Question Nu	ımber 1									
System/Mo	System/Mode 000000 Stem									
Generic Kr	nowledges and Abilities									
KANo	2.1.07 Description Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation.									
Question	A reactor startup is in progress. You are directed to maintain reactor power at approximately 1% power. Which one of the following should be used to monitor power?  A. WR Nuclear Instrumentation  B. Delta-T Power  C. XC-105 Calorimetric									
	D. Main Generator Output									
Answer	A CFR Section 43.5 / 45.12 / 45.13									
Higher Leve	R0 🗹 3.7 SR0 🗆 4.4									
LP Number 0712-18	LP Objective 02.01									
State the p	ourpose of the Wide Range Nuclear Instrumentation System (WR NIS).									
Question So	urce New									
Reference	OPD-4-19									
Attachmen	t None									
Comments										

Question N	lumber 2							
System/M	ode 000000 Stem							
Generic k	Generic Knowledges and Abilities							
KANo	2.1.12 Description Ability to apply technical specifications for a system.							
Question	The following conditions exist:							
	River Temperature is 55F The plant is operating at full power Raw Water pump AC-10A has been out of service for the past three days Containment Spray Pump SI-3B has just been declared inoperable							
	In order to satisfy the requirements of Tech Specs, these conditions require that the plant be taken to HOT SHUTDOWN within which one of the following times.?							
	A. 12 hours							
	B. 36 hours							
	C. 4.5 Days							
	D. 7.5 Days							
Answer	D CFR Section 43.2 / 43.5 / 45.3							
Higher Lev	el 🗹 RO 🗹 2.9 SRO 🗆 4.0							
LP Number 0711-22	LP Number LP Objective							
0711-22	01.12							
Given a copy of Technical Specifications, apply the applicable Limiting Conditions for Operation (LCO).								
Question S	Question Source Bank 1995-18							
Reference	Tech Spec 2.4							
Attachme	Tech Spec 2.4							
Comments								

Question N	umber	3							
System/M	ode	000000	Stem						
Generic K	inowled	dges and Abili	ties						
KANo		2.1.23	Descrip					m and integrat f plant operatio	
Question	prere	quisites and p	orocedural st	teps in For	t Calhoun	system	Operatir	uired sequence	?
	A. Prerequisites and procedural steps must be satisfied or completed in sequence unless the procedure states otherwise.								
		erequisites m leted in sequ						are not requir	ed to be
	C. Prerequisites are not required to be satisfied in sequence but procedure steps must be completed in sequence unless the procedure states otherwise.								
	D. Prerequisites and procedure steps are not required to be satisfied or completed in sequence unless the procedure states otherwise.								
Answer		С	CFR Sect	tion	45.2 / 45	5.6			
Higher Lev	Higher Level □ R0 ☑ 3.9 SR0 □ 4.0								
LP Number 0767-06									
DEMONS	DEMONSTRATE the FCS policies for proper procedure usage and compliance.								
Question S	ource	Bank	L	R-ADMIN-	RO-009				
Reference		SO O-16							
Attachmer	nt	None							
Comments									

Question N	lumbe	r	4									
System/M	lode		000000		Stem							
Generic Knowledges and Abilities												
KANo			2.1.30		Descrip	tion	Ability		cate a	and op	erate c	components, including local
Question	What is indicated by an orange or orange taped control switch.											
	A. The component operated by the switch is a "Maintenance Rule" component											
	B. The component operated by the switch is a "Safe Shutdown" component											
	C. Operation of the switch requires self-checking											
	D. Operation of the switch requires peer-checking											
Anguar		D			TD Coot	ion		41.7	/ 45 7	7		
Answer		U		(	CFR Sect	1011		41.7	/ 45./			
Higher Lev	el			R0	V	3.9	)	]		SR0		3.4
LP Number	-			LP (	Objectiv	е						
0767-05				02.	.00							
DESCRIB	BE the	Perf	ormance	Standa	ards list	ed in	the O	PD Ma	anua	l.		
Question S	ouroo		New		7							
Questions	oui ce		IVEW									
Reference		OF	D-3-09									
Attachmer	nt	No	ne									
Comments												

<b>Question Number</b>		5						
System/Mode		000000	Stem					
Generic k	(nowledge	es and Abilitie	es					
KANo		2.2.27	Description Knowledge of the refueling process.					
Question	During refueling, a fuel bundle has been removed from the core and the fuel hoist box on FH-1 has been returned to its up limit. What action must be taken to enable the bridge and trolley to be moved?							
	A. The	empty hoist	bypass switch must be turned to OFF.					
	B. The	bridge trolle	y lockout pushbutton must be depressed.					
	C. The	mast bump	override button must be depressed					
	D. The mast detent switch must be placed in DISENGAGE							
Answer	er B CFR Section 43.6 / 45.13							
Higher Lev	Higher Level □ R0 ☑ 2.6 SR0 □ 3.5							
LP Number 0711-13	LP Number LP Objective 0711-13 01.02							
	Explain the function of the major components of the refueling machine and how interlocks prevent unsafe operation.							
Question S	ource	Bank	07-11-13 02.03A 003					
Reference	Re	efueling STM						
Attachment None								
Comments								

Question Number 6						
System/Mode 000000 Stem						
Generic Knowledges and Abilities						
KANO Description Knowledge of new and spent fuel movement procedures.						
Question Which one of the following operations is performed using the short-handled fuel handling tool?						
A. Placing a fuel assembly in the storage side upender.						
B. Removing a fuel assembly from the storage side upender.						
C. Placing a fuel assembly in the new fuel elevator.						
D. Removing a fuel assembly from the new fuel elevator.						
A						
Answer C CFR Section 43.7 / 45.13						
Higher Level □ R0 ☑ 2.6 SR0 □ 3.5						
LP Number LP Objective						
0404-10 05.00						
Given an approved copy of OI-FH-1, DESCRIBE the operation of the new fuel elevator.						
Question Source Bank Fuel Handling 001						
Refueling STM						
Attachment None						
Comments						
Confinents						

Question N	lumber	7						
System/M	lode	000000	Stem					
Generic K	Cnowledge	es and Abilit	ies					
KANo		2.2.34	Descrip	0 (1011	•	•	ess for determining the internal and ereactivity.	
Question	When performing a shutdown margin calculation at FCS, a correction to the boron concentration required for adequate shutdown margin is made if the actual full power boron concentration is higher than the predicted full power boron concentration. This correction accounts for:  A. Boron-10 depletion in the RCS boron  B. Temperature difference between the RCS and the chemistry lab.  C. Changes in burnable poisons.							
	D. Vari	ations in the	boric acid (	Calibration s	tandards			
Answer	Α		CFR Sect	tion	43.6			
Higher Lev	Higher Level □ RO ☑ 2.8 SRO □ 3.2*							
LP Number 0705-09								
DESCRIB	DESCRIBE how changes in primary parameters affect shutdown margin including:							
Question S	Source	New						_
Reference	; TC	DB-V-9						_
Attachmer	nt No	one						
Comments	;							

Question N	lumber	8							
System/M	lode	000000	Stem						
Generic K	Generic Knowledges and Abilities								
KANo		2.3.02	Descrip	tion Knov	vledge of f	acility AL	ARA pı	rogram.	
Question	The RWP Surveillance and ALARA coordinator has determined that an ALARA job briefing is required for performance of a job in the RCA. Which one of the following restrictions apply until all affected workers attend an ALARA job briefing?  A. The affected workers will not be issued TLDs.								
	B. Th	e affected wo	kers will no	t be allowe	d to sign t	he RWP			
	C. Th	e affected wo	kers will no	t be allowe	d to enter	the RCA	<b>.</b> .		
		e affected wo						ırea	
Į									
Answer	E	3	CFR Sect	ion	41.12 / 4	3.4 / 45.	9 / 45.1	0	
Higher Lev	Higher Level □ R0 ☑ 2.5 SR0 □ 2.9								
	LP Number LP Objective 1924-03B 01.00								
Given a copy of the Radiation Protection procedures, DEFINE the following types of controlled, contaminated, and radiation areas at Fort Calhoun Station and EXPLAIN the controls, posting requirements, access requirements, and limits for each									
Question S	ource	Bank	20	001-1-11					
	_	DD 004							
Reference	Reference RP-301								
Attachmei	nt 🛚 🗈	Vone							
Comments  Used on exam 2001-1. One distractor changed									

Question No	umber 9							
System/Mo	System/Mode 000000 Stem							
Generic K	nowledges and Abilities							
KANo	2.3.04 Description Knowledge of radiation exposure limits and contamination control, including permissible levels in excess of those authorized.							
Question	A radiological posted area has a general area radiation dose rate of 27 mr/hr. What is your stay time for a dose rate of 100 mr?  A. 1 hour 18 minutes							
	B. 2 hours 51 minutes							
	C. 3 hours 42 minutes							
	D. 4 hours 8 minutes							
Answer	C CFR Section 43.4 / 45.10							
Allowei	CIR Section 45.47 45.10							
Higher Leve	el 🗹 R0 🗹 2.5 SR0 🗆 3.1							
LP Number 1924-03								
EXPLAIN the responsibilities of the individual worker for exposure reduction.								
Question So	nurce Modified 1999-16							
Question 30	our ce Modified 1999-10							
Reference	SO-G-101							
Attachmen	† None							
Comments	Used on 1999 exam							

Question No	umber 10						
System/Mo	ode 000000 Stem						
Generic K	nowledges and Abilities						
KANo	2.4.15 Description Knowledge of communications procedures associated with EOP implementation.						
Question	The "Master Silence" button may be used to enhance control room communications following a reactor trip. Who may authorize use of the "Master Silence" button?  A. The Reactor Operator  B. The Control Room Supervisor  C. The Shift Technical Advisor						
L	D. The Control Room Communicator						
Answer	B CFR Section 41.10 / 45.13						
Higher Leve	el						
LP Number 0762-11	LP Objective O1.01						
DESCRIB	E the operator actions for an annunciator in alarm.						
Question Sc	ource New						
Reference	ARP-01						
Attachmen	t None						
Comments							

Question N	lumber 11							
System/M	lode 000000 Stem							
Generic K	Knowledges and Abilities							
KANo	2.4.22 Description Knowledge of the bases for prioritizing safety functions during abnormal/emergency operations.							
Question	Why is "Reactivity Control" the only safety function given a higher priority than "Maintenance of Vital Auxiliaries"							
	A. The Reactor Operator is normally stationed at CB-4 where "Reactivity Control" is verified.							
	B. "Reactivity Control" is the only safety function that needs to be satisfied to prevent fuel damage.							
	C. "Reactivity Control" is the only safety function that can be satisfied without instrument air							
	D. "Reactivity Control" is the only safety function that can be satisfied without AC electrical power							
Answer	D CFR Section 43.5 / 45.12							
Higher Lev	rel □ R0 🔽 3.0 SR0 □ 4.0							
LP Number	LP Objective							
0718-10	01.01							
DEFINE ti	DEFINE the term Critical Safety Function (CSF).							
Ouaction C	inurce New							
Question S	ource New							
Reference	LP 07-18-10							
Attachmei	nt None							
Comments								

Question N	umber	12						
System/M	ode	000000	Stem					
Generic K	nowledge	s and Abilitie	es					
KANo		2.4.35	Descriptio	Knowledge of local auxiliary operator tasks during emergency operations including system geography and system implications.				
Question	The following conditions exist:							
	The reactor tripped.due to a loss of DC bus #1 DG-1 did not start and bus 1A3 is not energized. All offsite power (161 KV and 345 KV) is unavailable							
	Which o	ne of the foll	owing must be	e accomplished before Bus 1A3 can be energized?				
	A Start	the diesel Do	G-1 locally, at /	AI-133.				
	B Trans	sfer DG-1 D0	C Control Pow	ver to its emergency source.				
	C Trans	sfer bus 1A3	/1A1 DC contr	rol power to its emergency source				
	D Close the cross-tie breakers between instrument busses "A" and "C"							
A m a a m	В		CFD Co ation	43.5 / 45.13				
Answer	В		CFR Section	1 40.37 40.10				
Higher Lev	el 🔽	]	RO ☑ 3	3.3 SRO  3.5				
LP Number			LP Objective					
0713-04			01.03					
List the pr	imary (pre	eferred) and	alternate (if ar	ny) power supplies to each bus/component.				
Question S	nurce	Modified	Modi	lified Bank question 7-13-05 1.10h 002				
Reference	TE	BD-EOP-20						
Attachmer	nt No	one						
Comments								

Question N	umber	13	]					
System/M	ode	000000	Stem					
Generic K	(nowled	ges and Abilitie	es					
KANo		2.4.45	Descrip		ity to priori unciator o		interpret	t the significance of each
Question	being	used in accord	lance with t	he OPD 6	-04, "Annu	inciator N	Marking"	Annunciator window "flags" are .?
		dures?	-					
		red flagged an						
	B. A	blue flagged ai	nnunciator	window is	unlit			
	C. A	green flagged	annunciato	r window	is lit			
	D. Ar	n unflagged an	nunciator w	vindow is	lit			
Answer		D	CFR Sect	tion	43.5 / 4	5.3 / 45.1	12	
Higher Lev	el	<b>∠</b>	RO 🔽	3.3		SR0		3.6
LP Number			LP Objectiv	⁄e				
0762-11			01.00					
USE the A	ARPs to	diagnose plar	nt problems	·-				
Question S	ource	Bank	20	001-01-Q	128			
	-	OPD-6-04						
Reference	<u>'</u>	JPD-6-04						
Attachmer	nt [	None						
Comments	;	Used as SRC	Only ques	stion on 20	001 NRC e	xam		

