Facility:		Wolf Cree	k							Da	ate	of E	xam	: 10	/29/20	007			
						R) K/	A C	ateg	jory	Poi	nts				SRC)-Only	Poir	nts
Tie	r	Group	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G *	Total	Ą	\2	G	*	Total
1.		1	3	3	3				3	3			3	18	:	2	4		6
Emerge	ency	2	1	1	2				1	2			2	9	:	2	2		4
Abnor Plar Evoluti	mal nt ions	Tier Totals	4	4	5				4	5			5	27	4	4	6		10
2.		1	3	3	2	3	2	2	2	2	3	3	3	28	:	2	3		5
Plar	nt	2	0	1	1	1	1	1	1	1	1	1	1	10	0	2	1		3
Syste	ms	Tier Totals	3	4	3	4	3	3	3	3	4	4	4	38	4	4	4	-	8
3. (Generi	c Knowled	ge a	ind			1		2		3	4	4	10	1	2	3	4	7
	Abilitie	es Categori	Categories33222212Ensure that at least two topics from every applicable K/A category are sampled within each tier of the RO and SRO-only outlines (i.e., except for one category in Tier 3 of the SRO-only outline,																
Note:	1.	Ensure th of the RC the "Tier	3 3 2 2 2 2 1 2 Ensure that at least two topics from every applicable K/A category are sampled within each tier of the RO and SRO-only outlines (i.e., except for one category in Tier 3 of the SRO-only outline, the "Tier Totals" in each K/A category shall not be less than two). The point total for each group and tier in the proposed outline must match that specified in the table. The final point total for each group and tier may deviate by ±1 from that specified in the															ch tier outline,	
	2.	The point table. The table bas must tota	Ensure that at least two topics from every applicable K/A category are sampled within each tier of the RO and SRO-only outlines (i.e., except for one category in Tier 3 of the SRO-only outline, the "Tier Totals" in each K/A category shall not be less than two). The point total for each group and tier in the proposed outline must match that specified in the table. The final point total for each group and tier may deviate by ±1 from that specified in the table based on NRC revisions. The final RO exam must total 75 points and the SRO-only exam must total 25 points. Systems/evolutions within each group are identified on the associated outline; systems or															in the in the y exam	
	3.	Systems/ evolution site-spec Attachme	The point total for each group and tier in the proposed outline must match that specified in the table. The final point total for each group and tier may deviate by ±1 from that specified in the table based on NRC revisions. The final RO exam must total 75 points and the SRO-only exam must total 25 points. Systems/evolutions within each group are identified on the associated outline; systems or evolutions that do not apply at the facility should be deleted and justified; operationally important site-specific systems that are not included on the outline should be added. Refer to ES-401, Attachment 2, for guidance regarding elimination of inappropriate K/A statements															or nportant, 101,	
	4.	Select to evolution	pics in th	from ne gr	n as 'oup	man befo	y sy ore s	sterr elec	ns ar ting	nd ev a se	volut	ions d top	as p bic fo	oossible; or any sys	sampl stem c	e ever or evolu	y syste ution.	em or	
	5.	Absent a shall be s	plar selec	nt sp cted.	ecifi Us	c pri e the	ority e RC	, onl and	y tho I SR	ose ł O ra	(As ting:	havi s for	ng a the	n importa	ance ra SRO-c	ating (I only po	R) of 2 ortions,	2.5 or resp	higher ectively.
	6.	Select SF	RO te	opics	s for	Tier	rs 1 a	and	2 fro	m th	e sh	ade	d sys	stems an	d K/A	catego	ories.		
	7.*	The gene the topics	eric (s mu	G) K st be	(/As e rele	in Ti evar	ers nt to	1 an the a	d 2 s appli	shall cabl	be s e ev	selec oluti	cted on o	from Sec r system	tion 2	of the	K/A C	atalo	g, but
	8.	On the for important and categorian equipment side of Construction SRO-only	llowi ce ra gory nt is olum y exa	ing p ating . Ent sam nn A2 ams.	bage s (IR er th pled 2 for	s, er s) fo ne gr in c Tier	nter or the oup other 2, 0	the k and thar Grou	۲/A r plica tier ר Ca p 2 (numb ible l total tego (Note	icen s for ry A e #1	, a b se le eac 2 or doe	rief c evel, ch ca G* c s no	descriptic and the itegory ir on the SF t apply).	on of e point t the ta RO-onl Use d	ach to otals (able ab y exar uplicat	pic, the #) for e ove; if n, ente e page	e topi each fuel er it o es for	cs' system handling n the left RO and
	9.	For Tier 3 description linked to	3, se ons, 10C	lect IRs, FR5	topic and 5.43	cs fro poir	om S nt tot	Secti als (on 2 (#) o	of tł n Fo	ne K rm E	/A C ES-4	atalo 01-3	og, and e 5. Limit S	enter th SRO se	ne K/A electio	numb ns to K	ers, ⁄/As t	hat are

