

Facility: Nine Mile Point Unit 1Date of Examination: December 2018Examination Level: ROOperating Test Number: LC1 17-1 NRC

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	M, R	Verification Of Active License Status OP-AA-105-101, OP-AA-105-102, K/A 2.1.4 (3.3)
Conduct of Operations	D, R	DWFDT / DWEDT Leak Rate Determination and Evaluation N1-OP-8, K/A 2.1.18 (3.6)
Equipment Control	D, R	Develop a clearance boundary for the Liquid Poison Test Tank OP-CE-109-101 KA 2.2.13 (4.1)
Radiation Control	P, D, R (2017 NRC)	Application of Radiation Exposure Limits IAW RP-AA- 203 – SDC Room RP-AA-203, K/A 2.3.4 (3.2)
Emergency Procedures/Plan		
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: Nine Mile Point Unit 1Date of Examination: December 2018Examination Level: SROOperating Test Number: LC1 17-1 NRC

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	D, R	Reactivate SRO Licenses OP-AA-105-102, KA 2.1.4 (3.8)
Conduct of Operations	D, R	Perform Time to Boil Calculation for Reactor Coolant System OP-NM-108-117-1002, K/A 2.1.40 (3.9)
Equipment Control	N, R	Review and Approval of Completed Surveillance Test, N1-ST-Q13, Emergency Service Water Pump and Check Valve Operability Test N1-ST-Q13, K/A 2.2.12 (4.1)
Radiation Control	P, D, R (2017 NRC)	Determine Actions for Inoperable Service Water Radiation Monitor N1-ARP-H1, ODCM, K/A 2.3.15 (3.1)
Emergency Procedures/Plan	D, R	Emergency Event Reclassification and Notification EP-CE-111, EPIP-EPP-01 EAL Flowchart, K/A 2.4.41 (4.6)

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: Nine Mile Point Unit 1  
 Exam Level: RO/SRO-I/SRO-U

Date of Examination: December 2018  
 Operating Test No.: LC1 17-1 NRC

**Control Room Systems\* (8 for RO); (7 for SRO-I) ; (2 or 3 for SRO-U)**

System / JPM Title	Type Code*	Safety Function
<b>a. Swap CRD Pumps</b> K/A 201001 A4.01 (3.1/3.1), N1-OP-5	M, A, S	1
<b>b. Perform N1-ST-M8, Reactor Building Emergency Ventilation System Operability Test</b> K/A 288000 A4.01 (3.1/2.9), N1-ST-M8	N, S, EN	9
<b>c. Vent the Drywell Prior to Personnel Entry &gt;212</b> K/A 223001 A4.03 (3.4/3.4), N1-OP-9	M, S, L, A	5
d. Rapid RWCU System Restoration for Level Control (RO Only) K/A 204000 A4.06 (3.0/2.9), N1-EOP-HC	D, S, L	2
e. Restore Emergency Condenser To Service K/A 207000 A4.05 (3.5/3.7), N1-OP-13	D, A, EN, S	4
f. Swap PB 101 from 1014 to R1011 K/A 262001 A4.01 (3.4/3.7), N1-OP-30	D, S	6
g. Control Rod Exercising Operability Test K/A 214000 A4.02 (3.8/3.8), N1-ST-W1, N1-OP-5	P, D, A, S (2015 NRC)	7
h. MSIV Stroke test and Limit Switch Test K/A 239001 A4.01 (4.2/4.0), N1-ST-Q26	P, S, D (2015 NRC)	3

**In-Plant Systems\* (3 for RO); (3 for SRO-I) ; (3 or 2 for SRO-U)**

i. Swap CRD Stabilizing Valves K/A 201001 A2.08 (2.8/2.8), N1-OP-5	D, R	1
<b>j. Lineup Lake Water to Supply the Emergency Condenser Makeup Tanks using the Electric Fire Pump</b> K/A 207000 A1.01 (3.7/3.8), N1-SOP-21.2	D, E, A, R	4
<b>k. Supply Emergency Cooling Water to EDG from the Diesel Fire Pump</b> K/A 400000 K1.02 (3.2/3.4), N1-OP-45	D, E, R	8

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

Pairings:

A then B

E then F

**Appendix D****Scenario Outline****Form ES-D-1**Facility: Nine Mile Point Unit 1Scenario No.: NRC-2Op-Test No.: LC1 17-1 NRCExaminers: \_\_\_\_\_ Operators: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Initial Conditions: The plant is operating at approximately 90% power. Containment Spray Pump 112 is out of service for maintenance. Steam Packing Exhauster 12 is out of service due to high vibrations. PB 11 is aligned to reserve power in preparation for cross-tying PB 16.

Turnover: Cross-tie PB 16A to PB 16B with PB 16B supplying. Power board 11 will remain aligned to reserve power. Then, raise reactor power to 95% using recirc flow.

Event No.	Malf. No.	Event Type*	Event Description
1	N/A	N-BOP, SRO	Cross-tie PB 16A to PB 16B N1-OP-30
2	N/A	R-ATC, SRO	Raise reactor power with recirc. N1-OP-1
3	RD02	C-ATC, SRO	Control Rod 26-35 Drifts Out N1-SOP-5.2
4	FW02A Override	C-BOP, SRO TS-SRO	Feedwater Booster Pump 11 Trips with Failure of standby Feedwater Booster Pump to Auto-start N1-SOP-16.1, Technical Specifications
5	RP25	C-All TS-SRO	Respond to trip of Reactor Protection System (RPS) UPS 172 Technical Specification N1-SOP-40.1
6	CU11	M-All	RWCU break in the Secondary Containment requiring scram; RWCU Isolation Valves to isolate N1-EOP-2, N1-EOP-5, N1-EOP-8
7	Overrides	C-ATC, SRO	Mode Switch Fails to Scram N1-SOP-1
* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor			