Question N	lumber 14
System/M	lode Stem Knowledge of the operational implications of the following concepts
Continuo	as they apply to Continuous Rod Withdrawal:
KANo	AK1.01 Description Prompt criticality
Question	Which one of the following events is most likely to result in a prompt critical condition at FCS?
	A. A CEA ejection from 10-3% power.
	B. A CEA ejection from 100% power.
	C. A CEA withdrawal from 10-3% power.
	D. A CEA withdrawal from 100% power.
Answer	A CFR Section 41.8 / 41.10 / 45.3
Higher Lev	rel ☑ R0 ☑ 3.4* SR0 □ 3.7
LP Number 0715-32	LP Objective
EXPLAIN	the reactor power response to an event involving a change in reactivity
Question S	ource New
Reference	LP 0715-32
Attachme	nt None
Comments	

Question N	lumber	15							
System/M	ode	00001	Stem	Knowledg Withdrawa				veen the C	ontinuous Rod
Continuo	us Rod With	drawal							
KANo	A	K2.08	Descri	otion Indiv	dual rod	display li	ghts and	d indication	IS
Question	is directed CEAs con	to move (	CEAs so tha	at group 3 C eleases the	EAs are i	nserted	from 51'	' to 50". Mo	mode, the operator otion of all group 3 f the following
	A. PDIL								
	B. Contin	nuous Rod	Motion						
	C. Rod P	osition De	viation Low	/ Limit					
	D. Rod P	osition De	viation Ree	d Switch					
Answer	А	 7	CFR Sec <sup>-</sup>	tion	41.7 / 45	5.7			
711137701			0111300						
Higher Lev	el 🗹		R0 🔽	3.1		SR0		3.0	
LP Number			LP Objectiv	⁄e					
0717-02			01.02						
	how the pla and how it af					nalfuncti	on in ter	ms of how	specific equipment is
Question S	ource [	Bank	1	997-60					
Reference	LP 0	7-17-02							
Attachmei	nt PDIL	_ Curve fro	m COLR						
Comments									

Question N	umber 16												
System/Mode 000009 Stem Ability to operate and monitor the following as they apply to a sma break LOCA:													
Small Bre													
KANo	EA1.13 Description ESFAS												
Ougation [		_											
Question	Following a small break loss of coolant accident, the following conditions exist:												
	Three HPSI pumps are running Three Containment Spray Pumps are running One LPSI Pump is Running SIRWT Level is 16" RCS Pressure is 600 psia Containment pressure is 8 psig												
	Which one of the following actions should be taken?												
	A. Start a LPSI pump												
	B. Shutdown a LPSI pump												
	C. Shutdown a HPSI pump												
	D. Shutdown alll Containment Spray Pumps												
L		_											
Answer	B CFR Section 41.7 / 45.5 / 45.6												
Higher Leve	el 🗹 RO 🔽 4.4 SRO 🗆 4.4												
LP Number	LP Objective												
0712-14	01.05												
EXPLAIN	the functions performed by each Engineered Safeguards Control Signal.												
0 11 0	[O. ]	_											
Question So	ource New												
Reference	EOP-03												
Attachmer	nt None												
Comments													

Question N	umbei	r	17														
System/M	ode	0	00009		Stem				and m	nonito	or the f	follo	owing	as th	ney ar	pply to	a small
Small Break LOCA:    Small Break LOCA:																	
KANo		E	A1.17		Descri	ption P	rRT										
Question	The	<b>4</b> -11															
			ring cond														
	Que	ench ta	is opera ank pres er safety	sure is	s being	mainta		at 7 ps	ig								
		ich one -136?	e of the f	ollowi	ng is th	e tempe	eratu	re expe	ected	to be	seen	on	tailpi	pe te	mper	ature ı	monitor
	A.	150F															
	B.	230F															
	C.	300F															
	D.	640F															
Answer		В			CFR Sec	tion		41.7 / 4	45.5 /	45.6							
Higher Lev	el	<b>V</b>		R0	<b>V</b>	3.4				SR0			3.4				
LP Number				LP	Objectiv	ve											
0718-13				_	1.00												
DEMONS conseque				ge red	uired t	o use E	OP-0	3, Loss	of C	oolar	nt Acci	ider	nt (LO	CA),	to mi	itigate	the
Ougation C			Bank			995-47											
Question S	our ce		Dalik			990-47											
Reference		Stea	ım tables	3													
Attachmer	nt	Stea	ım tables	3													
Comments																	

Question N	lumber	18							
System/M	ode	000017	Stem						
Reactor C	Coolant F	Pump Malfund	ctions (Los						
KANo		2.1.28	Descrip		edge of thonents and			unction of ma	ajor system
Question	-	urpose of the	-		•	ump mo	otors is to	):	
	A. Mi	nimize startin	g current for	the RCP mo	otors				
	B. Co	ounterbalance	the lift prod	uced by ope	eration of t	he oil lif	t pumps		
	C. Ma	aintain core fl	ow following	a loss of po	ower to the	e pump			
	D. Re	educe pump v	ibration duri	ng a RCS c	ooldown a	and dep	ressuriza	ation.	
			050.0		44.7				
Answer		С	CFR Sect	ion	41.7				
Higher Lev	el		RO 🗹	3.2		SR0		3.3	
LP Number	•		LP Objectiv	е					
0715-16			03.04						
EXPLAIN	the imp	ortance of the	RCP flywhe	els to the lo	ess of flow	accider	nt analysi	is results.	
Question S	nurce	New							
	_								
Reference	L	_P 07-15-16							
Attachmei	nt [	None							
Comments	;								

Question Number 19										
System/Mode Stem Knowledge of the interrelations between the Reactor Coolant Pump										
Malfunctions (Loss of RC Flow) and the following:										
KANO Description RCP indicators and controls										
Question  The reactor tripped on low flow due to a trip of RC-3B. RCS pressure then dropped to 1300 psia and T-cold lowered to 500F. Which one of the following actions should be taken?  A. Restart RC-3B  B. Trip RC-3A  C. Trip RC-3D  D. Trip all running RCPs										
Answer C CFR Section 41.7 / 45.7										
Higher Level   RO   RO   SRO   2.8*  2.8*										
LP Number LP Objective 0718-13 01.00										
DEMONSTRATE the knowledge required to use EOP-03, Loss of Coolant Accident (LOCA), to mitigate the consequences of a LOCA.										
Question Source New										
Reference EOP-03										
Attachment None										
Comments										

Question N	umber	20							
System/M	ode	000022	Stem						oonses as they apply
Loss of Re	eactor Co	olant Makeu	ıρ	to the Loss	s of Reacti	or Coola	ını Pump	і імакеир.	
KANo		AK3.05	Descrip	otion Need	to avoid p	lant trar	nsients		
Question		nt is operati n OP-4 shut							able. What will utdown
		S temperatu ent is not all			during a n	ormal O	P-4 shu	tdown beca	ause rod
		S temperatu llowed in this		ower than d	uring a no	rmal OF	P-4 shuto	down beca	use rod movement
		will be more s must be m			normal OF	P-4 shute	down be	cause all n	egative reactivity
		will be more s must be m			normal O	P-4 shu	tdown be	ecause all	negative reactivity
Answer	С		CFR Sect	tion	41.5 / 41	10 / 45	6 / 45 13	<u> </u>	
			UIN JCC				0, 10.10		
Higher Lev	el 🔽	<u>'</u>	R0 🔽	3.2		SR0		3.4	
LP Number			LP Objectiv	/e					
0712-20			01.03f						
DEFINE th	ne followii	ng terms as	they apply to	o the Incore	NI Syster	n. Axial	shape in	dex	
Question S	ouroo	New							
Questions									
Reference	OI	P-4							
Attachmer	nt No	one							
Comments									
voiiiiioii (3									

Question N	umber	21							
System/M	ode	000024	Stem						
Emergen	y Boratio	n							
KANo		2.2.25	Descrip	0 (1011	wledge of b ditions for c		•	ations for lims.	niting
Question	A. Imm B. With C. With	EAs are full nediately co ndraw group ndraw group		. What act ergency be the short to er group o	ion must be oration erm insertion verlap is a	e taken a		are at 52 inches conditions?	
Į									
Answer	Α		CFR Sect	tion	43.2				
Higher Lev	el 🛂	]	RO 🗹	2.5		SR0	3.7		
LP Number 0705-09			LP Objectiv	/e					
DISCUSS	the powe	er dependei	nt insertion l	imit includ	ing:				
Question S	ource	Bank	L	R-TDB-RC	0 023				
Reference	PI	OIL curve							
Attachme		OIL curve							
Comments									

Question N	umber	22										
System/M	System/Mode 000024 Stem Ability to operate and / or monitor the following as they apply to the Emergency Boration:											
Emergend	y Boration	n		Linergene	y Doration	'						
KANo		AA1.06	Descrip	otion BWS	T temperat	ure						
Question		nt has been in		or a week v	vhile maint	enance	e is bein	g perforr	med. A plan	it heatup to		
	The follo	wing condition	ons exist:									
		Level	Cond	centration	Temp	erature	:					
	BAT A BAT I SIRW	3 28%	2.	1% 7% 225 ppm	50F 55F 53F							
	Which o	ne of the follo	owing action	ons is requi	red?							
	B. Incre	ease the bora ease the bora ease the boro ease the boro	ited water ton concenti	emperature ration in BA	e in BAT A T A							
Answer	В		CFR Sect	tion	41.7 / 45.	5 / 45.6	)					
Higher Lev	el 🗷	] ,	₹0 🗹	3.2	]	SR0		3.1				
LP Number			LP Objectiv	/e								
0762-08			05.00									
Given a co	opy of Tec	hnical Specif	ications, A	PPLY the re	equiremen	ts to a g	jiven coi	ndition co	overed by a	n LCO.		
Ousstian C	ouroo	Bank		R-TS-CH-R	20.005							
Question S	ource 	Dalik		K-13-CH-N	.0 003							
Reference	Те	ch Spec 2.2										
Attachmer	nt Te	ch Spec 2.2										
Comments												
ooiiiiiloit3												

Question N	Number 23
System/M	Mode 000025 Stem
Loss of R	Residual Heat Removal System
KANo	2.4.31 Description Knowledge of annunciators alarms and indications, and use of the response instructions.
Question	The following plant conditions exist:
	The reactor is in mode 4 The pressurizer manway is in place Shutdown cooling is in service Shutdown cooling isolation valves (HCV-347/348) then go fully closed.
	Which one of the following would cause those valves to isolate?
	A. Pressurizer pressure channel P-115 failed low
	B. Pressurizer pressure channel P-118 failed low
	C. A loss of power to pressurizer pressure channel P-115
	D. A loss of power to pressurizer pressure channel P-118
Answer	D CFR Section 41.10 / 45.3
Higher Lev	/el ☑ R0 ☑ 3.3 SR0 □ 3.4
LP Number 0711-22	LP Objective 01.04
Explain th	he operation of controls located in the Control Room associated with ECCS.
Question S	Source Bank 7-11-22, 1.4 002
Reference	RCS & RR STM
Attachme	nt None
Comments	S

Question N	umber	24								
System/M	ode	000025				ge of the in			ween the Lo	ss of Residual Heat
Loss of Re	esidual H	eat Remov	al Syste	em	rtomora					
KANo		AK2.02	De	escrip	tion LPI	or Decay I	Heat Rer	moval/RI	HR pumps	
Ougstion [										
Question	What co	ooling flowp	ath wou	ıld be	used follo	owing an i	noperabl	le LPSI ł	neader dowr	nstream of FCV-
		arging pump heat excha				the RCS lo	oop and	discharg	je through th	ne shutdown
		SI pumps ta changer bad				RCS loop	and disc	harge th	rough the sl	hutdown cooling
	through		wn cool	ling he	eat excha				suction and ction, The H	l discharges PSI pump
	shutdov		eat exc	hange	er to the c				lischarges tl iction, The c	hrough the containment spray
Answer	С		CE	R Secti	ion	41.7 / 4	5.7			
			OI I	11 3001						
Higher Lev	el 🗹		R0	<b>V</b>	3.2*		SR0		3.2	
LP Number			LP 0b	jectiv	e					
0707-42			12.0							
DESCRIB configurat		aluation crite	eria to u	ise for	r deciding	appropria	ate meas	ures to t	ake prior to	changing plant
Ousstian C	ouroo	Bank		1 6	R-AOP-19	PO 007				
Question S	ource	Dalik		L	N-AOF-19	-KO 007				
Reference	E	CCS STM								
Attachmer	nt No	one								
Comments										
COMMINICITES										

Question Nur	mber 25
System/Mod	de 000027 Stem Ability to determine and interpret the following as they apply to the
Pressurizer	Pressurizer Pressure Control Malfunctions:
KANo	AA2.03 Description Effects of RCS pressure changes on key components in plant
Question	When should the reactor operator use both letdown control valves, LCV-101-1 and LCV-101-2?
	A. When operating 2 or more charging pumps.
	B. When performing a normal RCS cooldown and depressurization.
	C. When responding to high pressurizer level.
	D. When performing a normal RCS boron dilution.
Answer	B CFR Section 43.5 / 45.13
Higher Level	□ R0 ☑ 3.3 SR0 □ 3.4
LP Number 0711-02	LP Objective 01.02
EXPLAIN, t	he manual and automatic functions of control valves in the CVCS.
Question Sou	Irce New
Reference	OI-4C-4A
Attachment	None
Comments	
COMMITTELLS	