E/APE # / Name Safety Function G K1 K2 K3 A1 A2 Number K/A Topic(s) Imp. G												
	E/APE # / Name	e Safety Function	G	K1	K2	K3	A1	A2	Number	K/A Topic(s)	lmp.	Q#

007 / Reactor Trip / 1					x	EA2.06	Ability to determine or interpret the following as they apply to a reactor trip: Occurrence of a reactor trip	4.5	76
026 / Loss of Component Cooling Water / 8	x					G2.1.33	Conduct of Operations: Ability to recognize indications for system operating parameters which are entry-level conditions for technical specifications	4.0	77
029 / Anticipated Transient Without Scram (ATWS) / 1	x					2.4.31	Emergency Procedures / Plan Knowledge of annunciators, alarms, and indications, and use of the response instructions.	3.4	78
040 / Steam Line Rupture / 4	x					2.2.25	Equipment Control Knowledge of bases in technical specifications for limiting conditions for operations and safety limits.	3.7	79
058 / Loss of DC Power / 6	x					2.1.14	Conduct of Operations: Knowledge of system status criteria which require the notification of plant personnel.	3.3	80
062 / Loss of Nuclear Service. Water / 4					x	AA2.03	Ability to determine and interpret the following as they apply to the Loss of Nuclear Service Water: The valve lineups necessary to restart the CCWS while bypassing the portion of the system causing the abnormal condition	2.9	81
009 / Small Break LOCA / 3			х			EK2.03	Knowledge of the interrelations between the small break LOCA and the following: S/Gs	3.0	39
011 / Large Break LOCA / 3					х	EA2.14	Ability to determine or interpret the following as they apply to a Large Break LOCA: Actions to be taken if limits for PTS are violated	3.6	40
015 / 17 / Reactor Coolant Pump Malfunctions / 4		x				AK1.05	Knowledge of the operational implications of the following concepts as they apply to the Reactor Coolant Pump Malfunctions (Loss of RC Flow): Effects of unbalanced RCS flow on in-core average temperature, core imbalance, and quadrant power tilt	2.7	41
022 / Loss of Reactor Coolant Makeup / 2	х					2.1.27	Conduct of Operations: Knowledge of system purpose and or function.	2.8	42
025 / Loss of Residual Heat Removal System / 4			x			AK2.01	Knowledge of the interrelations between the Loss of Residual Heat Removal System and the following: RHR heat exchangers	2.9	43
026 / Loss of Component Cooling Water / 8					х	AA2.01	Ability to determine and interpret the following as they apply to the Loss of Component Cooling Water: Location of a leak in the CCWS	2.9	44

