

Question Number

System/Mode

Stem

Generic Knowledges and Abilities

KANo

Description

Question

- A. WR Nuclear Instrumentation
- B. Delta-T Power
- C. XC-105 Calorimetric
- D. Main Generator Output

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

Generic Knowledges and Abilities

KANo

Description

Question

The following conditions exist:

- River Temperature is 55F
- The plant is operating at full power
- Raw Water pump AC-10A has been out of service for the past three days
- Containment Spray Pump SI-3B has just been declared inoperable

In order to satisfy the requirements of Tech Specs, these conditions require that the plant be taken to HOT SHUTDOWN within which one of the following times.?

- A. 12 hours
- B. 36 hours
- C. 4.5 Days
- D. 7.5 Days

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

Generic Knowledges and Abilities

KANo

Description

Question

Which one of the following statements is correct concerning the required sequence of prerequisites and procedural steps in Fort Calhoun system Operating Instructions?

A. Prerequisites and procedural steps must be satisfied or completed in sequence unless the procedure states otherwise.

B. Prerequisites must be satisfied in sequence but procedure steps are not required to be completed in sequence unless specified in the procedure.

C. Prerequisites are not required to be satisfied in sequence but procedure steps must be completed in sequence unless the procedure states otherwise.

D. Prerequisites and procedure steps are not required to be satisfied or completed in sequence unless the procedure states otherwise.

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

Generic Knowledges and Abilities

KANo

Description

Question B. The component operated by the switch is a "Safe Shutdown" component
C. Operation of the switch requires self-checking
D. Operation of the switch requires peer-checking"/>

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode Stem

Generic Knowledges and Abilities

KANo Description

Question

During refueling, a fuel bundle has been removed from the core and the fuel hoist box on FH-1 has been returned to its up limit. What action must be taken to enable the bridge and trolley to be moved?

A. The empty hoist bypass switch must be turned to OFF.

B. The bridge trolley lockout pushbutton must be depressed.

C. The mast bump override button must be depressed

D. The mast detent switch must be placed in DISENGAGE

Answer CFR Section

Higher Level R0 SR0

LP Number LPObjective

Explain the function of the major components of the refueling machine and how interlocks prevent unsafe operation.

Question Source

Reference

Attachment

Comments

Question Number
System/Mode Stem
Generic Knowledges and Abilities
KANo Description

Question
A. Placing a fuel assembly in the storage side upender.
B. Removing a fuel assembly from the storage side upender.
C. Placing a fuel assembly in the new fuel elevator.
D. Removing a fuel assembly from the new fuel elevator.

Answer CFR Section
Higher Level R0 SR0

LP Number LP Objective

Question Source
Reference
Attachment
Comments

Question Number

System/Mode

Stem

Generic Knowledges and Abilities

KANo

Description

Question

When performing a shutdown margin calculation at FCS, a correction to the boron concentration required for adequate shutdown margin is made if the actual full power boron concentration is higher than the predicted full power boron concentration. This correction accounts for:

- A. Boron-10 depletion in the RCS boron
- B. Temperature difference between the RCS and the chemistry lab.
- C. Changes in burnable poisons.
- D. Variations in the boric acid calibration standards

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

DESCRIBE how changes in primary parameters affect shutdown margin including:

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

Generic Knowledges and Abilities

KANo

Description

Question

The RWP Surveillance and ALARA coordinator has determined that an ALARA job briefing is required for performance of a job in the RCA. Which one of the following restrictions apply until all affected workers attend an ALARA job briefing?

- A. The affected workers will not be issued TLDs.
- B. The affected workers will not be allowed to sign the RWP.
- C. The affected workers will not be allowed to enter the RCA.
- D. The affected workers will not be allowed to enter the protected area

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Given a copy of the Radiation Protection procedures, DEFINE the following types of controlled, contaminated, and radiation areas at Fort Calhoun Station and EXPLAIN the controls, posting requirements, access requirements, and limits for each

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

Generic Knowledges and Abilities

KANo

Description

Question

A. 1 hour 18 minutes
B. 2 hours 51 minutes
C. 3 hours 42 minutes
D. 4 hours 8 minutes

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

Generic Knowledges and Abilities

KANo

Description

Question

The "Master Silence" button may be used to enhance control room communications following a reactor trip. Who may authorize use of the "Master Silence" button?

- A. The Reactor Operator
- B. The Control Room Supervisor
- C. The Shift Technical Advisor
- D. The Control Room Communicator

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

Generic Knowledges and Abilities

KANo

Description

Question

A. The Reactor Operator is normally stationed at CB-4 where "Reactivity Control" is verified.

B. "Reactivity Control" is the only safety function that needs to be satisfied to prevent fuel damage.

C. "Reactivity Control" is the only safety function that can be satisfied without instrument air

D. "Reactivity Control" is the only safety function that can be satisfied without AC electrical power

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LPObjective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

Generic Knowledges and Abilities

KANo

Description

Question

The following conditions exist:

The reactor tripped.due to a loss of DC bus #1
DG-1 did not start and bus 1A3 is not energized.
All offsite power (161 KV and 345 KV) is unavailable

Which one of the following must be accomplished before Bus 1A3 can be energized?

