Q#	QID	New	Modified	Direct from Bank
76	S06001	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	1/1
Tech References	OP-902-009, App. 1	**K/A**	4.4-E02 EA2.1
Ref Supplied	N/A	**Imp. Rating**	3.7
Cognitive Level	2	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-PPE01	12	

Proposed Question

A reactor trip has occurred. The following conditions exist:

- SIAS, CIAS, CSAS, MSIS, and EFAS-1 have actuated
- Pressurizer level is 0%
- Pressurizer pressure is 830 psia and lowering
- S/G 1 pressure is 770 psia and rising
- S/G 2 pressure is 400 psia and lowering
- S/G 1 level is 70% WR and slowly lowering
- S/G 2 level is 10% WR and slowly rising
- Main Steam Line radiation monitors are normal post-trip values
- Containment Building radiation monitors are slowly rising
- EDG A is the only 4KV power source

A(n) _____ is in progress, and the appropriate procedure to enter is _____.

	A	LOCA; OP-902-002, Loss of Coolant Accident Recovery
	B	ESD; OP-902-004, Excess Steam Demand Recovery
	C	LOCA and LOOP; OP-902-008, Functional Recovery Procedure
	D	ESD and SGTR; OP-902-008, Functional Recovery Procedure
Answer	D	

Explanation
D is correct due to SG low pressure, SG 2 level rising w/o EFAS-2, and CB RM activity A is plausible due to CB RM activity, but incorrect due to SG low pressure B is plausible due to SG low pressure, but incorrect due to SG 2 level rising w/o EFAS-2 C is plausible due to CB RM activity and Loss of Offsite Power, but incorrect with one 4KV Safety Bus energized

Comments

Q#	QID	New	Modified	Direct from Bank
77	S06002	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	1/1
Tech References	OP-902-000, OP-902-009, Att 2-A	**K/A**	4.1-E11 Gen. 2.4.1
Ref Supplied	OP-902-009, Att 2-A	**Imp. Rating**	4.6
Cognitive Level	2	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-PPE01	10	

Proposed Question

Plant conditions are as follows:

- RCP 1B Low Oil Pressure alarm is locked in
- The reactor is tripped from 100% power
- The ATC trips RCP 1B
- A SGTR occurs
- RCS Temperature is 560°F
- RCS Pressure is 1600 psia
- Containment Pressure is 17.5 psia

To comply with the Standard Post Trip Actions, the ATC should trip…

	A	no other RCPs.
	B	RCP 2B.
	C	RCPs 1A and 2A.
	D	all four RCPs.

Answer B

Explanation

B is correct; ATT. 2-A with no CSAS allows RCP operation, but step 4 limits RCP operation to two if <1621psia.

A is incorrect; ATT. 2-A with no CSAS allows RCP operation, but step 4 limits RCP operation to two if <1621psia.

C is incorrect; the ATC would normally trip RCPs 1A and 2A to comply with step 4, but with 1B RCP already tripped, the operator would only have to trip one other RCP.

D is incorrect; step 8 requirement to trip all RCPs following CSAS, but CSAS does not come in until 17.7 psia.

Comments

Q#	QID	New	Modified	Direct from Bank
78	S06003	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	1/1
Tech References	TS 3.7.4 and OI-037-000 Att. 6.1	**K/A**	4.2-A26 Gen. 2.2.17
Ref Supplied	TS 3.7.4 and OI-037-000 Att. 6.1	**Imp. Rating**	3.5
Cognitive Level	2	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-ORA	06	

Proposed Question

The following conditions exist:

- Plant is at 100% power
- Dry Cooling Tower (DCT) Fan 10A is Out of Service for corrective maintenance.
- Work is in progress on DCT Fan 10A, and is expected to be complete in 4 hours.
- The B Train DCT Fan Missile Shield is Inoperable due to discovery that the holddown bolts were not adequately torqued per design requirements.
- Work Planning has indicated that torquing all of the holddown bolts on the missile shield should take approximately 2 hours.
- The qualitative assessment of the Equipment Out of Service program is Green for all systems.
- Due to limited resources of maintenance personnel, Mechanical Maintenance personnel are in the process of restoring DCT Fan 10A. They are expected to perform the missile shield repair once complete.

The National Weather Service announces that a severe thunderstorm is predicted to affect St. John and St. Charles Parishes in approximately 4 hours. A tornado watch is predicted to affect St. John Parish only.

Under the above conditions, the SM should direct the Mechanical Maintenance personnel to....

	A	complete the repair of DCT Fan 10A first since work is already in progress on this fan.
	B	complete the repair of DCT Fan 10A first to prevent entry into TS 3.7.4 one hour action.
	C	repair the B Train DCT Fan Missile Shield first because it takes less time to complete.
	D	repair the B Train DCT Fan Missile Shield first because 9 DCT Fans are Inoperable.

