

# Draft Submittal

(Pink Paper)

DRAFT Written Exam Quality Checklist (ES-401-6)  
& Written Exam Sample Plan

BRUNSWICK JULY-AUG EXAM - 325, 324/2007-301  
DRAFT WRITTEN EXAM QUALITY CHECKLIST  
(ES-401-6) & SAMPLE PLAN

Facility: Brunswick		Date of Exam: July 2007		Exam Level: RO/SRO		
Item Description				Initial		
				a	b*	c#
1. Questions and answers technically accurate and applicable to facility.				SD	MB	MB
2. a. NRC K/As referenced for all questions. b. Facility learning objectives referenced as available.				SD	MB	MB
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401				SD	MB	MB
4. The sampling process was random and systematic. (If more than 4 RO and 2 SRO questions were repeated from the last 2 NRC licensing exams, consult the NRR OL Program Office)				SD	MB	MB
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input checked="" type="checkbox"/> the audit exam was systematically and randomly developed <input type="checkbox"/> the audit exam was completed before the license exam was started <input type="checkbox"/> the examinations were developed independently <input type="checkbox"/> the licensee certifies that there is no duplication other (explain)				SD	MB	MB
6. Bank use meets limits (no more than 75 percent from the bank at least 10 percent new, and the rest new or modified); enter the actual RO / SRO-only question distribution(s) at right.				Bank	Modified	New
				43 / 15	0 / 0	32 / 10
7. Between 50 and 60 percent of the question on the RO exam are written at the comprehension/ analysis level; the SRO exam may exceed 60 percent if the randomly selected K/As support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right				Memory	C/A	
				32 / 7	43 / 18	
8. References/handouts provided do not give away answers or aid in the elimination of distractors.				SD	MB	MB
9. Question content conforms with specific K/A statements in the previously approved examination outline and is appropriate for the tier to which they are assigned; deviations are justified.				SD	MB	MB
10. Question psychometric quality and format meet the guidelines in ES Appendix B.				SD	MB	MB
11. The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with value on cover sheet.				SD	MB	MB
Printed Name / Signature						Date
a.	Author	Steven Dennis / <i>Steven Dennis</i>				5-25-07
b.	Facility Reviewer (*)	Marcus Pearson / <i>Marcus Pearson</i>				053007
c.	NRC Chief Examiner (#)	MARK A. BATES / <i>Mark A. Bates</i>				06/15/2007
d.	NRC Regional Supervisor	Robert HAAG / <i>Robert Haag</i>				6/15/07
Note: * The facility reviewer's initials/signature are not applicable for NRC-developed examinations. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.						

\* Exceptions noted on 401-9. MB 6/15/07

\*\* Will be more thoroughly evaluated after ES-401-9 comments are addressed. MB 6/15/07

Facility:		Brunswick NRC										Date of Exam:		JULY 2007				
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 *	Total	A2	G*	Total		
1. Emergency & Abnormal Plant Evolutions	1	5✓	4✓	1✓	N/A			2✓	4✓	N/A			4✓	20✓	3✓	4✓	7✓	
	2	2✓	1✓	2✓	N/A			1✓	1✓	N/A			0✓	7✓	2✓	1✓	3✓	
	Tier Totals	7✓	5✓	3✓	N/A			3✓	5✓	N/A			4✓	27✓	5✓	5✓	10✓	
2. Plant Systems	1	4✓	3✓	1✓	5✓	1✓	2✓	0✓	2✓	3✓	2✓	3✓	26✓	2✓	3✓	5✓		
	2	1✓	1✓	1✓	1✓	1✓	1✓	3✓	0✓	1✓	2✓	0✓	12✓	0	1	2✓	3✓	
	Tier Totals	5✓	4✓	2✓	6✓	2✓	3✓	3✓	2✓	4✓	4✓	3✓	38✓	3✓	5✓	8✓		
3. Generic Knowledge and Abilities Categories				1		2		3		4		10		1	2	3	4	7
				2✓		2✓		2✓		4✓				2✓	2✓	2✓	1✓	
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 ± from that specified in the table based on NRC revisions. The final RO exam must total 75 points and the SRO-only exam must total 25 points.																
	3.	Select topics from many systems and evolutions; avoid selecting more than two 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 applicable license level, and the point totals for each system and category. Enter the group and tier totals for each category in the table above; 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.																
	8.	For Tier 3, enter the K/A numbers, descriptions, importance ratings, and point totals on Form ES-401-3.																
	9.	Refer to ES-401, Attachment 2, for guidance regarding the elimination of inappropriate K/A statements.																

