ES-401 **BWR Examination Outline** **FORM ES-401-1**

Facility Name: Dresden Station Date of Exam: 8/21/17

Tier	Group	RO K/A Category Points												SRO-Only Points						
		K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G *	Total	A2		G*		Total		
1. Emergency & Abnormal Plant Evolutions	1	4	4	3	N/A			3	3	N/A		3	20	3		4		7		
	2	1	1	2				1	1			1	7	2		1		3		
	Tier Totals	5	5	5				4	4			4	27	5		5		10		
2. Plant Systems	1	2	2	2	3	3	3	3	2	2	2	2	26	2		3		5		
	2	1	1	1	1	1	1	1	2	1	1	1	12	0	2	1		3		
	Tier Totals	3	3	3	4	4	4	4	4	3	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	2	1	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 outlines (i.e., except for one category in Tier 3 of the SRO-only outline, the "Tier Totals" in each K/A category shall not be less than two). (One Tier 3 Radiation Control K/A is allowed if the K/A 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 ±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 associated outline; systems or evolutions that do not apply at the facility should be deleted and justified; operationally important, site-specific systems 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 shall be selected. 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' importance ratings (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 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

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Emergency and Abnormal Plant Evolutions - Tier 1/Group 1 (RO)

Q#	E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
1	295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4	02						Knowledge of the operational implications of the following concepts as they apply to Partial or Complete Loss of Forced Core Flow Circulation: Power/flow distribution	3.3	1
2	295003 Partial or Complete Loss of AC / 6		05					Knowledge of the interrelations between Partial or Complete Loss of AC and the following: Isolation condenser: Plant-Specific	3.8	1
11	295004 Partial or Total Loss of DC Pwr / 6			01				Knowledge of the reasons for the following responses as they apply to Partial or Total Loss of DC Pwr: Load shedding: Plant-Specific	2.6	1
3	295005 Main Turbine Generator Trip / 3				07			Ability to operate and/or monitor the following as they apply to Main Turbine Generator Trip: A.C. electrical distribution	3.3	1
4	295006 SCRAM / 1					06		Ability to determine and/or interpret the following as they apply to SCRAM: Cause of reactor SCRAM	3.5	1
5	295016 Control Room Abandonment / 7						01.28	Knowledge of the purpose and function of major system components and controls.	4.1	1
6	295018 Partial or Total Loss of CCW / 8	01						Knowledge of the operational implications of the following concepts as they apply to Partial or Total Loss of CCW: Effects on component/system operations	3.5	1
7	295019 Partial or Total Loss of Inst. Air / 8		17					Knowledge of the interrelations between Partial or Total Loss of Inst. Air and the following: High pressure coolant injection: Plant-Specific	2.7	1
14	295021 Loss of Shutdown Cooling / 4			03				Knowledge of the reasons for the following responses as they apply to Loss of Shutdown Cooling: Increasing drywell cooling	2.9	1
12	295023 Refueling Acc / 8				06			Ability to operate and/or monitor the following as they apply to Refueling Accidents: Neutron monitoring	3.3	1
30	295024 High Drywell Pressure / 5					03		Ability to determine and/or interpret the following as they apply to High Drywell Pressure: Suppression pool level	3.8	1
15	295025 High Reactor Pressure / 3						01.07	Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation.	4.4	1
13	295026 Suppression Pool High Water Temp. / 5	02						Knowledge of the operational implications of the following concepts as they apply to Suppression Pool High Water Temp.: Steam condensation	3.5	1
	295027 High Containment Temperature / 5									0
17	295028 High Drywell Temperature / 5		04					Knowledge of the interrelations between High Drywell Temperature and the following: Drywell ventilation	3.6	1
10	295030 Low Suppression Pool Wtr Lvl / 5			06				Knowledge of the reasons for the following responses as they apply to Low Suppression Pool Wtr Lvl: Reactor SCRAM	3.6	1
9	295031 Reactor Low Water Level / 2				10			Ability to operate and/or monitor the following as they apply to Reactor Low Water Level: Control rod drive	3.6	1
8	295037 SCRAM Condition Present and Reactor Power Above APRM Downscale or Unknown / 1					04		Ability to determine and/or interpret the following as they apply to SCRAM Condition Present and Reactor Power Above APRM Downscale or Unknown: Suppression pool temperature	4.0	1
29	295038 High Off-site Release Rate / 9						04.01	Knowledge of EOP entry conditions and immediate action steps.	4.6	1
23	600000 Plant Fire On Site / 8	02						Knowledge of the operational implications of the following concepts as they apply to Plant Fire On Site: Fire Fighting	2.9	1
16	700000 Generator Voltage and Electric Grid Disturbances / 6		03					Knowledge of the interrelations between Generator Voltage and Electric Grid Disturbances and the following: Sensors, detectors, indicators	3.0	1
	K/A Category Totals:	4	4	3	3	3	3	Group Point Total:		20