E/APE # / Name Safety Function	G	K1	K2	K3	A1	A2	Number	K/A Topic(s)	Imp.	Q#
027 / Pressurizer Pressure Control System Malfunction / 3						х	AA2.02	Ability to determine and interpret the following as they apply to the Pressurizer Pressure Control Malfunctions: Normal values for RCS pressure	3.8	45
029 / Anticipated Transient Without Scram (ATWS) / 1					х		EA1.14	Ability to operate and monitor the following as they apply to a ATWS: Driving of control rods into the core	4.2	46
038 / Steam Generator Tube Rupture / 3		х					EK1.01	Knowledge of the operational implications of the following concepts as they apply to the SGTR: Use of steam tables	3.1	47
055 / Station Blackout / 6				x			EK3.02	Knowledge of the reasons for the following responses as the apply to the Station Blackout: Actions contained in EOP for loss of offsite and onsite power	4.3	48
056 / Loss of Off-site Power / 6				x			AK3.02	Knowledge of the reasons for the following responses as they apply to the Loss of Offsite Power: Actions contained in EOP for loss of offsite power	4.4	49
058 / Loss of DC Power / 6	х						2.1.32	Conduct of Operations: Ability to explain and apply all system limits and precautions.	3.4	50
062 / Loss of Nuclear Service. Water / 4					x		AA1.06	Ability to operate and / or monitor the following as they apply to the Loss of Nuclear Service Water: Control of flow rates to components cooled by the CCWS	2.9	51
065 / Loss of Instrument Air / 8	х						2.1.2	Conduct of Operations: Knowledge of operator responsibilities during all modes of plant operation.	3.0	52
E04 / LOCA Outside Containment / 3			x				EK2.2	Knowledge of the interrelations between the (LOCA Outside Containment) and the following: Facility's heat removal systems, including primary coolant, emergency coolant, the decay heat removal systems, and relations between the proper operation of these systems to the operation of the facility.	3.8	53
E05 / Loss of Secondary Heat Sink / 4				x			EK3.3	Knowledge of the reasons for the following responses as they apply to the (Loss of Secondary Heat Sink) Manipulation of controls required to obtain desired operating results during abnormal and emergency situations.	4.0	54

E/APE # / Name Safety Function	G	K1	K2	K3	A1	A2	Number	K/A Topic(s) Im	np.	Q#
E11 / Loss of Emergency Coolant Recirculation / 4					х		EA1.3	Ability to operate and / or monitor the following as they apply to the (Loss of Emergency Coolant Recirculation) Desired operating results during abnormal and emergency situations.	3.7	55
E12 / Uncontrolled Depressurization of all Steam Generators / 4		x					EK1.2	Knowledge of the operational implications of the following concepts as they apply to the (Uncontrolled Depressurization of all Steam Generators) Normal, abnormal and emergency operating procedures associated with (Uncontrolled Depressurization of all Steam Generators).3.	3.5	56
K/A Category Point Totals:	3/ <mark>4</mark>	3	3	3	3	3/ <mark>2</mark>	Group Point T	otal:		24

E/APE # / Name Safety Function	G	K1	K2	K3	A1	A2	Number	K/A Topic(s)	lmp.	Q#
E03 / LOCA Cooldown and Depressurization / 4	x						2.1.33	Conduct of Operations: Ability to recognize indications for system operating parameters which are entry-level conditions for technical specifications.	4.0	82
E06 / Degraded Core Cooling / 4						x	EA2.2	Ability to determine and interpret the following as they apply to the (Degraded Core Cooling) Adherence to appropriate procedures and operation within the limitations in the facility's license and amendments.	4.1	83
E08 / Pressurized Thermal Shock / 4	x						2.4.4	Emergency Procedures / Plan Ability to recognize abnormal indications for system operating parameters which are entry-level conditions for emergency and abnormal operating procedures.	4.3	84
E13 / Steam Generator Overpressure / 4						x	EA2.2	Ability to determine and interpret the following as they apply to the (Steam Generator Overpressure) Adherence to appropriate procedures and operation within the limitations in the facility's license and amendments.	3.4	85
001 / Continuous Rod Withdrawal / 1	х						2.2.22	Equipment Control Knowledge of limiting conditions for operations and safety limits.	3.4	57
028 / Pressurizer Level Control Malfunction / 2		x					AK1.01	Knowledge of the operational implications of the following concepts as they apply to Pressurizer Level Control Malfunctions: PZR reference leak abnormalities	2.8	58
051 / Loss of Condenser Vacuum / 4						x	AA2.02	Ability to determine and interpret the following as they apply to the Loss of Condenser Vacuum: Conditions requiring reactor and/or turbine trip	3.9	59
037 / Steam Generator Tube Leak / 3				x			AK3.07	Knowledge of the reasons for the following responses as they apply to the Steam Generator Tube Leak: Actions contained in EOP for steam generator tube leak	4.2	60
E03 / LOCA Cooldown and Depressurization / 4				x			EK3.3	Knowledge of the reasons for the following responses as they apply to the Post LOCA Cooldown and depressurization: Manipulation of controls required to obtain desired operating results during abnormal and emergency situations	3.9	61
E02 / SI Termination / 3	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	62

