

EXAMINATION OUTLINE SUBMITTALS

FOR THE KEWAUNEE RETAKE EXAMINATION - AUGUST 2006

Dominion Energy Kewaunee, Inc.
N490 Highway 42, Kewaunee, WI 54216-9511



APR 27 2006

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
2443 Warrenville Road, Suite 210
Lisle, Illinois 60532-4352

Serial No. 06-364
KPS/LIC/GR: R0
Docket No. 50-305
License No. DPR-43

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION
RETAKE EXAMINATION OUTLINE

In accordance with the guidelines NUREG 1021, "Operating License Examination Standard for Power Reactors" Revision 9, Dominion Energy Kewaunee, Inc. (DEK) is providing the enclosed Senior Reactor Operator outline for the retake examination of Mr. Randall W. Beck and Mr. Timothy J. Bunkelman scheduled for the week of August 7, 2006.

As discussed in a telephone conversation between Mr. Dell McNeil of Nuclear Regulatory Commission (NRC) Region III and Mr. Frank Winks of DEK, the outline was also provided on April 24, 2006 to the NRC Senior Resident Inspector assigned to the Kewaunee Power Station for delivery to Mr. Dell McNeil.

NUREG-1021 physical security requirements state that the enclosed examination materials must be withheld from public disclosure until after the examinations are complete.

If you have questions or require additional information, please feel free to contact Mr. Frank Winks at 920-388-8303.

Very truly yours,

A handwritten signature in black ink, appearing to read "Michael G. Gaffney".

Michael G. Gaffney
Site Vice President, Kewaunee Power Station

Enclosure

Commitments made by this letter: NONE

cc without enclosure:
NRC Senior Resident Inspector
Kewaunee Power Station



JUN 5 2006

Regional Administrator, Region III
U. S. Nuclear Regulatory Commission
2443 Warrenville Road, Suite 210
Lisle, IL 60532-4352

Serial No. 06-416
KPS/LIC/GR: R0
Docket No. 50-305
License No. DPR-43

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION
RESPONSE TO FURNISH WRITTEN EXAMINATIONS, OPERATING TESTS, AND
SUPPORTING REFERENCE MATERIALS

In response to a letter from the NRC dated April 27, 2006 regarding the administration of licensing re-take examinations at the Kewaunee Power Station, enclosed are the written examination and the following documents as required by NUREG 1021 Revision 9:

- ES-401-2 PWR Exam Outline (Revised)
- ES-401-3 Generic K/A Outline (Revised)
- ES-401-4 Record of Rejected K/As
- ES-401-6 Written Exam Quality Checklist
- ES-401-7 RO Written Exam Cover Sheet and RO Written Exam
(Ready to give with handouts)
- ES-401-8 SRO Written Exam Cover Sheet and SRO Written Exam
(Ready to give with handouts)

NUREG-1021 physical security requirements state that the enclosed examination materials must be withheld from public disclosure until after the examinations are complete.

If you have questions or require additional information, please feel free to contact Mr. Frank Winks at 920-388-8303.

Very truly yours,

A handwritten signature in black ink, appearing to read "L. Hartz".

Leslie N. Hartz
Site Vice President, Kewaunee Power Station

Enclosures

Commitments made by this letter: NONE

cc: Without enclosures
Mr. S. C. Burton
NRC Senior Resident Inspector
Kewaunee Power Station
Madison, WI 53707

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Facility: Kewaunee Power Station		Date of Examination: 08/09/06		
Item	Task Description	Initials		
		a	b*	c#
1. W R I T T E N	a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401.	AF	MWB	DM
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.	AF	MWB	DM
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	AF	MWB	DM
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	AF	MWB	DM
2. S I M U L A T O R	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications, and major transients.	N/A	N/A	N/A
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity, and ensure that each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s), and that scenarios will not be repeated on subsequent days.	N/A	N/A	N/A
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.	N/A	N/A	N/A
3. W / T	a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) the required number of control room and in-plant tasks distributed among the safety functions as specified on the form (2) task repetition from the last two NRC examinations is within the limits specified on the form (3) no tasks are duplicated from the applicants' audit test(s) (4) the number of new or modified tasks meets or exceeds the minimums specified on the form (5) the number of alternate path, low-power, emergency, and RCA tasks meet the criteria on the form.	N/A	N/A	N/A
	b. Verify that the administrative outline meets the criteria specified on Form ES-301-1: (1) the tasks are distributed among the topics as specified on the form (2) at least one task is new or significantly modified (3) no more than one task is repeated from the last two NRC licensing examinations	N/A	N/A	N/A
	c. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.	N/A	N/A	N/A
4. G E N E R A L	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam sections.	AF	MWB	DM
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	AF	MWB	DM
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	AF	MWB	DM
	d. Check for duplication and overlap among exam sections.	AF	MWB	DM
	e. Check the entire exam for balance of coverage.	AF	MWB	DM
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	AF	MWB	DM
a. Author <u>Stephen Johnson / Stephen Johnson</u> b. Facility Reviewer (*) <u>MARK COOLSBEY / Mark Coolsbey</u> c. NRC Chief Examiner (#) <u>DELL Mc NEIL / Dell McNeil</u> d. NRC Supervisor <u>William Peterson / William Peterson</u>		Printed Name/Signature		Date 4/18/06 4/30/06 5/4/06 5/8/06
Note: # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.				

