QUESTION 1

The plant is operating at 20 % power following RF11.

A ground fault on the Entergy Grid resulted in the Main Generator output circuit breakers J5228 and J5232 automatically opening on a Generator Lockout.

Which one of the following describes the reaction of the plant to this trip? ASSUME NO OPERATOR ACTIONS.

- A. Main Steam Bypass Valves will automatically open maintaining reactor pressure. The reactor will scram following the closure of the Main Turbine Stop and Control Valves.
- B. Main Steam Bypass Valves will automatically open maintaining reactor pressure. The reactor will remain at power with the Main Turbine remaining in operation.
- C. Main Steam Bypass Valves will automatically open maintaining reactor pressure. The reactor will remain at power with the Main Turbine Stop and Control Valves closing.
- D. The reactor will scram due to the Main Turbine Control Valve fast closure that will result in a subsequent normal closure of the Main Turbine Control Valves to maintain reactor pressure.

QUESTION	1	NRC RECORD	# WRI 553
ANSWER: C	SYSTEM # N41;	K/A 295005	AA2.05: 3.8/3.9
	N32-2; C71		AA2.04: 3.7/3.8
LP# GLP-OPS-	·C7100		AA2.03: 3.1/3.1
OBJ. 9, 10			
LP# GG-1-LP-	OP-N3202		
OBJ. 2			
LP# GG-1-LP-	OP-N4151		
OBJ. 11	SRO TIER 1 GR	OUP 2 / RO TIER 1	1 GROUP 1
REFERENCE:	Tech. Spec 3.3.1.1	NEW	
	05-1-02-I-2 sect 5.1 – 5.4	MODIFIED	BANK
DIFF 2; CA			NRC 6/2001
		RO SRO <u>BOTH</u>	<u>H</u> CFR 41.5/41.6
REFERENCE M	IATERIAL REQUIRED:	NONE	_

QUESTION 2

A reactor scram has occurred.

Which one of the following is a correct method of verifying the position of the control rods? (The scram has NOT been reset.)

- A. Using the full core display on H13-P680, depress ALL RODS with RCIS in Raw Data and observe a blank display with only green LEDs for all control rods.
- B. Using the full core display on H13-P680, depress ALL RODS with RCIS in Raw Data and observe all control rods indicate 00 with a green LED for all control rods.
- C. Using the full core display on H13-P680, depress ALL RODS with RCIS out of Raw Data and observe a blank display with only red LEDs for all control rods.
- D. Using the full core display on H13-P680, depress ALL RODS with RCIS out of Raw Data and observe all control rods indicate 00 with a red LED for all control rods.

QUESTION 2		NRC RECOR	D# WRI 10
ANSWER: A.	SYSTEM # C11-2;	K/A 295006	AA2.02: 4.3/4.4
	C11-1B	201005	A3.02: 3.5/3.5
LP# GG-1-LP-0	OP-C111B		A4.02: 3.7/3.7
OBJ. 3c, 3f		201003	K4.05: 3.2/3.3
			A3.01: 3.7/3.6
LP# GG-1-LP-0	DP-C1102		A4.02: 3.5/3.5
OBJ. 12	SRO TIER 1 GROU	P 1 / RO TIER	R 1 GROUP 1
REFERENCE:	04-1-01-C11-2	NEW	
	sect. 4.7.2p & 4.8.2i	MODIFIED	BANK
DIFF: 2; CA	05-1-02-I-1		NRC 6/2001
	sect. 2.1; 3.7; & 3.7.4	RO SRO <u>BO</u>	<u>OTH</u> CFR 41.6/41.10/43.5
REFERENCE M	ATERIAL REQUIRED: Non	e	

QUESTION 3

Plant conditions are as follows:

MODE:	Mode 1
Rx power:	28 %
T-G Load:	365 MWE
Load Demand	390 MWE
Bypass position:	0 %

All other parameters are per plant design.

The operator withdraws a control rod that raises Reactor power to 29 %.

How will the Turbine EHC Control System respond?

- A. Bypass Control Valves will throttle open as required to maintain Rx pressure.
- B. HP Turbine Control Valves will throttle open as required to maintain Rx pressure.
- C. LP Turbine Control Valves will throttle open as required to maintain Rx pressure.
- D. HP Turbine Control and Bypass Control Valves will throttle open as required to maintain Rx pressure.

QUESTION 3		NRC RECOR	2D # WRI 69
ANSWER: B.	SYSTEM # N32-2	K/A 295007	AK2.01: 3.5/3.7
		241000	A2.02: 3.7/3.7
LP# GG-1-LP-OP	-N3202		K4.01: 3.8/3.8
OBJ 4b, 6b, 7b	SRO TIER 1 GH	ROUP 1/ RO TIER	1 GROUP 1
REFERENCE: 0 .	3-1-01-2 sect. 5.2	NEW	
		MODIFIED	BANK
DIFF: 2; CA			NRC 6/2001
		RO SRO <u>BO</u>	OTH CFR 41.5
REFERENCE MAT	ERIAL REQUIRED:	None	

QUESTION 4

The plant was operating at 20 % power when a Feedwater rupture in the Turbine Building caused Reactor water level to drop.

The Control Room Operator manually initiated HPCS and RCIC.

Level in the Reactor dropped to ? 32 inches before HPCS and RCIC turned level, and level is now rising.

Which one of the following best describes the status of the Recirculation System?

- A. Recirc Pumps are in Slow Speed with the Flow Control Valves Locked up (motion inhibit).
- B. Recirc Pumps are tripped with the Flow Control Valves Locked up (motion inhibit).
- C. Recirc Pumps are in Slow Speed with the Flow Control Valves in their pretransient positions.
- D. Recirc Pumps are tripped with the Flow Control Valves in their pre-transient positions.

QUESTION	4		NRC RECORI	D# WRI 121
ANSWER:	C.	SYSTEM # B33	K/A 295009	AK1.02: 3.0/3.1
				AK2.03: 3.1/3.2
LP# GLP-O	PS-B	3300		AA1.03: 3.0/3.1
OBJ. 23, 2	4, 25,	47 SRO TIER 1 GH	ROUP 1 / RO TI	ER 1 GROUP 1
REFERENCI	Е:	ARI 04-1-02-H13-P680	NEW	
		3A-D4; 3A-D10	MODIFIED	BANK
DIFF 1; M				NRC 3/1998
			RO SRO <u>BO</u>	<u>OTH</u> CFR 41.5
REFERENC	E MA	TERIAL REQUIRED:	None	

QUESTION 5

Given the following plant conditions:

Reactor Power	100%
Reactor Level	+36 inches
Reactor Pressure	1025 psig
Containment Temperature	85 °F steady
Containment Pressure	0.03 psig steady
Suppression Pool Temperature	81 °F steady
Drywell Pressure	1.1 psig rising slowly
Drywell Temperature	110 °F steady
Drywell Area Sumps show no unusua	al changes in level, flow, or temperature.
Drywell Atmosphere radiation monit	or show no changes.

The Roving NOA has noted that Drywell Pressure is rising slowly.

Drywell atmosphere radiation levels are steady.

Which one of the following describes a possible cause of the conditions as noted above?

A. Small leak on the Main Steam Line Flow Elbows Instrument Line.

B. Small leak on the RWCU suction from the Reactor Bottom Head.

- C. Small leak on the Instrument Air header inside the Drywell.
- D. Small leak on Recirc Pump Seals.

QUESTION	5	NRC RECORD	# WRI 286
ANSWER:. C.	SYSTEM # M41; P53	K/A 295010	AK3.04: 3.5/3.8
			AK3.05: 3.5/3.4
LP# GLP-OPS-P	•5300		2.4.21: 3.7/4.3
OBJ. 26.1	SRO TIER 1 GROU	P 1 / RO TIE	R 1 GROUP 1
REFERENCE:	GGNS 1998 event	NEW	
	CR 1998-0952	MODIFIED	BANK
DIFF 3, CA			NRC 4/2000
		RO SRO <u>BO</u>	<u>CFR 41.5</u>
REFERENCE M	ATERIAL REQUIRED:	None	

QUESTION 6

The plant is performing a reactor startup from cold shutdown.

The reactor was at the point of adding heat.

The Control Room Supervisor instructed the operators to stop the startup for a short duration to perform a surveillance.

During this time, the reactor went subcritical and power dropped to range 3 of the IRMs.

The At-The-Controls Operator, noting that reactor power had dropped selected the next control rod and withdrew the control rod from 20 to 48 with continuous motion as allowed by the Control Rod Movement Sequence Sheet.

This resulted in a sustained 20 second period.

The following are the plant pa	arameters at present:
Reactor Pressure	80 psig
Reactor Level	+40 inches

Which one of the following describes the next action the At-The-Controls operator should take?

- A. Immediately range all IRMs to range 10 and monitor overlap data between IRMs and APRMs.
- B. Perform the coupling checks for the Control Rod, and inform the Reactor Engineer of the power rise.
- C. Withdraw the next in sequence Control Rod to maintain the power rise to reach the point of adding heat.
- D. Insert the Control Rod to a position which causes reactor period to be > 50 seconds.

QUESTION NRC RECORD # WRI 204 6 ANSWER: D. SYSTEM # C11-2; C51 K/A 295014 AK3.01: 4.1/4.1 LP# GG-1-LP-OP-IOI01 **OBJ.** 3c & d SRO TIER 1 GROUP 1 / RO TIER 1 GROUP 1 **REFERENCE:** 03-1-01-1 sect. 2.1.4; 2.1.16 NEW Susquehanna reactivity MODIFIED BANK DIFF 1; M **Event 7/98** NRC 6/2001 04-1-01-C51-1 sect 4.3.2 NOTE RO SRO BOTH CFR 41.1/41.2/ 41.6/43.6 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 7

Scram conditions exist. All control rods did NOT fully insert.

Reactor water level is being maintained at -60 inches wide range.

Reactor pressure is being maintained at 910 psig.

Reactor power is 20 %.

The following initial indications exist:

RPS white lights on H13-P680 are extinguished. Scram Air Header Pressure low annunciator is illuminated. RX SCRAM TRIP annunciator is illuminated.

The following actions have been taken:

Defeat the RPS scram signal and reset RPS Unisolate the Instrument Air header Defeat Alternate Rod Insertion A CRD pump is confirmed operating and the CRD FCV is open to achieve 250 psid Drive pressure.

Which one of the following contains the minimum actions required to drive the control rods to position 00 using Rod Control and Information System?

- A. Bypass Control Rod Drive withdrawal blocks, select control rods and insert.
- B. Bypass Control Rod Drive withdrawal blocks, select control rods in sequence and insert.
- C. Bypass Control Rod Drive insert and withdrawal blocks, select control rods and insert.
- D. Select control rods in sequence and insert.

QUESTION	NRC RECORD # WRI 203		
ANSWER: C.	SYSTEM # C11-2; C71; C1	11- K/A 295015 AK	3.01: 3.4/3.7
	1A		
LP# GG-1-LP-	RO-EP02A		
OBJ. 5	SRO TIER 1 GRO	UP 1 / RO TIER 1 GR	OUP 1
REFERENCE:	EP 05-S-01-EP-2A	NEW	
	Step 48 Att. 18, 19 & 20	MODIFIED	BANK
DIFF 3; CA	-		NRC 6/2001
		RO SRO <u>BOTH</u>	CFR 41.6/43.6
REFERENCE M	IATERIAL REQUIRED:	05-S-01-EP-2 EP-2A	

QUESTION 8

A loss of coolant accident has occurred.

Determine which one of the following describes conditions that would direct / allow manual initiation of Containment Spray per the Emergency Procedures?

	Supp Pool Lvl	CTMT Temp	CTMT Press	Drywell Temp	Drywell Press
А.	18 FT	186°F	1 psig	200°F	3 psig
B.	17 FT	120°F	7 psig	215°F	15 psig
C.	18 FT	120°F	6.5 psig	200°F	15 psig
D.	25 FT	140°F	4 psig	215°F	7 psig

QUESTION	8	NRC RECORD # WRI 601		
ANSWER: B.	SYSTEM # M41-1; E12	K/A 295024	AK2.14: 3.9/3.9	
LP# GG-1-LP-	RO-EP03			
OBJ. 3	SRO TIER 1 GROU	P1/ROTIER1	GROUP 1	
REFERENCE:	EP 05-S-01-EP-3	<u>NEW</u>		
	CTMT Temp & Press Legs	MODIFIED	BANK	
DIFF 2; CA	Figures 3 & 4			
	-	RO SRO <u>BOTH</u>	CFR 41.9/41.10/43.5	
REFERENCE M	IATERIAL REQUIRED: 05-	-S-01-EP-3 & Figure	es 3 & 4	

QUESTION 9

The following conditions exist in the plant:

Reactor power0% all rods inserted.Reactor pressure230 psig and rising.Reactor level- 230 inches Fuel Zone and lowering6 Safety Relief Valves have been manually opened.RHR C is injecting into the reactor vessel.

Which one of the following identifies adequate core cooling?

- A. Adequate core cooling is NOT assured.
- B. Adequate core cooling is assured by Minimum Alternate RPV Flooding Pressure (MARFP) with SRVs and Reactor pressure.
- C. Adequate core cooling is assured by Minimum Zero RPV Water Level without RPV injection.
- D. Adequate core cooling is assured by Minimum Steam Cooling Water Level.

QUESTION	9	NRC RECORD #	# WRI 309
ANSWER: A.	SYSTEM # Eps &	K/A 295031	EK1.01: 4.6/4.7
	Conduct of Ops.		2.1.1: 3.7/3.8
LP# GG-1-LP-	RO-EP02		2.4.21: 3.7/4.3
OBJ. 15, 16			
LP# GG-1-LP-	RO-EP01		
OBJ. 4a			
LP# GG-1-LP-	OP- PROC		
OBJ. 10b3	SRO TIER 1 GROU	UP 1 / RO TIER	1 GROUP 1
REFERENCE:	01-S-06-2 section 5.18	NEW	
	05-S-01-EP-2 steps 69 – 74	MODIFIED	BANK
DIFF 3, CA	PSTG App. B EPG Cont 3		NRC 12/2000
	Steam Cooling	RO SRO <u>BOT</u>	<u>H</u> CFR 41.2/41.3/41.10/
REFERENCE M	ATERIAL REQUIRED: 0	5-S-01-EP-2	43.5

QUESTION 10

An ATWS has occurred. Actions of EP-2A are being taken.

Which one of the following describes an allowance to terminate injection of Standby Liquid Control?

- A. Control rods have been inserted to the equivalent of the first banked position with RPV temperature at $< 200^{\circ}$ F making the reactor subcritical.
- B. All control rods are inserted to the Maximum Subcritical Banked Withdrawal Position, which assures the reactor will remain subcritical under all conditions.
- C. RPV temperature has been reduced to < 200 °F and indicated reactor power on all IRMs is downscale on range 1, which indicates a subcritical reactor.
- D. Standby Liquid Control has been injected such that Hot Shutdown Boron Weight (HSBW) has been injected and confirmed by chemical analysis.

QUESTION	10	NRC RECORD # W	'RI 216
ANSWER: B.	SYSTEM # C41;	K/A 295037 EA1	.04: 3.4/4.5
	C11; C71	EK1	.04: 3.4/3.6
		EK1	.05: 3.4/3.6
LP# GG-1-LP-R	CO-EP02A	EA2	2.03: 4.3/4.4
OBJ. 2, 3, 5	SRO TIER 1 GR	OUP 1 / RO TIER 1	GROUP 1
REFERENCE:	05-S-01-EP-2A	NEW	
	step 2 & 4	MODIFIED	BANK
DIFF 3, CA	GGNS PSTG App B		NRC 4/2000
	RC/Q-1		
		RO SRO <u>BOTH</u>	CFR 41.1/41.2/
REFERENCE M	ATERIAL REQUIRED:	05-S-01-EP-2A	41.6/43.6

QUESTION 11

A LOCA has occurred. The Plant Supervisor has ordered the Hydrogen Recombiners started for Hydrogen removal in Containment.

Determine the final Hydrogen Recombiner Power Setting and the time to final Recombiner power.

Pre-LOCA Containment Temperature was 85 °F. Post LOCA Containment Pressure +1.0 psig.

A. 47.73 kw after 20 minutes

B. 47.73 kw after 25 minutes

C. 49.02 kw after 20 minutes

D. 49.02 kw after 25 minutes

QUESTION	11		NRC RECORI	D # WRI	219
ANSWER: B.		SYSTEM # E61	K/A 500000	EA1.03	: 3.4/3.2
				2.1.20	: 4.3/4.2
LP# GQC-RO	-CRO01			2.1.25	: 2.8/3.1
OBJ. E61 tas	sk 5	SRO TIER 1 GRO	UP 1 / RO TIE	R 1 GR	OUP 1
REFERENCE:	04-1	-01-E61-1 sec. 5.4.2	NEW		
	Figu	re 1	MODIFIED	ŕ	BANK
DIFF 2, CA				•	NRC 4/2000
			RO SRO <u>BO</u>)TH	CFR 41.10/43.5
REFERENCE	MATER	IAL REQUIRED:	04-1-01-E61-1 &	Calculate	or

QUESTION 23

The plant is in a startup following a 32 day outage.

MSIVs are closed.

Recirc loop temperatures are at 180 ?F.

Control rods are being withdrawn to achieve criticality. (Minimal decay heat)

Feedwater is operating in long cycle cleanup.

The operating CRD Pump tripped.

What will be the response of the plant? (ASSUME NO FURTHER OPERATOR ACTIONS)

- A. The reactor water level will remain stable at its present level.
- B. The reactor water level will rise to the point that a reactor scram is received on High water level.
- C. The reactor water level will drop to the point that a reactor scram is received on Low water level.
- D. The plant will scram due to a loss of charging water pressure to the Hydraulic Control Units.

QUESTION	23		NRC RECORD)# WRI 55
ANSWER:	С.	SYSTEM # C11-1A;	K/A 295022	AK2.04: 2.5/2.7
		G33/36; IOI-1		AK2.05: 2.4/2.5
LP# GLP-C	DPS-G3336			AA1.04: 2.5/2.6
OBJ 3.3,	8.6, 21			
LP# GG-1-	LP-OP-C11	1 A		
OBJ 23		SRO TIER 1 GRO	UP 2/ RO TIER 1	GROUP 2
REFERENC	CE: 03-1-	01-1	NEW	
	sect. 2	2.2.5; 3.3.1d; 3.3.3a	MODIFIED	BANK
DIFF 2; C	A			NRC 6/2001
			RO SRO <u>BOT</u>	<u><i>H</i></u> CFR 41.5
REFERENC	CE MATER	IAL REQUIRED:	None	

QUESTION 13

The plant was operating at power.

A transient caused the Recirculation Pump 'B' trip to OFF.

The following parameters are indicated:

Reactor power	65 %
Core Flow	54 Mlbm/hr
Recirc A Flow	39,000 gpm
Recirc B Flow	0 gpm

Reactor Engineering is calculating FCBB.

Which one of the following describes the actions to be taken for present plant conditions?

- A. Immediately Scram the Reactor.
- B. Monitor Neutron Monitoring for thermal hydraulic instability. Immediately reduce core thermal power by only inserting control rods to exit the region.
- C. Monitor Neutron Monitoring for thermal hydraulic instability. Immediately exit the region by reducing core thermal power by inserting control rods, or raising core flow by opening Recirc FCV A.
- D. Monitor Neutron Monitoring for thermal hydraulic instability and scram the reactor if any is noted, close B33-F067B and re-open after five minutes, restart the Recirc Pump as soon as possible.

QUESTION	13	NRC RECORD # WRI 602		
ANSWER: C.	SYSTEM # B33	K/A 295001	AA2.01: 3.5/3.8	
			2.4.1: 4.3/4.6	
LP# GLP- OPS	-B3300		2.4.11: 3.4/3.6	
OBJ. 41.2; 42;	3 SRO TIER 1 GRO	UP 2 / RO TIER	A 1 GROUP 2	
REFERENCE:	05-1-02-III-3 sect	NEW		
	Figure 1	<u>MODIFIED</u>	BANK	
DIFF: 2; CA	03-1-01-2 sect 2.24	NRC 4/2000		
		RO SRO <u>BO</u>	<u>CFR 41.10/41.5/43.5</u>	
REFERENCE M	IATERIAL REQUIRED:	05-1-02-III-3 w/o	Immediate actions	

QUESTION 14

11HD

A.

The plant is in a normal electrical line-up with all busses fed from their preferred power source. If a lockout of BOP Transformer 12B were to occur,

Which of the following indicates the correct status of BOP busses?

ENERGIZED

	12HE]	DE-ENERGIZED				
	13AD]	DE-ENERGIZED				
	14AE	l	ENERGIZED				
	18AG]	ENERGIZED				
	28AG]	DE-ENERGIZED				
B.	11HD]	DE-ENERGIZED				
	12HE]	ENERGIZED				
	13AD]	ENERGIZED				
	14AE]	DE-ENERGIZED				
	18AG]	ENERGIZED				
	28AG]	ENERGIZED				
C.	11HD]	ENERGIZED				
	12HE]	DE-ENERGIZED				
	13AD]	DE-ENERGIZED				
	14AE]	ENERGIZED				
	18AG]	DE-ENERGIZED				
	28AG]	DE-ENERGIZED				
D	11110						
D.	TIHD	l	DE-ENERGIZED				
	12HE	1	ENERGIZED				
	13AD	1	ENERGIZED				
	14AE	l	DE-ENERGIZED				
	18AG]	DE-ENERGIZED				
	28AG	l	ENERGIZED				
OUEST	ION	14			NDC DECO	DD#WDI	507
ANSWE	\mathbf{R} : B	14	SYSTEM # R21		K/A 295003	A1.01:	3.7/3.8
LP# G	LP-OPS	-R2700			1,11 2,0000	111010	
OBJ. 8	&15.1.		SRO TIER 1 GR	ROUE	• 1 / RO TI	ER 1 GRO	UP 2
REFER	ENCE:	04-1-01	-R21-11 sect 3.2		NEW		
		04-1-01	-R21-12 sect 3.2		MODIFIED		BANK
DIFF 1	; M	04-1-01	-R21-13 sect 3.2			0711	NRC 6/2001
		04-1-01	-K21-14 sect 3.2		RO SRO <u>B</u>	<u>IOTH</u>	CFR 41.7
REFER	ENCE M	04-1-01 14TERIA	I-K21-10 SECU J.2	NO	NF		
				110			

QUESTION 15

Which one of the following describes the reason for isolating the Main Steam Isolation Valves on a Low Main Condenser Vacuum?

- A. Prevent erosion damage to the Main Steam Isolation Valve and Main Steam Bypass Valve seats due to steam condensation in the Main Steam Lines that would prevent their complete isolation in an emergency.
- B. Prevent erosion damage to turbine blading in the Low Pressure Turbine due to steam condensation in the Main Steam Lines.
- C. Prevent over-pressurization of low pressure piping on the suction of the Condensate pumps that could result in a rupture introducing steam outside Secondary Containment.
- D. Prevent rupture of the turbine rupture diaphragms or damage to the turbine exhaust hood that could lead to leakage of radiation to the environment.

QUESTION	15	NRC RECORD	# WRI 220
ANSWER: D.	SYSTEM # B21;	K/A 295002	AK3.05: 3.4/3.4
	N11; N62		AA1.04: 3.3/3.4
LP# GG-1-LP-O	P-M7101		
OBJ. 6	SRO TIER 1 GROU	JP 2 / RO TIER	1 GROUP 2
REFERENCE:	GGNS Tech Spec Bases	NEW	
	3.3.6.1-1d	MODIFIED	BANK
DIFF 1; M			NRC 4/2000
		RO SRO <u>BOT</u>	<u>CFR 41.4/43.4</u>
REFERENCE M	ATERIAL REQUIRED:	NONE	

QUESTION 16

The plant was operating at 80 % power.

Reactor Narrow Range Water Level transmitter C34-N004B has failed downscale and brought in annunciator "RX WTR LVL SIG FAIL HI/LO".

The Operator at the Controls notices the Reactor Narrow Range Level indicator C34-LI-R606A indicates offscale HIGH and annunciator "RFPT/MN TURB LVL 9 TRIP" is in.

Reactor Narrow Range Water Level indicator R606C is reading + 36 inches.

Reactor Upset Range Water Level indicator is reading + 38 inches.

Reactor Wide Range Water Level indicator on P680 is reading + 40 inches.

Reactor Wide Range Water Level indicators A & B on P601 are reading + 40 inches.

Which one of the following describes the actions to be taken? (NO OTHER ALARMS ARE PRESENT.)

- A. Immediately initiate a Reactor Scram and trip the Main Turbine and the Reactor Feed Pump Turbines because they failed to trip.
- B. Manually select Reactor Water Level Control to Single Element control and verify Reactor level returns to normal.
- C. Select the Master Level Controller to MANUAL to lock the level signals at the present setting to prevent any level perturbations and establish stable level control.
- D. Continue monitoring Reactor Water Level on P680 and compare with other indications on P601 and the PDS computer and contact I&C.

QUESTION	16	NRC RECORD	# WRI 275
ANSWER: D.	SYSTEM # C34; N2	21; K/A 295008	AK1.01: 3.0/3.2
	N30	245000	A3.01: 3.6/3.6
LP# GG-1-LP-	OP-C3401	259001	K6.07: 3.8/3.8
OBJ. 3f; 3g2;	3i; 22; 23 SRO TIER 1	GROUP 2 / RO TIE	R 1 GROUP 2
REFERENCE:	04-1-02-H13-P680	NEW	
	4A2-A2 & D1	MODIFIED	BANK
DIFF 2; CA			NRC 6/2001
		RO SRO <u>BOT</u>	<u>H</u> CFR 41.4/41.5
REFERENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 17

The Control Room has been abandoned and control has been established at the Remote Shutdown Panels.

Reactor pressure	600 psig
Indicated Reactor level at the Remote Shutdown Panel	66 inches

With present plant conditions, which one of the following describes Narrow Range Level, Actual Level and the availability of RCIC for level control?

05-1-02-II-1 Attachments I and II are provided.

	NARROW RANGE LEVEL	ACTUAL LEVEL	RCIC
А.	55 inches	52 inches	Not available
B.	45 inches	43 inches	Available
C.	48 inches	43 inches	Available
D.	60 inches	60 inches	Not available

QUESTION	17	NRC RECORD # W	RI 603
ANSWER: A.	SYSTEM # C61; B2	1 K/A 295016 AA	2.02: 4.2/4.3
		2.1	.25: 2.8/3.1
LP# GLP-OPS-	C6100	2.4	.11: 3.4/3.6
OBJ 19	SRO TIER 1 GR	OUP 1 / RO TIER 1 GR	COUP 2
REFERENCE:	05-1-02-I-1 Att I & II	NEW	
		<u>MODIFIED</u>	BANK
DIFF 2; CA		NRC 6/2001	
		RO SRO <u>Both</u>	CFR 41.5/41.10/43.5
REFERENCE N	IATERIAL REQUIRED: ()5-1-02-II-1 Att. I & II	

QUESTION 18

The plant is operating at 100 % power.

RCIC is to be operated for surveillance testing to return the system to operable.

Standby Service Water 'A' is operating.

Which one of the following describes the limitations and monitoring of the Suppression Pool Temperature?

- A. Suppression Pool Temperature is limited to 95°F and must be monitored every five minutes while RCIC is operating. If Suppression Pool Temperature exceeds 100°F Suppression Pool Cooling must be placed in service.
- B. Suppression Pool Temperature is limited to 95°F and must be monitored every five minutes while RCIC is operating. If Suppression Pool Temperature exceeds 95°F Suppression Pool Cooling must be placed in service and RCIC secured.
- C. Suppression Pool Temperature is limited to 100°F and must be monitored every five minutes while RCIC is operating. If Suppression Pool Temperature exceeds 95°F Suppression Pool Cooling must be placed in service. RCIC must be secured if Suppression Pool Temperature exceeds 100°F.
- D. Suppression Pool Temperature is limited to 105°F and must be monitored every sixty minutes while RCIC is operating and Suppression Pool Temperature exceeds 90°F. If Suppression Pool Temperature exceeds 105°F Suppression Pool Cooling must be placed in service and RCIC secured.

QUESTION	18	NRC RECORD # W	VRI 605
ANSWER: C.	SYSTEM # E51; M2	24 K/A 295013 A	A2.01: 3.8/4.0
		A	A1.02: 3.9/3.9
LP# GG-1-LP-	OP-E5100-	2.2	1.33: 3.4/4.0
OBJ. 12a; 22	2	2.4.4: 4.0)/4.3
LP# GG-1-LP-	OP-M7101		
OBJ. 23			
LP# GG-1-LP-	RO-EP03		
OBJ. 3; 5			
LP# GG-1-LP-	OP-M4101		
OBJ. 11	SRO TIER 1 GRO	UP 1 / RO TIER 1 GF	ROUP 2
REFERENCE:	Tech Spec 3.6.2.1	<u>NEW</u>	
	Tech Spec SR3.6.2.1.1	MODIFIED	BANK
DIFF 2; CA	04-1-01-E51-1 sect 5.2.1e		
,	05-S-01-EP-3 step 10 – 12	RO SRO BOTH	CFR
	06-OP-1M24-V-0001 sect		41.5/41.10/43.3/43.5
	5.1.2a		
REFERENCE M	IATERIAL REQUIRED:	Tech Spec 3.6.2.1 & 06-	
	•	OP-1M24-V-0001	

QUESTION 19

A LOCA has occurred.

The reactor is depressurized.

The Drywell remains inaccessible due to pressure of 2.5 psig and temperatures of 200°F.

MSIV Leakage Control Outboard System has been initiated.

Which one of the following identifies the method to monitor radiation released outside Secondary Containment at this time with MSIV Leakage Control in operation?

- A. The operating Standby Gas Treatment Train Radiation Monitors will give the indication of radiation release.
- B. Auxiliary Building Fuel Handling Area Exhaust Radiation Monitors will give indication of radiation release.
- C. Auxiliary Building Fuel Handling Area Exhaust and Fuel Pool Sweep Exhaust Radiation Monitors will give indication of radiation release.
- D. Auxiliary Building Fuel Handling Area Exhaust and Standby Gas Treatment Radiation Monitors will give indication of radiation release.

QUESTION	19	NRC RECORD) # WRI 606
ANSWER: A.	SYSTEM # T48;	K/A 295017	AA1.08: 3.1/3.4
	E32; D17		AA1.09: 3.6/3.8
LP# GG-1-LP-	OP-E3200	239003	K1.02: 2.9/3.0
OBJ. 12c; 13	3		
LP# GG-1-LP-	OP-D1721		
OBJ. 2			
LP# GG-1-LP-	OP-T4801		
OBJ. 9f	SRO TIER 1 GI	ROUP 2 / RO TIEH	R 1 GROUP 2
REFERENCE:	04-1-01-E32-1 sect 3.2	<u>NEW</u>	
	sect 3.2; 5.1.1c; 5.2.1c	MODIFIED	BANK
DIFF 2; CA			
		RO SRO <u>BO</u>	<i>TH</i> CFR 41.11/41.13
REFERENCE M	IATERIAL REQUIRED:	NONE	43.4

QUESTION 20

The plant is operating at 100 % power.

The Component Cooling Water temperature control valve closes to 25% in response to a temperature controller malfunction and the valve is unable to be reopened.

CCW temperatures have risen and continue to rise slowly.

Recirculation Pumps 'A' and 'B' pump bearing temperatures are in alarm on H13-P614.

Which one of the following describes the foremost actions to be taken for these conditions? Loss of Component Cooling Water ONEP is provided.

- A. Immediately scram the reactor and manually trip both Recirculation Pumps.
- B. Start the standby CCW pump. Trip the RWCU pumps then close CCW to the Non-Regenerative Heat Exchangers, P42-F103. Reduce core flow to 60% only.
- C. Trip the RWCU pumps then close CCW to the Non-Regenerative Heat Exchangers, P42-F103. Isolate CCW to Fuel Pool Heat Exchangers by closing P42-F105 and F205 only.
- D. Start the standby CCW pump. Trip the RWCU pumps then close CCW to the Non-Regenerative Heat Exchangers, P42-F103. Isolate CCW to Fuel Pool Heat Exchangers by closing P42-F105 and F205. Reduce core flow to 60% only.

QUESTION 20 NRC RECORD # WRI 314 ANSWER: A. SYSTEM # P42; K/A 295018 AK3.03: 3.1/3.3 **ONEPs** LP# GLP-OPS-ONEP 1; 2; 34 SRO TIER 1 GROUP 2 / RO TIER 1 GROUP 2 OBJ. **REFERENCE:** 05-1-02-V-1 sect 3.1 NEW Section 3.2.2 Note for 2.1 <u>BANK</u> MODIFIED DIFF 1; M NRC 12/2000 CFR 41.4/41.10/43.5 RO SRO BOTH **REFERENCE MATERIAL REQUIRED:** 05-1-02-V-1 w/o Imm. Actions

QUESTION 21

The plant is operating at rated conditions.

Plant Air Dryer 'A' is in service and Dryer 'B' is tagged out for maintenance.

Plant Air Dryer 'A' has undergone an "Executed Stop".

Annunciator "PLANT AIR DRYR TROUBLE" on H13-P870 is in alarm.

Instrument Air Header pressure is 110 psig and stable.

Which one of the following identifies actions to be taken?

- A. Immediately scram the reactor in preparation for a complete loss of Instrument Air.
- B. Immediately dispatch an operator to isolate Plant Air Dryer 'A' by closing isolation valves P51-F207A and P51-F208A.
- C. Dispatch an operator to manually crosstie Service Air via SP52-F010 or SP52-F300 and monitor Instrument Air header pressure.
- D. Monitor Instrument Air header pressure and determine the cause of the "Executed Stop" using the PDS computer and a local operator's observations.

QUESTION	21	NRC RECORD # W	RI 607
ANSWER: D.	SYSTEM # P51; P	253 K/A 295019 AK	2.14: 3.2/3.2
		2.4.	31: 3.3/3.4
LP# GLP-OP-	P5101	300000 A2.	01: 2.9/2.8
OBJ. 2d		2.1	1.32: 3.4/3.8
LP# GLP-OPS	S-P5300		
OBJ. 20.1; 2	SRO TIER 1 GR	OUP 2 / RO TIER 1	GROUP 2
REFERENCE:	04-1-02-H13-P870 7A-E3	NEW	
	04-1-01-P51-1	MODIFIED	BANK
DIFF 1; M	sect 3.5.4 & 3.7		
	05-1-02V-9 sect 3.4	RO SRO <u>BOTH</u>	CFR 41.4/41.10/43.5
REFERENCE M	IATERIAL REQUIRED:	04-1-02-H13-P870-7A-E	3

QUESTION 22

The plant is operating at rated conditions.

A rupture in the Instrument Air header has resulted in Instrument Air header pressure dropping to 40 psig.

Which one of the following describes the response of the Containment Cooling System and Containment temperature?

- A. Containment Coolers will operate recirculating the Containment atmosphere maintaining temperature stable.
- B. Containment Coolers will operate isolated without cooling water allowing Containment temperatures to rise.
- C. Containment Coolers will trip due to a loss of cooling water resulting in Containment temperatures rising.
- D. Containment Coolers will trip due to the isolation of the inlet and outlet dampers resulting in Containment temperatures rising.

QUESTION	22	NRC RECORD #	WRI 608
ANSWER: B.	SYSTEM # P71;	K/A 295020 A	K2.03: 3.1/3.3
	P53; M41	Α	K3.03: 3.2/3.2
LP# GG-1-LP-	-OP-M4100	300000 K	1.03: 2.8/2.9
OBJ. 10a; 13	3a		
LP# GLP-OPS	S-P7100		
OBJ. 16.2	SRO TIER 1	GROUP 2 / RO TIER 1	GROUP 2
REFERENCE:	E-1213-009 & 012	<u>NEW</u>	
	M-1100B	MODIFIED	BANK
DIFF 1; M	M-1109D		
	05-1-02V-9 sect 5.5	RO SRO <u>BOTH</u>	CFR 41.4/41.7/41.9
REFERENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 23

The plant is in a startup following a 32 day outage.

MSIVs are closed.

Recirc loop temperatures are at 180 ?F.

Control rods are being withdrawn to achieve criticality. (Minimal decay heat)

Feedwater is operating in long cycle cleanup.

The operating CRD Pump tripped.

What will be the response of the plant? (ASSUME NO FURTHER OPERATOR ACTIONS)

- A. The reactor water level will remain stable at its present level.
- B. The reactor water level will rise to the point that a reactor scram is received on High water level.
- C. The reactor water level will drop to the point that a reactor scram is received on Low water level.
- D. The plant will scram due to a loss of charging water pressure to the Hydraulic Control Units.

