Draft Submittal CATAWBA OCTOBER 2004

EXAM 50-413, 414/2004-301 OCTOBER 4 - 8, 2004 & OCTOBER 13, 2004 (WRITTEN)

1. Senior Reactor Operator Written Exam

Nuclear Regulatory Commission Senior Reactor Operator Licensing Examination

Catawba Nuclear Station

This document is removed from Official Use Only category on Date of the Examination 10/16/2004

DRAFT

NRC Official Use Only

U.S. Nuclear Regulatory Commission Site-Specific SRO Written Examination

1	Applicant Information
Name:	
Date: October 16, 2004	Facility/Unit: Catawba Nuclear Station
Region: II	Reactor Type: W / CE / BW / GE
Start Time:	Finish Time:
percent overall, with a 70.00 perce with the RO exam; SRO-only exams	Instructions document your answers. Staple this cover sheet on top of amination you must achieve a final grade of at least 80.00 ent or better on the SRO-only items if given in conjunction s given alone require an 80.00 percent to pass. You have ed examination, and three hours if you are only taking the SRO portion.
	Applicant Certification ion is my own. I have neither given nor received aid.
	Applicant's Signature
	Results
RO / SRO-Only / Total Examination	Values / / Points
Applicant's Scores /	/ Points

- 1 Pt(s) Unit 1 is at 9% power conducting a power ascension to full in accordance with normal plant operating procedures. Given the following events and conditions:
 - An electrical transient occurs on transformer 1A
 - The fast bus transfer does not occur.
 - The frequency on 1TA and 1TC dips to 55 hertz and voltage decreases to 6600V for approximately 3 seconds.

Which one of the following sequences describes:

- 1. The automatic plant response to this transient, and
- 2. The correct procedure to be implemented?
- A. 1. All NCP safety breakers open but the reactor does not trip.
 - 2. Enter AP-04 (Loss of Reactor Coolant Pump) and trip the reactor.
- B. 1. The A and C NCP safety breakers open and a reactor trip occurs.
 - 2. Enter E-0 (Reactor Trip or Safety Injection)
- C. 1. The A and C NCP safety breakers open but the reactor does not trip.
 - 2. Enter AP-04 (Loss of Reactor Coolant Pump) and trip the reactor.
- D. 1. All NCP safety breakers open and a reactor trip occurs.
 - 2. Enter E-0 (Reactor Trip or Safety Injection)

1 Pt(s) Unit 1 was operating at 100% when the unit trips due to a break on the pressurizer code safety line. Given the following events and conditions:

- Containment pressure peaked at 3.4 psig.
- Current containment pressure is 1.5 psig and decreasing.
- Both trains of ICCM are inoperable.
- The operators are evaluating S/I termination criteria in E-1 (Loss of Reactor or Secondary Coolant).

Given the following parameters at the indicated times:

<u>Tim</u>	<u>e Interval</u>	<u>2:00</u>	<u>2:03</u>	<u>2:06</u>
Pressurizer pressur	e (psig)	675	725	775
Core exit T/C temp	(°F)	455	480	495
T _{hot} (°F)		450	470	480
Highest narrow rar	ige steam	15%	19%	24%
generator levels (%	(a)			
Total CA flow (gp	m)	425	475	465
Pressurizer level (%	6)	12%	22%	25%

Which one of the following statements correctly describes the <u>earliest time</u> (if at all) that the operators can transition to ES-1.1 (*Safety Injection Termination*)?

REFERENCES PROVIDED:

- A. Transition to ES-1.1 at 2:00
- B. Transition to ES-1.1 at 2:03
- C. Transition to ES-1.1 at 2:06
- D. SI flow may be not terminated continue monitoring S/I termination criteria.