Written Examination Outline  
Emergency and Abnormal Plant Evolutions – Tier 1 Group 1

E/APE # / Name Safety Function	G	K1	K2	K3	A1	A2	Number	K/A Topic(s)	Imp.	Q#
295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4						X	AA2.01	Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF FORCED CORE FLOW CIRCULATION : Power/flow map.....	3.8	76
295003 Partial or Complete Loss of AC / 6	X						2.1.14	Conduct of Operations: Knowledge of system status criteria which require notification of plant personnel.	3.3	77
295024 High Drywell Pressure / 5	X						2.4.31	Emergency Procedures / Plan Knowledge of annunciators alarms and indications, and use of the response instructions.	3.4	78
295025 High Reactor Pressure / 3	X						2.1.27	Conduct of Operations: Knowledge of system purpose and or function.	2.9	79
295028 High Drywell Temperature / 5						X	EA2.01	Ability to determine and/or interpret the following as they apply to HIGH DRYWELL TEMPERATURE: Drywell Temperature	4.1	80
295030 Low Suppression Pool Water Level / 5						X	EA2.02	Ability to determine and/or interpret the following as they apply to LOW SUPPRESSION POOL WATER LEVEL : Suppression pool temperature.....	3.9	81
295038 High Off-site Release Rate / 9	X						2.1.23	Conduct of Operations: Ability to perform specific system and integrated plant procedures during all modes of plant operation.	4.0	82
295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4						X	AA2.05	Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF FORCED CORE FLOW CIRCULATION : Jet pump operability: Not-BWR-1&2.....	3.1	39
295003 Partial or Complete Loss of AC / 6		X					AK1.03	Knowledge of the operational implications of the following concepts as they apply to PARTIAL OR COMPLETE LOSS OF A.C. POWER : Under voltage/degraded voltage effects on electrical loads.....	2.9	40
295004 Partial or Total Loss of DC Pwr / 6	X						2.1.30	Conduct of Operations: Ability to locate and operate components, including local controls.	3.9	41
295005 Main Turbine Generator Trip / 3			X				AK2.01	Knowledge of the interrelations between MAIN TURBINE GENERATOR TRIP and the following: RPS	3.8	42
295006 SCRAM / 1						X	AA2.01	Ability to determine and/or interpret the following as they apply to SCRAM : Reactor power.....	4.5	43

Written Examination Outline  
Emergency and Abnormal Plant Evolutions – Tier 1 Group 1