A Start the diesel DG-1 locally, at AI-133.

B Transfer DG-1 DC Control Power to its emergency source.

C Transfer bus 1A3/1A1 DC control power to its emergency source

D Close the cross-tie breakers between instrument busses "A" and "C"

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LPObjective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

Generic Knowledges and Abilities

KANo

Description

Question

The plant is in mode 3 and surveillance tests are being performed. Annunciator window "flags" are being used in accordance with the OPD 6-04, "Annunciator Marking".?

Which one of the following situations is unexpected and requires use of the Annunciator Response Procedures?

- A. A red flagged annunciator window is unlit
- B. A blue flagged annunciator window is unlit
- C. A green flagged annunciator window is lit
- D. An unflagged annunciator window is lit

Answer

CFR Section

Higher Level

RO

SRO

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of the operational implications of the following concepts as they apply to Continuous Rod Withdrawal:

KANo

Description

Question

Which one of the following events is most likely to result in a prompt critical condition at FCS?

- A. A CEA ejection from 10-3% power.
- B. A CEA ejection from 100% power.
- C. A CEA withdrawal from 10-3% power.
- D. A CEA withdrawal from 100% power.

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question
A. PDIL
B. Continuous Rod Motion
C. Rod Position Deviation Low Limit
D. Rod Position Deviation Reed Switch

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode Stem

KANo Description

Question

Following a small break loss of coolant accident, the following conditions exist:

Three HPSI pumps are running
 Three Containment Spray Pumps are running
 One LPSI Pump is Running
 SIRWT Level is 16"
 RCS Pressure is 600 psia
 Containment pressure is 8 psig

Which one of the following actions should be taken?

A. Start a LPSI pump
 B. Shutdown a LPSI pump
 C. Shutdown a HPSI pump
 D. Shutdown all Containment Spray Pumps

Answer CFR Section

Higher Level RO SRO

LP Number LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The following conditions exist:

The plant is operating at 100% power
 Quench tank pressure is being maintained at 7 psig
 Pressurizer safety valve RC-142 is leaking

Which one of the following is the temperature expected to be seen on tailpipe temperature monitor TIA-136?

A. 150F
 B. 230F
 C. 300F
 D. 640F

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The purpose of the flywheels on the reactor coolant pump motors is to:
A. Minimize starting current for the RCP motors
B. Counterbalance the lift produced by operation of the oil lift pumps
C. Maintain core flow following a loss of power to the pump
D. Reduce pump vibration during a RCS cooldown and depressurization.

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

A. Restart RC-3B

B. Trip RC-3A

C. Trip RC-3D

D. Trip all running RCPs

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of the reasons for the following responses as they apply to the Loss of Reactor Coolant Pump Makeup:

KANo

Description

Question

The plant is operating at 100% power when all charging pumps become inoperable. What will make an OP-4 shutdown without charging more difficult than a normal OP-4 shutdown

A. RCS temperatures will be higher than during a normal OP-4 shutdown because rod movement is not allowed in this situation.

B. RCS temperatures will be lower than during a normal OP-4 shutdown because rod movement is not allowed in this situation.

C. ASI will be more positive than during a normal OP-4 shutdown because all negative reactivity changes must be made with control rods.

D. ASI will be more negative than during a normal OP-4 shutdown because all negative reactivity changes must be made with control rods.

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

Emergency Boration

KANo

Description

Question

A power increase is in progress. The reactor is at 80% power. Group 4 CEAs are at 52 inches. All other CEAs are fully withdrawn. What action must be taken as a result of these conditions?
A. Immediately commence emergency boration
B. Withdraw group 4 to above the short term insertion limit
C. Withdraw group 4 until proper group overlap is achieved
D. Place the plant in hot shutdown within 6 hours

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The plant has been in mode 4 for a week while maintenance is being performed. A plant heatup to mode 3 is in progress.

The following conditions exist:

	Level	Concentration	Temperature
BAT A	58%	3.1%	50F
BAT B	28%	2.7%	55F
SIRWT	188 in	2225 ppm	53F

Which one of the following actions is required?

A. Increase the borated water level in the SIRWT
 B. Increase the borated water temperature in BAT A
 C. Increase the boron concentration in BAT A
 D. Increase the boron concentration in the SIRWT

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode Stem

KANo Description

Question

Answer CFR Section

Higher Level RO SR0

LP Number LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of the interrelations between the Loss of Residual Heat Removal System and the following:

KANo

Description

Question

What cooling flowpath would be used following an inoperable LPSI header downstream of FCV-326?