QUESTION	23		NRC RECORD)# WRI 55
ANSWER:	С.	SYSTEM # C11-1A;	K/A 295022	AK2.04: 2.5/2.7
		G33/36; IOI-1		AK2.05: 2.4/2.5
LP# GLP-C	DPS-G3336			AA1.04: 2.5/2.6
OBJ 3.3,	8.6, 21			
LP# GG-1-	LP-OP-C11	1 A		
OBJ 23		SRO TIER 1 GRO	UP 2/ RO TIER 1	GROUP 2
REFERENC	CE: 03-1-	01-1	NEW	
	sect. 2	2.2.5; 3.3.1d; 3.3.3a	MODIFIED	BANK
DIFF 2; C	A			NRC 6/2001
			RO SRO <u>BOT</u>	<u><i>H</i></u> CFR 41.5
REFERENC	CE MATER	IAL REQUIRED:	None	

QUESTION 24

An ATWS has occurred. Reactor pressure is being controlled with SRVs.

Standby Liquid Control has been initiated.

Reactor power has just dropped below 4%.

The following conditions exist:

Reactor Power	2 % and stable
Reactor Pressure	1000 psig and stable
Reactor Level	- 100 inches Fuel Zone and stable
Suppression Pool Level	16.5 feet and rising
Suppression Pool Temperature	150 °F and rising
Drywell Pressure	+ 1.0 psig and rising

Which one of the following describes actions to be taken?

- A. Maintain RPV water level between -192 and + 53.5 inches and stabilize RPV pressure < 1064.7 psig.
- B. Maintain RPV water level between -192 and + 53.5 inches. Lower RPV pressure to 700 900 psig, and initiate SPMU.
- C. Terminate and prevent all injection into the RPV except for Boron, CRD and RCIC, and lower RPV water level to the top of active fuel.
- D. Terminate and prevent all injection into the RPV except for Boron, CRD and RCIC and emergency depressurize the RPV.

QUESTION	24		NRC RECORI) # WRI 301
ANSWER: D.		SYSTEM # M41;	K/A 295026	EK2.01: 3.9/4.0
		B21		
LP# GG-1-LP-	-RO-EP0	3		
OBJ.	2, 3			
LP# GG-1-LP-	RO-EP0)2A		
OBJ.	7, 10h	SRO TIER 1 GI	ROUP 1 / RO TIEL	R 1 GROUP 2
REFERENCE:	05-S-01	I-EP2 EP2A	NEW	
	Step 3	3, 14, & 15	MODIFIED	BANK
DIFF 2, CA	05-S-01	I-EP3 Step 15 and		NRC 12/2000
	HCTL		RO SRO <u>BO</u>	<i>TH</i> CFR 41.7/41.9/
REFERENCE M	IATERIA	L REQUIRED:	05-S-01-EP-2A and	EP-3 41.10/41.14/43.5

QUESTION 25

The plant was operating at 100 % Power.

A steam leak has developed in the Containment steam tunnel.

Containment temperature has gone up to 85°F and still rising.

A power reduction has commenced but Containment temperature continues to rise.

Tech. Specs states if Containment temperature exceeds $95^{\circ}F$ to restore to $< 95^{\circ}F$ within 8 hours.

If Containment temperature is unable to be restored to $< 95^{\circ}$ F within 8 hours; then be in MODE 3 in 12 hours and be in MODE 4 in 36 hours.

Which of the following is the reason for this action? **Tech Specs 3.0 & 3.6.1.5 are provided.**

- A. Shut down of the Reactor is done to prevent having to initiate Containment Spray to maintain Containment temperature below 185°F.
- B. Shut down of the Reactor is done to place the plant in a MODE that the LCO does NOT apply.
- C. Shut down of the Reactor is done to prevent having to Emergency Depressurize to maintain Containment temperature below 185°F.
- D. Shut down of the Reactor is done to prevent damaging operating equipment inside Containment due to current high temperature.

QUESTION	25	NRC RECORD # W	/RI 512
ANSWER: B.	SYSTEM # M41-1	K/A 295027 K3	3.03: 3.7/3.7
LP# GG-1-LP-	OP-TS001		
OBJ. 13			
LP# GG-1-LP-	OP-M4101		
OBJ. 11, 12	SRO TIER 1 G	ROUP 1 / RO TIER 1 (GROUP 2
REFERENCE:	TECH. SPEC. 3.6.1.5	NEW	
	TECH. SPEC. BASES	MODIFIED	<u>BANK</u>
DIFF 1; M	3.6.1.5		NRC 6/2001
	TECH SPEC 3.0.2 **	RO SRO <u>BOTH</u>	CFR 41.9/41.10/43.2
REFERENCE M	IATERIAL REQUIRED:	Tech Spec 3.6.1.5 & 3.0.2	2

QUESTION 26

The plant is operating at rated conditions.

Temperatures in the lower CRD Cavity are rising.

Which one of the following describes the expected response of the Drywell Cooling System?

- A. At 145°F, M51-F009 and M51-F016 open and M51-F006 and M51-F014 close to divert Drywell Cooling flow from the lower Drywell area to the CRD Cavity.
- B. At 145°F, the Standby fans on M51-B001 and B002 will auto start and M51-F009 and M51-F016 open raising the flow of air to the CRD Cavity.
- C. At 145°F, M51-F009 and M51-F016 open raising the flow of air to the CRD Cavity and at 155°F M51-F006 and M51-F014 close to divert more air flow.
- D. At 155°F, the Standby fans on M51-B001 and B002 will auto start and M51-F009 and M51-F016 open raising the flow of air to the CRD Cavity.

QUESTION	26	NRC RECORD # W	VRI 609
ANSWER: A.	SYSTEM # M51	K/A 295028 EA	1.03: 3.9/3.9
		EK	2.04: 3.6/3.6
LP# GG-1-LP	-OP-M5100	EK	3.04: 3.6/3.8
OBJ. 6a	SRO TIER 1 G	ROUP 2 / RO TIER 1	GROUP 2
REFERENCE:	04-1-02-H13-P870	<u>NEW</u>	
	4A-H2; 10A-H2	MODIFIED	BANK
DIFF 2; CA	M-1101		
	E-1214-001; 004; 009	RO SRO <u>BOTH</u>	CFR 41.4/41.7
REFERENCE M	IATERIAL REQUIRED:	Drywell Cooling System	
		Drawing	

QUESTION 27

Which of the following is the basis for Emergency Reactor Pressure Vessel (RPV) Depressurization when Suppression Pool Level CANNOT be maintained below 24.4 feet?

- A. 24.4 feet is the highest Suppression Pool level at which the pressure suppression capability of Containment can be maintained.
- B. 24.4 feet is the highest Suppression Pool level at which the Suppression Pool will NOT overflow the weir wall resulting in flooding the Drywell.
- C. 24.4 feet is the highest Suppression Pool level at which Suppression Pool level instrumentation taps will become covered resulting in loss of ability to monitor Suppression Pool level.
- D. 24.4 feet is the highest Suppression Pool level at which opening Safety Relief Valves (SRVs) will NOT result in exceeding the design blowdown rate for the SRV discharge piping.

QUESTION	27	NRC RECORD	# WRI 513
ANSWER: A.	SYSTEM # M41-1	K/A 295029	K1.01: 3.4/3.7
LP# GG-1-LP-	OP-EP03		
OBJ. 6	SRO TIER 1 GRO	OUP 2 / RO TIER	1 GROUP 2
REFERENCE:	GGNS PSTG APP B SP/L-3	NEW	
	GGNS PSTG APP A SP/L-3	MODIFIED	BANK
DIFF 1; M			NRC 6/2001
		RO SRO <u>BOT</u>	<i>H</i> CFR 41.9/41.10
REFERENCE M	IATERIAL REQUIRED:	NONE	_

QUESTION 28

The plant is in a LOCA with ECCS systems injecting to the reactor.

Suppression Pool level has lowered to 13.5 feet.

Which one of the following is a condition that exists due to this level?

- A. The SRV tailpipe exhaust spiders have been uncovered.
- B. The RCIC Turbine Exhaust pipe has been uncovered.
- C. Suppression Pool temperature is unable to be determined.
- D. Containment Pressure is unable to be determined

QUESTION NRC RECORD # WRI 8 28 ANSWER: C. SYSTEM # E30 K/A 295030 EA2.02: 3.9 LP# GG-1-LP-OP-EP01 OBJ. 5 LP# GG-1-LP-RO-EP03 OBJ. 6 SRO TIER 1 GROUP 1 / RO TIER 1 GROUP 2 **REFERENCE:** 05-S-01-EP-3 Caution 2 NEW GGNS EOP PSTG App B MODIFIED <u>BANK</u> DIFF 1; M Caution 2 NRC 6/2001 RO SRO <u>BOTH</u> CFR 41.9/41.10/43.5 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 29

Preparations are being made to startup following a Refueling Outage.

During the Refueling outage several Control Rod Drive Mechanisms were replaced and the old mechanisms taken to the CRD Maintenance Room for rebuilding.

The Auxiliary Building Operator has reported elevated radiation levels indicated on his dositec in Area 9 185 ft. of 150 mr/hr.

Which one of the following is the possible cause of the elevated radiation levels?

- A. This is normal radiation levels for general area Auxiliary Building.
- B. Used CRD Drive Mechanisms in the Auxiliary Building
- C. Waterborne contamination in the Fuel Pool Cooling System
- D. Normal radiation levels from the Fuel Pool Filter Demineralizers.

QUESTION 29 NRC RECORD # WRI 610 EA2.03: 3.7/3.7 ANSWER: C. **SYSTEM # G41/46** K/A 295033 LP# GLP-OPS-G4146 SRO TIER 1 GROUP 2 / RO TIER 1 GROUP 2 OBJ. 2; 4.8; 5.4; 5.5; 5.6; 15.1 REFERENCE: M-1051A; M-1016 NEW **UFSAR 9.1.3.1.2;** MODIFIED BANK DIFF 1; M 12.2.1.3.3 & Table 12.2.-12 **FPCCU System Figure 4** RO SRO BOTH CFR 41.12/43.4 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 30

A GENERAL EMERGENCY has been declared due to a DBA LOCA.

Plant conditions as follows:

- Reactor water level -195"
- Approximately 15% fuel damage
- Large fission product inventory in Containment
- All Containment parameters are within design limits
- Radiation levels at the site boundary are at 15 mRem/hr TEDE

What protective actions, if any, should be recommended?

10-S-01-1 Activation of the Emergency Plan is provided.

- A. No evacuation of surrounding areas is required.
- B. Evacuate a 2-mile radius and shelter five miles downwind.
- C. Evacuate a 2-mile radius and five miles downwind. Shelter the rest of the 10-mile EPZ.
- D. Evacuate a 2-mile radius and 10 miles downwind. Shelter the rest of the 10-mile EPZ.

QUESTION 30	NRC RECORD # WRI 611		
ANSWER: C. SYSTEM # EPP PAR	s K/A 295038 El	K1.02: 4.2/4.4	
LP# GG-1-LP-EP-EPTS6			
OBJ 2 SRO TIER 1 GRO	OUP 1 / RO TIER	1 GROUP 2	
REFERENCE: 10-S-01-1 sect. 6.1.4.j(1)	NEW		
	MODIFIED	<u>BANK</u>	
DIFF 2; CA		EPTS 6 EXAM 2	
	RO SRO <u>BOTH</u>	CFR 41.10/41.12	
REFERENCE MATERIAL REQUIRED:	10-S-01-1	43.4/43.5	

QUESTION 31

A fire has been reported by security at the Hydrogen Bulk Storage Facility.

The Outside Operator has identified the leak as coming from the vent stack on the discharge of the cryogenic compressors.

Which one of the following describes the actions to be taken by operators at the scene?

- A. Establish a perimeter of at least 160 feet, and allow the fire to burn itself out.
- B. Establish a perimeter of at least 160 feet, and establish a monitor nozzle spraying water on the point where the fire is originating.
- C. Evacuate a 2 mile radius of the fire, and establish a monitor nozzle spraying water on the point where the fire is originating.
- D. Evacuate a 2 mile radius of the fire, and establish a fire team to enter the area with a fire hose cooling the team and isolate the source of the fire.

QUESTION	31	NRC RECORD # WRI 612		
ANSWER: A.	SYSTEM # P73	K/A 600000	AK3.04: 2.8/3.4	
			2.1.32: 3.4/3.8	
LP# GG-1-LP-O	P-P7300		2.4.25: 2.9/3.4	
OBJ 12; 14	SRO TIER 1 GR	ROUP 2 / RO TIE	CR 1 GROUP 2	
REFERENCE:	04-1-01-P73-1	<u>NEW</u>		
	sect 3.1; 3.2; 3.3; 3.7	MODIFIED	BANK	
DIFF 1; M				
		RO SRO <u>BO</u>	<u>OTH</u> CFR 41.10/43.5	
REFERENCE M	ATERIAL REQUIRED:	NONE		

QUESTION 32

The plant is in a Refueling Outage with the reactor disassembled five (5) days after the plant was shutdown in Refueling Outage 11.

Reactor Coolant Temperature is 140 ?F

The Fuel shuffle has just begun.

The in-service shutdown cooling pump has just tripped off.

Assume no further operator action.

Determine for this condition:

1. The time to reach 200?F for the Reactor Vessel.

2. The time for level to reach the Top of Active Fuel.

05-1-02-III-1 Attachment I is provided.

A.	1)	0.75 hours		
	2)	15 hours		
B	1)	1.2 hours		
2.	$\frac{1}{2}$	18 hours		
	2)	18 hours		
C.	1)	2.5 hours		
	2)	60 hours		
	,			
D.	1)	4.5 hours		
	2)	75 hours		
QUES	TION	32	NRC RECORD	# WRI 604
ANSV	VER:	C. SYSTEM # G41/46;	K/A 295021	AK1.01: 3.6/3.8
		ONEP		
LP# G	LP-OI	PS-ONEP		AA2.01: 3.5/3.6
OBJ	18; 19	SRO TIER 1 GR	OUP 2 / RO TIEF	R 1 GROUP 3
REFE	RENCI	E: 05-1-02-III-1 Att. I	NEW	
		Figures 2 & 5	<u>MODIFIED</u>	BANK
DIFF	2; CA	A Pre-shuffle 150°F	NRC 3/1998 WI	RI37
			RO SRO <u>BOT</u>	<u>TH</u> CFR 41.5/41.10/43.5
REFE	RENC	E MATERIAL REQUIRED:	05-1-02-III-1 Att I	

QUESTION 33

RHR 'A' Pump Room temperature rises to 170 ?F.

Which one of the following identifies the systems or components in addition to RHR 'A' that will be affected by this temperature?

A. HPCS

- B. MSIVs and RCIC
- C. RCIC
- D. RWCU

QUESTION	33		NRC RECORD	D # WRI 048
ANSWER:	C.	SYSTEM # E12; E51;	K/A 219000	A1.08: 3.7/3.6
		E31		A2.14: 4.1/4.3
				A3.01: 3.3/3.3
LP# GLP-OI	PS-E3100	1		A4.06: 3.9/3.7
OBJ 7.4			295032	EK3.03: 3.8/3.9
				EK3.07: 3.6/3.8
		SRO TIER 1 GRO	DUP 2 / RO TIE	R 1 GROUP 3
REFERENCI	E: AR	I 04-1-02-H13-P601	NEW	
		20A-B1	MODIFIED	BANK
DIFF 1; M	05-	1-02-III-5 Group 2, 3,	4	NRC 3/1998
			RO SRO <u>BO</u>	<i>TH</i> CFR 41.4/41.10/43.5
REFERENCI	E MATE	RIAL REQUIRED:	NONE	

QUESTION 34

Following a Recirc line rupture, reactor level has dropped to - 80 inches.

Both trains of the Standby Gas Treatment System have initiated.

Which of the following best describes the operation of the Standby Gas Treatment System flow control dampers?

- A. When -0.2 inches water column is obtained in the Enclosure Building, the steam tunnel cooler dampers throttle to their intermediate position. 90 seconds later the remaining flow control dampers throttle to their intermediate position.
- B. When -0.25 inches water column is obtained in the Enclosure Building, the steam tunnel cooler dampers throttle to their intermediate position. 120 seconds later the remaining flow control dampers throttle to their intermediate position.
- C. After 90 seconds, the flow control dampers will go to their intermediate positions to maintain ? 0.75 inches water column in the Auxiliary Building and -0.25 inches water column in the Enclosure Building.
- D. After 90 seconds the flow control dampers throttle to maintain -0.25 inches water column in the Auxiliary Building. If the Enclosure Building pressure reaches -0.75 inches water column, the flow control dampers go to their intermediate positions.

QUESTION 34		NRC RECORD # V	NRC RECORD # WRI 007		
ANSWER: A.	SYSTEM # T48	K/A 295035 EA	1.02: 3.8/3.8		
LP# GG-1-LP-OP	-T4801	261000 A1.	.04: 3.0/3.3		
OBJ. 8e	SRO TIER 1 GR	OUP 2 / RO TIER	1 GROUP 3		
REFERENCE:	E- 1257- 08, 11, 23	NEW			
		MODIFIED	BANK		
DIFF 2; CA			NRC 3/1998		
		RO SRO <u>Both</u>	CFR 41.4/41.7/41.13		
REFERENCE MA	TERIAL REQUIRED:				

QUESTION 35

The plant is operating normally at 100 % power.

The Suppression Pool Hi/Lo Level and a LPCS Room Sump Level Hi-Hi annunciators have been received on the H13-P870 panel.

The Control Room Operator has noted that Suppression Pool Level is at 18.4 feet. An operator dispatched to the room reports that water is spraying from the LPCS Suction piping, but he was unable to tell the exact location.

Which one of the following are the appropriate actions for this event?

- A. Immediately scram the reactor, initiate Suppression Pool Makeup, and emergency depressurize the plant, and isolate the LPCS Suction from the Suppression Pool.
- B. Ensure the LPCS Room sump pumps are operating, isolate LPCS Suction from the Suppression Pool and observe the status of the leak and makeup to the Suppression Pool via normal means, if required open the LPCS Room Door.
- C. Monitor and control LPCS Room sump levels, rack out the LPCS Pump Breaker and isolate LPCS Suction from the Suppression Pool, scram the reactor since the Max Safe Level has been reached.
- D. Verify the LPCS Room sump pumps are operating, isolate LPCS Suction from the Suppression Pool and rack out the LPCS Pump Breaker, and observe the status of the leak and makeup to the Suppression Pool via normal means.

QUESTION 35		NRC RECORD # W	VRI 058	
ANSWER: D.	SYSTEM # P45; E12;	K/A 295036 EA2	2.03: 3.4/3.8	
	EOP- 4	EK	3.03: 3.5/3.6	
LP# GG-1-LP-R	O-EP03	EA	2.02: 3.1/3.1	
OBJ 3				
LP# GG-1-LP-R	O-EP04			
OBJ 4	SRO TIER 1 GRO	UP 2/ RO TIER 1 (GROUP 3	
REFERENCE:	05-S-01-EP-3 step 41	NEW		
	05-S-01-EP-4 step 9 - 13	MODIFIED	BANK	
DIFF 2; CA	ARI 04-1-02-H13-P680		NRC 3/1998	
	8A1-A4			
	ARI 04-1-02-H13-P870	RO SRO <u>BOTH</u>	CFR 41.4/41.10/43.5	
	4A-A3; 2A-F1; 4A-C3			
REFERENCE M	ATERIAL REQUIRED:	05-S-01-EP-3 & 4		

QUESTION 36

A reactor scram has occurred.

All control rods have fully inserted.

Reactor level is stable at + 4 inches narrow range with reactor pressure at rated conditions.

Which one of the following describes the flows observed with present conditions for the Control Rod Hydraulic System?

	CRD Pump Min Flow	Charging Water Header	Cooling Water Header	Recirc Pump Seal Purge
A.	20 gpm	0 gpm	60 gpm	2 gpm / pump
B.	20 gpm	165 gpm	5 gpm	2 gpm / pump
C.	20 gpm	165 gpm	5 gpm	0 gpm
D.	0 gpm	165 gpm	60 gpm	0 gpm

QUESTION 36 NRC RECORD # WRI 613 K/A 295036 K5.02: 2.6/2.6 ANSWER: B. SYSTEM # C11-1A LP# GG-1-LP-OP-C111A SRO TIER 2 GROUP 2/ RO TIER 2 GROUP 1 OBJ 4 <u>NE</u>W **REFERENCE:** SFD-1081 04-1-01-B33-1 MODIFIED BANK DIFF 2; CA sect 4.1.2b(2)(e) RO SRO <u>BOTH</u> 04-1-01-C11-1 sect 4.1.2v(2) CFR 41.5/41.6 **REFERENCE MATERIAL REQUIRED:** NONE
QUESTION 37

The plant is operating at 45% power while returning to full power conditions.

A fatigue failure of the High Pressure Turbine First Stage Pressure connection resulted in a loss of all inputs of pressure to Rod Control and Information System.

Which one of the following describes the ability to move control rods with present plant conditions?

Assume the only actions to move control rods are from H13-P680.

- A. Control rod movement is restricted to the Rod Pattern Controller.
- B. Control rod movements are unrestricted for both withdrawals and insertions.
- C. Control rod movement is restricted to 2 notch withdrawals and unlimited insertions.
- D. Control rod movement is restricted to 4 notch withdrawals and unlimited insertions.

QUESTION 37 NRC RECORD # WRI 614 ANSWER: A. **SYSTEM # C11-2;** K/A 201005 K6.01: 3.2/3.2 N11 LP# GG-1-LP-OP-C1102 SRO TIER 2 GROUP 1 / RO TIER 2 GROUP 1 OBJ 5, 6, 7, 13b, 23, 26 **REFERENCE:** 04-1-02-1H13-P680-4A2-D5 NEW 03-1-01-2 MODIFIED BANK sect 2.15; 5.3; 5.7; 6.4 DIFF 2; CA RO SRO <u>BOTH</u> Tech Spec 3.3.2.1 & bases CFR 41.6/43.6 **REFERENCE MATERIAL REQUIRED:** NONE

QUESTION 38

The plant is operating at 45% power raising power to full power conditions.

A disturbance on the Entergy Grid resulted in a trip of Circuit Breakers J5228 and J5232 in the GGNS Switchyard.

Reactor water level control responded to control reactor water level above –20 inches wide range.

Reactor pressure control responded to an actuation of B21-F051D momentarily with subsequent pressure control using Main Steam Bypass Valves.

All other systems functioned as designed.

Which one of the following identifies the current configuration of the Recirculation Pump circuit breakers?

	CB-1	CB-2	СВ-3	CB-4	CB-5	
A.	CLOSED	CLOSED	CLOSED	CLOSED	OPEN	
B.	OPEN	OPEN	CLOSED	OPEN	OPEN	
C.	CLOSED	CLOSED	OPEN	OPEN	OPEN	
D.	OPEN	OPEN	OPEN	OPEN	OPEN	

QUESTION 38		NRC RECORI)# WRI 615
ANSWER: C.	SYSTEM # B33; N32	K/A 202002	A2.01: 3.4/3.4
LP# GLP-OPS-B3	3300	202001	A2.15: 3.7/3.9
OBJ 27; 50	SRO TIER 2	GROUP 1 / RO	TIER 2 GROUP 1
REFERENCE:	04-1-02-1H13-P680	<u>NEW</u>	
	3A-D4 & D10	MODIFIED	BANK
DIFF 2; CA	Tech Spec 3.3.4.1 & bases	5	
	Tech Spec 3.3.1.1; 3.3.6.5	; RO SRO <u>B</u>	OTH CFR 41.6
	3.3.4.2		
REFERENCE MA	TERIAL REQUIRED:	NONE	

QUESTION 39

Which one of the following is the reason the LPCI Injection Valves, E12-F042A, B, and C, are designed to remain closed at normal reactor vessel pressure following a LOCA initiation signal?

- A. This allows the pump time to pressurize the header, thus minimizing the differential pressure across the injection valve.
- B. This ensures reactor pressure has dropped sufficiently to prevent the possibility of over pressurizing low pressure piping.
- C. This allows the pump to develop enough discharge head to overcome reactor pressure for injection preventing back flow of hot reactor water into LPCI piping.
- D. This ensures reactor pressure has equalized with LPCI pressure to prevent the injection check valves E12-F041A, B, C from slamming the injection piping causing damage.

QUEST	FION	3	9	NRC RECO	RD# WRI 060
ANSW	ER:	B.	SYSTEM # E12	K/A 203000	K1.17: 4.0/4.0
					K4.01: 4.2/4.2
					K4.02: 3.3/3.4
					A3.01: 3.8/3.7
					A3.08: 4.1/4.1
LP# G	LP-O	PS-E	E1200		A4.08: 4.3/4.3
OBJ	8.9; 1	14.2	SRO TIER 2 GRO	OUP 1 / RO TIE	ER 2 GROUP 1
REFE	RENC	E:	04-1-01-E12-1 sect. 3.4	NEW	
			Tech Spec Bases B3.3.5.1	MODIFIED	<u>BANK</u>
DIFF	1; M	[-		NRC 6/2001
				RO SRO <u>B</u>	<i>OTH</i> CFR 41.8
REFEF	RENC	EM	ATERIAL REQUIRED: N	lone	

QUESTION 40

A LOCA has occurred.

Power to bus 15AA has been lost.

All other systems are functioning as required.

Reactor water level is – 170 inches.

Reactor pressure is 840 psig.

Drywell pressure is 8.3 psig.

Which one of the following identifies the response of the Automatic Depressurization System?

- A. ADS valves are unable to open due to a loss of air needed to open the valves.
- B. ADS valves are unable to automatically open due to a loss of power needed to actuate.
- C. ADS valves will automatically open using both solenoids associated with the air actuator.
- D. ADS valves will automatically open when the appropriate time delays have been met.

QUESTION 40		NRC RECORD # W	/RI 616
ANSWER: D.	SYSTEM # E21; E	12; K/A 209001 K3.	02: 3.8/3.9
	E22-2; R21	218000 K6.	01: 3.9/4.1
LP# GG-1-LP-O	P-E2202	K6.	02: 4.1/4.1
OBJ 5c,f; 9a,b; 15; 17; 25	12b,c; SRO TIER	2 GROUP 1 / RO TIEL	R 2 GROUP 1
REFERENCE:	04-1-02-1H13-P601	<u>NEW</u> MODIFIED	DANIZ
DIFF 2; CA	18A-B3 & E2 19A-B3 & E2	MODIFIED	BAINK
	04-1-01-B21-1 sect 5.1.	1 RO SRO <u>BOTH</u>	CFR 41.7
REFERENCE M	ATERIAL REQUIRED:	NONE	

QUESTION 41

The plant is starting up and is currently operating at 80% power.

All systems are operating properly.

There is a spurious High Pressure Core Spray (HPCS) initiation.

All other systems respond properly.

NO operator action is taken.

Which of the following identifies the effect on Reactor Water Level the spurious HPCS initiation will have?

- A. Reactor Water Level will RISE, Feedwater Level Control will respond, and Reactor Water level will stabilize at a HIGHER than normal condition.
- B. Reactor Water level will RISE, Feedwater Level Control will respond, and Reactor Water level will be returned to NORMAL level.
- C. Reactor Water level will RISE, Feedwater Level Control will respond, and Reactor Water level will stabilize at a LOWER than normal condition.
- D. Reactor Water level will not be affected due to Feedwater Level Control will respond and maintain Reactor Water level at NORMAL level.

QUESTION	41	NRC RECORD #	# WRI 519
ANSWER: A.	SYSTEM # C34; E22	K/A 209002	K3.01: 3.9/3.9
LP# GG-1-LP-	OP-MCD7b	259002	A2.08: 4.5/4.5
OBJ. 2 A	SRO TIER 2 GROU	P 1/ RO TIER	2 GROUP 1
REFERENCE:	UFSAR 15.5.1.2.1	NEW	
	UFSAR FIG. 15.5-1	MODIFIED	BANK
DIFF 2; CA			NRC 6/2001
		RO SRO <u>BOTH</u>	<u>CFR 41.7/41.8</u>
REFERENCE M	IATERIAL REQUIRED: NO	ONE	

QUESTION 42

An ATWS has occurred.

Standby Liquid Control has just been initiated for injection into the reactor vessel.

Reactor power is 10 %.

Reactor pressure is 850 psig.

Reactor water level – 110 inches Fuel Zone.

Which one of the following identifies indications of Standby Liquid Control injection into the Reactor?

	SLC Tank Level	SLC Pump Pressure	Reactor Power	Squib Valve Ready lights	SLC OOSVC Alarms	SQUIB LOSCONT OR PWR LOSS lights
A.	4400 gal	1050 psig	9%	OFF	ON	ON
B.	4600 gal	860 psig	10%	ON	OFF	OFF
C.	4600 gal	1050 psig	9%	ON	OFF	OFF
D.	4400 gal	860 psig	10%	OFF	OFF	ON

QUESTION 42		NRC RECORI	D # WRI 617
ANSWER: A.	SYSTEM # C41	K/A 211000	A4.04: 4.5/4.6
			A4.01: 3.9/3.9
			A4.03: 4.1/4.1
LP# GLP-OPS-C	4100		A4.07: 3.6/3.6
OBJ 12	SRO TIER 2	2 GROUP 1 / RC	TIER 2 GROUP 1
REFERENCE:	04-1-01-C41-1 sect 5.3.2	b <u>NEW</u>	
		MODIFIED	BANK
DIFF 1; M			
		RO SRO <u>B</u>	<u>OTH</u> CFR 41.1/41.6/41.7
REFERENCE MA	ATERIAL REQUIRED:	NONE	43.6

QUESTION 43

The plant was operating at 60% power when Division I UPS Power Panel 1Y89 trips its incoming circuit breaker.

Which one of the following is the response of the Reactor Protection System?

- A. RPS A system tripped resulting in a half scram due to a loss of power to the RPS A logic relays.
- B. RPS A system logic energized causing a half scram due to a loss of power to the RPS A Scram Pilot Valve solenoids.
- C. RPS A system tripped with no half scram because the RPS A solenoids still have power available.
- D. RPS A system logic energized causing alarms indicating the loss of power with no half scram due to RPS Bus A still being energized.

43 NRC RECORD # WRI 102 QUESTION ANSWER: A. SYSTEM # C71; L62 K/A 212000 K6.01: 3.6 K1.04: 3.4 LP# GLP-OPS-C7100 OBJ. 11.10; 23 LP# GG-1-LP-OP-L6200 OBJ. 6b SRO TIER 2 GROUP 1 / RO TIER 2 GROUP 1 **REFERENCE:** E-1026 NEW E-1173 - 14, 15, & 19 MODIFIED BANK DIFF 1; M NRC 3/1998 CFR 41.2/41.6 RO SRO BOTH **REFERENCE MATERIAL REQUIRED:** NONE

QUESTION 44

Which one of the following identifies the power sources to the Intermediate Range Neutron Monitors (IRMs) and the impact on the monitors upon a loss of power?

- A. IRMs are powered from Division I and II DC buses and fail upscale on a loss of power.
- B. IRMs are powered from Division I and II RPS buses and fail upscale on a loss of power.
- C. IRMs are powered from Division I and II UPS buses and fail downscale on a loss of power.
- D. IRMs are powered from the BOP UPS buses and fail downscale on a loss of power.

QUES	STION	44			NRC	REC	ORD	# WR	LI 618	
ANSV	VER:	C.	SYSTEM # C51-2	2	K/A	21500)3	K2.01	: 2.5/2.7	
LP# (GG-1-L	P-OP	-C5102							
OBJ	6b,c;	11a; 1	8 SRO TIER	2	GROUP	2 /	RO	TIER	2 GROUP	1
REFF	RENC	Е:	04-1-01-C51-1 Att III		NE	W				
			04-1-01-L62-1 Att I		MO	DIFIE	ED		BANK	
DIFF	1; M		04-1-02-1H13-P680							
			5A-A8, B8; 7A-A8, B8	, B	9 RO	SRO) <u>BC</u>	<u>) TH</u>	CFR 41.6	
REFF	ERENC	E MA	TERIAL REQUIRED:		NONE					

QUESTION 45

GGNS is operating at 10% power with the mode switch in the STARTUP position.

APRM H has four (4) LPRMs currently bypassed.

What would APRM H indicate when the Meter Function switch is taken to COUNT after a fifth (5th) LPRM is taken to BYPASS?

- A. 75
- B. 80
- C. 85
- D. 90

QUESTION NRC RECORD # WRI 326 45 ANSWER: C. SYSTEM # C51 K/A 215005 K6.03: 3.1/3.3 LP# GG-1-LP-OP-C5104 3b; 9b SRO TIER 2 GROUP 1 / RO TIER 2 GROUP 1 **OBJ. REFERENCE: 06-OP-1C51-V-0003** NEW Att I sect 5.2.1g- i MODIFIED BANK DIFF 2; CA NRC 12/2000 RO SRO <u>BOTH</u> CFR 41.6/41.7 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 46

Which one of the following describes conditions that would prohibit withdrawing Source Range Neutron (SRM) detectors from the core?

- A. IRMs are on Range 1 reading between 10 and 25 and all SRMs are reading between 6000 and 9000 cps.
- B. Source Range 'A' detector has lost power and has been declared INOP and is bypassed at H13-P680.
- C. Under vessel work has been performed during the ongoing refueling outage and work is still in progress.
- D. Drywell entry has been made to inspect and identify leaks at rated pressure during a reactor startup.

QUESTION 4	6	NRC	RECO)RD # WF	RI 619
ANSWER: C.	SYSTEM # C51-1	K/A	21500	4 2.1.32	2: 3.4/3.8
LP# GG-1-LP-0	DP-C5101			A4.04	: 3.2/3.2
OBJ 7a; 11a	SRO TIER	2 GROUP	1 /	RO TIER	2 GROUP 1
REFERENCE:	04-1-01-C51-1 sect 3.5	NEV	W		
	04-1-02-1H13-P680-7A	-C11 MO	DIFIE	D	BANK
DIFF 1; M					
		RO	SRO	<u>BOTH</u>	CFR 41.5/41.6
REFERENCE N	IATERIAL REQUIRED:	NONE			

QUESTION 47

Which one of the following conditions will allow a start of a Recirculation Pump "A"?

A.	Steam Dome Pressure	950 psig
	Recirc Loop A Temperature	485 ?F
	Recirc Loop B Temperature	529 ?F
	Bottom Head Temperature	500 ?F
	Reactor Power	30 %
B.	Steam Dome Pressure	1014 psig
	Recirc Loop A Temperature	495 ?F
	Recirc Loop B Temperature	529 ?F
	Bottom Head Temperature	495 ?F
	Reactor Power	90 %
C.	Steam Dome Pressure	981 psig
	Recirc Loop A Temperature	499 ?F
	Recirc Loop B Temperature	529 ?F
	Bottom Head Temperature	500 ?F
	Reactor Power	60 %
D.	Steam Dome Pressure	960 psig
	Recirc Loop A Temperature	481 ?F
	Recirc Loop B Temperature	525 ?F
	Bottom Head Temperature	495 ?F
	Reactor Power	60 %

QUESTION	47		NRC RECOR	RD # WRI 122
ANSWER:	C.	SYSTEM # B33;]	B21 K/A 216000	K1.23: 3.3/3.4
			202001	A4.01: 3.7/3.7
LP# GLP-O	PS-B330()		
OBJ. 26.3		SRO TIER 2 G	ROUP 1 / ROT	TIER 2 GROUP 1
REFERENCI	E: 06-	OP-1B33-V-0005	NEW	
	Da	ta Sheet IV sect. 5.4	MODIFIED	BANK
DIFF 2; CA	A 04-	1-01-B33-1 sect 3.3		NRC 3/1998
-			RO SRO <u>B</u>	<i>OTH</i> CFR 41.5
REFERENC	E MATE	RIAL REQUIRED:	STEAM TABL	ES

QUESTION 48

RCIC was manually initiated for level control following a loss of feedwater.

Reactor level has risen to +55 inches.

Which one of the following describes the operation of RCIC?

- A. RCIC Injection Shutoff valve, E51-F013, will close and RCIC will operate on minimum flow. If Reactor water level drops to < 41.6 inches, the RCIC Injection Shutoff valve will re-open.
- B. RCIC Steam Supply to RCIC Turbine valve, E51-F045, will close securing RCIC. If Reactor water level drops to < - 41.6 inches the RCIC Steam Supply to RCIC Turbine valve will open and RCIC will re-inject into the Reactor.
- C. RCIC Turbine Trip/Throttle valve will close securing RCIC. RCIC will require a manual restart if further operation becomes necessary.
- D. RCIC Steam Supply to RCIC Turbine valve, E51-F045, will close securing RCIC. RCIC Injection Shutoff valve, E51-F013, will remain open. If Reactor water level drops to < - 41.6 inches the RCIC Steam Supply to RCIC Turbine valve will open and RCIC will re-inject into the Reactor.

QUESTION 48 NRC RECORD # WRI 328 ANSWER: B. SYSTEM # E51 K/A 217000 A1.01: 3.7/3.7 LP# GG-1-LP-OP-E5100 8c, i, k, 19 SRO TIER 2 GROUP 1/ RO TIER 2 GROUP 1 OBJ. **REFERENCE:** E-1185-02, 06, 15, 34, 35 NEW MODIFIED BANK DIFF 1; M NRC 12/2000 RO SRO BOTH CFR 41.5/41.7/41.10 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 49

A LOCA has occurred. High Pressure Core Spray is inoperable.

ADS Inhibit switches are in INHIBIT.

Drywell pressure is 1.05 psig and rising.

Reactor pressure is 890 psig and falling.

Reactor water level is – 155 inches and stable on wide range indication.