Question N	umber 26
System/M	Pressurizer Pressure Control Malfunctions:
Pressuriz	er Pressure Control System Mal
KANo	AA2.12 Description PZR level
Question	The plant is operating at 100% power with pressurizer level channel X selected as the controlling channel. Backup heater groups 1 and 2 are in the on position to maintain RCS pressure.
	If LT-101X fails low, how will the pressurizer heaters respond?
	A. All pressurizer heaters will deenergize
	B. Backup heater groups 1 and 2 will remain energized
	C. Backup heater groups 1 and 2 only will deenergize
	D. All backup heaters will energize
Answer	A CFR Section 43.5 / 45.13
Higher Lev	el 🗹 RO 🔽 3.7 SRO 🗆 3.8
LP Number	LP Objective
0711-20	04.04
EXPLAIN	the interlocks and control functions associated with RCS Instrumentation.
Question S	ource Bank LR-CH-RO 007
Reference	RCS INST STM
Attachmer	t None
Comments	

Question N	lumber 27					
System/M	Ability to determine and interpret the following as they apply to the Pressurizer Level Control Malfunctions:					
Pressuriz	er Level Control Malfunction					
KANo	AA2.02 Description PZR level as a function of power level or T-ave. including interpretation of malfunction					
Question	The reactor tripped 20 minutes ago. The following conditions are observed:					
	"PRESSURIZER PRESSURE OFF NORMAL HI-LO" channel x and y are in alarm PRC-103x (controlling channel) indicates 2160 psia and stable All backup heaters in auto and energized LRC-101Y (controlling channel) indicates 60% and stable LRC-101X indicates 43% and increasing slowly LI-106 indicates 28% Letdown flow is 26 gpm One charging pump is running T-cold is 533F T-hot is 534F Both are stable  Select the probable cause and the action that should be taken.  A. Low level on LRC-101X is maintaining B/U heaters on. Place the pressurizer heater cutout					
	<ul> <li>B. The bistable for the backup heaters needs to be reset. Place the control switches for all B/U heaters to reset and back to auto.</li> <li>C. LRC-101Y has malfunctioned causing the B/U heaters to remain on. Place LRC-101X in service</li> <li>D. PRC-103X has malfunctiones causing the backup heaters to remain on. Place PRC-103Y in service</li> </ul>					
Answer	C CFR Section 43.5 / 45.13					
Higher Lev	vel 🗹 RO 🗹 3.4 SRO □ 3.8					
LP Number LP Objective 05.04						
Given a co required a	urrent copy of ARP, EXPLAIN the alarms associated with the RCS Instrumentation System and the actions.					
Question S	Question Source Bank LR-TDB-RO 024					
Reference	RCS INST STM					
Attachmer	nt None					

Comments		

Question N	lumber 28
System/M	ode Stem Knowledge of the reasons for the following responses as the apply
Anticipate	to the ATWS:
KANo	EK3.02 Description Starting a specific charging pump
Question	The plant is operating at 2% power. CH-1B is operating. A reactor trip occurs and all CEAs fail to insert.
	What actions should be taken with the charging pumps?
	A. Start CH-1A or CH-1C
	B. Start CH-1A and CH-1C
	C. Start CH-1A. Stop CH-1B.
	D. Stop CH-1B
Answer	B CFR Section 41.5 / 41.10 / 45.6 / 45.13
Higher Lev	rel □ R0 ☑ 3.1 SR0 □ 3.1
LP Number 0718-10	LP Objective 01.11
	set of plant conditions and a copy of EOP-00, DETERMINE the appropriate response to the plant s. Both the corrective actions required and any other EOP's referred to by the procedure must be
Question S	ource New
Reference	
Attachmer	II None
Comments	

Question Num	nber 29				
System/Mode	000029	0.0111	owledge of the i	easons for the	following responses as the apply
Anticipated T	Transient Without S		10711110.		
KANo	EK3.08	Description	Closing the m	ain steam isola	tion valve
a A B		remained open. Volume is steam isolation the steam dump	What action sho valves. and bypass val	ould be taken to	d to trip and all turbine stop lower reactor power?
Answer	А	CFR Section	41.5 / 4	11.10 / 45.6 / 45.	13
Higher Level	V	RO 🗹 3.	6*	SRO	3.8
LP Number 0718-10		LP Objective			
					priate response to the plant to by the procedure must be
Question Sour	rce New				
Reference	EOP-00				
Attachment	None				
Comments					

Question N	lumber	30	1			
System/M	lode	000032		Stem	Knowledge of the operational implications of the following as they apply to Loss of Source Range Nuclear Instrument	
Loss of S	ource F	Range Nucl	ear Ins	trumen	, 11,	
KANo		AK1.01		Descri	tion Effects of voltage changes on performance	
Question		ctor startup nel reading		g perfo	med. The reactor power is steady with the following WR N	IS
	Ch	annel	Ро	wer		
	A	4	1.10 X	10-3%		
	E			( 10-3% ( 10-3%		
				( 10-3 % ( 10-3 %		
	the de	etector volta D" remain s	age for	channe	s the detector voltages for channel "A" to increase by 5 vol "C" to decrease by 5 volts. The detector voltages for channel will have the highest reading following the voltage	
	A. C	hannel "A"				
	B. C	hannel "B"				
	C. C	hannel "C"				
	D. C	hannel "D"				
Answer		D		CFR Sec	ion 41.8 / 41.10 / 45.3	
Higher Lev	el el	<b>∠</b>	R0	V	2.5 SRO  3.1	
LP Number	-		LF	Objectiv	е	
0712-18			0	1.01c		
		c-region ion chamber ar			rve, explain the relationship between ion pairs collected a regions.	nd voltage
Question S	ource	New				
Reference	)	NIS STM				
Attachme	nt	None				

Comments		

Question N	umber 31
System/M	ode 000033 Stem
Loss of In	termediate Range Nuclear Instr
KANo	2.4.50 Description Ability to verify system alarm setpoints and operate controls identified in the alarm response manual.
Question	Which of the following signals can cause a Rod Withdrawal Prohibit?
	A. TM/LP pretrip
	B. High SUR pretrip
	C. APD pretrip
	D. ASGT pretrip
Answer	B CFR Section 45.3
Higher Lev	el
LP Number	LP Objective
0712-26	01.02d
Describe Protective	the interface/interaction between the CRDS and the following systems/components: Reactor System.
Question S	nurce bank 07-12-26 1.2 001
Reference	CRDSTW
Attachme	nt None
Comments	

Question N	umber 32					
System/M	Ode Stem Ability to operate and monitor the following as they apply to a SGTR:					
Steam Ge	enerator Tube Rupture					
KANo	EA1.01 Description S/G levels, for abnormal increase in any S/G					
Question	The reactor is operating at 100% power when a 10 gpm tube leak develops in RC-2B. Assuming power operation continues, what would be the long term response of the steam generator level control system?					
	A. The system would act to maintain a higher level in RC-2B					
	B. The system would act to maintain a lower level in RC-2B					
	C. The system would act to maintain a higher FW flow into RC-2B					
	D. The system would react to maintain a lower FW flow into RC-2B					
Answer	D CFR Section 41.7 / 45.5 / 45.6					
Higher Lev	el ☑ RO ☑ 4.5 SRO □ 4.4					
LP Number	LP Objective					
0711-11	04.03					
EXPLAIN	the various modes for steam generator water level control per OI-FW-3.					
Question S	ource New					
Reference	LP 07-11-11					
Attachmer	nt None					
Comments						

Question N	lumber 33
System/M	lode 000038 Stem Knowledge of the operational implications of the following concepts
Steam Ge	as they apply to the SGTR:
KANo	EK1.04 Description Reflux boiling
Question	Which one of the following is true for reflux boiling natural convection?
	A. Steam flows from the reactor vessel to the steam generators in the cold legs
	B. Water flows from the reactor vessel to the steam generators in the cold legs
	C. Steam flows from the steam generators to the reactor vessel in the hot legs
	D. Water flows from the steam generators to the reactor vessel in the hot legs
Answer	D CFR Section 41.8 / 41.10 / 45.3
Higher Lev	rel □ R0 ☑ 3.1* SR0 □ 3.3
LP Number	
0715-23	01.05
EXPLAIN	the various modes of natural circulation that may occur during a small break loss of coolant accident.
Question S	inurce New
Question 3	ource inem
Reference	LP 07-15-23
Attachme	nt None
Comments	

Question N	lumber	34						
System/Mode		000040	Stem	Knowledge as they ap				eations of the following concepts
Steam Lir	ne Ruptu	re		ao inoy ap	, p.,	ann 21110	rtaptai	··
KANo		AK1.02	Descri	ption Leak	rate versu	is press	ure cha	nge
Question	RC-2A RC-2A	has been is lowers from	olated. How 900 psia to	does the st 15 psia?				n MS-291. Steam Generator, nange as the pressure in S/G
	A. The	e leakrate co	ntinuously l	owers.				
	B. Th	e leakrate co	ontinuously	ises				
	C. Th	e leakrate ri	ses down to	700 psia a	nd then be	gins to	lower	
	D. Th	e leakrate lo	owers down	to 700 psia	and then l	begins t	o rise.	
				_				
Answer	Α		CFR Sec	tion	41.8 / 41	.10 / 45.	3	
Higher Lev	vel <b>S</b>	7	RO 🔽	3.2		SR0		3.6
LP Number	-		LP Objecti	ve				
0715-20			01.02					
EXPLAIN	the resp	onse of seco	ondary syste	m paramete	ers.			
Question S	Courco	New						
Questions		Itow						
Reference	, L	P 07-15-20						
Attachme	nt N	one						
0								
Comments								

Question N	Number 35									
System/N	Mode Stem Knowledge of the operational implications of the following concepts as they apply to Steam Line Rupture:									
Steam Li	ne Rupture									
KANo	AK1.03 Description RCS shrink and consequent depressurization									
Question	A large main Steam Line Break can result in a reactor vessel head void because:									
	A. The RCS would rapidly depressurize to the saturation pressure corresponding to reactor head temperature									
	B. A void would form in the hottest portion of the RCS due to the sudden RCS inventory loss									
	C. The rapid RCS cooldown would cause the coolant in the upper head to shrink excessively									
	D. Core heat removal is ineffective and superheating of the coolant results in void formation									
Answer	A CFR Section 41.8 / 41.10 / 45.3									
Higher Lev										
LP Number 0718-15	LP Objective 01.00									
	STRATE the knowledge required to use EOP-05, Uncontrolled Heat Extraction (UHE), to mitigate the ences of an UHE.									
Question S	Source Bank LR-EOP-05-RO 004									
Reference	LP 7-18-15									
Attachme	nt None									
Comments	S									
oommones										

Question Number		36						
System/M	ode	000056	Stem		etermine and intersite Power:	erpret the	e following as they apply to the	
Loss of Off-Site Power								
KANo		AA2.39	Descri	ption Safet	y injection pump	ammete	er and flowmeter	
Question	failed to 1150 ps What is A. 150 B. 250 C. 350	start. The isia. the minimu gpm gpm gpm	immediate a	actions of EC		n comple	ost at the time of trip. D/G-2 ted. Pressurizer pressure is condiitions?	
	D. 450	gpm						
Answer	В		CFR Sec	tion	43.5 / 45.13			
Higher Lev	el 🔽	]	RO 🔽	3.5*	SRO		3.6	
LP Number 0718-10	-		LP Objecti	ve				
		at and use o		. As a minin	num, the explan	ation will	include a discussion of the	
Question S	nurce	Modified		nodified LR-	EOP-03-RO 015	5		
Reference	EC	OP Attechme	ent curve					
Attachmer	nt E	OP attachme	ent curve					
Comments		stem and tw	vo distractor	s changed				

Question N	lumber 37								
System/Mode Stem Ability to operate and / or monitor the following as they apply to the Loss of Vital AC Instrument Bus:									
Loss of Vital AC Electrical Instrument Bu									
KANo	AA1.05 Description Backup instrument indications								
Question	The RCS was being cooled down with RCS cold leg temperature at 350F and pressurizer pressure at 800 psia when a loss of an instrument bus made pressurizer level indicator, LI-106, inoperable. Which one of the following methods could be used to determine pressurizer level in this situation.  A. Read the level directly from LC-101X								
	B. Use the LC-101X indication and the associated TDB correction curve								
	C. Use the level directly from LI-197								
	D. Use the LI-197 indication and the associated TDB correction curve								
Answer	B CFR Section 41.7 / 45.5 / 45.6								
Higher Lev	rel 🗹 RO 🔽 3.2 SRO 🗆 3.4								
LP Number 0711.20									
Question S	ource New								
Reference	TDB Figure III.1.a								
Attachmer	nt None								
Comments									

Question N	umber 38		
System/Mo	ode 000057	Stem Ability to determine and Loss of Vital AC Instrum	interpret the following as they apply to the
Loss of Vit	tal AC Electrical Instrume		nont bus.
KANo	AA2.17	Description System and comp	onent status, using local or remote controls
Question	While in the process of I the operator should:	ining up to energize both instrur	nent busses "A" and "C" from inverter "A",
	A. Monitor load on inve	rter "A" to minimize the potential	for tripping the inverter due to overload.
	B. Monitor load on Inst instrument bus load.	rument bus "C" because the cro	ss-tie breakers are not sized to carry full
	C. Monitor the AC volta on undervoltage.	ge output of inverter "A" to minin	nize the potential for the inverter tripping
	D. Monitor inverter tem fire.	perature to minimize the potenti	al for the inverter to overheat and start a
Answer	А	CFR Section 43.5 / 45.13	<b>3</b>
Higher Leve	el Ro	☑ 3.1	SRO   3.4
LP Number	LP	Objective	
0713-04	01	1.00	
Explain the	e operation of 125 VDC a	nd 120 VAC Electrical Distribution	on Systems.
Question So	ource Bank	LR-EE-RO 001	
	OI-EE-4		
Reference	OI-EE-4		
Attachmen	None		
Comments			

