following: LPRM.	3.2	1
226001 RHR/LPCI Containment Spray System Mode								X				A2.13 - Ability to (a) predict the impacts of the following on: RHR/LPCI: CONTAINMENT SPRAY SYSTEM MODE and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Valve logic failure.	2.8	1
219000 RHR/LPCI: Torus/Pool Cooling Mode		X										K2.02- Knowledge of electrical power supplies to the following: Pumps.	3.1	1
239001 Main and Reheat Steam				X								K4.01 - Knowledge of MAIN AND REHEAT STEAM SYSTEM design feature(s) and/or interlocks which provide for the following: Automatic isolation of steam lines.	3.8	1



ES-401

BWR RO Examination Outline  
Plant Systems - Tier 2/Group 2

Form ES-401-2

System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
245000 Main Turbine Gen. And Auxiliaries										X		A4.08 – Ability to manually operate and/or monitor in the control room: Turbine oil pressure.	2.7	1
262001 AC Electrical Distribution							X					A1.03 – Ability to predict and monitor changes in parameters associated with operating the ELECTRICAL DISTRIBUTION controls including: Bus voltage.	2.9	1
262002 UPS (AC/DC)											X	2.4.50 – Ability to verify system alarm setpoints and operate controls identified in the alarm response manual.	3.3	1
263000 DC Electrical Distribution										X		A4.01 – Ability to manually operate and/or monitor in the control room: Major breakers and control power fuses.	3.3	1
271000 Offgas	X											K1.02 – Knowledge of the physical connections and/or cause-effect relationships between OFFGAS and the following: Process radiation monitoring system.	3.1	1
286000 Fire Protection		X										K2.02 – Knowledge of electrical power supplies to the following: Pumps.	2.9	1
290001 Secondary CTMT			X									K3.01 – Knowledge of the effect that a loss or malfunction of the SECONDARY CONTAINMENT will have on following: †Offsite radioactive release rates.	4.0	1
290003 Control Room HVAC											X	2.1.28 – Knowledge of the purpose and function of major system components and controls.	3.2	1
400000 Component Cooling Water								X				A2.01 – Ability to (a) predict the impacts of the following on: COMPONENT COOLING WATER SYSTEM and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Loss of CCW pump.	3.3	1
K/A Category Point Totals:	2	2	2	1	1	2	1	3	1	2	2	Group Point Total:	19	

BWR RO Examination Outline Plant Systems - Tier 2/Group 3													Form ES-401-2	
System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	Imp.	Points
215001 Traversing In-Core Probe <b>LER 99-008</b>				X								K4.01 – Knowledge of TRAVERSING IN-CORE PROBE design feature(s) and/or interlocks which provide for the following: Primary containment isolation.	3.4	1
233000 Fuel Pool Cooling and Cleanup			X									K3.02 – Knowledge of the effect that a loss or malfunction of the FUEL POOL COOLING AND CLEANUP will have on the following: Fuel pool water level.	3.1	1
288000 Plant Ventilation									X			A3.01 – Ability to monitor automatic operations of the PLANT VENTILATION SYSTEMS including: Isolation/initiation signals	3.8	1
290002 Reactor Vessel Internals						X						K6.09 - Knowledge of the effect that a loss or malfunction of the following will have on the REACTOR VESSEL AND INTERNALS: LPCS.	3.2	1
K/A Category Point Totals:	0	0	1	1	0	1	0	0	1	0	0	Group Point Total:	4	
Plant-Specific Priorities														
System / Topic							Recommended Replacement for...				Reason		Points	
Plant-Specific Priorities coincided with randomly selected KA's.														
Plant-Specific Priority Total: (limit 10)														

Category	K/A#	Topic	Imp.	Points
Conduct of Operations	2.1.2	Knowledge of operator responsibilities during all modes of plant operation.	3.0	1
	2.1.11	Knowledge of less than one hour technical specification action statements for systems.	3.0	1
	2.1.25	Ability to obtain and interpret station reference materials such as graphs / monographs / and tables which contain performance data.	2.8	1
	2.1.29	Knowledge of how to conduct and verify valve lineups.	3.4	1
	2.1.32	Ability to explain and apply system limits and precautions.	3.4	1
	Total			5
Equipment Control	2.2.4	Ability to explain the variations in control board layouts / systems / instrumentation and procedural actions between units at a facility.	2.8	1
	2.2.12	Knowledge of surveillance procedures.	3.0	1
	2.2.34	Knowledge of the process for determining the internal and external effects on core reactivity.	2.8	1
	Total			3
Radiation Control	2.3.2	Knowledge of facility ALARA program.	2.5	1
	2.3.11	Ability to control radiation releases.	2.7	1
	Total			2
Emergency Procedures/Plan	2.4.17	Knowledge of EOP terms and definitions.	3.1	1
	2.4.27	Knowledge of fire in the plant procedure.	3.0	1
	2.4.29	Knowledge of the emergency plan.	2.6	1
	Total			3
Tier 3 Point Total (RO/SRO)				13

ES-401

Record of Rejected K/As

Form ES-401-10

Tier / Group	Randomly Selected K/A	Reason for Rejection
Tier 1/Group 2	295008, AA2.02	<p>RO/SRO K/A <b>295008, AA2.02</b>, was changed to prevent double jeopardy with RO/SRO K/A <b>259002, A3.03</b>.</p> <p>Another token for <b>295008</b>, within the AA2 category, was pulled and the K/A was changed to <b>AA2.01</b>.</p> <p>(New K/A) <b>295008, AA2.01</b>, ability to determine and/or interpret the following as they apply to HIGH REACTOR WATER LEVEL: Reactor water level.</p> <p>(Old K/A) <b>295008, AA2.02</b>, ability to determine and/or interpret the following as they apply to HIGH REACTOR WATER LEVEL: Steam flow/feed flow mismatch.</p> <p>(Double Jeopardy K/A) <b>259002, A3.03</b>, ability to monitor automatic operations of the REACTOR WATER LEVEL CONTROL SYSTEM including Changes in main steam flow.</p>
Tier 1/Group 1	500000, EK3.05	<p>RO/SRO K/A <b>500000, EK3.05</b> was changed because there are no procedures that relate suppression pool sprays and high containment hydrogen concentrations. Another token within the K3 category was pulled and <b>K/A 500000, EK3.06</b> was selected.</p> <p>(old K/A) <b>500000, EK3.05</b>, Knowledge of the reasons for the following responses as apply to HIGH CONTAINMENT HYDROGEN CONCENTRATIONS: Operation of wet well (suppression pool) sprays.</p> <p>(New K/A) <b>500000, EK3.06</b>, Knowledge of the reasons for the following responses as apply to HIGH CONTAINMENT HYDROGEN CONCENTRATIONS: +Operation of wet well vent.</p>