Ques_093.3

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1 Pt(s)	The night Si listed below	The night Shift Work Manager (SWM) provides a record of work hours as listed below:			
	<u>10/16</u> 1900 1930	Started Shift Turnover Assumed shift duties			
	10/17 0730 0800	Relieved of duties Departed site			
	1530 1600	Called in to relieve the day shift due to illness Assumed shift duties			
	1 <u>0/18</u> 0730 0800	Relieved of duties Departed site			
	When, if at a	all, was the latest possible time that a Request for Works Hours			

When, if at all, was the latest possible time that a Request for Works Hours Extension could be completed and approved?

REFERENCES PROVIDED

- A. No "Request for Work Hours Extension" form was needed for the operator to work the scheduled hours.
- B. Prior to the operator assuming shift duties at 1600 on 10/17.
- C. Prior to the operator working past 0000 on 10/18.
- D. Prior to the operator working past 0400 on 10/18.

Ques_121.2

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- 1 Pt(s) Unit 1 is conducting a plant startup. Given the following Intermediate Range and Power Range NI channel indications:
 - $N-35 = 3.1 \times 10^{-5}$ amps
 - N-36 = 3.6×10^{-6} amps
 - N-41 = 9.6%
 - N-42 = 9.2%
 - N-43 = 10.9%
 - N-44 = 9.4%
 - Thermal Power (OAC) = 10.1%

If the operators have taken all required procedural actions during the startup, which one of the following statements describes:

- 1. The problem indicated by these readings, and
- 2. The action required.

References Provided:

- A. 1. N-35 is reading too high for existing conditions.
 - 2. Continue the plant startup by increasing thermal power to greater than 10% power within 2 hours.
- B. 1. N-36 is reading too low for existing conditions.
 - 2. Hold power at current levels until N-36 has been repaired.
- C. 1. N-35 is reading too high for existing conditions.
 - 1. Shutdown to less than P6 within 2 hours.
- D. 1. N-36 is reading too low for existing conditions.
 - 2. Continue the plant startup by increasing thermal power to greater than 10% within 2 hours.

1 Pt(s) Unit 2 is responding to a SGTR on the 2C S/G in E-0 (*Reactor Trip or Safety Injection*). Given the following events and conditions:

2C S/G NR level = $\frac{0200}{98\%}$ $\frac{0202}{99\%}$ $\frac{0204}{100\%}$ $\frac{0206}{200\%}$ $\frac{0208}{200\%}$

Which one of the following sets of S/G WR level indications is expected for the 2C S/G as it fills up with NC system coolant?

		<u>0200</u>	<u>0202</u>	<u>0204</u>	<u>0206</u>	<u>0208</u>
A.	2C S/G WR level =	72%	74%	75%	75%	75%
В.	2C S/G WR level =	72%	74%	77%	80%	82%
C.	2C S/G WR level =	90%	92%	93%	95%	96%
D.	2C S/G WR level =	90%	92%	99%	100%	100%

Ques_433.1

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- 1 Pt(s) Unit 1 was operating at 100% power when a loss of condenser vacuum occurred. Given the following events and conditions:
 - The operators initiated AP/23 (Loss of Condenser Vacuum) and AP/09 (Rapid Downpower)
 - Reactor power dropped to 85%
 - Turbine load dropped to 82% based on turbine impulse pressure
 - The operator reports that condenser vacuum is 23.8 inches vacuum and is continuing to decrease slowly.

Which one of the following statements correctly describes the required action for the current conditions?

- A. Manually trip the turbine then trip the reactor and enter E-0 (Reactor Trip or Safety Injection) immediately.
- B. Manually trip the reactor then trip the turbine and enter AP/02 (Turbine Generator Trip) immediately.
- C. If vacuum reaches 21.8 inches, manually trip the reactor and enter E-0.
- D. If vacuum reaches 21.8 inches, manually trip the turbine and enter AP/02.