Question N	umber	39													
System/M	ode	000059	] 9	Stem											
Accidental Liquid Radwaste Release															
KANo	2.1.02 Description Knowledge of operator responsibilities during all modes of plant operation.									s of					
Question	tion														
Question	An approved Release Permit is being used to release the "A" Monitor Tank. It is three (3) hours into the release and the EONA reports that flow recorder FR-690 does not appear to be operating and he can not determine the problem.														
	Selec	t the correct	respons	se to th	nis sit	tuatior	٦.								
		ommence lo e Liquid Discl					d proce	ss m	ionito	r readir	ngs				
	ВНа	ave two (2) in	depend	lent sa	mple	s rean	alyzed.								
	C Ve	erify recorder	RR-049	9/A is (	opera	ating a	nd cont	inue	relea	se.					
	D. C	ommence lo	gging th	ne calc	ulate	d flow	reading	js or	າ the L	_iquid C	Dischai	rge Lo	og eve	ery four	(4)
A		D	CI	LD C a a t	·!aa										
Answer		<u>D</u>	U	FR Sect	1011										
Higher Leve	el		RO	<b>V</b>	3.0				SR0		4.0				
LP Number			LP 0	bjectiv	е										
0711-32			02.0	05											
		ns necessary r are inopera		er the p	roce	ss rad	liation n	nonit	or rec	order o	or the v	vaste	liquic	d release	е
Question S	ourco	Bank		0.	7_11_	32 00	1								
Question 3	ource			07		32 00									
Reference		ODCM													
Attachmer	nt	None													
Comments															

Question N	lumber 40
System/M	lode 000067 Stem
Plant Fire	on Site
KANo	2.1.30 Description Ability to locate and operate components, including local controls.
Question	Following a loss of all AC that removes the automatic start signals from fire pumps FP-1A and FP-1B, the diesel fire pump maybe be started by:  A. Control switch operation from the Control Room.  B. Control switch operation at the intake structure.  C. Manual engagement of the starter locally.  D. Mechanical pressure sensor with header pressure < 99 psi.
l	D. Wednamear pressure serious with header pressure < 55 psi.
Answer	C CFR Section 41.7 / 45.7
Higher Lev	vel □ R0 ☑ 3.9 SR0 □ 3.4
LP Number 0711-12	LP Objective 1.5
Question S	Source Bank 07-11-12 004
Reference	OI-FP-1
Attachmei	nt None
Comments	

Question Number 41								
System/Mode Stem Stem Ability to determine and interpret the following as they apply to the Plant Fire on Site:								
Plant Fire on Site								
KANO Description Whether malfunction is d	due to common-mode electrical							
Ouestion  Which one of the following fires could create a common mode from initiating emergency boration from the control room?  A. A fire in room 19 affecting all 3 air compressors  B. A fire in the battery room affecting DC bus #2  C. A fire in the switchgear room affecting Instrument Inverter #								
D. A fire in the switchgear room affecting electrical bus 1A3								
Answer D CFR Section 43.5 / 45.13								
Higher Level ☑ R0 ☑ 2.6 SR0 I	3.1*							
LP Number LP Objective 02.01								
EXPLAIN the operation of the CVCS for boration, dilution and blended mal during normal power operation and when depressurized.	keup of the Reactor Coolant System							
Question Source New								
Reference CVCS STM								
Attachment None								
Comments  Bus 1A3 is required to power HCV-268 and LCV-218-2								

Question Number		42							
System/Mode		000068	Stem						_
Control Ro	oom Eva	cuation							
KANo	2.1.30 Description Ability to locate and operate components, including local controls.								
Question	The crew has just evacuated the control room due to a fire and established contol at the Alternate Shutdown Panel (AI-185) and (AI-179). Steam Generator Pressures are 850 psig and rising.  How is S/G pressure control established in this situation?								
	HCV-1	042C locally.						ol valves HCV-1041C and	
	<ul> <li>B. S/G pressure is controlled by operating main steam safety valve control switches on Al-1.</li> <li>C. S/G pressure is controlled by use of the steam driven AFW pump, FW-10.</li> <li>D. S/G pressure is controlled by lifting of the main steam safety valves.</li> </ul>								
Answer			CFR Sec	ction	41.7 / 45	5.7			
Higher Leve	el [		R0 🔽	3.9		SR0		3.4	
LP Number 0717-06			LP Objecti 01.03	ve					
Describe t	he majo	r recovery a	ctions of this	AOP.					
Question So	ource	Bank	Ę	99 NRC RO	) Exam que	estion 56	3		
Reference	A	OP-6							
Attachmer	nt N	lone							_
Comments									_

Question N	umber	43							
System/M	ode	000068	Sten		o operate a Room Eva		nitor the	e following a	as they apply to the
Control Room Evacuation									
KANo		AA1.03	Desc	ription S/	G level				
Question	A. AFA B. AFA auto sta	will occur w S low level : S will open	hen the tr setpoint? valves HC HCV-110	ansfer swit V-1107A a	and B and 1	-179 are to 108A and 107B and	aken to l B, FW-1 1108B (	local if S/G I 0 will auto : can be throt	ttled, FW-10 will
		_							manually started.
Answer	С		CFR S	ection	41.7 / 4	15.5 / 45.6			
Higher Leve	el 🗆	]	RO 🗷	4.1		SR0		4.3	
LP Number			LP Objec	tive					
0712-01			01.05						
EXPLAIN and 43/RC			uxiliary re	lays (43X/I	RC2A and 4	3X/RC-2E	3) and tra	ansfer switc	ches (43/RC-2A
Question So	ource	Bank		07-12-01	1.5 002				
Reference	A.S	SP STM							
Attachmer	it No	one							
Comments									

Question Num	nber 44								
System/Mode Stem Ability to operate and monitor the following as they apply to a									
Inadequate Core Cooling:									
KANo	EA1.13 Description Subcooling margin indicators								
i i	Under which one of the following conditions will the Subcooled Margin Monitors on CB-4 provide invalid results?  A. With containment pressure greater than 5 psig.  B. With pressurizer pressure below 1700 psia.  C. With RCS coolant temperatures below 465F.								
[ [	D. With containment temperature above 180F.								
Answer	C CFR Section 41.7 / 45.5 / 45.6								
Higher Level	□ R0 <b>☑</b> 4.3 SR0 □ 4.6								
LP Number 0711-20	LP Objective 04.03								
	the design characteristics of each of the RCS Instrumentation Subsystems including type and ation of sensors.								
Question Sou	ITCE Bank LR-07-11-20, 62								
Reference	RCS STM								
Attachment	None								
Comments	Used on 1995 NRC exam								

Question N	umber	45							
System/Mode		001000	Stem		ge of CRD or the follo		feature	(s) and/or interlock(s) which	
Control Ro	od Drive	System		provide		wilig.			
KANo		K4.10	Descrip	otion Trip	signals th	at would	prevent	reset of reactor trip signals	
Question	Choose the following that is most correct concerning the actions to reset [re-energize] the CEDM clutches when tripped by an automatic 2/4 RPS trip. [Assume all automatic RPS trip signals have cleared.]								
	A. R	eclose the clute	ch power su	ipply brea	kers to re-	energize	the CED	DM clutches.	
		nirty (30) secor e-energize the			trip depres	ss the bla	ck react	or trip "reset" button (on CB-	
		NYTIME after t ize the CEDM		trip, depre	ess the bla	ck reacto	r trip "re:	set" button (on CB-4) to re-	
		eclose the clut B-4) to re-ener				N depres	s the bla	ack reactor trip "reset" button	
Answer		В	CFR Sect	tion	41.7				
AllSWei		Б	CLK 26C	LIUII	71.7				
Higher Lev	el		RO 🔽	3.6		SR0		3.8	
LP Number 0712-25			LP Objectiv	/e					
EXPLAIN	what ac	ctions are requi	ired to reset	t (re-enerç	jize) the C	EDM clut	ches wh	en tripped by:	
Question S	ource	Bank	7-	-12-25,2.5	SA 001				
Reference		RPS STM							
	[	None							
Attachmer	11 [	None							
Comments									

Question N	lumber 46									
System/Mode O01000 Stem Knowledge of CRDS design feature(s) and/or interlock(s) which provide for the following:										
Control Rod Drive System										
KANo	K4.15 Description Operation of latching controls for groups and individual rods									
Question	Following a refuelling outage, the control rod spiders are reconnected to the drive shafts by:									
	A. Lowering the upper guide structure onto the core support barrel									
	B. Using the CEDM drive motors to drive the shafts down until they latch with the spiders									
	C. Operating the coupling/uncoupling tool through the tool access flange opening									
	D. Tripping the drive shafts so that they latch with the spiders									
Answer	C CFR Section 41.7									
Higher Lev	el									
LP Number 0712-26	LP Objective 01.06d									
Explain th	ne operation of the following CEDM components: Connector nut, plunger and gripper.									
Question S	nurce New									
Reference	CRD STM									
Attachme	nt None									
Comments										

Question N	lumber 47
System/M	lode 001000 Stem Knowledge of the following operational implications as they apply to the CRDS:
Control R	od Drive System
KANo	K5.26 Description Definition of moderator temperature coefficient; application to reactor control
Question	When can a positive moderator coefficient be expected at Fort Calhoun Station?
	A. Beginning of cycle, zero power
	B. Beginning of cycle, full power
	C. End of cycle, zero power
	D. End of cycle, full power
Answer	A CFR Section 41.5 / 45.7
Higher Lev	rel ☑ R0 ☑ 3.3 SR0 □ 3.6
LP Number 070509	LP Objective
Question S	Source New
Reference	TDB
Attachmei	nt None
Comments	

Question N	lumber 48											
System/M	will have on the RCPS:											
Reactor C	Coolant Pump System											
KANo	K6.02 Description RCP seals and seal water supply											
Question	The middle seal on RC-3C has failed. The upper and lower seals are functioning properly. What action would be required by AOP-35?  A. Monitor the seals. Full power operation can continue.  B. Perform a normal plant shutdown using OP-4. Then shutdown RC-3C.  C. Perform an emergency plant shutdown using AOP-05. Then shutdown RC-3C.											
	D. Trip the reactor. Then shutdown RC-3C.											
Answer	A CFR Section 41.7 / 45.5											
Higher Lev	el □ R0 ☑ 2.7 SR0 □ 3.1											
LP Number	LP Objective											
Question S	ource New											
Reference	AOP-35											
Attachmer	nt None											
Comments												

Question Number		49										
System/M	ode	002000	Stem	Ability to (a) predict the impacts of the following malfunctions or operations on the RCS; and (b) based on those predictions, use								
Reactor C	oolant Sy	stem		procedures to correct, control, or mitigate the consequences of								
KANo		A2.04	Descrip	tion Loss of heat sinks								
Question	The follo	wing condition	ons exist:									
	The reactor has tripped from full power as a result of a loss of all offsite power. Diesel Driven Feed Pump, FW-54, is tagged out of servicve DG-1 failed to start and bus 1A3 is deenergized Steam generator levels are currently 50% WR and lowering slowly All safety functions, other than heat removal, are satisfied.											
	What action should be taken to establish heat removal?  A. Start AFW Pump, FW-6											
	B. Start	AFW Pump,	FW-10									
	C. Establish Once-through-Cooling											
	D. Initia	ate Shutdown	cooling									
Δ			OFD C I	M 5 / 40 5 / 45 0 / 45 5								
Answer	В		CFR Sect	ion 41.5 / 43.5 / 45.3 / 45.5								
Higher Lev	el 🗹	l F	80 🗹	4.3 SRO (4.6)								
LP Number			LP Objectiv	е								
0718-10			01.05e									
				of the EOP resource Assessment Trees, DETERMINE the correct functions: RCS and Core Heat Removal								
Question S	nurca	Modified		odified bank question LR-EOP-20-RO 001								
Reference	EC	)P-06										
Attachmer	nt No	ne										
Comments												
23												

Question N	umber 50												
System/M	Ode Stem Knowledge of RCS design feature(s) and/or interlock(s) which provide for the following:												
Reactor C	Coolant System												
KANo	K4.02 Description Monitoring reactor vessel level												
Question	The heated junction thermocouples measure percent of level over which one of the following ranges?  A. Top of the vessel (100%) to bottom of the vessel (0%)												
	B. Top of the core (100%) to bottom of the core (0%)												
	C. Top of the vessel (100%) to top of the core (0%)												
	D. Top of the core (100%) to bottom of the vessel (0%)												
Answer	C CFR Section 41.7												
Higher Lev	el □ R0 ☑ 3.5* SR0 □ 3.8*												
LP Number 0712-20	LP Objective O1.07												
EXPLAIN	the effect of core voiding on the Incore NI System.												
Question S	0urce Bank question 7-12-20 1,7 001												
Reference	TDB III 28												
Attachmer	nt None												
Comments													

Question N	umber 51											
System/Mode 003000 Stem Ability to monitor automatic operation of the RCPS, including:												
Reactor C	Reactor Coolant Pump System  A2 02 Pages in tien Motor current											
KANo	A3.02 Description Motor current											
Question	A RCS cooldown is in progress. One reactor coolant pump is running in each loop. Which one of the following would cause the motor current on the two running RCPs to rise?  A. A third reactor coolant pump is started.  B. Voltage on the electrical grid is raised.  C. RCS pressure is lowered from 1800 psia to 1600 psia  D. RCS temperature is lowered from 400F to 350F											
l												
Answer	D											
Higher Lev	el ☑ R0 ☑ 2.6 SR0 □ 2.5											
LP Number 0711-20	LP Objective 01.07b											
LIST the o	design parameters for a RCP.											
Question S	ource New											
Reference	RCS STM											
Attachmei	nt None											
Comments												