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Emergency and Abnormal Plant Evolutions - Tier 1/Group 2 (RO)

Q#	E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
56	295002 Loss of Main Condenser Vac / 3			09				Knowledge of the reasons for the following responses as they apply to Loss of Main Condenser Vac: Reactor power reduction	3.2	1
	295007 High Reactor Pressure / 3									0
	295008 High Reactor Water Level / 2									0
18	295009 Low Reactor Water Level / 2				02			Ability to operate and/or monitor the following as they apply to Low Reactor Water Level: Reactor water level control	4.0	1
	295010 High Drywell Pressure / 5									0
	295011 High Containment Temp / 5									0
19	295012 High Drywell Temperature / 5					01		Ability to determine and/or interpret the following as they apply to High Drywell Temperature: Drywell temperature	3.8	1
21	295013 High Suppression Pool Temp. / 5						04.20	Knowledge of the operational implications of EOP warnings, cautions, and notes.	3.8	1
20	295014 Inadvertent Reactivity Addition / 1	06						Knowledge of the operational implications of the following concepts as they apply to Inadvertent Reactivity Addition: Abnormal reactivity additions.	3.8	1
	295015 Incomplete SCRAM / 1									0
	295017 High Off-site Release Rate / 9									0
	295020 Inadvertent Cont. Isolation / 5 & 7									0
51	295022 Loss of CRD Pumps / 1		03					Knowledge of the interrelations between Loss of CRD Pumps and the following: Accumulator pressures.	3.4	1
	295029 High Suppression Pool Wtr Lvl / 5									0
	295032 High Secondary Containment Area Temperature / 5									0
	295033 High Secondary Containment Area Radiation Levels / 9									0
	295034 Secondary Containment Ventilation High Radiation / 9									0
	295035 Secondary Containment High Differential Pressure / 5									0
	295036 Secondary Containment High Sump/Area Water Level / 5									0
22	500000 High CTMT Hydrogen Conc. / 5			06				Knowledge of the reasons for the following responses as they apply to High CTMT Hydrogen Conc.: Operation of wet well vent	3.1	1
	K/A Category Totals:	1	1	2	1	1	1	Group Point Total:		7

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Plant Systems - Tier 2/Group 1 (RO)