1 Pt(s)

Unit 1 experienced a LOCA with a breach of containment at 0200. The OSM assumed the duties of the Emergency Coordinator and declared a general emergency at 0210. The initial recommended protective actions at 0225 were as follows:

- Shelter zones A2, A3, B2, C2, D2, E2, F2, F3
- Evacuate zones A0, A1, B1, C1, D1, E1, F1

At 0235, the initial dose projection information was presented to the OSM. Given the following conditions at 0245:

- Wind direction = 450°
- Wind speed = 4 MPH
- Projected dose at the site boundary
 - TEDE = 250 mrem
 - CDE thyroid = 400 mrem
- Containment radiation levels
 - 1EMF53A = 950 R/hr
 - 1EMF53B = 955 R/hr
- Offsite monitoring teams have not yet reported results

Which one of the following protective action recommendations are correct in accordance with RP/0/A/5000/05?

REFERENCES PROVIDED:

- A. Change the protective action recommendation in zones A1 and B1 from evacuate to shelter.
- B. Extend the evacuation to zones A2, A3, B2, C2
- C. Extend the evacuation to zones D2, E2, F2
- D. The initial set of protective action recommendations remain in effect with no changes required.

Ques_491.1

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1 Pt(s) Unit 2 is responding to a small break LOCA in ES-1.2, (*Post LOCA Cooldown and Depressurization*). Step 16 of ES-1.2 requires the operators to depressurize the NC system.

Which one of the following statements correctly describes:

- 1. The priority for using the prescribed methods of depressurizing the NC system, and
- 2. The major concern during NC system depressurization?
- A. 1. Pressurizer spray PORV Auxiliary Spray
 - 2. To prevent voiding in the upper head and refilling the pressurizer to a solid water condition
- B. 1. Pressurizer spray PORV Auxiliary Spray
 - 2. To prevent thermal shocking the pressurizer spray nozzles.
- C. 1. PORV Auxiliary Spray Pressurizer Spray
 - 2. To prevent voiding in the upper head and refilling the pressurizer to a solid water condition
- D. 1. PORV Auxiliary Spray Pressurizer Spray
 - 2. To prevent thermal shocking the pressurizer spray nozzles.

Ques_571.3

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1 Pt(s) Unit 1 is recovering from a loss of offsite power in ES-0.2 (*Natural Circulation Cooldown*). The operators reach step 13, which states:

"IF AT ANY TIME cooldown rate must be raised to greater than 50 °F in an hour, THEN GO TO EP/1/A/5000/ES-0.3 (Natural Cooldown with Steam Void in Vessel)"

Given the following events and conditions:

- $T_{hot} = 500$ °F
- NC Pressure = 650 psig
- RVLIS = 100% upper range, 64% lower range
- All CRDM vent fans are deenergized and cannot be started
- Cooldown rate is 50 °F/hr

Which one of the following statements correctly describes the condition of the core and the proper procedure flow path?

REFERENCES PROVIDED:

- A. The core is in a subcooled condition transition to ES-0.3 to continue the cooldown at $> 50^{\circ}$ F/hr cooldown rate.
- B. The core is in a subcooled condition remain in ES-0.2 and do not exceed 50°F/hr cooldown rate.
- C. The core is in a superheated condition transition to ES-0.3 to continue the cooldown at >50°F/hr cooldown rate.
- D. The core is in a superheated condition remain in ES-0.2 and do not exceed 50°F/hr cooldown rate.

1 Pt(s) Unit 1 was operating at 100% power with no TSAIL entries. Given the following events and conditions:

10/16 at 0200 The DG 1A was declared inoperable. 10/18 at 1100 The DG 1B was declared inoperable. 10/18 at 1200 The DG 1A was declared to be operable.

If two offsite AC circuits remained operable throughout the sequence listed above and DG 1B is not returned to service, which one of the following statements correctly describes when the plant must be in mode 3?