E/APE # / Name Safety Function	G	K1	K2	K3	A1	A2	Number	K/A Topic(s) Imp	Q#
E07 / Saturated Core Cooling / 4						x	EA2.2	Ability to determine and interpret the following as they apply to the (Saturated Core Cooling) Adherence to appropriate procedures and operation within the limitations in the facility's license and amendments.	63
E08 / Pressurized Thermal Shock / 4					x		EA1.1	Ability to operate and / or monitor the following as they apply to the (Pressurized Thermal Shock) Components, and functions of control and safety systems, including instrumentation, signals, interlocks, failure modes, and automatic and manual features.	64
E14 / High Containment Pressure / 5			x				EK2.1	Knowledge of the interrelations between the (High Containment Pressure) and the following: Components, and functions of control and safety systems, including instrumentation, signals, interlocks, failure modes, and automatic and manual features.	65
K/A Category Point Total:	4	1	1	2	1	4	Group Point T	otal:	13

System #/Name	G	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	Number	K/A Topics	Imp.	Q#
003 Reactor Coolant Pump	x											2.4.6	Emergency Procedures / Plan Knowledge symptom based EOP mitigation strategies.	4.0	86
005 Residual Heat Removal									x			A2.03	Ability to (a) predict the impacts of the following malfunctions or operations on the RHRS, and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: RHR pump/motor malfunction	3.1	87
008 Component Cooling Water									x			A2.07	Ability to (a) predict the impacts of the following malfunctions or operations on the CCWS, and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: Consequences of high or low CCW flow rate and temperature; the flow rate at which the CCW standby pump will start	2.8	88
059 Main Feedwater	x											2.4.30	Emergency Procedures / Plan Knowledge of which events related to system operations/status should be reported to outside agencies.	3.6	89
006 ECCS	x											2.1.33	Conduct of Operations: Ability to recognize indications for system operating parameters which are entry-level conditions for technical specifications	4.0	90
003 Reactor Coolant Pump			х									K2.01	Knowledge of bus power supplies to the following: RCPS	3.1	1
003 Reactor Coolant Pump	х											2.1.27	Conduct of Operations: Knowledge of system purpose and or function.	2.8	2
004 Chemical and Volume Control			х									K2.05	Knowledge of bus power supplies to the following: MOVs	2.7	3
004 Chemical and Volume Control					х							K4.16	Knowledge of CVCS design feature(s) and/or interlock(s) which provide for the following: Temperature at which the temperature control valve automatically diverts flow from the demineralizer to the VCT; reason for this diversion	2.6	4
005 Residual Heat Removal							x					K6.03	Knowledge of the effect of a loss or malfunction on the following will have on the RHRS: RHR heat exchanger	2.5	5
006 Emergency Core Cooling							x					K6.02	Knowledge of the effect of a loss or malfunction on the following will have on the ECCS: Core flood tanks (accumulators)	3.4	6