Question N											
System/M Reactor C	lode 003000 Stem Knowledge of the effect that a loss or malfunction of the RCPS with have on the following:	II									
KANo	K3.02 Description S/G										
Question	The following conditions exist in the plant:  The reactor tripped from 100% power due to a small LOCA with a loss of offsite power. RCS pressure is 1000 psia S/G A pressure is 1100 psia S/G B pressure is 900 psia  Which one of the following statements is true?  A. Natural Circulation flow is not possible in either loop  B. Natural Circulation flow may be occuring in loop A but not in loop B  C. Natural Circulation flow may be occuring in loop B but not in loop A  D. Natural Circulation flow may be occuring in both loops										
L Answer	C CFR Section 41.7 / 45.6										
Higher Lev	o recotion										
LP Number 0715-16	LP Objective 01.06										
EXPLAIN	why natural circulation occurs.										
Question S	ource New										
Reference	LP 07-15-16										
Attachmer	nt None										
Comments											

Question N	lumber 53
System/M	operations on the CVCS; and (b) based on those predictions, use
Chemicai	l and Volume Control System procedures to correct, control, or mitigate the consequences of
KANo	A2.14 Description Emergency boration
Question	Why is the operator directed to close the VCT outlet valve, LCV-218-2, during Emergency Boration?
	A. To prevent cavitation of the Boric Acid pumps
	B. To prevent overpressurization of the VCT
	C. To prevent the VCT water from diluting the Emergency Boration flow
	D. To prevent the VCT pressure from stopping flow from the Boric Acid Tanks
Answer	D CFR Section 41.5 / 43.5 / 45.3 / 45.5
Higher Lev	vel
LP Number	
0717-03	01.00
Use the E reactivity	Emergency Boration AOP to mitigate the consequences of an uncontrollable or unexplained positive addition.
Question S	Source Modified 97-48
Reference	CVCS STM
***	
Attachmei	nt None
Comments	

Question N	lumber 54										
System/M	lode Stem Ability to manually operate and/or monitor in the control room:										
Chemical	and Volume Control System										
KANo	A4.09 Description PZR spray and heater controls										
Question	Which one of the following statements is true concerning pressurizer heater operation during RCS boron concentration changes?  A. Backup heaters should be ON during boration or dilution  B. Backup heaters should be OFF during boration or dilution										
	Backup heaters should be ON during boration but OFF during dilution      Backup heaters should be OFF during boration but ON during dilution										
L											
Answer	A CFR Section 41.7 / 45.5 to 45.8										
Higher Lev	rel □ R0 ☑ 3.5 SR0 □ 3.3										
LP Number 0762-06	LP Objective										
Question S	inurce New										
Reference	OI-RC-7										
Attachmer	nt None										
Comments											

Question Number		55									
System/Mode		004000	Ste			e of CVCS		feature	(s) and/or i	nterlock(s) which	
Chemical	and Volui	me Control	System		vide ioi	tile ioliot	wilig.				
KANo		K4.04	K4.04 Description Manual/automatic transfers of control								
Question When putting an additional charging pump into service, what control is charging and letdown flows without causing a pressurizer level transic									sient?	d to match when more than	
		rging pump			101-10	JI LC-101	-2, ale 0	ontrollec	a manuany	when more than	
	B. The	level bias p	otentian	neter is	manual	ly adjuste	ed to mat	tch flows	8		
	C. The	pressure se	etpoint c	n PIC-2	10 is cl	nanged u	ntil char	ging and	l letdown fl	ows are matched	
D. No manual adjustments are required. Charging and letdown are matched automat no change in pressurizer level										automatically with	
Answer	В		CED	Section		41.7					
Allowei			UTK	Section		71.7					
Higher Leve		]	RO	3.	2		SR0		3.1	]	
LP Number			LP Obje	ective							
0711-02			01.02								
EXPLAIN,	the manu	ual and auto	matic fu	nctions	of contr	ol valves	in the C\	/CS.			
Question So	ource	New									
Reference	OI	-CH-1								_	
Attachmen	t No	one									
	` _										
Comments											

Question Number		56											
System/M		005000	Stem	exce	ity to predict and/or monitor changes in parameters (to prevent eeding design limits) associated with operating the RHRS								
Residual I	noval Syste	m	cont	trols including:									
KANO A1.06			Descri	Description Relationship (dependence) of time available to perform system isolation surveillance test to time for decay heat to reach high limit									
Question													
QUESTION	Plant co	onditions ar	e as follows	<b>:</b> :									
	The rea	RCS inventory is at Mid Loop of the hot legs The reactor has been shutdown for 5 days RCS temperature is 130F											
	Determine the approximate time before boiling occurs in the core following a loss of shutdown cooling.												
	A. 12 minutes												
	B. 21 minutes												
	C. 27 minutes												
	D. 34 minutes												
Ĺ													
Answer	В		CFR Sec	tion	41.5 / 45.5								
Higher Lev	el 🗷	1	RO 🗷	2.7	SR0  3.1*								
LP Number			LP Objecti	Ve									
0707-42			03.01										
Time to bo	oil and RC	CS initial inv	rentory										
Ousstian C		Bank		D AC	PP-19-RO 006								
Question S				_R-AC	NF-19-KO 000								
Reference	A	OP-19											
Attachmer	nt A	OP-19											
Comments													
comments													

Question N	Number 57											
System/M	10de 005000 Stem Knowledge of bus power supplies to the following:											
Residual	Residual Heat Removal System  KANA K2 01 Description RHR pumps											
KANo	K2.01 Description RHR pumps											
Question	Assume that a loss of coolant accident occurred from full power. All offsite power was lost shortly following the accident. DG-2 failed to start. What LPSI pumps would be running in this situation.  A. No LPSI pumps would be running  B. SI-1A would be the only LPSI pump running  C. SI-1B would be the only LPSI pump operating											
	D. Both LPSI pumps, SI-1A and SI-1B would be running in this situation.											
Answer	B CFR Section 41.7											
Higher Lev	vel ☑ R0 ☑ 3.0 □ 3.2											
LP Number 0711-22	LP Objective 01.10											
State the	power supply for each major pump in the ECCS.											
Question S	Source New											
Reference	LP 07-11-22											
Attachme	nt None											
Comments	5											

Question Number		58													
System/M	ode	006000	S <sup>.</sup>	tem											
Emergend	y Core C	Cooling Syst	em												
KANo		2.4.49	D	escrip	tion	action	ns that re	equire ir	without reference to procedures those e immediate operation of system controls.						
Question	The following plant conditions exist following a reactor trip:  Pressurizer pressure = 1650 psia and lowering Containment Pressure = 6 psig and rising S/G pressures = 550 psia and lowering All radiation monitors are reading normal No ESF lockout relays have actuated  What action should be taken by the operator?  A. Operate the PPLS test switch  B. Operate the PPLS block switch  C. Operate the CPHS test switch  D Operate the SGLS block switch														
Answer	С		CE	R Sect	inn		41.10 /	43.2 / 4	5.6						
Higher Leve	L		RO RO	<b>✓</b>	4.0		]	SRO		]	4.0				
LP Number 0718-13			LP 0b	ojectivo o	<u>e</u>										
DEMONS conseque		he knowledg LOCA.	je requi	ired to	use	EOP-(	)3, Loss	of Cool	ant A	ccide	ent (LO	CA),	to mitig	gate the	
Question S	ource	New													
Reference		OP-03	1												
Attachmer	it live	one													
Comments															

Question Num	iber 59
System/Mode	Stem Knowledge of ECCS design feature(s) and/or interlock(s) which provide for the following:
Emergency	Core Cooling System
KANo	K4.20 Description Automatic closure of common drain line and fill valves to accumulator
2 A E	Which one of the following signals directly causes the SI Tank leakage cooler control valves, PCV-2909, -2929, -2949, and -2969, to close during a major LOCA?  A. CIAS  B. CPHS  C. PPLS  D. SIAS
_	
Answer	D CFR Section 41.7
Higher Level	□ R0 ☑ 3.2* SR0 □ 3.5*
LP Number	LP Objective
0711-22	01.08a
Explain over Actuation Sig	rall system response to actuation of automatic engineered safeguards signals: Safety Injection gnal (SIAS).
Ougation Cou	rce New
Question Sour	LGG INGM
Reference	ECCS STM
Attachment	None
0 1	
Comments	

Question N	lumber 60								
System/M	Ode Stem Ability to manually operate and/or monitor in the control room:								
Compone	ent Cooling Water System								
KANo	A4.08 Description CCW pump control switch								
^ I									
Question	The plant is operating at 50% power with CCW pump AC-3A operating. The control switches for AC-3B and AC-3C are in the after-stop position. How will the CCW system respond to an overcurrent trip of AC-3A.								
	A. There will be no automatic pump starts.								
	B. AC-3B will automatically start. AC-3C will start 30 seconds later if AC-3B failed to start.								
	C. AC-3C will automatically start. AC-3B will start 30 seconds later if AC-3C failed to start.								
	D. AC-3B and AC-3C will automatically start.								
Answer	D CFR Section 41.7 / 45.5								
HIIZAACI	CINSECTION, 18.0								
Higher Lev	rel ☑ R0 ☑ 3.1* SR0 □ 2.8								
LP Number	LP Objective								
0711-06	01.04								
EXPLAIN	standby operation of CCW pumps in terms of switch positions and automatic actions.								
Question S	Source New								
Questions	ource rew j [								
Reference	CCW STM								
Attachmei	nt None								
Comments									

Question N	umber	61							
System/M	ode	010000	Stem						
Pressurize	er Press	ure Control S	System						
KANo		2.2.25	Descrip					cal specifications for limiting safety limits.	g
Question	at 278 transie	0 psia. No rea	actor trip oc	curred. F	Pressurize	r pressure	returne	d pressurizer pressure to s d to 2100 psia following the	
		ace the plant i	_			•	o piani (	sperations:	
	B. Pla	ace the plant i	n HOT SHU	TDOWN	l within 6 h	iours			
	C Make an immediate notification to the PRC chairman and continue plant operation.  D. Make an immediate notification to the NRC and continue plant operation.								
Answer		<u> </u>	CFR Sec	ion	43.2				
Higher Leve		<b>✓</b>	RO ☑	2.5		SRO		3.7	
LP Number 0762-08			LP Objectiv	ve					
Immediate	action	for a Safety L	imit violatio	า					
Question So	ource	Bank	L	R-TS-R	C-RO 017	reworded			
Reference		Tech Specs							
Attachmer	nt [	None							
Comments									

Question N	umber	62	]						
System/Mode Pressurizer Pressu		010000 ire Control Sy	Stem	Knowledge of the physical connections and/or cause-effect relationships between the PZR PCS and the following systems:					
KANo		K1.01	Descrip	ription RPS					
Question	A. Whe prevents  B. Only bypass  C. Only TM/LP to	en a trip unit i s bypassing a y one channe switch. y one TM/LP rip unit bypas: design feature	is bypassed another TM, el can be se trip unit can es key.	ed with the bypass key, a contact opens in the logic ladder which M/LP trip unit.  selected using the bypass key to operate the 5-position TM/LP trip an be bypassed at a time because the key locker contains only one ded. Bypassing two TM/LP trip units is prevented by administrative					
Answer	С		CFR Sect	ction 41.2 to 41.9 / 45.7 to 45.8					
Higher Lev	el 🗆	] ,	RO 🔽	3.9 SR0					
LP Number 0712-25									
EXPLAIN	the functi	on and STAT	E the locat	ation of the individual trip unit bypass key-operated switches.					
Question S	ource	Bank	9:	95-60					
Reference	RF	PS STM							
Attachmer	nt No	one							
Comments									

Question N	lumber 63
System/M	lode 011000 Stem Knowledge of the operational implications of the following concepts as they apply to the PZR LCS:
Pressuriz	er Level Control System
KANo	K5.05  Description Interrelation of indicated charging flow rate with volume of water required to bring PZR level back to programmed level hot/cold
Question	How long would it take to raise indicated PZR level 10% using CH-1A only? (Assume normal at power plant conditions with letdown isolated)  A. 8 minutes
	B. 10 minutes
	C. 12 minutes
	D. 14 minutes
Answer	D
Higher Lev	rel 🗹 R0 🗹 2.8 SR0 □ 3.1
LP Number	LP Objective
0711-20	01.02a
DRAW a o Pressuriz	one-line diagram of the RCS, including penetrations for the following systems or components: er
Question S	Source Bank 99-83
Reference	CVCS STM
Attachmei	nt None
Comments	Need to check answer

Question N	umber	64							
System/M	ode	013000	Stem						
Engineere	d Safe	ety Features A	ctuation Sy						
KANo		2.4.50	Descrip		ility to verif entified in tl			•	l operate controls
Question	The	following cond	litions exist:						_
	All sa	nall break LOC afeguards cor actuated 31 o VT level is 78	nponents are minutes ago		ng as desir	ed			
	Wha	t action should s?	d be taken by	the RO	following th	e receipt	of LO-LO	O LEVEL ali	arms on both
	A. S	Stop the Boric	Acid Pumps.	Continue	e gravity fe	ed to the	charging	pump sucti	ions.
	В. 5	Stop all but on	e Charging p	ump. Co	ntinue eme	rgency b	oration.		
	С. [	Direct the Aux	Building opea	ntor to ba	atch to the E	BATs. Coi	ntinue er	mergency bo	oration
	D. (	Continue bora	tion by transfe	erring ch	arging pum	p suction	s to the	SIRWT	
Answer		D	CFR Sect	ion	45.3				
Higher Lev	el		RO 🗹	3.3		SR0		3.3	
LP Number			LP Objectiv	e	_				
0711-22			01.01						
Sketch a t	pasic s	single-line dra	wing of the E	CCS, lat	pelling all m	najor equ	pment.		
O 1! C		Modified		adified -	7 40 42 2 2	0.001			
Question S	our ce			oumeu <i>i</i>	7-18-13 3.2	0 00 1			
Reference		EOP-03							
Attachmer	nt	None							
Comments		Original qu	estion was us	sed on 1	995 NRC e	xam			