Q#	System # / Name	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	K/A Topic(s)	IR	#
28 24	203000 RHR/LPCI: Injection Mode			01	13								Knowledge of the effect that a loss or malfunction of the RHR/LPCI: Injection Mode will have on following: Reactor water level; Knowledge of RHR/LPCI: Injection Mode design feature(s) and/or interlocks which provide for the following: The prevention of leakage to the environment through LPCI/RHR heat exchanger: Plant-Specific	4.3; 3.4	2
31 25	205000 Shutdown Cooling				03	02							Knowledge of Shutdown Cooling design feature(s) and/or interlocks which provide for the following: Low reactor water level: Plant-Specific; Knowledge of the operational implications of the following concepts as they apply to Shutdown Cooling: Valve operation	3.8; 2.8	2
26 27	206000 HPCI					06	05						Knowledge of the operational implications of the following concepts as they apply to HPCI: Turbine speed measurement: BWR-2, 3, 4; Knowledge of the effect that a loss or malfunction of the following will have on the HPCI: Suppression pool level: BWR-2, 3, 4	2.6; 3.5	2
32 33	207000 Isolation (Emergency) Condenser						08	10					Knowledge of the effect that a loss or malfunction of the following will have on the Isolation (Emergency) Condenser: D.C. power: BWR-2, 3; Ability to predict and/or monitor changes in parameters associated with operating the Isolation (Emergency) Condenser controls including: Primary side temperature: BWR-2, 3	3.5; 3.2	2
37 38	209001 LPCS							03	05				Ability to predict and/or monitor changes in parameters associated with operating the LPCS controls including: Reactor water level; Ability to (a) predict the impacts of the following on the LPCS; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Core spray line break	3.8; 3.3	2
	209002 HPCS														0
41	211000 SLC									07			Ability to monitor automatic operations of the SLC including: Lights and alarms: Plant-Specific	3.7	1
39	212000 RPS										16		Ability to manually operate and/or monitor in the control room: Manually activate anticipated transient without SCRAM circuitry/RRCS: Plant-Specific	4.4	1
50	215003 IRM											04. 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.	4.0	1
42	215004 Source Range Monitor	02											Knowledge of the physical connections and/or cause-effect relationships between Source Range Monitor and the following: Reactor manual control	3.4	1
40	215005 APRM / LPRM		02										Knowledge of electrical power supplies to the following: APRM channels	2.6	1
	217000 RCIC														0
47	218000 ADS			01									Knowledge of the effect that a loss or malfunction of the ADS will have on following: Restoration of reactor water level after a break that does not depressurize the reactor when required	4.4	1
44	223002 PCIS/Nuclear Steam Supply Shutoff				05								Knowledge of PCIS/Nuclear Steam Supply Shutoff design feature(s) and/or interlocks which provide for the following: Single failures will not impair the function ability of the system	2.9	1
45	239002 SRVs					04							Knowledge of the operational implications of the following concepts as they apply to SRVs: Tail pipe temperature monitoring	3.3	1
35	259002 Reactor Water Level Control						03						Knowledge of the effect that a loss or malfunction of the following will have on the Reactor Water Level Control: Main steam flow input	3.1	1
46	261000 SGTS							04					Ability to predict and/or monitor changes in parameters associated with operating the SGTS controls including: Secondary containment differential pressure	3.0	1
72	262001 AC Electrical Distribution								10				Ability to (a) predict the impacts of the following on the AC Electrical Distribution; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Exceeding current limitations	2.9	1
36	262002 UPS (AC/DC)									01			Ability to monitor automatic operations of the UPS (AC/DC) including: Transfer from preferred to alternate source	2.8	1
48	263000 DC Electrical Distribution										03		Ability to manually operate and/or monitor in the control room: Battery discharge rate: Plant-Specific	2.7	1
49	264000 EDGs											01. 32	Ability to explain and apply system limits and precautions.	3.8	1
34	300000 Instrument Air	05											Knowledge of the physical connections and/or cause-effect relationships between Instrument Air and the following: Main Steam Isolation Valve air	3.1	1
43	400000 Component Cooling Water		02										Knowledge of electrical power supplies to the following: CCW valves	2.9	1
	K/A Category Totals:	2	2	2	3	3	3	3	2	2	2	2	Group Point Total:		26

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Plant Systems - Tier 2/Group 2 (RO)

