

Final Submittal
(Blue Paper)

BRUNSWICK 2007-301

FINAL SRO

WRITTEN EXAMINATION

~~AND REFERENCES~~

AND ANSWER KEY

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6		A B C D E	31		A B C D E	56		A B C D E	81		A B C D E
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19		B C D E	44		B C D E	69		B C D E	94		A B C D E
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21		A C D E	46		A B C D E	71		A C D E	96		A B C D E
22		A B C D E	47		B C D E	72		B C D E	97		B C D E
23		A B C D E	48		A C D E	73		B C D E	98		A B C D E
24		A B C D E	49		A C D E	74		A C D E	99		B C D E
25		A B C D E	50		A B C D E	75		A B C D E	100		A B C D E

ANSWER KEY INFO.				PERFORMANCE ASSESSMENT				
# OF KEYS				% OF TOTAL SCORE		POINTS EARNED		
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1	1	1	2	E O U A L P T V A L U E	1	1	1	1
1	1	1	3		1	1	1	1
2	2	4	2		2	2	2	
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RO/SRO
answer
Key

↑ FEED IN THIS DIRECTION ↓

NUMBER CORRECT	
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RESCORE	



COMBINED POINTS EARNED	
COMBINED PERCENT CORRECT	
LETTER GRADE	
SCORE	
RESCORE	



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Fill oval completely

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SUBJECT	
PERIOD	DATE

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

76. Unit Two (2) is operating at 96% power when Recirculation Pump 2A trips resulting in the following conditions:

Total Core Flow (P603)	38.3 Mlbm/hr
Total Core Flow (U2CPWTCF)	37.5 Mlbm/hr
Indicated Core Plate DP (B017)	5.0 psid
APRMs	52%
Indications of THI	None
OPRM System	INOPERABLE

For these conditions which **ONE** of the following describes the required operator actions (if any) and the reason for those actions?

(reference provided)

- A. The reactor is operating in the Immediate Exit Region of the Power-Flow map.
Insert control rods to exit the Immediate Exit Region.
- B. The reactor is operating in the 5% Buffer Region of the Power-Flow map.
Insert Control Rods to exit the 5% Buffer Region.
- C. The reactor is operating in the 5% Buffer Region of the Power-Flow map.
Increase monitoring of the nuclear instrumentation for indications of Thermal-Hydraulic Instability (THI).
No other actions are required
- D. The reactor is operating in the Immediate Exit Region of the Power-Flow map.
Raise core flow to exit the Immediate Exit Region of the Power-Flow map.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

77. Brunswick Unit One (1) has had a turbine trip and a subsequent Loss Of Off-Site Power (LOOP) with Diesel Generators #1 and #2 tripping and locking out due to electrical bus problems. Diesel Generators #3 and #4 are running and have energized their respective Emergency Busses.

Which **ONE** of the following describes the conditions above and notifications required?

- A. A Loss Of Off-Site Power has occurred but NOT a Station Blackout because Diesel Generators #3 and #4 are available.
The System Dispatcher and the Unit Two (2) SRO must be notified.
Security is not required to be notified.
- B. A Station Blackout has occurred.
The System Dispatcher and the Unit Two (2) SRO must be notified.
Security is not required to be notified.
- C. A Loss Of Off-Site Power has occurred but NOT a Station Blackout because Diesel Generators #3 and #4 are available.
The System Dispatcher, Security, and Unit Two (2) SRO must be notified.
- D. A Station Blackout has occurred.
The System Dispatcher, Security, and Unit Two (2) SRO must be notified.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

78. Following a partial loss of drywell cooling the following annunciators have alarmed:

CONTAINMENT PRESSURE AT 1.5 PSIG (UA-25 1-5)
PRI CTMT HI/LO PRESS (A – 05 5-5)

Primary Containment conditions are:

Drywell pressure is confirmed at 1.5 psig and slowly rising
Drywell temperature is 135°F, slowly rising

Which **ONE** of the following describes the required operator actions?