Question N	umber	65							
System/Mode 013000  Engineered Safety Features Ac		Stem	operations on the ESFAS; and (b) based Ability on those						
Engineere	d Safety	Features Ac	tuation Sy	predictions, use procedures to correct, control, or mitigate the					
KANo		A2.01	Descri	ription LOCA					
Question	A pressurizer steam space LOCA has caused PPLS and SIAS actuation. CETs are stable at 550F. RCS pressure is stable at 1300 psia, pressurizer level is 20% and rising. HPSI flow is 390 gpm.  With no operator action and assuming temperatures remain constant, how will pressurizer level, pressurizer pressure and HPSI flow respond?  A. Pressurizer level will stabilize slightly above 50%, pressure will lower and HPSI flow will								
	increas		ei wiii stadiii	ilize slightly above 50%, pressure will lower and HPSI flow will					
	B. Pressurizer level will rise to 100%, pressure and HPSI flow will remain constant.								
	C. Pressurizer level will rise to 100%, pressure will rise and HPSI flow will decrease.								
	D. Pressurizer level will stabilize slightly above 50%, pressure will rise and HPSI flow will decrease.								
Answer		<u>.                                      </u>	CFR Sec	ection 41.5 / 43.5 / 45.3 / 45.13					
AllSWei		<u>′</u>	CLK 26C	;CHOII 41.37 43.37 43.37 43.13					
Higher Lev	el E	<b>Z</b>	R0 🗹	] 4.6 SRO □ 4.8					
LP Number			LP Objectiv	tive					
0718-13			01.04						
		he Technical in EOP-03, L		cuments (TBDs), EXPLAIN the bases behind the major operator					
0 11 0		Б.		LD FOR 20 DO 205					
Question S	ource	Bank		LR-EOP-03-RO 005					
Reference	L	P 7-18-13							
Attachmer	nt N	lone							
Comments									

Question N System/M		66 015000	Stem				ations of the following concepts
Nuclear Ir	nstrumenta	ation Syster	n	as they a	pply to the NI	S:	
KANo		K5.12	Desc	ription Qua	drant power	tilt, including lo	ong-range effects
Question	The read		-	the following	g powers beir Channel C		the power range NI detectors
	Upper Lower	10 10	00% 01%	103% 99%	98% 99%	99% 101%	
	A. 0.01	the value of	Azimutna	i i iit. ?			
	B. 0,02						
	C 0.03						
	D 0.04						
Answer	С		CFR Se	ection	41.5 / 45.7		
Higher Lev	rel 🗷	<u> </u>	RO 🗷	3.2		SR0 □	3.6
LP Number 0712-20	-		LP Object 01.03d	tive			
DEFINE t	he followir	ng terms as	they apply	to the Inco	re NI System.	Azimuthal tilt	
Question S	ource	New					
Reference		S STM					
Attachmei		ne					
Comments							

Question N	umber	67							
System/M	ode	015000	Stem	Knowledg will have o			loss or r	malfunction	on the following
Nuclear In	strume	ntation Syster	n	will flave C	ii uie ivio.				
KANo		K6.02	Descri	ption Disc	riminator/c	compens	ation cir	cuits	
Question	affecte	ne reactor at 1 ed if the descr al setting?							ration Channel be to 50% of its
	A. The power		/R power wi	ill remain a	t 100% be	cause th	ne discrii	minator is r	ot used at this
	B. Th	e indicated W	'R power wi	ill drop to 0	% because	e a NON	-OP sigr	nal will be g	enerated
		ne indicated Wold setting	/R power w	ill indicate (	50% beca	use char	nnel outp	out is propo	rtional to the
		ne indicated W reshold setting		ill indicate 2	200% beca	ause cha	annel out	tput is inve	rsly proportional to
Answer		Α	CFR Sec	tion	41.7 / 45	.7			
Higher Leve	el	<u></u> ✓	RO 🔽	2.6	]	SR0		2.9	
LP Number			LP Objectiv	ve .					
0712-18			01.00						
Explain th FCS.	e basic	principles of c	design and	operation u	sed in WR	Nuclea	r Instrun	nentation S	ystem detectors at
Question So	ource	New							
Reference	ī	NI STM pages	7-8						
Attachmer	ıt lī	None							
	'' L								
Comments									

Question Nu	ımber 68								
System/Mo	de 022000 Stem								
Containme	ent Cooling System								
KANo	2.1.28 Description Knowledge of the purpose and function of major system components and controls.								
Question	The purpose of the moisture separators and mist eliminators in the containment cooling and filtering units is to:  A. Protect HEPA filters from water impingement damage								
	B. Prevent charcoal filters from absorbing water								
	C. Protect fans from water impingement damage								
	D. Limit the current drawn by the fan motors								
Answer	A CFR Section 41.7								
Higher Leve	RO 2 3.2 SRO 3.3								
LP Number 0714-02	LP Objective 01.07								
	e importance of moisture separators and mist eliminators to the operation of the Containment Air and Filtering System.								
Question So	urce Bank 7-14-02 1.7 N 001								
Reference	Containmnet STM								
Attachment	None								
Comments									

Question N	umber 69							
System/M	Ode Stem Knowledge of power supplies to the following:							
Containm	ent Cooling System							
KANo	K2.01 Description Containment cooling fans							
Question	The containment cooling fan, VA-7C, is powered from:							
	A. Bus 1B3B-4B							
	B. Bus 1B3C-4C							
	C. Bus 1A1							
	D. Bus 1A4							
Answer	B CFR Section 41.7							
Higher Leve	el							
LP Number	LP Objective							
0714-02	01.00							
	cific plant conditions, apply the principles of operation of the Containment Air Cooling and Filtering diagnose system response.							
Question So	ource New							
Reference	Containment STM							
Attachmer	None None							
Comments								

Question N	lumber 70								
System/M	Ability to (a) predict the impacts of the following malfunctions or operations on the CSS; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of								
KANo	A2.03 Description Failure of ESF								
_									
Question	A steam line break inside containment has occurred causing both PPLS and CPHS to actuate. Containment Spray pump, SI-3B, failed to start.								
	What shouild be the status of the containment spray header valves, HCV-344 and HCV-345?								
	A. HCV-344 and HCV-345 will both open								
	B. HCV-344 will open. HCV-345 will remain closed								
	C. HCV-344 will remain closed. HCV-345 will open								
	·								
	D. HCV-344 and HCV-345 will both remain closed								
Answer	C CFR Section 41.5 / 43.5 / 45.3 / 45.13								
Higher Lev	vel ☑ R0 ☑ 4.1 SR0 □ 4.4								
LP Number	LP Objective								
0711-22	01.08								
Explain o	verall system response to actuation of automatic engineered safeguards signals.								
Question S	Source Bank LR-EOP-05-RO 014								
Reference	ECCS STM								
Attachmer	nt None								
Comments	;								

Question N	umber	71							
System/M	ode	026000	Stem	Ability to m	anually o	perate a	ind/or mo	onitor in the control room:	
Containme	ent Spray	System							
KANo		A4.05	Descrip	otion Conta	inment sp	oray res	et switch	nes	
Question	A. The signal p	Jockout relay y normally re y allow manu resent. y allow manu etpoint. y allow manu	vs? set automa al reset so ual reset of	tically and on that contain the CPHS s	only requin	re manu ay actua r contai	al reset ation car	nment Pressure High Signal after a loss of voltage.  The overridden with a CPHS oressure drops below the pumps can be restarted	
L									
Answer	С		CFR Sect	tion	41.7 / 45	.5 to 45.	8		
Higher Leve	el 🗆	]	RO 🔽	3.5		SR0		3.5	
LP Number 0712-14			LP Objectiv	re					
EXPLAIN	the opera	tion of the fol	lowing devi	ces: Lockou	ıt relays				
Question So	ource	Bank	9.	7-13					
Reference	F.S	SC STM							
Attachmer	it No	one							
Comments									

Question Nu	mber 72
System/Mo	de 027000 Stem Knowledge of the operational implications of the following concepts as they apply to the CIRS:
Containme	ent Iodine Removal System
KANo	K5.01 Description Purpose of charcoal filters
	The containment air cooling and filtering system charcoal filters are designed to remove from the containment.  A. Noble gasses  B. lodine  C. Hydrogen  D. Smoke
	D. Smoke
Answer	B CFR Section 41.7 / 45.7
Higher Leve	I □ R0 ☑ 3.1* SR0 □ 3.4*
LP Number 0714-02	LP Objective 01.00
	cific plant conditions, apply the principles of operation of the Containment Air Cooling and Filtering diagnose system response.
Question So	urce Bank 07-14-02 1.0 003
Reference	LP 07-14-02
Attachment	† None
2	
Comments	

Question N	lumber	73							
System/M	<b>lod</b> e	028000	Stem	Ability to ma	anually op	erate ar	nd/or mo	nitor in the control room	n:
Hydroger	n Recombi	iner and Pui	rge Control						
KANo		A4.03	Descri					gen sampling and anal ding alarms and indicat	
Question	Analyze  A. Utiliz  B. Calil  C. Tak	er if Containr ze a percent brate the Hy e actions to	ment humid t error graph drogen Ana reduce the	ons must be ity reaches 1 a to correct for high humidity insing to correct for high to correct for high the correc	00% hum or excessive humidity.	idity? ve humid ontainme	dity.	Containment Hydroge	า
Answer	Α		CFR Sec	tion	41.7 / 45.	5 to 45.8	3		
Higher Lev	⁄el □	]	RO 🗹	3.1		SR0		3.3	
LP Number	<u>-</u>		LP Objecti	ve					
0714-03			02.01						
EXPLAIN humidity.	how the p	procedure is	used to ob	tain accurate	% hydro	gen leve	els unde	r conditions of 100% re	lative
Question S	Source	Bank		7-14-03 2.1	001				
	_	\\\							
Reference	) [0]	I-VA-6							
Attachme	nt No	one							
Comments	S				-				

Question N	umber 74										
System/M	ode 029000 Stem Knowledge of the effect that a loss or malfunction of the										
Containm	ent Purge System will have on the following:										
KANo	K3.02 Description Containment entry										
Question	How would inoperability of the containment purge fans affect a refueling outage?										
	A. Containment entry would be delayed due to higher airborne activity										
	B. Containment entry would be delayed due to higher temperatures in containment										
	C. Plant startup would be delayed because tech specs require operability of the purge fans										
	D. There would be no affect on the outage										
l											
Answer	A CFR Section 41.7 / 45.6										
Higher Lev	el □ R0 ☑ 2.9* SR0 □ 3.5*										
LP Number 0714-04	LP Objective 01.01										
STATE th	e purpose of the Containment Purge System.										
Question S	nurce New										
Questions	oui ce liter										
Reference	Containment STM										
Attachmei	nt None										
Comments											
COMMENTS											

Question N	lumber	75									
System/M Steam Ge		035000	Stem	operation	ns on the GS	S; and (b	o) based	following malfunctions or on those predictions, use gate the consequences of			
Steam Ge	illerator o	ystem		procedur	<u> </u>	-1, 0011110	71, OI IIIII				
KANo		A2.03	] Descr	iption Pre	ssure/level t	transmitt	ter failure				
Question	The plant is operating at steady state full power when level in one steam generator is seen to decrease. Which one of the following is a possible cause of this decrease?  A. Electrical control power has been lost to the affected S/G's reg valve.  B. Control air pressure has been lost to the affected S/G's feed reg valve  C. Steam pressure has failed low on the affected side  D. Steam flow has failed high on the affected side										
A											
Answer	С		CFR Sec	ction	41.5 / 43	.5 / 45.3 /	/ 45.5				
Higher Lev	rel 🔽	]	RO 🗹	3.4		SR0		3.6			
LP Number 0711-11			LP Object 02.02	ive							
DESCRIB	SE the con	itrols located	d in the Co	ntrol Room	associated	with the	feedwat	ter components.			
0 11 0		D I.		22.40							
Question S	ource	Bank	[	99-42							
Reference	CC	OND & FW S	TM								
Attachmei	nt No	one									
Comments											

Question N	lumber 76										
System/M	Stem   Knowledge of operational implications of the following concepts as the apply to the S/GS:										
Steam Ge	enerator System										
KANo	K5.01 Description Effect of secondary parameters, pressure, and temperature on reactivity										
Question	The reactor is operating at 50% power near the end of an operating cycle. Group 4 CEAs are at 100". A transient occurs which causes reactor power to lower and RCS T-cold to rise. Which one of the following could be the cause of this event?  A. Inadvertent CEA withdrawal										
	B. Inadvertent CEA insertion										
C. Inadvertent opening of the turbine control valves											
	D. Inadvertent closing of the turbine control valves										
l											
Answer	D CFR Section 41.5 / 45.7										
Higher Lev	rel 🗹 R0 🗹 3.4 SR0 □ 3.9										
LP Number	LP Objective										
0715-17	01.00										
EXPLAIN	the plant response to a loss of secondary heat removal event.										
Question S	ource New										
D (	L D 07 45 47										
Reference	LP 07-15-17										
Attachmei	nt None										
Comments											