- A. Charging pumps take a suction from the RCS loop and discharge through the shutdown cooling heat exchanger back to the RCS.
- B. HPSI pumps take a suction from the RCS loop and discharge through the shutdown cooling heat exchanger back to the RCS
- C. A containment spray pump takes a suction from the LPSI pump suction and discharges through the shutdown cooling heat exchanger to the HPSI pump suction, The HPSI pump discharge flows back to the RCS.
- D. A HPSI pump takes a suction from the LPSI pump suction and discharges through the shutdown cooling heat exchanger to the containment spray pump suction, The containment spray pump discharge flows back to the RCS.

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

DESCRIBE the evaluation criteria to use for deciding appropriate measures to take prior to changing plant configuration.

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

A. When operating 2 or more charging pumps.

B. When performing a normal RCS cooldown and depressurization.

C. When responding to high pressurizer level.

D. When performing a normal RCS boron dilution.

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The plant is operating at 100% power with pressurizer level channel X selected as the controlling channel. Backup heater groups 1 and 2 are in the on position to maintain RCS pressure.

If LT-101X fails low, how will the pressurizer heaters respond?

- A. All pressurizer heaters will deenergize
- B. Backup heater groups 1 and 2 will remain energized
- C. Backup heater groups 1 and 2 only will deenergize
- D. All backup heaters will energize

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The reactor tripped 20 minutes ago. The following conditions are observed:
"PRESSURIZER PRESSURE OFF NORMAL HI-LO" channel x and y are in alarm
PRC-103x (controlling channel) indicates 2160 psia and stable
All backup heaters in auto and energized
LRC-101Y (controlling channel) indicates 60% and stable
LRC-101X indicates 43% and increasing slowly
LI-106 indicates 28%
Letdown flow is 26 gpm
One charging pump is running
T-cold is 533F T-hot is 534F Both are stable

Select the probable cause and the action that should be taken.

A. Low level on LRC-101X is maintaining B/U heaters on. Place the pressurizer heater cutout switch in the channel Y position

B. The bistable for the backup heaters needs to be reset. Place the control switches for all B/U heaters to reset and back to auto.

C. LRC-101Y has malfunctioned causing the B/U heaters to remain on. Place LRC-101X in service

D. PRC-103X has malfunctioned causing the backup heaters to remain on. Place PRC-103Y in service

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of the reasons for the following responses as the apply to the ATWS:

Anticipated Transient Without Scram (AT)

KANo

Description Starting a specific charging pump

Question

The plant is operating at 2% power. CH-1B is operating. A reactor trip occurs and all CEAs fail to insert.

What actions should be taken with the charging pumps?

- A. Start CH-1A or CH-1C
- B. Start CH-1A and CH-1C
- C. Start CH-1A. Stop CH-1B.
- D. Stop CH-1B

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

GIVEN a set of plant conditions and a copy of EOP-00, DETERMINE the appropriate response to the plant conditions. Both the corrective actions required and any other EOP's referred to by the procedure must be included.

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of the reasons for the following responses as the apply to the ATWS:

Anticipated Transient Without Scram (AT)

KANo

Description Closing the main steam isolation valve

Question

A main generator trip occurred from 100% power. The reactor failed to trip and all turbine stop and control valves remained open. What action should be taken to lower reactor power?

A. Close the main steam isolation valves.

B. Manually open the steam dump and bypass valves

C. Start AFW pumps, FW-6 and FW-10

D. Trip all reactor coolant pumps

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

GIVEN a set of plant conditions and a copy of EOP-00, DETERMINE the appropriate response to the plant conditions. Both the corrective actions required and any other EOP's referred to by the procedure must be included.

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of the operational implications of the following concepts as they apply to Loss of Source Range Nuclear Instrumentation:

KANo

Description

Question

A reactor startup is being performed. The reactor power is steady with the following WR NIS channel readings:

Channel	Power
A	1.10 X 10 ⁻³ %
B	1.08 X 10 ⁻³ %
C	1.10 X 10 ⁻³ %
D	1.12 X 10 ⁻³ %

An electrical disturbance causes the detector voltages for channel "A" to increase by 5 volts and the detector voltage for channel "C" to decrease by 5 volts. The detector voltages for channels "B" and "D" remain steady. Which channel will have the highest reading following the voltage changes?