ALL systems are functioning as designed and CRD is maximized.

Which one of the following describes the operation of the Automatic Depressurization System (ADS) valves?

A. ADS valves can ONLY be opened using their handswitches.

- B. ADS will automatically initiate after the ADS 105 second timer has timed out.
- C. ADS can be manually initiated using the ADS Manual Initiation pushbuttons.
- D. ADS will automatically initiate after both the 9.2 minute and 105 second timers have timed out.

QUESTION	49		NRC	C RE	COR	D# W	/RI	620	
ANSWER: C.	SYSTE	M # E22-2	K/A	218	000	K4.	03:	3.8/4.0	
LP# GG-1-LP-	OP-E2202					K5.	01:	3.8/3.8	
OBJ. 15	SR	O TIER 2	GROUP	1 /	RO	TIER	2	GROUP	1
REFERENCE:	041-02-1H	1 3-P601	NEV	V					
	18A-B3, B4	, C2	MO	DIFI	ED			BANK	
DIFF 1, M	19A-B3, B4	, C2						NRC 12/	00
			RO	SRC) <u>B(</u>	<u>) TH</u>		CFR 41.7	7
REFERENCE N	MATERIAL RE	QUIRED:	None						

QUESTION 50

The plant is operating at 100% power steady state.

All power from offsite is lost.

All systems respond and function properly.

All plant parameters remain in their normal band.

Division 1 and 2 Load Shedding and Sequencing (LSS) functions properly.

Which of the following components is without power at this time?

A. Drywell Chillers A.

B. Division 1 Drywell Cooler Fans.

- C. Drywell Chillers B.
- D. Division 2 Drywell Cooler Fans.

QUESTION	50	NRC RECORD # W	RI 528
ANSWER: A.	SYSTEM # M51	K/A 223001 K2	2.09: 2.7/2.9
		K2	2.10: 2.7/2.9
LP# GG-1-LP-	OP-M5100	K2	2.08: 2.7/3.0
OBJ. 7a&c 9a	SRO TIER 2 G	GROUP 1 / RO TIER 2	GROUP 1
REFERENCE:	04-1-01-R21-1 Table 1	NEW	
	04-1-01-M51-1 Att III	MODIFIED	BANK
DIFF 2; CA	04-1-01-P72-1 Att II		NRC 6/2001
		RO SRO <u>BOTH</u>	CFR 41.7/41.8
REFERENCE M	IATERIAL REOUIRED:	NONE	

QUESTION 51

An LOCA has occurred.

Reactor scram immediate actions are complete.

The following conditions exist:

Reactor water level	+ 20 inches after dropping to $-$ 32 inches
Reactor pressure	40 psig
Drywell pressure	1.5 psig

Which one of the following should be isolated?

A. Reactor Water Cleanup system

B. Reactor Sample Isolation valves

C. Reactor Core Isolation Cooling Vacuum Breaker valves

D. Main Steam Line Drain Isolation valves B21-F016 & F019

QUESTION	51	NRC RECORD) # WRI 385
ANSWER: C.	SYSTEM # E	51 K/A 223002	A2.09: 3.6/3.7
			2.4.4: 4.0/4.3
LP# GG-1-LP-	OP-E5100		2.4.21: 3.7/4.3
OBJ. 80	SRO TIER 2	2 GROUP 1 / RO TIE	R 2 GROUP 1
REFERENCE:	05-1-02-III-5 Group 9	• NEW	
		MODIFIED	BANK
DIFF 1; M			NRC 12/2000
		RO SRO <u>BO</u>	<u>CFR 41.7/41.9</u>
REFERENCE M	ATERIAL REQUIRED:	None	

QUESTION 52

The reactor has scrammed.

A loss of offsite power (LOP) and loss of coolant accident (LOCA) signal were received by LSS eight (8) hours ago.

The ESF buses were restored by their respective diesel generators.

When the handswitch for SRV B21-F051F was taken to OPEN, the valve did NOT change position.

Instrument air system header pressure and ADS receiver pressure indicates 0 psig.

Which one of the following correctly describes a method to allow further operation of this SRV?

- A. The SRV can be opened after installing nitrogen bottles in area 9, 139 ft elevation and pressurizing the ADS air header.
- B. The SRV can be opened by placing the 'A' solenoid (H13-P601) and 'B' solenoid (H13-P631) handswitches to OPEN.
- C. The SRV can be opened by placing the handswitch on Division I or II Remote Shutdown Panels to OPEN.
- D. Due to the loss of instrument air, this SRV will open only in the Safety function.

QUE	STION	[52			NRC	C REO	COR	D#WI	RI 337	
ANS	WER:	D.	:	SYSTEM #	E22-2	K/A	2390	002	K1.05	5: 3.1/3.	3
LP#	GG-1-1	LP-O	P E2202	2							
OBJ.	7;11	; 13;	19d; 28	SRO T	IER 2	GROUP	1 /	RO	TIER 2	GROU	U P 1
REFI	ERENC	E:	05-1-02	-V-9 sect 3.	.15	NEV	V				
			04-1-01	-B21-1		MO	DIFIE	D		BANK	
DIFF	5 2; CA		Sect 4	1.2.2						NRC 1	12/2000
			M-1077	'C & E		RO	SRO	<u>BC</u>	DTH	CFR 4	1.3
REFI	ERENC	E MA	TERIA	L REQUIRI	ED:	None					

QUESTION 53

The plant is operating at 45% power.

An incident at the Front Standard of the Main Turbine resulted in a local manual trip of the Main Turbine.

Which one of the following describes the response of the plant?

- A. The reactor will scram on Turbine Valve fluid pressure and the Turbine Bypass Valves will open.
- B. The reactor will scram on high reactor flux and the Turbine Bypass Valves will open.
- C. The reactor will scram on Turbine Valve fluid pressure, the Turbine Bypass Valves will open, and 9 Safety Relief Valves will open.
- D. The reactor will scram on high reactor flux, the Turbine Bypass Valves will open, and Safety Relief Valves will open.

QUESTION	53	NRC RECORD # WR	RI 244
ANSWER: A.	SYSTEM # N32; C71	K/A 241000 K6.11	: 3.4/3.4
		A1.01	: 3.9/3.8
		A1.02	: 4.1/3.9
LP# GLP-OP-C7	/100	A1.07	': 3.8/3.7
OBJ. 9, 10; 23	SRO TIER 2 GH	ROUP 1 / RO TIER 2	GROUP 1
REFERENCE:	FSAR Table 15.2-4	NEW	
	Tech Spec 3.3.1.1 & bases	MODIFIED	<u>BANK</u>
DIFF 2; CA	FSAR Table 15.2-2		NRC 4/2000
		RO SRO <u>Both</u>	CFR 41.5
REFERENCE MA	ATERIAL REQUIRED:	None	

QUESTION 54

Which one of the following signals will cause a SBGT system 'A' initiation?

- A. Fuel handling area exhaust rad monitor 'A' indicating 4.2 mRem/hr. Fuel handling area exhaust rad monitor 'D' mode switch NOT in operate.
- B. Fuel pool sweep exhaust rad monitor 'A' indicating 32 mRem/hr. Fuel pool sweep exhaust rad monitor 'C' indicating 34 mRem/hr.
- C. Fuel handling area exhaust rad monitor 'B' indicating 5.3 mRem/hr. Fuel handling area exhaust rad monitor 'C' inop trip.
- D. Fuel pool sweep exhaust rad monitor 'A' indicating 31 mRem/hr. Fuel pool sweep exhaust rad monitor 'C' inop trip.

QUESTION	54	NRC RECORD # WI	RI 621
ANSWER: A.	SYSTEM # T48;	K/A 261000 K4.0	1: 3.7/3.8
	D17; T42		
LP# GG-1-LP-C	DP-T4801		
OBJ. 8f	SRO TIER 2	GROUP 1 / RO TIER 2	2 GROUP 1
REFERENCE:	04-1-02-1H13-P870 2A-A	3 NEW	
	04-1-02-1H13-P601	<u>MODIFIED</u>	BANK
DIFF 1, M	19A-B9	LOT 9/99 ESF	
,	TRM table 3.3.6.2-1	RO SRO <u>BOTH</u>	CFR 41.7/41.11
REFERENCE M	ATERIAL REQUIRED:	None	

QUESTION 55

A plant startup is in progress.

The Operator at the Controls has just shifted the 'A' Recirculation Pump to fast speed. The 'B' Recirculation pump is running in slow speed with its flow control valve at 100% open.

Immediately after the pump up-shift, the following indications were received in the Main Control Room:

Reactor Power 34 % and stable. Reactor level dropped to + 32 inches. Annunciator RECIRC FCV A PARTIAL CLOSE/ RFP TRIP (P680-3A-D1) is illuminated.

Which one of the following would be the expected response of the Recirculation System? (No other alarms or indicating lights have been received.)

- A. The 'A' Recirc Flow Control Valve will remain at present position and will require resetting via the RECIRC PUMP A CAV INTLK RESET pushbutton.
- B. The 'A' Recirc Flow Control Valve Hydraulic Power Unit will require resetting from the Control Room Back Panels and then the valve opened to 15 20 % valve position.
- C. The 'A' Recirc Flow Control Valve runback to 0 % valve position and 'B' Recirc Flow Control valve will runback to 15 20 % valve position and then both valves will be reset via the RECIRC PUMP A CAV INTLK RESET pushbutton.
- D. The 'A' Recirc Flow Control Valve will remain at present position and 'B' Recirc Flow Control Valve will runback to 15 20 % valve position and then both valves will be reset via the RECIRC PUMP A CAV INTLK RESET pushbutton

QUESTION 5	55	NRC RECORD # WR	I 235
ANSWER: A.	SYSTEM # B33	K/A 202002 A3.01	: 3.6/3.4
LP# GLP-OPS-B	3300		
OBJ. 20, 24, 50	SRO TIER 2	GROUP 1 / RO TIER 2	GROUP 1
REFERENCE:	04-1-02-H13-P680	NEW	
	3A-D1	MODIFIED	BANK
DIFF 1; M	04-1-01-B33-1 section 6.6	5	NRC 4/2000
		RO SRO <u>Both</u>	CFR 41.6
REFERENCE MA	TERIAL REQUIRED:	None	

QUESTION 56

The plant was operating at full power when a leak on the RFPT 'A' lube oil reservoir resulted in a trip of both AC RFPT Lube Oil Pumps.

The ACRO noted bearing oil pressure at 2 psig.

Which one of the following describes the response of the Feedwater System and the ability to inject water to the Reactor?

- A. RFPT 'A' will continue to operate using the Emergency RFPT Lube Oil Pump. Reactor water level will continue to be maintained by Feedwater.
- B. RFPT 'A' will trip and isolate the RFPT and power will be reduced with Recirc to within the capabilities of RFPT 'B' allowing reactor level to be recovered to close to normal levels.
- C. RFPT 'A' will trip and isolate feedwater to the reactor vessel resulting in a lowering reactor water level and eventual reactor scram. Water level must be recovered using ECCS and RCIC.
- D. RFPT 'A' will trip and power will be reduced with Recirc to within the capabilities of RFPT 'B' with level being maintained at 18 inches until the Digital Feedwater Control System can be restored to three element control.

QUESTION	56	NRC RECORD #	WRI 622
ANSWER: B.	SYSTEM # N21; F	333 K/A 259001 A2	2.01: 3.7/3.7
		K	.11: 2.7/2.7
		K4	.06: 2.5/2.6
LP# GG-1-LP-0	DP-N2100	Ke	5.09: 2.8/2.9
OBJ. 12; 14;	16; 37		
LP# GLP-OPS-	B3300		
OBJ. 24.1; 24	.2; 47 SRO TIER 2	GROUP 2 / RO TIE	R 2 GROUP 1
REFERENCE:	04-1-02-1H13-P680	<u>NEW</u>	
	2A-A2, B1, B2; 3A-A3	MODIFIED	BANK
DIFF 2; CA	04-1-01-N21-1 sect 3.7		
·		RO SRO <u>BOTH</u>	CFR 41.4
REFERENCE M	ATERIAL REOUIRED:	None	

QUESTION 57

The plant was operating at full power.

The variable leg of the transmitters off of D004C Condensing pot has broken and drained the water from the associated level transmitters.

The Digital Feed Control System was aligned for normal operations.

Which one of the following describes the response of the Digital Feed Control System (DFCS) and actual Reactor Water Level?

- A. Reactor water level will drop initially then is restored when DFCS automatically transfers from Three Element Control to Single Element Control.
- B. Reactor water level will drop initially then is restored when the DFCS automatically deselects C Narrow Range and is replaced with Upset Range for level control.
- C. Reactor water level will rise initially then is restored when the DFCS automatically deselects C Narrow Range and is replaced with Upset Range for level control.
- D. Reactor water level will remain stable and the DFCS automatically deselects C Narrow Range and is replaced with Upset Range for level control.

QUESTION	57	NRC	RECO	ORD # WRI	623
ANSWER: D.	SYSTEM # N21;	K/A	259002	2 K1.03:	3.8/3.9
	C34; B21				
LP# GG-1-LP-OP	-C3401				
OBJ. 3f; 22; 25					
LP# GLP-OPS-B2	2101				
OBJ. 8.1; 8.4; 20	SRO TIER 2	GROU	P1/	RO TIER	2 GROUP 1
REFERENCE:	04-1-02-1H13-P680	<u>NEW</u>			
	2A-C9	MOD	IFIED		BANK
DIFF 2; CA					
		RO	SRO	<u>BOTH</u>	CFR 41.4/41.7
REFERENCE MAT	FERIAL REQUIRED:	None			

QUESTION 58

The Electrical line up is normal.

A LOCA condition has caused Drywell Pressure to rise to 1.6 psig.

A switching error causes 500 kV voltage to drop.

The voltage to ALL ESF busses drops to 3290 volts.

The voltage transient duration is 10 seconds and then voltage returns to normal.

Which one of the following statements is the condition of the ESF busses after this voltage transient?

- A. 15AA is being supplied from ESF 11 16AB is being supplied from ESF 21 17AC is being supplied from ESF 21
- B. 15AA is being supplied from Div I D/G
 16AB is being supplied from Div II D/G
 17AC is being supplied from Div III D/G
- C. 15AA is being supplied from ESF 11 16AB is being supplied from ESF 21 17AC is being supplied from Div III D/G
- D. 15AA is being supplied from Div I D/G 16AB is being supplied from Div II D/G 17AC is being supplied from ESF 21

QUESTION	58	NRC RECORD #	WRI 11
ANSWER: B.	SYSTEM # R21	K/A 264000	2.4.4: 4.0/4.3
LP# GG-1-LP-	OP-R2100		K4.05: 3.2/3.2
			A3.05: 3.4/3.4
OBJ. 12; 20; 22	2; 37 SRO TIER 2	GROUP 1 / ROTIER	R 2 GROUP 1
REFERENCE:	04-1-01-R21-1 sect 5.1.1a	a NEW	
	04-1-01-P81-1 sect 3.22	MODIFIED	BANK
DIFF 2; CA			NRC 6/2001
		RO SRO <u>BOTH</u>	CFR 41.8
REFERENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 59

Select the statement that describes the MOST probable cause of the following plant conditions:

Annunciator "RECIRC PMP B SEAL STG FLO HI/LO" alarms.

Annunciator "RECIRC PMP B OUTR SEAL LEAK HI" alarms.

Recirc pump 'B' # 1 seal cavity pressure: 1020 psig.

Recirc pump 'B' # 2 seal cavity pressure: 100 psig

- A. Failure of the # 1 seal.
- B. Failure of the # 2 seal.
- C. Failure of the CRD seal purge regulator.
- D. Plugging of the orifice between # 1 and # 2 seals.

QUESTION	59	NRC RECORD # V	VRI 540
ANSWER: B.	SYSTEM # B33	K/A 202001 A	2.10: 3.5/3.9
LP# GLP-OPS-	·B3300	Α	1.09: 3.3/3.3
		A	1.10: 2.6/2.7
OBJ. 29.4	SRO TIER 2 G	ROUP 2 / RO TIER 2	GROUP 2
REFERENCE:	04-1-02-1H13-P680	NEW	
	3A-A12 & 3A-B11	MODIFIED	BANK
DIFF 2; CA			NRC 6/2001
		RO SRO <u>BOTH</u>	CFR 41.3/41.5
REFERENCE M	IATERIAL REOUIRED:	NONE	

QUESTION 60

The plant is in a refuel outage.

Reactor Water Clean-Up (RWCU) is operating.

Residual Heat Removal (RHR) B is in Shutdown Cooling.

E12-F048B RHR B Heat Exchanger Bypass valve is FULL OPEN.

E12-F003B RHR B Heat Exchanger Outlet valve is FULL CLOSED.

Which of the following would be a valid indication of Reactor Coolant Temperature under present plant conditions?

P & IDs M-1079 and M-1085A are provided.

A. RHR B heat exchanger B001B inlet temperature E12 TE-N004B

B. RHR B heat exchanger B002B inlet temperature E12 TE-N002B.

- C. RHR B heat exchanger discharge temperature E12 TE-N027B.
- D. RWCU Non-Regen heat exchanger inlet temperature G33 TE-N006.

QUESTION	60	NRC RECORD # W	/RI 541
ANSWER: C.	SYSTEM # E12	K/A 205000 K1	.03: 3.4/3.5
LP# GLP-OPS	-E1200		
OBJ. 14	SRO TIER 2 G	GROUP 2/ ROTIER 2 G	GROUP 2
REFERENCE:	04-1-01-E12-1	NEW	
	sect 4.2.2.e.13 Caution	MODIFIED	BANK
DIFF 2; CA	P&ID M1085A		NRC 6/2001
	M-1079	RO SRO <u>BOTH</u>	CFR 41.2/41.3/41.4
REFERENCE M	IATERIAL REQUIRED:	M-1079 & M-1085A	41.5

QUESTION 61

Suppression Pool Cooling is in service to support a RCIC surveillance.

Which of the following statements accurately depicts the required operation of E12-F003A(B), RHR Heat Exchanger Outlet Valve, and E12-F048A(B), RHR Heat Exchanger Bypass Valve, while in Suppression Pool cooling?

- A. Maintain flow greater than 4000 gpm. If the F048A(B) is not full OPEN, avoid using F003A(B) to throttle flow for extended periods (30 minutes) in the 0% to 15% open range.
- B. Maintain flow greater than 4000 gpm. If the F048A(B) is not full CLOSED, avoid using F003A(B) to throttle flow for extended periods (60 minutes) in the 0% to 15% open range.
- C. Maintain heat exchanger flow less than 8600 gpm. If the F048A(B) is not full OPEN, avoid using F003A(B) to throttle flow for extended periods (30 minutes) in the 0% to 15% open range.
- D. Maintain heat exchanger flow less than 8600 gpm. If the F048A(B) is not full CLOSED, avoid using F003A(B) to throttle flow for extended periods (60 minutes) in the 0% to 15% open range.

QUESTION	61	NRC RECORD # V	VRI 624
ANSWER: A.	SYSTEM # E12	K/A 219000 K5.	04: 2.9/2.9
LP# GLP-OPS-H	E1200	2.1.	32: 3.4/3.8
OBJ. 14.1	SRO TIER 2	GROUP 2 / RO TI	ER 2 GROUP 2
REFERENCE:	04-1-01-E12-1	NEW	
	sect 3.2.3; 3.6.3b;	MODIFIED	<u>BANK</u>
DIFF 1; M	5.2.2a(5) Caution		NRC 12/00 id 282
		RO SRO <u>BOTH</u>	CFR 41.7
REFERENCE MA	ATERIAL REQUIRED:	None	

QUESTION 62

In which one of the following situations would containment spray be in service?

A. 5 minutes since LOCA signal received Reactor water level - 192 inches RHR A and B pumps operating on minimum flow Drywell pressure 2 psig CTMT pressure 9 psig B. 12 minutes since LOCA signal received Reactor water level - 192 inches RHR A and B pumps operating on minimum flow Drywell pressure 0.7 psig CTMT pressure 8 psig C. 13 minutes since LOCA signal received Reactor water level - 92 inches RHR A and B pumps were overridden off 2 min. after LOCA Drywell pressure 5 psig CTMT pressure 4 psig D. 15 minutes since LOCA signal received - 92 inches Reactor water level RHR A and B pumps were overridden off 2 min. after LOCA Drywell pressure 3 psig CTMT pressure 8 psig QUESTION 62 NRC RECORD # WRI 625 ANSWER: D. SYSTEM # E12 K/A 226001 A3.07: 3.5/3.5 LP# GLP-OPS-E1200 A3.01: 3.0/3.0 **OBJ.** 10.1; 11.2 SRO TIER 2 GROUP 1 / RO TIER 2 GROUP 2 **REFERENCE:** 04-1-01-E12-1 sect 3.3 NEW 04-1-02-1H13-P601 **MODIFIED** BANK DIFF 1; M LOT 7/95 17A-F3; 20A-B6 RO SRO <u>BOTH</u> CFR 41.7/41.8 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 63

GGNS Main Generator has a limit to carry no more than ? 250 MVARs.

What is the basis for this limitation?

- A. This is the Maximum reactive load allowed by the manufacturer due to the heat build up in the stator windings at full power.
- B. GGNS is a base load station such that Entergy dispatchers are required to minimize the reactive load carried on the Main Generator.
- C. GGNS Main Generator reverse power relays will not recognize a reverse power condition at high reactive load and will not provide the required trip.
- D. The Generator V-Curves supplied by the manufacturer limit the power factor on the generator to reduce hysteresis losses.

QUESTION 63		NRC RECORD # W	VRI 44
ANSWER: C.	SYSTEM # N41	K/A 245000 A4.	14: 2.5/2.5
		АЗ.	10: 2.5/2.6
LP# GG-1-LP-O	P-N4151	K4.	.06: 2.7/2.8
OBJ 7; 13	SRO TIER 2 GR	OUP 2 / RO TIER 2	GROUP 2
REFERENCE:	04-1-01-N40-1 sect. 3.8	NEW	
		MODIFIED	BANK
DIFF 1; M			NRC 3/1998
		RO SRO <u>Both</u>	CFR 41.4/41.10/43.5
REFERENCE M	ATERIAL REQUIRED:	NONE	

QUESTION 64

The plant is operating normally at full power rated conditions.

A rupture of tubes in the 3A Low Pressure Feedwater Heater resulted in an automatic isolation of the Feedwater Heater String.

Which one of the following describes the limitations on plant operations?

- A. Power is limited to a maximum of 50% rated thermal power utilizing Condensate and Heater Drain pumps to a limit of 250 psid differential pressure across the LP Feedwater Heaters due to 1/3 Condensate System capacity.
- B. Power is limited to a maximum of 75% rated thermal power without restrictions on the use of Condensate and Heater Drain pumps.
- C. Power is limited to a maximum of 100% rated thermal power without restrictions on the use of Condensate and Heater Drain pumps opening the LP Feedwater Heater Bypass valve as necessary to reduce differential pressure.
- D. Power is limited as necessary to maintain the turbine parameters within limits without restrictions on the operation of the Condensate and Heater Drain Pumps.

QUESTION	64	NRC RECOR	D # WRI 294
ANSWER: D.	SYSTEM # N23; N19	K/A 256000	A3.07: 2.9/2.9
			A3.04: 3.0/3.0
			A3.01: 2.7/2.7
LP# GLP-OPS-	N2335		A2.08: 3.1/3.1
OBJ. 15	SRO TIER 2 GRO	UP 3 / RO TI	ER 2 GROUP 2
REFERENCE:	04-1-01-N23-1 sect 3.10	NEW	
	03-1-01-2 sect 2.10.2	MODIFIED	BANK
DIFF 1; M			NRC 4/2000
		RO SRO <u>BO</u>	<u>OTH</u> CFR 41.4
REFERENCE M	MATERIAL REQUIRED:	None	

QUESTION 65

Bus 16AB has experienced an undervoltage condition.

Diesel Generator 12 failed to start.

Power to bus 16AB has been restored by the Control Room Operator from transformer ESF 11.

Reactor water level and pressure are stable.

Which one of the following is the type of load sequencing that will take place?

A. Bus Undervoltage Sequence

- B. Loss of Offsite Power Sequence
- C. Loss of Coolant Accident Sequence

D. Bus Undervoltage Sequence following automatic source selection

QUESTION		65			NRC	C REC	OR	RD # WRI	62	6
ANSWER:	A.		SYSTEM #	R21	K/A	26200	01	A3.04:	3.4	/3.6
LP# GG-1-I	LP-OP	-R21	00							
OBJ. 15; 1	l 6; 17;	18	SRC) TIER 2	GROU	J P 1	/	RO TIER	2	GROUP 2
REFERENC	E:	E-10.	39		NEW	V				
					MOL	DIFIE	<u>D</u>		BA	NK
DIFF 1; M					LOI	8/02				
					RO	SRO	B	<u>OTH</u>	CF	R 41.4/41.7
REFERENC	E MA	TER	IAL REQUI	RED:	None					

QUESTION 66

Static inverter 1Y95 has automatically transferred to its alternate power source because of a fault on its normal power source.

Two hours later, the electricians have repaired the fault and the normal power source for 1Y95 is re-energized.

Which one of the following statements describes the restoration of the inverter to its NORMAL source?

- A. The inverter static switch can be manually transferred back to the normal power source, only if the power sources are IN SYNC.
- B. The inverter static switch will automatically transfer back to the normal power source, only if the power sources are IN SYNC.
- C. The inverter static switch will automatically transfer back to the normal power source, regardless of whether the power sources are IN SYNC.
- D. The inverter static switch can be manually transferred back to the normal power source, regardless of whether the power sources are IN SYNC.

QUESTION ANSWER: A.	66 SYSTEM # L62	NRC RECORD # W K/A 262002 A3.	VRI 544 01: 2.8/3.1
LP# GG-1-LP-0	OP-L6200		
OBJ. 4b; 10a	SRO TIER 2 G	ROUP 2 / RO TIER 2	2 GROUP 2
REFERENCE:	04-1-01-L62-1	NEW	
	sect 3.2 & 3.5	MODIFIED	<u>BANK</u>
DIFF 1; M			NRC 6/2001
		RO SRO <u>Both</u>	CFR 41.7/41.10/43.5
REFERENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 67

The plant was operating at 100 % power when Control Room Operators rapidly reduced power due to changes in feedwater heating.

Annunciator "MSL RAD HI" was received.

No other radiation alarms were received and indications on the Main Steam Line Radiation Monitors are elevated.

All other radiation levels have dropped from previous readings.

Which one of the following is the most likely cause of these conditions?

- A. Fuel cladding failure
- B. Resin intrusion into the reactor
- C. Hydrogen water chemistry is in service
- D. Release of crud containing Co-60 into the reactor

QUESTION	67	NRC RECOR	2D # WRI 627
ANSWER: C.	SYSTEM # P73;	D17 K/A 272000	A1.01: 3.2/3.2
LP# GG-1-LP-O	P-P7300		
OBJ. 8	SRO TIE	R 2 GROUP 2 /	RO TIER 2 GROUP 2
REFERENCE:	04-1-02-1H13-P601	<u>NEW</u>	
	19A-D4; 18A-D4	MODIFIED	BANK
DIFF 1; M			
		RO SRO <u>B</u>	OTH CFR 41.10/41.11
REFERENCE MA	ATERIAL REQUIRED:	None	43.4/43.5

QUESTION 68

The Plant is operating at 100 % power.

The Motor Driven Fire pump is out of service.

A fire in Transformer ESF 12 has initiated the Deluge system for the transformer.

The A Diesel Driven Fire Pump received a signal to start.

Which one of the following describes the starting limitations of the Diesel Driven Fire Pump?

- A. The diesel engine will attempt to start for 15 minutes. If the diesel does not start it alarms in the Control Room, and it must be reset from the Control Room before it will attempt to start again.
- B. The diesel engine will attempt to start for 15 seconds, then wait for 15 seconds. It will attempt this start sequence for 6 attempts. After that, it must manually be reset before any further start attempts occur.
- C. The diesel engine will attempt to start for 15 seconds then wait for 15 minutes to allow the battery to recharge, then it will attempt this cycle again. After that it must manually be reset before any further start attempts occur.
- D. The diesel engine will attempt to start as long as air pressure is > 60 psig. After that, the air bank must recharge before additional start attempts can occur.

QUESTION	68			NRO	C REC	CORD	# WI	RI 3	
ANSWER:	В.	SYSTEM #	P64	K/A	2860	00	A2.08	8: 3.2/3.3	
							K5.05	5: 3.0/3.1	
							K4.0′	7: 3.3/3.3	
							A3.01	1: 3.4/3.4	
LP# GG-1-I	P-OP-F	P6400					A4.00	5: 3.4/3.4	
OBJ. 6d		SRO TIER	2 GRO	UP 2	/ R	O TIE	R 2	GROUP	2
REFERENC	E: A	RI 04-S-02-SH1	3-P862	NEV	V				
	1	A-B3; 1A-B5		MOI	DIFIE	D		BANK	
DIFF 1; M	S	ect. 1.2; 2.1; &	4.5					NRC 3/1	1998
				RO	SRO	<u>BOT</u>	H	CFR 41.	.4
REFERENC	E MATI	ERIAL REQUIE	RED:	NONE	l.				

QUESTION 69

A station blackout has occurred.

A fire has broken out in the Division II ESF Switchgear Room on 119 ft elevation area 10.

Which one of the following describes the ability to combat the fire?

- A. Fire fighting will be limited to the use of portable fire extinguishers.
- B. The CO2 fire suppression system can be overridden open and the Auxiliary Building Isolation Valves opened using the AUX BLDG ISO BYPASS Switch.
- C. The Fire Water System Auxiliary Building Isolation Valves can be opened using the AUX BLDG ISO BYPASS Switch to provide fire water to hoses.
- D. The Fire Water System Auxiliary Building Isolation Valves can be bypassed by manually opening the motor operated bypass valves.

QUESTION	69		NRC RECOR	RD # WRI	264
ANSWER: D.	SYSTEM	# T10;	K/A 290001	K6.09:	3.4/3.6
	P64; M71	l; R21		A2.06:	3.7/4.0
LP# GG-1-LP-	OP-M7101		286000	A2.09:	2.7/2.8
OBJ. 8a; 10;	16d,e,f; 20; 29 S	SRO TIER 2	GROUP 1 /	RO TIER	2 GROUP 2
REFERENCE:	05-1-02-V-9		NEW		
	Sect 3.19 & 5.	46	MODIFIED		BANK
DIFF 2; CA	05-1-02-III-5				NRC 4/2000
	sect 3.4.4				
	M-0035E		RO SRO <u>B</u>	OTH	CFR 41.9
REFERENCE M	MATERIAL REQU	UIRED:	None		

QUESTION 70

An accident has occurred and a radiological release is in progress.

RCIC was manually initiated to maintain reactor water level.

The Main Steam failed to completely isolate upon a manual isolation when a steam leak was reported in the Turbine Building.

Annunciator "CONT RM VENT RAD HI" has been received.

There are various Turbine Building radiation alarms.

No other radiation alarms were received.

Which one of the following describes the response of the Control Room HVAC System (Z51)?

(ASSUME NO OPERATOR ACTIONS)

- A. Control Room HVAC is operating in a normal configuration.
- B. Control Room HVAC has isolated and the Control Room Standby Fresh Air Unit associated with the in service Control Room Air Conditioning Unit will automatically start.
- C. Both Control Room Standby Fresh Air Units will automatically start to filter Control Room air with the remaining Control Room HVAC components continuing to operate as normal.
- D. Control Room HVAC will isolate and both Control Room Standby Fresh Air Units will initiate to filter Control Room air with the in service Control Room Air Conditioning Unit remaining in operation.

QUESTION	70	NRC RECORD # WR	I 628
ANSWER: A.	SYSTEM # Z51; D1 '	7 K/A 290003 A1.05	: 3.2/3.3
LP# GG-1-LP-O	P-Z5100		
OBJ. 8; 9; 11	SRO TIER 2	GROUP 2 / RO TIER	R 2 GROUP 2
REFERENCE:	04-1-02-1H13-P601	<u>NEW</u>	
	<u><i>19A-A9</i>;</u> A10; A11	MODIFIED	BANK
DIFF 2; CA	04-S-02-SH13-P855		
	1A-A5; 2A-A5	RO SRO <u>BOTH</u>	CFR 41.7/41.11/43.4
	TRM Table 6.3.1-1		
REFERENCE MA	ATERIAL REQUIRED:	None	

QUESTION 71

The operating Instrument Air Compressor has tripped.

The Standby Instrument Air Compressor fails to start.

Which one of the following describes the response of the Instrument/Plant/Service Air Systems?

- A. Instrument Air pressure will continue to drop until an operator manually cross ties Service Air to the Instrument Air header down stream of the Instrument Air Dryers.
- B. Instrument Air pressure will continue to drop until an operator manually cross ties Service Air to the Instrument Air header up stream of the Instrument Air Dryers.
- C. Instrument Air pressure will continue to drop until the Service to Instrument Air cross tie automatically opens to connect to the Instrument Air header down stream of the Instrument Air Dryers.
- D. Instrument Air pressure will continue to drop until the Service to Instrument Air cross tie automatically opens to connect to the Instrument Air header up stream of the Instrument Air Dryers.

QUESTION	71	NRC RECORD # WR	[629
ANSWER: D.	SYSTEM # P51;	K/A 300000 K4.02:	3.0/3.0
	P52; P53		
LP# GG-1-LP-O	P-P5200		
OBJ. 3; 4			
LP# GLP-OPS-P	\$5300		
OBJ. 3; 4	SRO TIER 2	GROUP 2 / RO TIER	2 GROUP 2
REFERENCE:	05-1-02-V-9 sect 3.1.1	<u>NEW</u>	
	M-1067A	MODIFIED	BANK
DIFF 1; M	M-1068D		
	M-1126	RO SRO <u>Both</u>	CFR 41.4/41.10/43.5
REFERENCE MA	ATERIAL REQUIRED:	None	

QUESTION 72

The plant is operating in the normal electrical lineup.

CCW pumps "A" and "C" are operating with "B" selected for STANDBY.

A Loss of Coolant Accident occurs resulting in a shedding of loads.

The "C" CCW pump trips on overcurrent.

Which of the following describes the resulting status of the CCW system?

(Assume NO operator action.)

A. Pump "A" operating; Pump "B" operating; Pump "C" tripped

- B. Pump "A" operating; Pump "B" not operating; Pump "C" tripped
- C. Pump "A" not operating; Pump "B" operating; Pump "C" tripped
- D. Pump "A" not operating; Pump "B" not operating; Pump "C" tripped

NRC RECORD # WRI 105 **OUESTION** 72 K/A 400000 ANSWER: B. SYSTEM # P42 K4.01: 3.4/3.9 LP# GG-1-LP-OP-P4200 SRO TIER 2 GROUP 2 / RO TIER 2 GROUP 2 **OBJ** 5; 7a; 11h; 23 **REFERENCE:** 04-1-01-R21-1 Table 1 NEW MODIFIED BANK NRC 3/1998 DIFF 1; M RO SRO <u>BOTH</u> **CFR 41.4 REFERENCE MATERIAL REQUIRED:** NONE
QUESTION 73

Radwaste is discharging the Floor Drain Sample Tank to the River.

Which one of the following would result in an isolation of the G17-F355 Liquid Radwaste Discharge Isolation Valve?

- A. The Floor Drain Sample Pump discharge pressure is too low.
- B. The blow down flow rate is too low.
- C. The discharge flow rate is too low.
- D. The effluent radiation monitor high radiation setpoint is reached.

QUESTION	73	NRC RECORD # W	RI 110
ANSWER: B.	SYSTEM # G17	K/A 268000 A1.0	2: 2.6/3.6
LP# GG-1-LP-OF	P-G1718		
OBJ 6a, 7h, l	SRO TIER 2 GR	OUP 3 / RO TIER 2	GROUP 3
REFERENCE:	ARI 04-1-02-H13-P601	NEW	
	19А-Н7; 19А-Н8	MODIFIED	BANK
DIFF 1; M	ARI 04-1-02-H13-P870		NRC 3/1998
	6A-F3	RO SRO <u>BOTH</u>	CFR 41.13/43.4
REFERENCE MA	TERIAL REQUIRED:	NONE	

QUESTION 74

A rise in Fuel Handling Area Exhaust Radiation levels have resulted in an actuation of Standby Gas Treatment. Standby Gas Treatment 'A' and 'B' initiated, but Standby Gas Treatment 'B' Exhaust and Enclosure Building fans failed to start.

Which of the following identifies the condition of the Auxiliary Building Ventilation System?

- A. All fan coil units operating, Div I and Div II Secondary Containment Isolation dampers open.
- B. All fan coil units shutdown, the Division I Secondary Containment Isolation dampers closed.
- C. All fan coil units shutdown, Div I and Div II Secondary Containment Isolation dampers closed.
- D. Div I fan coil units shutdown, the Division I Secondary Containment Isolation dampers closed.