Question N	umber	77									
System/Mo	ode	039000	Stem								
Main and I	Reheat S	team System	1								
KANo		2.1.30	Descrip	tion Abilit	y to locate rols.	and ope	erate cor	nponent	s, includir	ng local	
Question	A. Whe the valv  B. Place the valv  C. Place	in steam isoloperation of the placed in Clear remain clear remain clear remain clear remain clear remain clear remain clear remains a clear remains re	e manual s  OPEN, the posed. All au  ual shutoff v  automatic tr  ual shutoff v	hutoff valvoneumatic tomatic tri valve in OV ips are def valve in OF	es?  cylinders a ps are defe  (ERRIDE, 1 feated.  PEN, the pr	are vente eated. the pneu	ed throug	gh the op	oen solen are pressi	oids and urized and	
	valves open. All automatic trips are operable.  D. Placing the manual shutoff valve in OVERRIDE, the pneumatic cylinders are vented through the open solenoids and the valves remain closed. All automatic trips are operable.										
Answer	В		CFR Sect	ion	41.7 / 45	.7					
Higher Leve	el 🗆	]	RO ☑	3.9	]	SR0		3.4			
LP Number 0711-17			LP Objectiv 01.06	e							
EXPLAIN	how char	nges in plant	conditions v	vill effect t	he Main St	eam Sys	stem.				
Question Sc	ource	Bank	07	7-11-17 1.6	6 004						
Reference	M	S STM									
Attachmen	it No	one									
Comments											
30.1111101113											

Question N	lumber 78
System/M	O39000   Stem   Knowledge of the physical connections and/or cause-effect relationships between the MRSS and the following systems:
Main and	Reheat Steam System
KANo	K1.06 Description Condenser steam dump
Question	Steam bypass valve controller, PIC-910, has been set to 870 psia. What cold leg temperature will be maintained in the RCS 15 minutes after the plant inadvertently trips from full power assuming all system operate as expected?  A. 528F
	B. 532F
	C. 535F
	D 540F
	0500 II
Answer	A CFR Section 41.2 to 41.9 / 45.7 to 45.8
Higher Lev	rel
LP Number	LP Objective
0712-31	02.02
	the actions necessary to control main steam pressure using the steam dump and turbine bypass he automatic pressure and temperature control outputs from the RRS are not available.
Question S	Source New
5.6	LIO OTIL
Reference	MS STM
Attachmer	nt Steam tables
Comments	

Question N	umber	79									
System/M	ode	045000	Stem								
Main Turb	ine Gene	rator Syste	m								
KANo		2.1.32	Descri	ption Abi	ility to expla	in and ap	oply all s	system lim	its and precautions.		
Question	Exhaus	t Hood A Te		power wh	nen the follo	owing an	nunciat	ors alarm:			
			·	l, what wo	ould be the I	result of	the high	temperati	ure on the main		
	<ul> <li>A. No effect on turbine operation</li> <li>B. The turbine would trip at 175 F</li> <li>C. The condensate system would increase flows to reduce temperature</li> </ul>										
D. The turbine would trip at 225 F											
Λ			CED C	11	44.40/	43.2 / 45.	10				
Answer	D		CFR Sec	LION	41.10/4	43.2 / 43.	12				
Higher Lev	el 🗹		RO 🗹	3.4		SR0		3.8			
LP Number 0711-18			LP Objectiv	/e	]						
Explain h	ow exhau	ist hood spr	ay cooling is	accompl	lished if the	auto init	iation fa	ils.			
Question S	ource	Bank	9	9-84							
Reference											
Attachmer	nt N	one									
Comments											

Question N	umber	80										
System/M		045000	Stem		dge of MT/o			reature(s) and/or interlock(s)	)			
Main Turb	ine Gene	rator Systen	n									
KANo		K4.44	Desc	ription Im	pulse pres	sure mod	le contro	ol of steam dumps				
Question	valves to		. The turbi					using the turbine control the following sets of valves				
	A. The steam dump valves (TCV-909s) and the turbine bypass valve (PCV-910)											
	B. The turbine bypass valve (PCV-910) and some of the S/G safety valves											
	C. The steam dump valves (TCV-909s) and some of the S/G safety valves											
	D. The turbine bypass valve (PCV-910), the steam dump valves (TCV-909s) and some of the S/G safety valves											
L	_											
Answer	В		CFR Se	ection	41.7							
Higher Lev	el 🔽	]	RO 🔽	2.5*		SR0		2.8*				
LP Number			LP Objec	tive								
0711-18			01.01a									
State the f	functional	relationshi	p between	the turbin	e and the fo	ollowing s	systems:	Main Steam System.				
Question S	ource	New										
Reference	R	CS & RR ST	M									
Attachmer	nt No	one										
Comments												

Question N	umber 81											
System/M	Ode 059000 Stem Knowledge of the effect that a loss or malfunction of the MFW will have on the following:											
Main Feed	dwater System											
KANo	K3.03 Description S/GS											
Question	A Steam Generator Isolation Signal (SGIS) has isolated Feed Water to both Steam Generators.  All Main Feedwater pumps are tripped. FW-6 is running. Which one of the following actions result in water being provided to FW-2B's Feed Ring?  A. Open HCV-1384, Override and Open HCV-1104 and FCV-1102											
	B. Open HCV-1384, Override and Open HCV-1385 and HCV-1106											
	C Open HCV-1385, Override and Open HCV-1104 and FCV-1102											
	D. Open HCV-1385, Override and Open HCV-1104 and HCV-1106											
Answer	B CFR Section 41.7 / 45.6											
Higher Lev	el 🗹 RO 🔽 3.5 SRO 🗆 3.7.											
LP Number	LP Objective											
0711-01	01.01											
EXPLAIN System.	the indications located in the Control Room on panels AI-66 and CB-10/11 associated with the AFW											
Question S	ource Bank 2001-1-102											
2400110110												
Reference	AFW STM - AFW diagram											
Attachmer	nt None											
Comments	Used on 2001 NRC exam											

Question N	lumber	82									
System/M	ode	059000	Ste					a loss o	r malfun	oction of	the MFW will
Main Fee	dwater Sy	stem		liave	on the	e followin	ıy.				
KANo		K3.04	Des	cription	RCS						
ŗ											
Question	Which one of the following describes the consequenses of late initiation of once through coduring condiitons when it is required?										ough cooling
	A. The flow rate through the PORVs may no longer be adequate to remove decay heat which may lead to core damage.										at which
	B. The decay heat level may not be adequate to support sufficient natural circulation flow to prevent core damage.										
C. The HPSI flow rate may no longer be adequate to maintain RCS inventory high enough prevent core damage.										nough to	
D. The increase in RCS temperature may increase hydraulic forces on the fuel assembl may lead to core damage.									emblies, whicł		
Answer	С		CFR '	Section		41.7 / 45	5.6				
Higher Lev	el 🗷	]		<b>✓</b> 3.6			SR0		3.8		
LP Number	-		LP Obje	ctive							
0718-18			01.04								
DESCRIB	E the ove	rall strategy	of EOP-	20.							
Question S	OUTCE	Bank		07-18-	18 1.4	001					
	_	P loss of FW	,								
Reference	LI	PIOSS OF FW									
Attachme	nt No	one									
Comments	j	Used on 99	NRC exa	am							

Question Number		83	]								
System/M	ode	061000	Stem	Ability to predict and/or monitor changes in parameters (to prevent exceeding design limits) associated with operating the AFW							
Auxiliary /	Emergen	cy Feedwate	er System	controls including:							
KANo		A1.02	Descrip	ription S/G pressure							
г											
Question	The following plant conditions exist:										
	A steam leak upstream of the MSIV on the "A" S/G has occurred Pressure in the "A" S/G is 480 psia Level in the "A" S/G is 50% WR Pressure in the "B" S/G is 575 psia Level in the "B" S/G is 60% WR The MSIVs are closed										
	Assumir	ng no operat	or action, w	which one of the following is the current status of the AFW system?							
	A. AFW	should be fe	eeding the ".	e "A" S/G only.							
	B. AFW	/ should be f	eeding the '	e "B" S/G only							
	C. AFW	/ should be f	feeding both	oth S/Gs							
	D. AFW	/ should not	have initiate	ated yet							
Answer	D		CFR Sect	ection 41.5 / 45.5							
Higher Lev	el 🗷	l	RO 🗹	3.3* SR0 □ 3.6*							
LP Number			LP Objectiv	tive							
0715-17			02.05								
EXPLAIN	the poten	tial consequ	ences of lat	ate initiation of once through cooling.							
O 1! C		Modified		95-085							
Question S	our ce	Modified	9:	95-065							
Reference	ES	SC STM									
Attachmer	nt No	ne									
Comments											

Question Number		84									
System/Mode Auxiliary / Emerge		061000 cy Feedwat	Ste	exce	eding					arameters (to practing the AFV	
KANo	scription	AFW	source ta	nk level							
Question	Both D/G's failed to start FW-54 is not available FW-10 is supplying 100 gpm to each S/G EFWST level is 80 inches									wing	
	If the present rate of feed is maintained to both S/Gs, how long will it take to empty the EFWST?  A. 1 hour 15 minutes  B. 2 hours 30 minutes  C. 3 hours 30 minutes  D. 4 hours 15 minutes										ST?
Answer	В		CFR	Section		41.5 / 4	5.5				
Higher Lev	el 🗷	]	RO I	3.9			SR0		3.9		
LP Number 0717-30			LP 0bje								
Describe	what plan	t conditions	would re	equire en	nerger	icy make	up to the	EFWS1	Г.		
Question S	ource	Bank		LR-AO	P030	RO 002					
Reference	No	one									
Attachmer	nt AC	OP-30									
Comments											

Question N	lumber 85										
System/M	O61000   Stem   Knowledge of the physical connections and/or cause-effect relationships between the AFW and the following systems:										
Auxiliary /	Emergency Feedwater System										
KANo	K1.07 Description Emergency water source										
Question	The EONT reports a leak in the Emergency Feedwater Storage Tank has emptied it. Which one of the following should be used to feed the steam generators if the plant were to trip due to a loss of offsite power. Assume both D/G's start and load as designed.  A. Motor driven AFW pump, FW-6										
	B. Turbine driven AFW pump, FW-10										
	C. Diesel driven AFW pump, FW-54										
	D. Diesel driven Fire pump, FP-1B										
Answer	C CFR Section 41.2 to 41.9 / 45.7 to 45.8										
Higher Lev	rel □ R0 ☑ 3.6 SR0 □ 3.8										
LP Number	LP Objective										
0711-01	01.10										
	BE the operational conditions associated with the operation of each of the three AFW pumps: FW-6, nd FW-54.										
Question S	Source New										
Reference	AFW STM										
Attachme	nt None										
Comments											

Question Number		86									
System/Mo	ode	062000	Stem	Knowledge distribution					tion of the ac	;	
A.C. Electi	rical Di	stribution									
KANo		K3.02	Descrip	otion ED/G							
, F											
Question	The plant is in cold shutdown with all 4160 buses powered from 345 KV. Shutdown cooling is operation with LPSI pump SI-1A running. Emergency Diesel Generators #1 and #2 are aligne normal operation. Assiming all system operate as designed, what will happen if 345 KV powers:    Still   The plant is in cold shutdown with all 4160 buses powered from 345 KV. Shutdown cooling is operation with LPSI pump SI-1A running. Emergency Diesel Generators #1 and #2 are aligned normal operation. Assiming all system operate as designed, what will happen if 345 KV powers:										
	A. Bo	oth D/G's will s	start, accele	rate to full s	peed. And	l load bu	sses 1A	3 and 1A	4		
	B. Both D/G's will start and accelerate to full speed. Neither bus 1A3 or 1A4 will be powered unit SI-1A is tripped										
	C. Both D/G's will start and accelerate to full speed. DG-1 will load Bus 1A3. Bus 1A4 will no powered until SI-1A is tripped										
		oth D/G's will s red until SI-1A		celerate to	ull speed.	DG-2 w	ill load E	Bus 1A4.	Bus 1A3 will	not be	
Answer		A	CFR Sec	tion	41.7 / 45	.6					
Higher Leve	el .	abla	RO 🗹	4.1	]	SR0		4.4			
LP Number			LP Objectiv	/e							
0713-05			01.10								
<b>-</b>											
Explain an	emerg	gency start of t	ne EDG. In	ciude in you	ır expiana	tion the f	ollowing	<b>)</b> :			
Question Sc	urco	Bank		7-13-05 1.1	0F 001 re	worded					
Question st	Jui CC	Dank			02 00110	1101404					
Reference		D/G STM									
Attachmen	t [	None									
Comments											

Question N	umber 87
System/M	Ode Stem Ability to monitor automatic operation of the ED/G system, including:
Emergend	cy Diesel Generators
KANo	A3.11 Description Need for setting offsite power breaker to automatic
Question	Diesel generator D/G-1 has received a start signal as a result of a reactor trip. The engine lube oil pump discharge pressure switch has failed in the low pressure position. Which one of the following describes the expected response of D/G-1 to these events?  A. It will not start  B. It will start but will trip after 15 seconds  C. It will start and then idle at 500 RPM
	D. It will start and then run at 900 RPM
Answer	C CFR Section 41.7 / 45.5
Higher Lev	el ☑ R0 ☑ 3.1* SR0 □ 2.9*
LP Number 0713-05	LP Objective O1.09
	normal start of the EDG. Include operation of the Air Start System, the actions that take place, and ions that exist at 40, 100, 500, 750 and 900RPM. Include where a normal start can be initiated.
Question S	00rce Bank 07-13-05 1,9G 001
Reference	D/G STM
Attachmer	nt None
Comments	used on 95 NRC exam

Question N	lumber 88										
System/Mode Stem Ability to manually operate and/or monitor in the control room											
Emergen	Emergency Diesel Generators										
KANo	No Description Transfer ED/G (with load) to grid										
Question	D/G-1 is operating fully loaded onto bus 1A3 during a test. Bus 1A3 is also being supplied by 161 KV offsite power. Which one of the following is the reason for placing the governor in the speed droop mode in this configuration?										
	A. Prevent overspeed										
	B. Prevent undervoltage										
	C. Prevent overload										
	D. Prevent overvoltage										
Answer	C CFR Section 41.7 / 45.5 to 45.8										
Higher Lev	el ☑ R0 ☑ 3.4 SR0 □ 3.4										
LP Number											
0713-05	01.07										
	enerator instrumentation and controls at AI-30 and CB-20. (Specifically generator volts, amps, KW, voltage regulator, governor motor and output breaker control).										
Question S	ource New										
Reference	D/G STM										
Attachme	nt None										
Comments											