- A. Channel "A"
- B. Channel "B"
- C. Channel "C"
- D. Channel "D"

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question
A. TM/LP pretrip
B. High SUR pretrip
C. APD pretrip
D. ASGT pretrip

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode Stem

KANo Description

Question

- A. The system would act to maintain a higher level in RC-2B
- B. The system would act to maintain a lower level in RC-2B
- C. The system would act to maintain a higher FW flow into RC-2B
- D. The system would react to maintain a lower FW flow into RC-2B

Answer CFR Section

Higher Level R0 SR0

LP Number LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question
A. Steam flows from the reactor vessel to the steam generators in the cold legs
B. Water flows from the reactor vessel to the steam generators in the cold legs
C. Steam flows from the steam generators to the reactor vessel in the hot legs
D. Water flows from the steam generators to the reactor vessel in the hot legs

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of the operational implications of the following concepts as they apply to Steam Line Rupture:

KANo

Description

Question

A steam line break has occurred due to the rupture of the housing on MS-291. Steam Generator, RC-2A has been isolated. How does the steam flow out the break change as the pressure in S/G RC-2A lowers from 900 psia to 15 psia?

- A. The leakrate continuously lowers.
- B. The leakrate continuously rises
- C. The leakrate rises down to 700 psia and then begins to lower
- D. The leakrate lowers down to 700 psia and then begins to rise.

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of the operational implications of the following concepts as they apply to Steam Line Rupture:

KANo

Description

Question

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

A. 150 gpm
B. 250 gpm
C. 350 gpm
D. 450 gpm

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

- A. Read the level directly from LC-101X
- B. Use the LC-101X indication and the associated TDB correction curve
- C. Use the level directly from LI-197
- D. Use the LI-197 indication and the associated TDB correction curve

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

- A. Monitor load on inverter "A" to minimize the potential for tripping the inverter due to overload.
- B. Monitor load on Instrument bus "C" because the cross-tie breakers are not sized to carry full instrument bus load.
- C. Monitor the AC voltage output of inverter "A" to minimize the potential for the inverter tripping on undervoltage.
- D. Monitor inverter temperature to minimize the potential for the inverter to overheat and start a fire.

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

An approved Release Permit is being used to release the "A" Monitor Tank. It is three (3) hours into the release and the EONA reports that flow recorder FR-690 does not appear to be operating and he can not determine the problem.

Select the correct response to this situation.

- A. Commence logging calculated flow and process monitor readings on the Liquid Discharge Log every hour.
- B. Have two (2) independent samples reanalyzed.
- C. Verify recorder RR-049/A is operating and continue release.
- D. Commence logging the calculated flow readings on the Liquid Discharge Log every four (4) hours.

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

A. A fire in room 19 affecting all 3 air compressors

B. A fire in the battery room affecting DC bus #2

C. A fire in the switchgear room affecting Instrument Inverter #1

D. A fire in the switchgear room affecting electrical bus 1A3

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode Stem

KANo Description

Question

Answer CFR Section

Higher Level RO SRO

LP Number LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Operation is taking place at AI-179 due to Control Room evacuation. Which one of the following actions will occur when the transfer switches on AI-179 are taken to local if S/G levels decrease to the AFAS low level setpoint?

- A. AFAS will open valves HCV-1107A and B and 1108A and B, FW-10 will auto start.
- B. AFAS will open HCV-1107A and 1108A, HCV-1107B and 1108B can be throttled, FW-10 will auto start.
- C. The AFAS signals to HCV-1107A and B and 1108A and B, FW-10 are blocked.
- D. AFAS will open valves HCV-1107A and B and 1108A and B, FW-10 must be manually started.

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

A. With containment pressure greater than 5 psig.
B. With pressurizer pressure below 1700 psia.
C. With RCS coolant temperatures below 465F.
D. With containment temperature above 180F.

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of CRDS design feature(s) and/or interlock(s) which provide for the following:

KANo

Description

Question

Choose the following that is most correct concerning the actions to reset [re-energize] the CEDM clutches when tripped by an automatic 2/4 RPS trip. [Assume all automatic RPS trip signals have cleared.]

- A. Reclose the clutch power supply breakers to re-energize the CEDM clutches.
- B. Thirty (30) seconds after the 2/4 RPS trip depress the black reactor trip "reset" button (on CB-4) to re-energize the CEDM clutches.
- C. ANYTIME after the 2/4 RPS trip, depress the black reactor trip "reset" button (on CB-4) to re-energize the CEDM clutches.
- D. Reclose the clutch power supply breakers THEN depress the black reactor trip "reset" button (on CB-4) to re-energize the CEDM clutches.

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

A. Lowering the upper guide structure onto the core support barrel
B. Using the CEDM drive motors to drive the shafts down until they latch with the spiders
C. Operating the coupling/uncoupling tool through the tool access flange opening
D. Tripping the drive shafts so that they latch with the spiders

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question
A. Beginning of cycle, zero power
B. Beginning of cycle, full power
C. End of cycle, zero power
D. End of cycle, full power

Answer

CFR Section

Higher Level

RO

SRO

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question
A. Monitor the seals. Full power operation can continue.
B. Perform a normal plant shutdown using OP-4. Then shutdown RC-3C.
C. Perform an emergency plant shutdown using AOP-05. Then shutdown RC-3C.
D. Trip the reactor. Then shutdown RC-3C.