Facility: <b>Nine Mile Point Unit 1</b>		Scenario No.: <b>NRC-2</b>	Op-Test No.: <b>LC1 17-1 NRC</b>
1. Malfunctions after EOP entry (1-2) <b>Events 7</b>	1		
2. Abnormal events (2-4) <b>Events 3, 4, 5</b>	3		
3. Major transients (1-2) <b>Event 6</b>	1		
4. EOPs entered/requiring substantive actions (1-2) <b>N1-EOP-2, N1-EOP-5</b>	2		
5. EOP contingencies requiring substantive actions (0-2) <b>N1-EOP-8</b>	1		
6. Preidentified Critical tasks (2-3)	2		
<b>CRITICAL TASK DESCRIPTIONS:</b>		<b>CRITICAL TASK JUSTIFICATION:</b>	
<b>CT-1.0: Given an un-isolable RWCU leak outside primary containment and one general area temperature above the maximum safe limit, the crew will insert a manual reactor scram, in accordance with N1-EOP-5.</b>		With an un-isolable primary system discharging outside of Primary Containment resulting in general area temperature above the maximum safe limit, the Reactor must be scrammed. This reduces the rate of energy production and thus the heat input, radioactivity release, and break flow into the Secondary Containment. This also ensures the Reactor is shutdown prior to need for a blowdown.	
<b>CT- 2.0: Given an un-isolable RWCU leak outside primary containment and two general area temperatures above the maximum safe limit, the crew will execute N1-EOP-8, RPV Blowdown, in accordance with N1-EOP-5.</b>		An un-isolable primary system discharging outside of Primary Containment resulting in two general area temperatures above the maximum safe limit indicates a wide-spread problem posing a direct and immediate threat to Secondary Containment. A blowdown minimizes flow through the break, rejects heat to the suppression pool in preference to outside the containment, and places the primary system in the lowest possible energy state.	

**Appendix D****Scenario Outline****Form ES-D-1**Facility: Nine Mile Point Unit 1

Scenario No.: NRC-3

Op-Test No.: LC1 17-1 NRCExaminers: \_\_\_\_\_ Operators: \_\_\_\_\_  
\_\_\_\_\_

Initial Conditions: The plant is operating at approximately 100% power. Containment Spray Pump 112 is out of service for maintenance. Steam Packing Exhauster 12 is out of service due to high vibrations.

Turnover: Reduce reactor power to 98% with recirc flow. Then, start TBCLC Pump 12 and secure TBCLC Pump 11.

Event No.	Malf. No.	Event Type*	Event Description
1	N/A	R-ATC, SRO	Lower reactor power to 98% with recirc flow N1-OP-1
2	N/A	N – BOP, SRO	Swap Running TBCLC Pumps <b>(2017 Scenario 4)</b> , N1-OP-24
3	ED06	C –BOP, SRO	Powerboard 101 fault N1-SOP-1.3
4	RP17B	I-SRO TS-SRO	Reactor Pressure Instrument 36-07C Fails Low Technical Specifications
5	TC06	I – ATC, SRO TS-SRO	EPR Oscillation N1-SOP-31.1, Technical Specifications
6	CW04A CW04B CW04C	C – All	All RBCLC Pumps Trip, Motor Driven Feedwater Pumps Fail to Operate and 13 FW Pump clutch disengages <b>(2015 Scenario 5)</b> , N1-SOP-11.1, N1-SOP-1, N1-EOP-2
7	CU01 EC01	M – All	Coolant Leak Inside Primary Containment <b>(2015 Scenario 5)</b> , N1-EOP-2, N1-EOP-4
8	VICP201 68/69	M – All	Fuel Zone Level Instrument Sporadic Indication <b>(2015 Scenario 5)</b> , N1-EOP-2, N1-EOP-7
* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor			

Facility: <b>Nine Mile Point Unit 1</b>		Scenario No.: <b>NRC-3</b>	Op-Test No.: <b>LC1 17-1 NRC</b>
2. Malfunctions after EOP entry (1-2) <b>Events 7, 8</b>	2		
3. Abnormal events (2-4) <b>Events 3, 5, 6</b>	3		
4. Major transients (1-2) <b>Events 7 &amp; 8</b>	2		
5. EOPs entered/requiring substantive actions (1-2) <b>N1-EOP-2, N1-EOP-4</b>	2		
6. EOP contingencies requiring substantive actions (0-2) <b>N1-EOP-7</b>	1		
7. Preidentified Critical tasks (2-3)	2		
<b>CRITICAL TASK DESCRIPTIONS:</b>		<b>CRITICAL TASK JUSTIFICATION:</b>	
<b>CT-1.0: Given a LOCA in the Drywell with the inability to maintain containment parameters within the Pressure Suppression Pressure limit, initiate Containment Sprays, in accordance with N1-EOP-4.</b>		Initiating Containment Sprays reduces Primary Containment pressure. This reduces stresses on the Drywell and Torus, assists in avoiding "chugging" that may cause fatigue failure of the LOCA downcomers, and avoids the need for a blowdown. These benefits reduce challenges to the fuel cladding, the RPV, and the Primary Containment.	
<b>CT-2.0: Given the plant with RPV water level unknown, execute N1-EOP-7, RPV Flooding, in accordance with N1-EOP-2.</b>		With Reactor water level unknown, the status of core cooling is unknown. RPV flooding is required to establish conditions to cool the core. This protects the fuel cladding integrity.	

**Appendix D****Scenario Outline****Form ES-D-1**Facility: Nine Mile Point Unit 1

Scenario No.: NRC-4

Op-Test No.: LC1 17-1 NRCExaminers: \_\_\_\_\_ Operators: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Initial Conditions: A plant startup is in progress with reactor power approximately 2-3%. Containment Spray Pump 112 is out of service for maintenance. Steam Packing Exhauster 12 is out of service due to high vibrations.

Turnover: Continue power ascension by withdrawing control rods.

