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November 20, 2000

U.S. NRC Region I Administrator
475 Allendale Road
King of Prussia, PA 19406

Subject: Submittal of Integrated Initial License Training Examination Outline
Peach Bottom Atomic Power Station, Units 2 and 3
NRC Docket Nos. 50-277 and 50-278

In accordance with NUREG 1021, Revision 8, "Operating Licensing Examination Standards for Power Reactors", Peach Bottom Atomic Power Station is submitting the integrated initial license training examination outline. This submittal supports the initial license examination scheduled for the week of February 5, 2001.

In accordance with NUREG 1021, Revision 8, Section ES-201, please ensure that these materials are withheld from public disclosure until after the examinations are complete.

Should you have any questions concerning this letter or the examination outlines, please contact Philip E. Nielsen at (717) 456-3497.

Respectfully,

Robert G. Birley
Manager - Operations Training
Peach Bottom Atomic Power Station

Enclosure: (Hand delivered to Julian H. Williams, Chief Examiner, NRC Region I)
ES-201-2, Examination Outline Quality Checklist
ES-201-3, Examination Security Agreements
ES-301-1, Administrative Topics Outline
ES-301-3, Control Room Systems and Facility Walk-Through Test Outline
ES-301-5, Transient and Event Checklist
ES-401-1, BWR SRO Examination Outline
ES-401-2, BWR RO Examination Outline
ES-D-1, Scenario Outlines

cc: Correspondence Control Center, KSA1-N

CNN-00-14090

Facility: Peach Bottom Atomic Power Station

Form ES-401-2

Exam Date: 02/01/2001

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	3	3	3				2	1			1	13
	2	4	3	4				3	4			1	19
	3	1	1	1				1	0			0	4
	Totals Tier	8	7	8				6	5			2	36
2. Plant Systems	1	3	3	3	3	2	3	2	3	2	3	1	28
	2	3	2	1	2	2	1	3	2	1	1	1	19
	3	1	0	1	0	1	0	0	1	0	0	0	4
	Tier Totals	7	5	5	5	5	4	5	6	3	4	2	51
3. Generic Knowledge And Abilities					Cat 1		Cat 2		Cat 3		Cat 4		
					4		3		2		4		13

Note:

1. Attempt to distribute topics among all K/A Categories; select at least one topic from every K/A category within each tier.
2. Actual point totals must match those specified in the table.
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.
4. Systems/evolutions within each group are identified on the associated outline.
5. The shaded areas are not applicable to the category tier.

BWR RO Examination Outline

Printed: 11/14/2000

Facility: Peach Bottom Atomic Power Stat

ES - 401

Emergency and Abnormal Plant Evolutions - Tier 1 / Group 1

Form ES-401-2

E/APE #	E/APE Name / Safety Function	K1	K2	K3	A1	A2	G	KA Topic	Imp.	Points
295006	SCRAM / 1		X					AK2.02 - Reactor water level control system	3.8	1
295006	SCRAM / 1			X				AK3.06 - Recirculation pump speed reduction: Plant-Specific	3.2	1
295007	High Reactor Pressure / 3			X				AK3.02 - HPCI operation: Plant-Specific	3.7	1
295007	High Reactor Pressure / 3	X						AK1.01 - Pump shutoff head	2.9	1
295010	High Drywell Pressure / 5			X				AK3.01 - Drywell venting	3.8	1
295014	Inadvertent Reactivity Addition / 1				X			AA1.07 - Cold water injection	4.0	1
295015	Incomplete SCRAM / 1		X					AK2.02 - RMCS: Plant-Specific	3.6	1
295015	Incomplete SCRAM / 1				X			AA1.07 - Neutron monitoring system	3.6	1
295024	High Drywell Pressure / 5		X					EK2.11 - Drywell spray (RHR) logic: Mark-I&II	4.2	1
295024	High Drywell Pressure / 5						X	2.4.35 - Knowledge of local auxiliary operator tasks during emergency operations including system geography and system implications.	3.3	1
295031	Reactor Low Water Level / 2	X						EK1.01 - Adequate core cooling.	4.6*	1
295031	Reactor Low Water Level / 2					X		EA2.01 - Reactor water level	4.6*	1
500000	High Containment Hydrogen Concentration / 5	X						EK1.01 - Containment integrity	3.3	1