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The following conditions exist:

The reactor has tripped from full power as a result of a loss of all offsite power.
Diesel Driven Feed Pump, FW-54, is tagged out of service
DG-1 failed to start and bus 1A3 is deenergized
Steam generator levels are currently 50% WR and lowering slowly
All safety functions, other than heat removal, are satisfied.

What action should be taken to establish heat removal?

- A. Start AFW Pump, FW-6
- B. Start AFW Pump, FW-10
- C. Establish Once-through-Cooling
- D. Initiate Shutdown cooling

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

GIVEN a set of plant conditions and a copy of the EOP resource Assessment Trees, DETERMINE the correct success path for any of the following safety functions: RCS and Core Heat Removal

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question
A. Top of the vessel (100%) to bottom of the vessel (0%)
B. Top of the core (100%) to bottom of the core (0%)
C. Top of the vessel (100%) to top of the core (0%)
D. Top of the core (100%) to bottom of the vessel (0%)

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

A RCS cooldown is in progress. One reactor coolant pump is running in each loop. Which one of the following would cause the motor current on the two running RCPs to rise?

- A. A third reactor coolant pump is started.
- B. Voltage on the electrical grid is raised.
- C. RCS pressure is lowered from 1800 psia to 1600 psia
- D. RCS temperature is lowered from 400F to 350F

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The following conditions exist in the plant:

The reactor tripped from 100% power due to a small LOCA with a loss of offsite power.
RCS pressure is 1000 psia
S/G A pressure is 1100 psia
S/G B pressure is 900 psia

Which one of the following statements is true?

A. Natural Circulation flow is not possible in either loop
B. Natural Circulation flow may be occurring in loop A but not in loop B
C. Natural Circulation flow may be occurring in loop B but not in loop A
D. Natural Circulation flow may be occurring in both loops

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Which one of the following statements is true concerning pressurizer heater operation during RCS boron concentration changes?

- A. Backup heaters should be ON during boration or dilution
- B. Backup heaters should be OFF during boration or dilution
- C. Backup heaters should be ON during boration but OFF during dilution
- D. Backup heaters should be OFF during boration but ON during dilution

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of CVCS design feature(s) and/or interlock(s) which provide for the following:

KANo

Description

Question

When putting an additional charging pump into service, what control is operated to match charging and letdown flows without causing a pressurizer level transient?

A. The letdown control valves, LC-101-1 or LC-101-2, are controlled manually when more than one charging pump is in operation

B. The level bias potentiometer is manually adjusted to match flows

C. The pressure setpoint on PIC-210 is changed until charging and letdown flows are matched

D. No manual adjustments are required. Charging and letdown are matched automatically with no change in pressurizer level

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Assume that a loss of coolant accident occurred from full power. All offsite power was lost shortly following the accident. DG-2 failed to start. What LPSI pumps would be running in this situation.

- A. No LPSI pumps would be running
- B. SI-1A would be the only LPSI pump running
- C. SI-1B would be the only LPSI pump operating
- D. Both LPSI pumps, SI-1A and SI-1B would be running in this situation.

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The following plant conditions exist following a reactor trip:

Pressurizer pressure = 1650 psia and lowering
 Containment Pressure = 6 psig and rising
 S/G pressures = 550 psia and lowering
 All radiation monitors are reading normal
 No ESF lockout relays have actuated

What action should be taken by the operator?

A. Operate the PPLS test switch
 B. Operate the PPLS block switch
 C. Operate the CPHS test switch
 D. Operate the SGLS block switch

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

DEMONSTRATE the knowledge required to use EOP-03, Loss of Coolant Accident (LOCA), to mitigate the consequences of a LOCA.

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

- A. CIAS
- B. CPHS
- C. PPLS
- D. SIAS

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode Stem

KANo Description

Question

A. There will be no automatic pump starts.

B. AC-3B will automatically start. AC-3C will start 30 seconds later if AC-3B failed to start.

C. AC-3C will automatically start. AC-3B will start 30 seconds later if AC-3C failed to start.

D. AC-3B and AC-3C will automatically start.

Answer CFR Section

Higher Level R0 SR0

LP Number LPObjective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode Stem

KANo Description

Question

The plant was operating in mode one when a plant transient caused pressurizer pressure to spike at 2780 psia. No reactor trip occurred. Pressurizer pressure returned to 2100 psia following the transient.

Which one of the following actions is required with respect to plant operations?

A. Place the plant in HOT SHUTDOWN within 1 hour

B. Place the plant in HOT SHUTDOWN within 6 hours

C.. Make an immediate notification to the PRC chairman and continue plant operation.