REFERENCES PROVIDED

- A. 10/19 at 0800
- B. 10/21 at 1700
- C. 10/22 at 0800
- D. 10/22 at 1700

Ques_705.2

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- 1 Pt(s) Unit 1 was operating at 100% power when a steam line rupture occurred. Given the following events and conditions;
 - The operators transitioned from E-0 (Reactor Trip or Safety Injection) to FR-P1 (Response to Imminent Thermal Shock Condition) due to a red path.
 - NCPs 1A and 1B were tripped due to high vibration
 - The operator reached step 18 of FR-P.1, which requires isolating the cold leg accumulators.
 - Given the following parameters:

Time	0200	0205	0210	0215
Pzr Pressure (psig)	750	700	650	600
NC Subcooling (°F)	+50	+75	+60	+40
RVLIS D/P indication	1			
Train A (%)	21	22	22	22
Train B (%)	35	37	47	57

Which one of the following selections correctly describes:

- 1. The earliest time that the CLAs can be isolated, and
- 2. The reason why the CLAs should be isolated?

References Provided:

- A. 0205 to prevent injecting CLA water into the reactor vessel and increasing the thermal stress on the vessel.
- B. 0205 to prevent injecting the CLA nitrogen bubble into the reactor, creating a gas bubble in the vessel head region.
- C. 0210 to prevent injecting CLA water into the reactor vessel and increasing the thermal stress on the vessel.
- D. 0210 to preserve CLA volume as a source of borated water to prevent re-criticality during cooldown.

Ques_1143

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1 Pt(s)

Unit 1 has experienced a complete loss of offsite power. Given the following events and conditions:

• Operators are in the process of stabilizing the plant using ES-0.1 (*Reactor Trip Response*)

How is verification of adequate shutdown margin determined in this procedure if DRPI is unavailable?

- A. Initiate emergency boration flow greater than or equal to 30 gpm; all NC $T_{cold}s$ greater than 535 °F
- B. Initiate emergency boration flow greater than or equal to 30 gpm; all NC $T_{avg}s$ greater than 535 $^{\circ}F$
- C. Initiate emergency boration to 700 ppm above the last known boron concentration; all NC $T_{cold}s$ greater than 535 °F
- D. Initiate emergency boration to 700 ppm above the last known boron concentration; all NC $T_{avg}s$ greater than 535 °F

Ques_1172

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1 Pt(s) Unit 1 was operating at 100% power when a turbine trip occurred. Given the following events and conditions:

- The control rods failed to insert.
- Pressurizer pressure = 2337 psig
- The operators entered E-0 (*Reactor Trip or Safety Injection*) and immediately transitioned to FR-S.1 (*Response to Nuclear Power Generation/ATWS*) and carry out all immediate actions.
- All ECCS pumps are running.
- 1NV-236B (Boric Acid to NV Pump Suct) is opened.
- Boric acid transfer pump switches are in "ON".
- 1NV-312A and 1NV-314B (Chrg Line Cont Isol) are open.

Which one of the following statements correctly describes the:

- 1. NV pump current (running amps) indication,
- 2. The required actions, and
- 3. The reasons for these actions?
- A. 1. NV pump amps are higher than normal
 - 2. Manually actuate safety injection
 - 3. To ensure adequate boration flow
- B. 1. NV pump amps are higher than normal
 - 2. Manually align the NV pump suction to the FWST
 - 3. To provide a source of boric acid
- C. 1. NV pump amps are lower than normal
 - 2. Depressurize the NC system to 2135 by opening spray valves
 - 3. To prevent challenging the PORVs
- D. 1. NV pump amps are lower than normal
 - 2. Open the PORVs to depressurize the NC system to 2135 psig
 - 3. To provide adequate boration flow.