System #/Name	G	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	Number	K/A Topics	Imp.	Q#
													Ability to monitor automatic operation of the		
007 Pressurizer Relief/Quench Tank										Х		A3.01	PRTS, including: Components which discharge to the PRT	2.7	7
008 Component Cooling Water										х		A3.03	Ability to monitor automatic operation of the CCWS, including: All flow rate indications and the ability to evaluate the performance of this closed-cycle cooling system.	3.0	8
008 Component Cooling Water		х										K1.05	Knowledge of the physical connections and/or cause-effect relationships between the CCWS and the following systems: Sources of makeup water	3.0	9
010 Pressurizer Pressure Control						x						K5.01	Knowledge of the operational implications of the following concepts as the apply to the PZR PCS: Determination of condition of fluid in PZR, using steam tables	3.5	10
012 Reactor Protection									x			A2.04	Ability to (a) predict the impacts of the following malfunctions or operations on the RPS; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: Erratic power supply operation	3.1	11
013 Engineered Safety Features Actuation			х									K2.01	Knowledge of bus power supplies to the following: ESFAS/safeguards equipment control	3.6	12
013 Engineered Safety Features Actuation						х						K5.01	Knowledge of the operational implications of the following concepts as they apply to the ESFAS: Definitions of safety train and ESF channel	2.8	13
022 Containment Cooling											х	A4.04	Ability to manually operate and/or monitor in the control room: Valves in the CCS	3.1	14
026 Containment Spray											Х	A4.01	Ability to manually operate and/or monitor in the control room: CSS controls	4.5	15
039 Main and Reheat Steam		х										K1.05	Knowledge of the physical connections and/or cause-effect relationships between the MRSS and the following systems: T/G	2.5	16
059 Main Feedwater								x				A1.03	Ability to predict and/or monitor changes in parameters (to prevent exceeding design limits) associated with operating the MFW controls including: Power level restrictions for operation of MFW pumps and valves.	2.7	17
061 Auxillary/Emergency Feedwater				х								K3.02	Knowledge of the effect that a loss or malfunction of the AFW will have on the following: S/G	4.2	18

System #/Name	G	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	Number		K/A Topics	Imp.	Q#
061 Auxillary/Emergency Feedwater		x										K1.05	Knowledge of cause-effect	f the physical connections and/or relationships between the AFW and systems: Condensate system	2.6	19
062 AC Electrical Distribution				x								K3.03	Knowledge of of the ac distr following: DC	f the effect that a loss or malfunction ibution system will have on the system	3.7	20
062 AC Electrical Distribution	х											2.4.6	Emergency P symptom bas	rocedures / Plan Knowledge ed EOP mitigation strategies.	3.1	21
063 DC Electrical Distribution										х		A3.01	Ability to mon electrical syst dials, recorde	itor automatic operation of the dc tem, including: Meters, annunciators, rrs, and indicating lights	2.7	22
064 Emergency Diesel Generator									x			A2.16	Ability to (a) p malfunctions and (b) based procedures to consequence operations: Li testing of ED/	oredict the impacts of the following or operations on the ED/G system; d on those predictions, use o correct, control, or mitigate the s of those malfunctions or oss of offsite power during full-load 'G	3.3	23
073 Process Radiation Monitoring					x							K4.01	Knowledge of and/or interlo Release term setpoint	f PRM system design feature(s) cks which provide for the following: ination when radiation exceeds	4.0	24
076 Service Water								x				A1.02	Ability to prec parameters (t associated wi including: Re cooling water	lict and/or monitor changes in o prevent exceeding design limits) ith operating the SWS controls actor and turbine building closed temperatures.	2.6	25
078 Instrument Air											х	A4.01	Ability to man control room:	ually operate and/or monitor in the Pressure gauges	3.1	26
078 Instrument Air	х											2.4.50	Emergency P system alarm identified in th	rocedures / Plan Ability to verify setpoints and operate controls ne alarm response manual.	3.3	27
103 Containment					х							K4.04	Knowledge of feature(s) and following: Per access hatch	f containment system design d/or interlock(s) which provide for the rsonnel access hatch and emergency	2.5	28
K/A Category Point Totals:	6	3	3	2	3	2	2	2	4	3	3	Group F	Point Total:			33