E/APE # / Name Safety Function	G	K1	K2	K3	A1	A2	Number	K/A Topic(s)	Imp.	Q#
295016 Control Room Abandonment / 7			X				AK2.01	Knowledge of the interrelations between CONTROL ROOM ABANDONMENT and the following: Remote shutdown panel: Plant-Specific.....	4.4	44
295018 Partial or Total Loss of CCW / 8						X	AA2.04	Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF COMPONENT COOLING WATER : System flow.....	2.9	45
295019 Partial or Total Loss of Inst. Air / 8					X		AA1.01	Ability to operate and/or monitor the following as they apply to PARTIAL OR COMPLETE LOSS OF INSTRUMENT AIR : Backup Air supply	3.5	46
295021 Loss of Shutdown Cooling / 4			X				AK2.03	Knowledge of the interrelations between LOSS OF SHUTDOWN COOLING and the following: RHR/shutdown cooling.....	3.6	47
295023 Refueling Acc Cooling Mode / 8			X				AK2.03	Knowledge of the interrelations between REFUELING ACCIDENTS and the following: Radiation monitoring equipment.....	3.4	48
295024 High Drywell Pressure / 5	X						2.2.25	Equipment Control Knowledge of bases in technical specifications for limiting conditions for operations and safety limits.	2.5	49
295025 High Reactor Pressure / 3	X						2.1.23	Conduct of Operations: Ability to perform specific system and integrated plant procedures during different modes of plant operation	3.9	50
295026 Suppression Pool High Water Temp. / 5	X						2.1.2	Conduct of Operations: Knowledge of operator responsibilities during all modes of plant operation.	3.0	51
295028 High Drywell Temperature / 5				X			EK3.01	Knowledge of the reasons for the following responses as they apply to HIGH DRYWELL TEMPERATURE: Emergency depressurization	3.6	52
295028 High Drywell Temperature / 5					X		EA1.04	Ability to operate and/or monitor the following as they apply to HIGH DRYWELL TEMPERATURE : Drywell pressure.....	3.9	53
295030 Low Suppression Pool Water Level / 5		X					EK1.01	Knowledge of the operational implications of the following concepts as they apply to LOW SUPPRESSION POOL WATER LEVEL: Steam condensation.....	3.8	54
295031 Reactor Low Water Level / 2		X					EK1.02	Knowledge of the operational implications of the following concepts as they apply to REACTOR LOW WATER LEVEL : Natural circulation: Plant-Specific.....	3.8	55

2011-09-30

Written Examination Outline  
 Emergency and Abnormal Plant Evolutions – Tier 1 Group 1

E/APE # / Name Safety Function	G	K1	K2	K3	A1	A2	Number	K/A Topic(s)	Imp.	Q#
295037 SCRAM Condition Present and Power Above APRM Downscale or Unknown / 1						X	EA2.06	Ability to determine and/or interpret the following as they apply to SCRAM CONDITION PRESENT AND REACTOR POWER ABOVE APRM DOWNSCALE OR UNKNOWN : Reactor pressure.....	4.0	56
295038 High Off-site Release Rate / 9		X					EK1.01	Knowledge of the operational implications of the following concepts as they apply to HIGH OFF-SITE RELEASE RATE : Biological effects of radioisotope ingestion.....	2.5	57
600000 Plant Fire On-site / 8		X					AK1.02	Knowledge of the operation applications of the following concepts as they apply to Plant Fire On Site: Fire Fighting	2.9	58
K/A Category Point Totals:	4/4	5	4	1	2	4/3	Group Point Total:			20/7

6/10/50

Written Examination Outline  
Emergency and Abnormal Plant Evolutions – Tier 1 Group 2

E/APE # / Name Safety Function	G	K1	K2	K3	A1	A2	Number	K/A Topic(s)	Imp.	Q#
295008 High Reactor Water Level / 5						X	AA2.02	Ability to determine and/or interpret the following as they apply to HIGH REACTOR WATER LEVEL : Steam Flow/ Feed Flow mismatch	3.4	83
295029 High Suppression Pool Water Level / 5	X						2.1.32	Conduct of Operations: Ability to explain and apply all system limits and precautions.	3.8	84
295032 High Secondary Containment Area Temperature / 5						X	EA2.02	Ability to determine and/or interpret the following as they apply to HIGH SECONDARY CONTAINMENT AREA TEMPERATURE : Equipment operability.....	3.5	85
295010 High Drywell Pressure / 5			X				AK2.05	Knowledge of the interrelations between HIGH DRYWELL PRESSURE and the following: Drywell cooling and ventilation.....	3.7	59
295015 Incomplete SCRAM / 1		X					AK1.02	Knowledge of the operational implications of the following concepts as they apply to INCOMPLETE SCRAM : (CFR 41.8 to 41.10) Cooldown effects on reactor power.....	3.9	60
295020 Inadvertent Cont. Isolation / 5 & 7		X					AK1.01	Knowledge of the operational implications of the following concepts as they apply to INADVERTENT CONTAINMENT ISOLATION : Loss of normal heat sink.....	3.7	61
295022 Loss of CRD Pumps / 1					X		AA1.01	Ability to operate and/or monitor the following as they apply to LOSS OF CRD PUMPS: CRD Hydraulic System	3.1	62
295029 High Suppression Pool Water Level / 5						X	EA2.02	Ability to determine and/or interpret the following as they apply to HIGH SUPPRESSION POOL WATER LEVEL : Reactor pressure.....	3.5	63
295033 High Secondary Containment Area Radiation Levels / 9				X			EK3.04	Knowledge of the reasons for the following responses as they apply to HIGH SECONDARY CONTAINMENT AREA RADIATION LEVELS : Personnel evacuation.....	4.0	64
295035 Secondary Containment High Differential Pressure / 5				X			EK3.01	Knowledge of the reasons for the following responses as they apply to SECONDARY CONTAINMENT HIGH DIFFERENTIAL PRESSURE : Blow-out panel operation: Plant-Specific.....	2.8	65
K/A Category Point Total:	0/1	2	1	2	1	1/2	Group Point Total:			7/3