D. Make an immediate notification to the NRC and continue plant operation.

Answer CFR Section

Higher Level RO SR0

LP Number LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode Stem

KANo Description

Question

A. When a trip unit is bypassed with the bypass key, a contact opens in the logic ladder which prevents bypassing another TM/LP trip unit.

B. Only one channel can be selected using the bypass key to operate the 5-position TM/LP trip bypass switch.

C. Only one TM/LP trip unit can be bypassed at a time because the key locker contains only one TM/LP trip unit bypass key.

D. No design feature is provided. Bypassing two TM/LP trip units is prevented by administrative control only.

Answer CFR Section

Higher Level RO SRO

LP Number LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

- A. 8 minutes
- B. 10 minutes
- C. 12 minutes
- D. 14 minutes

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The following conditions exist:
A small break LOCA has occurred
All safeguards components are operating as desired
SIAS actuated 31 minutes ago
SIRWT level is 78 inches

What action should be taken by the RO following the receipt of LO-LO LEVEL alarms on both BATs?

A. Stop the Boric Acid Pumps. Continue gravity feed to the charging pump suction.
B. Stop all but one Charging pump. Continue emergency boration.
C. Direct the Aux Building operator to batch to the BATs. Continue emergency boration
D. Continue boration by transferring charging pump suction to the SIRWT

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode Stem

KANo Description

Question

A pressurizer steam space LOCA has caused PPLS and SIAS actuation. CETs are stable at 550F. RCS pressure is stable at 1300 psia, pressurizer level is 20% and rising. HPSI flow is 390 gpm.

With no operator action and assuming temperatures remain constant, how will pressurizer level, pressurizer pressure and HPSI flow respond?

A. Pressurizer level will stabilize slightly above 50%, pressure will lower and HPSI flow will increase.

B. Pressurizer level will rise to 100% , pressure and HPSI flow will remain constant.

C. Pressurizer level will rise to 100%, pressure will rise and HPSI flow will decrease.

D. Pressurizer level will stabilize slightly above 50%, pressure will rise and HPSI flow will decrease.

Answer CFR Section

Higher Level RO SR0

LP Number LP Objective

GIVEN a copy of the Technical Basis Documents (TBDs), EXPLAIN the bases behind the major operator actions contained in EOP-03, LOCA.

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The reactor is operating with the following powers being indicated by the power range NI detectors

	Channel A	Channel B	Channel C	Channel D
Upper	100%	103%	98%	99%
Lower	101%	99%	99%	101%

What is the value of Azimuthal Tilt.?

- A. 0.01
- B. 0.02
- C. 0.03
- D. 0.04

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

A. The indicated WR power will remain at 100% because the discriminator is not used at this power level.

B. The indicated WR power will drop to 0% because a NON-OP signal will be generated

C. The indicated WR power will indicate 50% because channel output is proportional to the threshold setting

D. The indicated WR power will indicate 200% because channel output is inversly proportional to the threshold setting

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The purpose of the moisture separators and mist eliminators in the containment cooling and filtering units is to:
A. Protect HEPA filters from water impingement damage
B. Prevent charcoal filters from absorbing water
C. Protect fans from water impingement damage
D. Limit the current drawn by the fan motors

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Explain the importance of moisture separators and mist eliminators to the operation of the Containment Air Cooling and Filtering System.

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

- A. HCV-344 and HCV-345 will both open
- B. HCV-344 will open. HCV-345 will remain closed
- C. HCV-344 will remain closed. HCV-345 will open
- D. HCV-344 and HCV-345 will both remain closed

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Which one of the following statements is true concerning the Containment Pressure High Signal (CPHS) lockout relays?

- A. They normally reset automatically and only require manual reset after a loss of voltage.
- B. They allow manual reset so that containment spray actuation can be overridden with a CPHS signal present.
- C. They allow manual reset of the CPHS signal after containment pressure drops below the CPHS setpoint.
- D. They allow manual reset of the CPHS so that containment spray pumps can be restarted following RAS.

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

- A. Noble gasses
- B. Iodine
- C. Hydrogen
- D. Smoke

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Which one of the following actions must be taken while operating the Containment Hydrogen Analyzer if Containment humidity reaches 100% humidity?
A. Utilize a percent error graph to correct for excessive humidity.
B. Calibrate the Hydrogen Analyzer for high humidity.
C. Take actions to reduce the humidity inside the Containment.
D. Utilize a percent error graph to correct for excessive temperature.

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question
A. Containment entry would be delayed due to higher airborne activity
B. Containment entry would be delayed due to higher temperatures in containment
C. Plant startup would be delayed because tech specs require operability of the purge fans
D. There would be no affect on the outage

Answer

CFR Section

Higher Level

RO

SRO

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question
A. Electrical control power has been lost to the affected S/G's reg valve.
B. Control air pressure has been lost to the affected S/G's feed reg valve
C. Steam pressure has failed low on the affected side
D. Steam flow has failed high on the affected side

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The main steam isolation valves are closed. Which one of the following statements is correct about operation of the manual shutoff valves?