System #/Name	G	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	Number	K/A Topics	Imp.	Q#
045 Main Turbine Generator	x											2.4.31	Emergency Procedures / Plan Knowledge of annunciators, alarms, and indications, and use of the response instructions.	3.4	91
068 Liquid Radwaste									x			A2.04	Ability to (a) predict the impacts of the following malfunctions or operations on the Liquid Radwaste System; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: Failure of automatic isolation	3.3	92
071 Waste Gas Disposal									x			A2.05	Ability to (a) predict the impacts of the following malfunctions or operations on the Waste Gas Disposal System ; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: Power failure to the ARM and PRM Systems	2.6	93
001 Control Rod Drive										х		A3.04	Ability to monitor automatic operation of the CRDS, including: Radial imbalance	3.5	29
002 Reactor Coolant											х	A4.08	Ability to manually operate and/or monitor in the control room: Safety parameter display systems	3.4	30
015 Nuclear Instrumentation							х					K6.02	Knowledge of the effect of a loss or malfunction on the following will have on the NIS: Discriminator/compensation circuits	2.6	31
017 In-core Temperature Monitor				х								K3.01	Knowledge of the effect that a loss or malfunction of the ITM system will have on the following: Natural circulation indications	3.5	32
027 Containment Iodine Removal			х									K2.01	Knowledge of bus power supplies to the following: Fans	3.1	33
034 Fuel Handling Equipment								х				A1.02	Ability to predict and/or monitor changes in parameters (to prevent exceeding design limits) associated with Fuel Handling System operating the controls including: Water level in the refueling canal	2.9	34
035 Steam Generator									x			A2.06	Ability to (a) predict the impacts of the following mal-functions or operations on the GS; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: Small break LOCA	4.5	35

System #/Name	G	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	Number		K/A Topics	lmp.	Q#
041 Steam Dump/Turbine Bypass Control					x							K4.11	Knowled interlock ave./T-r	lge of SDS design feature(s) and/or :(s) which provide for the following: T- ef. program	2.8	36
068 Liquid Radwaste						x						K5.03	Knowled following Radwas dose rat	dge of the operational implication of the g concepts as they apply to the Liquid te System: Units of radiation, dose, and e	2.6	37
072 Area Radiation Monitoring	х											2.1.28	Conduct and fund controls	t of Operations: Knowledge of the purpose ction of major system components and	3.2	38
K/A Category Point Totals:	2	0	1	1	1	1	1	1	3	1	1	Group Poir	nt Total:			13

Facility:		Wolf Cre	ek	Date of Exam:		10/2	9/2007		
Cater		K/A #		Topic		R	0	7 SRO IR 4.3 4.2 2.9 3.3 3.3 3.3 4.0 3.9	-Only
Cale	JOLA	N/A #		Topic		IR	Q#	IR	Q#
		2.1.6	Ability to su manageme and upset of	upervise and assume ent role during plant tr conditions.	a ansients			4.3	94
		2.1.20	Ability to execute procedure steps.					4.2	95
1	2.1.2	Knowledge of operator responsibilities during all modes of plant operation.			3.0	66			
Conduct of Operations	f S	2.1.31	Ability to locate control room switches, controls and indications and to determine that they are correctly reflecting the desired plant lineup.				67		
		2.1.19	Ability to us evaluate pa or compone	se plant computer to o arametric information ent STATUS	3.0	68			
		Subtota					3		2
	2.2.33	Knowledge of control rod programming.					2.9	96	
		2.2.32	Knowledge core config	of the effects of alter uration.	rations on			3.3	97
2. Equipment Control	2.2.30	Knowledge during fuel fuel handlir storage fac control roo operations,	3.5	69					
		2.2.25	Knowledge specifications	of bases in technica ons for limiting condition and safety limits.	2.5	70			
		2.2.12	Knowledge of surveillance procedures.			3.0	71		
		Subtotal					3		2
3. Radiation Control		2.3.10	Ability to pe excessive l against per	erform procedures to evels of radiation and sonnel exposure.	reduce d guard			3.3	98
	2.3.1	Knowledge facility radi	e of 10 CFR: 20 and a ation control requirem	related nents	2.6	72			
		2.3.2	Knowledge of facility ALARA program.			2.5	73		
		Subtota	I				2		1
		2.4.6	Knowledge strategies.	symptom based EO	P mitigation			4.0	99
4. Emergency Procedures / Plan	2	2.4.9	Knowledge implication of RHR) m	e of low power / shutd s in accident (e.g. LC itigation strategies.	own DCA or loss			3.9	100
	y s / Plan	2.4.46	Ability to ve consistent	erify that the alarms a with the plant condition	re ons.	3.5	74		
		2.4.5	Knowledge operating p abnormal,	e of the organization of the organization of the organization of orocedures network for and emergency evolution of the organization of the organiz	of the or normal, itions.	2.9	75		
		Subtotal					2		2
Tier 3 Point Total						10		7	