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

Group Point Total: 13

BWR RO Examination Outline

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Facility: Peach Bottom Atomic Power Stat

ES - 401

Emergency and Abnormal Plant Evolutions - Tier 1 / Group 2

Form ES-401-2

E/APE #	E/APE Name / Safety Function	K1	K2	K3	A1	A2	G	KA Topic	Imp.	Points
295001	Partial or Complete Loss of Forced Core Flow Circulation / 1				X			AA1.06 - Neutron monitoring system	3.3	1
295001	Partial or Complete Loss of Forced Core Flow Circulation / 1				X			AA1.07 - Nuclear boiler instrumentation system	3.1	1
295002	Loss of Main Condenser Vacuum / 3	X						AK1.03 - Loss of heat sink	3.6	1
295004	Partial or Complete Loss of D.C. Power / 6		X					AK2.02 - Batteries	3.0	1
295004	Partial or Complete Loss of D.C. Power / 6	X						AK1.05 - Loss of breaker protection	3.3	1
295008	High Reactor Water Level / 2	X						AK1.01 - Moisture carryover	3.0	1
295012	High Drywell Temperature / 5					X		AA2.01 - Drywell temperature	3.8	1
295013	High Suppression Pool Temperature / 5		X					AK2.01 - Suppression pool cooling	3.6	1
295017	High Off-Site Release Rate / 9			X				AK3.04 - Power reduction	3.6	1
295017	High Off-Site Release Rate / 9					X		AA2.04 - †Source of off-site release	3.6	1
295018	Partial or Complete Loss of Component Cooling Water / 8			X				AK3.07 - Cross-connecting with backup systems	3.1	1
295019	Partial or Complete Loss of Instrument Air / 8		X					AK2.07 - Condensate system	3.2	1
295019	Partial or Complete Loss of Instrument Air / 8						X	2.4.11 - Knowledge of abnormal condition procedures.	3.4	1
295022	Loss of CRD Pumps / 1					X		AA2.02 - CRD system status	3.3	1
295028	High Drywell Temperature / 5			X				EK3.02 - RPV flooding	3.5	1

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ES - 401

Emergency and Abnormal Plant Evolutions - Tier 1 / Group 2

Form ES-401-2

E/APE #	E/APE Name / Safety Function	K1	K2	K3	A1	A2	G	KA Topic	Imp.	Points
295029	High Suppression Pool Water Level / 5	X						EK1.01 - Containment integrity	3.4	1
295030	Low Suppression Pool Water Level / 5				X			EA1.05 - HPCI	3.5	1
295033	High Secondary Containment Area Radiation Levels / 9			X				EK3.02 - Reactor SCRAM	3.5	1
295034	Secondary Containment Ventilation High Radiation / 9					X		EA2.01 - Ventilation radiation levels	3.8	1

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

Group Point Total: 19

BWR RO Examination Outline

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Facility: Peach Bottom Atomic Power Stat

ES - 401

Plant Systems - Tier 2 / Group 2

Form ES-401-2

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
205000	Shutdown Cooling System (RHR Shutdown Cooling Mode) / 4					X							K5.02 - Valve operation	2.8	1
215002	Rod Block Monitor System / 7				X								K4.01 - Prevent control rod withdrawal: BWR-3, 4, 5	3.4	1
215002	Rod Block Monitor System / 7								X				A2.03 - Loss of associated reference APRM channel: BWR-3, 4, 5	3.1	1
219000	RHR/LPCI: Torus/Suppression Pool Cooling Mode / 5								X				A2.04 - Valve openings	3.1	1
226001	RHR/LPCI: Containment Spray System Mode / 5	X											K1.01 - Suppression pool	3.4	1
226001	RHR/LPCI: Containment Spray System Mode / 5			X									K3.02 - Containment/drywell/suppression chamber temperature	3.5	1
230000	RHR/LPCI: Torus/Suppression Pool Spray Mode / 5	X											K1.08 - Nuclear boiler instrumentation	3.1	1
230000	RHR/LPCI: Torus/Suppression Pool Spray Mode / 5									X			A3.01 - Valve operation	3.4	1
239001	Main and Reheat Steam System / 3				X								K4.05 - Steam flow measurement	3.1	1
239001	Main and Reheat Steam System / 3							X					A1.05 - Main steam line radiation monitors	3.6	1
245000	Main Turbine Generator and Auxiliary Systems / 4											X	2.1.25 - Ability to obtain and interpret station reference materials such as graphs, monographs, and tables which contain performance data.	2.8	1