Answer D

Explanation
D is correct. The qualitative assessment of OI-037, Table 4, states to assume all equipment under the missile barrier OOS. 9 of 15 DCT Fans reside under the missile shield. A is incorrect. With a thunderstorm in progress, completion of this fan is not a priority. B is incorrect. TS 3.7.4 only requires a 1-hour action for a Tornado Watch. C is incorrect. Time for completion takes less priority of possibly losing the B Train Ultimate Heat Sink.

Comments

Q#	QID	New	Modified	Direct from Bank
79	S06004		X	

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	5855-A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	1/1
Tech References	OI-038-000; OP-902-008 Safety Function RC-2; OP-902-009 App. 13	**K/A**	4.2-A40 AA2.05
Ref Supplied	N/A	**Imp. Rating**	4.5
Cognitive Level	2	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-PPE08	09	

Proposed Question

Plant conditions are as follows:

- A MSLB has occurred
- 3 CEAs remain fully withdrawn
- SIAS, CIAS, MSIS, CSAS have occurred
- SG #2 has blown dry
- CET temperature is 450°F
- RCS pressure has been stabilized at 1550 psia
- Pressurizer level continues to rise

Which ONE of the following conditions allows securing ALL Charging Pumps?

	A	All HPSI Throttle Criteria are met
	B	Reactor power is 2.4 x 10^{-3}% and dropping
	C	Pressurizer level is approaching 60%
	D	RCS is borated to refueling concentration

Answer D

Explanation
D is correct. OI-038-000 step 5.4.2 states that Emergency Boration should continue until refueling concentration is met. A and C are incorrect. OI-038-000 step 5.4.31 for HPSI Throttle Criteria states that at least one charging pump must remain in operation unless this creates a challenge to the pressurizer safety valves. B is incorrect. Reactor power must be below 10^{-4}% to meet the Reactivity Control Safety Function in OP-902-008.

Comments

Q#	QID	New	Modified	Direct from Bank
80	S06005	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	1/1
Tech References	OP-902-006 SF 6	**K/A**	4.2-A54 AA2.06
Ref Supplied	N/A	**Imp. Rating**	4.3
Cognitive Level	1	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-PPE06	08	

Proposed Question

The crew has entered OP-902-006 for a Loss of Main Feedwater. The reactor operator has taken manual control of EFW and Steam Bypass Control. The following conditions exist.

- SG 1 level is 75% NR and slowly lowering
- SG 2 level is 45% NR and slowly lowering
- RCS T_{cold} is 540 °F and slowly rising

The CRS should direct the reactor operator to _____ EFW flow to SG 1 and _____ EFW flow to SG 2.

	A	maintain; raise
	B	maintain; maintain
	C	raise; maintain
	D	raise; raise

Answer A

Explanation

OP-902-006 Safety Function 6 standards require maintain SG levels 50-70% NR and T_{cold} stable or lowering.

A is correct; SG 1 level is already lowering to the desired band. Increasing EFW flow will raise SG 2 level and lower T_{cold} which is desired.

B is incorrect; SG 1 level is already lowering to the desired band. SG 2 level is too low, and EFW flow should be raised to raise level.

C is incorrect; SG 1 level is lowering to the desired band, and raising flow may cause it to start raising level. SG 2 level is too low, and EFW flow should be raised to raise level.

D is incorrect; SG 1 level is lowering to the desired band, and raising flow may cause it to start raising level.

Comments

Q#	QID	New	Modified	Direct from Bank
81	S06006	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	1/1
Tech References	OP-902-005 TGOP-902-005	**K/A**	4.1-E55 Gen. 2.4.47
Ref Supplied	N/A	**Imp. Rating**	3.7
Cognitive Level	2	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-PPE05	07	

Proposed Question

Plant conditions are as follows:

- A Station Blackout has occurred with the plant initially at 100% power.
- No AC sources of power have been restored.
- A 20°F/Hr cooldown is in progress.
- Both Atmospheric Dump Valves (ADVs) are 30% open.
- Emergency Feedwater Pump AB is supplying each Steam Generator 150 GPM flow.
- Subcooled margin is 35°F and slowly lowering.
- RCS Tc is 405°F and slowly lowering.

The CRS should direct throttling the ADVs _____ in order to prevent losing _____ margin.

	A	closed; shutdown
	B	closed; subcooled
	C	open; shutdown
	D	open; subcooled

Answer A

Explanation

A is correct. Basis for step 18 is that C/D must be secured prior to 400°F to prevent loss of reactivity control safety function. W3 has calculated that SDM is maintained down to 400°F.

B is incorrect. The action is correct, but Reactivity control is why we stop cooldown at 400°F. This action will not prevent losing subcooled margin.