- A. Enter AOP-14 and vent the Drywell per OP-10.
- B. Enter EOP-02-PCCP and vent the Suppression Chamber using SBGT per SEP-01.
- C. Enter AOP-14 and vent the Drywell per OP-24.
- D. Enter EOP-02-PCCP and vent the Suppression Chamber using Purge Fans per SEP-01.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

79. Unit One (1) has the following plant conditions:

- Reactor is shutdown (all rods in)
- Reactor pressure is 800 psig
- Demineralized Water is injecting to the RPV using SLC per LEP-01
- ONLY 1A Core Spray pump is running
- Reactor water level reaches LL4 and continues to lower

Based on these conditions, which **ONE** of the following actions is required?

- A. Secure the SLC pumps, Emergency Depressurize per EOP-01-RVCP then restart SLC for LEP-01 Demineralized Water injection.
- B. Emergency Depressurize and align the SLC system to inject boron per EOP-01-RVCP.
- C. Continue LEP-01 Demineralized Water injection per EOP-01-RVCP do not Emergency Depressurize until other injection systems become available.
- D. Emergency Depressurize in accordance with EOP-01-RVCP and continue LEP-01 Demineralized Water injection per EOP-01-RVCP until level is >TAF.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

80. Following a small break LOCA on Unit Two (2) the following conditions exist:

Drywell temperature	270°F
Drywell pressure	5.0 psig
Suppr Chamber pressure	2.5 psig
Suppr Pool level	+5 inches
Reactor pressure	395 psig

Containment H₂O₂ Monitors CAC-AT-4409 & 4410 are not available at this time. Chemistry has been called but has not sampled the drywell.

Which **ONE** of the following procedures provides the required actions that mitigate these plant conditions?

(reference provided)

- A. 0EOP-01-SEP-05, Primary Containment Purging.
- B. 0EOP-01-SEP-10, Circuit Alteration Procedure (section 4, Defeating Drywell Cooler LOCA Lockout).
- C. 0EOP-01-SEP-03, Suppression Pool Spray Procedure.
- D. 0EOP-01-SEP-02, Drywell Spray Procedure.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

81. On Unit Two (2) following a LOCA coincident with a failure to scram (ATWS), the reactor has been Emergency Depressurized and all control rods have been manually inserted. The following conditions now exist:

Reactor water level	55 inches (N036/N037) and rising
Supp. Chamber Press	6.5 psig
Core Spray	One pump injecting at 4500 gpm
RHR	One pump injecting at 7000 gpm
Supp pool level	- 5.5 feet
Supp pool temp	196° F

Which **ONE** of the following actions should be directed?

(reference provided)

- A. Lower Core Spray to 3200 gpm to comply with NPSH limitations and secure RHR pump to comply with the Vortex Limit.
- B. Lower Core Spray to 3200 gpm and lower RHR flow to 4,000 gpm to comply with the NPSH limits.
- C. Raise Core Spray to 5200 gpm and shutdown the RHR pump to comply with the NPSH and Vortex Limits, respectively.
- D. Raise core spray flow to 5200 gpm and raise RHR flow to 10,500 gpm as allowed by the NPSH and Vortex Limits, respectively.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

82. Following fuel failure, a steam leak in the Turbine Building results in an off-site release in excess of the Alert classification per Table 1 of EOP-04-RRCP and the Main Steam Line Rad Hi-Hi annunciator is sealed in. The MSIV's are currently open.

Under these conditions, which **ONE** of the following allows the MSIVs to remain open?

- A. Use of component isolation valves are effective in isolating the source of the Turbine Building steam leak.
- B. Entry into EOP-01-LPC with the main turbine operating and no off site power available.
- C. Initiation of Alternate Emergency Depressurization in accordance with EOP-01-RVCP.
- D. Initiation of Anticipation of Emergency Depressurization in accordance with EOP-01-RVCP.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