BWR RO Examination Outline

Printed: 11/14/2000

Facility: Peach Bottom Atomic Power Stat

ES - 401 Plant Systems - Tier 2 / Group 2 Form ES-401-2

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
262001	A.C. Electrical Distribution / 6							X					A1.01 - Effect on instrumentation and controls of switching power supplies	3.1	1
263000	D.C. Electrical Distribution / 6							X					A1.01 - Battery charging/discharging rate	2.5	1
271000	Offgas System / 9	X											K1.01 - Condenser air removal system	3.1	1
271000	Offgas System / 9						X						K6.11 - Condenser vacuum	3.2	1
272000	Radiation Monitoring System / 7		X										K2.02 - Offgas radiation monitoring system	2.5	1
286000	Fire Protection System / 8					X							K5.06 - Heat detection	2.6	1
290001	Secondary Containment / 5										X		A4.02 - Reactor building area temperatures: Plant-Specific	3.3	1
300000	Instrument Air System (IAS) / 8		X										K2.01 - Instrument air compressor	2.8	1

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

Group Point Total: 19

BWR RO Examination Outline

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Facility: Peach Bottom Atomic Power Stat

ES - 401 Plant Systems - Tier 2 / Group 3 Form ES-401-2

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
215001	Traversing In-Core Probe / 7								X				A2.07 - †Failure to retract during accident conditions: Mark-I&II(Not-BWR1)	3.4	1
215001	Traversing In-Core Probe / 7	X											K1.05 - Primary containment isolation system: (Not-BWR1)	3.3	1
234000	Fuel Handling Equipment / 8			X									K3.04 - †core modifications/alterations	2.9	1
288000	Plant Ventilation Systems / 9					X							K5.01 - Airborne contamination control	3.1	1

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

Group Point Total: 4

Generic Knowledge and Abilities Outline (Tier 3)

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BWR RO Examination Outline

Form ES-401-5

Facility: Peach Bottom Atomic Power Stat

Generic Category	KA	KA Topic	Imp.	Points
Conduct of Operations	√ 2.1.29	Knowledge of how to conduct and verify valve lineups. 135	3.4	1
	√ 2.1.32	Ability to explain and apply system limits and precautions. 136	3.4	1
	2.1.3	Knowledge of shift turnover practices.	3.0	1
	2.1.19	Ability to use plant computer to obtain and evaluate parametric information on system or component status.	3.0	1
Category Total:			4	
Equipment Control	2.2.12	Knowledge of surveillance procedures.	3.0	1
	2.2.27	Knowledge of the refueling process.	2.6	1
	2.2.11	Knowledge of the process for controlling temporary changes.	2.5	1
Category Total:			3	
Radiation Control	√ 2.3.1	Knowledge of 10 CFR 20 and related facility radiation control requirements. 145	2.6	1
	2.3.4	Knowledge of radiation exposure limits and contamination control, including permissible levels in excess of those authorized.	2.5	1
Category Total:			2	
Emergency Plan	√ 2.4.1	Knowledge of EOP entry conditions and immediate action steps. 148	4.3	1
	√ 2.4.20	Knowledge of operational implications of EOP warnings, cautions, and notes. 150	3.3	1
	2.4.24	Knowledge of loss of cooling water procedures.	3.3	1
	√ 2.4.4	Ability to recognize abnormal indications for system operating parameters which are entry-level conditions for emergency and abnormal operating procedures. 149	4.0	1
Category Total:			4	
Generic Total:			13	