Tier / Randomly Group Selected K/A		Reason for Rejection			
2/2	068 A2.03	Evaporators no longer used at WCGS. Reselected 068 A2.04			
1 / 1	026 AA2.02	Removed because item was a direct overlap with dynamic scenario event. Randomly reselected 026 G2.1.33			
2 / 1	073 K4.02	Function does not exist at facility. Randomly reselected 073 K4.01			
1 / 2	059 AK3.01	Excessive overlap on radiation monitoring functions for liquid and gaseous radwaste. Randomly reselected 037 AK3.07			
1 / 2	061 AK3.02	Topic did not provide for enough action to develop a discriminating test item. Randomly reselected E03 EK3.3			
2 / 1	078 G2.1.28	Could not develop a psychometrically sound SRO level test item for topic. Randomly selected G2.1.33, determined not applicable, so randomly selected system 006.			

`Facility: Wolf Creek		Date of Examination:	10/2007		
Examination Level (circle o	ne): RO	Operating Test Number:	NRC		
Administrative Topic (see Note)	Type Code*	Describe activity to be performed			
Conduct of Operations	NR	Perform a manual QPTR calculation			
Conduct of Operations	NR	Determine RCS boration required to Shutdown conditions	Determine RCS boration required to reach Cold Shutdown conditions		
Equipment Control	NR	Identify clearance boundaries for safety related equipment			
Radiation Control	MR	Determine Stay Time for work to be performed			
Emergency Plan	NA				
NOTE: All items (5 total are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.					
*Type Codes & Criteria:	(C)ontrol ro Class(R)oo (D)irect from (N)ew or (M (P)revious 2 (S)imulator	om m n bank (≤ 3 for ROs; ≤ for SROs & R0 I)odified from bank (> 1) 2 exams (≤ 1; randomly selected)	D retakes)		

A1a – QPTR calc with a dropped rod with computer unavailable. QPTR will exceed limits A1b – Cooldown to CSD conditions required. Use curve book to determine amount of boration required to reach CSD

A2 – RHR or SI Pump tagout. Identify electrical and mechanical boundaries, including sequence of tag placement

A3 – Modify conditions of JPM performed on 2004 NRC Exam. (Or rad monitor setpoint adjustment if ROs perform that at WCNOC)

`Facility: Wolf Creek		Date of Examination:	10/2007		
Examination Level (circle o	ne): SRO	Operating Test Number:	NRC		
Administrative Topic (see Note)	Type Code*	Describe activity to be performed			
Conduct of Operations	NR	Perform/review a manual QPTR calculation and identify action IAW Technical Specifications.			
Conduct of Operations	NR	Determine RCS boration required to Shutdown conditions	reach Cold		
Equipment Control	NR	Review clearance boundaries for approval of work on safety related equipment			
Radiation Control	MR	Review a radioactive release permit for approval			
Emergency Plan	NR	Classify event and perform Protective Action Recommendations			
NOTE: All items (5 total are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.					
*Type Codes & Criteria: (C)ontrol ro Class(R)oo (D)irect from (N)ew or (N (P)revious (S)imulator		om m n bank (≤ 3 for ROs; ≤ for SROs & R0 I)odified from bank (> 1) 2 exams (≤ 1; randomly selected)	D retakes)		

A1a – QPTR calc with a dropped rod with computer unavailable. QPTR will exceed limits; determine actions IAW TS $\,$

A1b – Cooldown to CSD conditions required. Use curve book to determine amount of boration required to reach CSD. Same task as ROs perform

A2 – RHR or SI Pump tagout. Identify up to 3 critical errors on a clearance presented for approval.