Question N	umber 89										
System/M	ode 071000 Stem										
Waste Ga	s Disposal System										
KANo	2.1.28 Description Knowledge of the purpose and function of major system components and controls.										
Question	The purpose of the waste gas decay tanks is to:										
	A. Collect combustible gasses from plant components until they can be inerted and released										
	B. Store radioactive noble gasses until their activity is low enough for release										
	C. Collect combustible gasses from plant components until they can be inerted and reused in the plant										
	D. Store radioactive noble gasses until their activity is low enough for reuse in the plant										
Answer	B CFR Section 41.7										
Higher Lev	el										
LP Number	LP Objective										
0711-31	01.00										
	e principles of operation of the Waste Disposal (Gas) System to diagnose system response for lant conditions.										
Question S	nurre New										
Reference	waste disposal STM										
Attachmer	nt None										
Comments											

Question N	lumber 90										
System/M	Ode O71000 Stem Ability to manually operate and/or monitor in the control room:										
Waste Ga	as Disposal System										
KANo	A4.27 Description Opening and closing of the decay tank discharge control valve										
Question	A planned release of Wests Cas Descritory "P" is in progress. Which are of the following										
A planned release of Waste Gas Decay tank "B" is in progress. Which one of the following describes the automatic action due to a high alarm on RM-062?											
	A. Trips all waste gas compressors										
	B. Places control room ventilation into recirculation mode										
	C. Closes waste gas discharge valves										
	D. Stops all hydrogen purge fans										
Answer	C CFR Section 41.7 / 45.5 to 45.8										
Higher Lev	rel □ R0 ☑ 3.0* SR0 □ 2.7*										
LP Number	LP Objective										
0711-31	01.05										
EXPLAIN	the automatic operation of components in the Waste Disposal (Gas) System.										
Question S	ource bank 99-80										
Reference	Waste Disposal STM										
Attachmer	nt None										
Comments	Used on 1999 exam										

Question N	lumber 91									
System/M	relationships between the ARM system and the following systems:									
Area Radi	iation Monitoring System									
KANo	K1.03 Description Fuel building isolation									
Question	reads 200 mrem/hr. Which one of the following AOPs should be entered as a result of this condition?									
	A. None									
	B. AOP-08 (Fuel Handling Incident)									
	C. AOP-09 (High Radioactivity)									
	D. AOP-21 (High RCS Activity)									
Ancwor	C CFR Section 41.2 to 41.9 / 45.7 to 45.8									
Answer	C CLK 26CTION 41.2 to 41.37 43.7 to 43.0									
Higher Lev	el <b>☑</b> R0 <b>☑</b> 3.6* SR0 □ 3.7*									
LP Number	LP Objective									
0717-09	01.01									
Discuss th	he purpose of the AOP.									
Question S	Ource Bank 07-17-09 1.1 001									
Questions										
Reference	AOP-09									
Attachmer	nt None									
Comments	Used 1995 NRC exam									

Question Number		92									
System/M	ode	073000	Stem Knowledge of the physical connections and/or cause relationships between the PRM system and the fol								
Process R	Radiatio	n Monitoring S	System								
KANo	NO Rescription Those systems served by PRMs										
, F											
Question With the unit at 100% power, the following parameters were observed:											
	VCT level is lowering CCW surge tank level and pressure are rising RM-053 countrate is rising										
	Which	one of the fol	lowing coul	d produce	these indic	cations?					
	A. A tube leak in one of the CCW heat exchangers										
	В. А	leak in one of	the RCP se	al coolers							
	C. A	tube leak in th	e spent fuel	pool heat	exchanger						
	D. A	coil leak in on	e of the con	tainment co	ooling units	3					
Anouson		В	CED Coo	tion	41.2 to 4	1 0 / 45	7 to 15 9				
Answer		В	CFR Sec <sup>-</sup>	LION	41.2 10 4	1.9 / 45.	1 10 43.0				
Higher Lev	el	<b>∠</b>	R0 🗹	3.6		SR0		3.9	]		
LP Number			LP Objectiv	/e							
0711-06			06.01								
EXPLAIN	conditio	ons that indica	te leakage i	n or out of	he CCW S	ystem.					
Question S	ource	bank	0	7-11-06 6.	01 001						
Reference		CCW STM									
Attachmer	nt [	None									
Comments		Used on 97 S	SRO exam								

Question Number		93							
System/Mode		086000	Stem	Ability to n	nanually c	perate a	nd/or mo	onitor in the	control room:
Fire Prote	ction Syst	tem							
KANo		A4.01	Descrip	otion Fire	water pum	nps			
Question	A. Delu pressur	tic starting of uge valve ope e.	the fire pure	mps? (assi	ume the fi	re proted	ction sys	tem is fully	ect sequence for operable) on low system on low system
	D. AT-	e.  uation of the T	result in a	-			_		
Answer	С		CFR Sect	tion	41.7 / 45	5.5 to 45.	8		
Higher Leve	el 🗆	]	RO 🔽	3.3		SR0		3.3	
LP Number 0711-12			LP Objectiv 01.00						
When give System re		c plant condit	ions, be ab	le to APPL	Y operati	ng princi	ples to d	liagnose Fir	e Protection
Question So	ource	Bank	9.	7-34					
Reference	LF	07-11-12							
Attachmer	nt No	one							
Comments	l	Jsed on 97 S	RO exam						

<b>Question Number</b>		94									
System/M	ode	086000	S		Knowledge of		ature(	s) and	or interlo	ck(s) which	n provide
Fire Prote	ction S	ystem			for the following:						
KANo		K4.03	D	escript	ion Detection	and locat	tion of	fires			
Question	Which one of the following describes the expected response of the Fire Protection System in the East Switchgear Room?  A. The first detector actuated causes the ventilation dampers to the affected space to show the street of t										
	a 60 second time delay, the halon bank discharge is initiated.										
	<ul><li>B. After two detectors have actuated in the same space, the ventillation dampers for both switchgear rooms shut and the halon bank discharge is initiated.</li><li>C. The first detector actuated causes the ventillation dampers in both switchgear rooms to sharp the second detector actuated causes the halon bank to discharge.</li></ul>										
					ated in the sa 0 second time						·d.
Answer		D	CF	R Secti	on 41.	7					
Higher Lev	el	<b>V</b>	RO	V	3.1	SI	RO [		3.7	]	
LP Number			LP Ok	ojective	!						
0711-12			01.0	•							
EXPLAIN	the cor	ntrols associa	 ated with	n Fire F	Protection Syst	em equip	ment r	manipu	ulated fror	n the Cont	rol Room.
Question S	ource	bank		7-	1-12 1.5 001						
		Fine Duete et									
Reference		Fire Protection	on STIVI								
Attachmei	nt	None									
Comments		Used on 95	ē exam								

Question N	umber 95
System/M	Ode Stem Knowledge of the physical connections and/or cause-effect relationships between the containment system and the following
Containm	ent System systems:
KANo	K1.02 Description Containment isolation/containment integrity
Question	The plant is at power with containment integrity established. Which one of the following would be considered a loss of containment integrity?  A. Containment pressure slowly increasing.  B. A locked closed containment isolation MOV is inoperable  C. HCV-746A (Pressure Relief) is open  D. Both PAL door seals have failed leak tests
Answer	D CFR Section 41.2 to 41.9 / 45.7 to 45.8
Higher Lev	el □ R0 ☑ 3.9 SR0 □ 4.1*
LP Number	LP Objective
0711-08	02.01
DESCRIB	E how containment integrity is monitored.
Question S	Ource Modified 7-11-08 2.1 N 001
Reference	AOP-12
Attachmer	nt None
Comments	

Question N	Number	96			
System/N	<b>lod</b> e	CE-A13	Ste		nowledge of the reasons for the following responses as they apply the (Natural Circulation Operations)
Natural C	irculation	on Operation	3		the (Natural Circulation Operations)
KANo		AK3.01	Des	scription	Facility operating characteristics during transient conditions, including coolant chemistry and the effects of temperature, pressure, and reactivity changes and operating limitations and reasons for these operating characteristics.
Question					
Question	four r	plant tripped freactor coolar ollowing cond	nt pumps.		r following a transient involving the loss of forced flow from all
		pressure is 2			
	Stear	surizer level is m Generator	Pressures		
	Hot le	m Generator ' eg temperatu	res are 57	75F	rels are 40%
	Cold	leg temperat	ures are 5	532F	
	Whic	h one of the f	ollowing a	actions w	would be most effective in enhancing natural circulation?
	A. R	aise RCS pre	essure		
	B. R	aise Pressur	zer Level		
	C. R	taise Steam (	∋enerator	Pressur	ures
	D. R	taise Steam (	enerator	Levels	
Anouge		D	CED	Coation	41.5 / 41.10 / 45.6 / 45.13
Answer		Ь	LFK	Section	41.57 41.107 45.07 45.13
Higher Lev	/el	$ \checkmark $	RO E	3.4	3.4 SRO   3.7
LP Number	r		LP Obje	ective	
0715-16			01.07		
EYDI AIN	l the pla	int response t	o the dev	elonmen	ent of natural circulation.
LXI LXIIV	Tille pla		o the dev	ciopinicii	ant of natural officiation.
Ouaction (	Source	Bank		2001-	1.123
QuestionS	oui ce				1-12U
Reference	9	SHB 0715-1	∂ page 15	5	
Attachme	nt	None			

Comments	used on 2001 exam

Question N	lumber 97
System/M	ode CE-A16 Stem
Excess R	CS Leakage
KANo	2.2.25 Description Knowledge of bases in technical specifications for limiting conditions for operations and safety limits.
Question	Which one of the following conditions requires entry into AOP-22 (Reactor Coolant Leak)?
	A. CRDM seal leakage is 0.8 gpm
	B. CRDM seal leakage is 1.2 gpm
	C. Unidentified leakage is 0.8 gpm
	D. Unidentified leakage is 1.2 gpm
Anguar	D CFR Section 43.2
Answer	D CFR Section 43.2
Higher Lev	rel 🗹 R0 🔽 2.5 SR0 🗆 3.7
LP Number	LP Objective
0717-22	01.02
	how the plant responds to a Reactor Coolant Leak in terms of how specific equipment is affected and ects overall plant operation and reliability.
Question S	Ource Bank 7-17-22 1.2 N 001
Reference	AOP-22
Attachme	nt None
Comments	

Question N	lumber 98
System/M	Ode CE-E06 Stem Knowledge of the interrelations between the (Loss of Feedwater)
Loss of F	eedwater and the following:
KANo	EK2.02  Description  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.
Question	EOP-06 directs the operators to trip all RCPs following a loss of all feedwater. What is the basis for this action?
	A. Flow from the RCPs would interfere with once through cooling
	B. To eliminate the RCPs as a source of heat input to the RCS
	C. To reduce the risk of clad damage due to quenching if a void forms in the vessel
	D. To allow the stratification of phases so that water remains in the reactor vessel
Answer	B CFR Section 41.7 / 45.7
Higher Lev	el
LP Number	LP Objective
0718-16	01.06
	copy of the Technical Basis Documents (TBDs), EXPLAIN the bases behind the major operator ontained in EOP-06, LOAF.
0	Death 05 040
Question S	ource Bank 95-042
Reference	LP 07-15-17
Attachmei	nt None
Comments	

Question No	umber 99
System/Mo	ode CE-E09 Stem
Functiona	I Recovery
KANo	2.1.30 Description Ability to locate and operate components, including local controls.
Question	An EOP-20 event has occurred involving a loss of DC bus# 2. DC bus #1 is being powered by a battery charger. What other condition must be met before the MVA-DC safety function is satisfied?  A. Switchgear DC control power must be supplied by DC bus #1  B. DC loads must be minimized  C. The battery #2 output breaker must be opened  D. DC bus #2 must be reenergized
L	
Answer	A CFR Section 41.7 / 45.7
Higher Leve	el □ R0 ☑ 3.9 SR0 □ 3.4
LP Number 0718-18	LP Objective 01.06
	how the Resource Assessment Trees are used in terms of Safety Function priority and success path thin each tree.
Question So	ource Modified 2001-01-52
Reference	EOP-20 page 141
Attachmen	nt None
Comments	

Question N	lumber 100
System/N	CE-E09   Stem   Knowledge of the operational implications of the following concepts as they apply to the (Functional Recovery)
Functiona	al Recovery
KANo	EK1.02 Description Normal, abnormal and emergency operating procedures associated with (Functional Recovery).
Question	In the Heat Removal section of EOP-20, Functional Recovery, operators are instructed to maintain NR S/G level above 85%. What is the basis for this:  A. To reduce thermal cycles on the AFW nozzles
	B. To prevent overpressurizing the feedwater ring
	C. To ensure adequate heat sink for once-through-cooling
	D. To enable adequate recirculation flow in the S/G.
Answer	A CFR Section 41.8 / 41.10 / 45.3
Higher Lev	/el □ R0 🗹 3.2 SR0 □ 4.0
LP Number	LP Objective
0718-18	01.00
	Functional Recovery Procedure (EOP-20) to bring the reactor, Reactor Coolant System and ent to a safe and stable condition.
Question S	Source Bank 7-18-18 one distractor changed
D (	EOD 00
Reference	EOP-20
Attachme	nt None
Comments	used on 95 exam