Facility: Peach Bottom Atomic Power Station

Form ES-401-1

Exam Date: 02/01/2001

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	4	4	4				3	8			3	26
	2	3	2	3				2	5			2	17
	Tier Totals	7	6	7				5	13			5	43
2. Plant Systems	1	2	2	3	2	1	2	2	2	2	3	2	23
	2	2	1	1	1	1	1	2	1	0	0	3	13
	3	0	0	0	1	0	0	1	1	0	0	1	4
	Tier Totals	4	3	4	4	2	3	5	4	2	3	6	40
3. Generic Knowledge And Abilities					Cat 1		Cat 2		Cat 3		Cat 4		
					5		5		3		4		17

Note:

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2. Actual point totals must match those specified in the table.
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4. Systems/evolutions within each group are identified on the associated outline.
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BWR SRO Examination Outline

Printed: 11/14/2000

Facility: Peach Bottom Atomic Power Stat

ES - 401

Emergency and Abnormal Plant Evolutions - Tier 1 / Group 1

Form ES-401-1

E/APE #	E/APE Name / Safety Function	K1	K2	K3	A1	A2	G	KA Topic	Imp.	Points
295003	Partial or Complete Loss of A.C. Power / 6					X		AA2.01 - Cause of partial or complete loss of A.C. power	3.7	1
295006	SCRAM / 1		X					AK2.02 - Reactor water level control system	3.8	1
295006	SCRAM / 1					X		AA2.02 - Control rod position	4.4*	1
295007	High Reactor Pressure / 3	X						AK1.01 - Pump shutoff head	3.2	1
295007	High Reactor Pressure / 3			X				AK3.02 - HPCI operation: Plant-Specific	3.8*	1
295009	Low Reactor Water Level / 2					X		AA2.01 - Reactor water level	4.2	1
295010	High Drywell Pressure / 5			X				AK3.01 - Drywell venting	4.0*	1
295013	High Suppression Pool Temperature / 5		X					AK2.01 - Suppression pool cooling	3.7	1
295014	Inadvertent Reactivity Addition / 1				X			AA1.07 - Cold water injection	4.1	1
295015	Incomplete SCRAM / 1		X					AK2.02 - RMCS: Plant-Specific	3.7	1
295015	Incomplete SCRAM / 1				X			AA1.07 - Neutron monitoring system	3.7	1
295016	Control Room Abandonment / 7						X	2.1.4 - Knowledge of shift staffing requirements.	3.4	1
295017	High Off-Site Release Rate / 9			X				AK3.04 - Power reduction	3.8	1
295017	High Off-Site Release Rate / 9					X		AA2.04 - †Source of off-site release	4.3*	1
295023	Refueling Accidents / 8			X				AK3.03 - Ventilation isolation	3.6	1
295023	Refueling Accidents / 8					X		AA2.05 - †Entry conditions of emergency plan	4.6*	1

BWR SRO Examination Outline

Printed: 11/14/2000

Facility: Peach Bottom Atomic Power Stat

ES - 401

Emergency and Abnormal Plant Evolutions - Tier 1 / Group 1

Form ES-401-1

E/APE #	E/APE Name / Safety Function	K1	K2	K3	A1	A2	G	KA Topic	Imp.	Points
295024	High Drywell Pressure / 5		X					EK2.11 - Drywell spray (RHR) logic: Mark-I&II	4.2*	1
295024	High Drywell Pressure / 5						X	2.4.35 - Knowledge of local auxiliary operator tasks during emergency operations including system geography and system implications.	3.5	1
295025	High Reactor Pressure / 3						X	EA2.01 - Reactor pressure	4.3*	1
295025	High Reactor Pressure / 3						X	2.4.6 - Knowledge symptom based EOP mitigation strategies.	4.0	1
295030	Low Suppression Pool Water Level / 5				X			EA1.05 - HPCI	3.5	1
295030	Low Suppression Pool Water Level / 5						X	EA2.04 - Drywell/ suppression chamber differential pressure: Mark-I&II	3.7	1
295031	Reactor Low Water Level / 2	X						EK1.01 - Adequate core cooling.	4.7*	1
295031	Reactor Low Water Level / 2						X	EA2.01 - Reactor water level	4.6*	1
295038	High Off-Site Release Rate / 9	X						EK1.03 - †Meteorological effects on off-site release	3.8	1
500000	High Containment Hydrogen Concentration / 5	X						EK1.01 - Containment integrity	3.9	1