C and D are incorrect. This action will cause temperature to lower faster and drop below 400°F. Also, reactivity control is a higher safety function than is inventory control.

Comments

Q#	QID	New	Modified	Direct from Bank
82	S06007	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	1/2
Tech References	OP-901-102	**K/A**	4.2-A1 AA2.04
Ref Supplied	N/A	**Imp. Rating**	4.3
Cognitive Level	2	**10 CFR 55.43(b)**	6
Learning Objective	WLP-OPS-PP010	04	

Proposed Question

Initial conditions are as follows:

- Plant is stable at 50% power.
- Group P CEAs are inserted to 120" for axial shape control
- RG 6 CEAs are at 127" and are currently being withdrawn for axial shape control

RG 6 CEAs continue to withdraw when the reactor operator releases the shim switch. The reactor operator places the CEDMCS Mode Select switch to Off in accordance with OP-901-102, CEA or CEDMCS Malfunction. RG 6 CEAs stop outward motion at 140".

The most appropriate method to match Tavg and Tref is to….

	A	reduce turbine load.
	B	raise turbine load.
	C	borate the RCS.
	D	dilute the RCS.

Answer C

Explanation

C is correct. This action would match Tavg and Tref by lowering power, which is a conservative action, and meets the intent of OP-901-102, section E_3, step 3.

A and D are incorrect. These actions would cause a greater deviation between Tavg and Tref.

B is incorrect. This action would effectively match Tavg and Tref, but raising power to do so is a non-conservative method.

Comments

Q#	QID	New	Modified	Direct from Bank
83	S06008	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	1/2
Tech References	OP-901-202; OP-003-010	**K/A**	4.2-A37 Gen. 2.4.11
Ref Supplied	N/A	**Imp. Rating**	3.6
Cognitive Level	2	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-TS04	04	

Proposed Question

Plant conditions are as follows:

- The plant has been shutdown and is in Mode 3 due to a steam generator tube leak in SG 1.
- SG 1 has been isolated in accordance with OP-901-202, Steam Generator Tube Leakage or High Activity.
- SG 1 level is 83% Narrow Range and rising.

To comply with OP-901-202, Steam Generator Tube Leakage or High Activity, the CRS should direct the BOP operator to…

	A	drain SG 1 to the Regenerative Waste Tank.
	B	drain SG 1 to the Main Condenser.
	C	steam SG 1 using the Steam Bypass Control System
	D	steam SG 1 using Atmospheric Dump Valve # 1.

Answer B

Explanation

B is correct; OP-901-202 step 22 indicates that with Blowdown available, this method should be used to lower SG level. OP-003-010 Caution for section 8.12 indicates that draining to Main Condenser is preferable to Regen Waste Tank to prevent rad release to RAB.

A is incorrect; OP-003-010, SG Blowdown, Caution for section 8.12 indicates that draining to Main Condenser is preferable to Regen Waste Tank to prevent rad release to RAB.

C and D are incorrect; OP-901-202 step 22 indicates that with Blowdown available, this method should be used to lower SG level.

Comments

Q#	QID	New	Modified	Direct from Bank
84	S06009			X

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	6093-A	**Level**	SRO
NRC Exam History	2004 NRC Exam	**Tier/Group**	1/2
Tech References	OP-901-220	**K/A**	4.2-A51 AA2.02
Ref Supplied	N/A	**Imp. Rating**	4.1
Cognitive Level	2	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-PPO20	03	

Proposed Question

Given the following plant conditions:

- Reactor Power is 100%
- Condenser vacuum is 20.4 inches Hg and lowering 0.2 inches/minute

Which of the following should be done at this time?

	A	Commence a rapid downpower until vacuum recovers to > 25 inches HG.
	B	Trip the reactor and verify the turbine tripped
	C	Trip Feedwater Pump Turbines A and B.
	D	Verify Main Steam Isolation Valves closed.

Answer B

Explanation

B is correct. This matches step 5 of OP-901-220.

A is incorrect. This rate of decline will not allow a downpower prior to reaching 20" Hg vacuum where the procedure requires a reactor trip.

C is incorrect. The Feedwater Pumps trip at 14" Hg

D is incorrect. This action is required below 14" Hg per step 5a of OP-901-220.

Comments

Q#	QID	New	Modified	Direct from Bank
85	S06010	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	1/2
Tech References	SD-RMS EP-002-030 EN-RP-207	**K/A**	4.2-A61 Gen. 2.3.1
Ref Supplied	N/A	**Imp. Rating**	3.0
Cognitive Level	2	**10 CFR 55.43(b)**	4
Learning Objective	WLP-OPS-EP02	08	

Proposed Question

With refueling operations in progress, a failure of a steam generator nozzle dam has resulted in an unisolable leak, causing level in the Reactor Cavity and Spent Fuel Pool to lower. Area radiation monitors in the Fuel Handling Building (FHB) are all reading 7.5 X 10^3 mR/hr. This reading has been validated as accurate according to Radiation Protection surveys and calculations. The TSC has determined the need to enter the +46 FHB and close the Transfer Tube Isolation Valve, FHS-201.