Facility:		Kewaunee Power Station										Date Of Exam:		08/09/2006				
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	3	3	N/A			3	2	N/A			3	18	0	0	0	
	2	1	2	2	N/A			1	1	N/A			2	9	0	0	0	
	Tier Totals	5	5	5	N/A			4	3	N/A			5	27	0	0	0	
2. Plant Systems	1	3	2	3	3	2	2	3	2	3	2	3	28	0	0	0		
	2	1	1	1	1	1	1	1	1	0	1	1	10	0	0	0		
	Tier Totals	4	3	4	4	3	3	4	3	3	3	4	38	0	0	0		
3. Generic Knowledge and Abilities Categories				1		2		3		4		10		1	2	3	4	0
				2		3		2		3				0	0	0	0	

- 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).
 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 ES-401, Attachment 2, 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.
 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.

ES - 401	PWR Examination Outline Emergency and Abnormal Plant Evolutions - Tier 1 / Group 1 RO						Form ES-401-2		
E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	KA Topic(s)	IR	#
000007 Reactor Trip - Stabilization - Recovery / 1						X	EA2.04 - If reactor should have tripped but has not done so, manually trip the reactor and carry out actions in ATWS EOP.	4.4	1
000008 Pressurizer Vapor Space Accident / 3		X					AK2.01 - Valves.	2.7*	1
000009 Small Break LOCA / 3		X					EK2.03 - S/Gs.	3.0	1
000011 Large Break LOCA / 3			X				EK3.14 - RCP tripping requirement.	4.1	1
000015/000017 RCP Malfunctions / 4				X			AA1.05 - RCS flow.	3.8	1
000025 Loss of RHR System / 4	X						AK1.01 - Loss of RHRS during all modes of operation.	3.9	1
000027 Pressurizer Pressure Control System Malfunction / 3			X				AK3.01 - Isolation of PZR spray following loss of PZR heaters.	3.5*	1
000029 ATWS / 1					X		EA2.05 - System component valve position indications	3.4*	1
000038 Steam Gen. Tube Rupture / 3				X			EA1.04 - PZR spray, to reduce coolant system pressure.	4.3	1
000054 Loss of Main Feedwater / 4	X						AK1.01 - MFW line break depressurizes the S/G (similar to a steam line break).	4.1	1
000055 Station Blackout / 6						X	2.4.20 - Knowledge of operational implications of EOP warnings, cautions, and notes.	3.3	1
000056 Loss of Off-site Power / 6						X	2.1.14 - Knowledge of system status criteria which require the notification of plant personnel.	2.5	1
000057 Loss of Vital AC Inst. Bus / 6				X			AA1.01 - Manual inverter swapping.	3.7*	1
000062 Loss of Nuclear Svc Water / 4						X	2.1.32 - Ability to explain and apply all system limits and precautions.	3.4	1
000065 Loss of Instrument Air / 8			X				AK3.08 - Actions contained in EOP for loss of instrument air.	3.7	1
W/E05 Inadequate Heat Transfer - Loss of Secondary Heat Sink / 4		X					EK2.1 - Components, and functions of control and safety systems, including instrumentation, signals, interlocks, failure modes, and automatic and manual features.	3.7	1
W/E11 Loss of Emergency Coolant Recirc. / 4	X						EK1.2 - Normal, abnormal and emergency operating procedures associated with Loss of Emergency Coolant Recirculation.	3.6	1
W/E12 - Steam Line Rupture - Excessive Heat Transfer / 4	X						EK1.1 - Components, capacity, and function of emergency systems.	3.4	1
K/A Category Totals:	4	3	3	3	2	3	Group Point Total:		18