K/A Category Totals: 4 4 4 3 8 3

Group Point Total: 26

BWR SRO Examination Outline

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Facility: Peach Bottom Atomic Power Stat

ES - 401

Emergency and Abnormal Plant Evolutions - Tier 1 / Group 2

Form ES-401-1

E/APE #	E/APE Name / Safety Function	K1	K2	K3	A1	A2	G	KA Topic	Imp.	Points
295001	Partial or Complete Loss of Forced Core Flow Circulation / 1				X			AA1.06 - Neutron monitoring system	3.4	1
295004	Partial or Complete Loss of D.C. Power / 6		X					AK2.02 - Batteries	3.1	1
295005	Main Turbine Generator Trip / 3					X		AA2.04 - Reactor pressure	3.8	1
295008	High Reactor Water Level / 2	X						AK1.01 - Moisture carryover	3.2	1
295008	High Reactor Water Level / 2					X		AA2.04 - Heatup rate: Plant-Specific	3.3	1
295012	High Drywell Temperature / 5					X		AA2.01 - Drywell temperature	3.9	1
295018	Partial or Complete Loss of Component Cooling Water / 8			X				AK3.07 - Cross-connecting with backup systems	3.2	1
295019	Partial or Complete Loss of Instrument Air / 8		X					AK2.07 - Condensate system	3.2	1
295019	Partial or Complete Loss of Instrument Air / 8						X	2.4.11 - Knowledge of abnormal condition procedures.	3.6	1
295021	Loss of Shutdown Cooling / 4	X						AK1.01 - Decay heat	3.8	1
295028	High Drywell Temperature / 5			X				EK3.02 - RPV flooding	3.8	1
295029	High Suppression Pool Water Level / 5	X						EK1.01 - Containment integrity	3.7	1
295033	High Secondary Containment Area Radiation Levels / 9			X				EK3.02 - Reactor SCRAM	3.6	1
295034	Secondary Containment Ventilation High Radiation / 9					X		EA2.01 - Ventilation radiation levels	4.2	1
295035	Secondary Containment High Differential Pressure / 5				X			EA1.01 - Secondary containment ventilation system	3.6	1

BWR SRO Examination Outline

Printed: 11/14/2000

Facility: Peach Bottom Atomic Power Stat

ES - 401

Emergency and Abnormal Plant Evolutions - Tier 1 / Group 2

Form ES-401-1

E/APE #	E/APE Name / Safety Function	K1	K2	K3	A1	A2	G	KA Topic	Imp.	Points
295036	Secondary Containment High Sump/Area Water Level / 5						X	2.4.20 - Knowledge of operational implications of EOP warnings, cautions, and notes.	4.0	1
295036	Secondary Containment High Sump/Area Water Level / 5					X		EA2.01 - Operability of components within the affected area	3.2	1

K/A Category Totals: 3 2 3 2 5 2

Group Point Total: 17

BWR SRO Examination Outline

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Facility: Peach Bottom Atomic Power Stat