83. While executing the Emergency Operating Procedures (EOPs), level cannot be controlled below 250". What direction is provided by the EOPs to address this condition and which procedure contains the direction?
- A. Place all Main Steam Isolation Valve (MSIV) Switches to Close.
Lower Reactor Vessel Level using RWCU.
Located in the 1(2)EOP-01-RSP (Reactor Scram Procedure).
 - B. Place all Main Steam Isolation Valve (MSIV) Switches to Close.
Lower Reactor Vessel Level using RWCU.
Located in the 1(2)EOP-01-RVCP (Reactor Vessel Control Procedure).
 - C. Place all Main Steam Isolation Valve (MSIV) Switches to Close.
Secure all Table 1 Injection Systems.
Located in the 1(2)EOP-01-RSP (Reactor Scram Procedure).
 - D. Place all Main Steam Isolation Valve (MSIV) Switches to Close.
Secure all Table 1 Injection Systems.
Located in the 1(2)EOP-01-RVCP (Reactor Vessel Control Procedure).

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

84. During ATWS conditions, Terminating and Preventing has been completed and HPCI injection has been restored. HPCI is injecting to the RPV to maintain RPV level. HPCI suction has automatically transferred to the suppression pool due to high suppression pool level. Suppression pool temperature is 135°F, and rising.

Which **ONE** of the following actions is required to maintain continued HPCI system operation?

- A. In accordance with EOP-01-LPC, lower HPCI flow to less than 2000 gpm if suppression pool temperature approaches 140°F.
- B. In accordance with EOP-01-LPC, lower HPCI flow to less than 2000 gpm if suppression pool temperature approaches 170°F.
- C. Enter EOP-01-SEP-10 and defeat the automatic suction transfer logic and transfer HPCI suction to the CST if suppression pool temperature approaches 140°F.
- D. Enter EOP-01-SEP-10 and defeat the automatic suction transfer logic and transfer HPCI suction to the CST if suppression pool temperature approaches 170°F.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

85. Following an unisolable RCIC steam supply line break in the South RHR Room the following conditions exist:

A Reactor Manual SCRAM has been inserted but several control rods did not insert and reactor power is 5%.

South RHR Equip room	280 mr/hr
South RHR Equip room	355°F (steady)
RCIC Equip Room	298°F (rising slowly)
North RHR Equip room	212 mr/hr
North RHR Equip room	280°F (rising slowly)

Which **ONE** of the following describes the required actions IAW EOP-03-SCCP, Secondary Containment Control Procedure?

(reference provided)

- A. Enter EOP-01-RVCP and perform emergency depressurization when second area is above Max safe temperature.
- B. Enter EOP-01-LPC and perform emergency depressurization when second area is above Max safe temperature.
- C. Enter EOP-01-RVCP and implement anticipation of emergency depressurization prior to second area exceeding its maximum safe temperature.
- D. Enter EOP-01-LPC and implement anticipation of emergency depressurization prior to second area exceeding its maximum safe temperature.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

86. Following an accident on Unit One (1), plant conditions are:

RPV water level	-15 inches (slow trend down)
RPV pressure	10 psig
RHR Pump 1A	Only injection source
RHR Pump 1A	Injecting at 11,500 gpm
Suppr pool temp	176°F
Suppr pool level	-43 inches
Suppr chamber press	4.5 psig

Which **ONE** of the following actions is required for LPCI injection and suppression pool cooling at this time?

- A. Maintain the current injection rate and divert some flow for suppression pool cooling.
- B. Maintain the current injection rate and defer suppression pool cooling to a later time.
- C. Lower the injection rate within the NPSH limit and defer suppression pool cooling to a later time.
- D. Lower the injection rate within the NPSH limit and divert some flow for suppression pool cooling.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

87. Unit Two (2) is at 100% power with RPS in its normal alignment. I&C has just notified you that a review of the last 2A RPS BUS EPA breaker operability MST has determined the undervoltage trips will not function properly for both EPA breakers on 2A RPS.

2A RPS EPA breakers have been declared inoperable.

Which **ONE** of the following actions is required and what is the basis for declaring 2A RPS EPA breakers inoperable?