Event No.	Malf. No.	Event Type*	Event Description
1	N/A	R-ATC, SRO	Raise power with control rods N1-OP-43A, N1-OP-5
2	RD42	C –ATC, SRO	Control Rod Double Notches N1-OP-5
3	RR06A RR07A	I –ATC, SRO	IRM Downscale Failure N1-SOP-1.2,
4	ED12A	C –BOP, SRO	Powerboard 16A Electrical Fault (2015 Scenario 5), ARP L4-3-6, N1-EOP-4
5	RR06A RR07A	C –BOP, SRO TS-SRO	Recirc Pump 11 seal failure requiring isolation of the pump N1-SOP-1.2, Technical Specification 3.2.5, 3.1.7.e
6	PC05 CT04A	C –BOP, SRO TS-SRO	Seismic Event; Isolable Leak on Containment Spray Suction Line N1-SOP-28, N1-EOP-5, Technical Specifications
7	PC05 PC04	M – All	Second Seismic Event; Torus Break; Multiple Control Rods Fail to Insert N1-EOP-5, N1-EOP-4, N1-SOP-1, N1-EOP-2, N1-EOP-8, N1-EOP-3
8	CT02B CT02C	C – All	Containment Spray Raw Water Pumps 112 and 121 Trips N1-EOP-4
* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor			

Facility: <b>Nine Mile Point Unit 1</b>		Scenario No.: <b>NRC-4</b>	Op-Test No.: <b>LC1 17-1 NRC</b>
1. Malfunctions after EOP entry (1-2) <b>Events 8</b>	1		
2. Abnormal events (2-4) <b>Events 3, 4, 5, 6</b>	4		
3. Major transients (1-2) <b>Event 7</b>	1		
4. EOPs entered/requiring substantive actions (1-2) <b>N1-EOP-2, N1-EOP-4, N1-EOP-5</b>	3		
5. EOP contingencies requiring substantive actions (0-2) <b>N1-EOP-3, N1-EOP-8</b>	2		
6. Preidentified Critical tasks (2-3)	2		
<b>CRITICAL TASK DESCRIPTIONS:</b>		<b>CRITICAL TASK JUSTIFICATION:</b>	
<b>CT-1.0: Given an un-isolable Torus leak exceeding makeup capacity, scram the Reactor, in accordance with N1-EOP-4.</b>		Lowering Torus water level challenges the pressure suppression function of the Primary Containment. Continued Reactor operation is not allowed with an inoperable Primary Containment. A Reactor scram also allows subsequent mitigating actions, such as Reactor cooldown and/or blowdown.	
<b>CT- 2.0: Given an un-isolable Torus leak exceeding makeup capacity, perform an RPV Blowdown, in accordance with N1-EOP-4.</b>		If torus water level lowers below the elevation of the ERV discharge holes, opening ERVs would discharge steam directly into the torus airspace. The resulting pressure increase could exceed the maximum pressure capability of the Primary Containment. Since the RPV may not be kept at pressure under these conditions, a blowdown is required.	

Facility: Nine Mile Point Unit 1										Date of Exam: December 2018									
Tier	Group	RO K/A Category Points												SRO-Only Points					
		K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G*	Total	A2		G*	Total		
1. Emergency and Abnormal Plant Evolutions	1	3	4	2	N/A			4	3	N/A			4	20	3		4	7	
	2	1	1	1				2	1				1	7	2		1	3	
	Tier Totals		4	5				3	6				4	5	27	5		5	10
2. Plant Systems	1	3	2	3	3	2	2	2	3	2	2	2	26	3		2	5		
	2	1	1	1	1	1	2	0	1	2	1	1	12	0	1	2	3		
	Tier Totals		4	3	4	4	3	4	2	4	4	3	3	38	4		4	8	
3. Generic Knowledge and Abilities Categories					1		2		3		4		10	1	2	3	4	7	
					3		2		2		3			2	1	2	2		

- Note: 1. Ensure that at least two topics from every applicable K/A category are sampled within each tier of the RO and SRO-only outline sections (i.e., except for one category in Tier 3 of the SRO-only section, the "Tier Totals" in each K/A category shall not be less than two). (One Tier 3 radiation control K/A is allowed if it is replaced by a K/A from another Tier 3 category.)
2. The point total for each group and tier in the proposed outline must match that specified in the table. The final point total for each group and tier may deviate by  $\pm 1$  from that specified in the table based on NRC revisions. The final RO exam must total 75 points, and the SRO-only exam must total 25 points.
3. Systems/evolutions within each group are identified on the outline. Systems or evolutions that do not apply at the facility should be deleted with justification. Operationally important, site-specific systems/evolutions that are not included on the outline should be added. Refer to Section D.1.b of ES-401 for guidance regarding the elimination of inappropriate K/A statements.
4. Select topics from as many systems and evolutions as possible. Sample every system or evolution in the group before selecting a second topic for any system or evolution.
5. Absent a plant-specific priority, only those K/As having an importance rating (IR) of 2.5 or higher. Use the RO and SRO ratings for the RO and SRO-only portions, respectively.
6. Select SRO topics for Tiers 1 and 2 from the shaded systems and K/A categories.
7. The generic (G) K/As in Tiers 1 and 2 shall be selected from Section 2 of the K/A catalog, but the topics must be relevant to the applicable evolution or system. Refer to Section D.1.b of ES-401 for the applicable K/As.
8. On the following pages, enter the K/A numbers, a brief description of each topic, the topics' IRs for the applicable license level, and the point totals (#) for each system and category. Enter the group and tier totals for each category in the table above. If fuel-handling equipment is sampled in a category other than Category A2 or G\* on the SRO-only exam, enter it on the left side of Column A2 for Tier 2, Group 2. (Note 1 does not apply.) Use duplicate pages for RO and SRO-only exams.
9. For Tier 3, select topics from Section 2 of the K/A catalog, and enter the K/A numbers, descriptions, IRs, and point totals (#) on Form ES-401-3. Limit SRO selections to K/As that are linked to 10 CFR 55.43.

**G\* Generic K/As**

- \* These systems/evolutions must be included as part of the sample (as applicable to the facility) when Revision 3 of the K/A catalog is used to develop the sample plan. They are not required to be included when using earlier revisions of the K/A catalog.
- \*\* These systems/evolutions may be eliminated from the sample (as applicable to the facility) when Revision 3 of the K/A catalog is used to develop the sample plan.

