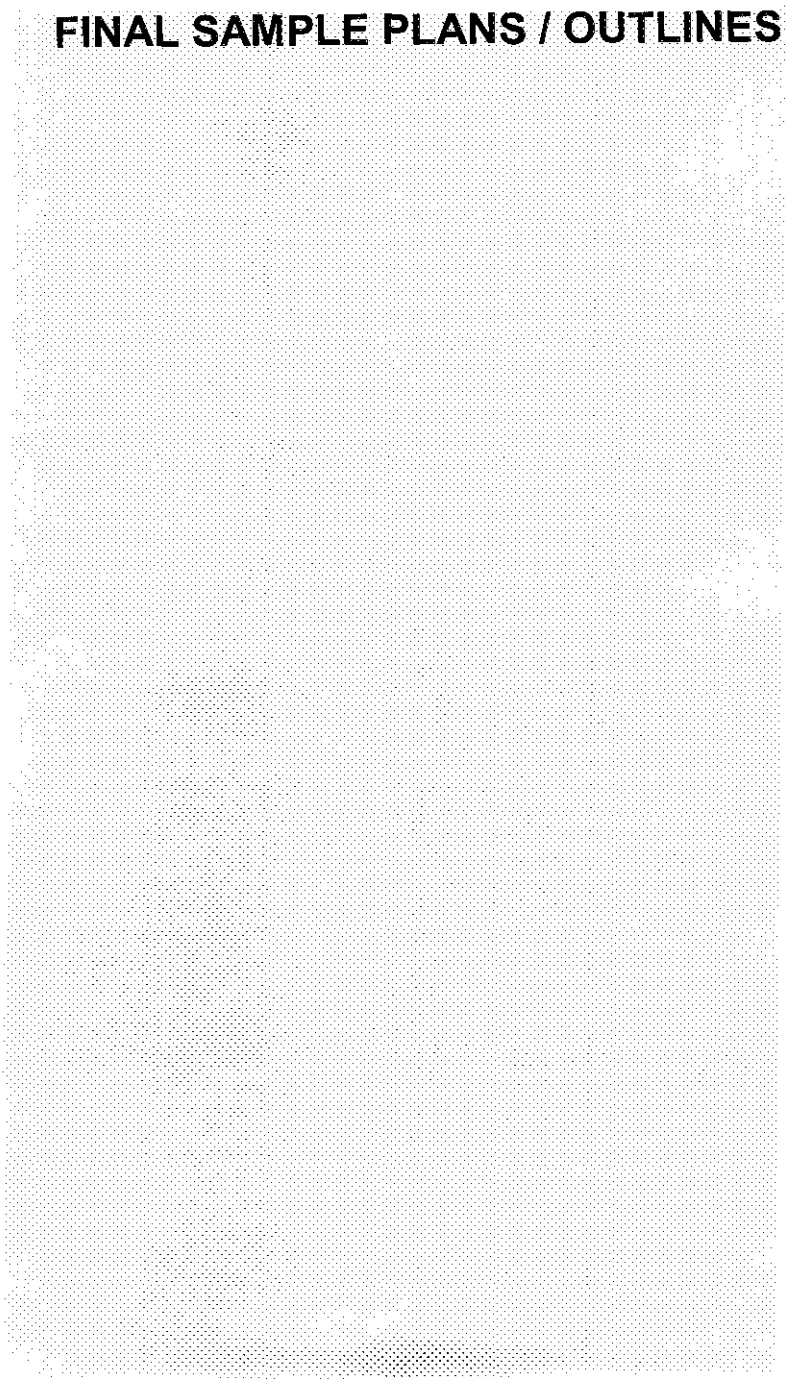
Final Submittal

OCONEE JUNE 2004 EXAM
50-269/2004-301,
50-27012004-301, &
50-28712004-301
JUNE 14 - 18 & 25,2004

FINAL SAMPLE PLANS / OUTLINES



Final Submittal

Facility: **Oconee**	Date of Examination: **June, 2004**
Examination Level (circle one): **RO** / SRO	Operating Test Number: _____