ES - 401	PWR Examination Outline Emergency and Abnormal Plant Evolutions - Tier 1 / Group 2 RO							Form ES-401-2	
E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	KA Topic(s)	IR	#
000003 Dropped Control Rod / 1			X				AK3.09 - Recording of group bank position for dropped rod (reference point used to withdraw dropped rod to equal height with other rods in the bank).	3.0*	1
000024 Emergency Boration / 1						X	2.4.45 - Ability to prioritize and interpret the significance of each annunciator or alarm.	3.3	1
000032 Loss of Source Range NI / 7			X				AK3.02 - Guidance contained in EOP for loss of source-range nuclear instrumentation.	3.7*	1
000036 Fuel Handling Accident / 8	X						AK1.01 - Radiation exposure hazards.	3.5	1
000061 ARM System Alarms / 7		X					AK2.01 - Detectors at each ARM system location.	2.5*	1
W/E03 LOCA Cooldown - Depress. / 4						X	2.1.27 - Knowledge of system purpose and or function.	2.8	1
W/E10 Natural Circ. / 4					X		EA2.2 - Adherence to appropriate procedures and operation within the limitations in the facility's license and amendments.	3.4	1
W/E13 Steam Generator Over-pressure / 4		X					EK2.1 - Components, and functions of control and safety systems, including instrumentation, signals, interlocks, failure modes, and automatic and manual features.	3.0	1
W/E16 High Containment Radiation / 9				X			EA1.2 - Operating behavior characteristics of the facility.	2.9	1
K/A Category Totals:	1	2	2	1	1	2	Group Point Total:		9

System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	KA Topic(s)	IR	#
003 Reactor Coolant Pump					X							K5.02 - Effects of RCP coastdown on RCS parameters.	2.8	2
003 Reactor Coolant Pump										X		A4.06 - RCP cooling water supplies	3.2	
004 Chemical and Volume Control	X											K1.23 - RWST.	3.4	2
004 Chemical and Volume Control										X		2.1.28 - Knowledge of the purpose and function of major system components and controls.	3.2	
005 Residual Heat Removal					X							K5.09 - Dilution and boration considerations.	3.2	1
006 Emergency Core Cooling						X						K6.02 - Core flood tanks (accumulators).	3.4	1
007 Pressurizer Relief/Quench Tank									X			A3.01 - Components which discharge to the PRT.	2.7*	1
008 Component Cooling Water				X								K4.01 - Automatic start of standby pump	3.1	2
008 Component Cooling Water								X				A2.07 - Consequences of high or low CCW flow rate and temperature; the flow rate at which the CCW standby pump will start.	2.5*	
010 Pressurizer Pressure Control			X									K3.03 - ESFAS	4	1
012 Reactor Protection								X				A2.06 - Failure of RPS signal to trip the reactor	4.4	1
013 Engineered Safety Features Actuation						X						K6.01 - Sensors and detectors.	2.7*	2
013 Engineered Safety Features Actuation									X			A3.02 - Operation of actuated equipment.	4.1	
022 Containment Cooling			X									K3.02 - Containment instrumentation readings.	3.0	1
026 Containment Spray				X								K4.04 - Reduction of temperature and pressure in containment after a LOCA by condensing steam, to reduce radiological hazard, and protect equipment from corrosion damage (spray).	3.7	1
039 Main and Reheat Steam			X									K3.03 - AFW pumps.	3.2*	1
059 Main Feedwater				X								K4.16 - Automatic trips for MFW pumps.	3.1*	1
061 Auxiliary/Emergency Feedwater	X											K1.01 - S/G system.	4.1	2
061 Auxiliary/Emergency Feedwater										X		2.4.45 - Ability to prioritize and interpret the significance of each annunciator or alarm.	3.3	
062 AC Electrical Distribution		X										K2.01 - Major system loads.	3.3	1
063 DC Electrical Distribution									X			A3.01 - Meters, annunciators, dials, recorders, and indicating lights	2.7	1

