

### **Draft Written Exam Sample plan (ES-401-1/2/3)**

There was no Draft Written Exam Sample plan for the North Anna 2012-302 Exam (the Written Exam was waived).

Facility: <b>North Anna Power Station</b>		Date of Examination: <u>12/17/2012</u>
Examination Level: <b>SRO-I</b>		Operating Test Number: <u>Retake</u>
Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	M, R G2.1.43	Calculate Estimated Critical Conditions (RO 4.1 / SRO 4.3)
Conduct of Operations	M, R G2.1.18	Perform 1-LOG-20, ECCS Leakage Log (RO 3.6 / SRO 3.8)
Equipment Control	N, R G2.2.20	Evaluate proposed troubleshooting activity and correctly apply the requirements of MA-AA-103. (RO 2.6 / SRO 3.8)
Radiation Control	M, R, P G2.3.7	Given an assignment in the RCA: Select the appropriate RWP Task, identify required dosimetry & alarm setpoints, and, using the appropriate survey maps, estimate total dose for performing the task. (RO 3.5 / SRO 3.6)
Emergency Plan	M, R G2.4.44	Determine Protective Action Recommendation (PAR) and update requirement (EPIP-1.06) (RO 2.4 / SRO 4.4)
NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when all 5 are required.		
* Type Codes & Criteria: (C)ontrol room, (S)imulator, or Class(R)oom (D)irect from bank ( $\leq 3$ for ROs; $\leq 4$ for SROs & RO retakes) (N)ew or (M)odified from bank ( $\geq 1$ ) (P)revious 2 exams ( $\leq 1$ ; randomly selected)		

Facility: North Anna Power Station Date of Examination: 12/17/2012  
 Exam Level : RO  SRO-I  SRO-U  Operating Test No.: Retake

Control Room Systems<sup>®</sup> (8 for RO); (**7 for SRO-I**); (2 or 3 for SRO-U, including 1 ESF)

System / JPM Title (KA)	Type Code*	Safety Function
a) Makeup to Service Water Reservoir 076-A4.01, (RO 2.9 / SRO 2.9)	M, S	4(sec)
b) Maintain stable plant conditions (No-tell, Unit on RHR, spurious SI, 1-AP-0.1) 006-A2.13 (RO 3.9 / SRO 4.2)	A, EN, L, N, S	3
c) Perform 1-PT-17.1, Control Rod Operability 001-A2.11, (RO 4.4 / SRO 4.7)	A, M, S	1
d) Place Excess Letdown in service 004-A4.06, (RO 3.6 / SRO 3.1)	D, S	2
e) Maintain Stable Plant Conditions (No-tell, N-44 failure, 1-AP-4.3) 015 - A2.02 (RO 3.1 / SRO 3.5)	A, M, S	7
f) Start RCP (No-tell, after start conditions degrade & require stopping RCPs ) 003 - A1.09 (RO 2.8 / SRO 2.8)	A, L, M, S	4(pri)
g) Raise PRT pressure by adding nitrogen 007 - A1.02 (RO 2.7 / SRO 2.9)	D, S, P	5
h) N/A	N/A	N/A

In-Plant Systems<sup>®</sup> (3 for RO; **3 for SRO-I**; 3 or 2 for SRO-U)

i) Transfer Aux Monitoring Panel and Remote Monitoring Excore Neutron Flux Detectors to backup power. 067-AA2.16, (RO 3.3 / SRO 4.0)	D, E	6
j) Trip reactor locally (2-FR-S.1) 029 - EA1.12 (RO 4.1 / SRO 4.0)	A, D, E, P	1
k) Align CC system for split operations (1-AP-15) 026 - AA2.03 (RO 2.6 / SRO 2.9)	D, E, R	8

@ 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 / <b>SRO-I</b> / SRO-U
(A)lternate path	4-6 / 4-6 / 2-3
(C)ontrol room	
(D)irect from bank	≤ 9 / ≤ 8 / ≤ 4
(E)mergency or abnormal in-plant	≥ 1 / ≥ 1 / ≥ 1
(EN)gineered safety feature	- / - / ≥ 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 (similar topic)	≤ 3 / ≤ 3 / ≤ 2 (randomly selected)
(R)CA	≥ 1 / ≥ 1 / ≥ 1
(S)imulator	