Administrative Topic	Describe activity to be performed
Conduct of Operations GEN 2.1.23 (3.9/4.0)	**Admin-100, Determine SDM with a Dropped Control Rod** PT/1/A/1103/15, Reactivity Balance (10 min)
Conduct of Operations GEN 2.1.7 (3.7/4.4)	**Adrnin-103, Perform Manual RCS Leakage Calculation;** PT/0600/010 (RO Only) **(last exam)** (group activity) (18 min)
Equipment Control GEN 2.2.12 (3.0/3.4)	**Adrnin-202, Perform Surveillance to Verify SSF RCMUP Qperability** PT/600/001 Enci. 13.1 (Mode 1 & 2) **(new)** (15 min)
Radiation Control GEN 2.3.4 (2.5/3.1)	
Emergency Plan GEN **2.4.39** (3.3/3.1)	**Admin-402, Perform Actions for Medical Emergency** RP/1000/016, Encl. 4.1 (Medical Response) (RO Only) (15 min)

Note: **All** items (5 total) are required for SROs. **RO** applicants require only ***4*** items unless they are retaking only the administrative topics, when 5 are required.

Final Submittal

Facility: **Oconee**	Date of Examination: **June, 2004**
Examination Level (circle one): RO / **SRO**	Operating Test Number: _____

Administrative Topic	Describe activity to be performed
Conduct of Operations GEN 2.1.23 (3.9/4.0)	**Admin-100, Determine SDM with a Dropped Control Rod** PT/1/A/1103/15, Reactivity Balance (10 min)
Conduct of Operations GEN 2.1.4 (2.3/3.4)	**Admin-110, Determine Minimum Shift Staffing** SLC 16.13.1, Minimum Station Staffing Requirements (**new**) (SRO only) (15 min)
Equipment Control GEN 2.2.12 (3.0/3.4)	**Admin-202, Perform surveillance to verify SSF RCMUP Operability** PT/600/001, Encl. 13.1 (Mode 1 & 2) (**new**) (15 min)
Radiation Control GEN 2.3.4 (2.5/3.1)	**Admin-300, Calculate the Maximum Permissible Stay Time Within Emergency Dose Limits** **(last exam)** (SRO only) (20 min)
Emergency Plan GEN 2.4.38 (2.2/4.0)	**Admin-403, Determine Emergency Classification and Protective Action Recommendations** (SRO only) (group activity) (20 min)

Note: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.

Facility: **Oconee** Date of Examination: **June, 2004**

Exam Level (circle one): **RO** / SRO(I) / SRO(U) Operating Test No.: _____

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

System / JPM Title	Type Code*	Safety Function
a. **CRO-012A,** Recover a dropped rod AP/1/A/1700/15, OP/0/A/1105/09, Enci 4.10 [KA: 005 AA2.03 (3.5/4.4)] (20 min)	D, S, A	1
b. **CRO-** 067, Perform Required Actions for ES Actuation (> 3psig) EOP Enclosure 5.1 (ES Actuation) [KA: EPE-009 EA1.13 (4.4/4.4)] (6 min)	D, A, S	3
c. CRQ-97, Transfer ECCS Suction to the Emergency Sump (1LP-15 Failed Closed) EOP, Enclosure 5.12 [KA:BW/E08 EA1.1 (4.0/3.7)] (PRA) (9 min)	D, A, S, L	4P
d. **CRO-015, Establish EFDW Flow Through Startup Valves** EOP Enclosure 5.27. Alternate Methods for Controlling EFDW Flow [APE-054 AA2.04 (4.2/4.3)] (20 min)	D, S, L	4S
e. CRO-700, Place ICS In **Auto** following **Loss** Of **Auto** Power AP/23 (Loss Of ICS Power) Enclosure 5 5 (Placing ICS In Auto) [KA: BW/A02 AA1.1 (4.0/3.8)] (new) (20 min)	N. A. S	7
f. CRO-060, Perform Required Actions ***For*** Turbine Building Flood AP/10 (Turbine Building Flood) [KA: APE BW/A07 AA1.3 (3.3/3.5)] (7 min)	D, S	8
g. CRO-900, Release GWD Tank OP/1&2/A/1104/018 Encl. 4.9 (GWD **Tank** Release) [KA: 071 A4.26 (3.1/3.9) (**new**) (15 min)	N, S	9
h. **CRO-600, Recover from Switchyard Isolation** AP/11 Enclosure 5.3 (Recover From Switchyard Isolation) [KA: BW/A05 AA1.1 (4.3/4.2)] (15 min)	D, S, L	6
In-Plant Systems (3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)		
i. NLQ-039, Prime The Spent Fuel **Pool** Fill Line EOP Encl. 5.7, HPI Pump Operations From ASW Pump Switchgear [KA: APE022 AK3.02 (3.5/3.8)] (16 min)	D, L, R	2
j. **CRO-053, Bypass Coolant Pump Starting Interlocks** EOP Encl. 5.14 [KA: EPE074 AA1.01 (3.6/3.9)] (7 min)	D, L	4P
k. NLO-036, **Startup** A Vital Bus Inverter OP/1107/004 Enclosure 4.2 [KA: 062 A3 04 (2.7/2.9)] (9 min))	D	6