Q#	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	#
53	201001 CRD Hydraulic							04					Ability to predict and/or monitor changes in parameters associated with operating the CRD Hydraulic System controls including: Head spray flow: BWR-3	2.7	1
	201002 RMCS														0
54	201003 Control Rod and Drive Mechanism								01				Ability to (a) predict the impacts of the following on the Control Rod and Drive Mechanism; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Stuck rod	3.4	1
	201004 RSCS														0
	201005 RCIS														0
55	201006 RWM								05				Ability to (a) predict the impacts of the following on the RWM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Out of sequence rod movement; P-Spec(Not-BWR6)	3.1	1
57	202001 Recirculation									03			Ability to monitor automatic operations of the Recirculation including: System flow	3.2	1
	202002 Recirculation Flow Control														0
60	204000 RWCU										06		Ability to manually operate and/or monitor in the control room: System flow	3.0	1
	214000 RPIS														0
	215001 Traversing In-core Probe														0
61	215002 RBM											02.39	Knowledge of less than or equal to one hour Technical Specification action statements for systems.	3.9	1
	216000 Nuclear Boiler Inst.														0
	219000 RHR/LPCI: Torus/Pool Cooling Mode														0
58	223001 Primary CTMT and Aux.	06											Knowledge of the physical connections and/or cause-effect relationships between Primary CTMT and Aux. and the following: RHR/LPCI	3.4	1
	226001 RHR/LPCI: CTMT Spray Mode														0
	230000 RHR/LPCI: Torus/Pool Spray Mode														0
59	233000 Fuel Pool Cooling/Cleanup		02										Knowledge of electrical power supplies to the following: RHR pumps	2.8	1
	234000 Fuel Handling Equipment														0
	239001 Main and Reheat Steam														0
	239003 MSIV Leakage Control														0
63	241000 Reactor/Turbine Pressure Regulator			25									Knowledge of the effect that a loss or malfunction of the Reactor/Turbine Pressure Regulator will have on following: Reactor cooldown	3.3	1
	245000 Main Turbine Gen. / Aux.														0
	256000 Reactor Condensate														0
62	259001 Reactor Feedwater				04								Knowledge of Reactor Feedwater design feature(s) and/or interlocks which provide for the following: Dispersal of feedwater in the reactor vessel	2.5	1
	268000 Radwaste														0
	271000 Offgas														0
64	272000 Radiation Monitoring					01							Knowledge of the operational implications of the following concepts as they apply to Radiation Monitoring : Hydrogen injection operation's effect on process radiation indications: Plant-Specific	3.2	1
	286000 Fire Protection														0
	288000 Plant Ventilation														0
52	290001 Secondary CTMT						08						Knowledge of the effect that a loss or malfunction of the following will have on the Secondary CTMT: Plant air systems	2.7	1
	290003 Control Room HVAC														0
	290002 Reactor Vessel Internals														0
	K/A Category Totals:	1	1	1	1	1	1	1	2	1	1	1	Group Point Total:		12

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	Emergency and Abnormal Plant Evolutions - Tier 1/Group 1 (SRO)									
Q#	E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
76	295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4						02. 38	Knowledge of conditions and limitations in the facility license.	4.5	1
	295003 Partial or Complete Loss of AC / 6									0
87	295004 Partial or Total Loss of DC Pwr / 6					0 4		Ability to determine and/or interpret the following as they apply to Partial or Total Loss of DC Pwr: System lineups	3.3	1
	295005 Main Turbine Generator Trip / 3									0
	295006 SCRAM / 1									0
88	295016 Control Room Abandonment / 7						01. 25	Ability to interpret reference materials, such as graphs, curves, tables, etc.	4.2	1
	295018 Partial or Total Loss of CCW / 8									0
96	295019 Partial or Total Loss of Inst. Air / 8					0 2		Ability to determine and/or interpret the following as they apply to Partial or Total Loss of Inst. Air: Status of safety-related instrument air system loads (see AK2.1-AK2.19)	3.7	1
	295021 Loss of Shutdown Cooling / 4									0
	295023 Refueling Acc / 8									0
98	295024 High Drywell Pressure / 5						04. 23	Knowledge of the bases for prioritizing emergency procedure implementation during emergency operations.	4.4	1
	295025 High Reactor Pressure / 3									0
77	295026 Suppression Pool High Water Temp. / 5					0 2		Ability to determine and/or interpret the following as they apply to Suppression Pool High Water Temp.: Suppression pool level	3.9	1
	295027 High Containment Temperature / 5									0
	295028 High Drywell Temperature / 5									0
	295030 Low Suppression Pool Wtr Lvl / 5									0
97	295031 Reactor Low Water Level / 2						04. 02	Knowledge of system set points, interlocks and automatic actions associated with EOP entry conditions.	4.6	1
	295037 SCRAM Condition Present and Reactor Power Above APRM Downscale or Unknown / 1									0
	295038 High Off-site Release Rate / 9									0
	600000 Plant Fire On Site / 8									0
	700000 Generator Voltage and Electric Grid Disturbances / 6									0
	K/A Category Totals:	0	0	0	0	3	4	Group Point Total:		7