- A. The RPS Alternate power source is from the same power supply (2E7) as RPS Bus 2A. RPS **CANNOT** be transferred to alternate and must be de-energized IAW 2OP-03.
If these conditions exist for an extended period of time, the scram solenoids can chatter and potentially lose their pneumatic control capability.
- B. 2A RPS **CAN** be transferred to the alternate power supply IAW 2OP-03.
If these conditions exist for an extended period of time, the scram solenoids can chatter and potentially lose their pneumatic control capability.
- C. The RPS Alternate power source is from the same power supply (2E7) as RPS Bus 2A. RPS **CANNOT** be transferred to alternate and must be de-energized IAW 2OP-03.
If these conditions exist for an extended period of time, it may cause equipment (2A RPS MG Set Generator) degradation.
- D. 2A RPS **CAN** be transferred to the alternate power supply IAW 2OP-03.
If these conditions exist for an extended period of time, it may cause equipment (2A RPS MG Set Generator) degradation.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

88. Unit One (1) is starting up with the following initial conditions.

- IRM "B" is inoperable
- Reactor is critical
- All IRMs are on range 6
- SRMs have been withdrawn

The operator then places the range switch for IRM "D" to range 7 and notes that IRM "D" indication fails downscale. The operator places the range switch for IRM "D" back to range 6 and the indication comes back on scale.

Which **ONE** of the following describes the reason that the IRM "D" indication failed downscale and describes the ability to continue the startup while maintaining compliance with procedure and Tech. Specs?

- A. Failure of High Voltage Power Supply.
Startup is permitted to continue.
- B. Failure of High Voltage Power Supply.
Startup is NOT permitted to continue.
- C. Failure of Voltage Pre-amplifier High Frequency Band.
Startup is permitted to continue.
- D. Failure of Voltage Pre-amplifier High Frequency Band.
Startup is NOT permitted to continue.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

89. Unit 2 is in Mode 5 with core defueling in progress.

The 2A RHR Loop is in Shutdown Cooling when the disc of the 2-E11-F009 separates from the stem, resulting in a loss of Shutdown Cooling.

The unit SCO enters AOP-15, Loss of Shutdown Cooling, and determines that Reactor Vessel feed and bleed must be established.

Which **ONE** of the following alignments can be used for feed and bleed?

- A. Feed with CRD IAW SEP-09 and bleed with RWCU IAW OP-14.
- B. Feed with CRD IAW SEP-09 and bleed with main steam line drains per OP-32.
- C. Feed with CRD per OP-08 and bleed with RWCU per OP-14.
- D. Feed with CRD per OP-08 and bleed with stream line drains per OP-32.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

90. An ATWS has occurred on Unit Two (2):

ARI has been actuated.

Scram air header pressure is normal.

Suppression Pool Temperature is 112° F.

The 2A SLC pump is running but its squib valve has not fired.

The 2B SLC pump has tripped and its squib valve has fired.

For this condition which **ONE** of the following procedures is required to shutdown the reactor and what is the basis for the procedural guidance IAW 00I-37.5?

- A. IAW EOP-01-LEP-02, "Alternate Control Rod Insertion".
This is to avoid depressurizing the reactor at power and to shut down the reactor prior to exceeding the Heat Capacity Temperature Limit and the Boron Injection Initiation Temperature.
- B. IAW EOP-01-LEP-02, "Alternate Control Rod Insertion".
A reactor shutdown on boron only is not necessarily a stable condition; dilution concerns, coolant leaks, or operator errors could result in a return to criticality.
- C. IAW EOP-01-LEP-03, "Alternate Boron Injection".
Boron injection is required prior to the Boron Injection Initiation Temperature being exceeded.
- D. IAW EOP-01-LEP-03, "Alternate Boron Injection".
Boron injection is required to ensure the reactor can be shutdown prior to exceeding the Heat Capacity Temperature Limit.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

91. During an ATWS on Unit Two (2), RPV level has been lowered. E4 is de-energized due to an electrical fault. The 2A CRD pump is under clearance.

Plant conditions are:

RPV water level	TAF
Reactor power	6%
Reactor pressure	550 psig
Suppr pool temp	125°F
Suppr pool level	Hi-Hi in alarm
Reactor Bldg Ventilation	Isolated
HPCI Area Temperature	150°F
RCIC Area Temperature	170°F

Which **ONE** of the following procedures is currently required to maintain RPV level > LL4?