ES - 401

Plant Systems - Tier 2 / Group 1

Form ES-401-1

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
202002	Recirculation Flow Control System / 1											X	2.4.46 - Ability to verify that the alarms are consistent with the plant conditions.	3.6	1
202002	Recirculation Flow Control System / 1			X									K3.01 - Core flow	3.5	1
203000	RHR/LPCI: Injection Mode (Plant Specific) / 2		X										K2.02 - Valves	2.7*	1
206000	High Pressure Coolant Injection System / 2									X			A3.01 - Turbine speed: BWR-2, 3, 4	3.5	1
209001	Low Pressure Core Spray System / 2										X		A4.05 - Manual initiation controls	3.6	1
211000	Standby Liquid Control System / 1		X										K2.01 - SBLC pumps	3.1*	1
212000	Reactor Protection System / 7									X			A3.01 - Reactor power	4.4*	1
215005	Average Power Range Monitor/Local Power Range Monitor System / 7				X								K4.07 - Flow biased trip setpoints	3.7	1
215005	Average Power Range Monitor/Local Power Range Monitor System / 7								X				A2.02 - Upscale or downscale trips	3.7	1
217000	Reactor Core Isolation Cooling System (RCIC) / 2								X				A2.03 - Valve closures	3.3	1
223002	Primary Containment Isolation System/Nuclear Steam Supply Shut-Off / 5						X						K6.06 - Various process instrumentation	2.9	1

BWR SRO Examination Outline

Printed: 11/14/2000

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ES - 401

Plant Systems - Tier 2 / Group 1

Form ES-401-1

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
223002	Primary Containment Isolation System/Nuclear Steam Supply Shut-Off / 5			X									K3.16 - Shutdown cooling system/RHR	3.3	1
226001	RHR/LPCI: Containment Spray System Mode / 5	X											K1.01 - Suppression pool	3.6	1
226001	RHR/LPCI: Containment Spray System Mode / 5			X									K3.02 - Containment/drywell/suppression chamber temperature	3.5	1
239002	Relief/Safety Valves / 3						X						K6.02 - Air (Nitrogen) supply: Plant-Specific	3.5	1
241000	Reactor/Turbine Pressure Regulating System / 3					X							K5.05 - Turbine inlet pressure vs. turbine load	2.9	1
241000	Reactor/Turbine Pressure Regulating System / 3							X					A1.21 - Main condenser vacuum	3.4	1
261000	Standby Gas Treatment System / 9				X								K4.01 - Automatic system initiation	3.8	1
262001	A.C. Electrical Distribution / 6							X					A1.01 - Effect on instrumentation and controls of switching power supplies	3.4	1
264000	Emergency Generators (Diesel/Jet) / 6										X		A4.04 - Manual start, loading, and stopping of emergency generator: Plant-Specific	3.7	1
264000	Emergency Generators (Diesel/Jet) / 6	X											K1.01 - A.C. electrical distribution	4.1	1
290001	Secondary Containment / 5											X	2.2.23 - Ability to track limiting conditions for operations.	3.8	1
290001	Secondary Containment / 5										X		A4.02 - Reactor building area temperatures: Plant-Specific	3.4	1

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ES - 401

Plant Systems - Tier 2 / Group 1

Form ES-401-1

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
	K/A Category Totals:	2	2	3	2	1	2	2	2	2	3	2	Group Point Total:		23

BWR SRO Examination Outline

Printed: 11/14/2000

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ES - 401

Plant Systems - Tier 2 / Group 2

Form ES-401-1

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
201001	Control Rod Drive Hydraulic System / 1							X					A1.01 - CRD drive water header pressure	2.9	1
201001	Control Rod Drive Hydraulic System / 1											X	2.1.32 - Ability to explain and apply system limits and precautions.	3.8	1
215002	Rod Block Monitor System / 7				X								K4.01 - Prevent control rod withdrawal: BWR-3, 4, 5	3.5	1
215003	Intermediate Range Monitor (IRM) System / 7			X									K3.04 - Reactor power indication	3.6	1
215003	Intermediate Range Monitor (IRM) System / 7								X				A2.01 - Power supply degraded	3.2	1
230000	RHR/LPCI: Torus/Suppression Pool Spray Mode / 5	X											K1.08 - Nuclear boiler instrumentation	3.2	1
234000	Fuel Handling Equipment / 8											X	2.2.27 - Knowledge of the refueling process.	3.5	1
245000	Main Turbine Generator and Auxiliary Systems / 4											X	2.1.25 - Ability to obtain and interpret station reference materials such as graphs, monographs, and tables which contain performance data.	3.1	1
263000	D.C. Electrical Distribution / 6							X					A1.01 - Battery charging/discharging rate	2.8	1
271000	Offgas System / 9						X						K6.11 - Condenser vacuum	3.3	1
271000	Offgas System / 9	X											K1.01 - Condenser air removal system	3.1	1
286000	Fire Protection System / 8					X							K5.06 - Heat detection	2.7	1