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Emergency and Abnormal Plant Evolutions - Tier 1/Group 2 (SRO)

Q#	E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	K/A Topic(s)	IR	#
	295002 Loss of Main Condenser Vac / 3									0
95	295007 High Reactor Pressure / 3					03		Ability to determine and/or interpret the following as they apply to High Reactor Pressure: Reactor water level	3.7	1
	295008 High Reactor Water Level / 2									0
	295009 Low Reactor Water Level / 2									0
	295010 High Drywell Pressure / 5									0
	295011 High Containment Temp / 5									0
	295012 High Drywell Temperature / 5									0
	295013 High Suppression Pool Temp. / 5									0
	295014 Inadvertent Reactivity Addition / 1									0
99	295015 Incomplete SCRAM / 1						01.20	Ability to interpret and execute procedure steps.	4.6	1
	295017 High Off-site Release Rate / 9									0
89	295020 Inadvertent Cont. Isolation / 5 & 7					04		Ability to determine and/or interpret the following as they apply to Inadvertent Cont. Isolation: Reactor pressure	3.9	1
	295022 Loss of CRD Pumps / 1									0
	295029 High Suppression Pool Wtr Lvl / 5									0
	295032 High Secondary Containment Area Temperature / 5									0
	295033 High Secondary Containment Area Radiation Levels / 9									0
	295034 Secondary Containment Ventilation High Radiation / 9									0
	295035 Secondary Containment High Differential Pressure / 5									0
	295036 Secondary Containment High Sump/Area Water Level / 5									0
	500000 High CTMT Hydrogen Conc. / 5									0
	K/A Category Totals:	0	0	0	0	2	1	Group Point Total:		3

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Plant Systems - Tier 2/Group 1 (SRO)

Q#	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	#
	203000 RHR/LPCI: Injection														0
	205000 Shutdown Cooling Mode														0
100	206000 HPCI											02.25	Knowledge of the bases in Technical Specifications for limiting conditions for operations and safety limits.	4.2	1
	207000 Isolation (Emergency) Condenser														0
	209001 LPCS														0
	209002 HPCS														0
	211000 SLC														0
	212000 RPS														0
	215003 IRM														0
	215004 Source Range Monitor														0
78	215005 APRM / LPRM								05				Ability to (a) predict the impacts of the following on the APRM / LPRM; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Loss of recirculation flow signal	3.6	1
	217000 RCIC														0
	218000 ADS														0
	223002 PCIS/Nuclear Steam Supply Shutoff														0
	239002 SRVs														0
	259002 Reactor Water Level Control														0
90	261000 SGTS											04.35	Knowledge of local auxiliary operator tasks during an emergency and the resultant operational effects.	4.0	1
	262001 AC Electrical Distribution														0
79	262002 UPS (AC/DC)								01				Ability to (a) predict the impacts of the following on the UPS (AC/DC); and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Under voltage	2.8	1
	263000 DC Electrical Distribution														0
	264000 EDGs														0
	300000 Instrument Air														0
91	400000 Component Cooling Water											02.37	Ability to determine operability and/or availability of safety related equipment.	4.6	1
	K/A Category Totals:	0	0	0	0	0	0	0	2	0	0	3	Group Point Total:		5

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Plant Systems - Tier 2/Group 2 (SRO)