05/04/09

Bruns NRC  
 Written Examination Outline  
 Plant Systems – Tier 2 Group 1

System #/Name	G	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	Number	K/A Topics	Imp.	Q#
203000 RHR/LPCI: Injection Mode	X											2.1.23	Conduct of Operations: Ability to perform specific system and integrated plant procedures during all modes of plant operation.	4.0	86
212000 RPS									X			A2.02	Ability to (a) predict the impacts of the following on the REACTOR PROTECTION SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: RPS bus power supply failure	3.9	87
215003 IRM									X			A2.02	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: IRM Inop condition	3.7	88
215004 Source Range Monitor	X											2.4.11	Emergency Procedures / Plan Knowledge of abnormal condition procedures	3.6	89
300000 Instrument Air	X											2.4.6	Emergency Procedures / Plan Knowledge symptom based EOP mitigation strategies.	4.0	90
203000 RHR/LPCI: Injection Mode										X		A3.09	Ability to monitor automatic operations of the RHR/LPCI: INJECTION MODE (PLANT SPECIFIC) including: Emergency generator load sequencing	3.6	1
205000 Shutdown Cooling			X									K2.02	Knowledge of electrical power supplies to the following: Motor operated valves	2.5	2
205000 Shutdown Cooling											X	A4.05	Ability to manually operate and/or monitor in the control room: Minimum flow valves	3.2	3
206000 HPCI					X							K4.18	Knowledge of HIGH PRESSURE COOLANT INJECTION SYSTEM design feature(s) and/or interlocks which provide for the following: Pump minimum flow: BWR-2,3,4	3.2	4
217000 RCIC			X									K2.02	Knowledge of electrical power supplies to the following: RCIC initiation signals (logic)	2.8	5
209001 LPCS		X										K1.09	Knowledge of the physical connections and/or cause- effect relationships between LOW PRESSURE CORE SPRAY SYSTEM and the following: Nuclear boiler instrumentation	3.2	6
202002 Recirc Flow Control											X	A4.09	Ability to manually operate and/or monitor in the control room: Core Flow	3.2	7



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 Written Examination Outline  
 Plant Systems – Tier 2 Group 1

System #/Name	G	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	Number	K/A Topics	Imp.	Q#
211000 SLC									X			A2.04	Ability to (a) predict the impacts of the following on the STANDBY LIQUID CONTROL SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Inadequate system flow	3.1	8
212000 RPS							X					K6.05	Knowledge of the effect that a loss or malfunction of the following will have on the REACTOR PROTECTION SYSTEM : RPS sensor inputs	3.5	9
212000 RPS									X			A2.09	Ability to (a) predict the impacts of the following on the REACTOR PROTECTION SYSTEM ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: High containment /Drywell pressure	4.1	10
215003 IRM							X					K6.02	Knowledge of the effect that a loss or malfunction of the following will have on the INTERMEDIATE RANGE MONITOR (IRM) SYSTEM : 24/48 volt D.C. power: Plant-Specific	3.6	11
215004 Source Range Monitor						X						K5.01	Knowledge of the operational implications of the following concepts as they apply to SOURCE RANGE MONITOR (SRM) SYSTEM : Detector operation	2.6	12
215005 APRM / LPRM	X											2.1.20	Emergency Procedures / Plan: Ability to execute procedure steps.	4.3	13
217000 RCIC	X											2.1.33	Conduct of Operations: Ability to recognize indications for system operating parameters which are entry-level conditions for technical specifications.	3.4	14
218000 ADS					X							K4.02	Knowledge of AUTOMATIC DEPRESSURIZATION SYSTEM design feature(s) and/or interlocks which provide for the following: Allows manual initiation of ADS logic	3.8	15
218000 ADS	X											2.4.49	Emergency Procedures / Plan Ability to perform without reference to procedures those actions that require immediate operation of system components and controls.	4.0	16
223002 PCIS/Nuclear Steam Supply Shutoff					X							K4.05	Knowledge of PRIMARY CONTAINMENT ISOLATION SYSTEM/NUCLEAR STEAM SUPPLY SHUT-OFF design feature(s) and/or interlocks which provide for the following: Single failures will not impair the function ability of the system	2.9	17