QUESTION	74	NRC RECORD # WRI	630
ANSWER: C.	SYSTEM # T41;	K/A 288000 K1.05:	3.3/3.6
	D17; T48	K1.02:	3.4/3.4
LP# GG-1-LP-OP	-T4100		
OBJ. 7; 9; 10; 11	SRO TIER 2	GROUP 3 / RO TIER	2 GROUP 3
REFERENCE:	05-1-02-III-5 Check list	NEW	
]	E-1257-01	<u>MODIFIED</u>	BANK
DIFF 2; CA	E-1253-01, 02, 06, 07, 12	LOT 9/99 Vent	
		RO SRO <u>BOTH</u>	CFR 41.7/41.11
REFERENCE MAT	FERIAL REQUIRED:	None	

QUESTION 75

The plant is operating at rated conditions.

The following are the parameters taken from the recent Mon Edit.

MFLCPR	0.94
MAPRAT	1.02
MFLPD	0.96
FDLRX	0.92
FCBB	2.42

Which of the following identifies the consequences of continued operation with thermal limits at the present values?

- A. Fuel cladding could exhibit in excess of 1% plastic strain during a LOCA.
- B. Possible peak cladding temperatures in excess of 2200°F during a DBA LOCA.
- C. There is a possibility of the onset of transition boiling in greater than 0.1 % of the fuel rods.
- D. The core may become unstable during operation in the Restricted Region of the Power to Flow Map.

QUESTION	75	NRC RECORD	# WRI 631
ANSWER: B.	SYSTEM # B21;	K/A 290002	A2.05: 3.7/4.2
	Thermal Limits		K5.01: 3.5/3.9
LP# General Phy	sics HTFF		
Chapter 9 Therma	al Limits		
OBJ. 9; 10	SRO TIER 2	GROUP 3 / R	O TIER 2 GROUP 3
REFERENCE:	Tech Spec Bases	<u>NEW</u>	
	3.2.1; 3.2.2; 3.2.3; 3.2.4	MODIFIED	BANK
DIFF 2; CA	10CFR50.46(b)(1)		
		RO SRO <u>BOT</u>	<u>CFR 41.3/41.14/43.2</u>
REFERENCE MA	TERIAL REQUIRED:	None	

QUESTION 76

The plant is performing the Reactor Vessel In-Service Leak Test (03-1-01-6) following refueling operations. A miscommunication results in a significant reactor pressure rise. Pressure as read on the Control Room Wide Range Pressure indication on P680 is pegged upscale.

The Post Accident Pressure recorders indicate pressure has reached 1350 psig.

Which one of the following is a correct statement with regard to the GGNS Safety Limit for Reactor Pressure?

- A. Reactor Pressure is above the Safety Limit of 1250 psig, because Tech Specs specifically references the P680 Reactor Wide Range Instrument.
- B. Reactor Pressure is above the Safety Limit of 1325 psig, because the Post Accident indication is sensed from the Reactor Water Level instruments reference leg tubing.
- C. Reactor Pressure is below the Safety Limit of 1375 psig, because the Post Accident indication is sensed from the Reactor Bottom Head instrument tap.
- D. Reactor Pressure is below the Safety Limit of 1550 psig.

QUESTION		76 RO	Ν	NRO	C REC	ORD	# WR	RI 30		
ANSWER:	В.	SYSTEM #	H	K/A	29502	5	EK1.()5: 4	.4	
		Tech Specs					EK1.()2: 4	.1	
LP# GG-1-L	P-OF	P-TS001			Gener	ric	2.2.22	: 3.4	ļ	
OBJ 24; 28	8						2.2	2.25:	2.5	
LP# GG-1-L	P-OF	P-B2102								
OBJ 3		SRO TIER	GROUP	/	RO TI	ER	1 GR	OUP	1	
REFERENCI	E:]	Fech Specs 2.1.2	Ν	VEV	V					
		Bases B2.1.2	Ν	MO	DIFIEI)		BA	NK	
DIFF 1; M								NR	C 12/20	00
			<u> </u>	<u>20</u>	SRO	BO	ГН	CF	R 41.3/4	3.2
REFERENCE	E MA'	TERIAL REQUIRED:	None							

QUESTION 77

Concerning the operation of the Reactor Feed Pump (RFP) Turbines governor control in MANUAL and SPEED AUTO, which of the following correctly identifies the limitations imposed in MANUAL <u>and</u> SPEED AUTO if the raise pushbutton is depressed and held from 0 to 100%?

- A. In MANUAL, the governor will stroke 0-100% in 15 seconds.
 In SPEED AUTO, the speed setpoint will change at a rate of 10 rpm/sec for one second and 120 rpm/ second thereafter.
- B. In MANUAL, the governor will stroke 0-100% in 10 seconds.
 In SPEED AUTO, the speed setpoint will change at a rate of 15 rpm/sec for one second and 120 rpm/ second thereafter.
- C. In MANUAL, the governor will stroke 0-100% in 15 seconds.
 In SPEED AUTO, the speed setpoint will change at a rate of 10 rpm/sec for one second and 150 rpm/ second thereafter.
- D. In MANUAL, the governor will stroke 0-100% in 10 seconds.
 In SPEED AUTO, the speed setpoint will change at a rate of 15 rpm/sec for one second and 150 rpm/ second thereafter.

QUESTION	77 RO	NRC RECORD # V	WRI 548
ANSWER: A.	SYSTEM # N21	K/A 259001 K	5.03: 2.8
LP# GG-1-LP	-OP-N2100		
OBJ. 19; 29	SRO TIER G	GROUP / ROTIER 2 G	ROUP 1
REFERENCE:	04-1-01-N21-1 sect 3.14	NEW	
		MODIFIED	<u>BANK</u>
DIFF 1; M			NRC 6/2001
		<u>RO</u> SRO BOTH	CFR 41.5/41.10/43.5
REFERENCE I	MATERIAL REQUIRED:	NONE	

QUESTION 78

The plant is operating at 80 % power.

Feedwater Level Control is selected for "Three Element Control".

Feedwater Flow 'A' indicates 6.8 mlbm/hr Feedwater Flow 'B' indicates 6.5 mlbm/hr

The sensing line for the 'A' Feedwater Flow Transmitter has broken loose.

Which one of the following describes the reaction of the Feedwater Level Control System?

- A. A "hard" failure would be registered de-selecting "3-element" control.
- B. A "soft" failure would be registered de-selecting "3-element" control.
- C. A "hard" failure would be registered causing the Feedwater Level Control System to automatically input an Estimated Flow maintaining "3-element" control
- D. A "soft" failure would be registered de-selecting "3-element" control and disabling the use of "3-element" control.

QUESTION	78 RO	NRC RECORI) # WRI 273
ANSWER: A.	SYSTEM # C34	K/A 259002	K4.10: 3.4/3.4
LP# GG-1-LP-C	DP-C3401		K6.04: 3.1/3.1
OBJ. 6c	SRO TIER	GROUP / RO T	IER 2 GROUP 1
REFERENCE:	04-1-02-H13-P680-2A-0	C9 NEW	
		MODIFIED	BANK
DIFF 1; M			NRC 4/2000
		<u>ro</u> sro bo	OTH CFR 41.5
REFERENCE M	ATERIAL REQUIRED:	None	

QUESTION 79

Which one of the following would result in an automatic alignment of Standby Service Water 'A' to Division I Diesel Generator?

- A. RCIC has been manually started using the controls on H22-P150.
- B. RHR 'A' Pump has been manually started using the pump controls on H13-P601.
- C. SSW 'A' Pump has been manually started using the pump controls on H13-P870.
- D. LPCS/LPCI 'A' has been manually initiated using the pushbuttons on H13-P601.

QUESTION ANSWER: D.	79 RO SYST	TEM # P75; P41	WRI (K/A 2	577 264000	K1.04	: 3.2
LP# GLP-OPS- OBJ. 6.8: 9.5: 10	-P4100).1	SRO TIER	GROU	J P / 1	RO TIER	2 GROUP 1
REFERENCE: DIFF 1; M	E-122	25-001; 008	<u>NEW</u> Modi	FIED	BANK	
REFERENCE MA	TERIAL R	EQUIRED:	<u>RO</u> None	SRO	BOTH	CFR 41.4/41.7

QUESTION 80

RCIC was operating for a surveillance when RCIC tripped on overspeed.

The overspeed trip has NOT been reset.

Which one of the following describes the indications if the operator placed the Trip/Throttle valve handswitch to close and then back to open?

See attached drawing of handswitch and indications.

- A. The TRIP/THROTTLE SUPV will indicate full open The TRIP/THROTTLE VLV will indicate full closed
- B. The TRIP/THROTTLE SUPV will indicate full closed The TRIP/THROTTLE VLV will indicate full open
- C. The TRIP/THROTTLE SUPV will indicate full open The TRIP/THROTTLE VLV will indicate full open
- D. The TRIP/THROTTLE SUPV will indicate full closed The TRIP/THROTTLE VLV will indicate full closed

QUES	ΓΙΟΝ	80 RO		WRI 6	676				
ANSW	ER: D.	SYSTE	SYSTEM # E51		K/A 217000			A4.02: 3.9	
						A	4.03: 3	3.4	
						2.	1.31: 4	4.2	
LP#	GG-1-LP-	·OP-E5100	SRO TIER	GROU	J P /	RO T	IER 2	GROUP	1
OBJ.	9e								
REFEI	RENCE:	E-1185	-015; 035; 039	NEW					
DIFF	2; CA			MODI	FIED	BA	ANK		
				AUDI	T 6/20	01 Q 5	9		
				RO	SRO	BOT	TH (CFR 41.7	
REFEI	RENCE MA	ATERIAL RE	QUIRED:	Drawing	g of ha	ndswit	ch		

QUESTION 81

Which one of the following describes the function of the Safety Relief Valve Tailpipe Vacuum breakers?

- A. Equalize pressure conditions in the SRV tailpipes to prevent Suppression Pool water from drawing into the piping resulting in excessive hydraulic loads.
- B. Relieve steam from the SRV tailpipes following SRV actuation to the Drywell to prevent excessive back pressure on the SRV discs.
- C. Relieve differential pressures built up in the SRV tailpipes following actuation that would result in lift pressures for SRVs in excess of design.
- D. Equalize pressure established in the SRV tailpipes to assure positive actuation of the SRV tailpipe pressure switches to give accurate SRV position indication.

QUESTION	81 RO		WRI	678					
ANSWER: A.	SYSTE	CM # E22-2	K/A 2	239002	2	K5.01: 2.1.28	: 2. : 3.	.7 .2	
LP# GG-1-LP OBJ. 5b	-OP-E2202	SRO TIER	GROU	J P /	RO	TIER	2	GROUP	1
REFERENCE: DIFF 1; M	UFSAR sect	5.2.2.4.1	<u>NEW</u> MODI	IFIED		BANK	- -		
REFERENCE MA	ATERIAL RE	QUIRED:	<u>RO</u> None	SRO	В	ОТН	С	FR 41.7	

QUESTION 82

The plant is operating at rated conditions.

The following indications are illuminated on the H13-P680 panel.

Pushbutton HCU FAULT Pushbutton ACKN HCU FAULT

Annunciator "HCU TROUBLE"

The operator identifies Control Rod 28-05 has a flashing RED led when HCU FAULT pushbutton is depressed.

ASSUME ALL OTHER ANNUNCIATORS AND STATUS LIGHTS ARE NORMAL.

Which one of the following is the probable cause for these indications?

- A. HCU Accumulator pressure at 1620 psig
- B. Loss of power to RPS bus A
- C. A single control rod scram
- D. Detectable water in an HCU Instrument Block

QUESTION	82	NRC RECORD # W	RI 341
ANSWER: I	D. SYSTEM # C11-	1B K/A 201003 A2.0	8: 3.8
LP# GG-1-LH	P-OP-C111A		
OBJ. 8d	SRO TIER	GROUP / RO TIER 2	GROUP 2
LP# GG-1-LH	P-OP-C1102		
OBJ. 12; 26			
REFERENCE	: 04-1-02-1H13-P680	NEW	
	4A2-D4, E4; 7A-A2	MODIFIED	<u>BANK</u>
DIFF 2; CA	04-1-01-C11-2		NRC 12/2000
	Sect 4.7.2.e,f; 4.8.2.a,d	<u>RO</u> SRO BOTH	CFR 41.6/41.10
	05-1-02-III-2 sect 5.2.3		
REFERENCE	MATERIAL REQUIRED:	None	43.5

QUESTION 83

A plant startup is in progress.

The reactor is at the point of adding heat with reactor temperature at 165°F.

Reactor water level is at +35 inches.

Which one of the following describes the response of the plant to an isolation of Reactor Water Cleanup? ASSUME NO OPERATOR ACTION.

- A. Reactor water level will rise to the point that a RPS scram signal is received and a Feedwater isolation occurs.
- B. Reactor water level will rise to the point that water level has reached the main steam lines.
- C. Reactor water level will rise until steam flow offsets the expansion of water in the reactor at which point level will stabilize.
- D. Reactor water level will remain stable with steam flow offsetting the expansion of water in the reactor.

QUESTION	83 RO	WRI 679			
ANSWER: B.	SYSTEM # G33;	K/A 2040	00	K3.02: 3	3.1
	C11-1A; C71				
LP# GLP-OP-O	C7100				
OBJ. 9; 10					
LP# GLP-OPS-	-G3336 SRO TIER	GROUP	/ RO	TIER 2	GROUP 2
OBJ. 1; 2; 19; 21	l				
REFERENCE:	03-1-01-1	<u>NEW</u>			
DIFF 2; CA	Sect 2.2.5; 3.3.3a	MODIFIEI	D	BANK	
		<u>RO</u> SR	O BO	OTH (CFR 41.4
REFERENCE MA	TERIAL REQUIRED:	None			

QUESTION 84

The Main Steam Isolation Valves just isolated with the plant operating at rated conditions.

Plant systems were operating in a normal configuration at the time of the isolation.

Which one of the following describes the response of the Condensate and Feedwater Systems? ASSUME NO OPERATOR ACTION.

- A. Condensate and Condensate Booster Pumps will continue to operate on minimum flow. Feedwater will continue to operate for a period of time until steam from the MSRs is exhausted. Reactor pressure will require reduction to allow feeding with Condensate and Condensate Booster Pumps.
- B. Condensate and Condensate Booster Pumps will trip on low hotwell level causing a cascading effect tripping the Feedwater Pumps on low suction pressure. This results in a loss of all feed to the reactor until hotwell level is restored. Once the hotwell is restored reactor pressure will require reduction to allow feeding with Condensate and Condensate Booster Pumps.
- C. Condensate and Condensate Booster Pumps will continue to operate supplying flow. Feedwater will trip on low reactor water level, but can be restored using steam from the MSRs until exhausted. Reactor pressure will require reduction to allow feeding with Condensate and Condensate Booster Pumps.
- D. Condensate and Condensate Booster Pumps will trip on minimum flow. Feedwater will trip on low suction pressure, but Condensate and Condensate Booster Pumps can be restored at a lower pump combination and return Feedwater to service. Reactor pressure will require reduction following a loss of steam from the MSRs to allow feeding with Condensate and Condensate Booster Pumps.

QUESTION	84 RO		WRI 6	80			
ANSWER: A.	SYSTEM	M # N21; N19;	K/A 2.	39001	K3.03	3: 3.2	
	N11; B2	1			K1.22	2: 3.1	
LP# GG-1-I	LP-OP-MCD7b	SRO TIER	GROUP	/ R	O TIER 2	GROUP	2
OBJ. 2							
REFERENCE:	UFSAR Figur	e 15.2-6	<u>NEW</u>				
DIFF 2; CA	Simulator per	formance	MODIF	FIED	BANK	X	
			<u>RO</u> S	SRO	BOTH	CFR 4	1.4/41.14
REFERENCE M	IATERIAL REQU	IRED:	None				

QUESTION 85

Which one of the following identifies the start signal and power supply for the TBCW DC Emergency Water Cooling Pump?

- A. Seal Oil Pump 'C' running will start the DC TBCW pump powered from 11DA.
- B. Seal Oil Pump 'C' running will start the DC TBCW pump powered from 11DF.
- C. Low H2 Side Seal Oil Pressure will start the DC TBCW pump powered from 11DA.
- D. Low H2 Side Seal Oil Pressure will start the DC TBCW pump powered from 11DF.

QUESTION ANSWER: B. LP# GG-1-LI	85 RO SYSTE P-OP-P4300	EM # L11; P43 SRO TIER	WRI K/A 2 GROU	681 263000 UP /) ' RO	K2.01: TIER	: 3.1 2	l GROUP	2
OBJ. 6; 8a									
REFERENCE:	04-1-01-P43	-1 Att III	<u>NEW</u>						
DIFF 1; M	E-1227-018		MOD	IFIED		BANK			
·	E-1147-003								
			RO	SRO	BO	ЭТН	CI	FR 41.4	
REFERENCE M	ATERIAL RE	QUIRED:	None						

QUESTION 86

Preparations are being made for a plant startup.

Which one of the following describes the process for startup of Offgas to prevent excessive levels of explosive gas buildup?

- A. Preheat the Offgas system using Oxygen from the Hydrogen Water Chemistry System to scavenge any residual Hydrogen and recombining the two in the Hydrogen Recombiners prior to startup of the Steam Jet Air Ejectors.
- B. Establish a purge of the Offgas system with Oxygen from the Hydrogen Water Chemistry System to heat up the Hydrogen Recombiner prior to startup of the Steam Jet Air Ejectors, then maintain constant flow through Offgas.
- C. Preheat the Offgas system using air from the Instrument Air System to scavenge any residual Hydrogen and recombining the two in the Hydrogen Recombiners prior to startup of the Steam Jet Air Ejectors.
- D. Establish a purge of the Offgas system with air from the Instrument Air System to heat up the Hydrogen Recombiner prior to startup of the Steam Jet Air Ejectors, then maintain minimum flow through Offgas.

QUESTI	ON	86 RO		WRI (682		
ANSWE	R: D.	SYSTE	M # N64	K/A 2	271000	A4.09	: 3.3
						2.1.32	: 3.4
LP# (GLP-OPS	-N64565					
OBJ. 1	14.2; 15; 2	1.2					
LP# (GG-1-LP-	OP-N6200	SRO TIER	GROU	J P /	RO TIER	2 GROUP 2
OBJ. 1	15						
REFERE	ENCE:	04-1-01-N64-	1	<u>NEW</u>			
DIFF 1;	Μ	sect 3.7; 3.9;	4.1.2c NOTE	MODI	FIED	BANK	
,		04-1-01-N62-	1				
		sect 3.8; 3.10:	4.3.2i	RO	SRO	BOTH	CFR 41.7/41.13
		Caution; 4.4.	1a; 4.4.2c				
		03-1-01-1 sec	t 3.3.8g				
		04-1-01-P73-1	l				
		sect 3.9; 3.10					
REFERE	ENCE MA	TERIAL REO)UIRED:	None			

QUESTION 87

Which one of the following identifies the maximum allowed Spent Fuel Pool Temperature per the Technical Requirements Manual?

- A. 70°F
- B. 125°F
- C. 140°F
- D. 200°F

QUESTION 87 RO WRI 683 ANSWER: C. K/A 233000 A2.07: 3.0 SYSTEM # G41 GROUP / RO TIER 2 GROUP 3 LP# GG-1-LP-OP-G4146 SRO TIER OBJ. 14a; 19 **REFERENCE:** 04-1-01-G41-1 sect 3.5 <u>NEW</u> MODIFIED DIFF 1; M TRM 6.7.4 BANK *RO* SRO BOTH CFR 41.7 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 88

The plant is at 135?F.

All ECCS systems are in standby.

The Reactor Mode Switch is in SHUTDOWN.

Refuel Floor Surveillances are being performed on the Refuel Bridge.

The Reactor Head is installed with the first head closure bolt de-tensioned.

Secondary Containment is in effect.

With the above conditions, which one of the following is the Plant Operational Mode?

- A. Mode 2 Startup
- B. Mode 3 Hot Shutdown
- C. Mode 4 Cold Shutdown
- D. Mode 5 Refueling

QUESTION	88 RO	NRC RECORD # WF	RI 585
ANSWER: D.	SYSTEM # ADM	IN K/A Generic 2.1.2	22: 2.8
	Conduct of Ops.		
LP# GG-1-LP-	OP-TS001		
OBJ. 5	SRO TIER GR	OUP / ROTIER 3 GROU	U P
REFERENCE:	Tech Specs sect. 1.1	NEW	
	table 1.1-1	MODIFIED	BANK
DIFF 1; M			NRC 6/2001
,		<i>RO</i> SRO BOTH	CFR 41.10/43.1
REFERENCE M	ATERIAL REQUIRED:	None	

QUESTION 89

Which one of the following evolutions would be the manipulation of Controls as defined in Licensed Operator duties?

- A. Shifting Control Rod Drive Flow Control Valves in Containment.
- B. Lowering Control Rod Drive Pressure by opening C11-F003 on H13-P601.
- C. Inserting local manual scrams of individual control rods in Containment at the SRI switches.
- D. Controlling Reactor water level during a plant operation at 30% power using Feedwater.

QUESTION	89 RO		WRI (684		
ANSWER: C.	SYSTE of Oper	M # Conduct rations	K/A (Generio	es 2.1.1	: 3.7
LP# GG-1-LP	-OP-PROC	SRO TIER	GROU	J P / 1	RO TIER	3 GROUP
OBJ. 11.b.1						
REFERENCE:	01-S-06-2 see	et 5.1	<u>NEW</u>			
DIFF 2; CA	10 CFR 50.2	definitions	MODI	FIED	BANK	X
REFERENCE M	ATERIAL RE	QUIRED:	<u>RO</u> None	SRO	BOTH	CFR 41.10/43.5

QUESTION 90

You are the Operator-at-the-Controls.

Which one of the following Operations personnel is allowed to relieve you of Operator-atthe-Controls duties with a simple verbal exchange of current plant status?

ASSUME ONLY LEGAL AND PROCEDURAL REQUIREMENTS; DISREGARD UNION CONTRACTS.

- A. A Tagging Group Reactor Operator
- B. Operations Office Shift Manager qualified active Senior Reactor Operator
- C. Training shift Nuclear Operator 'A' visiting the Control Room during Training
- D. Nuclear Operator 'A' assigned as the Auxiliary Building Roving Operator

QUESTION	90 RO		WRI	685		
ANSWER: D.	SYSTE of Ope	M # Conduct rations	K/A	Generi	cs 2.1.3	: 3.0
LP# GG-1-LF	P-OP-PROC	SRO TIER	GROU	J P /	RO TIER	3 GROUP
OBJ. 45d						
REFERENCE:	02-S-01-4 se	ct 2.7; 6.1.6	<u>NEW</u>			
DIFF 2; CA			MOD	IFIED	BANK	<u> </u>
			RO	SRO	BOTH	CFR 41.10/43.5
REFERENCE M	ATERIAL RE	QUIRED:	None			

QUESTION 91

The basis for having Hydrogen Water Chemistry is to remove Oxygen from the reactor to reduce the possibility of Intergranular Stress Corrosion Cracking.

Which one of the following is the reason for injecting Oxygen into the Condensate System?

- A. Oxygen is used in the reactor to scavenge any excess Hydrogen remaining in the Reactor environment to prevent explosive concentrations from remaining.
- B. Oxygen raises concentrations in the Condensate System piping to prevent the flaking off of oxide layers inside the Condensate System components.
- C. Oxygen concentrations inside the Reactor are insufficient to support recombination requiring additional Oxygen to allow complete removal.
- D. Oxygen raises concentrations in the Reactor to prevent the removal of oxide layers from components in the Reactor during the recombination with Hydrogen.

QUESTION ANSWER: B.	91 RO SYSTI	E M # P73	WRI 68 K/A G	86 eneric	s 2.1.2	8: 3.2
LP# GG-1-L	P-OP-P7300	SRO TIER	GROU	P / 1	RO TIER	3 GROUP
OBJ. 1 REFERENCE: DIFF 1; M	ER 96/0936 sect 1.2.1	Supp 0	<u>new</u> Modif	FIED	BANK	X
REFERENCE M	IATERIAL RE	QUIRED:	<u>RO</u> None	SRO	BOTH	CFR 41.4

QUESTION 92

The Access Control Area Fan Coil Unit Heater, Z17-B003, has malfunctioned resulting in extremely high temperatures in the HP Lab and the heater control panel.

An MAI has been generated to investigate the problem.

Which one of the following describes the most appropriate configuration control method for this equipment?

- A. Secure the fan coil unit. Log the handswitch position in the Control Room Operator's Logbook and add the MAI number for reference.
- B. Open the heater circuit breaker. Hang an information tag on the circuit breaker stating the problem and reference the MAI number.
- C. Secure the fan coil unit. Document the handswitch position on a Component Position Control Form and reference the MAI number.
- D. Open the heater circuit breaker. Hang a red tag on the circuit breaker and reference the MAI number on the clearance.

QUESTION	92 R(C		NRO	CRECOR	D # WRI	387
ANSWER:	D.	SYSTEM #		K/A	Generic	2.2.11:	2.5
		Procedures					
LP# GG-1-L	P-OP-PR	DC					
OBJ. 10b	o1,2;	SRO TIER	GROUP	/ F	RO TIER	3 GROU	JP
REFERENCE	: 02-S-0	1-2		NEV	V		
	Sect 6	.12.6b		MO	DIFIED		BANK
DIFF 2; CA	01-S-0	6-1 sect 5.4 &	z 5.9				NRC 12/2000
	04-S-0	1-Z17-1 Att I	II	<u>R0</u>	SRO BO	DTH	CFR 41.10/43.5
REFERENCE	MATERIA	AL REQUIREI	D: Noi	ne			

QUESTION 93

The Component Cooling Water Supply to the Non-Regenerative Heat Exchangers P42-F103 is to be used as a boundary valve for a tagout for Mechanical Maintenance.

Which one of the following describes the items to be tagged to utilize this valve as a boundary valve?

P&IDs M-1063B and M-1067H, and Electrical E-1226-05 are provided as reference.

- A. Handswitch tagged in closed position.
 Air supply P53-FY087 tagged in closed position.
 Air supply to actuator vented and tagged.
- B. Handswitch tagged in closed position.
 P42-F103 jacked closed with an installed jacking device.
 Air supply to actuator vented and tagged.
- C. Air supply P53-FY087 tagged in closed position. P42-F103 jacked closed with an installed jacking device. Air supply to actuator vented and tagged.
- D. Handswitch tagged in closed position. Air supply P53-FY087 tagged in closed position. P42-F103 jacked closed with an installed jacking device.

QUESTION	93 RO	NRC RECORD # WR	I 580
ANSWER: A.	SYSTEM # Protective	K/A Generics 2.2.1	3: 3.6
	Tagging		
LP# GG-1-LP-O	P-PROC		
OBJ. 10j, k, l	SRO TIER	GROUP / RO TIER	R 3 GROUP
REFERENCE:	01-S-06-1 sect 6.2.1h – i	NEW	
	M-1067H	MODIFIED	BANK
DIFF 2; CA	M-1063B		NRC 6/2001
	E-1226-05	<u>RO</u> SRO BOTH	CFR 41.10/43.5
REFERENCE M	ATERIAL REQUIRED:	M-1063B, M-1067H, &	
	-	E-1226-05	

QUESTION 94

Mechanical Maintenance is preparing to repack a valve in the Radwaste Equipment Drain Filter Demin Room. The job is estimated to take 30 - 45 minutes to complete.

Which one of the following is an acceptable method of reducing the radiation levels the Mechanics will be exposed to?

- A. Install fans and HEPA filters to ventilate the room.
- B. Plant Services builds a room of lead blankets around the valve.
- C. Flush the Equipment Drain Filter and refill with demineralized water.
- D. Cut the valve from the system and remove the valve to outside the room.

QUESTION	94 RO		WRI	687		
ANSWER: C.	SYST CON	EM # RAD	K/A	Generio	es 2.3.1	0: 2.9
LP# ELP-GET	F-RWT01	SRO TIER	GROU	J P /	RO TIER	3 GROUP
OBJ. RWT41						
REFERENCE:	10CFR 20.	1101(b)	<u>NEW</u>			
DIFF 2; CA	01-S-08-2 s	ect 6.1.1	MOD	FIED	BANK	X
	08-S-01-28	sect 5.9.2; 6.1				
			RO	SRO	BOTH	CFR 41.12/43.4
REFERENCE MA	ATERIAL R	EQUIRED:	NONE			

QUESTION 95

Residual Heat Removal 'A' is being lined up to operate in Suppression Pool Cooling.

The Plant Supervisor has requested you contact Health Physics.

Which one of the following describes the purpose of this phone notification?

- A. Allows Health Physics personnel to evacuate any personnel from the Containment.
- B. Allows Health Physics personnel to perform surveys of the RHR rooms and Containment for elevated radiation levels.
- C. Informs Health Physics of elevated heat and noise levels in the vicinity of the RHR Rooms such that personnel entering the areas may be informed.
- D. Informs Health Physics that the transient High Radiation areas for the RHR loop are now in effect.

QUESTION	95 RO		NRC RECORD	# WRI 2	287
ANSWER: B.	SYSTEM # Ra	d Con –	K/A Generic	2.3.2: 2	2.5
	ALARA			2.1.32:	3.4
LP# GLP-OPS-	E1200				
OBJ. 14	SRO TIER	GROUP	/ ROTIER 3	GROUP	
REFERENCE:	04-1-01-E12-1 sect 3.	1	NEW		
			MODIFIED		BANK
DIFF 1, M					NRC 6/2001
			RO SRO BOT	Н	CFR 41.10/41.12/43.4
REFERENCE M	IATERIAL REQUIRED	Non	ie		

QUESTION 96

An ATWS has occurred.

The MSIVs have closed.

RPV level is unable to be determined.

The following parameters exist:

Reactor Pressure	70 psig and lowering.
Suppression Pool Level	16.5 feet
Suppression Pool Temperature	150 °F
Drywell Pressure	+ 1.0 psig
8 Safety Relief Valves are OPEN.	
LPCI A is injecting through Shutdowr	Cooling at 5000 GPM.
HPCS, LPCS, and RHR B & C are un	navailable for injection.

Which one of the following identifies the actions to be taken?

- A. Continue injection as long as water is available from any source to restore pressure above Minimum Alternative RPV Flooding Pressure.
- B. Exit the Emergency Procedures and enter Severe Accident Procedure 4.
- C. Exit the Emergency Procedures and enter Severe Accident Procedure 5.

D. Exit the Emergency Procedures and enter Severe Accident Procedure 6.

QUESTION	RO 96	NRC RECORD # WR	[298
ANSWER:. B.	SYSTEM # Conduct	K/A Generics 2.4.4:	4.0
	of Ops – EOP and		
	SAP		
LP# GLP-EP-EF	PT19		
OBJ. 7	SRO TIER GROUP	/ RO TIER 3 GROUP	OUP
REFERENCE:	05-S-01-EP2A	NEW	
	Steps 94 & 96	MODIFIED	<u>BANK</u>
DIFF 2, CA	SAP – 4 step 4 MDRIR		NRC 4/2000
		<u>Ro</u> sro both	CFR 41.10/43.5
REFERENCE M	ATERIAL REQUIRED: 0	05-1-01-EP-2A and SAPs	

QUESTION 97

An emergency condition has resulted in an Alert being declared.

The Emergency Response Organization is in route for manning.

How many and what are the responsibilities of Non-Licensed Operators dispatched to the Control Room during the initial phase of the emergency?

- A. One Non-Licensed Operator is to perform the duties of safe shutdown operator, communications will be handled by the TSC when manned. All other operators report to the OSC.
- B. Two Non-Licensed Operators are to perform the duties of communicators. All other operators report to the OSC.
- C. Two Non-Licensed Operators are to perform the duties of communicators and one operator as the safe shutdown operator. All other operators report to the OSC.
- D. Two Non-Licensed Operators are to perform the duties of communicators and two operators to perform equipment operations required outside the Control Room. All other operators report to the OSC.

QUESTION ANSWER: D. LP# GG-1-LP-	97 RO SYSTEM # E-Plan OP-PROC	NRC RECORD # WRI K/A Generics 2.4.35	577 : 3.3
OBJ. 11d	SRO TIEF	R GROUP / RO TIER 3	GROUP
REFERENCE:	01-S-10-6 Att II & III	NEW	
	01-S-06-2 sect 6.2.1d	MODIFIED	BANK
DIFF 1; M			NRC 6/2001
,		RO SRO BOTH	CFR 41.10/43.5
REFERENCE M	MATERIAL REQUIRED:	None	

QUESTION 98

The plant is operating at 100% power.

A short circuit results in N71-F041A, CLG TWR BYP VLV inadvertently opening.

Main Generator load immediately began to drop and is continuing to drop.

Which one of the following describes the Immediate Operator Actions to be taken for plant conditions?

- A. Reduce reactor power as necessary to remain above turbine trip setpoint, maintaining within power to flow limitations.
- B. Reduce recirculation flow immediately until thermal power decreases by 20% or 60% core flow is reached, and determine core stability actions.
- C. Reduce reactor power as necessary to maintain offgas system below isolation setpoint and condenser vacuum above turbine trip setpoint remaining within power to flow limitations.
- D. Reduce core flow to 60% (67Mlbm/hr) but not less than 55% (62Mlbm/hr) core flow, followed by control rod insertion, to reduce reactor power to less than 60% of rated thermal power.

QUESTION	98 RO		WRI	688		
ANSWER: A.	SYST	EM # ONEPs	K/A	Generic	es 2.4.4	9: 4.0
LP# GLP-OP	S-ONEP1	SRO TIER	GROU	J P /]	RO TIER	3 GROUP
OBJ. 1						
REFERENCE:	05-1-02-V-	8 sect 2.0 **	<u>NEW</u>			
DIFF 1; M	05-1-02-V-	5 sect 2.0	MODI	FIED	BANK	X
	05-1-02-V-1	11 sect 2.0				
	05-1-02-V-1	13 sect 2.0	RO	SRO	BOTH	CFR 41.10/43.5
	04-1-01-N7	1-1 Att II				
REFERENCE M	ATERIAL R	EQUIRED:	NONE			

QUESTION 99

An ALERT has been declared, and notifications to offsite agencies are being made on schedule.

A Followup Notification was made at 0917.

At 0930 another Followup Notification was approved for transmission after a new development in the situation. This notification was *begun* at 0932 and *completed* at 0936.

The Operational Hotline has become inoperable.

When does the next Followup Notification become due and how should the notification be made?

- A. Time 1017; using the Standard Telephone System
- B. Time 1030; using the Emergency Notification System (ENS)
- C. Time 1032; using the Standard Telephone System
- D. Time 1036; using the Emergency Notification System (ENS)

QUESTION	99 RO	WRI 689
ANSWER: C.	SYSTEM # EPPs	K/A Generics 2.4.43: 2.8
LP# GLP-EF	P-EPTS6 SRO TIE	R GROUP / RO TIER 3 GROUP
OBJ. 3		
REFERENCE:	10-S-01-6	NEW
DIFF 1; M	sect 6.1.1b(1); 6.3.1;	<u>MODIFIED</u> BANK
	6.6.3.a(1)	EPTS 6 Exm 1
	Form EPP 06-01	<u>RO</u> SRO BOTH CFR 41.10/43.5
REFERENCE M	IATERIAL REQUIRED:	None

QUESTION 100

A fire has been reported in the Division I Diesel Generator Room.

The Fire Brigade is in route to the fire.

Which one of the following describes responses of the Control Room Operator?

- A. Manually start all three fire pumps and the outside air fans for Division II and III Diesel Generator Rooms.
- B. Manually start the motor driven fire pump and the outside air fans for Division II and III Diesel Generator Rooms.
- C. Manually start all three fire pumps and the outside air fans for all three Diesel Generator Rooms.
- D. Manually start the motor driven fire pump and the outside air fans for all three Diesel Generator Rooms.

QUESTION	100 RO	NRC RECORD # WRI	578
ANSWER: B.	SYSTEM # Fire	K/A Generics 2.4.25	: 2.9
	Protection		
LP# GG-1-LP-	OP-PROC		
OBJ. 61c(1)	SRO TIER	GROUP / RO TIER 3	GROUP
REFERENCE:	10-S-03-2	NEW	
	Sect 6.2.2c NOTE & 6.2.2d	MODIFIED	BANK
DIFF 1; M			NRC 6/2001
		<u>RO</u> SRO BOTH	CFR 41.10/43.5
REFERENCE M	IATERIAL REQUIRED:	None	

QUESTION 1

The plant is operating at 20 % power following RF11.

A ground fault on the Entergy Grid resulted in the Main Generator output circuit breakers J5228 and J5232 automatically opening on a Generator Lockout.

Which one of the following describes the reaction of the plant to this trip? ASSUME NO OPERATOR ACTIONS.

- A. Main Steam Bypass Valves will automatically open maintaining reactor pressure. The reactor will scram following the closure of the Main Turbine Stop and Control Valves.
- B. Main Steam Bypass Valves will automatically open maintaining reactor pressure. The reactor will remain at power with the Main Turbine remaining in operation.
- C. Main Steam Bypass Valves will automatically open maintaining reactor pressure. The reactor will remain at power with the Main Turbine Stop and Control Valves closing.
- D. The reactor will scram due to the Main Turbine Control Valve fast closure that will result in a subsequent normal closure of the Main Turbine Control Valves to maintain reactor pressure.