Of the following, what is the maximum time each team member may remain in this high dose field WITHOUT exceeding Emergency Radiation Exposure Guidelines?

	A	30 minutes
	B	45 minutes
	C	1 hour and 15 minutes
	D	1 hour and 30 minutes

Answer C

Explanation

EP-002-030 Section 5.2 limits emergency exposure for accident-mitigating activities to a TEDE of 10 rem. (EN-RP-207, Planned Special Exposure, limits PSEs to 5 rem.)

C is correct. (7.5 rem) X (1.25 hours) = 9.375 rem

A is incorrect. (7.5 rem) X (.5 hours) = 3.75 rem

B is incorrect. (7.5 rem) X (.75 hours) = 5.625 rem

D is incorrect. (7.5 rem) X (1.5 hours) = 11.25 rem

Comments

Q#	QID	New	Modified	Direct from Bank
86	S06011		X	

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	113-B	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	2/1
Tech References	TS 3.1.2.9, COLR 3.1.2.9	**K/A**	3.1-004 Gen. 2.1.33
Ref Supplied	TS 3.1.2.9, COLR 3.1.2.9	**Imp. Rating**	4.0
Cognitive Level	2	**10 CFR 55.43(b)**	2
Learning Objective	WLP-OPS-CVC00	08	

Proposed Question

Given the following:

- The plant has recently entered Mode 5.
- Pressurizer level is at 50% Cold Cal.
- The last OP-903-090 "Shutdown Margin" calculated a Keff of 0.962.
- Charging Pump A is de-energized and isolated.
- Charging Pump B is in operation.
- Charging Pump AB is in Standby.

Startup channel #1 has just failed high. WHAT action(s) is(are) required to meet the Tech Spec Limiting Condition for Operation?

	A	Isolate all Primary Makeup Water flowpaths to the RCS.
	B	Isolate all Primary Makeup Water flowpaths to the RCS and isolate Charging Pump AB.
	C	Determine RCS boron concentration within 1 hour and every 1.5 hours thereafter.
	D	Determine RCS boron concentration within 1 hour and every 1.5 hours thereafter, and isolate Charging Pump AB.

Answer B

Explanation

B is correct. This keeps the facility within the LCO of TS 3.1.2.9.b.

A and C are incorrect. TS 3.1.2.9.b.2 refers to the COLR. COLR requires 2 charging pump breakers to be racked out for 0.962 Keff.

D is incorrect. This keeps the facility within the Action Statement, but not the LCO.

Comments

Old question only required PMU isolated since two Charging pumps were already racked out.

Q#	QID	New	Modified	Direct from Bank
87	S06012	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	2/1
Tech References	OP-901-111; HP-001-213; OP-008-003	**K/A**	3.5-007 Gen. 2.3.10
Ref Supplied	N/A	**Imp. Rating**	3.3
Cognitive Level	2	**10 CFR 55.43(b)**	4
Learning Objective	WLP-OPS-PPO10	04	

Proposed Question

The following plant conditions exist:

- The plant is at 100% power.
- Pressurizer Safety Valve, RC-317B, is leaking at 1.5 gpm.
- Quench Tank temperature and pressure are both rising.

To limit radiation levels in the Containment atmosphere, the CRS should direct _____; and, to guard against personnel exposure in the Containment, the SM should limit the time maintenance personnel spend _____.

	A	starting a fourth Containment Fan Cooler; in the reactor cavity.
	B	starting a fourth Containment Fan Cooler; at elevations above the +46 elevation.
	C	filling and draining the Quench Tank; in the reactor cavity.
	D	filling and draining the Quench Tank; at elevations above the +46 elevation.

Answer D

Explanation

D is correct. The Quench Tank must be cooled to prevent rupturing the rupture disc. This is directed in OP-901-111, step 14. HP-001-213 allows limited entry to the +46 elevation.

A and B are incorrect. Starting all CFCs is not allowed by OP-008-003, Containment Cooling System.

C is incorrect. HP-001-213 forbids entry into the reactor cavity while in MODE 1.

Comments

Q#	QID	New	Modified	Direct from Bank
88	S06013	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	2/1
Tech References	OP-901-504, SD-SDC, SD-CC, SD-PPS	**K/A**	3.2-013 A2.06
Ref Supplied	N/A	**Imp. Rating**	4.0
Cognitive Level	2	**10 CFR 55.43(b)**	2
Learning Objective	WLP-OPS-PPO50	03	

Proposed Question

Plant conditions are as follows:

- A plant cooldown is in progress
- RCS Temperature is 300°F and slowly lowering
- Pzr Pressure is 350 psia and stable
- RCPs 1B and 2B are running
- SDC Train A is in operation

Following an inadvertent _____, the CRS should enter OP-901-504, Inadvertent ESFAS Actuation, and prioritize….