ES-401 BWR Examination Outline Form ES-401-1 Emergency and Abnormal Plant Evolutions—Tier 1/Group 1 (RO/SRO)										
E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G*	K/A Topic(s)	IR	Q#	
295001 (APE 1) Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4					X		AA2.02, Ability to determine and/or interpret the following as they apply to PARTIAL OR COMPLETE LOSS OF FORCED CORE FLOW CIRCULATION: Neutron monitoring	3.1	27	
295003 (APE 3) Partial or Complete Loss of AC Power / 6				X			AA1.01, Ability to operate and/or monitor the following as they apply to PARTIAL OR COMPLETE LOSS OF A.C. POWER: A.C. electrical distribution system	3.7	29	
295004 (APE 4) Partial or Complete Loss of DC Power / 6	X						AK1.04, Knowledge of the operational implications of the following concepts as they apply to PARTIAL OR COMPLETE LOSS OF D.C. POWER: Effect of battery discharge rate on capacity	2.8	30	
295005 (APE 5) Main Turbine Generator Trip / 3						X	G.2.4.31, Knowledge of annunciator alarms, indications, or response procedures.	4.2	31	
295006 (APE 6) Scram / 1		X					AK2.06, Knowledge of the interrelations between SCRAM and the following: Reactor power	4.2	32	
						X	G2.1.19, Ability to use plant computers to evaluate system or component status.	3.8	76	
295016 (APE 16) Control Room Abandonment / 7						X	G2.4.35, Knowledge of local auxiliary operator tasks during an emergency and the resultant operational effects.	3.8	33	
295018 (APE 18) Partial or Complete Loss of CCW / 8	X						AK1.01, Knowledge of the operational implications of the following concepts as they apply to PARTIAL OR COMPLETE LOSS OF COMPONENT COOLING WATER: Effects on component/system operations	3.5	34	
295019 (APE 19) Partial or Complete Loss of Instrument Air / 8			X				AK3.03, Knowledge of the reasons for the following responses as they apply to PARTIAL OR COMPLETE LOSS OF INSTRUMENT AIR: Service air isolations: Plant-Specific	3.2	35	
295021 (APE 21) Loss of Shutdown Cooling / 4						X	G2.2.37, Ability to determine operability and/or availability of safety related equipment.	3.6	36	
					X		AA2.06, Ability to determine and/or interpret the following as they apply to LOSS OF SHUTDOWN COOLING: Reactor pressure	3.3	77	
295023 (APE 23) Refueling Accidents / 8	X						AK1.01, Knowledge of the operational implications of the following concepts as they apply to REFUELING ACCIDENTS: Radiation exposure hazards	3.6	37	
						X	G2.2.37, Ability to determine operability and/or availability of safety related equipment.	4.6	78	
295024 High Drywell Pressure / 5		X					EK2.15, Knowledge of the interrelations between HIGH DRYWELL PRESSURE and the following: Containment spray logic: Plant-Specific	3.8	38	

295025 (EPE 2) High Reactor Pressure / 3						X	G2.4.8, Knowledge of how abnormal operating procedures are used in conjunction with EOPs.	3.8	39
295026 (EPE 3) Suppression Pool High Water Temperature / 5				X			EA1.03, Ability to operate and/or monitor the following as they apply to SUPPRESSION POOL HIGH WATER TEMPERATURE: Temperature monitoring	3.9	28
					X		EA2.01, Ability to determine and/or interpret the following as they apply to SUPPRESSION POOL HIGH WATER TEMPERATURE: Suppression pool water temperature	4.2	79
295028 (EPE 5) High Drywell Temperature (Mark I and Mark II only) / 5			X				EK3.06, Knowledge of the reasons for the following responses as they apply to HIGH DRYWELL TEMPERATURE: ADS	3.4	40
					X		EA2.01, Ability to determine and/or interpret the following as they apply to HIGH DRYWELL TEMPERATURE: Drywell temperature	4.1	80
295030 (EPE 7) Low Suppression Pool Water Level / 5						X	EA2.04, Ability to determine and/or interpret the following as they apply to LOW SUPPRESSION POOL WATER LEVEL: Drywell/ suppression chamber differential pressure: Mark I & II	3.5	41
295031 (EPE 8) Reactor Low Water Level / 2				X			EA1.13, Ability to operate and/or monitor the following as they apply to REACTOR LOW WATER LEVEL: Reactor water level control	4.3	42
295037 (EPE 14) Scram Condition Present and Reactor Power Above APRM Downscale or Unknown / 1				X			EA1.01, Ability to operate and/or monitor the following as they apply to SCRAM CONDITION PRESENT AND REACTOR POWER ABOVE APRM DOWNSCALE OR UNKNOWN: Reactor Protection System	4.6	43
295038 (EPE 15) High Offsite Radioactivity Release Rate / 9		X					EK2.08, Knowledge of the interrelations between HIGH OFF-SITE RELEASE RATE and the following: SPDS/ERIS/CRIDS/GDS: Plant-Specific.	2.6	44
						X	G2.4.41, Knowledge of the emergency action level thresholds and classifications.	4.6	81
600000 (APE 24) Plant Fire On Site / 8					X		AA2.05, Ability to determine and interpret the following as they apply to PLANT FIRE ON SITE: Ventilation alignment necessary to secure affected area	2.9	45
						X	2.1.7, Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation.	4.7	82
700000 (APE 25) Generator Voltage and Electric Grid Disturbances / 6		X					AK2.07, Knowledge of the interrelations between GENERATOR VOLTAGE AND ELECTRIC GRID DISTURBANCES and the following: Turbine/generator control	3.6	46
K/A Category Totals:	3	4	2	4	3/3	4/4	RO/SRO Group Point Total:	20/7	