- A. When placed in OPEN, the pneumatic cylinders are vented through the open solenoids and the valves remain closed. All automatic trips are defeated.
- B. Placing the manual shutoff valve in OVERRIDE, the pneumatic cylinders are pressurized and the valves open. All automatic trips are defeated.
- C. Placing the manual shutoff valve in OPEN, the pneumatic cylinders are pressurized and the valves open. All automatic trips are operable.
- D. Placing the manual shutoff valve in OVERRIDE, the pneumatic cylinders are vented through the open solenoids and the valves remain closed. All automatic trips are operable.

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode Stem

KANo Description

Question
A. 528F
B. 532F
C. 535F
D. 540F

Answer CFR Section

Higher Level RO SR0

LP Number LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The plant is operating at 100% power when the following annunciators alarm:
Exhaust Hood A Temp Hi
Exhaust Hood B Temp Hi
If this condition is not corrected, what would be the result of the high temperature on the main turbine?
A. No effect on turbine operation
B. The turbine would trip at 175 F
C. The condensate system would increase flows to reduce temperature
D. The turbine would trip at 225 F

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

A. The steam dump valves (TCV-909s) and the turbine bypass valve (PCV-910)
B. The turbine bypass valve (PCV-910) and some of the S/G safety valves
C. The steam dump valves (TCV-909s) and some of the S/G safety valves
D. The turbine bypass valve (PCV-910), the steam dump valves (TCV-909s) and some of the S/G safety valves

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

A. Open HCV-1384, Override and Open HCV-1104 and FCV-1102
B. Open HCV-1384, Override and Open HCV-1385 and HCV-1106
C. Open HCV-1385, Override and Open HCV-1104 and FCV-1102
D. Open HCV-1385, Override and Open HCV-1104 and HCV-1106

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Which one of the following describes the consequences of late initiation of once through cooling during conditons when it is required?

A. The flow rate through the PORVs may no longer be adequate to remove decay heat which may lead to core damage.

B. The decay heat level may not be adequate to support sufficient natural circulation flow to prevent core damage.

C. The HPSI flow rate may no longer be adequate to maintain RCS inventory high enough to prevent core damage.

D. The increase in RCS temperature may increase hydraulic forces on the fuel assemblies, which may lead to core damage.

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Ability to predict and/or monitor changes in parameters (to prevent exceeding design limits) associated with operating the AFW controls including:

Auxiliary / Emergency Feedwater System

KANo

Description S/G pressure

Question

The following plant conditions exist:

A steam leak upstream of the MSIV on the "A" S/G has occurred
 Pressure in the "A" S/G is 480 psia
 Level in the "A" S/G is 50% WR
 Pressure in the "B" S/G is 575 psia
 Level in the "B" S/G is 60% WR
 The MSIVs are closed

Assuming no operator action, which one of the following is the current status of the AFW system?

A. AFW should be feeding the "A" S/G only.
 B. AFW should be feeding the "B" S/G only
 C. AFW should be feeding both S/Gs
 D. AFW should not have initiated yet

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

EXPLAIN the potential consequences of late initiation of once through cooling.

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

During a plant cooldown, all offsite power was lost. The CRS entered EOP-07 and the following plant conditions existed:

Both D/G's failed to start
FW-54 is not available
FW-10 is supplying 100 gpm to each S/G
EFWST level is 80 inches

If the present rate of feed is maintained to both S/Gs, how long will it take to empty the EFWST?

- A. 1 hour 15 minutes
- B. 2 hours 30 minutes
- C. 3 hours 30 minutes
- D. 4 hours 15 minutes

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode Stem

KANo Description

Question
A. Motor driven AFW pump, FW-6
B. Turbine driven AFW pump, FW-10
C. Diesel driven AFW pump, FW-54
D. Diesel driven Fire pump, FP-1B

Answer CFR Section

Higher Level RO SR0

LP Number LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

The plant is in cold shutdown with all 4160 buses powered from 345 KV. Shutdown cooling is in operation with LPSI pump SI-1A running. Emergency Diesel Generators #1 and #2 are aligned for normal operation. Assiming all system operate as designed, what will happen if 345 KV power is lost?

- A. Both D/G's will start, accelerate to full speed. And load busses 1A3 and 1A4
- B. Both D/G's will start and accelerate to full speed. Neither bus 1A3 or 1A4 will be powered until SI-1A is tripped
- C. Both D/G's will start and accelerate to full speed. DG-1 will load Bus 1A3. Bus 1A4 will not be powered until SI-1A is tripped
- D. Both D/G's will start and accelerate to full speed. DG-2 will load Bus 1A4. Bus 1A3 will not be powered until SI-1A is tripped

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Diesel generator D/G-1 has received a start signal as a result of a reactor trip. The engine lube oil pump discharge pressure switch has failed in the low pressure position. Which one of the following describes the expected response of D/G-1 to these events?