	A	CSAS; securing High Pressure Safety Injection flow to prevent lifting LTOPs.
	B	RAS; restoring cooling flow to the RCPs to prevent seal damage.
	C	SIAS; securing High Pressure Safety Injection flow to prevent lifting LTOPs.
	D	CIAS; restoring cooling flow to the RCPs to prevent seal damage.

Answer C

Explanation

C is correct; HPSI and Charging Pumps start on SIAS, and would pressurize RCS to LTOP lift setpoint if not secured. Step 1 of E1, Inadvertent SIAS/CIAS, directs securing HPSI pumps.

A is incorrect; CSAS does not send a start signal to the HPSI pumps.

B and D are incorrect; CSAS isolates CCW to RCPs.

Comments

Q#	QID	New	Modified	Direct from Bank
89	S06014	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	2/1
Tech References	SD-EFW; OP-100-014 TS 3.7.1.2 & 3.8.1.1	**K/A**	3.4-061 A2.03
Ref Supplied	TS 3.7.1.2 (TS and Basis); 3.8.1.1	**Imp. Rating**	3.4
Cognitive Level	1	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-EFW00	08	

Proposed Question

Plant conditions are as follows:

- Plant power is 100%.
- 1 hour ago, EDG A was declared Out of Service. Appropriate Tech Spec Actions have been addressed in accordance with OP-100-014, Technical Specification and Technical Requirements Compliance.
- A component failure has just resulted in a loss of DC power to the AB EFW Pump Steam Supply Valves (MS-401A and MS-401B).

Under these conditions the maximum time allowed before the plant must be in Hot Standby is _____ hours from now.

	A	7
	B	8
	C	30
	D	78

Answer B

Explanation

B is correct; TS 3.8.1.1 (Action “d”) states that the AB EFW Pump must be Operable within 2 hours or be in HSB within the next 6 hours (2 + 6 = 8).

A is incorrect; TS 3.8.1.1 (Action “d”) states that the AB EFW Pump must be Operable within 2 hours or be in HSB within the next 6 hours (2 + 6 = 8). An operator that assumed this is from the time of the EDG failure would subtract 1 hour from the 8 hour calculation.

C is incorrect; TS 3.7.1.2 (Action “b”) allows 24 hours for restoration or be in HSB within the next 6 hours (24 + 6 = 30).

D is incorrect; TS 3.7.1.2 (Action “d”) allows 72 hours for restoration or be in HSB within the next 6 hours (72 + 6 = 78). Both EFW Turbine Steam Supply Valves (MS-401A AND MS-401B) are powered from bus AB-DC-S and will fail closed without power.

Comments

Q#	QID	New	Modified	Direct from Bank
90	S06015	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	2/1
Tech References	OP-901-310	**K/A**	3.6-062 A2.12
Ref Supplied	N/A	**Imp. Rating**	3.6
Cognitive Level	2	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-PPO30	01	

Proposed Question

The following plant conditions exist:

- The plant was shutdown 3 days ago for a refueling outage
- RCS temperature is 195°F
- SDC Train A is in service
- SDC Train B is in standby
- AB electrical buses are aligned to the A side
- AB CCW Pump is replacing B (B CCW Pump is Out of Service)
- Essential Chiller A shaft seizes, resulting in a loss of the A3 Safety Bus

Which action should be performed FIRST in order to maintain the plant in Mode 5?

	A	Align the AB electrical buses to the B side.
	B	Send an operator and electrician to the A3 Safety Bus.
	C	Ensure at least one CCW pump is running.
	D	Place SDC Train B in service.

Answer A

Explanation

A is correct. OP-901-310, Loss of Train A Safety Bus, directs aligning the AB bus to the B side. This needs to be done first so that the AB CCW Pump can be restarted followed by placing SDC Train B in service.

B is incorrect. This is a good action to restore the A3 Bus; however, it will take longer than swapping the AB Buses, and decay heat will heat the plant into Mode 4.

C is incorrect. Must restore power to the A or AB Bus before any CCW pumps can be started.

D is incorrect. Cannot place SDC Train B in service without CCW to remove the heat.

Comments

Q#	QID	New	Modified	Direct from Bank
91	S06016		X	

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	5879-A	**Level**	SRO
NRC Exam History	2002	**Tier/Group**	2/2
Tech References	OP-901-405	**K/A**	3.8-034 A2.01
Ref Supplied	N/A	**Imp. Rating**	4.4
Cognitive Level	2	**10 CFR 55.43(b)**	7
Learning Objective	WLP-OPS-PPO40	04	

Proposed Question

During refueling operations, a spent fuel bundle is dropped to the Refueling Cavity floor, resulting in numerous area and effluent radiation alarms.