ES-401		BWR Examination Outline Emergency and Abnormal Plant Evolutions—Tier 1/Group 2 (RO/SRO)						Form ES-401-1	
E/APE # / Name / Safety Function	K1	K2	K3	A1	A2	G*	K/A Topic(s)	IR	Q#
295002 (APE 2) Loss of Main Condenser Vacuum / 3	X						AK1.03, Knowledge of the operational implications of the following concepts as they apply to LOSS OF MAIN CONDENSER VACUUM: Loss of heat sink	3.6	47
295007 (APE 7) High Reactor Pressure / 2						X	<b>G2.2.42, Ability to recognize system parameters that are entry-level conditions for Technical Specifications.</b>	4.6	83
295009 (APE 9) Low Reactor Water Level / 2				X			AA1.04, Ability to operate and/or monitor the following as they apply to LOW REACTOR WATER LEVEL: Reactor water cleanup	2.7	48
295012 (APE 12) High Drywell Temperature / 5			X				AK3.01, Knowledge of the reasons for the following responses as they apply to HIGH DRYWELL TEMPERATURE: Increased drywell cooling	3.5	49
295013 (APE 13) High Suppression Pool Temperature. / 5						X	G2.4.20, Knowledge of the operational implications of EOP warnings, cautions, and notes.	3.8	50
295015 (APE 15) Incomplete Scram / 1				X			AA1.05, Ability to operate and/or monitor the following as they apply to INCOMPLETE SCRAM: Rod worth minimizer: Plant-Specific	2.5	51
295022 (APE 22) Loss of Control Rod Drive Pumps / 1		X					AK2.07, Knowledge of the interrelations between LOSS OF CRD PUMPS and the following: Reactor pressure (SCRAM assist): Plant-Specific	3.4	52
295029 (EPE 6) High Suppression Pool Water Level / 5					X		EA2.03, Ability to determine and/or interpret the following as they apply to HIGH SUPPRESSION POOL WATER LEVEL: Drywell/containment water level	3.4	53
295033 (EPE 10) High Secondary Containment Area Radiation Levels / 9					X		<b>EA2.03, Ability to determine and/or interpret the following as they apply to HIGH SECONDARY CONTAINMENT AREA RADIATION LEVELS: Cause of high area radiation</b>	4.2	84
295036 (EPE 13) Secondary Containment High Sump/Area Water Level / 5					X		<b>EA2.03, Ability to determine and/or interpret the following as they apply to SECONDARY CONTAINMENT HIGH SUMP/AREA WATER LEVEL: Cause of the high water level</b>	3.8	85
K/A Category Point Totals:	1	1	1	2	1/2	1/1	RO/SRO Group Point Total:	7/3	

ES-401		BWR Examination Outline Plant Systems—Tier 2/Group 1 (RO/SRO)											Form ES-401-1	
System # / Name	K 1	K 2	K 3	K4	K 5	K 6	A 1	A 2	A 3	A 4	G *	K/A Topic(s)	IR	Q#
205000 (SF4 SCS) Shutdown Cooling			X									K3.02, Knowledge of the effect that a loss or malfunction of the SHUTDOWN COOLING SYSTEM (RHR SHUTDOWN COOLING MODE) will have on following: Reactor water level: Plant-Specific	3.2	6
								X				A2.02, Ability to (a) predict the impacts of the following on the SHUTDOWN COOLING SYSTEM (RHR SHUTDOWN COOLING MODE); and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Low shutdown cooling suction pressure: Plant-Specific	2.7	86
206000 (SF2, SF4 HPCIS) High-Pressure Coolant Injection		X										K2.01, Knowledge of electrical power supplies to the following: System valves: BWR-2,3,4	3.2	3
				X								K4.07, Knowledge of HIGH PRESSURE COOLANT INJECTION SYSTEM design feature(s) and/or interlocks which provide for the following: Automatic system initiation: BWR-2,3,4	4.3	24
207000 (SF4 IC) Isolation (Emergency) Condenser						X						K6.04, Knowledge of the effect that a loss or malfunction of the following will have on the ISOLATION (EMERGENCY) CONDENSER: Plant air systems: BWR-2,3	3.2	11
209001 (SF2, SF4 LPCS) Low-Pressure Core Spray	X											K1.09, Knowledge of the physical connections and/or cause-effect relationships between LOW PRESSURE CORE SPRAY SYSTEM and the following: Nuclear boiler instrumentation	3.2	1
								X				A2.01, Ability to (a) predict the impacts of the following on the LOW PRESSURE CORE SPRAY SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Pump trips	3.4	87
211000 (SF1 SLCS) Standby Liquid Control							X					A1.03, Ability to predict and/or monitor changes in parameters associated with operating the STANDBY LIQUID CONTROL SYSTEM controls including: Pump discharge pressure	3.6	13

212000 (SF7 RPS) Reactor Protection				X						K5.02, Knowledge of the operational implications of the following concepts as they apply to REACTOR PROTECTION SYSTEM: Specific logic arrangements	3.3	9
									X	<b>2.4.46, Ability to verify that the alarms are consistent with the plant conditions.</b>	<b>4.2</b>	<b>88</b>
215003 (SF7 IRM) Intermediate-Range Monitor				X						K5.01, Knowledge of the operational implications of the following concepts as they apply to INTERMEDIATE RANGE MONITOR (IRM) SYSTEM: Detector operation	2.6	10
215004 (SF7 SRMS) Source-Range Monitor				X						K4.02, Knowledge of SOURCE RANGE MONITOR (SRM) SYSTEM design feature(s) and/or interlocks which provide for the following: Reactor SCRAM signals	3.4	7
215005 (SF7 PRMS) Average Power Range Monitor/Local Power Range Monitor						X				A1.07, Ability to predict and/or monitor changes in parameters associated with operating the AVERAGE POWER RANGE MONITOR/LOCAL POWER RANGE MONITOR SYSTEM controls including: APRM (gain adjustment factor)	3.0	14
									X	G2.1.32, Conduct of Operations: Ability to explain and apply all system limits and precautions.	3.8	22
218000 (SF3 ADS) Automatic Depressurization							X			A2.01, Ability to (a) predict the impacts of the following on the AUTOMATIC DEPRESSURIZATION SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Small steam line break LOCA	4.1	16
223002 (SF5 PCIS) Primary Containment Isolation/Nuclear Steam Supply Shutoff								X		A3.01, Ability to monitor automatic operations of the PRIMARY CONTAINMENT ISOLATION SYSTEM/NUCLEAR STEAM SUPPLY SHUT-OFF including: System indicating lights and alarms	3.4	17
									X	<b>A2.04, Ability to (a) predict the impacts of the following on the PRIMARY CONTAINMENT ISOLATION SYSTEM/NUCLEAR STEAM SUPPLY SHUT-OFF; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Process radiation monitoring system failures</b>	<b>3.2</b>	<b>89</b>