QUESTION	1	NRC RECORD	# WRI 553
ANSWER: C	SYSTEM # N41;	K/A 295005	AA2.05: 3.8/3.9
	N32-2; C71		AA2.04: 3.7/3.8
LP# GLP-OPS-	·C7100		AA2.03: 3.1/3.1
OBJ. 9, 10			
LP# GG-1-LP-	OP-N3202		
OBJ. 2			
LP# GG-1-LP-	OP-N4151		
OBJ. 11	SRO TIER 1 GR	OUP 2 / RO TIER 1	I GROUP 1
REFERENCE:	Tech. Spec 3.3.1.1	NEW	
	05-1-02-I-2 sect 5.1 – 5.4	MODIFIED	BANK
DIFF 2; CA			NRC 6/2001
		RO SRO <u>BOTH</u>	<u>H</u> CFR 41.5/41.6
REFERENCE M	IATERIAL REQUIRED:	NONE	_

QUESTION 2

A reactor scram has occurred.

Which one of the following is a correct method of verifying the position of the control rods? (The scram has NOT been reset.)

- A. Using the full core display on H13-P680, depress ALL RODS with RCIS in Raw Data and observe a blank display with only green LEDs for all control rods.
- B. Using the full core display on H13-P680, depress ALL RODS with RCIS in Raw Data and observe all control rods indicate 00 with a green LED for all control rods.
- C. Using the full core display on H13-P680, depress ALL RODS with RCIS out of Raw Data and observe a blank display with only red LEDs for all control rods.
- D. Using the full core display on H13-P680, depress ALL RODS with RCIS out of Raw Data and observe all control rods indicate 00 with a red LED for all control rods.

QUESTION 2		NRC RECOR	D# WRI 10
ANSWER: A.	SYSTEM # C11-2;	K/A 295006	AA2.02: 4.3/4.4
	C11-1B	201005	A3.02: 3.5/3.5
LP# GG-1-LP-0	OP-C111B		A4.02: 3.7/3.7
OBJ. 3c, 3f		201003	K4.05: 3.2/3.3
			A3.01: 3.7/3.6
LP# GG-1-LP-0	DP-C1102		A4.02: 3.5/3.5
OBJ. 12	SRO TIER 1 GROU	P 1 / RO TIER	R 1 GROUP 1
REFERENCE:	04-1-01-C11-2	NEW	
	sect. 4.7.2p & 4.8.2i	MODIFIED	BANK
DIFF: 2; CA	05-1-02-I-1		NRC 6/2001
	sect. 2.1; 3.7; & 3.7.4	RO SRO <u>BO</u>	<u>OTH</u> CFR 41.6/41.10/43.5
REFERENCE M	ATERIAL REQUIRED: Non	e	

QUESTION 3

Plant conditions are as follows:

MODE:	Mode 1
Rx power:	28 %
T-G Load:	365 MWE
Load Demand	390 MWE
Bypass position:	0 %

All other parameters are per plant design.

The operator withdraws a control rod that raises Reactor power to 29 %.

How will the Turbine EHC Control System respond?

- A. Bypass Control Valves will throttle open as required to maintain Rx pressure.
- B. HP Turbine Control Valves will throttle open as required to maintain Rx pressure.
- C. LP Turbine Control Valves will throttle open as required to maintain Rx pressure.
- D. HP Turbine Control and Bypass Control Valves will throttle open as required to maintain Rx pressure.

QUESTION 3		NRC RECORD # WRI 69		
ANSWER: B.	SYSTEM # N32-2	K/A 295007	AK2.01: 3.5/3.7	
		241000	A2.02: 3.7/3.7	
LP# GG-1-LP-C	DP-N3202		K4.01: 3.8/3.8	
OBJ 4b, 6b, 7l	SRO TIER 1 G	ROUP 1/ RO TIER 1	GROUP 1	
REFERENCE:	03-1-01-2 sect. 5.2	NEW		
		MODIFIED	BANK	
DIFF: 2; CA			NRC 6/2001	
		RO SRO <u>BO</u>	<u>TH</u> CFR 41.5	
REFERENCE M	ATERIAL REQUIRED:	None		

QUESTION 4

The plant was operating at 20 % power when a Feedwater rupture in the Turbine Building caused Reactor water level to drop.

The Control Room Operator manually initiated HPCS and RCIC.

Level in the Reactor dropped to ? 32 inches before HPCS and RCIC turned level, and level is now rising.

Which one of the following best describes the status of the Recirculation System?

- A. Recirc Pumps are in Slow Speed with the Flow Control Valves Locked up (motion inhibit).
- B. Recirc Pumps are tripped with the Flow Control Valves Locked up (motion inhibit).
- C. Recirc Pumps are in Slow Speed with the Flow Control Valves in their pretransient positions.
- D. Recirc Pumps are tripped with the Flow Control Valves in their pre-transient positions.

QUESTION	4		NRC RECORI	D# WRI 121
ANSWER:	C.	SYSTEM # B33	K/A 295009	AK1.02: 3.0/3.1
				AK2.03: 3.1/3.2
LP# GLP-O	PS-B	3300		AA1.03: 3.0/3.1
OBJ. 23, 2	4, 25,	47 SRO TIER 1 GH	ROUP 1 / RO TI	ER 1 GROUP 1
REFERENCI	Е:	ARI 04-1-02-H13-P680	NEW	
		3A-D4; 3A-D10	MODIFIED	BANK
DIFF 1; M				NRC 3/1998
			RO SRO <u>BO</u>	<u>OTH</u> CFR 41.5
REFERENC	E MA	TERIAL REQUIRED:	None	

QUESTION 5

Given the following plant conditions:

Reactor Power	100%		
Reactor Level	+36 inches		
Reactor Pressure	1025 psig		
Containment Temperature	85 °F steady		
Containment Pressure	0.03 psig steady		
Suppression Pool Temperature	81 °F steady		
Drywell Pressure	1.1 psig rising slowly		
Drywell Temperature	110 °F steady		
Drywell Area Sumps show no unusua	al changes in level, flow, or temperature.		
Drywell Atmosphere radiation monitor show no changes.			

The Roving NOA has noted that Drywell Pressure is rising slowly.

Drywell atmosphere radiation levels are steady.

Which one of the following describes a possible cause of the conditions as noted above?

A. Small leak on the Main Steam Line Flow Elbows Instrument Line.

B. Small leak on the RWCU suction from the Reactor Bottom Head.

- C. Small leak on the Instrument Air header inside the Drywell.
- D. Small leak on Recirc Pump Seals.

QUESTION	5	NRC RECORD	# WRI 286
ANSWER:. C.	SYSTEM # M41; P53	K/A 295010	AK3.04: 3.5/3.8
			AK3.05: 3.5/3.4
LP# GLP-OPS-P	•5300		2.4.21: 3.7/4.3
OBJ. 26.1	SRO TIER 1 GROU	P 1 / RO TIE	R 1 GROUP 1
REFERENCE:	GGNS 1998 event	NEW	
	CR 1998-0952	MODIFIED	BANK
DIFF 3, CA			NRC 4/2000
		RO SRO <u>BO</u>	<u>CFR 41.5</u>
REFERENCE M	ATERIAL REQUIRED:	None	

QUESTION 6

The plant is performing a reactor startup from cold shutdown.

The reactor was at the point of adding heat.

The Control Room Supervisor instructed the operators to stop the startup for a short duration to perform a surveillance.

During this time, the reactor went subcritical and power dropped to range 3 of the IRMs.

The At-The-Controls Operator, noting that reactor power had dropped selected the next control rod and withdrew the control rod from 20 to 48 with continuous motion as allowed by the Control Rod Movement Sequence Sheet.

This resulted in a sustained 20 second period.

The following are the plant pa	arameters at present:
Reactor Pressure	80 psig
Reactor Level	+40 inches

Which one of the following describes the next action the At-The-Controls operator should take?

- A. Immediately range all IRMs to range 10 and monitor overlap data between IRMs and APRMs.
- B. Perform the coupling checks for the Control Rod, and inform the Reactor Engineer of the power rise.
- C. Withdraw the next in sequence Control Rod to maintain the power rise to reach the point of adding heat.
- D. Insert the Control Rod to a position which causes reactor period to be > 50 seconds.

QUESTION NRC RECORD # WRI 204 6 ANSWER: D. SYSTEM # C11-2; C51 K/A 295014 AK3.01: 4.1/4.1 LP# GG-1-LP-OP-IOI01 **OBJ.** 3c & d SRO TIER 1 GROUP 1 / RO TIER 1 GROUP 1 **REFERENCE:** 03-1-01-1 sect. 2.1.4; 2.1.16 NEW Susquehanna reactivity MODIFIED BANK DIFF 1; M **Event 7/98** NRC 6/2001 04-1-01-C51-1 sect 4.3.2 NOTE RO SRO BOTH CFR 41.1/41.2/ 41.6/43.6 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 7

Scram conditions exist. All control rods did NOT fully insert.

Reactor water level is being maintained at -60 inches wide range.

Reactor pressure is being maintained at 910 psig.

Reactor power is 20 %.

The following initial indications exist:

RPS white lights on H13-P680 are extinguished. Scram Air Header Pressure low annunciator is illuminated. RX SCRAM TRIP annunciator is illuminated.

The following actions have been taken:

Defeat the RPS scram signal and reset RPS Unisolate the Instrument Air header Defeat Alternate Rod Insertion A CRD pump is confirmed operating and the CRD FCV is open to achieve 250 psid Drive pressure.

Which one of the following contains the minimum actions required to drive the control rods to position 00 using Rod Control and Information System?

- A. Bypass Control Rod Drive withdrawal blocks, select control rods and insert.
- B. Bypass Control Rod Drive withdrawal blocks, select control rods in sequence and insert.
- C. Bypass Control Rod Drive insert and withdrawal blocks, select control rods and insert.
- D. Select control rods in sequence and insert.

QUESTION	7	NRC RECORD # WRI 203		
ANSWER: C.	SYSTEM # C11-2; C71; C1	11- K/A 295015 AK	3.01: 3.4/3.7	
	1A			
LP# GG-1-LP-	RO-EP02A			
OBJ. 5	SRO TIER 1 GRO	UP 1 / RO TIER 1 GR	OUP 1	
REFERENCE:	EP 05-S-01-EP-2A	NEW		
	Step 48 Att. 18, 19 & 20	MODIFIED	BANK	
DIFF 3; CA	-		NRC 6/2001	
		RO SRO <u>BOTH</u>	CFR 41.6/43.6	
REFERENCE M	IATERIAL REQUIRED:	05-S-01-EP-2 EP-2A		

QUESTION 8

A loss of coolant accident has occurred.

Determine which one of the following describes conditions that would direct / allow manual initiation of Containment Spray per the Emergency Procedures?

	Supp Pool Lvl	CTMT Temp	CTMT Press	Drywell Temp	Drywell Press
А.	18 FT	186°F	1 psig	200°F	3 psig
B.	17 FT	120°F	7 psig	215°F	15 psig
C.	18 FT	120°F	6.5 psig	200°F	15 psig
D.	25 FT	140°F	4 psig	215°F	7 psig

QUESTION	8	NRC RECORD # WRI 601		
ANSWER: B.	SYSTEM # M41-1; E12	K/A 295024	AK2.14: 3.9/3.9	
LP# GG-1-LP-	RO-EP03			
OBJ. 3	SRO TIER 1 GROU	P1/ROTIER1	GROUP 1	
REFERENCE:	EP 05-S-01-EP-3	<u>NEW</u>		
	CTMT Temp & Press Legs	MODIFIED	BANK	
DIFF 2; CA	Figures 3 & 4			
	-	RO SRO <u>BOTH</u>	CFR 41.9/41.10/43.5	
REFERENCE M	IATERIAL REQUIRED: 05-	-S-01-EP-3 & Figure	es 3 & 4	
QUESTION 9

The following conditions exist in the plant:

Reactor power0% all rods inserted.Reactor pressure230 psig and rising.Reactor level- 230 inches Fuel Zone and lowering6 Safety Relief Valves have been manually opened.RHR C is injecting into the reactor vessel.

Which one of the following identifies adequate core cooling?

- A. Adequate core cooling is NOT assured.
- B. Adequate core cooling is assured by Minimum Alternate RPV Flooding Pressure (MARFP) with SRVs and Reactor pressure.
- C. Adequate core cooling is assured by Minimum Zero RPV Water Level without RPV injection.
- D. Adequate core cooling is assured by Minimum Steam Cooling Water Level.

QUESTION	9	NRC RECORD	# WRI 309
ANSWER: A.	SYSTEM # Eps &	K/A 295031	EK1.01: 4.6/4.7
	Conduct of Ops.		2.1.1: 3.7/3.8
LP# GG-1-LP-	RO-EP02		2.4.21: 3.7/4.3
OBJ. 15, 16			
LP# GG-1-LP-	RO-EP01		
OBJ. 4a			
LP# GG-1-LP-	OP- PROC		
OBJ. 10b3	SRO TIER 1 GRO	UP 1 / RO TIER	1 GROUP 1
REFERENCE:	01-S-06-2 section 5.18	NEW	
	05-S-01-EP-2 steps 69 – 74	MODIFIED	BANK
DIFF 3, CA	PSTG App. B EPG Cont 3		NRC 12/2000
	Steam Cooling	RO SRO <u>BOT</u>	<u><i>H</i></u> CFR 41.2/41.3/41.10/
REFERENCE M	ATERIAL REQUIRED: 0	5-S-01-EP-2	43.5

QUESTION 10

An ATWS has occurred. Actions of EP-2A are being taken.

Which one of the following describes an allowance to terminate injection of Standby Liquid Control?

- A. Control rods have been inserted to the equivalent of the first banked position with RPV temperature at $< 200^{\circ}$ F making the reactor subcritical.
- B. All control rods are inserted to the Maximum Subcritical Banked Withdrawal Position, which assures the reactor will remain subcritical under all conditions.
- C. RPV temperature has been reduced to < 200 °F and indicated reactor power on all IRMs is downscale on range 1, which indicates a subcritical reactor.
- D. Standby Liquid Control has been injected such that Hot Shutdown Boron Weight (HSBW) has been injected and confirmed by chemical analysis.

QUESTION	10	NRC RECORD # W	'RI 216
ANSWER: B.	SYSTEM # C41;	K/A 295037 EA1	.04: 3.4/4.5
	C11; C71	EK1	.04: 3.4/3.6
		EK1	.05: 3.4/3.6
LP# GG-1-LP-R	O-EP02A	EA2	2.03: 4.3/4.4
OBJ. 2, 3, 5	SRO TIER 1 GRO	OUP 1 / RO TIER 1	GROUP 1
REFERENCE:	05-S-01-EP-2A	NEW	
	step 2 & 4	MODIFIED	<u>BANK</u>
DIFF 3, CA	GGNS PSTG App B		NRC 4/2000
	RC/Q-1		
		RO SRO <u>BOTH</u>	CFR 41.1/41.2/
REFERENCE M	ATERIAL REQUIRED:	05-S-01-EP-2A	41.6/43.6

QUESTION 11

A LOCA has occurred. The Plant Supervisor has ordered the Hydrogen Recombiners started for Hydrogen removal in Containment.

Determine the final Hydrogen Recombiner Power Setting and the time to final Recombiner power.

Pre-LOCA Containment Temperature was 85 °F. Post LOCA Containment Pressure +1.0 psig.

A. 47.73 kw after 20 minutes

B. 47.73 kw after 25 minutes

- C. 49.02 kw after 20 minutes
- D. 49.02 kw after 25 minutes

QUESTION	11		NRC RECOR	D # WRI	219
ANSWER: B.		SYSTEM # E61	K/A 500000	EA1.03	: 3.4/3.2
				2.1.20	: 4.3/4.2
LP# GQC-RO	-CRO01	l		2.1.25	: 2.8/3.1
OBJ. E61 tas	sk 5	SRO TIER 1 GRO	OUP 1 / RO TIE	R 1 GR	OUP 1
REFERENCE:	04-1	-01-E61-1 sec. 5.4.2	NEW		
	Figu	ire 1	MODIFIED		BANK
DIFF 2, CA					NRC 4/2000
			RO SRO <u>BO</u>	<u>)TH</u>	CFR 41.10/43.5
REFERENCE	MATER	IAL REQUIRED:	04-1-01-E61-1 &	Calculat	or

QUESTION: 12

Concerning the Fast Opening of One Recirculation Flow Control Valve transient, which one of the following CONDITIONS would result in the more severe transient on the reactor?

- A. Reactor Power is at 30 % with Recirc in Slow Speed with Maximum Valve position.
- B. Reactor Power is at 36 % with Recirc in Fast Speed with Minimum Valve position.
- C. Reactor Power is at 60 % with Recirc in Fast Speed with Minimum Valve position.
- D. Reactor Power is at 100 % with Recirc in Fast Speed with 68% Valve position.

QUESTION	12			NRC RECORI) # WRI 1	116
ANSWER:	С.	SYSTEM #	B33;	K/A 295014	AA1.02:	3.6/3.8
		FSAR CHP	Г 15	202002	K1.02:	4.2/4.2
LP# GG-1-LI	P-OP-M	C D7 b			K3.02:	4.0/4.0
OBJ 2		SRO TIEF	R 1 GR	OUP 1 / RO TIE	CR 1 GR	OUP 1
REFERENCE	E: UF	SAR 15.4.5.3	.2.1	NEW		
				MODIFIED	<u>I</u>	<u>BANK</u>
DIFF: 1; M					Ν	NRC 3/1998
				RO SRO <u>BO</u>	<u>TH</u> (CFR 41.6/43.6
REFERENCE	E MATE	RIAL REQU	IRED:	NONE		

QUESTION 13

The plant was operating at power.

A transient caused the Recirculation Pump 'B' trip to OFF.

The following parameters are indicated:

Reactor power	65 %
Core Flow	54 Mlbm/hr
Recirc A Flow	39,000 gpm
Recirc B Flow	0 gpm

Reactor Engineering is calculating FCBB.

Which one of the following describes the actions to be taken for present plant conditions?

- A. Immediately Scram the Reactor.
- B. Monitor Neutron Monitoring for thermal hydraulic instability. Immediately reduce core thermal power by only inserting control rods to exit the region.
- C. Monitor Neutron Monitoring for thermal hydraulic instability. Immediately exit the region by reducing core thermal power by inserting control rods, or raising core flow by opening Recirc FCV A.
- D. Monitor Neutron Monitoring for thermal hydraulic instability and scram the reactor if any is noted, close B33-F067B and re-open after five minutes, restart the Recirc Pump as soon as possible.

QUESTION	13	NRC RECORD	# WRI 602
ANSWER: C.	SYSTEM # B33	K/A 295001	AA2.01: 3.5/3.8
			2.4.1: 4.3/4.6
LP# GLP- OPS	-B3300		2.4.11: 3.4/3.6
OBJ. 41.2; 42;	43 SRO TIER 1 GR	OUP 2 / RO TIER	1 GROUP 2
REFERENCE:	05-1-02-III-3 sect	NEW	
	Figure 1	<u>MODIFIED</u>	BANK
DIFF: 2; CA	03-1-01-2 sect 2.24	NRC 4/2000	
		RO SRO <u>BOT</u>	<u><i>H</i></u> CFR 41.10/41.5/43.5
REFERENCE M	IATERIAL REQUIRED:	05-1-02-III-3 w/o 1	Immediate actions

QUESTION 14

11HD

A.

The plant is in a normal electrical line-up with all busses fed from their preferred power source. If a lockout of BOP Transformer 12B were to occur,

Which of the following indicates the correct status of BOP busses?

ENERGIZED

	12HE	DE-ENERGIZED		
	13AD	DE-ENERGIZED		
	14AE	ENERGIZED		
	18AG	ENERGIZED		
	28AG	DE-ENERGIZED		
B.	11HD	DE-ENERGIZED		
	12HE	ENERGIZED		
	13AD	ENERGIZED		
	14AE	DE-ENERGIZED		
	18AG	ENERGIZED		
	28AG	ENERGIZED		
C.	11HD	ENERGIZED		
	12HE	DE-ENERGIZED		
	13AD	DE-ENERGIZED		
	14AE	ENERGIZED		
	18AG	DE-ENERGIZED		
	28AG	DE-ENERGIZED		
D.	11HD	DE-ENERGIZED		
	12HE	ENERGIZED		
	13AD	ENERGIZED		
	14AE	DE-ENERGIZED		
	18AG	DE-ENERGIZED		
	28AG	ENERGIZED		
QUEST	ION	14	NRC RECORD # WRI	507
ANSWE	CR: B	SYSTEM # R21	K/A 295003 A1.01:	3.7/3.8
LP# GI	LP-OPS	·R2700		
OBJ. 8	&15.1. FNCE	SKU HEK 1 GK 04-1-01-R21-11 sect 3.2	NEW	UP 2
KEP EK		04-1-01-R21-12 sect 3.2	MODIFIED	BANK
DIFF 1	; M	04-1-01-R21-13 sect 3.2		NRC 6/2001
	,	04-1-01-R21-14 sect 3.2	RO SRO <u>BOTH</u>	CFR 41.7
		04-1-01-R21-18 sect 3.2		
REFER	ENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 15

Which one of the following describes the reason for isolating the Main Steam Isolation Valves on a Low Main Condenser Vacuum?

- A. Prevent erosion damage to the Main Steam Isolation Valve and Main Steam Bypass Valve seats due to steam condensation in the Main Steam Lines that would prevent their complete isolation in an emergency.
- B. Prevent erosion damage to turbine blading in the Low Pressure Turbine due to steam condensation in the Main Steam Lines.
- C. Prevent over-pressurization of low pressure piping on the suction of the Condensate pumps that could result in a rupture introducing steam outside Secondary Containment.
- D. Prevent rupture of the turbine rupture diaphragms or damage to the turbine exhaust hood that could lead to leakage of radiation to the environment.

QUESTION	15	NRC RECORD	# WRI 220
ANSWER: D.	SYSTEM # B21;	K/A 295002	AK3.05: 3.4/3.4
	N11; N62		AA1.04: 3.3/3.4
LP# GG-1-LP-O	P-M7101		
OBJ. 6	SRO TIER 1 GROU	JP 2 / RO TIER	1 GROUP 2
REFERENCE:	GGNS Tech Spec Bases	NEW	
	3.3.6.1-1d	MODIFIED	BANK
DIFF 1; M			NRC 4/2000
		RO SRO <u>BOT</u>	<u>CFR 41.4/43.4</u>
REFERENCE M	ATERIAL REQUIRED:	NONE	

QUESTION 16

The plant was operating at 80 % power.

Reactor Narrow Range Water Level transmitter C34-N004B has failed downscale and brought in annunciator "RX WTR LVL SIG FAIL HI/LO".

The Operator at the Controls notices the Reactor Narrow Range Level indicator C34-LI-R606A indicates offscale HIGH and annunciator "RFPT/MN TURB LVL 9 TRIP" is in.

Reactor Narrow Range Water Level indicator R606C is reading + 36 inches.

Reactor Upset Range Water Level indicator is reading + 38 inches.

Reactor Wide Range Water Level indicator on P680 is reading + 40 inches.

Reactor Wide Range Water Level indicators A & B on P601 are reading + 40 inches.

Which one of the following describes the actions to be taken? (NO OTHER ALARMS ARE PRESENT.)

- A. Immediately initiate a Reactor Scram and trip the Main Turbine and the Reactor Feed Pump Turbines because they failed to trip.
- B. Manually select Reactor Water Level Control to Single Element control and verify Reactor level returns to normal.
- C. Select the Master Level Controller to MANUAL to lock the level signals at the present setting to prevent any level perturbations and establish stable level control.
- D. Continue monitoring Reactor Water Level on P680 and compare with other indications on P601 and the PDS computer and contact I&C.

QUESTION	16	NRC RECORD	# WRI 275
ANSWER: D.	SYSTEM # C34; N2	21; K/A 295008	AK1.01: 3.0/3.2
	N30	245000	A3.01: 3.6/3.6
LP# GG-1-LP-	OP-C3401	259001	K6.07: 3.8/3.8
OBJ. 3f; 3g2;	3i; 22; 23 SRO TIER 1	GROUP 2 / RO TIE	R 1 GROUP 2
REFERENCE:	04-1-02-H13-P680	NEW	
	4A2-A2 & D1	MODIFIED	BANK
DIFF 2; CA			NRC 6/2001
		RO SRO <u>BOT</u>	<u>H</u> CFR 41.4/41.5
REFERENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 17

The Control Room has been abandoned and control has been established at the Remote Shutdown Panels.

Reactor pressure	600 psig
Indicated Reactor level at the Remote Shutdown Panel	66 inches

With present plant conditions, which one of the following describes Narrow Range Level, Actual Level and the availability of RCIC for level control?

05-1-02-II-1 Attachments I and II are provided.

	NARROW RANGE LEVEL	ACTUAL LEVEL	RCIC
A.	55 inches	52 inches	Not available
B.	45 inches	43 inches	Available
C.	48 inches	43 inches	Available
D.	60 inches	60 inches	Not available

QUESTION	17	NRC RECORD # W	RI 603
ANSWER: A.	SYSTEM # C61; B2	1 K/A 295016 AA	2.02: 4.2/4.3
		2.1	.25: 2.8/3.1
LP# GLP-OPS-	C6100	2.4	.11: 3.4/3.6
OBJ 19	SRO TIER 1 GR	OUP 1 / RO TIER 1 GR	COUP 2
REFERENCE:	05-1-02-I-1 Att I & II	NEW	
		<u>MODIFIED</u>	BANK
DIFF 2; CA		NRC 6/2001	
		RO SRO <u>Both</u>	CFR 41.5/41.10/43.5
REFERENCE N	IATERIAL REQUIRED: ()5-1-02-II-1 Att. I & II	

QUESTION 18

The plant is operating at 100 % power.

RCIC is to be operated for surveillance testing to return the system to operable.

Standby Service Water 'A' is operating.

Which one of the following describes the limitations and monitoring of the Suppression Pool Temperature?

- A. Suppression Pool Temperature is limited to 95°F and must be monitored every five minutes while RCIC is operating. If Suppression Pool Temperature exceeds 100°F Suppression Pool Cooling must be placed in service.
- B. Suppression Pool Temperature is limited to 95°F and must be monitored every five minutes while RCIC is operating. If Suppression Pool Temperature exceeds 95°F Suppression Pool Cooling must be placed in service and RCIC secured.
- C. Suppression Pool Temperature is limited to 100°F and must be monitored every five minutes while RCIC is operating. If Suppression Pool Temperature exceeds 95°F Suppression Pool Cooling must be placed in service. RCIC must be secured if Suppression Pool Temperature exceeds 100°F.
- D. Suppression Pool Temperature is limited to 105°F and must be monitored every sixty minutes while RCIC is operating and Suppression Pool Temperature exceeds 90°F. If Suppression Pool Temperature exceeds 105°F Suppression Pool Cooling must be placed in service and RCIC secured.

QUESTION	18	NRC RECORD # V	WRI 605
ANSWER: C.	SYSTEM # E51; M2	4 K/A 295013 A	A2.01: 3.8/4.0
		Α	A1.02: 3.9/3.9
LP# GG-1-LP-	OP-E5100-	2	.1.33: 3.4/4.0
OBJ. 12a; 22	2	2.4.4: 4.	0/4.3
LP# GG-1-LP-	OP-M7101		
OBJ. 23			
LP# GG-1-LP-	RO-EP03		
OBJ. 3; 5			
LP# GG-1-LP-	OP-M4101		
OBJ. 11	SRO TIER 1 GRO	UP 1 / RO TIER 1 G	ROUP 2
REFERENCE:	Tech Spec 3.6.2.1	<u>NEW</u>	
	Tech Spec SR3.6.2.1.1	MODIFIED	BANK
DIFF 2; CA	04-1-01-E51-1 sect 5.2.1e		
,	05-S-01-EP-3 step 10 – 12	RO SRO BOTH	CFR
	06-OP-1M24-V-0001 sect		41.5/41.10/43.3/43.5
	5.1.2a		
REFERENCE M	IATERIAL REQUIRED:	Tech Spec 3.6.2.1 & 06-	
	c c	OP-1M24-V-0001	

QUESTION 19

A LOCA has occurred.

The reactor is depressurized.

The Drywell remains inaccessible due to pressure of 2.5 psig and temperatures of 200°F.

MSIV Leakage Control Outboard System has been initiated.

Which one of the following identifies the method to monitor radiation released outside Secondary Containment at this time with MSIV Leakage Control in operation?

- A. The operating Standby Gas Treatment Train Radiation Monitors will give the indication of radiation release.
- B. Auxiliary Building Fuel Handling Area Exhaust Radiation Monitors will give indication of radiation release.
- C. Auxiliary Building Fuel Handling Area Exhaust and Fuel Pool Sweep Exhaust Radiation Monitors will give indication of radiation release.
- D. Auxiliary Building Fuel Handling Area Exhaust and Standby Gas Treatment Radiation Monitors will give indication of radiation release.

QUESTION	19	NRC RECORD)# WRI 606
ANSWER: A.	SYSTEM # T48;	K/A 295017	AA1.08: 3.1/3.4
	E32; D17		AA1.09: 3.6/3.8
LP# GG-1-LP-	OP-E3200	239003	K1.02: 2.9/3.0
OBJ. 12c; 13	3		
LP# GG-1-LP-	OP-D1721		
OBJ. 2			
LP# GG-1-LP-	OP-T4801		
OBJ. 9f	SRO TIER 1 GI	ROUP 2 / RO TIEF	R 1 GROUP 2
REFERENCE:	04-1-01-E32-1 sect 3.2	<u>NEW</u>	
	sect 3.2; 5.1.1c; 5.2.1c	MODIFIED	BANK
DIFF 2; CA			
		RO SRO <u>BO</u>	<i>TH</i> CFR 41.11/41.13
REFERENCE M	IATERIAL REQUIRED:	NONE	43.4

QUESTION 20

The plant is operating at 100 % power.

The Component Cooling Water temperature control valve closes to 25% in response to a temperature controller malfunction and the valve is unable to be reopened.

CCW temperatures have risen and continue to rise slowly.

Recirculation Pumps 'A' and 'B' pump bearing temperatures are in alarm on H13-P614.

Which one of the following describes the foremost actions to be taken for these conditions? Loss of Component Cooling Water ONEP is provided.

- A. Immediately scram the reactor and manually trip both Recirculation Pumps.
- B. Start the standby CCW pump. Trip the RWCU pumps then close CCW to the Non-Regenerative Heat Exchangers, P42-F103. Reduce core flow to 60% only.
- C. Trip the RWCU pumps then close CCW to the Non-Regenerative Heat Exchangers, P42-F103. Isolate CCW to Fuel Pool Heat Exchangers by closing P42-F105 and F205 only.
- D. Start the standby CCW pump. Trip the RWCU pumps then close CCW to the Non-Regenerative Heat Exchangers, P42-F103. Isolate CCW to Fuel Pool Heat Exchangers by closing P42-F105 and F205. Reduce core flow to 60% only.

QUESTION 20 NRC RECORD # WRI 314 ANSWER: A. SYSTEM # P42; K/A 295018 AK3.03: 3.1/3.3 **ONEPs** LP# GLP-OPS-ONEP 1; 2; 34 SRO TIER 1 GROUP 2 / RO TIER 1 GROUP 2 OBJ. **REFERENCE:** 05-1-02-V-1 sect 3.1 NEW Section 3.2.2 Note for 2.1 <u>BANK</u> MODIFIED DIFF 1; M NRC 12/2000 CFR 41.4/41.10/43.5 RO SRO BOTH **REFERENCE MATERIAL REQUIRED:** 05-1-02-V-1 w/o Imm. Actions

QUESTION 21

The plant is operating at rated conditions.

Plant Air Dryer 'A' is in service and Dryer 'B' is tagged out for maintenance.

Plant Air Dryer 'A' has undergone an "Executed Stop".

Annunciator "PLANT AIR DRYR TROUBLE" on H13-P870 is in alarm.

Instrument Air Header pressure is 110 psig and stable.

Which one of the following identifies actions to be taken?

- A. Immediately scram the reactor in preparation for a complete loss of Instrument Air.
- B. Immediately dispatch an operator to isolate Plant Air Dryer 'A' by closing isolation valves P51-F207A and P51-F208A.
- C. Dispatch an operator to manually crosstie Service Air via SP52-F010 or SP52-F300 and monitor Instrument Air header pressure.
- D. Monitor Instrument Air header pressure and determine the cause of the "Executed Stop" using the PDS computer and a local operator's observations.

QUESTION	21	NRC RECORD # W	RI 607
ANSWER: D.	SYSTEM # P51; P	253 K/A 295019 AK	2.14: 3.2/3.2
		2.4.	31: 3.3/3.4
LP# GLP-OP-	P5101	300000 A2.	01: 2.9/2.8
OBJ. 2d		2.1	1.32: 3.4/3.8
LP# GLP-OPS	S-P5300		
OBJ. 20.1; 2	SRO TIER 1 GR	OUP 2 / RO TIER 1	GROUP 2
REFERENCE:	04-1-02-H13-P870 7A-E3	<u>NEW</u>	
	04-1-01-P51-1	MODIFIED	BANK
DIFF 1; M	sect 3.5.4 & 3.7		
	05-1-02V-9 sect 3.4	RO SRO <u>BOTH</u>	CFR 41.4/41.10/43.5
REFERENCE M	IATERIAL REQUIRED:	04-1-02-H13-P870-7A-E	3

QUESTION 22

The plant is operating at rated conditions.

A rupture in the Instrument Air header has resulted in Instrument Air header pressure dropping to 40 psig.

Which one of the following describes the response of the Containment Cooling System and Containment temperature?

- A. Containment Coolers will operate recirculating the Containment atmosphere maintaining temperature stable.
- B. Containment Coolers will operate isolated without cooling water allowing Containment temperatures to rise.
- C. Containment Coolers will trip due to a loss of cooling water resulting in Containment temperatures rising.
- D. Containment Coolers will trip due to the isolation of the inlet and outlet dampers resulting in Containment temperatures rising.

QUESTION	22	NRC RECORD #	WRI 608
ANSWER: B.	SYSTEM # P71	; K/A 295020 A	K2.03: 3.1/3.3
	P53; M41	Α	K3.03: 3.2/3.2
LP# GG-1-LP-	-OP-M4100	300000 K	1.03: 2.8/2.9
OBJ. 10a; 1	3a		
LP# GLP-OPS	S-P7100		
OBJ. 16.2	SRO TIER 1	GROUP 2 / RO TIER 1	GROUP 2
REFERENCE:	E-1213-009 & 012	<u>NEW</u>	
	M-1100B	MODIFIED	BANK
DIFF 1; M	M-1109D		
	05-1-02V-9 sect 5.5	RO SRO <u>BOTH</u>	CFR 41.4/41.7/41.9
REFERENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 23

The plant is in a startup following a 32 day outage.

MSIVs are closed.

Recirc loop temperatures are at 180 ?F.

Control rods are being withdrawn to achieve criticality. (Minimal decay heat)

Feedwater is operating in long cycle cleanup.

The operating CRD Pump tripped.

What will be the response of the plant? (ASSUME NO FURTHER OPERATOR ACTIONS)

- A. The reactor water level will remain stable at its present level.
- B. The reactor water level will rise to the point that a reactor scram is received on High water level.
- C. The reactor water level will drop to the point that a reactor scram is received on Low water level.
- D. The plant will scram due to a loss of charging water pressure to the Hydraulic Control Units.

QUESTION 2	23	NRC RECORD	# WRI 55
ANSWER: C	. SYSTEM # C11-1A;	K/A 295022	AK2.04: 2.5/2.7
	G33/36; IOI- 1		AK2.05: 2.4/2.5
LP# GLP-OPS	S-G3336		AA1.04: 2.5/2.6
OBJ 3.3, 8.6	, 21		
LP# GG-1-LP	-OP-C111A		
OBJ 23	SRO TIER 1 GROU	JP 2/ RO TIER 1	GROUP 2
REFERENCE :	03-1-01-1	NEW	
	sect. 2.2.5; 3.3.1d; 3.3.3a	MODIFIED	BANK
DIFF 2; CA			NRC 6/2001
		RO SRO <u>BOT</u>	<u>H</u> CFR 41.5
REFERENCE	MATERIAL REQUIRED: N	lone	

QUESTION 24

An ATWS has occurred. Reactor pressure is being controlled with SRVs.

Standby Liquid Control has been initiated.

Reactor power has just dropped below 4%.

The following conditions exist:

Reactor Power	2 % and stable
Reactor Pressure	1000 psig and stable
Reactor Level	- 100 inches Fuel Zone and stable
Suppression Pool Level	16.5 feet and rising
Suppression Pool Temperature	150 °F and rising
Drywell Pressure	+ 1.0 psig and rising

Which one of the following describes actions to be taken?

- A. Maintain RPV water level between -192 and + 53.5 inches and stabilize RPV pressure < 1064.7 psig.
- B. Maintain RPV water level between -192 and + 53.5 inches. Lower RPV pressure to 700 900 psig, and initiate SPMU.
- C. Terminate and prevent all injection into the RPV except for Boron, CRD and RCIC, and lower RPV water level to the top of active fuel.
- D. Terminate and prevent all injection into the RPV except for Boron, CRD and RCIC and emergency depressurize the RPV.