- 1 Pt(s) Unit 1 was operating at 100% power when a LOCA occurred with an unisolable release path into the auxiliary building. Given the following events and conditions:
 - The operators completed ECA-1.2 (LOCA Outside of Containment) and transitioned to ECA-1.1 (Loss of Emergency Coolant Recirculation)
 - The LOCA continues into the auxiliary building.
 - Containment sump level = 3.6 feet
 - FWST level = 4.9%
 - NR S/G level = 8%
 - CA flow \approx 435 gpm
 - Core exit thermocouples are reading 850°F and increasing

Which one of the following statements correctly describes:

- 1. The major action required, and
- 2. The bases for this action?
- A. 1. Depressurize the NC system
 - 2. To allow CLAs to inject to reduce NC system break flow and loss of inventory.
- B. 1. Reduce CA flow to S/Gs
 - 2. To preserve the remaining condensate storage inventory.
- C. 1. Reduce SI flow requirements to minimum
 - 2. To prevent PTS and preserve the remaining FWST inventory.
- D. 1. Enter SAMGs and take immediate actions to refill the FWST
 - 2. To provide a qualified source of water to containment.

1 Pt(s) Unit 1 was conducting refueling operations in mode 6. Given the following events and conditions:

- The containment purge system is in operation in the REFUEL mode.
- VQ-10 (VQ Fans Disch to Unit Vent) is open as part of a special test.
- Train B of SSPS is in "test".
- The refueling crew dropped a fuel assembly into the refueling cavity.
- The following alarms were received in the control room:
 - o 1RAD-1 A/2 (IEMF-39 Containment Gas Hi RAD)
 - o 1RAD-3 D/2 (1EMF-17 Reactor Bldg Refuel Bridge)

Which one of the following statements correctly describes the required actions to respond to this event in AP-25 (*Damaged Spent Fuel*)?

- A. 1. Manually actuate containment ventilation isolation
 - 2. Manually stop the containment purge system.
 - 3. Manually close VQ-10.
- B. 1. Verify the containment evacuation alarm has sounded
 - 2. Manually secure the containment purge.
 - 3. Manually close VQ-10.
- C. 1. Verify the containment evacuation alarm has sounded
 - 2. Verify containment purge has been secured.
 - 3. Manually close VQ-10.
- D. 1. Verify the containment evacuation alarm has sounded
 - 2. Verify containment purge has been secured.
 - 3. Verify VQ-10 has closed.

- 1 Pt(s) Unit 1 was in mode 3 when a switchyard transient caused a loss of offsite power on Unit 1. Given the following events and conditions:
 - 1A emergency diesel generator (D/G) was running under full load on the 1ETA bus for a surveillance test.
 - The loss of offsite power caused the 1A D/G breaker to trip on underfrequency and the 1A D/G shutdown on overspeed.
 - 1B emergency diesel generator (D/G) auto-started normally.
 - After the overspeed trip was reset, the 1A D/G failed to start.
 - Power is not available from either 1TA or 1TC.
 - Power to 2TC is available.

Which one of the following statements correctly describes:

- 1. A potential cause of the 1A D/G to auto start, and
- 2. The Case in AP-07 (Loss of Normal Power) that should be entered, and major action taken to restore 1ETA?
- 1. VG starting air pressure is 145 psig.
 - 2. Complete Case I (Loss of Normal Power to an Essential Train) and restore power to 1ETA from Unit 2.
- B. 1. VG starting air pressure is 145 psig.
 - 2. Complete Case II (Loss of All Power to an Essential Train) and start the 1A EDG manually.
- C. 1. Loss of the 1EMXF load center.
 - 2. Complete Case I and restore power to 1ETA from Unit 2.
- D. 1. Loss of the 1EMXF load center.
 - 2. Complete Case II and start the 1A EDG manually.

1 Pt(s) Units 1 and 2 were operating at 100% power when a hurricane in the eastern portion of the state caused extensive damage to Duke Power electrical distribution system. Given the following events and conditions:

- The plant commenced a controlled shutdown of both units because of grid instability.
- During the shutdown, a loss of offsite power occurred to both units.
- The transient caused both units reactors to trip.
- All four D/Gs automatically started and powered the essential busses.
- Both CAPTs auto started.
- Offsite power was restored to both units 5 minutes after it was lost.

