

Facility: Duane Arnold Energy Center				Date of Exam: April 8, 2019				Operating Test No.: NRC 19-1										
A P P L I C A N T	E V E N T  T Y P E	Scenarios												T O T A L	M I N I M U M(*)			
		1			2			3			4							
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION							
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P					
																R	I	U
RO <input type="checkbox"/> SRO-I X SRO-U <input type="checkbox"/>	RX	1				0		1		1			3	1	1	0		
	NOR	1				1		0		1			4	1	1	1		
	I/C	4				4		2		5			15	4	4	2		
	MAJ	1				1		1		1			4	2	2	1		
	TS	2				0		0		2			4	0	2	2		
RO <input type="checkbox"/> SRO-I X SRO-U <input type="checkbox"/>	RX		1		1				0		1		3	1	1	0		
	NOR		0		1				1		0		2	1	1	1		
	I/C		2		5				6		3		16	4	4	2		
	MAJ		1		1				1		1		4	2	2	1		
	TS		0		2				0		0		2	0	2	2		
RO <input type="checkbox"/> SRO-I X SRO-U <input type="checkbox"/>	RX			0		1		1				0	1	1	1	0		
	NOR			1		0		1				1	3	1	1	1		
	I/C			2		3		5				2	12	4	4	2		
	MAJ			1		1		1				1	4	2	2	1		
	TS			0		0		2				0	2	0	2	2		
RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>	RX													1	1	0		
	NOR													1	1	1		
	I/C													4	4	2		
	MAJ													2	2	1		
	TS													0	2	2		

Instructions:

- Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the at-the-controls (ATC) and balance-of-plant (BOP) positions. Instant SROs (SRO-I) must serve in both the SRO and the ATC positions, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position. If an SRO-I *additionally* serves in the BOP position, one I/C malfunction can be credited toward the two I/C malfunctions required for the ATC position.
- Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (\*) Reactivity and normal evolutions may be replaced with additional I/C malfunctions on a one-for-one basis.
- Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.
- For new reactor facility licensees that use the ATC operator primarily for monitoring plant parameters, the chief examiner may place SRO-I applicants in either the ATC or BOP position to best evaluate the SRO-I in manipulating plant controls.

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		1			2			3			4							
		CREW POSITION			CREW POSITION			CREW POSITION			CREW POSITION							
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P					
																R	I	U
RO <input type="checkbox"/>	RX	1			1			1			1			4	1	1	0	
SRO-I <input type="checkbox"/>	NOR	1			1			1			1			4	1	1	1	
SRO-U <input type="checkbox"/>	I/C	4			5			5			5			19	4	4	2	
X	MAJ	1			1			1			1			4	2	2	1	
	TS	2			2			2			2			8	0	2	2	
RO X <input type="checkbox"/>	RX		1			0		1				0	2	1	1	0		
SRO-I <input type="checkbox"/>	NOR		0			1		0				1	2	1	1	1		
SRO-U <input type="checkbox"/>	I/C		2			4		2				2	10	4	4	2		
	MAJ		1			1		1				1	4	2	2	1		
	TS		0			0		0				0	0	0	2	2		
RO X <input type="checkbox"/>	RX			0		1			0		1		2	1	1	0		
SRO-I <input type="checkbox"/>	NOR			1		0			1		0		2	1	1	1		
SRO-U <input type="checkbox"/>	I/C			2		3			6		3		14	4	4	2		
	MAJ			1		1			1		1		4	2	2	1		
	TS			0		0			0		0		0	0	2	2		
RO <input type="checkbox"/>	RX													1	1	0		
SRO-I <input type="checkbox"/>	NOR													1	1	1		
SRO-U <input type="checkbox"/>	I/C													4	4	2		
	MAJ													2	2	1		
	TS													0	2	2		

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