Q#	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	#
	201001 CRD Hydraulic														0
	201002 RMCS														0
	201003 Control Rod and Drive Mechanism														0
	201004 RSCS														0
	201005 RCIS														0
	201006 RWM														0
	202001 Recirculation														0
	202002 Recirculation Flow Control														0
	204000 RWCU														0
	214000 RPIS														0
92	215001 Traversing In-core Probe								02				Ability to (a) predict the impacts of the following on the Traversing In-core Probe; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: High primary containment pressure: Mark-I&II(Not-BWR1)	3.0	1
	215002 RBM														0
	216000 Nuclear Boiler Inst.														0
	219000 RHR/LPCI: Torus/Pool Cooling Mode														0
	223001 Primary CTMT and Aux.														0
	226001 RHR/LPCI: CTMT Spray Mode														0
	230000 RHR/LPCI: Torus/Pool Spray Mode														0
	233000 Fuel Pool Cooling/Cleanup														0
93	234000 Fuel Handling Equipment											01.23	Ability to perform specific system and integrated plant procedures during all modes of plant operation.	4.4	1
	239001 Main and Reheat Steam														0
	239003 MSIV Leakage Control														0
	241000 Reactor/Turbine Pressure Regulator														0
	245000 Main Turbine Gen. / Aux.														0
	256000 Reactor Condensate														0
	259001 Reactor Feedwater														0
	268000 Radwaste														0
94	271000 Offgas								14				Ability to (a) predict the impacts of the following on the Offgas; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal conditions or operations: Offgas filter high differential pressure	2.8	1
	272000 Radiation Monitoring														0
	286000 Fire Protection														0
	288000 Plant Ventilation														0
	290001 Secondary CTMT														0
	290003 Control Room HVAC														0
	290002 Reactor Vessel Internals														0
	K/A Category Totals:	0	0	0	0	0	0	0	2	0	0	1	Group Point Total:		3

Facility Name:Dresden Station Date of Exam:8/21/17

Q#	Category	K/A #	Topic	RO IR	RO #	SRO-Only IR	SRO-Only #
65	1. Conduct of Operations	2.1. 03	Knowledge of shift or short-term relief turnover practices.	3.7	1	3.9	
75		2.1. 15	Knowledge of administrative requirements for temporary management directives, such as standing orders, night orders, operations memos, etc.	2.7	1	3.4	
73		2.1. 37	Knowledge of procedures, guidelines, or limitations associated with reactivity management.	4.3	1	4.6	
		2.1.					
80		2.1. 04	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		3.8	1
81		2.1. 14	Knowledge of criteria or conditions that require plant-wide announcements, such as pump starts, reactor trips, mode changes, etc.	3.1		3.1	1
		Subtotal			3		2
66	2. Equipment Control	2.2. 20	Knowledge of the process for managing troubleshooting activities.	2.6	1	3.8	
74		2.2. 43	Knowledge of the process used to track inoperable alarms.	3.0	1	3.3	
		2.2.					
82		2.2. 07	Knowledge of the process for conducting special or infrequent tests.	2.9		3.6	1
83		2.2. 15	Ability to determine the expected plant configuration using design and configuration control documentation, such as drawings, line-ups, tag-outs, etc.	3.9		4.3	1
		2.2.					
		Subtotal			2		2
67	3. Radiation Control	2.3. 11	Ability to control radiation releases.	3.8	1	4.3	
68		2.3. 14	Knowledge of radiation or contamination hazards that may arise during normal, abnormal, or emergency conditions or activities.	3.4	1	3.8	
		2.3.					
84		2.3. 04	Knowledge of radiation exposure limits under normal or emergency conditions.	3.2		3.7	1
		2.3.					
		2.3.					
		Subtotal			2		1
71	4. Emergency Procedures / Plan	2.4. 13	Knowledge of crew roles and responsibilities during EOP usage.	4.0	1	4.6	
70		2.4. 25	Knowledge of fire protection procedures.	3.3	1	3.7	
69		2.4. 37	Knowledge of the lines of authority during implementation of the emergency plan.	3.0	1	4.1	
		2.4.					
85		2.4. 06	Knowledge of EOP mitigation strategies.	3.7		4.7	1
86		2.4. 47	Ability to diagnose and recognize trends in an accurate and timely manner utilizing the appropriate control room reference material.	4.2		4.2	1
		Subtotal			3		2
	Tier 3 Point Total				10		7