A3 – Modify conditions of bank JPM.

A4 – Either modify a bank JPM or develop a new JPM requiring declaration of a GE and subsequent PAR.

Faci	ity: Wolf Creek Date of Ex		Date of Exam	ination:	10/2007	
Exa	m Level	(circle one):	RO / SRO(I) / SRO (U)	Operating Te	Operating Test No.:	
Con	Control Room Systems [@] (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U, including 1 ESF)					
			System / JPM Title		Type Code*	Safety Function
a.	001 — F	Rod Control			NAS	1
	Perforr moved	n actions to ma , continuous ro	aintain AFD in target band (Wh od withdrawal will require trippin	nen rods are ng reactor)		
b.	006 - E	CCS			DAS	2
	Isolate not clo	SI accumula se, requires	tors IAW EMG ES-11 (One is venting the associated accur	olation valve will nulator)		
c.	010 — F	Pressurizer Pre	essure Control		DS	3
	Depres	surize the RC	S (Possibly modify this one)			
d.	003 – F	RCP			MASL	4P
	Start a after s	n RCP (Modif tart; vibration	y bank JPM to require trip of or temperature problem)	the RCP shortly		
e.	103 – 0	Containment			DAS	5
	Manua	I CISA and C	PIS isolation			
f.	E05 – I	Loss of Secon	dary Heat Sink		NAS	4S
	Restore close, i	e AFW flow; re must close blo	ecover from RCS Bleed and Fe ck valve)	ed (PORV fails to		
g.	073 – F	Process Radia	tion Monitoring		DS	7
	Verify p	proper Unit Ve	nt sample pressure using SP-0)56A (RM-11)		
	(RO 0	NLY)				
h.	064 – E	EDG			DS	6
	Manua	lly start, synch	ronize, and load EDG NE02			
In-P	In-Plant Systems [@] (3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)					
i.	103 – 0	Containment			DER	5
	Locally	close all valve	es which receive a CISB			

	D	8		
006 – ECCS				
All RO and SRO-I control room (and in-plant) systems must be different and serve different safety functions; all 5 SRO-U systems must serve different safety functions; in-plant systems and functions may overlap those tested in the control room.				
Criteria for F	RO / SRO-I / SRC)-U		
4-6 / 4-6 / 2-3				
$\begin{array}{l} \leq 9 \ / \leq 8 \ / \leq 4 \\ \geq 1 \ / \geq 1 \ / \geq 1 \\ \geq 1 \ / \geq 1 \ / \geq 1 \\ \geq 2 \ / \geq 2 \ / \geq 1 \end{array}$ $\leq 3 \ / \leq 3 \ / \leq 2 \ (randomly \ selected) \\ \geq 1 \ / \geq 1 \ / \geq 1 \end{array}$				
) systems must be diffe serve different safety function for F Criteria for F 4-6 ≤ 9 ≥ 1 ≥ 1 ≥ 2 $\leq 3/\leq 3/\leq 2$ ≥ 1	DDDER) systems must be different and serve different safety functions; in-plant serve different safety functions; in-plant serve ntrol room.Criteria for RO / SRO-I / SRO $4-6 / 4-6 / 2-3$ $4-6 / 4-6 / 2-3$ $4-6 / 4-6 / 2-3$ $4-6 / 4-6 / 2-3$ $4-6 / 4-6 / 2-3$ $4-6 / 4-6 / 2-3$ $2 / 2 / 2 - 1$ $2 / 2 / 2 / 2 - 1$ $2 / 2 / 2 / 2 - 1$ $2 / 2 / 2 / 2 - 1$ $2 / 2 / 2 - 1$ $2 / 2 / 2 - 1$ $2 / 2 / 2 - 1$ $2 / 2 - 1 / 2 - 1$		