239002 (SF3 SRV) Safety Relief Valves	X							X			A2.01, Ability to (a) predict the impacts of the following on the RELIEF/SAFETY VALVES; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Stuck open vacuum breakers	3.0	15
											K1.07, Knowledge of the physical connections and/or cause-effect relationships between RELIEF/SAFETY VALVES and the following: Suppression Pool	3.6	23
259002 (SF2 RWLCS) Reactor Water Level Control									X		A4.01, Ability to manually operate and/or monitor in the control room: All individual component controllers in the manual mode	3.8	20
										X	<b>G2.4.9, Knowledge of low power / shutdown implications in accident (e.g., loss of coolant accident or loss of residual heat removal) mitigation strategies.</b>	4.2	90
261000 (SF9 SGTs) Standby Gas Treatment							X				K6.03, Knowledge of the effect that a loss or malfunction of the following will have on the STANDBY GAS TREATMENT SYSTEM : Emergency diesel generator system	3.0	12
								X			A2.07, Ability to (a) predict the impacts of the following on the STANDBY GAS TREATMENT SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A.C. electrical failure	2.7	25
262001 (SF6 AC) AC Electrical Distribution				X							K4.03, Knowledge of A.C. ELECTRICAL DISTRIBUTION design feature(s) and/or interlocks which provide for the following: Interlocks between automatic bus transfer and breakers	3.1	8
262002 (SF6 UPS) Uninterruptable Power Supply (AC/DC)			X								K3.10 - Knowledge of the effect that a loss or malfunction of the UNINTERRUPTABLE POWER SUPPLY (A.C./D.C.) will have on following: Containment isolation: Plant-Specific	2.7	5
263000 (SF6 DC) DC Electrical Distribution									X		A3.01, Ability to monitor automatic operations of the D.C. ELECTRICAL DISTRIBUTION including: Meters, dials, recorders, alarms, and indicating lights	3.2	18
			X								K3.03, Knowledge of the effect that a loss or malfunction of the D.C. ELECTRICAL DISTRIBUTION will have on following: Systems with D.C. components (i.e. valves, motors, solenoids, etc.)	3.4	26

264000 (SF6 EGE) Emergency Generators (Diesel/Jet) EDG												X	A4.04, Ability to manually operate and/or monitor in the control room: Manual start, loading, and stopping of emergency generator: Plant-Specific	3.7	19
300000 (SF8 IA) Instrument Air		X											K2.02, Knowledge of electrical power supplies to the following: Emergency air compressor	3.0	4
													X 2.1.30, Conduct of Operations: Ability to locate and operate components, including local controls.	4.4	21
400000 (SF8 CCS) Component Cooling Water	X												K1.02, Knowledge of the physical connections and / or cause-effect relationships between CCWS and the following: Loads cooled by CCWS	3.2	2
K/A Category Point Totals:	3	2	3	3	2	2	2	3/3	2	2	2/2		RO/SRO Group Point Total:		26/5

ES-401		BWR Examination Outline Plant Systems—Tier 2/Group 2 (RO/SRO)										Form ES-401-1		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G*	K/A Topic(s)	IR	Q#
201002 (SF1 RMCS) Reactor Manual Control								X				A2.01, Ability to (a) predict the impacts of the following on the REACTOR MANUAL CONTROL SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Rod movement sequence timer malfunctions	2.8	91
201003 (SF1 CRDM) Control Rod and Drive Mechanism											X	G2.2.38, Knowledge of conditions and limitations in the facility license.	4.5	92
201006 (SF7 RWMS) Rod Worth Minimizer								X				A2.01, Ability to (a) predict the impacts of the following on the ROD WORTH MINIMIZER SYSTEM (RWM) (PLANT SPECIFIC); and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Power supply loss: P-Spec(Not-BWR6)	2.5	54
202001 (SF1, SF4 RS) Recirculation											X	G2.2.36, Ability to analyze the effect of maintenance activities, such as degraded power sources, on the status of limiting conditions for operations.	4.2	93
202002 (SF1 RSCTL) Recirculation Flow Control									X			A3.03, Ability to monitor automatic operations of the RECIRCULATION FLOW CONTROL SYSTEM including: Scoop tube operation: BWR-2,3,4	3.1	55
215001 (SF7 TIP) Traversing In-Core Probe				X								K4.01, Knowledge of TRAVERSING IN-CORE PROBE design feature(s) and/or interlocks which provide for the following: Primary containment isolation: Mark I & II (Not-BWR1)	3.4	56
223001 (SF5 PCS) Primary Containment and Auxiliaries											X	G2.4.3, Ability to identify post-accident instrumentation.	3.7	57
226001 (SF5 RHR CSS) RHR/LPCI: Containment Spray Mode						X						K6.11, Knowledge of the effect that a loss or malfunction of the following will have on the RHR/LPCI: CONTAINMENT SPRAY SYSTEM MODE: Component cooling water systems	2.8	58
245000 (SF4 MTGEN) Main Turbine Generator/Auxiliary										X		A4.09, Ability to manually operate and/or monitor in the control room: Hydrogen seal oil pressure	2.6	59

