ES-301

Control Room/In-Plant Systems Outline

Facility: Point Beach Nuclear Plant U1/U2 Da	ate of Examination:	July 2021		
Exam Level: RO 🛛 SRO-I 🗍 SRO-U 🗍 💦 O	perating Test Number:	2021		
Control Room Systems: [*] 8 for RO, 7 for SRO-I, and 2 or 3 for S	Control Room Systems: [*] 8 for RO, 7 for SRO-I, and 2 or 3 for SRO-U			
System/JPM Title	Type Code*	Safety Function		
a. <i>Control Rod Drive System</i> / Perform Rod Exercise Test 001A3.05 (3.5/3.5) Bank Rods exercised, overlap counter discrepancy corrected and retu to original position Previous 2017	rned A, D, P, S	1		
b. <i>Chemical and Volume Control System</i> / Shift Charging Pump Such Between the VCT and RWST 004A3.01 (3.5/3.7) <i>Attempt normal boration to target load, end with charging pump sucti</i> <i>the RWST per RNO</i>	ion on to A, D, S	2		
c. <i>Emergency Core Cooling</i> System / Adjust Accumulator Pressure 006A1.13 (3.5/3.7) Lower accumulator pressure without to the target range	D, EN, S	3		
d. <i>Residual Heat Removal</i> / Stroke Open Test 1SI-852A, Low Head S Core Deluge Isolation 005A1.07 (2.5/3.1*) <i>Perform a partial stroke test</i> Previous 2019	D, EN, P, S	4P		
e . <i>Containment Spray System</i> / Align Containment Spray Pump for Containment Sump Recirc with Suction Supplied by the RHR Pump 026A4.01 (4.5/4.3) <i>Align containment spray with Spray pump suction supplied from RHR</i> <i>throttle RHR recirc to as high as possible and less than the limit (time</i> <i>critical)</i>	and A, D, EN, L, S	5		
f. <i>Emergency Diesel Generator</i> / Island EDG Per 1-SOP-4KV-001 064A4.01 (4.0/4.3) <i>Island G01, Emergency Diesel Generator to 1A-05, Safeguards Bus</i>	D,S	6		
g. <i>Nuclear Instrumentation System</i> / Perform a partial flux map using incore instrumentation 015A3.01 (3.8/3.8) or 015A4.02 (3.9/3.9)	S N, S	7		
h. Control Room Ventilation (Accidental Gaseous Radwaste Release Shift Ventilation Lineups for Various Modes 060AA1.02 (2.9/3.1) Restore ventilation system from Mode 5 to Mode 1	D, S	9		
In-Plant Systems: [*] 3 for RO, 3 for SRO-I, and 3 or 2 for SRO-U				
i. <i>Service Water System</i> / Determine SW Flow as a Function of Heade 076A2.02 (2.7/3.1) <i>Record data and determine and take required actions to ensure require</i> <i>Service Water Flow</i>	er DP A, N	4S		
j. <i>Emergency Diesel Generator</i> / Transfer Fuel Oil Between Day Tanl 064K1.03 (3.6/4.0) Transfer fuel oil from T-175B to T-175A with Fuel Oil Transfer pump Previous 2017	, D, P	6		
k. <i>Spent Fuel Pool Cooling System</i> / Respond to Loss of Spent Fuel F Cooling 033A2.02 (2.7/3.0) <i>Restore SFP cooling by shifting to 'B' train pump and heat exchanger</i>	A, D, E, R	8		

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* All RO and SRO-I control room (and in-plant) systems must be different and serve different safety functions, all five SRO-U systems must serve different safety functions, and in-plant systems and functions may overlap those tested in the control room.		
* Type Codes	Criteria for R /SRO-I/SRO-U	
 (A)Iternate path (C)ontrol room (D)irect from bank (E)mergency or abnormal in-plant (EN)gineered safety feature (L)ow-Power/Shutdown (N)ew or (M)odified from bank including 1(A) (P)revious 2 exams (R)CA (S)imulator 	4-6/4-6 /2-3 ≤ 9/≤ 8/≤ 4 ≥ 1/≥ 1/≥ 1 ≥ 1/≥ 1/≥ 1 (control room system) ≥ 1/≥ 1/≥ 1 ≥ 2/≥ 2/≥ 1 ≤ 3/≤ 3/≤ 2 (randomly selected) ≥ 1/≥ 1/≥ 1	

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Control Room Systems: [*] 8 for RO, 7 for SRO-I, and 2 or 3 for SRO-U				
System/JPM Title	Type Code*	Safety Function		
a. <i>Control Rod Drive System</i> / Perform Rod Exercise Test 001A3.05 (3.5/3.5) <i>Bank Rods exercised, overlap counter discrepancy corrected and returned</i> <i>to original position</i> Previous 2017	A, D, P, S	1		
b. <i>Chemical and Volume Control System</i> / Shift Charging Pump Suction Between the VCT and RWST 004A3.01 (3.5/3.7) <i>Attempt normal boration to target load, end with charging pump suction to</i> <i>the RWST per RNO</i>	A, D, S	2		
c. <i>Emergency Core Cooling</i> System / Adjust Accumulator Pressure 006A1.13 (3.5/3.7) Lower accumulator pressure without to the target range	D, EN, S	3		
d. <i>Residual Heat Removal</i> / Stroke Open Test 1SI-852A, Low Head SI Core Deluge Isolation 005A1.07 (2.5/3.1*) <i>Perform a partial stroke test</i> Previous 2019	D, EN, P, S	4P		
e . <i>Containment Spray System</i> / Align Containment Spray Pump for Containment Sump Recirc with Suction Supplied by the RHR Pump 026A4.01 (4.5/4.3) <i>Align containment spray with Spray pump suction supplied from RHR and</i> <i>throttle RHR recirc to as high as possible and less than the limit (time</i> <i>critical)</i>	A, D, EN, L, S	5		
f.				
g. <i>Nuclear Instrumentation System</i> / Perform a partial flux map using incore instrumentation 015A3.01 (3.8/3.8) or 015A4.02 (3.9/3.9)	N, S	7		
h. Control Room Ventilation (Accidental Gaseous Radwaste Release) / Shift Ventilation Lineups for Various Modes 060AA1.02 (2.9/3.1) Restore ventilation system from Mode 5 to Mode 1	D, S	9		
In-Plant Systems:* 3 for RO, 3 for SRO-I, and 3 or 2 for SRO-U				
i. <i>Service Water System</i> / Determine SW Flow as a Function of Header DP 076A2.02 (2.7/3.1) Record data and determine and take required actions to ensure required Service Water Flow	A, N	4S		
j. <i>Emergency Diesel Generator</i> / Transfer Fuel Oil Between Day Tanks 064K1.03 (3.6/4.0) Transfer fuel oil from T-175B to T-175A with Fuel Oil Transfer pump Previous 2017	D, P	6		
k. <i>Spent Fuel Pool Cooling System</i> / Respond to Loss of Spent Fuel Pool Cooling 033A2.02 (2.7/3.0) <i>Restore SFP cooling by shifting to 'B' train pump and heat exchanger</i>	A, D, E, R	8		

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