- A. SEP-09, CRD Flow Maximization
- B. RCIC hard card (RCIC Operations for EOPs)
- C. LPCI (Automatic Startup for LPCI IAW 2OP-17 section 5.2.1)
- D. HPCI hard card (HPCI Injection In EOPs)

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

92. RWCU is discharging into Secondary Containment and has resulted in one area exceeding the Maximum Safe Operating Radiation Level.

After the radiation level in this area is reduced below the Maximum Safe value a second area exceeds its Maximum Safe Operating Radiation Level.

Which **ONE** of the following describes the required actions for these conditions?

- A. Shutdown the reactor per GP-05.
- B. Scram the reactor and cooldown $<100^{\circ}\text{F}/\text{Hr}$.
- C. Scram the reactor and cooldown $\geq 100^{\circ}\text{F}/\text{Hr}$.
- D. Scram the reactor and open seven ADS valves.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

93. Unit One (1) is at 100% power. The plant is operating with two ADS valves inoperable and the 1B RHR pump out of service for emergent maintenance. An unexpected trip of the breaker for the 1C RHR pump has just occurred. The field operator and electrician dispatched to investigate the breaker trip have determined that a mechanical problem exists within the breaker compartment for the 1C RHR Pump that will require several hours to repair.

The plant is in 3.0.3 due to the above conditions. Which **ONE** of the following identifies the **MINIMUM** action (ie. least amount of equipment to be returned to operable) required to exit 3.0.3 and enter a Tech Spec 3.5.1 action statement?

- A. Restore two ADS valves **AND** one of the RHR pumps to operable status.
- B. Restore one ADS valve **OR** one of the RHR pumps to operable status.
- C. Restore one ADS valve **AND** one of the RHR pumps to operable status.
- D. Restore two ADS valves **OR** both RHR pumps to operable status.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

94. Unit Two (2) is operating at rated power with SBGT Fan 2B under clearance and in a 7 day action statement.

480 VAC Substation E7 trips on fault.

Which **ONE** of the following identifies the Technical Specifications which now have an active required action statement(s) for this condition?

- A. LCO 3.8.7, "Electrical Power Systems" – "Distribution Systems – Operating".
Do NOT enter Technical Specifications for either LCO 3.6.4.1, "Containment Systems" – "Secondary Containment" or LCO 3.6.4.3, "Containment Systems" – "Standby Gas Treatment System".
- B. LCO 3.8.7, "Electrical Power Systems" – "Distribution Systems – Operating" and
LCO 3.6.4.1, "Containment Systems" – "Secondary Containment".
Do NOT enter Technical Specifications for LCO 3.6.4.3, "Containment Systems" – "Standby Gas Treatment System".
- C. LCO 3.8.7, "Electrical Power Systems" – "Distribution Systems – Operating" and
LCO 3.6.4.3, "Containment Systems" – "Standby Gas Treatment System".
Do NOT enter Technical Specifications for LCO 3.6.4.1, "Containment Systems" – "Secondary Containment".
- D. LCO 3.8.7, "Electrical Power Systems" – "Distribution Systems – Operating",
LCO 3.6.4.3, "Containment Systems" – "Standby Gas Treatment System" and
LCO 3.6.4.1, "Containment Systems" – "Secondary Containment".

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

95. Following a SCRAM on Unit Two (2), guidance has been provided to maintain the reactor vessel temperature and pressure as high as possible to facilitate leak hunts in the Drywell. Vessel bottom head temperature is currently 110° F and steady, Reactor Pressure is 900 psig and steady. The control band established last shift is as follows:

- Vessel Pressure 850 psig to 950 psi

Which **ONE** of the following describes the current conditions and any required action?