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow-Power, (R)CA

Facility: **Oconee** Bate of Examination: **June, 2004**

Exam bevel (circle one): RO / **SRO(I)** / SRO(U) Operating Test No.: _____

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

System / JPM Title	Type Code*	Safety Function
a. **CRO-012A,** Recover a dropped rod AP/1/A/1700/15, OP/0/A/1105/09, Encl 4.10 [KA: 005 AA2.03 (3.5/4.4)] (20 min)	D, S, A	1
b. CRO- **067,** Perform Required Actions for ES Actuation (**> 3psig**) EOP Enclosure 5.1 (ES Actuation) [KA: EPE-009 EA1.13 (4.4/4.4)] (6 min)	D, A, S	3
c. **CRO-97,** *Transfer* **ECCS** Suction to **the** Emergency Sump (**1LP-15** Failed Closed) EOP, Enclosure 5.12 [KA:BW/E08 EA1.1 (4.0/3.7)] (PRA) (9 min)	D, A, S, L	4P
d. **CRO-015,** Establish EFDW **Flow** Through Startup Valves EOP Enclosure 5.27, Alternate Methods for Controiiing EFDW Flow [APE-054 AA2.04 (4.2/4.3)] (20 min)	D, S, L	4S
e. CRO-700, **Place ICS** In Auto following Loss Of Auto Power AP/23 (Loss Of ICS Power) Enclosure 5.5 (Placing ICS In Auto) [KA: BW/A02 AAI.1 (4.0/3.8)] (new) 15min)	N, A, S	7
f. CRO-060, Perform Required Actions **For** Turbine Building Flood AP/10 (Turbine Building Flood) [KA: AFTBW/A07 AA1.3 (3.3/3.5)] (7 min)	D, S	8
g. **CRO-900,** Release GWD Tank OP/1&2/A/1104/018 Encl. 4.9 (GWD Tank Release) [KA: 071 A4.26 (3.1i3.9) (new) (15 rnin)	N, S	9
In-Plant **Systems** (3 for RO; 3 for SRO-I; **3** or 2 for SRO-U)		
i. **NLO-039,** Prime The Spent Fuel Pool Fill Line EOQ Encl. 5.7, HPI Pump Operations from ASW Pump Switchgear [KA: APE022 AK3.02 (3.5/3.8)] (16 min)	D, L, R	2
j. CRO-053, Bypass **Coolant** Pump Starting **Interlocks** EOP Encl. 5.14 [KA: EPE074 AA1.01 (3.6/3.9)] (7 min)	D, L	4P
k. **NLO-036,** Startup A Vital Bus Inverter OP/1107/004 Enclosure 4.2 [KA: 062 A3.04 (2.7/2.9)] (9 min))	D	**6**