- A. It will not start
- B. It will start but will trip after 15 seconds
- C. It will start and then idle at 500 RPM
- D. It will start and then run at 900 RPM

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

D/G-1 is operating fully loaded onto bus 1A3 during a test. Bus 1A3 is also being supplied by 161 KV offsite power. Which one of the following is the reason for placing the governor in the speed droop mode in this configuration?

- A. Prevent overspeed
- B. Prevent undervoltage
- C. Prevent overload
- D. Prevent overvoltage

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question
A. None
B. AOP-08 (Fuel Handling Incident)
C. AOP-09 (High Radioactivity)
D. AOP-21 (High RCS Activity)

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

Answer

CFR Section

Higher Level

R0

SRO

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

A fire has been discovered in the main transformer, T-1. What would be the correct sequence for automatic starting of the fire pumps? (assume the fire protection system is fully operable)

- A. Deluge valve opening would cause only the motor-driven fire pump to start on low system pressure.
- B. Deluge valve opening would cause only the diesel-driven fire pump to start on low system pressure.
- C. Actuation of the T-1 deluge system will generate a direct start signal to both fire pumps
- D. A T-1 fire will not result in automatic starting of the fire pumps until the pull stations are operated in the service building

Answer

CFR Section

Higher Level

RO

SRO

LP Number

LP Objective

When given specific plant conditions, be able to APPLY operating principles to diagnose Fire Protection System response.

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of design feature(s) and/or interlock(s) which provide for the following:

KANo

Description

Question

Which one of the following describes the expected response of the Fire Protection System to a fire in the East Switchgear Room?

- A. The first detector actuated causes the ventilation dampers to the affected space to shut. After a 60 second time delay, the halon bank discharge is initiated.
- B. After two detectors have actuated in the same space, the ventilation dampers for both switchgear rooms shut and the halon bank discharge is initiated.
- C. The first detector actuated causes the ventilation dampers in both switchgear rooms to shut. The second detector actuated causes the halon bank to discharge.
- D. After two detectors have actuated in the same space, the ventilation dampers in both switchgear rooms shut. After a 60 second time delay, the halon bank discharge is initiated.

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question
A. Containment pressure slowly increasing.
B. A locked closed containment isolation MOV is inoperable
C. HCV-746A (Pressure Relief) is open
D. Both PAL door seals have failed leak tests

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem Knowledge of the reasons for the following responses as they apply to the (Natural Circulation Operations)

KANo

Description Facility operating characteristics during transient conditions, including coolant chemistry and the effects of temperature, pressure, and reactivity changes and operating limitations and reasons for these operating characteristics.

Question

The plant tripped from 100% power following a transient involving the loss of forced flow from all four reactor coolant pumps.
The following conditions exist:

RCS pressure is 2000 psia
Pressurizer level is 50%
Steam Generator Pressures are 900 psia
Steam Generator Wide Range Levels are 40%
Hot leg temperatures are 575F
Cold leg temperatures are 532F

Which one of the following actions would be most effective in enhancing natural circulation?

- A. Raise RCS pressure
- B. Raise Pressurizer Level
- C. Raise Steam Generator Pressures
- D. Raise Steam Generator Levels

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

used on 2001 exam

Question Number

System/Mode

Stem

KANo

Description

Question

Answer

CFR Section

Higher Level

RO

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

- A. Flow from the RCPs would interfere with once through cooling
- B. To eliminate the RCPs as a source of heat input to the RCS
- C. To reduce the risk of clad damage due to quenching if a void forms in the vessel
- D. To allow the stratification of phases so that water remains in the reactor vessel

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

Functional Recovery

KANo

Description

Question

An EOP-20 event has occurred involving a loss of DC bus# 2. DC bus #1 is being powered by a battery charger. What other condition must be met before the MVA-DC safety function is satisfied?

- A. Switchgear DC control power must be supplied by DC bus #1
- B. DC loads must be minimized
- C. The battery #2 output breaker must be opened
- D. DC bus #2 must be reenergized

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

EXPLAIN how the Resource Assessment Trees are used in terms of Safety Function priority and success path priority within each tree.

Question Source

Reference

Attachment

Comments

Question Number

System/Mode

Stem

KANo

Description

Question

- A. To reduce thermal cycles on the AFW nozzles
- B. To prevent overpressurizing the feedwater ring
- C. To ensure adequate heat sink for once-through-cooling
- D. To enable adequate recirculation flow in the S/G.

Answer

CFR Section

Higher Level

R0

SR0

LP Number

LP Objective

Question Source

Reference

Attachment

Comments