259001 (SF2 FWS) Feedwater						X							K6.06, Knowledge of the effect that a loss or malfunction of the following will have on the REACTOR FEEDWATER SYSTEM: Plant service water	2.7	60
268000 (SF9 RW) Radwaste	X												K1.05, Knowledge of the physical connections and/or cause-effect relationships between RADWASTE and the following: Drywell equipment drains	2.9	61
272000 (SF7, SF9 RMS) Radiation Monitoring		X											K2.05, Knowledge of electrical power supplies to the following: Reactor building ventilation monitors: Plant-Specific	2.6	62
288000 (SF9 PVS) Plant Ventilation						X							K5.02, Knowledge of the operational implications of the following concepts as they apply to PLANT VENTILATION SYSTEMS: Differential pressure control	3.2	63
290001 (SF5 SC) Secondary Containment										X			A3.01, Ability to monitor automatic operations of the SECONDARY CONTAINMENT including: Secondary containment isolation	3.9	64
290002 (SF4 RVI) Reactor Vessel Internals			X										K3.01, Knowledge of the effect that a loss or malfunction of the REACTOR VESSEL INTERNALS will have on following: Reactor water level	3.2	65
K/A Category Point Totals:	1	1	1	1	1	2	0	1/1	2	1	1/2		RO/SRO Group Point Total:		12/3

Facility: Nine Mile Point Unit 1		Date of Exam: January 2019				
Category	K/A #	Topic	RO		SRO-only	
			IR	Q#	IR	Q#
1. Conduct of Operations	2.1.4	Knowledge of individual licensed operator responsibilities related to shift staffing, such as medical requirements, "no-solo" operation, maintenance of active license status, 10CFR55, etc.	3.3	66		
	2.1.37	Knowledge of procedures, guidelines, or limitations associated with reactivity management.	4.3	67		
	2.1.31	<b>Ability to locate control room switches, controls, and indications, and to determine that they correctly reflect the desired plant lineup.</b>			4.3	94
	2.1.40	<b>Knowledge of refueling administrative requirements.</b>			3.9	95
	2.1.43	Ability to use procedures to determine the effects on reactivity of plant changes, such as reactor coolant system temperature, secondary plant, fuel depletion, etc.	4.1	68		
	Subtotal			3		2
2. Equipment Control	2.2.2	Ability to manipulate the console controls as required to operate the facility between shutdown and designated power levels.	4.6	69		
	2.2.21	<b>Knowledge of pre- and post-maintenance operability requirements.</b>			4.1	96
	2.2.22	Knowledge of limiting conditions for operations and safety limits.	4.0	70		
	Subtotal			2		1
3. Radiation Control	2.3.5	Ability to use radiation monitoring systems, such as fixed radiation monitors and alarms, portable survey instruments, personnel monitoring equipment, etc.	2.9	71		
	2.3.7	<b>Ability to comply with radiation work permit requirements during normal or abnormal conditions.</b>			3.6	97
	2.3.13	Knowledge of radiological safety procedures pertaining to licensed operator duties, such as response to radiation monitor alarms, containment entry requirements, fuel handling responsibilities, access to locked high-radiation areas, aligning filters, etc.	3.4	72		
	2.3.14	<b>Knowledge of radiation or contamination hazards that may arise during normal, abnormal, or emergency conditions or activities.</b>			3.8	98
	Subtotal			2		2
4. Emergency Procedures/Plan	2.4.14	Knowledge of general guidelines for EOP usage.	3.8	73		
	2.4.17	<b>Knowledge of EOP terms and definitions.</b>			4.3	99

**ES-401****Generic Knowledge and Abilities Outline (Tier 3)****Form ES-401-3**

	2.4.21	Knowledge of the parameters and logic used to assess the status of safety functions, such as reactivity control, core cooling and heat removal, reactor coolant system integrity, containment conditions, radioactivity release control, etc.			4.6	100
	2.4.32	Knowledge of operator response to loss of all annunciators.	3.6	74		
	2.4.22	Knowledge of the bases for prioritizing safety functions during abnormal/emergency operations.	3.6	75		
	Subtotal			3		2
Tier 3 Point Total				10		7

Tier / Group	Randomly Selected K/A	Reason for Rejection
The systematic and random sampling process utilized the pre-approved Nine Mile Point Unit 1 K/A suppression list.		
The following K/As were rejected following the systematic and random sampling process:		
2 / 1	<p>Question 9</p> <p>212000 RPS</p> <p>K5.01 - Knowledge of the operational implications of the following concepts as they apply to REACTOR PROTECTION SYSTEM: Fuel thermal time constant</p>	<p>A discriminating question could not be developed without testing generic fundamentals knowledge.</p> <p>Randomly reselected K/A 212000 RPS K5.02 - Knowledge of the operational implications of the following concepts as they apply to REACTOR PROTECTION SYSTEM: Specific logic arrangements.</p>
2 / 1	<p>Question 14</p> <p>215005 APRM / LPRM</p> <p>A1.06 - Ability to predict and/or monitor changes in parameters associated with operating the AVERAGE POWER RANGE MONITOR/LOCAL POWER RANGE MONITOR SYSTEM controls including: Recirculation flow control valve position: Plant-Specific</p>	<p>This facility does not have recirculation flow control valves.</p> <p>Randomly reselected K/A 215005 A1.07 - Ability to predict and/or monitor changes in parameters associated with operating the AVERAGE POWER RANGE MONITOR/LOCAL POWER RANGE MONITOR SYSTEM controls including: APRM (gain adjustment factor).</p>
2 / 1	<p>Question 23</p> <p>239002 SRVs</p> <p>K1.05 - Knowledge of the physical connections and/or cause-effect relationships between RELIEF/SAFETY VALVES and the following: Plant air systems: Plant-Specific</p>	<p>An acceptable question could not be written for the randomly selected K/A due to limited interrelations between SRVs and plant air systems.</p> <p>Randomly reselected K/A 239002 K1.07 - Knowledge of the physical connections and/or cause-effect relationships between RELIEF/SAFETY VALVES and the following: Suppression Pool.</p>