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow-Power, (R)CA

Facility: **Oconee** *Bate* of Examination: **June, 2004**

Exam Level (circle one): RO / SRO(I) / **SRO(U)** Operating Test No.: _____

Control Room Systems (8 for RO; 7 for SRO-I; 2 or 3 for SRO-U)		
System / JPM Title	Type Code*	Safety Function
b. **CRO- 067, Perform Required Actions for ES Actuation (> 3psig)** EOP Enclosure 5.1 (**ES** Actuation) [KA: EQE-009EA1.13 (4.4/4.4)] (6 min)	D, A, S, L	3
d. **CRO-025, Establish EFDW Flow Through Startup Valves** EOP Enclosure 5.27, Alternate Methods for Controlling EFDW Flow [APE-054 AA2.04 (4.2/4.3)] (6 min)	D, S, L	4S
e. **CRO-750, Place ICS In Auto following Loss Of Auto Power** AP/23 (Loss Of ICS Power) Enclosure 5.5 (Placing ICS In Auto) [KA: BW/A02 AA1.1 (4.0/3.8)] **(new)** 20 min)	N, A, S	7
In-Plant Systems (3 for RO; 3 for SRO-I; 3 or 2 for SRO-U)		
i. **NLO-039, Prime The Spent Fuel Pool Fill Line** EOP Encl. 5.7, HPI Pump Operations from ASW Pump Switchgear [KA: APE022 AK3.02 (3.5/3.8)] (16 min)	D, L, R	2
k. **NLO-036, Startup A** Vital **Bus Inverter** OP/1107/004 Enclosure 4.2 [KA: 062 A3.04 (2.7/2.9)] (9 min))	D	6

* Type Codes: (D)irect from **bank.** (M)odified from **bank,** (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow-Power, (R)CA

Facility Date of Exam

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	K	A	A 2	G *	Total
1. Emergency & Abnormal Plant Evolutions	1	3	2	3				3	5			2	18			4	3	7
	2	1	1	2				2	0			3	9			2	3	5
	3												3					
	Tier Totals	4	3	5				5	5			5	27			6	6	12
2. Plant Systems	1	2	2	3	3	2	1	3	2	3	4	3	28			2	2	4
	2	2	1	1	1	1	1	0	2	0	0	1	10			1	1	2
	3												4					
	Tier Totals	4	3	4	4	3	2	3	4	3	4	4	38			3	3	6
3. Generic Knowledge and Abilities Categories		1		2		3		4					10	1	2	3	4	7
		3		3		2		2						2	2	1	2	

Note:
1. Ensure that at least two topics from every K/A category are sampled within each tier of the RO outline (i.e., the "Tier Totals" in each K/A category shall not be less than two). Refer to Section B.1.c for additional guidance regarding SRO sampling.
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 NWC revisions. The final RO exam must total 75 points and the SRO-only exam must total 25 points.
3. Select topics from many systems and evolutions; avoid selecting more than two K/A topics from a given system or evolution unless they relate to plant-specific priorities.
4. Systems/evolutions within each group are identified on the associated outline.
5. The shaded areas are not applicable to the category/tier.
6.* 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. The SRO K/As must also be linked to 10 CFR 55.43 or an SKO-level learning objective.
7. On the fcllowing pages, enter the WA numbers, a brief description of each topic, the topics' importance ratings (IR) fer the applicable license level, and the point totals for each system and category. Enter the group and tier totals fer each category in the table above; summarize all the SRO-only knowledge and non-A2 ability categories in the columns labeled "K" and "A." Use duplicate pages for RO and SRO-only exams.
8. For Tier 3, enter the K/A numbers, descriptions, importance ratings, and point totals on Form ES-401-3.
9. Refer to ES-401, Attachment 2, for guidance regarding the elimination of inappropriate K/A statements.

SRO

Tier 1 Group 1

Name/Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
								45.13)			
...ss of Nuclear Svc	0	0	0	0	0	1	062AG2.2.22	This is a Generic, no stem statement is associated.	Knowledge of limiting conditions for operations and safety limits.	3.4	4.1
Loss of Instrument Air / 8	0	0	0	0	0	0	065AG2.1.33	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.4	4
Reactor Trip - Stabilization - Recovery / 1	0	0	0	0	1	0	BE02EA2.1	Ability to determine and interpret the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	Facility conditions and selection of appropriate procedures during abnormal and emergency operations.	2.5	4
Reactor Trip - Stabilization - Recovery / 1	0	0	0	0	0	0	BE10EA2.2	Ability to determine and interpret the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	3.5	4
Steam Line Rupture - Excessive Heat Transfer / 4	0	0	0	0	0	1	BE05EG2.4.6	This is a Generic, no stem statement is associated.	Knowledge symptom based EOP mitigation strategies.	3.1	4
Inadequate Heat Transfer - Loss of Secondary Heat Sink / 4	0	0	0	0	0	0	BE04EA2.1	Ability to determine and interpret the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	3.2	4.4