BWR SRO Examination Outline

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Facility: Peach Bottom Atomic Power Stat

ES - 401

Plant Systems - Tier 2 / Group 2

Form ES-401-1

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
300000	Instrument Air System (IAS) / 8		X										K2.01 - Instrument air compressor	2.8	1

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

Group Point Total: 13

BWR SRO Examination Outline

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Facility: Peach Bottom Atomic Power Stat

ES - 401

Plant Systems - Tier 2 / Group 3

Form ES-401-1

Sys/Ev #	System / Evolution Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	KA Topic	Imp.	Points
215001	Traversing In-Core Probe / 7								X				A2.07 - †Failure to retract during accident conditions: Mark-I&II(Not-BWR1)	3.7	1
239001	Main and Reheat Steam System / 3				X								K4.05 - Steam flow measurement	3.2	1
239001	Main and Reheat Steam System / 3							X					A1.05 - Main steam line radiation monitors	3.6	1
256000	Reactor Condensate System / 2											X	2.4.48 - Ability to interpret control room indications to verify the status and operation of system, and understand how operator action and directives affect plant and system conditions.	3.8	1

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

Group Point Total: 4

Generic Knowledge and Abilities Outline (Tier 3)

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BWR SRO Examination Outline

Form ES-401-5

Facility: Peach Bottom Atomic Power Stat

Generic Category	KA	KA Topic	Imp.	Points
Conduct of Operations	✓ 2.1.13	Knowledge of facility requirements for controlling vital / controlled access. 132	2.9	1
	2.1.32	Ability to explain and apply system limits and precautions.	3.8	1
	2.1.29	Knowledge of how to conduct and verify valve lineups.	3.3	1
	✓ 2.1.12	Ability to apply technical specifications for a system. 131	4.0	1
	✓ 2.1.22	Ability to determine Mode of Operation. 134	3.3	1
Category Total:			5	
Equipment Control	✓ 2.2.6	Knowledge of the process for making changes in procedures as described in the safety analysis report. 138	3.3	1
	✓ 2.2.3	(multi-unit) Knowledge of the design, procedural, and operational differences between units. 137	3.3	1
	✓ 2.2.20	Knowledge of the process for managing troubleshooting activities. 141	3.3	1
	✓ 2.2.22	Knowledge of limiting conditions for operations and safety limits. 143	4.1	1
	✓ 2.2.21	Knowledge of pre and post maintenance operability requirements. 142	3.5	1
Category Total:			5	
Radiation Control	✓ 2.3.4	Knowledge of radiation exposure limits and contamination control, including permissible levels in excess of those authorized. 147	3.1	1
	✓ 2.3.2	Knowledge of facility ALARA program. 146	2.9	1
	2.3.1	Knowledge of 10 CFR 20 and related facility radiation control requirements.	3.0	1
Category Total:			3	

Generic Knowledge and Abilities Outline (Tier 3)

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BWR SRO Examination Outline

Form ES-401-5

Facility: Peach Bottom Atomic Power Stat

Generic Category	KA	KA Topic	Imp.	Points
Emergency Plan	2.4.1	Knowledge of EOP entry conditions and immediate action steps.	4.6	1
	2.4.20	Knowledge of operational implications of EOP warnings, cautions, and notes.	4.0	1
	2.4.4	Ability to recognize abnormal indications for system operating parameters which are entry-level conditions for emergency and abnormal operating procedures.	4.3	1
	✓ 2.4.38	Ability to take actions called for in the facility emergency plan, including (if required) supporting or acting as emergency coordinator. 152	4.0	1

Category Total: 4

Generic Total: 17