2 / 1	<p>Question 25</p> <p>261000 SGTS</p> <p>A2.14 - Ability to (a) predict the impacts of the following on the STANDBY GAS TREATMENT SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: High system pressure: Plant-Specific</p>	<p>There are no interlocks or initiations for RBEVS (SGTS) related to high system pressure at this facility. An acceptable question could not be developed without testing minutia.</p> <p>Randomly reselected K/A 261000 A2.07 - Ability to (a) predict the impacts of the following on the STANDBY GAS TREATMENT SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: A.C. electrical failure.</p>
1 / 1	<p>Question 28</p> <p>295001 Partial or Complete Loss of Forced Core Flow Circulation</p> <p>AA1.03 - Ability to operate and/or monitor the following as they apply to PARTIAL OR COMPLETE LOSS OF FORCED CORE FLOW CIRCULATION: RMCS: Plant-Specific</p>	<p>295001 was inadvertently sampled twice on the RO exam prior to sampling 295026.</p> <p>Reselected 295026 Suppression Pool High Water Temperature and randomly reselected EA1.03 - Ability to operate and/or monitor the following as they apply to SUPPRESSION POOL HIGH WATER TEMPERATURE: Temperature monitoring.</p>
1 / 1	<p>Question 36</p> <p>295021 Loss of Shutdown Cooling</p> <p>2.2.25 - Knowledge of the bases in Technical Specifications for limiting conditions for operations and safety limits.</p>	<p>An acceptable question could not be developed for the randomly sampled K/A due to lack of Technical Specification bases related to loss of Shutdown Cooling that are RO level.</p> <p>Randomly reselected K/A 295021 Loss of Shutdown Cooling 2.2.37 - Ability to determine operability and/or availability of safety related equipment.</p>
1 / 1	<p>Question 40</p> <p>295028 High Drywell Temperature</p> <p>EK3.04 - Knowledge of the reasons for the following responses as they apply to HIGH DRYWELL TEMPERATURE: Increased drywell cooling</p>	<p>An acceptable question could not be developed for the randomly sampled K/A without overlapping Question 49.</p> <p>Randomly reselected K/A 295028 High Drywell Temperature EK3.06 - Knowledge of the reasons for the following responses as they apply to HIGH DRYWELL TEMPERATURE: ADS.</p>

2 / 2	<p>Question 63</p> <p>288000 Plant Ventilation</p> <p>K5.03 - Knowledge of the operational implications of the following concepts as they apply to PLANT VENTILATION SYSTEMS: Temperature control</p>	<p>An acceptable question could not be developed for the randomly sampled K/A without testing minutia due to a lack of operationally relevant references related to Plant Ventilation temperature control.</p> <p>Randomly reselected K/A 288000 Plant Ventilation K5.02 - Knowledge of the operational implications of the following concepts as they apply to PLANT VENTILATION SYSTEMS: Differential pressure control.</p>
2 / 2	<p>Question 64</p> <p>290001 Secondary Containment</p> <p>A1.01 - Ability to predict and/or monitor changes in parameters associated with operating the SECONDARY CONTAINMENT controls including: System lineups</p>	<p>An acceptable question could not be developed for the randomly sampled K/A due to lack of Secondary Containment controls and associated system lineups.</p> <p>Randomly reselected K/A 290001 Secondary Containment A3.01 - Ability to monitor automatic operations of the SECONDARY CONTAINMENT including: Secondary containment isolation.</p>
3	<p>Question 67</p> <p>2.1.19 - Ability to use plant computers to evaluate system or component status.</p>	<p>An acceptable question could not be developed for the randomly sampled K/A without oversampling plant computer topics (see Questions 44 &amp; 76). Use of plant computers is also tested extensively on the operating exam.</p> <p>Randomly reselected K/A 2.1.37 - Knowledge of procedures, guidelines, or limitations associated with reactivity management.</p>
3	<p>Question 75</p> <p>2.4.35 - Knowledge of local auxiliary operator tasks during an emergency and the resultant operational effects.</p>	<p>The randomly sampled generic K/A is also tested on Question 33. Reselecting for better balance of coverage.</p> <p>Randomly reselected K/A 2.4.22 - Knowledge of the bases for prioritizing safety functions during abnormal/emergency operations.</p>
2 / 1	<p>Question 88</p> <p>212000 Reactor Protection</p> <p>2.4.34 - Knowledge of RO tasks performed outside the main control room during an emergency and the resultant operational effects.</p>	<p>An acceptable question could not be developed for the randomly sampled K/A due to lack of RO tasks performed outside the control room related to the Reactor Protection System.</p> <p>Randomly reselected K/A 212000 Reactor Protection 2.4.46 - Ability to verify that the alarms are consistent with the plant conditions.</p>

2 / 2	<p>Question 91</p> <p>201002 Reactor Manual Control</p> <p>A2.02 - Ability to (a) predict the impacts of the following on the REACTOR MANUAL CONTROL SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Rod drift alarm</p>	<p>An acceptable question could not be developed for the randomly sampled K/A without overlapping the operating exam. Additionally, the K/A did not readily support testing at the SRO level.</p> <p>Randomly reselected K/A 201002 Reactor Manual Control A2.01 - Ability to (a) predict the impacts of the following on the REACTOR MANUAL CONTROL SYSTEM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Rod movement sequence timer malfunctions.</p>
2 / 2	<p>Question 93</p> <p>202001 Recirculation</p> <p>2.2.12 - Knowledge of surveillance procedures.</p>	<p>An acceptable question could not be developed for the randomly sampled K/A due to lack of surveillance procedures for the Recirculation system.</p> <p>Randomly reselected K/A 202001 Recirculation 2.2.36 - Ability to analyze the effect of maintenance activities, such as degraded power sources, on the status of limiting conditions for operations.</p>
1 / 2	<p>Question 83</p> <p>295008 High Reactor Pressure</p>	<p>Editorial error - APE 295008 does not coincide with High Reactor Pressure.</p> <p>Conferred with Chief Examiner to change 295008 to 295007 to coincide with High Reactor Pressure</p>