Control Room/In-Plant Systems Outline

Form ES-301-2

Facility: Arkansas Nuclear One -2	Date of Examination: 2/25/2008				
Exam Level: RO 🛛 SRO-I 🗌 SRO-U 🗌	Operating Test Number: <u>1</u>				
Control Room Systems [@] (8 for RO); (7 for SRO-I); (2 or 3 for SRO-U, including 1 ESF)					
System / JPM Title		Type Code*	Safety Function		
a. ANO-2-JPM-NRC-CVCS2 004 A4.07 RO 3.9/SRO 3.7 Perform Emergency Boration		A/D/L/S	1 Reactivity		
 b. ANO-2-JPM-NRC-EOP01 026 A2.03 RO 3.2 SRO 3.7 Secure Containment Spray System (inadvertent) 		D/L/S (ESF)	5 Containment		
 c. ANO-2-JPM-NRC-CREV01 073 A3.01 RO- 2.9 SRO-3.1 Manually actuate control room ventilation 		A/N/S (ESF)	7 Instrumentation		
 d. ANO-2-JPM-NRC-IA02 078 A3.01 RO 3.1 SRO 3.2 Perform actions required by low Instrument Air Header Pressure 		M/S	8 Plant Service Systems		
e. ANO-2-JPM-NRC-MTG05 045 K3.01 RO 2.9 SRO 3.2 Synchronize MTG to grid with failure of speed./load control results in excess steam demand		A/D/L/S	4 RCS Heat Removal		
f. ANO-2-JPM-NRC-SIT01 006 A2.03 RO-3.3 SRO-3.7 High pressure fill of Safety Injection Tank		A/D/S	2 RCS Inventory		
 G. ANO-2-JPM-NRC-LTOP O10 K4.03 RO 3.8 SRO 4.1 Respond to Annunciator 2K10 C-4, Loop 1Low temperature over pressure relief valve alignment incorrect 		D/L/S/P	3 Reactor Pressure Control		
 h. ANO-2-JPM-NRC-ELEC001 062 A2.11 RO 3.7 SRO 4.1 Back feed a non-vital bus from a vital bus 		D/S	6 Electrical		
In-Plant Systems [@] (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)					
i. ANO-2-JPM-NRC-AACGLS 064 A3.06 RO 3.3 SRO 3.4 Local start of AAC diesel generator manually and locally		A/D/E/P	6 Electrical		
j. ANO-2-JPM-NRC-FPEM1 033 A2.03 RO 3.1 SRO 3.5 Add Water from Loop I SW to SFP		D/R	8 Plant Service Systems		
k. ANO-2-JPM-NRC-LOF01 CE E06 EA1.1 RO 4.0 SRO 3.9 Align Condensate pump for start during a loss of all Feed	water event	D/L/E	4 RCS Heat Removal		
All RO and SRO-I control room (and in-plant) systems must be different and serve different safety functions; all 5 SRO-U systems must serve different safety functions; in-plant systems and functions may overlap those tested in the control room.					
*Type Codes	Criteria for RO / SRO-I / SRO-U				
(A)lternate path (C)ontrol room	4-6 / 4-6 / 2-3				
(D)irect from bank	<u><</u> 9/ <u><</u> 8				
(E)mergency or abnormal in-plant	$\geq 1 / \geq 1 / \geq 1$				
(L)ow-Power / Shutdown	<u>></u> 1/ <u>></u> 1 >2/ >2				
(N)ew or (M)odified from bank including 1(A) (P)revious 2 exams	<u>></u> 2/ <u>></u> 2 < 3 < 3	/ <u>></u> 1 / <u><</u> 2 (randoml	v selected)		
(R)CA	<u>></u> 1/ <u>></u> 1		y selected)		
(S)imulator		· _ ·			

ES-301

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Facility: <u>Arkansas Nuclear One -2</u> Exam Level: RO	Date of Examination: <u>2/25/2008</u> Operating Test Number: <u>1</u>				
	Operating re		I <u> </u>		
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b.					
c. ANO-2-JPM-NRC-CREV01 073 A3.01 RO- 2.9 SRO-3.1 Manually actuate control room ventilation		A/N/S (ESF)	7 Instrumentation		
d.					
е.					
f.					
g.					
h.					
In-Plant Systems [@] (3 for RO); (3 for SRO-I); (3	or 2 for SRO-U)				
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(D)irect from bank	<u>< 9 / </u> < 8				
(E)mergency or abnormal in-plant	<u>></u> 1/ <u>></u> 1 >1/ >1				
(L)ow-Power / Shutdown (N)ew or (M)odified from bank including 1(A)	<u>≥</u> 1/ <u>≥</u> 1 <u>≥</u> 2/ <u>≥</u> 2				
(P)revious 2 exams		/ <u><</u> 2 (randoml	y selected)		
(R)CA	<u> </u>		,		
(S)imulator					

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e. ANO-2-JPM-NRC-MTG05 045 K3.01 RO 2.9 SRO 3.2 Synchronize MTG to grid with failure of speed./load control results in excess steam demand		A/D/L/S	4 RCS Heat Removal		
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g. ANO-2-JPM-NRC-LTOP 010 K4.03 RO 3.8 SRO 4.1 Respond to Annunciator 2K10 C-4, Loop 1Low tempera alignment incorrect	ature over pressure relief valve	D/L/S/P	3 Reactor Pressure Control		
h. NA					
In-Plant Systems [@] (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)					
i. ANO-2-JPM-NRC-AACGLS 064 A3.06 RO 3.3 SRO 3.4 Local start of AAC diesel generator manually and locally		A/D/E/P	6 Electrical		
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k. ANO-2-JPM-NRC-LOF01 CE E06 EA1.1 RO 4.0 SRO 3.9 Align Condensate pump for start during a loss of all Feed	water event	D/L/E	4 RCS Heat Removal		
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*Type Codes	Criteria for RO / SRO-I / SRO-U				
(A)Iternate path (C)ontrol room	4-6 / 4-6 / 2-3				
(D)irect from bank	<u>≤</u> 9/ <u>≤</u> 8 / <u>≤</u> 4				
(E)mergency or abnormal in-plant	<u>≥</u> 1/ <u>≥</u> 1 / <u>≥</u> 1				
(L)ow-Power / Shutdown	<u>≥</u> 1/ <u>≥</u> 1/ <u>≥</u> 1				
(N)ew or (M)odified from bank including 1(A)	<u>≥</u> 2/ <u>≥</u> 2 / <u>≥</u> 1				
(P)revious 2 exams		3 / <u><</u> 2 (random	ly selected)		
(R)CA	<u>></u> 1/ <u>></u>	1 / <u>></u> 1			
(S)imulator					