064 Emergency Diesel Generator		X													K2.02 - Fuel oil pumps	2.8*	2
064 Emergency Diesel Generator														X	2.1.33 - Ability to recognize indications for system operating parameters which are entry-level conditions for technical specifications.	3.4	
073 Process Radiation Monitorin													X		A1.01 - Radiation levels.	3.2	1
076 Service Water													X		A1.02 - Reactor and turbine building closed cooling water temperatures.	2.6*	1
078 Instrument Air		X													K1.02 - Service air.	2.7*	2
078 Instrument Air													X		A4.01 - Pressure gauges.	3.1	
103 Containment													X		A1.01 - Containment pressure, temperature, and humidity.	3.7	1
K/A Category Totals:		3	2	3	3	2	2	3	2	3	2	3			Group Point Total:		28

ES - 401	PWR Examination Outline Plant Systems - Tier 2 / Group 2 RO											Form ES-401-2		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	KA Topic(s)	IR	#
002 Reactor Coolant								X				A2.01 - Loss of coolant inventory	4.3	1
011 Pressurizer Level Control							X					A1.02 - Charging and letdown flows	3.3	1
015 Nuclear Instrumentation						X						K6.01 - Sensors, detectors, and indicators	2.9	1
017 In-core Temperature Monitor	X											K1.01 - Plant computer	3.2*	1
035 Steam Generator				X								K4.01 - S/G level control	3.6	1
045 Main Turbine Generator			X									K3.01 - Remainder of the plant	2.9	1
068 Liquid Radwaste										X		A4.02 - Remote radwaste release	3.2*	1
071 Waste Gas Disposal											X	2.1.32 - Ability to explain and apply all system limits and precautions.	3.4	1
075 Circulating Water		X										K2.03 - Emergency/essential SWS pumps	2.6*	1
086 Fire Protection					X							K5.03 - Effect of water spray on electrical components	3.1	1
K/A Category Totals:	1	1	1	1	1	1	1	1	0	1	1	Group Point Total:		10

Facility:		Kewaunee Power Station										Date Of Exam:		08/09/2006				
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 & Abnormal Plant Evolutions	1	0	0	0	N/A			0	0	N/A			0	0	3	3	6	
	2	0	0	0	N/A			0	0	N/A			0	0	2	2	4	
	Tier Totals	0	0	0	N/A			0	0	N/A			0	0	5	5	10	
2. Plant Systems	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	5	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	
	Tier Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	5	3	8	
3. Generic Knowledge and Abilities Categories				1		2		3		4		10		1	2	3	4	7
				0		0		0		0				2	2	2	1	

- 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).
 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 ES-401, Attachment 2, 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.
 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.

ES - 401		PWR Examination Outline Emergency and Abnormal Plant Evolutions - Tier 1 / Group 1 SRO							Form ES-401-2	
E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	KA Topic(s)	IR	#	
000022 Loss of Rx Coolant Makeup / 2					X		AA2.02 - Charging pump problems	3.7	1	
000026 Loss of Component Cooling Water / 8						X	2.2.25 - Knowledge of bases in technical specifications for limiting conditions for operations and safety limits.	3.7	1	
000038 Steam Gen. Tube Rupture / 3					X		EA2.08 - Viable alternatives for placing plant in safe condition when condenser is not available	4.4	1	
000040 Steam Line Rupture - Excessive Heat Transfer / 4						X	2.1.32 - Ability to explain and apply all system limits and precautions.	3.8	1	
000058 Loss of DC Power / 6					X		AA2.02 - 125V dc bus voltage, low/critical low, alarm	3.6	1	
W/E04 LOCA Outside Containment / 3						X	2.4.48 - Ability to interpret control room indications to verify the status and operation of system, and understand how operator actions and directives affect plant and system conditions.	3.8	1	
K/A Category Totals:	0	0	0	0	3	3	Group Point Total:		6	

ES - 401	PWR Examination Outline							Form ES-401-2	
Emergency and Abnormal Plant Evolutions - Tier 1 / Group 2 SRO									
E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	A 2	G	KA Topic(s)	IR	#
000067 Plant Fire On-site / 9						X	AA2.08 - Limits of affected area	3.6	1
W/E06 Inad. Core Cooling / 4						X	2.1.12 - Ability to apply technical specifications for a system.	4	1
W/E10 Natural Circ. / 4						X	2.4.4 - Ability to recognize abnormal indications for system operating parameters which are entry-level conditions for emergency and abnormal operating procedures.	4.3	1
W/E14 Loss of CTMT Integrity / 5						X	EA2.1 - Facility conditions and selection of appropriate procedures during abnormal and emergency operations	3.8	1
K/A Category Totals:	0	0	0	0	2	2	Group Point Total:		4