Which one of the following statements correctly describes the <u>earliest</u> report that is required to be submitted to the NRC?

References Provided:

- A. Within one hour, report the declaration of an emergency classification.
- B. Within four hours, report under 10CFR50.72.
- C. Within eight hours, report under 10CFR50.72.
- D. Within 60 days, report under 10CFR50.73.

- 1 Pt(s) Unit 1 was operating at 100% power when a loss of VI pressure occurred. Given the following events and conditions:
 - The VI system became heavily contaminated with oil due to a maintenance problem.
 - Both the E and F air dryer packages became plugged and airflow was restricted.
 - 1VS-78 was mechanically jammed shut and could not be opened.
 - The manual bypass valve (1VI-671) around the air dryers is also mechanically jammed shut.
 - Unit 1 VI header pressure dropped to 55 psig and continued to decrease uncontrollably 20 minutes after the first alarm.

Which one of the following statements correctly describes the:

- 1. Status of the Unit 1 VI system, and
- 2. The action to be taken in AP-22 (Loss of Instrument Air).
- A. 1. VI pressure can be restored by manually opening 1VI-500 and cross-connecting VI to VS.
 - 2. Manually open 1VI-500 to restore VI pressure.
- B. 1. The VI pressure can be restored by shifting the VI dryers from the "drying" to "regenerating" cycle on the automatic microcomputer control system.
 - 2. Restore VI header pressure by shifting the VI dryer cycle.
- C. 1. The VI air dryers will be automatically bypassed and the system repressurized when 1VI-670 opens.
 - 2. Verify 1VI-670 opens automatically at 45 psig.
- D. 1. The VI system cannot be repressurized.
 - 2. Manually trip the reactor before the automatic reactor trip occurs.

1 Pt(s) Unit 1 was operating at 100% power with Xenon concentration at equilibrium. Given the following events and conditions:

- Control bank D is at 218 steps.
- Control rod H-8 drops into the core to 100 steps.
- Attempts to recover the rod are not successful.
- The rod is left at that position while reactor engineering evaluates the situation.

Which one of the following statements correctly describes the:

- 1. Change in AFD 24 hours after the rod dropped, and
- 2. The recommended action to stop the Xenon oscillation?
- A. 1. AFD will swing in the negative direction.
 - 2. Borate the core to dampen Xenon oscillations.
- B. 1. AFD will swing in the negative direction.
 - 2. Insert and withdraw bank D to perform a "bang bang".
- C. 1. AFD will swing in the positive direction.
 - 2. Borate the core to dampen Xenon oscillations.
- D. 1. AFD will swing in the positive direction.
 - 2. Insert and withdraw bank D to perform a "bang bang".

1 Pt(s) Unit 1 was operating at 100% power when a feedwater control transient occurred. Given the following events and conditions:

- A feedwater header pressure transmitter was being returned to service.
- A hydraulic transient occurred in the common sensing line serving the three feedwater header transmitters as the transmitter was being valved-in.
- Feedwater pump speed increased by 25 rpm.
- All main feedwater control valves opened from 50% to 70%.
- All main feed and bypass control valve controllers shifted to MANUAL mode.
- Steam flow/feed flow mismatch shows feedwater flow is too high.

Which one of the following statements correctly describes:

- 1. The status of the master and individual main feedwater pump speed controllers, and
- 2. The Case in AP-06 (*Loss of S/G Feedwater*) and major actions required to respond to this problem?
- A. 1. The master CF pump speed controller remains in automatic, the individual CF pump speed controllers shift to manual.
 - 2. Enter AP-06 Case 1 (Loss of CF Supply to S/Gs) and trip the reactor.
- B. 1. The master CF pump speed controller remains in automatic, the individual CF pump speed controllers shift to manual.
 - 2. Enter AP-06 Case III (*DFCS Not in Auto*) and reduce feedwater flow using the master CF pump speed controller.
- C. 1. The master and individual CF pump controllers shift to manual.
 - 2. Enter AP-06 Case III and increase feedwater flow using the master CF pump speed controller.
- D. 1. The master and individual CF pump controllers shift to manual.
 - 2. Enter AP-06 Case III and reduce feedwater flow using the individual CF pump speed controllers for each CF pump.