QUESTION	24		NRC RECORI) # WRI 301
ANSWER: D.		SYSTEM # M41;	K/A 295026	EK2.01: 3.9/4.0
		B21		
LP# GG-1-LP-	-RO-EP0	3		
OBJ.	2, 3			
LP# GG-1-LP-	RO-EP0)2A		
OBJ.	7, 10h	SRO TIER 1 GI	ROUP 1 / RO TIEL	R 1 GROUP 2
REFERENCE:	05-S-01	I-EP2 EP2A	NEW	
	Step 3	3, 14, & 15	MODIFIED	BANK
DIFF 2, CA	05-S-01	I-EP3 Step 15 and		NRC 12/2000
	HCTL		RO SRO <u>BO</u>	<i>TH</i> CFR 41.7/41.9/
REFERENCE M	IATERIA	L REQUIRED:	05-S-01-EP-2A and	EP-3 41.10/41.14/43.5

QUESTION 25

The plant was operating at 100 % Power.

A steam leak has developed in the Containment steam tunnel.

Containment temperature has gone up to 85°F and still rising.

A power reduction has commenced but Containment temperature continues to rise.

Tech. Specs states if Containment temperature exceeds $95^{\circ}F$ to restore to $< 95^{\circ}F$ within 8 hours.

If Containment temperature is unable to be restored to $< 95^{\circ}$ F within 8 hours; then be in MODE 3 in 12 hours and be in MODE 4 in 36 hours.

Which of the following is the reason for this action? **Tech Specs 3.0 & 3.6.1.5 are provided.**

- A. Shut down of the Reactor is done to prevent having to initiate Containment Spray to maintain Containment temperature below 185°F.
- B. Shut down of the Reactor is done to place the plant in a MODE that the LCO does NOT apply.
- C. Shut down of the Reactor is done to prevent having to Emergency Depressurize to maintain Containment temperature below 185°F.
- D. Shut down of the Reactor is done to prevent damaging operating equipment inside Containment due to current high temperature.

QUESTION	25	NRC RECORD # W	/RI 512
ANSWER: B.	SYSTEM # M41-1	K/A 295027 K3	3.03: 3.7/3.7
LP# GG-1-LP-	OP-TS001		
OBJ. 13			
LP# GG-1-LP-	OP-M4101		
OBJ. 11, 12	SRO TIER 1 G	ROUP 1 / RO TIER 1 (GROUP 2
REFERENCE:	TECH. SPEC. 3.6.1.5	NEW	
	TECH. SPEC. BASES	MODIFIED	<u>BANK</u>
DIFF 1; M	3.6.1.5		NRC 6/2001
	TECH SPEC 3.0.2 **	RO SRO <u>BOTH</u>	CFR 41.9/41.10/43.2
REFERENCE M	IATERIAL REQUIRED:	Tech Spec 3.6.1.5 & 3.0.2	2

QUESTION 26

The plant is operating at rated conditions.

Temperatures in the lower CRD Cavity are rising.

Which one of the following describes the expected response of the Drywell Cooling System?

- A. At 145°F, M51-F009 and M51-F016 open and M51-F006 and M51-F014 close to divert Drywell Cooling flow from the lower Drywell area to the CRD Cavity.
- B. At 145°F, the Standby fans on M51-B001 and B002 will auto start and M51-F009 and M51-F016 open raising the flow of air to the CRD Cavity.
- C. At 145°F, M51-F009 and M51-F016 open raising the flow of air to the CRD Cavity and at 155°F M51-F006 and M51-F014 close to divert more air flow.
- D. At 155°F, the Standby fans on M51-B001 and B002 will auto start and M51-F009 and M51-F016 open raising the flow of air to the CRD Cavity.

QUESTION	26	NRC RECORD # W	VRI 609
ANSWER: A.	SYSTEM # M51	K/A 295028 EA	1.03: 3.9/3.9
		EK	2.04: 3.6/3.6
LP# GG-1-LP	-OP-M5100	EK	3.04: 3.6/3.8
OBJ. 6a	SRO TIER 1 G	ROUP 2 / RO TIER 1	GROUP 2
REFERENCE:	04-1-02-H13-P870	<u>NEW</u>	
	4A-H2; 10A-H2	MODIFIED	BANK
DIFF 2; CA	M-1101		
	E-1214-001; 004; 009	RO SRO <u>BOTH</u>	CFR 41.4/41.7
REFERENCE MATERIAL REQUIRED:		Drywell Cooling System	
		Drawing	

QUESTION 27

Which of the following is the basis for Emergency Reactor Pressure Vessel (RPV) Depressurization when Suppression Pool Level CANNOT be maintained below 24.4 feet?

- A. 24.4 feet is the highest Suppression Pool level at which the pressure suppression capability of Containment can be maintained.
- B. 24.4 feet is the highest Suppression Pool level at which the Suppression Pool will NOT overflow the weir wall resulting in flooding the Drywell.
- C. 24.4 feet is the highest Suppression Pool level at which Suppression Pool level instrumentation taps will become covered resulting in loss of ability to monitor Suppression Pool level.
- D. 24.4 feet is the highest Suppression Pool level at which opening Safety Relief Valves (SRVs) will NOT result in exceeding the design blowdown rate for the SRV discharge piping.

QUESTION	27	NRC RECORD	# WRI 513
ANSWER: A.	SYSTEM # M41-1	K/A 295029	K1.01: 3.4/3.7
LP# GG-1-LP-	OP-EP03		
OBJ. 6	SRO TIER 1 GRO	DUP 2 / RO TIER	1 GROUP 2
REFERENCE:	GGNS PSTG APP B SP/L-3	NEW	
	GGNS PSTG APP A SP/L-3	MODIFIED	BANK
DIFF 1; M			NRC 6/2001
,		RO SRO <u>BOT</u>	<u><i>H</i></u> CFR 41.9/41.10
REFERENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 28

The plant is in a LOCA with ECCS systems injecting to the reactor.

Suppression Pool level has lowered to 13.5 feet.

Which one of the following is a condition that exists due to this level?

- A. The SRV tailpipe exhaust spiders have been uncovered.
- B. The RCIC Turbine Exhaust pipe has been uncovered.
- C. Suppression Pool temperature is unable to be determined.
- D. Containment Pressure is unable to be determined

QUESTION NRC RECORD # WRI 8 28 ANSWER: C. SYSTEM # E30 K/A 295030 EA2.02: 3.9 LP# GG-1-LP-OP-EP01 OBJ. 5 LP# GG-1-LP-RO-EP03 OBJ. 6 SRO TIER 1 GROUP 1 / RO TIER 1 GROUP 2 **REFERENCE:** 05-S-01-EP-3 Caution 2 NEW GGNS EOP PSTG App B MODIFIED <u>BANK</u> DIFF 1; M Caution 2 NRC 6/2001 RO SRO <u>BOTH</u> CFR 41.9/41.10/43.5 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 29

Preparations are being made to startup following a Refueling Outage.

During the Refueling outage several Control Rod Drive Mechanisms were replaced and the old mechanisms taken to the CRD Maintenance Room for rebuilding.

The Auxiliary Building Operator has reported elevated radiation levels indicated on his dositec in Area 9 185 ft. of 150 mr/hr.

Which one of the following is the possible cause of the elevated radiation levels?

- A. This is normal radiation levels for general area Auxiliary Building.
- B. Used CRD Drive Mechanisms in the Auxiliary Building
- C. Waterborne contamination in the Fuel Pool Cooling System
- D. Normal radiation levels from the Fuel Pool Filter Demineralizers.

QUESTION 29 NRC RECORD # WRI 610 ANSWER: C. **SYSTEM # G41/46** K/A 295033 EA2.03: 3.7/3.7 LP# GLP-OPS-G4146 SRO TIER 1 GROUP 2 / RO TIER 1 GROUP 2 OBJ. 2; 4.8; 5.4; 5.5; 5.6; 15.1 **REFERENCE:** M-1051A; M-1016 NEW MODIFIED **UFSAR 9.1.3.1.2;** BANK DIFF 1; M 12.2.1.3.3 & Table 12.2.-12 **FPCCU System Figure 4** RO SRO BOTH CFR 41.12/43.4 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 30

A GENERAL EMERGENCY has been declared due to a DBA LOCA.

Plant conditions as follows:

- Reactor water level -195"
- Approximately 15% fuel damage
- Large fission product inventory in Containment
- All Containment parameters are within design limits
- Radiation levels at the site boundary are at 15 mRem/hr TEDE

What protective actions, if any, should be recommended?

10-S-01-1 Activation of the Emergency Plan is provided.

- A. No evacuation of surrounding areas is required.
- B. Evacuate a 2-mile radius and shelter five miles downwind.
- C. Evacuate a 2-mile radius and five miles downwind. Shelter the rest of the 10-mile EPZ.
- D. Evacuate a 2-mile radius and 10 miles downwind. Shelter the rest of the 10-mile EPZ.

QUESTION 30	NRC RECORD # WRI 611		
ANSWER: C. SYSTEM # EPP PAR	s K/A 295038 El	K1.02: 4.2/4.4	
LP# GG-1-LP-EP-EPTS6			
OBJ 2 SRO TIER 1 GRO	OUP 1 / RO TIER	1 GROUP 2	
REFERENCE: 10-S-01-1 sect. 6.1.4.j(1)	NEW		
	MODIFIED	<u>BANK</u>	
DIFF 2; CA		EPTS 6 EXAM 2	
	RO SRO <u>BOTH</u>	CFR 41.10/41.12	
REFERENCE MATERIAL REQUIRED:	10-S-01-1	43.4/43.5	

QUESTION 31

A fire has been reported by security at the Hydrogen Bulk Storage Facility.

The Outside Operator has identified the leak as coming from the vent stack on the discharge of the cryogenic compressors.

Which one of the following describes the actions to be taken by operators at the scene?

- A. Establish a perimeter of at least 160 feet, and allow the fire to burn itself out.
- B. Establish a perimeter of at least 160 feet, and establish a monitor nozzle spraying water on the point where the fire is originating.
- C. Evacuate a 2 mile radius of the fire, and establish a monitor nozzle spraying water on the point where the fire is originating.
- D. Evacuate a 2 mile radius of the fire, and establish a fire team to enter the area with a fire hose cooling the team and isolate the source of the fire.

QUESTION	31	NRC RECORD # WRI 612		
ANSWER: A.	SYSTEM # P73	K/A 600000	AK3.04: 2.8/3.4	
			2.1.32: 3.4/3.8	
LP# GG-1-LP-O	P-P7300		2.4.25: 2.9/3.4	
OBJ 12; 14	SRO TIER 1 GR	ROUP 2 / RO TIE	CR 1 GROUP 2	
REFERENCE:	04-1-01-P73-1	<u>NEW</u>		
	sect 3.1; 3.2; 3.3; 3.7	MODIFIED	BANK	
DIFF 1; M				
		RO SRO <u>BO</u>	<u>OTH</u> CFR 41.10/43.5	
REFERENCE M	ATERIAL REQUIRED:	NONE		

QUESTION 32

The plant is in a Refueling Outage with the reactor disassembled five (5) days after the plant was shutdown in Refueling Outage 11.

Reactor Coolant Temperature is 140 ?F

The Fuel shuffle has just begun.

The in-service shutdown cooling pump has just tripped off.

Assume no further operator action.

Determine for this condition:

1. The time to reach 200?F for the Reactor Vessel.

2. The time for level to reach the Top of Active Fuel.

05-1-02-III-1 Attachment I is provided.

A.	1)	0.75 hours		
	2)	15 hours		
B	1)	1.2 hours		
2.	$\frac{1}{2}$	18 hours		
	2)	18 hours		
C.	1)	2.5 hours		
	2)	60 hours		
	,			
D.	1)	4.5 hours		
	2)	75 hours		
QUES	TION	32	NRC RECORD	# WRI 604
ANSV	VER:	C. SYSTEM # G41/46;	K/A 295021	AK1.01: 3.6/3.8
		ONEP		
LP# G	LP-OI	PS-ONEP		AA2.01: 3.5/3.6
OBJ	18; 19	SRO TIER 1 GR	OUP 2 / RO TIEF	R 1 GROUP 3
REFE	RENCI	E: 05-1-02-III-1 Att. I	NEW	
		Figures 2 & 5	<u>MODIFIED</u>	BANK
DIFF	2; CA	A Pre-shuffle 150°F	NRC 3/1998 WI	RI37
			RO SRO <u>BOT</u>	<u>TH</u> CFR 41.5/41.10/43.5
REFE	RENC	E MATERIAL REQUIRED:	05-1-02-III-1 Att I	

QUESTION 33

RHR 'A' Pump Room temperature rises to 170 ?F.

Which one of the following identifies the systems or components in addition to RHR 'A' that will be affected by this temperature?

A. HPCS

- B. MSIVs and RCIC
- C. RCIC
- D. RWCU

QUESTION	33		NRC RECORD	D # WRI 048
ANSWER:	C.	SYSTEM # E12; E51;	K/A 219000	A1.08: 3.7/3.6
		E31		A2.14: 4.1/4.3
				A3.01: 3.3/3.3
LP# GLP-OI	PS-E3100	1		A4.06: 3.9/3.7
OBJ 7.4			295032	EK3.03: 3.8/3.9
				EK3.07: 3.6/3.8
		SRO TIER 1 GRO	DUP 2 / RO TIE	R 1 GROUP 3
REFERENCI	E: AR	I 04-1-02-H13-P601	NEW	
		20A-B1	MODIFIED	BANK
DIFF 1; M	05-	1-02-III-5 Group 2, 3,	4	NRC 3/1998
			RO SRO <u>BO</u>	<u>TH</u> CFR 41.4/41.10/43.5
REFERENCI	E MATE	RIAL REQUIRED:	NONE	

QUESTION 34

Following a Recirc line rupture, reactor level has dropped to - 80 inches.

Both trains of the Standby Gas Treatment System have initiated.

Which of the following best describes the operation of the Standby Gas Treatment System flow control dampers?

- A. When -0.2 inches water column is obtained in the Enclosure Building, the steam tunnel cooler dampers throttle to their intermediate position. 90 seconds later the remaining flow control dampers throttle to their intermediate position.
- B. When -0.25 inches water column is obtained in the Enclosure Building, the steam tunnel cooler dampers throttle to their intermediate position. 120 seconds later the remaining flow control dampers throttle to their intermediate position.
- C. After 90 seconds, the flow control dampers will go to their intermediate positions to maintain ? 0.75 inches water column in the Auxiliary Building and -0.25 inches water column in the Enclosure Building.
- D. After 90 seconds the flow control dampers throttle to maintain -0.25 inches water column in the Auxiliary Building. If the Enclosure Building pressure reaches -0.75 inches water column, the flow control dampers go to their intermediate positions.

QUESTION 3	4	NRC RECORD #	WRI 007
ANSWER: A	. SYSTEM # T48	K/A 295035 EA	A1.02: 3.8/3.8
LP# GG-1-LP-	OP-T4801	261000 A:	1.04: 3.0/3.3
OBJ. 8e	SRO TIER 1	GROUP 2 / RO TIER	1 GROUP 3
REFERENCE:	E- 1257- 08, 11, 23	NEW	
		MODIFIED	BANK
DIFF 2; CA			NRC 3/1998
,		RO SRO <u>BOTH</u>	CFR 41.4/41.7/41.13
REFERENCE M	IATERIAL REQUIRED	:	

QUESTION 35

The plant is operating normally at 100 % power.

The Suppression Pool Hi/Lo Level and a LPCS Room Sump Level Hi-Hi annunciators have been received on the H13-P870 panel.

The Control Room Operator has noted that Suppression Pool Level is at 18.4 feet. An operator dispatched to the room reports that water is spraying from the LPCS Suction piping, but he was unable to tell the exact location.

Which one of the following are the appropriate actions for this event?

- A. Immediately scram the reactor, initiate Suppression Pool Makeup, and emergency depressurize the plant, and isolate the LPCS Suction from the Suppression Pool.
- B. Ensure the LPCS Room sump pumps are operating, isolate LPCS Suction from the Suppression Pool and observe the status of the leak and makeup to the Suppression Pool via normal means, if required open the LPCS Room Door.
- C. Monitor and control LPCS Room sump levels, rack out the LPCS Pump Breaker and isolate LPCS Suction from the Suppression Pool, scram the reactor since the Max Safe Level has been reached.
- D. Verify the LPCS Room sump pumps are operating, isolate LPCS Suction from the Suppression Pool and rack out the LPCS Pump Breaker, and observe the status of the leak and makeup to the Suppression Pool via normal means.

QUESTION 2	35	NRC RECORD # W	/RI 058
ANSWER: D	SYSTEM # P45; E12;	K/A 295036 EA2	2.03: 3.4/3.8
	EOP- 4	EK.	3.03: 3.5/3.6
LP# GG-1-LP-	RO-EP03	EAZ	2.02: 3.1/3.1
OBJ 3			
LP# GG-1-LP-	RO-EP04		
OBJ 4	SRO TIER 1 GRO	OUP 2 / RO TIER 1 (GROUP 3
REFERENCE:	05-S-01-EP-3 step 41	NEW	
	05-S-01-EP-4 step 9 - 13	MODIFIED	BANK
DIFF 2; CA	ARI 04-1-02-H13-P680		NRC 3/1998
	8A1-A4		
	ARI 04-1-02-H13-P870	RO SRO <u>BOTH</u>	CFR 41.4/41.10/43.5
	4A-A3; 2A-F1; 4A-C3		
REFERENCE	MATERIAL REQUIRED:	05-S-01-EP-3 & 4	

QUESTION 36

A reactor scram has occurred.

All control rods have fully inserted.

Reactor level is stable at + 4 inches narrow range with reactor pressure at rated conditions.

Which one of the following describes the flows observed with present conditions for the Control Rod Hydraulic System?

	CRD Pump Min Flow	Charging Water Header	Cooling Water Header	Recirc Pump Seal Purge
A.	20 gpm	0 gpm	60 gpm	2 gpm / pump
B.	20 gpm	165 gpm	5 gpm	2 gpm / pump
C.	20 gpm	165 gpm	5 gpm	0 gpm
D.	0 gpm	165 gpm	60 gpm	0 gpm

QUESTION 36 NRC RECORD # WRI 613 K/A 295036 K5.02: 2.6/2.6 ANSWER: B. SYSTEM # C11-1A LP# GG-1-LP-OP-C111A SRO TIER 2 GROUP 2/ RO TIER 2 GROUP 1 OBJ 4 <u>NE</u>W **REFERENCE:** SFD-1081 04-1-01-B33-1 MODIFIED BANK DIFF 2; CA sect 4.1.2b(2)(e) RO SRO <u>BOTH</u> 04-1-01-C11-1 sect 4.1.2v(2) CFR 41.5/41.6 **REFERENCE MATERIAL REQUIRED:** NONE

QUESTION 37

The plant is operating at 45% power while returning to full power conditions.

A fatigue failure of the High Pressure Turbine First Stage Pressure connection resulted in a loss of all inputs of pressure to Rod Control and Information System.

Which one of the following describes the ability to move control rods with present plant conditions?

Assume the only actions to move control rods are from H13-P680.

- A. Control rod movement is restricted to the Rod Pattern Controller.
- B. Control rod movements are unrestricted for both withdrawals and insertions.
- C. Control rod movement is restricted to 2 notch withdrawals and unlimited insertions.
- D. Control rod movement is restricted to 4 notch withdrawals and unlimited insertions.

QUESTION 37 NRC RECORD # WRI 614 ANSWER: A. **SYSTEM # C11-2;** K/A 201005 K6.01: 3.2/3.2 N11 LP# GG-1-LP-OP-C1102 SRO TIER 2 GROUP 1 / RO TIER 2 GROUP 1 OBJ 5, 6, 7, 13b, 23, 26 **REFERENCE:** 04-1-02-1H13-P680-4A2-D5 NEW 03-1-01-2 MODIFIED BANK sect 2.15; 5.3; 5.7; 6.4 DIFF 2; CA RO SRO <u>BOTH</u> Tech Spec 3.3.2.1 & bases CFR 41.6/43.6 **REFERENCE MATERIAL REQUIRED:** NONE

QUESTION 38

The plant is operating at 45% power raising power to full power conditions.

A disturbance on the Entergy Grid resulted in a trip of Circuit Breakers J5228 and J5232 in the GGNS Switchyard.

Reactor water level control responded to control reactor water level above –20 inches wide range.

Reactor pressure control responded to an actuation of B21-F051D momentarily with subsequent pressure control using Main Steam Bypass Valves.

All other systems functioned as designed.

Which one of the following identifies the current configuration of the Recirculation Pump circuit breakers?

_	CB-1	CB-2	СВ-3	CB-4	CB-5	
A.	CLOSED	CLOSED	CLOSED	CLOSED	OPEN	
B.	OPEN	OPEN	CLOSED	OPEN	OPEN	
C.	CLOSED	CLOSED	OPEN	OPEN	OPEN	
D.	OPEN	OPEN	OPEN	OPEN	OPEN	

QUESTION 38		NRC RECORI)# WRI 615
ANSWER: C.	SYSTEM # B33; N32	K/A 202002	A2.01: 3.4/3.4
LP# GLP-OPS-B3	3300	202001	A2.15: 3.7/3.9
OBJ 27; 50	SRO TIER 2	GROUP 1 / RO	TIER 2 GROUP 1
REFERENCE:	04-1-02-1H13-P680	<u>NEW</u>	
	3A-D4 & D10	MODIFIED	BANK
DIFF 2; CA	Tech Spec 3.3.4.1 & bases	5	
	Tech Spec 3.3.1.1; 3.3.6.5	; RO SRO <u>B</u>	OTH CFR 41.6
	3.3.4.2		
REFERENCE MA	TERIAL REQUIRED:	NONE	

QUESTION 39

Which one of the following is the reason the LPCI Injection Valves, E12-F042A, B, and C, are designed to remain closed at normal reactor vessel pressure following a LOCA initiation signal?

- A. This allows the pump time to pressurize the header, thus minimizing the differential pressure across the injection valve.
- B. This ensures reactor pressure has dropped sufficiently to prevent the possibility of over pressurizing low pressure piping.
- C. This allows the pump to develop enough discharge head to overcome reactor pressure for injection preventing back flow of hot reactor water into LPCI piping.
- D. This ensures reactor pressure has equalized with LPCI pressure to prevent the injection check valves E12-F041A, B, C from slamming the injection piping causing damage.

QUES	ΓΙΟΝ	3	9	NRC RECOI	RD # WRI 060	
ANSW	ER:	B.	SYSTEM # E12	K/A 203000	K1.17: 4.0/4.0	
					K4.01: 4.2/4.2	
					K4.02: 3.3/3.4	
					A3.01: 3.8/3.7	
					A3.08: 4.1/4.1	
LP# G	LP-O	PS-E	21200		A4.08: 4.3/4.3	
OBJ	8.9;1	14.2	SRO TIER 2 GRO	UP 1 / RO TIE	CR 2 GROUP 1	
REFEI	RENC	E:	04-1-01-E12-1 sect. 3.4	NEW		
			Tech Spec Bases B3.3.5.1	MODIFIED	BANK	7
DIFF	1; M	[NRC	6/2001
				RO SRO <u>B</u>	<u>OTH</u> CFR 4	41.8
REFEI	RENC	EM	ATERIAL REQUIRED: N	one		

QUESTION 40

A LOCA has occurred.

Power to bus 15AA has been lost.

All other systems are functioning as required.

Reactor water level is – 170 inches.

Reactor pressure is 840 psig.

Drywell pressure is 8.3 psig.

Which one of the following identifies the response of the Automatic Depressurization System?

- A. ADS valves are unable to open due to a loss of air needed to open the valves.
- B. ADS valves are unable to automatically open due to a loss of power needed to actuate.
- C. ADS valves will automatically open using both solenoids associated with the air actuator.
- D. ADS valves will automatically open when the appropriate time delays have been met.

QUESTION 40		NRC RECORD # W	/RI 616
ANSWER: D.	SYSTEM # E21; E	12; K/A 209001 K3.	02: 3.8/3.9
	E22-2; R21	218000 K6.	01: 3.9/4.1
LP# GG-1-LP-O	P-E2202	K6.	02: 4.1/4.1
OBJ 5c,f; 9a,b; 15; 17; 25	12b,c; SRO TIER	2 GROUP 1 / RO TIEL	R 2 GROUP 1
REFERENCE:	04-1-02-1H13-P601	<u>NEW</u> MODIFIED	DANIZ
DIFF 2; CA	18A-B3 & E2 19A-B3 & E2	MODIFIED	BAINK
	04-1-01-B21-1 sect 5.1.	1 RO SRO <u>BOTH</u>	CFR 41.7
REFERENCE M	ATERIAL REQUIRED:	NONE	

QUESTION 41

The plant is starting up and is currently operating at 80% power.

All systems are operating properly.

There is a spurious High Pressure Core Spray (HPCS) initiation.

All other systems respond properly.

NO operator action is taken.

Which of the following identifies the effect on Reactor Water Level the spurious HPCS initiation will have?

- A. Reactor Water Level will RISE, Feedwater Level Control will respond, and Reactor Water level will stabilize at a HIGHER than normal condition.
- B. Reactor Water level will RISE, Feedwater Level Control will respond, and Reactor Water level will be returned to NORMAL level.
- C. Reactor Water level will RISE, Feedwater Level Control will respond, and Reactor Water level will stabilize at a LOWER than normal condition.
- D. Reactor Water level will not be affected due to Feedwater Level Control will respond and maintain Reactor Water level at NORMAL level.

QUESTION	41	NRC RECORD #	# WRI 519
ANSWER: A.	SYSTEM # C34; E22	K/A 209002	K3.01: 3.9/3.9
LP# GG-1-LP-	OP-MCD7b	259002	A2.08: 4.5/4.5
OBJ. 2 A	SRO TIER 2 GROU	P 1/ RO TIER	2 GROUP 1
REFERENCE:	UFSAR 15.5.1.2.1	NEW	
	UFSAR FIG. 15.5-1	MODIFIED	BANK
DIFF 2; CA			NRC 6/2001
		RO SRO <u>BOTH</u>	<u>CFR 41.7/41.8</u>
REFERENCE M	IATERIAL REQUIRED: NO	ONE	

QUESTION 42

An ATWS has occurred.

Standby Liquid Control has just been initiated for injection into the reactor vessel.

Reactor power is 10 %.

Reactor pressure is 850 psig.

Reactor water level – 110 inches Fuel Zone.

Which one of the following identifies indications of Standby Liquid Control injection into the Reactor?

	SLC Tank Level	SLC Pump Pressure	Reactor Power	Squib Valve Ready lights	SLC OOSVC Alarms	SQUIB LOSCONT OR PWR LOSS lights
A.	4400 gal	1050 psig	9%	OFF	ON	ON
B.	4600 gal	860 psig	10%	ON	OFF	OFF
C.	4600 gal	1050 psig	9%	ON	OFF	OFF
D.	4400 gal	860 psig	10%	OFF	OFF	ON

QUESTION 4	2	NRC RECOR	D# WRI 617
ANSWER: A.	SYSTEM # C41	K/A 211000	A4.04: 4.5/4.6
			A4.01: 3.9/3.9
			A4.03: 4.1/4.1
LP# GLP-OPS-	C4100		A4.07: 3.6/3.6
OBJ 12	SRO TIER 2	GROUP 1 / RO	DTIER 2 GROUP 1
REFERENCE:	04-1-01-C41-1 sect 5.3.2	b <u>NEW</u>	
		MODIFIED	BANK
DIFF 1; M			
		RO SRO B	CFR 41.1/41.6/41.7
REFERENCE N	IATERIAL REQUIRED:	NONE	43.6

QUESTION 43

The plant was operating at 60% power when Division I UPS Power Panel 1Y89 trips its incoming circuit breaker.

Which one of the following is the response of the Reactor Protection System?

- A. RPS A system tripped resulting in a half scram due to a loss of power to the RPS A logic relays.
- B. RPS A system logic energized causing a half scram due to a loss of power to the RPS A Scram Pilot Valve solenoids.
- C. RPS A system tripped with no half scram because the RPS A solenoids still have power available.
- D. RPS A system logic energized causing alarms indicating the loss of power with no half scram due to RPS Bus A still being energized.

43 NRC RECORD # WRI 102 QUESTION ANSWER: A. SYSTEM # C71; L62 K/A 212000 K6.01: 3.6 K1.04: 3.4 LP# GLP-OPS-C7100 OBJ. 11.10; 23 LP# GG-1-LP-OP-L6200 OBJ. 6b SRO TIER 2 GROUP 1 / RO TIER 2 GROUP 1 **REFERENCE:** E-1026 NEW E-1173 - 14, 15, & 19 MODIFIED BANK DIFF 1; M NRC 3/1998 RO SRO BOTH CFR 41.2/41.6 **REFERENCE MATERIAL REQUIRED:** NONE

QUESTION 44

Which one of the following identifies the power sources to the Intermediate Range Neutron Monitors (IRMs) and the impact on the monitors upon a loss of power?

- A. IRMs are powered from Division I and II DC buses and fail upscale on a loss of power.
- B. IRMs are powered from Division I and II RPS buses and fail upscale on a loss of power.
- C. IRMs are powered from Division I and II UPS buses and fail downscale on a loss of power.
- D. IRMs are powered from the BOP UPS buses and fail downscale on a loss of power.

QUES	STION	44			NRC	REC	ORD	# WR	LI 618	
ANSV	VER:	C.	SYSTEM # C51-2	2	K/A	21500)3	K2.01	: 2.5/2.7	
LP# (GG-1-L	P-OP	-C5102							
OBJ	6b,c;	11a; 1	8 SRO TIER	2	GROUP	2 /	RO	TIER	2 GROUP	1
REFF	RENC	Е:	04-1-01-C51-1 Att III		NE	W				
			04-1-01-L62-1 Att I		MO	DIFIE	ED		BANK	
DIFF	1; M		04-1-02-1H13-P680							
			5A-A8, B8; 7A-A8, B8	, B	9 RO	SRO) <u>BC</u>	<u>) TH</u>	CFR 41.6	
REFF	ERENC	E MA	TERIAL REQUIRED:		NONE					
QUESTION 45

GGNS is operating at 10% power with the mode switch in the STARTUP position.

APRM H has four (4) LPRMs currently bypassed.

What would APRM H indicate when the Meter Function switch is taken to COUNT after a fifth (5th) LPRM is taken to BYPASS?

- A. 75
- B. 80
- C. 85
- D. 90

QUESTION NRC RECORD # WRI 326 45 ANSWER: C. SYSTEM # C51 K/A 215005 K6.03: 3.1/3.3 LP# GG-1-LP-OP-C5104 3b; 9b SRO TIER 2 GROUP 1 / RO TIER 2 GROUP 1 **OBJ. REFERENCE: 06-OP-1C51-V-0003** NEW Att I sect 5.2.1g- i MODIFIED BANK DIFF 2; CA NRC 12/2000 RO SRO <u>BOTH</u> CFR 41.6/41.7 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 46

Which one of the following describes conditions that would prohibit withdrawing Source Range Neutron (SRM) detectors from the core?

- A. IRMs are on Range 1 reading between 10 and 25 and all SRMs are reading between 6000 and 9000 cps.
- B. Source Range 'A' detector has lost power and has been declared INOP and is bypassed at H13-P680.
- C. Under vessel work has been performed during the ongoing refueling outage and work is still in progress.
- D. Drywell entry has been made to inspect and identify leaks at rated pressure during a reactor startup.

QUESTION 4	6	NRC	RECO)RD # WF	RI 619
ANSWER: C.	SYSTEM # C51-1	K/A	21500	4 2.1.32	2: 3.4/3.8
LP# GG-1-LP-0	DP-C5101			A4.04	: 3.2/3.2
OBJ 7a; 11a	SRO TIER	2 GROUP	1 /	RO TIER	2 GROUP 1
REFERENCE:	04-1-01-C51-1 sect 3.5	NEV	W		
	04-1-02-1H13-P680-7A	-C11 MO	DIFIE	D	BANK
DIFF 1; M					
		RO	SRO	<u>BOTH</u>	CFR 41.5/41.6
REFERENCE N	IATERIAL REQUIRED:	NONE			

QUESTION 47

Which one of the following conditions will allow a start of a Recirculation Pump "A"?

A.	Steam Dome Pressure	950 psig
	Recirc Loop A Temperature	485 ?F
	Recirc Loop B Temperature	529 ?F
	Bottom Head Temperature	500 ?F
	Reactor Power	30 %
B.	Steam Dome Pressure	1014 psig
	Recirc Loop A Temperature	495 ?F
	Recirc Loop B Temperature	529 ?F
	Bottom Head Temperature	495 ?F
	Reactor Power	90 %
C.	Steam Dome Pressure	981 psig
	Recirc Loop A Temperature	499 ?F
	Recirc Loop B Temperature	529 ?F
	Bottom Head Temperature	500 ?F
	Reactor Power	60 %
D.	Steam Dome Pressure	960 psig
	Recirc Loop A Temperature	481 ?F
	Recirc Loop B Temperature	525 ?F
	Bottom Head Temperature	495 ?F
	Reactor Power	60 %

QUESTION	47		NRC R	ECORI)# WR	I 122
ANSWER:	C.	SYSTEM # B33;	B21 K/A 21	6000	K1.23	: 3.3/3.4
			20	02001	A4.01	: 3.7/3.7
LP# GLP-O	PS-B3300)				
OBJ. 26.3		SRO TIER 2 G	GROUP 1 /	RO TI	ER 2	GROUP 1
REFERENCI	E: 06-0	OP-1B33-V-0005	NEW			
	Da	ta Sheet IV sect. 5.4	MODIF	IED		BANK
DIFF 2; CA	A 04-1	1-01-B33-1 sect 3.3				NRC 3/1998
			RO SR	RO <u>BO</u>	TH	CFR 41.5
REFERENC	E MATEI	RIAL REQUIRED:	STEAM 7	TABLES	5	

QUESTION 48

RCIC was manually initiated for level control following a loss of feedwater.

Reactor level has risen to +55 inches.

Which one of the following describes the operation of RCIC?

- A. RCIC Injection Shutoff valve, E51-F013, will close and RCIC will operate on minimum flow. If Reactor water level drops to < 41.6 inches, the RCIC Injection Shutoff valve will re-open.
- B. RCIC Steam Supply to RCIC Turbine valve, E51-F045, will close securing RCIC. If Reactor water level drops to < - 41.6 inches the RCIC Steam Supply to RCIC Turbine valve will open and RCIC will re-inject into the Reactor.
- C. RCIC Turbine Trip/Throttle valve will close securing RCIC. RCIC will require a manual restart if further operation becomes necessary.
- D. RCIC Steam Supply to RCIC Turbine valve, E51-F045, will close securing RCIC. RCIC Injection Shutoff valve, E51-F013, will remain open. If Reactor water level drops to < - 41.6 inches the RCIC Steam Supply to RCIC Turbine valve will open and RCIC will re-inject into the Reactor.

QUESTION 48 NRC RECORD # WRI 328 ANSWER: B. SYSTEM # E51 K/A 217000 A1.01: 3.7/3.7 LP# GG-1-LP-OP-E5100 8c, i, k, 19 SRO TIER 2 GROUP 1/ RO TIER 2 GROUP 1 OBJ. **REFERENCE:** E-1185-02, 06, 15, 34, 35 NEW MODIFIED BANK DIFF 1; M NRC 12/2000 RO SRO BOTH CFR 41.5/41.7/41.10 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 49

A LOCA has occurred. High Pressure Core Spray is inoperable.

ADS Inhibit switches are in INHIBIT.

Drywell pressure is 1.05 psig and rising.

Reactor pressure is 890 psig and falling.

Reactor water level is – 155 inches and stable on wide range indication.

ALL systems are functioning as designed and CRD is maximized.

Which one of the following describes the operation of the Automatic Depressurization System (ADS) valves?

A. ADS valves can ONLY be opened using their handswitches.

- B. ADS will automatically initiate after the ADS 105 second timer has timed out.
- C. ADS can be manually initiated using the ADS Manual Initiation pushbuttons.
- D. ADS will automatically initiate after both the 9.2 minute and 105 second timers have timed out.

QUESTION	49		NRC	C RE	COR	D# W	/RI	620	
ANSWER: C.	SYSTE	M # E22-2	K/A	218	000	K4.	03:	3.8/4.0	
LP# GG-1-LP-	OP-E2202					K5.	01:	3.8/3.8	
OBJ. 15	SR	O TIER 2	GROUP	1 /	RO	TIER	2	GROUP	1
REFERENCE:	041-02-1H	1 3-P601	NEV	V					
	18A-B3, B4	, C2	MO	DIFI	ED			BANK	
DIFF 1, M	19A-B3, B4	, C2						NRC 12/	00
			RO	SRC) <u>B(</u>	<u>) TH</u>		CFR 41.7	7
REFERENCE N	MATERIAL RE	QUIRED:	None						

QUESTION 50

The plant is operating at 100% power steady state.

All power from offsite is lost.

All systems respond and function properly.

All plant parameters remain in their normal band.

Division 1 and 2 Load Shedding and Sequencing (LSS) functions properly.

Which of the following components is without power at this time?