ES - 401	PWR Examination Outline Plant Systems - Tier 2 / Group 1 SRO											Form ES-401-2		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	KA Topic(s)	IR	#
005 Residual Heat Removal								X				A2.02 - Pressure transient protection during cold shutdown.	3.7	1
006 Emergency Core Cooling											X	2.4.30 - Knowledge of which events related to system operations/status should be reported to outside agencies.	3.6	1
059 Main Feedwater								X				A2.04 - Feeding a dry S/G.	3.4*	1
062 AC Electrical Distribution											X	2.4.49 - Ability to perform without reference to procedures those actions that require immediate operation of system components and controls.	4	1
103 Containment								X				A2.02 - Necessary plant conditions for work in containment.	3.2*	1
K/A Category Totals:								3			2	Group Point Total:		5

ES - 401	PWR Examination Outline Plant Systems - Tier 2 / Group 2 SRO											Form ES-401-2		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G	KA Topic(s)	IR	#
014 Rod Position Indication								X				A2.02 - Loss of power to the RPIS.	3.6	1
029 Containment Purge											X	2.4.45 - Ability to prioritize and interpret the significance of each annunciator or alarm	3.6	1
034 Fuel Handling Equipment							X					A1.02 - Water level in the refueling canal	3.7	1
K/A Category Totals:							1	1			1	Group Point Total:		3

Facility: Kewaunee Power Station		Date of Exam: 8/7/2006		RO		SRO-Only	
Category	K/A #	Topic	RO		SRO-Only		
			IR	#	IR	#	
1 Conduct of Operations	2.1.10	Knowledge of conditions and limitations in the facility license.	2.7	1			
	2.1.13	Knowledge of facility requirements for controlling vital / controlled access.			2.9	1	
	2.1.25	Ability to obtain and interpret station reference materials such as graphs, monographs, and tables which contain performance data			3.1	1	
	2.1.29	Knowledge of how to conduct and verify valve lineups.	3.4	1			
	2.1						
	Subtotal			2		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.	4.0	1			
	2.2.13	Knowledge of tagging and clearance procedures.	3.6	1			
	2.2.19	Knowledge of maintenance work order requirements.			3.1	1	
	2.2.22	Knowledge of limiting conditions for operations and safety limits.	3.4	1			
	2.2.34	Knowledge of the process for determining the internal and external effects on core reactivity.			3.2*	1	
	Subtotal			3		2	
3 Radiation Control	2.3.1	Knowledge of 10 CFR, 20 and related facility radiation control requirements.	2.6	1			
	2.3.4	Knowledge of radiation exposure limits and contamination control, including permissible levels in excess of those authorized			3.1	1	
	2.3.9	Knowledge of the process for performing a containment purge.			3.4	1	
	2.3.11	Ability to control radiation releases	2.7	1			
	2.3						
	Subtotal			2		2	
4 Emergency Procedures / Plan	2.4.4	Ability to recognize abnormal indications for system operating parameters which are entry-level conditions for emergency and abnormal operating procedures.	4.0	1			
	2.4.9	Knowledge of low power /shutdown implications in accident (e.g. LOCA or loss of RHR) mitigation strategies.	3.3	1			
	2.4.21	Knowledge of the parameters and logic used to assess the status of safety functions including: 1. Reactivity control, 2. Core cooling and heat removal, 3. Reactor coolant system integrity, 4. Containment conditions, 5. Radioactivity release control	3.7	1			
	2.4.38	Ability to take actions called for in the facility emergency plan, including (if required) supporting or acting as emergency coordinator			4.0	1	
	2.4						
	Subtotal			3		1	
Tier 3 Point Total					10		7