What action contained in OP-901-405, Fuel Handling Incident, has the HIGHEST priority to minimize an uncontrolled release?

	A	Start Airborne Radioactivity Removal System.
	B	Ensure FHB exterior and Cargo Train Bay doors closed.
	C	Close the Personnel and Escape Air Locks.
	D	Close and secure the Equipment Hatch.

Answer D

Explanation

D is correct. This is part of the Containment Closure Checklist referenced early in OP-901-405. Closing the Equipment Hatch needs to be performed within 30 minutes. This is the most important step in limiting the release of radioactivity to the environment.

A is incorrect. This is referenced late in OP-901-405 and is less effective in limiting the release of radioactivity to the environment than bottling the Containment.

B is incorrect. This is referenced early in OP-901-405, but it ineffective for a dropped assembly in the Containment.

C is incorrect. This is part of the Containment Closure Checklist referenced early in OP-901-405. Closing the Personnel and Escape Air Locks need to be complete within 1.5 hours.

Comments

Q#	QID	New	Modified	Direct from Bank
92	S06017	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	2/2
Tech References	CE-002-002	**K/A**	3.8-056 Gen. 2.1.34
Ref Supplied	CE-002-002 pp 3-9	**Imp. Rating**	2.9
Cognitive Level	1	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-CHM02	18	

Proposed Question

Plant conditions are as follows:

- A condenser tube leak occurred 2 hours ago.
- Condensate Pump Discharge dissolved oxygen had peaked at 40 ppb.
- A plant downpower is in progress.
- After isolating the A2 Waterbox, dissolved oxygen dropped to 25 ppb and is currently lowering at 2 ppb per hour.
- The plant is currently at 82% power.

What is the correct course of action for this condition?

	A	Continue the downpower to < 5% power.
	B	Continue the downpower to < 30% power.
	C	Return to 100% power.
	D	Remain at 82% power.

Answer D

Explanation

D is correct. Meets the guidelines of Action Level 2 in CE-002-002.

A is incorrect. Action Level 3 requires downpower to < 5%.

B is incorrect. Action Level 2 does not require continuing the downpower if below Action 2 levels, unless 1 week above Action 1 Levels exceeded.

C is incorrect. Action Level 2 does not allow restoring power until Action Level 1 values are met.

Comments

Q#	QID	New	Modified	Direct from Bank
93	S06018	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	2/2
Tech References	SD-FP; OP-009-004	**K/A**	3.8-086 A2.04
Ref Supplied	N/A	**Imp. Rating**	3.3
Cognitive Level	2	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-FP00	01	

Proposed Question

Plant conditions are as follows:

- Plant is in Mode 4 in preparation for a refueling outage
- The crew is responding to an inadvertent CIAS, caused by an error in I&C testing.
- The charcoal filter for the B Airborne Radioactivity Removal System (ARRS) catches fire.
- The BOP operates the pull station for E13B.
- The fire brigade leader reports that the B ARRS charcoal unit continues to burn with no water flow to the unit.

To comply with OP-009-004, Fire Protection, the CRS should direct the…..

	A	fire brigade leader to locally actuate the deluge system for the B ARRS charcoal unit.
	B	fire brigade leader to spray down the B ARRS charcoal unit with local fire hoses.
	C	BOP to place the control switch for FP-601B, Reactor Bldg Fire Main Hdr B FPM-2 Cntmt Isolation, to Close and then to Open.
	D	BOP to operate the pull station for FPM-2, Reactor Bldg Fire Main Hdr B.

Answer C

Explanation

C is correct. FP-601B closed on the CIAS. The valve must be taken to Close and then to Open to override the signal.(SD pp23-24)

A is incorrect. The AARS charcoal unit is not locally activated. Plausible because other units (SBVS and CVAS) do require local actuation.

B is incorrect. The CIAS has isolated Fire Protection to the Containment.

D is incorrect. FPM-2 receives an actuation when the pull station for E13B is actuated. The CIAS has isolated Fire Protection to the Containment.