A. Drywell Chillers A.

B. Division 1 Drywell Cooler Fans.

- C. Drywell Chillers B.
- D. Division 2 Drywell Cooler Fans.

QUESTION	50	NRC RECORD # W	VRI 528
ANSWER: A.	SYSTEM # M51	K/A 223001 K2	2.09: 2.7/2.9
		K	2.10: 2.7/2.9
LP# GG-1-LP-	OP-M5100	K	2.08: 2.7/3.0
OBJ. 7a&c 9a	SRO TIER 2 G	ROUP 1 / RO TIER 2 (GROUP 1
REFERENCE:	04-1-01-R21-1 Table 1	NEW	
	04-1-01-M51-1 Att III	MODIFIED	BANK
DIFF 2; CA	04-1-01-P72-1 Att II		NRC 6/2001
		RO SRO <u>BOTH</u>	CFR 41.7/41.8
REFERENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 51

An LOCA has occurred.

Reactor scram immediate actions are complete.

The following conditions exist:

Reactor water level	+ 20 inches after dropping to $-$ 32 inches
Reactor pressure	40 psig
Drywell pressure	1.5 psig

Which one of the following should be isolated?

A. Reactor Water Cleanup system

B. Reactor Sample Isolation valves

C. Reactor Core Isolation Cooling Vacuum Breaker valves

D. Main Steam Line Drain Isolation valves B21-F016 & F019

QUESTION	51	NRC RECORD) # WRI 385
ANSWER: C.	SYSTEM # E	51 K/A 223002	A2.09: 3.6/3.7
			2.4.4: 4.0/4.3
LP# GG-1-LP-	OP-E5100		2.4.21: 3.7/4.3
OBJ. 80	SRO TIER 2	2 GROUP 1 / RO TIE	R 2 GROUP 1
REFERENCE:	05-1-02-III-5 Group 9	• NEW	
		MODIFIED	BANK
DIFF 1; M			NRC 12/2000
		RO SRO <u>BO</u>	<i>CFR</i> 41.7/41.9
REFERENCE M	ATERIAL REQUIRED:	None	

QUESTION 52

The reactor has scrammed.

A loss of offsite power (LOP) and loss of coolant accident (LOCA) signal were received by LSS eight (8) hours ago.

The ESF buses were restored by their respective diesel generators.

When the handswitch for SRV B21-F051F was taken to OPEN, the valve did NOT change position.

Instrument air system header pressure and ADS receiver pressure indicates 0 psig.

Which one of the following correctly describes a method to allow further operation of this SRV?

- A. The SRV can be opened after installing nitrogen bottles in area 9, 139 ft elevation and pressurizing the ADS air header.
- B. The SRV can be opened by placing the 'A' solenoid (H13-P601) and 'B' solenoid (H13-P631) handswitches to OPEN.
- C. The SRV can be opened by placing the handswitch on Division I or II Remote Shutdown Panels to OPEN.
- D. Due to the loss of instrument air, this SRV will open only in the Safety function.

QUE	STION	[52			NRC	C REO	COR	D#WI	RI 337	
ANS	WER:	D.	:	SYSTEM #	E22-2	K/A	2390	002	K1.05	5: 3.1/3.	3
LP#	GG-1-1	LP-O	P E2202	2							
OBJ.	7;11	; 13;	19d; 28	SRO T	IER 2	GROUP	1 /	RO	TIER 2	GROU	U P 1
REFI	ERENC	E:	05-1-02	-V-9 sect 3.	.15	NEV	V				
			04-1-01	-B21-1		MO	DIFIE	D		BANK	
DIFF	^C 2; CA		Sect 4	1.2.2						NRC 1	12/2000
			M-1077	'C & E		RO	SRO	<u>BC</u>	DTH	CFR 4	1.3
REFI	ERENC	E MA	TERIA	L REQUIRI	ED:	None					

QUESTION 53

The plant is operating at 45% power.

An incident at the Front Standard of the Main Turbine resulted in a local manual trip of the Main Turbine.

Which one of the following describes the response of the plant?

- A. The reactor will scram on Turbine Valve fluid pressure and the Turbine Bypass Valves will open.
- B. The reactor will scram on high reactor flux and the Turbine Bypass Valves will open.
- C. The reactor will scram on Turbine Valve fluid pressure, the Turbine Bypass Valves will open, and 9 Safety Relief Valves will open.
- D. The reactor will scram on high reactor flux, the Turbine Bypass Valves will open, and Safety Relief Valves will open.

QUESTION	53	NRC RECORD # WR	RI 244
ANSWER: A.	SYSTEM # N32; C71	K/A 241000 K6.11	: 3.4/3.4
		A1.01	: 3.9/3.8
		A1.02	: 4.1/3.9
LP# GLP-OP-C7	/100	A1.07	': 3.8/3.7
OBJ. 9, 10; 23	SRO TIER 2 GH	ROUP 1 / RO TIER 2	GROUP 1
REFERENCE:	FSAR Table 15.2-4	NEW	
	Tech Spec 3.3.1.1 & bases	MODIFIED	<u>BANK</u>
DIFF 2; CA	FSAR Table 15.2-2		NRC 4/2000
		RO SRO <u>Both</u>	CFR 41.5
REFERENCE MA	ATERIAL REQUIRED:	None	

QUESTION 54

Which one of the following signals will cause a SBGT system 'A' initiation?

- A. Fuel handling area exhaust rad monitor 'A' indicating 4.2 mRem/hr. Fuel handling area exhaust rad monitor 'D' mode switch NOT in operate.
- B. Fuel pool sweep exhaust rad monitor 'A' indicating 32 mRem/hr. Fuel pool sweep exhaust rad monitor 'C' indicating 34 mRem/hr.
- C. Fuel handling area exhaust rad monitor 'B' indicating 5.3 mRem/hr. Fuel handling area exhaust rad monitor 'C' inop trip.
- D. Fuel pool sweep exhaust rad monitor 'A' indicating 31 mRem/hr. Fuel pool sweep exhaust rad monitor 'C' inop trip.

QUESTION	54	NRC RECORD # W	RI 621
ANSWER: A.	SYSTEM # T48;	K/A 261000 K4.0	1: 3.7/3.8
	D17; T42		
LP# GG-1-LP-C	DP-T4801		
OBJ. 8f	SRO TIER 2	GROUP 1 / RO TIER 2	2 GROUP 1
REFERENCE:	04-1-02-1H13-P870 2A-A	3 NEW	
	04-1-02-1H13-P601	<u>MODIFIED</u>	BANK
DIFF 1, M	19A-B9	LOT 9/99 ESF	
,	TRM table 3.3.6.2-1	RO SRO <u>BOTH</u>	CFR 41.7/41.11
REFERENCE M	ATERIAL REQUIRED:	None	

QUESTION 55

A plant startup is in progress.

The Operator at the Controls has just shifted the 'A' Recirculation Pump to fast speed. The 'B' Recirculation pump is running in slow speed with its flow control valve at 100% open.

Immediately after the pump up-shift, the following indications were received in the Main Control Room:

Reactor Power 34 % and stable. Reactor level dropped to + 32 inches. Annunciator RECIRC FCV A PARTIAL CLOSE/ RFP TRIP (P680-3A-D1) is illuminated.

Which one of the following would be the expected response of the Recirculation System? (No other alarms or indicating lights have been received.)

- A. The 'A' Recirc Flow Control Valve will remain at present position and will require resetting via the RECIRC PUMP A CAV INTLK RESET pushbutton.
- B. The 'A' Recirc Flow Control Valve Hydraulic Power Unit will require resetting from the Control Room Back Panels and then the valve opened to 15 20 % valve position.
- C. The 'A' Recirc Flow Control Valve runback to 0 % valve position and 'B' Recirc Flow Control valve will runback to 15 20 % valve position and then both valves will be reset via the RECIRC PUMP A CAV INTLK RESET pushbutton.
- D. The 'A' Recirc Flow Control Valve will remain at present position and 'B' Recirc Flow Control Valve will runback to 15 20 % valve position and then both valves will be reset via the RECIRC PUMP A CAV INTLK RESET pushbutton

QUESTION 5	55	NRC RECORD # V	VRI 235
ANSWER: A.	SYSTEM # B33	K/A 202002 A3.	01: 3.6/3.4
LP# GLP-OPS-B	3300		
OBJ. 20, 24, 50	SRO TIER 2	GROUP 1 / RO TIER	2 GROUP 1
REFERENCE:	04-1-02-H13-P680	NEW	
	3A-D1	MODIFIED	BANK
DIFF 1; M	04-1-01-B33-1 section 6.	6	NRC 4/2000
		RO SRO <u>BOTH</u>	CFR 41.6
REFERENCE MA	TERIAL REQUIRED:	None	

QUESTION 56

The plant was operating at full power when a leak on the RFPT 'A' lube oil reservoir resulted in a trip of both AC RFPT Lube Oil Pumps.

The ACRO noted bearing oil pressure at 2 psig.

Which one of the following describes the response of the Feedwater System and the ability to inject water to the Reactor?

- A. RFPT 'A' will continue to operate using the Emergency RFPT Lube Oil Pump. Reactor water level will continue to be maintained by Feedwater.
- B. RFPT 'A' will trip and isolate the RFPT and power will be reduced with Recirc to within the capabilities of RFPT 'B' allowing reactor level to be recovered to close to normal levels.
- C. RFPT 'A' will trip and isolate feedwater to the reactor vessel resulting in a lowering reactor water level and eventual reactor scram. Water level must be recovered using ECCS and RCIC.
- D. RFPT 'A' will trip and power will be reduced with Recirc to within the capabilities of RFPT 'B' with level being maintained at 18 inches until the Digital Feedwater Control System can be restored to three element control.

QUESTION	56	NRC RECORD #	# WRI 622
ANSWER: B.	SYSTEM # N21; I	33 K/A 259001	A2.01: 3.7/3.7
			K1.11: 2.7/2.7
			K4.06: 2.5/2.6
LP# GG-1-LP-C	DP-N2100		K6.09: 2.8/2.9
OBJ. 12; 14; 1	16; 37		
LP# GLP-OPS-	B3300		
OBJ. 24.1; 24	.2; 47 SRO TIER 2	GROUP 2 / RO T	IER 2 GROUP 1
REFERENCE:	04-1-02-1H13-P680	<u>NEW</u>	
	2A-A2, B1, B2; 3A-A3	MODIFIED	BANK
DIFF 2; CA	04-1-01-N21-1 sect 3.7		
·		RO SRO <u>BOT</u>	<i>H</i> CFR 41.4
REFERENCE M	ATERIAL REQUIRED:	None	—

QUESTION 57

The plant was operating at full power.

The variable leg of the transmitters off of D004C Condensing pot has broken and drained the water from the associated level transmitters.

The Digital Feed Control System was aligned for normal operations.

Which one of the following describes the response of the Digital Feed Control System (DFCS) and actual Reactor Water Level?

- A. Reactor water level will drop initially then is restored when DFCS automatically transfers from Three Element Control to Single Element Control.
- B. Reactor water level will drop initially then is restored when the DFCS automatically deselects C Narrow Range and is replaced with Upset Range for level control.
- C. Reactor water level will rise initially then is restored when the DFCS automatically deselects C Narrow Range and is replaced with Upset Range for level control.
- D. Reactor water level will remain stable and the DFCS automatically deselects C Narrow Range and is replaced with Upset Range for level control.

QUESTION	57	NRC	RECO	ORD # WRI	623
ANSWER: D.	SYSTEM # N21;	K/A	259002	2 K1.03:	3.8/3.9
	C34; B21				
LP# GG-1-LP-OP	-C3401				
OBJ. 3f; 22; 25					
LP# GLP-OPS-B2	2101				
OBJ. 8.1; 8.4; 20	SRO TIER 2	GROU	P1/	RO TIER	2 GROUP 1
REFERENCE:	04-1-02-1H13-P680	<u>NEW</u>			
	2A-C9	MOD	IFIED		BANK
DIFF 2; CA					
		RO	SRO	<u>BOTH</u>	CFR 41.4/41.7
REFERENCE MAT	FERIAL REQUIRED:	None			

QUESTION 58

The Electrical line up is normal.

A LOCA condition has caused Drywell Pressure to rise to 1.6 psig.

A switching error causes 500 kV voltage to drop.

The voltage to ALL ESF busses drops to 3290 volts.

The voltage transient duration is 10 seconds and then voltage returns to normal.

Which one of the following statements is the condition of the ESF busses after this voltage transient?

- A. 15AA is being supplied from ESF 11 16AB is being supplied from ESF 21 17AC is being supplied from ESF 21
- B. 15AA is being supplied from Div I D/G
 16AB is being supplied from Div II D/G
 17AC is being supplied from Div III D/G
- C. 15AA is being supplied from ESF 11 16AB is being supplied from ESF 21 17AC is being supplied from Div III D/G
- D. 15AA is being supplied from Div I D/G 16AB is being supplied from Div II D/G 17AC is being supplied from ESF 21

QUESTION	58	NRC RECORD	# WRI 11
ANSWER: B.	SYSTEM # R21	K/A 264000	2.4.4: 4.0/4.3
LP# GG-1-LP-	OP-R2100		K4.05: 3.2/3.2
			A3.05: 3.4/3.4
OBJ. 12; 20; 22	; 37 SRO TIER 2 G	ROUP 1 / ROTI	ER 2 GROUP 1
REFERENCE:	04-1-01-R21-1 sect 5.1.1a	NEW	
	04-1-01-P81-1 sect 3.22	MODIFIED	BANK
DIFF 2; CA			NRC 6/2001
		RO SRO <u>BOT</u>	<u>H</u> CFR 41.8
REFERENCE M	ATERIAL REOUIRED:	NONE	

QUESTION 59

Select the statement that describes the MOST probable cause of the following plant conditions:

Annunciator "RECIRC PMP B SEAL STG FLO HI/LO" alarms.

Annunciator "RECIRC PMP B OUTR SEAL LEAK HI" alarms.

Recirc pump 'B' # 1 seal cavity pressure: 1020 psig.

Recirc pump 'B' # 2 seal cavity pressure: 100 psig

- A. Failure of the # 1 seal.
- B. Failure of the # 2 seal.
- C. Failure of the CRD seal purge regulator.
- D. Plugging of the orifice between # 1 and # 2 seals.

QUESTION	59	NRC RECORD # W	VRI 540
ANSWER: B.	SYSTEM # B33	K/A 202001 A2	2.10: 3.5/3.9
LP# GLP-OPS	-B3300	A	1.09: 3.3/3.3
		A	1.10: 2.6/2.7
OBJ. 29.4	SRO TIER 2 G	ROUP 2 / RO TIER 2 (GROUP 2
REFERENCE:	04-1-02-1H13-P680	NEW	
	3A-A12 & 3A-B11	MODIFIED	BANK
DIFF 2; CA			NRC 6/2001
		RO SRO <u>BOTH</u>	CFR 41.3/41.5
REFERENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 60

The plant is in a refuel outage.

Reactor Water Clean-Up (RWCU) is operating.

Residual Heat Removal (RHR) B is in Shutdown Cooling.

E12-F048B RHR B Heat Exchanger Bypass valve is FULL OPEN.

E12-F003B RHR B Heat Exchanger Outlet valve is FULL CLOSED.

Which of the following would be a valid indication of Reactor Coolant Temperature under present plant conditions?

P & IDs M-1079 and M-1085A are provided.

A. RHR B heat exchanger B001B inlet temperature E12 TE-N004B

B. RHR B heat exchanger B002B inlet temperature E12 TE-N002B.

- C. RHR B heat exchanger discharge temperature E12 TE-N027B.
- D. RWCU Non-Regen heat exchanger inlet temperature G33 TE-N006.

QUESTION	60	/RI 541	
ANSWER: C.	SYSTEM # E12	K/A 205000 K1	.03: 3.4/3.5
LP# GLP-OPS	-E1200		
OBJ. 14	SRO TIER 2 G	GROUP 2/ ROTIER 2 G	GROUP 2
REFERENCE:	04-1-01-E12-1	NEW	
	sect 4.2.2.e.13 Caution	MODIFIED	BANK
DIFF 2; CA	P&ID M1085A		NRC 6/2001
	M-1079	RO SRO <u>BOTH</u>	CFR 41.2/41.3/41.4
REFERENCE M	IATERIAL REQUIRED:	M-1079 & M-1085A	41.5

QUESTION 61

Suppression Pool Cooling is in service to support a RCIC surveillance.

Which of the following statements accurately depicts the required operation of E12-F003A(B), RHR Heat Exchanger Outlet Valve, and E12-F048A(B), RHR Heat Exchanger Bypass Valve, while in Suppression Pool cooling?

- A. Maintain flow greater than 4000 gpm. If the F048A(B) is not full OPEN, avoid using F003A(B) to throttle flow for extended periods (30 minutes) in the 0% to 15% open range.
- B. Maintain flow greater than 4000 gpm. If the F048A(B) is not full CLOSED, avoid using F003A(B) to throttle flow for extended periods (60 minutes) in the 0% to 15% open range.
- C. Maintain heat exchanger flow less than 8600 gpm. If the F048A(B) is not full OPEN, avoid using F003A(B) to throttle flow for extended periods (30 minutes) in the 0% to 15% open range.
- D. Maintain heat exchanger flow less than 8600 gpm. If the F048A(B) is not full CLOSED, avoid using F003A(B) to throttle flow for extended periods (60 minutes) in the 0% to 15% open range.

QUESTION	61	NRC RECORD # V	VRI 624
ANSWER: A.	SYSTEM # E12	K/A 219000 K5.	04: 2.9/2.9
LP# GLP-OPS-H	E1200	2.1.	32: 3.4/3.8
OBJ. 14.1	SRO TIER 2	GROUP 2 / RO TI	ER 2 GROUP 2
REFERENCE:	04-1-01-E12-1	NEW	
	sect 3.2.3; 3.6.3b;	MODIFIED	<u>BANK</u>
DIFF 1; M	5.2.2a(5) Caution		NRC 12/00 id 282
		RO SRO <u>BOTH</u>	CFR 41.7
REFERENCE M.	ATERIAL REQUIRED:	None	

QUESTION 62

In which one of the following situations would containment spray be in service?

A. 5 minutes since LOCA signal received Reactor water level - 192 inches RHR A and B pumps operating on minimum flow Drywell pressure 2 psig CTMT pressure 9 psig B. 12 minutes since LOCA signal received Reactor water level - 192 inches RHR A and B pumps operating on minimum flow Drywell pressure 0.7 psig CTMT pressure 8 psig C. 13 minutes since LOCA signal received Reactor water level - 92 inches RHR A and B pumps were overridden off 2 min. after LOCA Drywell pressure 5 psig CTMT pressure 4 psig D. 15 minutes since LOCA signal received - 92 inches Reactor water level RHR A and B pumps were overridden off 2 min. after LOCA Drywell pressure 3 psig CTMT pressure 8 psig QUESTION 62 NRC RECORD # WRI 625 ANSWER: D. SYSTEM # E12 K/A 226001 A3.07: 3.5/3.5 LP# GLP-OPS-E1200 A3.01: 3.0/3.0 **OBJ.** 10.1; 11.2 SRO TIER 2 GROUP 1 / RO TIER 2 GROUP 2 **REFERENCE:** 04-1-01-E12-1 sect 3.3 NEW 04-1-02-1H13-P601 **MODIFIED** BANK DIFF 1; M LOT 7/95 17A-F3; 20A-B6 RO SRO <u>BOTH</u> CFR 41.7/41.8 **REFERENCE MATERIAL REQUIRED:** None

QUESTION 63

GGNS Main Generator has a limit to carry no more than ? 250 MVARs.

What is the basis for this limitation?

- A. This is the Maximum reactive load allowed by the manufacturer due to the heat build up in the stator windings at full power.
- B. GGNS is a base load station such that Entergy dispatchers are required to minimize the reactive load carried on the Main Generator.
- C. GGNS Main Generator reverse power relays will not recognize a reverse power condition at high reactive load and will not provide the required trip.
- D. The Generator V-Curves supplied by the manufacturer limit the power factor on the generator to reduce hysteresis losses.

QUESTION 63		NRC RECORD # W	VRI 44
ANSWER: C.	SYSTEM # N41	K/A 245000 A4.	14: 2.5/2.5
		A3.	10: 2.5/2.6
LP# GG-1-LP-O	P-N4151	K4.	06: 2.7/2.8
OBJ 7; 13	SRO TIER 2 GR	OUP 2 / RO TIER 2	GROUP 2
REFERENCE:	04-1-01-N40-1 sect. 3.8	NEW	
		MODIFIED	<u>BANK</u>
DIFF 1; M			NRC 3/1998
		RO SRO <u>BOTH</u>	CFR 41.4/41.10/43.5
REFERENCE M	ATERIAL REQUIRED:	NONE	

QUESTION 64

The plant is operating normally at full power rated conditions.

A rupture of tubes in the 3A Low Pressure Feedwater Heater resulted in an automatic isolation of the Feedwater Heater String.

Which one of the following describes the limitations on plant operations?

- A. Power is limited to a maximum of 50% rated thermal power utilizing Condensate and Heater Drain pumps to a limit of 250 psid differential pressure across the LP Feedwater Heaters due to 1/3 Condensate System capacity.
- B. Power is limited to a maximum of 75% rated thermal power without restrictions on the use of Condensate and Heater Drain pumps.
- C. Power is limited to a maximum of 100% rated thermal power without restrictions on the use of Condensate and Heater Drain pumps opening the LP Feedwater Heater Bypass valve as necessary to reduce differential pressure.
- D. Power is limited as necessary to maintain the turbine parameters within limits without restrictions on the operation of the Condensate and Heater Drain Pumps.

QUESTION	64	NRC RECOR	D#WRI 294
ANSWER: D.	SYSTEM # N23; N19	K/A 256000	A3.07: 2.9/2.9
			A3.04: 3.0/3.0
			A3.01: 2.7/2.7
LP# GLP-OPS-	N2335		A2.08: 3.1/3.1
OBJ. 15	SRO TIER 2 GRO	UP 3 / RO TI	ER 2 GROUP 2
REFERENCE:	04-1-01-N23-1 sect 3.10	NEW	
	03-1-01-2 sect 2.10.2	MODIFIED	BANK
DIFF 1; M			NRC 4/2000
		RO SRO <u>BO</u>	DTH CFR 41.4
REFERENCE M	MATERIAL REQUIRED:	None	

QUESTION 65

Bus 16AB has experienced an undervoltage condition.

Diesel Generator 12 failed to start.

Power to bus 16AB has been restored by the Control Room Operator from transformer ESF 11.

Reactor water level and pressure are stable.

Which one of the following is the type of load sequencing that will take place?

A. Bus Undervoltage Sequence

- B. Loss of Offsite Power Sequence
- C. Loss of Coolant Accident Sequence

D. Bus Undervoltage Sequence following automatic source selection

QUESTION		65			NRC	C REC	OR	RD # WRI	62	6
ANSWER:	A.		SYSTEM #	R21	K/A	26200	01	A3.04:	3.4	/3.6
LP# GG-1-I	LP-OP	-R21	00							
OBJ. 15; 1	l 6; 17;	18	SRC) TIER 2	GROU	J P 1	/	RO TIER	2	GROUP 2
REFERENC	E:	E-10.	39		NEW	V				
					MOL	DIFIE	<u>D</u>		BA	NK
DIFF 1; M					LOI	8/02				
					RO	SRO	B	<u>OTH</u>	CF	R 41.4/41.7
REFERENC	E MA	TER	IAL REQUI	RED:	None					

QUESTION 66

Static inverter 1Y95 has automatically transferred to its alternate power source because of a fault on its normal power source.

Two hours later, the electricians have repaired the fault and the normal power source for 1Y95 is re-energized.

Which one of the following statements describes the restoration of the inverter to its NORMAL source?

- A. The inverter static switch can be manually transferred back to the normal power source, only if the power sources are IN SYNC.
- B. The inverter static switch will automatically transfer back to the normal power source, only if the power sources are IN SYNC.
- C. The inverter static switch will automatically transfer back to the normal power source, regardless of whether the power sources are IN SYNC.
- D. The inverter static switch can be manually transferred back to the normal power source, regardless of whether the power sources are IN SYNC.

QUESTION ANSWER: A.	66 SYSTEM # L62 DP-1 6200	NRC RECORD # W K/A 262002 A3.0	/RI 544 01: 2.8/3.1
OBJ. 4b: 10a	SRO TIER 2 G	ROUP 2 / ROTIER 2	GROUP 2
REFERENCE:	04-1-01-L62-1	NEW	
	sect 3.2 & 3.5	MODIFIED	BANK
DIFF 1; M			NRC 6/2001
,		RO SRO <u>Both</u>	CFR 41.7/41.10/43.5
REFERENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 67

The plant was operating at 100 % power when Control Room Operators rapidly reduced power due to changes in feedwater heating.

Annunciator "MSL RAD HI" was received.

No other radiation alarms were received and indications on the Main Steam Line Radiation Monitors are elevated.

All other radiation levels have dropped from previous readings.

Which one of the following is the most likely cause of these conditions?

- A. Fuel cladding failure
- B. Resin intrusion into the reactor
- C. Hydrogen water chemistry is in service
- D. Release of crud containing Co-60 into the reactor

QUESTION	67	NRC RECOR	2D # WRI 627
ANSWER: C.	SYSTEM # P73;	D17 K/A 272000	A1.01: 3.2/3.2
LP# GG-1-LP-O	P-P7300		
OBJ. 8	SRO TIE	R 2 GROUP 2 /	RO TIER 2 GROUP 2
REFERENCE:	04-1-02-1H13-P601	<u>NEW</u>	
	19A-D4; 18A-D4	MODIFIED	BANK
DIFF 1; M			
		RO SRO <u>B</u>	OTH CFR 41.10/41.11
REFERENCE MA	ATERIAL REQUIRED:	None	43.4/43.5

QUESTION 68

The Plant is operating at 100 % power.

The Motor Driven Fire pump is out of service.

A fire in Transformer ESF 12 has initiated the Deluge system for the transformer.

The A Diesel Driven Fire Pump received a signal to start.

Which one of the following describes the starting limitations of the Diesel Driven Fire Pump?

- A. The diesel engine will attempt to start for 15 minutes. If the diesel does not start it alarms in the Control Room, and it must be reset from the Control Room before it will attempt to start again.
- B. The diesel engine will attempt to start for 15 seconds, then wait for 15 seconds. It will attempt this start sequence for 6 attempts. After that, it must manually be reset before any further start attempts occur.
- C. The diesel engine will attempt to start for 15 seconds then wait for 15 minutes to allow the battery to recharge, then it will attempt this cycle again. After that it must manually be reset before any further start attempts occur.
- D. The diesel engine will attempt to start as long as air pressure is > 60 psig. After that, the air bank must recharge before additional start attempts can occur.

QUESTION	68			NRO	C REC	CORD	# WI	RI 3	
ANSWER:	В.	SYSTEM #	P64	K/A	2860	00	A2.08	8: 3.2/3.3	
							K5.05	5: 3.0/3.1	
							K4.0′	7: 3.3/3.3	
							A3.01	1: 3.4/3.4	
LP# GG-1-I	P-OP-F	P6400					A4.00	5: 3.4/3.4	
OBJ. 6d		SRO TIER	2 GRO	UP 2	/ R	O TIE	R 2	GROUP	2
REFERENC	E: A	RI 04-S-02-SH1	3-P862	NEV	V				
	1	A-B3; 1A-B5		MOI	DIFIE	D		BANK	
DIFF 1; M	S	ect. 1.2; 2.1; &	4.5					NRC 3/1	1998
				RO	SRO	<u>BOT</u>	H	CFR 41.	.4
REFERENC	E MATI	ERIAL REQUIE	RED:	NONE	l.				

QUESTION 69

A station blackout has occurred.

A fire has broken out in the Division II ESF Switchgear Room on 119 ft elevation area 10.

Which one of the following describes the ability to combat the fire?

- A. Fire fighting will be limited to the use of portable fire extinguishers.
- B. The CO2 fire suppression system can be overridden open and the Auxiliary Building Isolation Valves opened using the AUX BLDG ISO BYPASS Switch.
- C. The Fire Water System Auxiliary Building Isolation Valves can be opened using the AUX BLDG ISO BYPASS Switch to provide fire water to hoses.
- D. The Fire Water System Auxiliary Building Isolation Valves can be bypassed by manually opening the motor operated bypass valves.

QUESTION	69		NRC RECOR	RD # WRI	264
ANSWER: D.	SYSTEM	1 # T10;	K/A 290001	K6.09:	3.4/3.6
	P64; M7	'1; R21		A2.06:	3.7/4.0
LP# GG-1-LP-	OP-M7101		286000	A2.09:	2.7/2.8
OBJ. 8a; 10;	16d,e,f; 20; 29	SRO TIER 2	GROUP 1 /	RO TIER	2 GROUP 2
REFERENCE:	05-1-02-V-9		NEW		
	Sect 3.19 & 5	5.46	MODIFIED		BANK
DIFF 2; CA	05-1-02-III-5				NRC 4/2000
	sect 3.4.4				
	M-0035E		RO SRO <u>B</u>	<u>OTH</u>	CFR 41.9
REFERENCE I	MATERIAL REQ	UIRED:	None		

QUESTION 70

An accident has occurred and a radiological release is in progress.

RCIC was manually initiated to maintain reactor water level.

The Main Steam failed to completely isolate upon a manual isolation when a steam leak was reported in the Turbine Building.

Annunciator "CONT RM VENT RAD HI" has been received.

There are various Turbine Building radiation alarms.

No other radiation alarms were received.

Which one of the following describes the response of the Control Room HVAC System (Z51)?

(ASSUME NO OPERATOR ACTIONS)

- A. Control Room HVAC is operating in a normal configuration.
- B. Control Room HVAC has isolated and the Control Room Standby Fresh Air Unit associated with the in service Control Room Air Conditioning Unit will automatically start.
- C. Both Control Room Standby Fresh Air Units will automatically start to filter Control Room air with the remaining Control Room HVAC components continuing to operate as normal.
- D. Control Room HVAC will isolate and both Control Room Standby Fresh Air Units will initiate to filter Control Room air with the in service Control Room Air Conditioning Unit remaining in operation.

QUESTION	70	NRC RECORD # WR	I 628
ANSWER: A.	SYSTEM # Z51; D1 '	7 K/A 290003 A1.05	: 3.2/3.3
LP# GG-1-LP-O	P-Z5100		
OBJ. 8; 9; 11	SRO TIER 2	GROUP 2 / RO TIER	R 2 GROUP 2
REFERENCE:	04-1-02-1H13-P601	<u>NEW</u>	
	<u><i>19A-A9</i>;</u> A10; A11	MODIFIED	BANK
DIFF 2; CA	04-S-02-SH13-P855		
	1A-A5; 2A-A5	RO SRO <u>BOTH</u>	CFR 41.7/41.11/43.4
	TRM Table 6.3.1-1		
REFERENCE MA	ATERIAL REQUIRED:	None	

QUESTION 71

The operating Instrument Air Compressor has tripped.

The Standby Instrument Air Compressor fails to start.

Which one of the following describes the response of the Instrument/Plant/Service Air Systems?

- A. Instrument Air pressure will continue to drop until an operator manually cross ties Service Air to the Instrument Air header down stream of the Instrument Air Dryers.
- B. Instrument Air pressure will continue to drop until an operator manually cross ties Service Air to the Instrument Air header up stream of the Instrument Air Dryers.
- C. Instrument Air pressure will continue to drop until the Service to Instrument Air cross tie automatically opens to connect to the Instrument Air header down stream of the Instrument Air Dryers.
- D. Instrument Air pressure will continue to drop until the Service to Instrument Air cross tie automatically opens to connect to the Instrument Air header up stream of the Instrument Air Dryers.

QUESTION	71	NRC RECORD # W	RI 629
ANSWER: D.	SYSTEM # P51;	K/A 300000 K4.0	2: 3.0/3.0
	P52; P53		
LP# GG-1-LP-0	OP-P5200		
OBJ. 3; 4			
LP# GLP-OPS-	·P5300		
OBJ. 3; 4	SRO TIER 2	2 GROUP 2 / RO TIE	R 2 GROUP 2
REFERENCE:	05-1-02-V-9 sect 3.1.1	<u>NEW</u>	
	M-1067A	MODIFIED	BANK
DIFF 1; M	M-1068D		
	M-1126	RO SRO <u>Both</u>	CFR 41.4/41.10/43.5
REFERENCE M	IATERIAL REQUIRED:	None	

QUESTION 72

The plant is operating in the normal electrical lineup.

CCW pumps "A" and "C" are operating with "B" selected for STANDBY.

A Loss of Coolant Accident occurs resulting in a shedding of loads.

The "C" CCW pump trips on overcurrent.

Which of the following describes the resulting status of the CCW system?

(Assume NO operator action.)

A. Pump "A" operating; Pump "B" operating; Pump "C" tripped

- B. Pump "A" operating; Pump "B" not operating; Pump "C" tripped
- C. Pump "A" not operating; Pump "B" operating; Pump "C" tripped
- D. Pump "A" not operating; Pump "B" not operating; Pump "C" tripped

NRC RECORD # WRI 105 **OUESTION** 72 ANSWER: B. SYSTEM # P42 K/A 400000 K4.01: 3.4/3.9 LP# GG-1-LP-OP-P4200 SRO TIER 2 GROUP 2 / RO TIER 2 GROUP 2 **OBJ** 5; 7a; 11h; 23 **REFERENCE:** 04-1-01-R21-1 Table 1 NEW MODIFIED BANK NRC 3/1998 DIFF 1; M RO SRO <u>BOTH</u> **CFR 41.4 REFERENCE MATERIAL REQUIRED:** NONE

QUESTION 73

Radwaste is discharging the Floor Drain Sample Tank to the River.

Which one of the following would result in an isolation of the G17-F355 Liquid Radwaste Discharge Isolation Valve?

- A. The Floor Drain Sample Pump discharge pressure is too low.
- B. The blow down flow rate is too low.
- C. The discharge flow rate is too low.
- D. The effluent radiation monitor high radiation setpoint is reached.

QUESTION	73	NRC RECORD # W	RI 110
ANSWER: B.	SYSTEM # G17	K/A 268000 A1.0	2: 2.6/3.6
LP# GG-1-LP-OI	P-G1718		
OBJ 6a, 7h, l	SRO TIER 2 GR	OUP 3 / RO TIER 2	GROUP 3
REFERENCE:	ARI 04-1-02-H13-P601	NEW	
	19А-Н7; 19А-Н8	MODIFIED	BANK
DIFF 1; M	ARI 04-1-02-H13-P870		NRC 3/1998
	6A-F3	RO SRO <u>BOTH</u>	CFR 41.13/43.4
REFERENCE MA	ATERIAL REQUIRED:	NONE	

QUESTION 74

A rise in Fuel Handling Area Exhaust Radiation levels have resulted in an actuation of Standby Gas Treatment. Standby Gas Treatment 'A' and 'B' initiated, but Standby Gas Treatment 'B' Exhaust and Enclosure Building fans failed to start.

Which of the following identifies the condition of the Auxiliary Building Ventilation System?

- A. All fan coil units operating, Div I and Div II Secondary Containment Isolation dampers open.
- B. All fan coil units shutdown, the Division I Secondary Containment Isolation dampers closed.
- C. All fan coil units shutdown, Div I and Div II Secondary Containment Isolation dampers closed.
- D. Div I fan coil units shutdown, the Division I Secondary Containment Isolation dampers closed.

QUESTION	74	NRC RECORD # WRI	630
ANSWER: C.	SYSTEM # T41;	K/A 288000 K1.05:	3.3/3.6
	D17; T48	K1.02:	3.4/3.4
LP# GG-1-LP-OP	-T4100		
OBJ. 7; 9; 10; 11	SRO TIER 2	GROUP 3 / RO TIER	2 GROUP 3
REFERENCE:	05-1-02-III-5 Check list	NEW	
	E-1257-01	<u>MODIFIED</u>	BANK
DIFF 2; CA	E-1253-01, 02, 06, 07, 12	LOT 9/99 Vent	
		RO SRO <u>BOTH</u>	CFR 41.7/41.11
REFERENCE MA	TERIAL REQUIRED:	None	

QUESTION 75

The plant is operating at rated conditions.

The following are the parameters taken from the recent Mon Edit.

MFLCPR	0.94
MAPRAT	1.02
MFLPD	0.96
FDLRX	0.92
FCBB	2.42

Which of the following identifies the consequences of continued operation with thermal limits at the present values?

- A. Fuel cladding could exhibit in excess of 1% plastic strain during a LOCA.
- B. Possible peak cladding temperatures in excess of 2200°F during a DBA LOCA.
- C. There is a possibility of the onset of transition boiling in greater than 0.1 % of the fuel rods.
- D. The core may become unstable during operation in the Restricted Region of the Power to Flow Map.