05/16/15

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 Written Examination Outline  
 Plant Systems – Tier 2 Group 1

System #/Name	G	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	Number	K/A Topics	Imp.	Q#
239002 SRVs		X										K1.07	Knowledge of the physical connections and/or cause- effect relationships between RELIEF/SAFETY VALVES and the following: Suppression pool	3.6	18
259002 Reactor Water Level Control					X							K4.10	Knowledge of REACTOR WATER LEVEL CONTROL SYSTEM design feature(s) and/or interlocks which provide for the following: Three element control	3.4	19
261000 SGTS		X										K1.09	Knowledge of the physical connections and/or cause- effect relationships between SGTS and the following: PCIS	3.2	20
262001 AC Electrical Distribution										X		A3.03	Ability to monitor automatic operations of the A.C. ELECTRICAL DISTRIBUTION including: Load shedding	3.4	21
262002 UPS (AC/DC)					X							K4.01	Knowledge of UNINTERRUPTABLE POWER SUPPLY (A.C./D.C.) design feature(s) and/or interlocks which provide for the following: Transfer from preferred power to alternate power supplies	3.1	22
263000 DC Electrical Distribution			X									K2.01	Knowledge of electrical power supplies to the following: Major D.C. loads	3.1	23
264000 EDGs		X										K1.07	Knowledge of the physical connections and/or cause- effect relationships between EMERGENCY GENERATORS (DIESEL/JET) and the following: Emergency core cooling systems	3.9	24
300000 Instrument Air				X								K3.02	Knowledge of the effect that a loss or malfunction of the Instrument Air System will have on the following: Systems having pneumatic valves or controls.	3.3	25
400000 Component Cooling Water										X		A3.01	Ability to monitor automatic operations of the CCWS including: Setpoints on instrument signal levels for normal operations, warnings, and trips that are applicable to the CCWS	3.0	26
K/A Category Point Totals:	3/3	4	3	1	5	1	2	0	2/2	3	2	Group Point Total:			26/5