Ques_1193 For Official Use Only Page 20

1 Pt(s) Which one of the following changes will require a 10CFR50.59 review?

- A. Change to the Physical Security Plan that requires moving a section moving a section of the perimeter fence.
- B. Revision to the Emergency Plan changes the designated assembly areas for accountability.
- C. System modification that adds a backup Nitrogen accumulator to an air operated containment isolation valve.
- D. Changes to the Nuclear Quality Assurance Plan

Ques_1194

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1 Pt(s) Unit 1 was operating at 100% power when there were indications of high activity in the NC system. Given the following events and conditions:

- Demineralizer 1A contains mixed bed resin and has been in service for 200 days since the last outage.
- Demineralizer 1B contains freshly charged cation resin and has been pretreated but has never been placed in service.
- The fuel that was loaded after the last outage has been identified to have cladding flaws in a 10CFR21 report by the manufacturer.

Date	10/1	6/04
4.0666	T /// T	U/ U-T

Sample Time	0200	0600	1000	1400	1800	2200
NC Activity:						
Dose Equiv. I (μCi/g)	0.8	50	45	50	45	45

0600 The operators enter AP-18 (High Activity in Reactor Coolant).

• Letdown flow has been increased to 80 gpm. 0630 Chemistry reports the high activity is due to failed fuel. 0700 Reactor power has been reduced to 70%.

Which one of the following statements correctly describes the required actions?

References Provided:

- A. Remove demineralizer 1A from service and shutdown to mode 3 (<500°F) no later than 1200 on 10/18/04.
- B. Place demineralizer 1B in service and shutdown to mode 3 (<500°F) no later than 1200 on 10/18/04.
- C. Remove demineralizer 1A from service and shutdown to mode 3 (<500°F) no later than 1200 on 10/16/04.
- D. Place demineralizer 1B in service and shutdown to mode 3 (<500°F) no later than 1200 on 10/16/04.

Ques_1195

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1 Pt(s) A junior engineer has requested to conduct a special test of the diesel generators that required operating the diesels for 24 hours at 120% rated output power. The attached 10CFR50.59 evaluation states all evaluation questions are evaluated as "NO" with the exception of:

	2	Does the proposed activity result in more than a minimal increase in	X YES	□ NO
1		the likelihood of occurrence of a malfunction of an SSC important to		
	Ì	safety previously evaluated in the UFSAR?		

Which one of the following statements correctly describes what additional requirements are needed before this test may be approved?

References Provided:

- A. Obtain Site Vice President approval prior to running this test.
- B. Complete an applicability determination under NSD 228 prior to conducting this test.
- C. Request a license amendment under 10CFR50.90 from the NRC prior to conducting this test.
- D. The test may be conducted with permission from the NRC Senior Resident Inspector.

Ques_1196

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1 Pt(s) Unit 1 was operating at 100% power. The ORAM-SENTINAL risk model indicates that a planned work activity places the plant in an ORANGE condition.

Which one of the following statements correctly describes the required steps to be taken to ensure risk is managed in accordance with NSD-415 (Operational Risk Management (Modes 1-3) Per 10CFR50.65(a.4))?

- A. Work will not be scheduled until the PRA model has been modified to properly model this activity.
- B. Operations and Maintenance personnel shall discuss the planned work activity to increase Operator and Maintenance awareness of the risk of the work activity.
- C. There must be a written Risk Management Plan overseen by the Work Control organization.
- D. This work activity is not normally allowed and will not be scheduled without Plant Operational Review Committee (PORC) approval.

Ques_1197

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