Comments

Q#	QID	New	Modified	Direct from Bank
94	S06019	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	3
Tech References	OP-901-523; WLP-OPS-PP052	**K/A**	2.1.6
Ref Supplied	N/A	**Imp. Rating**	4.3
Cognitive Level	2	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-PPO52	02	

Proposed Question

The site is under attack from armed adversaries. The Control Room Staff has entered the Security Event Offnormal, and taken the following actions:

- Tripped the Reactor
- Manually initiated EFAS 1 and 2
- Placed Pressurizer Spray Valves in BOTH
- Placed Control Room Ventilation in ISOLATE
- Entered OP-902-000, Standard Post Trip Actions

Security has JUST informed the SM that:

- The Control Room is the current target of attack
- Adversaries have entered the Turbine Building
- The Security Force is defending the Control Room Envelope entrance

The SM should…

	A	direct the crew to perform the Immediate Operator Actions of OP-901-502, Control Room Evacuation, and establish communications with Security after reaching the Remote Shutdown Panel.
	B	coordinate with Security to evacuate the Control Room, and directly enter OP-901-502 E_1, Control Room Evacuation with Fire.
	C	notify Security of an immediate Control Room Evacuation, and directly enter OP-901-502 E_2, Control Room Evacuation.
	D	direct Security to defend the Control Room staff, direct the NAOs to take cover, and continue with Standard Post Trip Actions.

Answer B

Explanation
B is correct. Step 9 of OP-901-523 directs these actions, and WLP-OPS-PPO52 provides elaborating information on safety precautions. A is incorrect; OP-901-502 Immediate actions are not performed in a security event. OPS must coordinate with Security prior to CR evacuation. C and D are incorrect; OP-901-523 directs entry into E_1, Fire section of OP-901-502.

Comments

Q#	QID	New	Modified	Direct from Bank
95	S06020	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	3
Tech References	OP-902-002; OI-038-000	**K/A**	2.1.7
Ref Supplied	N/A	**Imp. Rating**	4.4
Cognitive Level	2	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-PPE02	19	

Proposed Question

The following conditions exist:

- The plant has experienced a LOCA.
- Containment pressure is 16.2 psia and trending down.
- Containment temperature is 201°F and trending down.
- All systems operated per design.
- You have implemented the procedure step for Throttling HPSI Flow.

Which ONE of the following requires raising HPSI flow to the RCS?

	A	RCS Subcooling is 31°F and dropping very slowly.
	B	PZR level is 21% and stable.
	C	All S/Gs are capable of steaming; with SG 1 NR level 61%, SG 2 NR level 62%, and EFW is raising both in MANUAL.
	D	QSPDS Reactor Vessel Level 5 and below indicate covered, but levels above that are still uncovered.

Answer B

Explanation

B is correct. OI-038-000 requires Harsh Containment values to be used $\geq$ 200°F. Harsh Containment value for PZR level must be $\geq$ 23% to throttle HPSI flow.

A, C and D are incorrect; HPSI Throttle criteria are satisfied with these step values with Harsh Containment Conditions. A - RCS subcooling required is 28°F / C – Both S/Gs have level 60-80% NR / D – RVLMS Rx Vessel level 5 is NOT voided.

Comments

Q#	QID	New	Modified	Direct from Bank
96	S06021	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	3
Tech References	EN-OP-102	**K/A**	2.2.13
Ref Supplied	N/A	**Imp. Rating**	3.8
Cognitive Level	1	**10 CFR 55.43(b)**	2
Learning Objective	ELP-OPS-CLR	07	

Proposed Question

If plant conditions require the removal of a danger tag, the _____ may perform Alternate Release Authorization. One procedural condition required for this authorization is…

	A	Duty Plant Manager; a knowledgeable Tagout Holder ensures the release will not be detrimental to the plant or personnel.
	B	Duty Plant Manager; the Tagout/Work Order Holder cannot be contacted or cannot break away from his/her current responsibility.
	C	SM or designee; a knowledgeable Tagout Holder ensures the release will not be detrimental to the plant or personnel.
	D	SM or designee; the Tagout/Work Order Holder cannot be contacted or cannot break away from his/her current responsibility.

Answer C

Explanation

C is correct. The SM or designee may perform this function (step 5.14), and part c of this step discusses the knowledgeable Tagout Holder.

A and B are incorrect. The DPM is not mentioned in step 5.14.

D is incorrect. The conditions of step 5.14 state that the Tagout/Work Order Holder must not be on site.

Comments

Q#	QID	New	Modified	Direct from Bank
97	S06022		X	

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	3989-A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	3
Tech References	RF-005-001	**K/A**	2.2.28
Ref Supplied	N/A	**Imp. Rating**	3.5
Cognitive Level	1	**10 CFR 55.43(b)**	7
Learning Objective	WLP-OPS-REQ04	04	

Proposed Question

The following conditions exist:

- The plant is in Mode 6
- Refueling activities are in progress
- Initial startup count rate is 16 cps
- The current move sequence is to remove a CEA from a spent fuel assembly and insert it into a new fuel assembly.

During the withdrawal of the CEA from the fuel assembly seated in the core, the Control Room Communicator reports that startup count rate is 34 cps and slowly rising.

To comply with RF-005-001, Fuel Movement, the Fuel Handling Supervisor should direct the Refueling Crew to_____ and then . . .