05/14/10

Brunswick  
 Written Examination Outline  
 Plant Systems – Tier 2 Group 2

System #/Name	G	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	Number	K/A Topics	Imp.	Q#
206000 HPCI	X											2.4.7	Knowledge of event based EOP mitigation strategies	3.8	91
290001 Secondary CTMT									X			A2.03	Ability to (a) predict the impacts of the following on the SECONDARY CONTAINMENT ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: High area radiation	3.6	92
226001 RHR/LPCI Containment Spray Mode	X											2.1.9	Conduct of Operations: Ability to apply tech specs for a system	4.0	93
201002 RMCS											X	A4.02	Ability to manually operate and/or monitor in the control room: Emergency in/notch override switch	3.5	27
201003 Control Rod and Drive Mechanism								X				A1.02	Ability to predict and/or monitor changes in parameters associated with operating the Control Rod and Drive Mechanism controls including: CRD Drive Pressure	2.8	28
201006 RWM							X					K6.01	Knowledge of the effect that a loss or malfunction of the following will have on the ROD WORTH MINIMIZER SYSTEM (RWM) (PLANT SPECIFIC) : RWM power supply: P-Spec(Not-BWR6)	2.8	29
202001 Recirculation				X								K3.06	Knowledge of the effect that a loss or malfunction of the RECIRCULATION SYSTEM will have on following: Low pressure coolant injection logic: Plant-Specific	3.7	30
202002 Recirculation Flow Control					X							K4.02	Knowledge of RECIRCULATION FLOW CONTROL SYSTEM design feature(s) and/or interlocks which provide for the following: Recirculation pump speed control: Plant-Specific	3.0	31
204000 RWCU						X						K5.05	Knowledge of the operational implications of the following concepts as they apply to RWCU: Flow Controllers	2.6	32
241000 Reactor/Turbine Pressure Regulator								X				A1.14	Ability to predict and/or monitor changes in parameters associated with operating the REACTOR/TURBINE PRESSURE REGULATING SYSTEM controls including: Pressure setpoint/pressure demand	3.4	33
256000 Reactor Condensate								X				A1.09	Ability to predict and/or monitor changes in parameters associated with operating the REACTOR CONDENSATE SYSTEM controls including: Feedwater temperature	3.1	34

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Written Examination Outline  
Plant Systems – Tier 2 Group 2

System #/Name	G	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	Number	K/A Topics	Imp.	Q#
268000 Radwaste											X	A4.01	Ability to manually operate and/or monitor in the control room: Sump integrators	3.4	35
286000 Fire Protection			X									K2.03	Knowledge of electrical power supplies to the following: <u>Fire detection system</u> Plant-Specific	2.5	36
290001 Secondary CTMT										X		A3.02	Ability to monitor automatic operations of the SECONDARY CONTAINMENT including: Normal building differential pressure: Plant-Specific	3.5	37
290002 Reactor Vessel Internals		X										K1.05	Knowledge of the physical connections and/or cause- effect relationships between REACTOR VESSEL INTERNALS and the following: RHR: Plant-Specific	3.1	38
K/A Category Point Totals:	0/2	1	1	1	1	1	1	3	0/1	1	2	Group Point Total:			12/3

L.01/10/15/0

Facility:	Brunswick NRC	Date of Exam:	3/10/2007			
Category	K/A #	Topic	RO		SRO-Only	
			IR	Q#	IR	Q#
1. Conduct of Operations	2.1.12	Ability to apply technical specifications for a system.			4.0	94
	2.1.25	Ability to obtain and interpret station reference materials such as graphs, monographs, and tables which contain performance data.			3.1	95
	2.1.32	Ability to explain and apply all system limits and precautions.	3.4	66		
	2.1.1	Knowledge of conduct of operations requirements	3.7	67		
	Subtotal			2		2
2. Equipment Control	2.2.7	Knowledge of the process for conducting tests or experiments not described in the safety analysis report.			3.2	96
	2.2.25	Knowledge of bases in technical specifications for limiting conditions for operations and safety limits.			3.7	97
	2.2.34	Knowledge of the process for determining the internal and external effects on core reactivity.	2.8	68		
	2.2.3	(multi-unit) Knowledge of the design, procedural, and operational differences between units.	3.1	69		
	Subtotal			2		2
3. Radiation Control	2.3.3	Knowledge of SRO responsibilities for auxiliary systems that are outside the control room (e.g., waste disposal and handling systems).			2.9	98
	2.3.4	Knowledge of radiation exposure limits and contamination control, including permissible levels in excess of those authorized.			3.1	99
	2.3.10	Ability to perform procedures to reduce excess levels of radiation and guard against personnel exposure	2.9	70		
	2.3.1	Knowledge of 10 CFR: 20 and related facility radiation control requirements	2.6	71		
	Subtotal			2		2
4. Emergency Procedures / Plan	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	100
	2.4.27	Knowledge of fire in the plant procedure.	3.0	72		
	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	73		
	2.4.23	Knowledge of the bases for prioritizing emergency procedure implementation during emergency operations.	2.8	74		
	2.4.15	Knowledge of communications procedures associated with EOP implementation	3.0	75		
	Subtotal			4		1
Tier 3 Point Total				10		7