QUESTION	75	NRC RECORD # W	VRI 631
ANSWER: B.	SYSTEM # B21;	K/A 290002 A2.	05: 3.7/4.2
	Thermal Limits	К5.	01: 3.5/3.9
LP# General Phys	sics HTFF		
Chapter 9 Therma	al Limits		
OBJ. 9; 10	SRO TIER 2	GROUP 3 / RO TI	ER 2 GROUP 3
REFERENCE:	Tech Spec Bases	<u>NEW</u>	
	3.2.1; 3.2.2; 3.2.3; 3.2.4	MODIFIED	BANK
DIFF 2; CA	10CFR50.46(b)(1)		
		RO SRO <u>BOTH</u>	CFR 41.3/41.14/43.2
REFERENCE MA	TERIAL REQUIRED:	None	

QUESTION 76

The Control Room has been abandoned due to a fire.

Prior to leaving the Control Room, the reactor mode switch was placed in the SHUTDOWN position.

When attempting to place RHR 'A' in shutdown cooling, RHR 'A' shutdown cooling suction valve E12-F009 failed to open.

The SRO has elected to use LPCI 'A' as an alternate means of shutdown cooling and has directed opening of breakers 52-1C71105 (CB5A), 52-1C71107 (CB7A), 52-1C71205 (CB5B), and 52-1C71207 (CB7B).

Which one of the following describes the effect of opening the above breakers?

Opening all four breakers will:

- A. result in a closure of all MSIV's.
- B. result in a reactor scram that is unable to be reset.
- C. result in a complete Auxiliary Building and Containment isolation.
- D. remove all interlocks associated with the LPCI 'A' injection valve (E12-F042A).

QUESTION	76 SRO	NRC RECORD #	# WRI 701
ANSWER: A	A. SYSTEM # C61;	K/A 239001	K2.01: 3.3
	ONEP	295016	AA1.04: 3.2
LP# GG-1-LP	-OP-B1300		
OBJ. 11a	SRO TIER 1 GI	ROUP 1 / RO TIER	GROUP
REFERENCE:	05-1-02-II-1 (B) 3.15 No	ote NEW	
		MODIFIED	BANK
DIFF 1; M		NRC 3/1998	
		RO <u>SRO</u> BOT	H CFR41.7/41.10/43.5
REFERENCE	MATERIAL REQUIRED:	NONE	

QUESTION 77

Which one of the following work practices is NOT required to verify the proper grappling of an irradiated fuel assembly with the Fuel Handling Platform, prior to raising the hoist?

- A. Attempt to rotate the mast.
- B. Attempt to disengage the grapple.
- C. Visually observe that the channel fastener is visible, if possible.
- D. Obtain independent verification that the fuel assembly is correctly grappled.

QUESTION	77	SRO	NRC RECORD # WRI 187	
ANSWER:	B.	SYSTEM # F1	11 K/A 295023	AA1.03: 3.6
LP# GG-1-I	LP-RF	F-F1108		
OBJ.	5c			
LP# GG-1-I	LP-RF	-F1107		
OBJ.	1	SRO TIER	1 GROUP 1 / RO TIER	GROUP
REFERENC	E: 0	4-1-01-F11-1	NEW	
		Sect 4.5.2 Caution	MODIFIED	BANK
DIFF 1; M	(Operations Expectation	n 9	NRC 6/2001
	(GE RICSIL 036	RO <u>SRO</u> BOTH	CFR 41.2/41.6/43.6
REFERENC	E MA'	FERIAL REQUIRED:	None	43.7

QUESTION 78

Which one of the following is the basis for Hydrogen Control of the Emergency Procedures during accidents in a Mark III Containment?

Ignition of excess Hydrogen when mixed with sufficient concentrations of Oxygen in a confined space could result in:

- A. peak pressures in excess of either Drywell structural capability <u>or</u> Drywell-to-Containment differential pressure.
- B. peak pressures in excess of either Containment structural capability <u>or</u> Drywell-to-Containment differential pressure.
- C. peak pressures in excess of either Drywell structural capability <u>or</u> Drywell pressurization rates.
- D. peak pressures in excess of either Drywell-to-Containment differential pressure <u>or</u> Drywell pressurization rates.

QUESTION	78 SRO	NRC RECORI	D# WRI 505
ANSWER: B.	SYSTEM # EP Bases	K/A 500000	EK1.01: 3.9
LP# GG-1-LP-	RO-EP03		2.4.18: 3.6
OBJ. 6	SRO TIER 1 GROUP	1 / RO TIER	GROUP
REFERENCE:	GGNS PSTG Appendix B	NEW	
	PC/G Combustible Gas Conc.	<u>MODIFIED</u>	BANK
DIFF 1; M		NRC 6/2001	
		RO <u>SRO</u> BO	ГН СFR 41.10/43.5
REFERENCE M	IATERIAL REQUIRED: No	one	

QUESTION 79

A station blackout has occurred and the Baxter Wilson and Franklin Transmission lines are out of service. Bus 17AC has tripped on overcurrent lockout.

Reactor water level is stable at +4 inches.

Reactor pressure is 850 psig and slowly dropping.

A leak has developed in the RHR 'C' suction piping.

Suppression Pool level is currently 16.5 feet.

Containment is inaccessible.

Which one of the following systems can be utilized to raise Suppression Pool water level from the Control Room?

- A. High Pressure Core Spray
- B. Reactor Core Isolation Cooling
- C. Refueling Water Transfer System
- D. Suppression Pool Makeup System

QUESTION	79 SRO	NRC RECORD #	# WRI 703
ANSWER: B.	SYSTEM # EP3	K/A 295030	EA1.02: 3.5
LP# GG-1-LP-H	RO-EP03		
OBJ. 2; 3	SRO TIER 1 GRO	UP 1 / RO TIER	GROUP
REFERENCE:	05-S-01-EP-3 steps 40, 41	<u>NEW</u>	
		MODIFIED	BANK
DIFF 2; CA			
		RO <u>SRO</u> BOTI	H CFR 41.9/41.10/43.5
REFERENCE N	IATERIAL REQUIRED:	05-S-01-EP-3	

QUESTION 80

Which one of the following describes the Reactor Vessel Pressure Safety Limit and actions to be taken if violated?

- A. Reactor Pressure above 1325 psig as read on Reactor Pressure Wide Range instrumentation. This pressure may be exceeded during vessel hydro with the permission of the NRC.
- B. Reactor Pressure above 1325 psig as read on Reactor Pressure Wide Range instrumentation. When exceeded pressure must immediately be reduced and the reactor shutdown until NRC permission is granted for restart.
- C. Reactor Pressure above1375 psig as read on Reactor Pressure Wide Range instrumentation. This pressure may be exceeded during vessel hydro with the permission of the NRC.
- D. Reactor Pressure above 1375 psig as read on Reactor Pressure Wide Range instrumentation. When exceeded pressure must immediately reduced and the reactor shutdown until NRC permission is granted for restart.

QUESTION 8	0 SRO	NRC RECORD #	WRI 704
ANSWER: B.	SYSTEM # Safety	K/A 295025 H	EK1.05: 4.7
	Limits	2	2.2.22: 4.1
		2	2.2.25: 3.7
LP# GG-1-LP-OP-	TS001	I	EK1.02: 4.2
OBJ. 24; 28; 29; 3	0 SRO TIER 1 GRO	UP 1 / RO TIER	GROUP
REFERENCE:	Tech Specs 2.1.2 & Bases	<u>NEW</u>	
	01-S-06-5	MODIFIED	BANK
DIFF 1; M	sect 6.2.3 Caution		
		RO <u>SRO</u> Both	H CFR 41.3/43.2
REFERENCE MA'	FERIAL REQUIRED:	NONE	
QUESTION 81

The plant is operating at 100% power.

Steam flow transmitter C34-N030B has failed upscale.

Which one of the following describes the response of actual reactor water level and the Digital Feed Control System (DFCS)?

- A. Reactor water level will remain stable when the DFCS system automatically de-selects and locks out three element control and selects single element control.
- B. Reactor water level will remain stable when the level dominance of the DFCS takes over and automatically substitutes average steam flow for the failed value
- C. Reactor water level will immediately rise then return to normal level when the DFCS system automatically de-selects and locks out three element control and selects single element control.
- D. Reactor water level will immediately rise then return to normal level when the level dominance of the DFCS takes over and automatically substitutes average steam flow for the failed value.

NRC RECORD # WRI 705 **QUESTION** 81 SRO ANSWER: A. SYSTEM # C34; B21 K/A 295009 AA2.02: 3.7 LP# GG-1-LP-OP-C3401 **OBJ.** 5c; 23 SRO TIER 1 GROUP 1 / RO TIER GROUP **REFERENCE:** 04-1-02-1H13-P680 NEW 2A-C9 MODIFIED BANK DIFF 2; CA RO <u>SRO</u> BOTH CFR 41.7/43.5 **REFERENCE MATERIAL REQUIRED:** NONE

QUESTION 82

Power has been lost to Division I and II buses. Division III bus and Diesel Generator are available.

The Shift Manager has decided to cross tie Division III bus to Division II bus.

Which one of the following describes the alignment of power to supply Division II bus from Division III?

- A. Division III bus is aligned through the ESF Transformer 21 feeder to back feed through the secondary windings of ESF 21 through the normal bus feeder to Division II bus from ESF 21 Transformer.
- B. Division III bus has interlocks defeated and is aligned through the ESF Transformer 11 feeder to back feed through the secondary windings of ESF 11 through the normal bus feeder to Division II bus from ESF 11 Transformer.
- C. Division III bus has interlocks defeated and is aligned through the ESF Transformer 12 feeder to back feed through the secondary windings of ESF 12 through the normal bus feeder to Division II bus from ESF 12 Transformer.
- D. Division III bus has interlocks defeated and is aligned through the ESF Transformer 21 feeder to back feed through the secondary windings of ESF 21 through the normal bus feeder to Division II bus from ESF 21 Transformer.

QUESTION	82 SRO	NRC RECORD # V	VRI 706
ANSWER: C.	SYSTEM # R27; R	21 K/A 295003 AK	2.03: 3.9
		AK	1.06: 4.0
LP# GLP-OPS-	ONEP	AA	1.01: 3.8
OBJ. 12			
LP# GG-1-LP-C)P-R2100		
OBJ. 28; 37	SRO TIER 1 GRO	OUP 1 / RO TIER	GROUP
REFERENCE:	E-0001	<u>NEW</u>	
	05-1-02-I-4 sect 3.2.9	MODIFIED	BANK
DIFF 1; M			
		RO <u>SRO</u> BOTH	CFR 41.4/41.10/43.5
REFERENCE M	IATERIAL REQUIRED:	E-0001	

QUESTION 83

A Refueling Outage is in progress.

The plant is in Mode 4 making preparations for vessel disassembly.

An incident on the Refueling Floor has resulted in radiation levels on the 208 and 245ft elevations in the Auxiliary Building to rise to 20 mr/hr.

Fuel Handling Area Ventilation Radiation Monitor is indicating 16 mr/hr.

Personnel have been evacuated.

Which one of the following describes the actions that should be taken with present plant conditions?

- A. Verify Fuel Handling Area Ventilation has isolated and Standby Gas Treatment has initiated.
- B. Manually isolate Fuel Handling Area Ventilation and once isolated manually initiate Standby Gas Treatment.
- C. Set Secondary Containment, verify Fuel Handling Area Ventilation has isolated and Standby Gas Treatment has initiated.
- D. Set Primary and Secondary Containment, and manually isolate Fuel Handling Area Ventilation and once isolated manually initiate Standby Gas Treatment.

QUESTION	83 SRO	NRC RECORD # V	VRI 707
ANSWER: C.	SYSTEM # T42;	K/A 295034 EK	2.05: 3.7
	T48; M41-1		
LP# GG-1-LP-O	P-T4200		
OBJ. 7a & b	SRO TIER 1 GRO	OUP 2 / RO TIER	GROUP
REFERENCE:	04-1-02-1H13-P601 19A-	B9 <u>NEW</u>	
	05-1-02-II-8 sect 3.2	MODIFIED	BANK
DIFF 2; CA	Tech Specs 3.6.1.1; 3.6.4.	3;	
,	3.6.4.1		
	SOER 96-01	RO <u>SRO</u> Both	CFR 41.4/41.10
REFERENCE M	IATERIAL REQUIRED:	NONE	41.13/43.4

QUESTION 84

During an emergency, the shift determines that plant conditions are such that there is no appropriate action to be taken which would be in compliance with the station operating license.

Whose permission at a MINIMUM, is required to take the necessary actions to maintain the plant in a safe condition and when must the NRC be notified? **Incident Reports and Reportable Events procedure is provided.**

- A. The Duty Manager; notify the NRC within one (1) hour.
- B. General Manager-Operations; notify the NRC within four (4) hours.
- C. Licensed Senior Reactor Operator; notify the NRC within one (1) hour.
- D. Licensed Reactor Operator; notify the NRC within four (4) hours.

QUESTION	84 SRO	NRC RE	CORD # WR	135
ANSWER:	C. SYSTEM #	ADMIN K/A Gen	eric 2.1.1:	3.8
	Conduct of	Ops	2.1.2:	4.0
LP# GG-1-LI	P-OP-PROC			
OBJ. 110 &	& 14h SRO TIER	3 GROUP / RO	TIER GRO	UP
REFERENCE:	01-S-06-5 Att. III,	I.3 NEW		
	01-S-06-2 sect. 6.2.	.1e(4) <u>MODIFI</u>	ED	BANK
DIFF 1; M	10 CFR 50.54x &	y NRC 12/	2000	
		RO <u>SR(</u>	2 BOTH	CFR41.10/43.3/43.5
REFERENCE	MATERIAL REQUIRE	ED: 01-S-06-5		

QUESTION 85

You have assumed the shift as Control Room Supervisor.

The Crew has the following complement.

1 Shift Manager (SRO)	1 Control Room Supervisor (SRO)
1 Shift Supervisor (SRO/STA)	3 Reactor Operators (RO)
2 Radwaste Operators	5 Nuclear Operator 'B's (NOB)

All crew members are qualified fire brigade except the Shift Manager and the Reactor Operators.

An NOB becomes ill and is transported to the hospital by Health Physics personnel.

Which one of the following describes the status of shift manning for the Fire Brigade?

- A. Fire Brigade requirements are unable to be met until another qualified fire brigade member arrives within two (2) hours.
- B. Fire Brigade requirements are being met using a Health Physicist as a member of the fire brigade until another operator arrives.
- C. Fire Brigade requirements are being met using the Shift Supervisor as a member of the fire brigade until another operator arrives.
- D. Fire Brigade requirements are being met using the Roving Reactor Operator as Safe Shutdown and a Radwaste Operator as Fire Brigade Leader.

QUESTION	85 SRO	5 SRO NRC RECORD # WRI 486	
ANSWER: D.	SYSTEM # Fire	K/A Generic	2.4.26: 3.3
	Brigade		2.1.4: 3.4
LP# GG-1-LP	-OP-PROC		
OBJ. 11x, y	SRO TIER 3 GI	ROUP RO TIER	GROUP
REFERENCE:	01-S-06-2 sect 6.5	NEW	
	01-S-10-6 Att II	MODIFIED	BANK
DIFF 2; CA	TRM table 7.2.2-1		NRC 6/2001
		RO <u>SRO</u> BO	ГН СFR41.10/43.1/43.2
REFERENCE M	MATERIAL REQUIRED:	None	43.5

QUESTION 86

The plant is at 10 % power during a reactor startup.

All control rod withdrawals have been completed to place the Reactor Mode Switch in RUN.

Reactor Coolant pH has been sampled at 6.9.

Feedwater iron content has been analyzed at 4.5 ppb.

Which one of the following describes the chemistry allowances for continuing power ascension?

Attached is the Chemistry Report submitted in preparation for entering power operations.

Chemistry procedures and requirements are provided.

- A. Transfer to Run is NOT allowed. Subsequent power ascension is prohibited by Tech Specs (TRM) requirements.
- B. Transfer to Run is NOT allowed. Power ascension is prohibited by the EPRI Water Chemistry Guidelines and Off Normal Event Procedure requirements.
- C. Transfer to Run is allowed. Power ascension is restricted to 15% power until all chemistry parameters are within specifications, and continue sampling reactor water at least once per 8 hours.
- D. Transfer to Run is allowed. Consult with the Duty Manager prior to raising reactor power. Reactor chemistry has been demonstrated under control, and continue sampling reactor water at least once per 24 hours.

QUESTION	86 SRO	NRC RECORD #	[#] WRI 197
ANSWER: D.	SYSTEM # Chemi	stry K/A Generics	2.1.34: 2.9
LP# GG-1-LP-	OP-PROC	-	
OBJ. 28	SRO TIER 3	GROUP / RO TIER	GROUP
REFERENCE:	01-S-08-29 Att I	NEW	
	05-1-02-V-12 Tbl Mode 1	MODIFIED	BANK
DIFF 3, CA	TRM 6.4.1		NRC 6/2001
	03-1-01-1		
	sect 6.2.15a(5) & 6.2.15j	RO <u>SRO</u> BOTH	CFR 41.10/43.2/43.5
REFERENCE M	IATERIAL REQUIRED:	01-S-08-29 & complete	d Att VI; 03-1-01-1 sect 6.2.15
		05-1-02-V-12; TRM 6.4	l.1; Tech Spec 3.0

QUESTION 87

The CYCLOPS computer is out of service.

The following are the Core Thermal Power calculations determined by the Reactor Engineer:

Time	Core Thermal Power	Time	Core Thermal Power	Time	Core Thermal Power
0000	3833 MW	0800	3829 MW	1600	3833 MW
0100	3833 MW	0900	3836 MW	1700	3830 MW
0200	3833 MW	1000	3833 MW	1800	3833 MW
0300	3829 MW	1100	3833 MW	1900	3834 MW
0400	3833 MW	1200	3828 MW	2000	3830 MW
0500	3833 MW	1300	3833 MW	2100	3833 MW
0600	3832 MW	1400	3833 MW	2200	3833 MW
0700	3834 MW	1500	3835 MW	2300	3833 MW

Which one of the following describes compliance with the plant operating license considerations of Maximum Core Thermal Power?

- A. Core Thermal Power is within compliance of the Operating License.
- B. Core Thermal Power has exceeded the limitations of the Operating License requiring immediate notification of the NRC.
- C. Core Thermal Power has exceeded the eight hour average limitations of the Operating License requiring immediate notification of the NRC.

D. Core Thermal Power has exceeded the limitations of the Operating License requiring immediate plant shutdown and immediate notification of the NRC.

QUESTION	87 SRO	NRC RECORD # WRI '	708
ANSWER: A.	SYSTEM # OP License	K/A Generics 2.1.10	: 3.9
LP# GG-1-LP-	OP-IOI02		
OBJ. 2.c.6			
LP# GG-1-LP-	OP-TS001		
OBJ. 4l	SRO TIER 3 GROUP	/ RO TIER GROUP	
REFERENCE:	GGNS Operating License	NEW	
	Sect 2.C(1)	MODIFIED	BANK
DIFF 2; CA	GGNS Tech Specs sect 1.1		
	03-1-01-2 sect 2.3.6	RO <u>SRO</u> BOTH	CFR 43.1
	06-OP-1000-D-0001 Att I		
REFERENCE M	IATERIAL REQUIRED:	None	

QUESTION 88

The plant is in Mode 2.

The following parameters have been reported to the Control Room:

SLC Tank level	4600 gallons
SLC Tank temperature	112 °F
SLC Sodium Petaborate concentration	15.3%

Which one of the following describes the actions that should be taken with present plant conditions?

Tech Specs 3.0 and 3.1.7 are provided.

- A. No actions are required. Continue plant startup and continue to Mode 1.
- B. Concentrations are unacceptable. Initiate actions to be in Mode 3 in 12 hours.
- C. Restore concentrations to Normal Operation Region within 72 hours and verify temperatures within limits every 4 hours. Continue plant startup and continue to Mode 1.
- D. Restore concentrations to Normal Operation Region within 72 hours and verify temperatures within limits every 4 hours. Remain in Mode 2 until concentrations returned to Normal Operation.

QUESTION	88 SRO	NRC RECORD # WRI	709
ANSWER: D.	SYSTEM # Tech	K/A Generics 2.1.25	: 3.1
	Specs; C41	2.1.33	: 4.0
LP# GG-1-LP-C	DP-C4100	2.2.22	: 4.1
OBJ. 18			
LP# GG-1-LP-C	P-TS001		
OBJ. 17; 34	SRO TIER 3 GRO	UP / RO TIER GR	OUP
REFERENCE:	Tech Spec 3.1.7	<u>NEW</u>	
	Tech Spec 3.0.4	MODIFIED	BANK
DIFF 2; CA			
		RO <u>SRO</u> BOTH	CFR 41.6/41.10
REFERENCE M	IATERIAL REQUIRED:	Tech Specs 3.0 & 3.1.7	43.2/43.5

QUESTION 89

A Refueling outage is in progress.

Core Alterations are in progress.

Who supervises lifting activities on the Containment Refuel Floor and who must concur with the lifting?

- A. The Refuel Manager supervises all lifting and must have the concurrence of the Shift Manager.
- B. The Refuel Manager supervises all lifting and must have the concurrence of the Refueling SRO.
- C. The Refuel Floor Supervisor supervises all lifting and must have the concurrence of the Shift Manager.
- D. The Refuel Floor Supervisor supervises all lifting and must have the concurrence of the Refueling SRO.

QUESTION 89 SRO	NRC RECORD #	# WRI 702
ANSWER: D. SYST	EM # Refueling K/A Generics	2.2.26: 3.7
LP# GG-1-LP-RF-F1105		2.2.27: 3.5
OBJ. 5d & 5e S	RO TIER 3 GROUP / RO TIER	GROUP
REFERENCE: 01-S-06-2 sec	t 6.7.7 <u>NEW</u>	
	MODIFIED	BANK
DIFF 1; M		
	RO <u>SRO</u> BOTH	CFR 41.10/43.5/43.7
REFERENCE MATERIAL REC	QUIRED: None	

QUESTION 90

The plant is in MODE 5.

Vessel re-assembly is in progress.

There are 31 spent fuel bundles remaining in the Containment Temporary Fuel Storage area.

Hydrogen Recombiner 'A' (1855 lbs) (southwest corner of Containment) must be moved to the 166 ft Containment Equipment hatch for removal.

Which one of the following is an allowed path for the polar crane to make this lift? (Containment 208 ft drawing attached.)

Movement of the H2 Recombiner:

- A. may take place around the periphery of Containment.
- B. may take place in any direction through the Containment.
- C. must be suspended until all spent fuel is removed from Containment.
- D. must be suspended until vessel re-assembly is complete.

QUESTION	90 SRO	NRC RECORD #	WRI 411
ANSWER: A.	SYSTEM #	K/A Generic 2.	2.28: 3.5
	Equipment Control	ol-	
	Refueling		
LP# GG-1-LP-	OP-IOI05		
OBJ. 2d			
LP# GG-1-LP-	RF-F1105		
OBJ. 14b; 16	of SRO TIER 3 GF	ROUP RO TIER (GROUP
REFERENCE:	03-1-01-5 sect 2.8	NEW	
	Drawing of 208 ft Ctmt	MODIFIED	<u>BANK</u>
DIFF 2; CA	FSAR sect 9.1.4.2.2.2 &		NRC 12/2000
	9.1.4.3	RO <u>Sro</u> Both	CFR41.9/41.10/43.2/
	TRM 6.9.6		
REFERENCE M	ATERIAL REQUIRED:	Drawing of 208 ft Ctmt	43.4/43.5/43.7

QUESTION 91

Which one of the following conditions does NOT require the issuance of an approved Maintenance Action Item (MAI)?

- A. Electrical Maintenance is to troubleshoot a motor operated valve on Plant Service Water by observing the valve stroke open and closed using the local handswitch to determine when the limit switch functions.
- B. I & C is to troubleshoot a Control Room trip unit by lifting leads on the trip unit that allows the technician to modify the input signal and observe the functioning of the trip unit.
- C. Mechanical Maintenance is required to inspect the pump impeller on a Condensate Transfer pump that when operating fails to develop sufficient discharge pressure to prevent operation of the standby pump.
- D. I & C is to modify the instrument air supply to Primary Containment Isolation Valve G36-F106 to raise the stroke time to prevent slamming the valve into the closed seat.

QUESTION	91 SRO	NRC RECOR	D # WRI 492
ANSWER: A.	SYSTEM # Control	of K/A Generic	2.2.20: 3.3
	Work		
LP# GG-1-LP-0	OP-PROC		
OBJ. 25c(1	SRO TIER 3 GROU	JP / RO TIER	GROUP
REFERENCE:	07-S-01-228 sect 6.2 NOTE	NEW	
	07-S-01-205 sect 6.5.1	MODIFIED	BANK
DIFF 2; CA	01-S-07-1 sect 5.2 & 5.2.1		NRC 6/2001
		RO <u>SRO</u> BO	TH CFR 41.10/43.5
REFERENCE M	ATERIAL REQUIRED: 0'	7-S-01-205; 07-S-0	1-228;
	01	1-S-07-1 & WM-10	0

QUESTION 92

Under which one of the following conditions is new or spent fuel allowed to be stored in the Upper Containment Fuel Storage Pool?

- A. The reactor is at 130 0F and with the plant in Mode 5 ONLY.
- B. The reactor is at 180 0F with the plant subcritical and shutdown cooling operating.
- C. The reactor is at 20% power with a plant startup in progress following RF12.
- D. The reactor is at 20 % power with a plant shutdown in progress in preparation for RF12.

QUESTION	92 SRO	NRC RECOR	D#WRI4	91
ANSWER: B.	SYSTEM # Refueling	K/A Generic	2.2.32:	3.3
LP# GG-1-LP-	RF-F1105		2.2.28:	3.5
OBJ. 18 c &	e SRO TIER 3 GROU	P / RO TIER	GROUP	
REFERENCE:	17-S-02-100	NEW		
	sect 6.1.1; 6.2.1; 6.3.8	MODIFIED		<u>BANK</u>
DIFF 2; CA				NRC 6/2001
		RO <u>SRO</u> BO	ΤН	CFR 43.6/43.7
REFERENCE M	IATERIAL REQUIRED: 17	-S-02-100		

QUESTION 93

The Control Room Operator has a tagout which requires verification.

Under which one of the following conditions can the Shift Manager waive Independent Verification?

- A. Lineup on the Instrument Air Header Auxiliary Building Automatic Bleed off valve 8 foot off the floor in area 10, 166 ft elevation.
- B. A Red Tag to be hung on a Main Steam Drain Valve on the HP Main Steam Stop Valve at 100 % Power.
- C. A Temporary Alteration on the Division III Diesel Air Start Header.
- D. A procedure step for lineup restoration following the Load Shedding and Sequencing Monthly surveillance.

QUESTION	93	SRO	NRC RECORI)# WR	I 127
ANSWER:	В.	SYSTEM # ADMIN	K/A Generic	2.3.2:	2.9
		Rad Con		2.2.13	: 3.8
				2.2.11	: 3.4
LP# GG-1-I	LP-OP-	PROC		2.1.2:	4.0
OBJ. 10s	; 12g; 2	2g SRO TIER 3 GRO	UP / RO TIEI	R GR	OUP
REFERENC	E: 0	1-S-06-1 sect. 6.1.13	NEW		
	0	1-S-06-29 sect. 6.4.1	MODIFIED		<u>BANK</u>
DIFF 1; M	0	1-S-06-3 sect 6.2.3c			NRC 3/1998
			RO <u>SRO</u> BO	TH	CFR 41.12/43.4
REFERENC	E MAT	ERIAL REQUIRED:	NONE		

QUESTION 94

The plant is operating at rated conditions.

A leak has been identified on a valve in the Auxiliary Building Steam Tunnel.

Plans are to lower reactor power to 40% to allow a Steam Tunnel entry to attempt to back seat the valve to stop the leak allowing continued plant operation.

It is estimated the job will take 10 minutes to complete.

Radiation levels are expected to be 1 - 1.5 R/Hr in the area of the work.

Determine whether the General Operations Radiation Work Permit is acceptable for this job?

01-S-08-34 and Operations RWP are provided.

- A. No actions are required. The General Operations RWP is sufficient.
- B. No actions are required. The General Operations RWP is sufficient however, a special pre-job briefing is required.
- C. A job specific RWP is required. Radiation Protection will require more in-depth planning and special pre-job briefings.
- D. A job specific RWP is required. Radiation Protection will require specific General Manager approvals due to the possibility of exceeding Administrative dose limits.

QUESTION	94 SRO	NRC RECORD # WRI	710
ANSWER: C.	SYSTEM # Rad	K/A Generics 2.3.7:	3.3
	Protection		
LP# ELP-GET-F	RWT01		
OBJ. RWT68	SRO TIER 3 GRO	OUP / RO TIER GRO	OUP
REFERENCE:	01-S-08-34	<u>NEW</u>	
	sect 6.1.2d(4); 6.1.2e	MODIFIED	BANK
DIFF 2; CA	Operations RWP		
		RO <u>Sro</u> Both	CFR 41.10/41.12
REFERENCE M	IATERIAL REQUIRED:	01-S-08-34 & Ops RWP & calculator	43.4/43.5

QUESTION 95

Twenty-two minutes ago a feedwater line break in the drywell caused a plant scram.

The following indications currently exist:

Reactor pressure	98 psig
Containment temperature at 13	39' 141°F
Drywell temperature at 166'	204°F
Wide range level	-144 inches
Upset range level	+75 inches
Shutdown range level	+51 inches
Fuel Zone range level	-171 inches

No personnel were able to closely monitor Reactor Water level as it dropped.

Which one of the following level instruments can be used to determine reactor water level?

- A. Wide range level indication only
- B. Fuel Zone and Wide range level indications only
- C. Fuel Zone and Upset range level indications only
- D. Wide and Shutdown range level indications only

QUESTION	95 S	RO	NRC RECORI) # WR	[415
ANSWER:	B.	SYSTEM # ADMI	N K/A Generic	2.4.20	4.0
		Emergency		2.4.18	3.6
		Procedures/Plan-		2.4.22	4.0
		EOPs		2.4.23	3.8
LP# GG-1-L	P-RO-EP	02			
OBJ. 4		SRO TIER 3 GR	OUP / RO TIER	GRO	UP
REFERENCE	2: 05-S-0	1-EP-2 Caution 1	NEW		
	GGNS	PSTG App B	MODIFIED		BANK
DIFF 2; CA	EPG/	/SAG step (Caution	1)		NRC 12/2000
			RO <u>SRO</u> BO	TH	CFR41.10/43.5
REFERENCE	MATERIA	AL REQUIRED:	05-S-01-EP-2		

QUESTION 96

The plant is operating at rated conditions.

Subversives have entered the Main Control Room and taken over.

Communication with the Main Control Room has been lost.

You are the Shift Supervisor working in the Work Control Center with the Tagging Group.

Which one of the following describes the actions to be taken and Emergency Classification?

- A. Man Remote Shutdown Panels, maintain the plant in stable conditions until the security situation is resolved, declare an Unusual Event.
- B. Man and isolate the Remote Shutdown Panels, manually scram the plant and cooldown the plant using Division II equipment, declare an Alert.
- C. Man and isolate the Remote Shutdown Panels, manually scram the plant and cooldown the plant using Division I equipment, declare a Site Area Emergency.
- D. Man and isolate the Remote Shutdown Panels, manually scram the plant and cooldown the plant using Division I equipment, declare a General Emergency.

QUESTION	SRO 96	NRC RECORD #	WRI 192
ANSWER: D.	SYSTEM #	K/A Generics 2.4	4.40: 4.0
	Emergency Ops SRO	2.4	4.11: 3.6
	Responsibility	2.1	1.2: 4.0
	Security Threat	2.1	1.49: 4.0
LP# GG-1-LP-0	OP-PROC	2.4	4.28: 3.3
OBJ. 11d &	g		
LP# GG-1-LP-0	DP-EPTS6		
OBJ. 1	SRO TIER 3 GI	ROUP / RO TIER	GROUP
REFERENCE:	10-S-01-1 EAL 14.4.1	NEW	
	01-S-06-2	MODIFIED	BANK
DIFF 3; CA	sect 6.1.2a & 6.2.3l		NRC 4/2000
	05-1-02-VI-4 sect 2.0; 3.0	RO <u>SRO</u> BOTH	CFR 41.10/43.5
REFERENCE MATERIAL REOUIRED:		10-S-01-1 & 05-1-02	2-VI-4
	-	w/o immediate actio	ons

QUESTION 97

A plant transient has resulted in the following conditions:

All control rods inserted to 00 except 2 peripheral control rods stuck full out. All MSIVs isolated. RPV pressure 980 psig RPV power 1% Drywell pressure 1.4 psig Suppression Pool temperature 95°F Suppression Pool level 18.9 feet

Which one of the following describes the requirements for RPV level and pressure control given the above conditions?

- A. Maintain RPV water level between +11.4 and + 53.5 inches and control RPV pressure less than 1064.7 psig.
- B. Maintain RPV water level between 192 and + 53.5 inches and control RPV pressure less than 1064.7 psig.
- C. Terminate and prevent all injection to the RPV except Boron, CRD and RCIC and control RPV level between 192 and 140 inches and control RPV pressure less than 1064.7 psig.
- D. Terminate and prevent all injection to the RPV except Boron, CRD and RCIC and open 8 SRVs controlling RPV pressure based on the MARFP table.

QUESTION	97 SRO	NRC RECORD # W	VRI 711
ANSWER: B.	SYSTEM # EOPs	K/A Generics 2.4	.7: 3.8
LP# GG-1-LP-H	RO-EP02A	2.4	.14: 3.9
OBJ. 5	SRO TIER 3 GRO	UP / RO TIER	GROUP
REFERENCE:	05-S-01-EP-2A step 45	<u>NEW</u>	
		MODIFIED	BANK
DIFF 2; CA			
		RO <u>Sro</u> Both	H CFR 41.10/43.5
REFERENCE M	IATERIAL REQUIRED:	05-S-01-EP-2/2A & 3	

QUESTION 98

The plant is operating at 100% power.

An employee with authorized access to the plant was observed by co-workers to possess a small handgun in their lunch box in the M & E Building.

Security was notified and the handgun was removed from the protected area.

Which one of the following describes the reportability of this incident?

- A. One hour notification of NRC Regional Office
- B. One hour notification of NRC Operations Center
- C. Four hour notification of NRC Regional Office
- D. Four hour notification of the NRC Operations Center

QUESTION	98 SRO	NRC RECORD # V	WRI 712
ANSWER: B.	SYSTEM #	K/A Generics 2.	4.30: 3.6
	Reportable eve	ents	
LP# GG-1-LP-C	DP-PROC		
OBJ. 14h, i, j	SRO TIER 3	GROUP / RO TIER	GROUP
REFERENCE:	01-S-06-5 Att III sec	et I.13 <u>NEW</u>	
		MODIFIED	BANK
DIFF 1; M			
		RO <u>SRO</u> BOT	тн CFR 41.10/43.5
REFERENCE M	IATERIAL REQUIRE	D: 01-S-05-6-5	

QUESTION 99

A plant transient has resulted in the following conditions:

All control rods inserted to 00 except 2 peripheral control rods stuck full out. All MSIVs isolated. RPV power 1% RPV level – 210 inches RPV pressure 60 psig 8 SRVs are open Drywell pressure 1.4 psig Suppression Pool temperature 145°F Suppression Pool level 18.9 feet

Conditions warrant entry into the Severe Accident Procedures.

Which one of the following identifies entry into the Severe Accident Procedures?

- A. The Control Room enters the appropriate SAP and implements actions from the Control Room.
- B. The Control Room enters the appropriate SAP with concurrence of the Emergency Director and implements actions from the Control Room.
- C. The TSC determines entry into the appropriate SAP and directs implementation of the SAPs from the TSC.
- D. The TSC determines entry into the appropriate SAP with concurrence of the Offsite Emergency Coordinator and the Emergency Director directs implementation from the TSC.

QUESTION	99 SRO	NRC RECORD #	WRI 714
ANSWER: B.	SYSTEM # EOPs;	K/A Generics 2.	4.16: 4.0
	SAPs	2.	4.8: 3.8
LP# GLP-EP-E	PTS19	2.	4.14: 3.9
OBJ. 3; 4; 10	SRO TIER 3 GRO	UP / RO TIER	GROUP
REFERENCE:	05-S-01-SAP-1/2/3/4/5/6	<u>NEW</u>	
	NOTE on Yellow	MODIFIED	BANK
DIFF 1; M	Background steps		
		RO <u>SRO</u> BOT	CFR 41.10/43.5
REFERENCE M	IATERIAL REQUIRED:	NONE	

QUESTION 100

An Alert has been declared at GGNS.

Which one of the following identifies the Emergency Response Facilities required to be activated for this emergency?

A. No facilities are required, they may be activated at Emergency Director's discretion.

- B. TSC and OSC only
- C. TSC, OSC, and EOF only
- D. TSC, OSC, EOF, and ENMC/EIC only

QUESTION 100 SRO NRC RECORD # WRI 714 ANSWER: D. SYSTEM # EPPs K/A Generics 2.4.42: 3.7 LP# GLP-EP-EPTS6 / RO TIER GROUP OBJ. 5 SRO TIER 3 GROUP **REFERENCE:** 10-S-01-1 sect 6.1.4i (2) <u>NEW</u> MODIFIED BANK DIFF 1; M RO <u>SRO</u> BOTH CFR 41.10/43.5 **REFERENCE MATERIAL REQUIRED:** NONE