Tier / Group	Randomly Selected K/A	Reason for Rejection
1 / 1	007EA2.05	"FIRST OUT" annunciators do not exist at KPS. Unable to generate question for topic. Replaced with randomly selected KA 007EA2.04.
1 / 1	038EA2.04	KA 038EA2.08 was selected for the SRO outline. This KA overlaps the same area. Replaced with randomly selected KA 038EA1.04.
1 / 1	058AA1.03	KA 058AA2.08 was selected for the SRO outline. This KA overlaps the same area. Replaced with randomly selected KA that is from a previously unselected APE, 054AK1.01
1 / 1	W/E04 2.4.10	KA W/E04 2.4.48 was selected for the SRO outline. This KA overlaps the same area. Replaced with randomly selected KA that is from a previously unselected APE, 062A 2.1.32.
1 / 2	W/E14EA2.2	KA W/E14EA2.1 was selected for the SRO outline. This KA overlaps the same area. Replaced with randomly selected KA that is from a previously unselected APE, 003AK3.09.
2 / 1	005A4.05	Two KAs had already been chosen from SRO and RO outlines for 005. This KA resulted in overpopulation of the system and overlap. Replaced with randomly selected KA from less populated system, 003A4.08.
2 / 1	006 2.4.45	Two KAs had already been chosen from SRO and RO outlines. Also KA 006 2.4.30 was selected for the SRO outline. This KA resulted in overpopulation of the system and overlap. Replaced with randomly selected KA from less populated system, 004 2.1.28.
2 / 1	103 2.1.23	Two KAs had already been chosen from SRO and RO outlines for 103. This KA resulted in overpopulation of the system and overlap. Replaced with randomly selected KA from less populated system, 064 2.1.33.
2 / 2	029A1.03	KA 029 2.4.45 was selected for the SRO outline. This KA overpopulates the system and overlaps the same area. Replaced with randomly selected KA from a system previously not sampled, 011A1.02.
2 / 2	034K1.02	KA 034A1.02 was selected for the SRO outline. This KA overpopulates the system and overlaps the same area. Replaced with randomly selected KA from a system previously not sampled, 017K1.01.
3	2.1.25	This KA was selected for the SRO outline. Replaced with randomly selected KA 2.1.10.

Tier / Group	Randomly Selected K/A	Reason for Rejection
1 / 1 [SRO]	040A 2.1.33	A question could not be developed suitable to the event. Replaced with randomly selected KA 040A 2.1.32.
1 / 1 [SRO]	W/E04E 2.2.25	This KA is the same KA that was selected for another APE in the same group (026A 2.2.25). To prevent overlap, it was replaced with randomly selected KA W/E04E 2.4.48.
1 / 2 [SRO]	067AA2.02	An SRO level question could not be developed for this KA. Replaced with randomly selected KA 067AA2.08.
1 / 2 [SRO]	W/E15E 2.1.33	A question at SRO level could not be developed suitable to the event. Replaced with randomly selected KA W/E06 2.4.7.
2 / 1 [SRO]	103A2.01	A question at SRO level could not be developed since operations involvement in leak rate testing is minimal. Replaced with randomly selected KA 103A2.02.
2 / 2 [SRO]	014A2.03	An SRO level question could not be developed for this KA. Replaced with randomly selected KA 014A2.02.
3	2.3.2	The combined RO and SRO tier 3 was imbalanced with 5 K/As selected in Categories 2 and 3, and only 3 KAs selected in Category 4. Category 3 was selected for reduction due to the limited number of KAs as compared to Category 2. Replaced with randomly selected KA 2.4.9 in Category 4.
2 / 1	007K4.01	(Post-submittal) The KA supports only questions that overlap in area with the other selected KA 007A3.01. To prevent double jeopardy condition selected KA from next System in Group, 008K4.01 (only selected once previously)
2 / 1	063A2.01	(Post-submittal) An operationally valid question could not be developed for KA. Replaced with random-selected KA 063A3.01.
2 / 1	064K2.01	(Post-submittal) An operationally valid question could not be developed for KA. Replaced with random-selected KA 064K2.02.
2 / 2	035K4.05	(Post-submittal) A question could not be developed to fit KA. Replaced with random-selected KA 035K4.01.
1 / 2 [SRO]	W/E06 2.4.7	(Post-submittal) A SRO-only level appropriate question could not be developed for KA. Replaced with random-selected KA W/E06 2.1.12.
3	2.4.43	(Post-submittal) An operationally valid question could not be developed for KA. Replaced with random-selected KA 2.4.21.

Tier / Group	Randomly Selected K/A	Reason for Rejection
1 / 1	029EA2.05	(Post NRC Comments) An acceptable level of difficulty question could not be written. Replaced with KA 029EA2.01.
1 / 1 [SRO]	058AA2.02	(Post NRC Comments) An acceptable SRO-only level question could not be written. Replaced with KA 058AA2.01.
2 / 1 [SRO]	062 2.4.48	(Post NRC Comments) An acceptable SRO-only level question could not be written. Replaced with KA 062 2 4 48.