

Facility: Millstone Unit 2Date of Examination: 02/28/2017Examination Level: RO ☒ SRO ☐Operating Test Number: ES17LI

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
A1.1-RO Conduct of Operations	R, D	K/A 2.1.7 Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation. (RO 4.4) Evaluate an RCP Seal Failure
A1.2-RO Conduct of Operations	R, M	K/A 2.1.37 Knowledge of procedures, guidelines, or limitations associated with reactivity management. (RO 4.3) Determine Shutdown Margin with one CEA not inserted and crediting xenon reactivity worth.
A2-RO Equipment Control	R, N	K/A 2.2.12 Knowledge of surveillance procedures. (RO 3.7) Complete "A" Service Water Pump Operability Surveillance, SP 2612A-003.
A3-RO Radiation Control	R, M	K/A 2.3.7 Ability to comply with radiation work permit requirements during normal or abnormal conditions. (RO 3.5) For the task of venting a CTMT Spray pump, determine RWP clothing requirements, maximum dose and contamination levels in the area and adjacent to the valves being manipulated.

NOTE: All items (five total) are required for SROs. RO applicants require only four items unless they are retaking only the administrative topics (which would require all five items).

* Type Codes & Criteria:

- (C)ontrol room, (S)imulator, or Class(R)oom
- (D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs & RO retakes)
- (N)ew or (M)odified from bank (≥ 1)
- (P)revious 2 exams (≤ 1 ; randomly selected)

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Exam Level: RO <input checked="" type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>		Operating Test No.: <u>ES17LI</u>
Control Room Systems: 8 for RO; 7 for SRO-I; 2 or 3 for SRO-U		
System / JPM Title	Type Code*	Safety Function
S-1 CVCS / Emergency Boration 004/A2.14 Emergency boration (RO 3.8)	D, L, S	1
S-2 LPSI / Verify adequate Safety Injection Flow IAW EOP 2532, LOCA 006/A3.03 ESFAS-operated valves (RO 4.1)	A, L, N, S	2
S-3 PZR Pressure Control / Force Pressurizer Sprays 010/A1.07 RCS Pressure (RO 3.7)	A, M, S	3
S-4 Auxiliary Feedwater / Operate TDAFP IAW EOP 2541, App 6 061/A2.04 Pump failure or improper operation (RO 3.4)	A, L, N, S	4(S)
S-5 CTMT Spray / Restore from inadvertent CTMT Spray actuation 026/A4.05 Containment spray reset switches (RO 3.5)	EN, N, S	5
S-6 Emergency Diesel Generators / Unload and secure a EDG 064/A4.06 Manual start, loading, and stopping of the ED/G (RO 3.9)	A, D, S	6
S-7 Mitigating a Reactor Regulating System Failed T _{COLD} Input 016/A4.01 NNI channel select controls (RO 2.9*)	N, S	7
S-8 Circulating Water / Respond to the loss of a 2 nd CW pump 075/A2.02 Loss of circulating water pumps (RO 2.5)	A, N, S	8
In-Plant Systems (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)		
P-1 AC Electrical (Instrument Power) / Transfer PPC Power Supply 062/A4.01 All breakers (including available switchyard) (RO 3.3)	D	6
P-2 Service Water / On a loss of 22E, swap the "B" SW Pump Strainer power supply to 22F to restore Facility 1 SW to operation 076/A2.01 Loss of SWS (RO 3.5)	E, M	4(S)
P-3 Waste Gas Disposal / Shift In-Service Waste Gas Decay Tank 071/A4.05 Gas decay tanks, including valves, indicators, and sample line (RO 2.6)	D, R	9
* 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; 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 (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 $\leq 9 / \leq 8 / \leq 4$ $\geq 1 / \geq 1 / \geq 1$ $\geq 1 / \geq 1 / \geq 1$ (control room system) $\geq 1 / \geq 1 / \geq 1$ $\geq 2 / \geq 2 / \geq 1$ $\leq 3 / \leq 3 / \leq 2$ (randomly selected) $\geq 1 / \geq 1 / \geq 1$	