	A	insert the CEA in the spent assembly; secure core alterations.
	B	insert the CEA in the spent assembly; analyze the condition prior to securing core alterations.
	C	complete the CEA movement to the new assembly; secure core alterations.
	D	stop the CEA movement; analyze the condition prior to securing core alterations.

Answer A

Explanation
A is correct; Reinserting the CEA is conservative and allowed by Precaution 3.16. Precaution 3.17 states to secure core alterations. B is incorrect; Core alterations must be secured and need for evacuation must be determined. Rx Engineering is responsible for analyzing the situation. C is incorrect; Do not complete the movement, Precaution 3.17 requires stopping core alterations. D is incorrect; Reinserting the CEA is conservative and allowed by Precaution 3.16. Rx Engineering is responsible for analyzing the situation.

Comments

Q#	QID	New	Modified	Direct from Bank
98	S06023	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	3
Tech References	OP-007-004; SD-LWM	**K/A**	2.3.3
Ref Supplied	N/A	**Imp. Rating**	2.9
Cognitive Level	1	**10 CFR 55.43(b)**	4
Learning Objective	WLP-OPS-LWM00	04	

Proposed Question

The _____ must weigh the needs of the station against increased radiological dose rates in areas surrounding the Waste Storage Tank prior to authorizing the tank to be filled above _____.

	A	Duty Plant Manager; 75%
	B	Duty Plant Manager; 50%
	C	SM/CRS; 75%
	D	SM/CRS; 50%

Answer D

Explanation

D is correct; consistent with Limitation 3.2.5 of OP-007-004.

A and B are incorrect; 3.2.5 specifies SM/CRS.

C is incorrect; 3.2.5 specifies 50%

Comments

Q#	QID	New	Modified	Direct from Bank
99	S06024	X		

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	N/A	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	3
Tech References	OP-002-010	**K/A**	2.3.9
Ref Supplied	N/A	**Imp. Rating**	3.4
Cognitive Level	1	**10 CFR 55.43(b)**	4
Learning Objective	WLP-OPS-HVR00	06	

Proposed Question

Given the following:

- The plant is in MODE 5 after refueling the reactor.
- Containment Purge has been operated frequently throughout the outage.
- The Train A Plant Stack Radiation Monitor (PRM-IRE-0100.1) sample pump is Out of Service.
- The Train A Airborne Radiation Removal System is Out of Service.
- The Personnel Airlock Door interlock has been defeated.
- The Maintenance Hatch has been closed.
- The Containment Purge Valve Manual Stops have NOT been installed.

Radiation Protection (RP) requests starting Containment Purge to maintain iodine levels low in Containment.

The CRS should inform RP that Containment Purge should not be initiated until the _____ is (are) returned to service.

	A	Train A Plant Stack Radiation Monitor sample pump
	B	Train A Airborne Radiation Removal System
	C	Personnel Airlock Door interlock
	D	Containment Purge Valve Manual Stops

Answer C

Explanation
C is correct; OP-002-010 Precaution 3.1.11 states that Purge should not be initiated with the Maintenance Hatch closed and the airlock door interlock defeated. This is a personnel safety risk. A is incorrect; OP-002-010 Precaution 3.1.6 states that only one sample pump is needed to commence Purge. B is incorrect; OP-002-010 step 6.5 - ARRS is discretionary with low Iodine levels. At the end of the outage, iodine levels should be low. And, one ARRS unit is still available, if needed. D is incorrect; OP-002-010 Precaution 3.1.1 states that the valve stops are required for Modes 1-4.
Comments

Q#	QID	New	Modified	Direct from Bank
100	S06025		X	

Question Information		Examination Outline Cross-Reference	
Previous Bank QID	06734	**Level**	SRO
NRC Exam History	N/A	**Tier/Group**	3
Tech References	EP-001-001 Att. 7.1 p15	**K/A**	2.4.29
Ref Supplied	EP-001-001 Att. 7.1 p15	**Imp. Rating**	4.0
Cognitive Level	1	**10 CFR 55.43(b)**	5
Learning Objective	WLP-OPS-PPO52	04	

Proposed Question

The NRC notifies the Control Room that a commercial aircraft leaving Dallas International Airport has left its designated flight path and Waterford 3 is within current flight path of a Track of Interest. The current time is 1400, and the estimated arrival time of the airborne threat is 1440.

Assuming this information is validated _____ should immediately be declared. In addition, a Site Area Emergency should be declared…

	A	no classification; after 1410.
	B	an Unusual Event; after 1410.
	C	an Unusual Event; on impact within the Protected Area.
	D	an Alert; on impact within the Protected Area.

Answer C

Explanation

C is correct; UE per HU1, and SAE per HS1b.

A and B are incorrect; SAE not required until impact in protected area.

D is incorrect; Alert required after 1410 if threat still imminent, but this was not given in the stem.

Comments