ES-301

Control Room/In-Plant Systems Outline

Form ES-301-2

Facility: Clinton Date of	f Examination:	3/29/2021
	ing Test Number:	2021-301
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. 201001 A2.01 3.2 / JPM562 Control Rod Difficult to Withdraw / RE Pump Trip (Alternate Path)	D A, EN, N, S	1
b. 259001 A4.02 3.9 / JPM530 TDRFP 'B' Startup (Alternate Path)	A, D, S	2
c. 241000 A1.08 3.3 / JPM501 Main Turbine Control Valve Tests	D, P, S	3
d. 245000 A4.01 2.7 / JPM563 On-Line Testing Of Turning Gear Oil Pump 1TO04P	N, S	4
e. 223001 2.1.23 4.3 / JPM531 CNMT Pool Makeup from SP	D, EN, L, P, S	5
f. 262001 A4.04 3.6 / JPM432 Transferring 4160V Bus 1B1 from the Main to the Reserve Source (Alternate Path)	A, D, S	6
g. 400000 A2.01 3.3 / JPM466 Shift CCW Pumps (Alternate Path)	A, D, S	8
h. 290003 A4.01 3.2 / JPM565 Startup the Control Room Ventilation System (VC) in the High Radiation Mode (Alternate Path)	A, L, EN, N, S	9
In-Plant Systems:* 3 for RO, 3 for SRO-I, and 3 or 2 for SRO-U		
i. 264000 2.1.30 4.4 / JPM451 Reset 1C Diesel Generator After an Overspeed Trip	D, E, EN, R	6
j. 295019 AA1.02 3.3 / JPM428 Place IA Ring Header Automatic Isolation Valve into Service	D, E, R	8
k. 295016 AA1.07 4.2 / JPM533 RSP - Div 2 LPCI Operation	D, E, EN, L, P, R	2

* 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	4-6/4-6 /2-3	
(D)irect from bank	≤ 9/≤ 8/≤ 4	
(É)mergency or abnormal in-plant	≥ 1/≥ 1/≥ 1	
(EN)gineered safety feature	≥ 1/≥ 1/≥ 1 (control room system)	
(L)ow-Power/Shutdown	≥ 1/≥ 1/≥ 1	
(N)ew or (M)odified from bank including 1(A)	≥ 2/≥ 2/≥ 1	
(P)revious 2 exams	\leq 3/ \leq 3/ \leq 2 (randomly selected)	
(R)CA (S)imulator	≥ 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. 201001 A2.01 3.2 / JPM562 Control Rod Difficult to Withdrav Pump Trip (Alternate Path)	v / RD A, EN, N, S	1	
b.			
c. 241000 A1.08 3.2 / JPM501 Main Turbine Control Valve Tes	ts D, P, S	3	
d. 245000 A4.01 2.7 / JPM563 On-Line Testing Of Turning Gea Pump 1TO04P	ar Oil N, S	4	
e. 223001 2.1.23 4.4 / JPM531 CNMT Pool Makeup from SP	D, EN, L, P, S	5	
f. 262001 A4.04 3.7 / JPM432 Transferring 4160V Bus 1B1 from Main to the Reserve Source (Alternate Path)	m the A, D, S	6	
g. 400000 A2.01 3.4 / JPM466 Shift CCW Pumps (Alternate Pa	ath) A, D, S	8	
h. 290003 A4.01 3.2 / JPM565 Startup the Control Room Venti System (VC) in the High Radiation Mode (Alternate Path)	lation A, L, EN, N, S	9	
In-Plant Systems: [*] 3 for RO, 3 for SRO-I, and 3 or 2 for SRO-U			
i. 264000 2.1.30 4.0 / JPM451 Reset 1C Diesel Generator Afte Overspeed Trip	ran D, E, EN, R	6	
j. 295019 AA1.02 3.1 / JPM428 Place IA Ring Header Automat Isolation Valve into Service	ic D, E, R	8	
k. 295016 AA1.07 4.3 / JPM533RSP - Div 2 LPCI Operation	D, E, EN, L, P, R	2	

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* Type Codes	Criteria for R /SRO-I/SRO-U	
(A)Iternate path (C)ontrol room	4-6/4-6 /2-3	
(D)irect from bank	≤ 9/≤ 8/≤ 4	
(E)mergency or abnormal in-plant	≥ 1/≥ 1/≥ 1	
(EN)gineered safety feature	≥ 1/≥ 1/≥ 1 (control room system)	
(L)ow-Power/Shutdown	≥ 1/≥ 1/≥ 1	
(N)ew or (M)odified from bank including 1(A)	≥ 2/≥ 2/≥ 1	
(P)revious 2 exams	\leq 3/ \leq 3/ \leq 2 (randomly selected)	
(R)CA (S)imulator	≥ 1/≥ 1/≥ 1	

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Exam Level: RO SRO-I SRO-U	Operating Test Number:	2021-301		
Control Room Systems:* 8 for RO, 7 for SRO-I, and 2 or 3 fo	or SRO-U			
System/JPM Title	Type Code*	Safety Function		
a. 201001 A2.01 3.2 / JPM562 Control Rod Difficult to Withd Pump Trip (Alternate Path)	raw / RD A, EN, N, S	1		
b.				
C.				
d.				
e.				
f.				
g.				
h. 290003 A4.01 3.2 / JPM565 Startup the Control Room Ve System (VC) in the High Radiation Mode (Alternate Path)	ntilation A, L, EN, N, S	9		
In-Plant Systems: [*] 3 for RO, 3 for SRO-I, and 3 or 2 for SRO-U				
i. 264000 2.1.30 4.0 / JPM451 Reset 1C Diesel Generator A Overspeed Trip	fter an D, E, EN, R	6		
j. 295019 AA1.02 3.1 / JPM428 Place IA Ring Header Auton Isolation Valve into Service	natic D, E, R	8		
k. 295016 AA1.07 4.3 / JPM533RSP - Div 2 LPCI Operation	D, E, EN, L, P, R	2		
* 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	$\begin{array}{l} 4-6/4-6/2-3 \\ \leq 9/\leq 8/\leq 4 \\ \geq 1/\geq 1/\geq 1 \\ \geq 1/\geq 1/\geq 1 \ (\text{control room system}) \\ \geq 1/\geq 1/\geq 1 \\ \geq 2/\geq 2/\geq 1 \\ \leq 3/\leq 3/\leq 2 \ (\text{randomly selected}) \\ \geq 1/\geq 1/\geq 1 \end{array}$