(reference provided)

- A. The current conditions meet Technical Specification requirements for figure 3.4.9-1 and no actions are required.
- B. The current conditions meet Technical Specification requirements for figure 3.4.9-1 and the established control bands must be changed to lower vessel pressure.
- C. The current conditions do not meet Technical Specifications for figure 3.4.9-1 and vessel pressure must be lowered below 820 psig within 30 minutes.
- D. The current conditions do not meet Technical Specifications for figure 3.4.9-1 and vessel pressure must be lowered below 820 psig immediately.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

96. IAW REG-NGGC-0010, "10CFR50.59 and Selected Regulatory Reviews," which ONE of the following plant activities requires that a Screening be performed to determine whether an Evaluation is required under the provisions of 10CFR50.59?
- A. Maintenance performing a calibration of a reactor vessel level instrument.
 - B. Placing temporary lead shielding on pipes and equipment for 43 days.
 - C. Making a conservative change in surveillance tests acceptance criteria.
 - D. Temporary alterations that support maintenance such as lifting leads for 80 days.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

97. Unit Two (2) has just been placed in Shutdown Cooling with Reactor Coolant temperature at 195° F. Current ECCS System status:

Core Spray Pump 2A is under clearance
Core Spray Pump 2B is under clearance
RHR Pump 2A which is under clearance
RHR Loop B is operating in Shutdown Cooling
No other equipment is out of service

Which **ONE** of the following describes Technical Specification applicability for these conditions?

(reference provided)

- A. LCO 3.5.2 is applicable for these plant conditions and is met.
- B. LCO 3.5.2 is NOT met, Actions for Condition A only are required.
- C. LCO 3.5.2 is NOT applicable for these plant conditions.
- D. LCO 3.5.2 is NOT met, Actions for both Conditions A and C are required.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

98. IAW 0AI-118, Switchyard and Transformer Yard Vehicle Access, the WCC SRO is responsible for which **ONE** of the following activities for work performed in the switchyard?
- A. Coordinate planned and scheduled work activities by the Eastern Transmission Area crew.
 - B. Provide the Eastern Transmission Area crew a representative during vehicle movement and crane or boom operation in the switchyard.
 - C. Provide permission to allow vehicles to park in the Security Isolation Zone (within 20 feet of the Protected Area Fence) in the switchyard.
 - D. Conduct a pre-job brief that includes, as a minimum, a discussion of the job scope, work methods, and required safety measures.

**BRUNSWICK NUCLEAR PLANT
SENIOR REACTOR OPERATOR NRC EXAM**

99. During accident conditions, an auxiliary operator is needed to enter the Reactor Building for local emergency actions to prevent fuel damage. Due to elevated Reactor Building radiation levels, it is estimated the operator will receive 7.5 rem.

Which **ONE** of the following describes if the estimated 7.5 rem will exceed applicable limits and can be authorized?

- A. The estimated dose of 7.5 rem will not exceed EPA-400 limits and is allowed to be authorized by the Site Emergency Coordinator.
- B. The estimated dose of 7.5 rem will not exceed EPA-400 limits and is not allowed to be authorized by the Site Emergency Coordinator.
- C. The estimated dose of 7.5 rem will exceed EPA 400 limits and is allowed to be authorized by the Site Emergency Coordinator.
- D. The estimated dose of 7.5 rem will exceed EPA 400 limits and is not allowed to be authorized by the Site Emergency Coordinator.

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100. Unit Two (2) was operating at 96% power when the following occurred:

- @ 1900, the Unit Two (2) SAT trips and locks out, DGs 1-4 auto start
- @ 1901, a manual reactor scram is inserted, RPS A fails to trip, no rod motion
- @ 1902, manual ARI initiation is attempted, ARI fails to initiate
- @ 1904, SLC is initiated, SLC Pump 2A starts, SLC Pump 2B fails to start
- @ 1907, RPS trip system A is tripped using RPS test switches, all rods insert
- @ 1908, the turbine trips, DG3 ties to E3, DG4 trips and locks out

It is now 1910 and you are reviewing the Emergency Action Levels per PEP-02.1.

Which **ONE** of the following describes the event classification and associated notification?

(reference provided)

- A. Declare an Alert and notify off-site agencies of this classification.
- B. Declare an Unusual Event and notify off-site agencies of this classification.
- C. Declare an Unusual Event and notify off-site agencies that the EAL for an Alert was briefly exceeded, but no longer exists.
- D. Declare an Alert and notify off-site agencies that the EAL for a Site Area Emergency was briefly exceeded, but no longer exists.

END OF NRC SRO EXAM