SRO

Tier 1 Group 2

Name / Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
Continuous Rod Withdr	0	0	0	0	0	0	001AG2.4.1	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.3	3.3
Dropped Control Rod /	0	0	0	0	1	0	003AA2.03	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	Dropped rod, using in-core/ex-core instrumentation in-core or loop temperature measurements	3.6	3.8
Inoperable/Stuck Contr	0	0	0	0	0	0	005AA2.03	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 143.5 / 45.13)	K/A Randomly Rejected	3.5	4.4
Emergency Boration / 1	0	0	0	0	0	0	024AA2.02	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	3.9	4.4
Pressurizer Level Malfu	0	0	0	0	0	0	028AG2.4.49	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	4	4
Loss of Source Range	0	0	0	0	0	0	032AG2.4.49	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	4	4
Loss of Intermediate R	0	0	0	0	0	0	033AA2.09	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 143.5 / 45.13)	K/A Randomly Rejected	3.4	3.7
Fuel Handling Accident	0	0	0	0	0	0	036AG2.4.4	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	4	4.3
Steam Generator Tube	0	0	0	0	0	0	037AA2.16	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	4.1	4.3

SRO

Tier 1 Group 2

Name / Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
Loss of Condenser Vac	0	0	0	0	0	0	051AG2.4.30	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	2.2	3.6
Accidental Liquid RadV	0	0	0	0	0	0	059AG2.1.14	This is a Generic, no stem statement is associated,	K/A Randomly Rejected	2.5	3.3
Accidental Gaseous Ra	0	0	0	0	0	0	060AA2.03	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	3.2	3.9
ARM System Alarms /	0	0	0	0	0	0	061AA2.01	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	3.5	3.7
Plant Fire On-site / 8	0	0	0	0	0	0	067AG2.4.6	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.1	4
Control Room Evac. / 8	0	0	0	0	0	0	068AA2.09	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	4.1	4.3
Loss of CTMT Integrity	0	0	0	0	0	0	069AG2.4.49	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	4	4
Inad. Core Cooling / 4	0	0	0	0	0	0	074EG2.1.32	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.4	3.8
High Reactor Coolant /	0	0	0	0	0	0	076AA2.03	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	2.5	3

SRO

Tier 1 Group 2

Name / Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
Plant Runback / 1	0	0	0	0	0	0	BA01AA2.1	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	3	3.7
Loss of NNI-X/Y / 7	0	0	0	0	0	0	BA02AG2.2.22	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.4	4.1
Turbine Trip / 4	0	0	0	0	0	0	BA04AG2.2.22	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.4	4.1
Emergency Diesel Actu	0	0	0	0	0	0	BE05EG2.4.4	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	4	4.3
Flooding / 8	0	0	0	0	0	0	BA07AG2.4.49	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	4	4
Inadequate Subcooling	0	0	0	0	0	0	BE03EA2.1	Ability to determine and interpret the following as they apply *to* (EMERGENCY PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	3	4
LOCA Cooldown - Depi	0	0	0	0	0	0	BE08EA2.2	Ability to determine and interpret the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	3.3	4
Natural Circ. / 4	0	0	0	0	0	0	BE09EG2.1.14	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	2.5	3.3
EOP Rules and Enclos	0	0	0	0	0	0	BE13EG2.1.32	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.4	3.8

SRO

Pier 1 Group 2

Name / Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
Loss of NNI-X/Y / 7	0	0	0	0	0	1	BA03AG2.4.6	This is a Generic, no stem statement is associated.	Knowledge symptom based EOP mitigation strategies.	3.1	4
EOP Rules and Enclos	0	0	0	0	1	0	BE14EA2.2	Ability to determine and interpret the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	Adherence to appropriate procedures and operation within the limitations in the facility s license and amendments.	4	4
Control Room Evac. / 8	0	0	0	0	0	1	BA06AG2.4.4	This is a Generic, no stem statement is associated.	Ability to recognize abnormal indications for system operating parameters which are entry-level conditions for emergency and abnormal operating procedures.	4	4.3
Fuel Handling Accident	0	0	0	0	0	1	BA08AG2.1.14	This is a Generic, no stem statement is associated.	Knowledge of system status criteria which require the notification of plant personnel.	2.5	3.3

SRO

Tier 2 Group 1

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
												based on those predictions, use procedures to correct. control. or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)				
Main Feedwater	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	059GG2.2.25	2.5	3.7
Auxiliary/Emergency Feedwater	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	061GG2.1.2	3.0	4.0
AC Electrical Distribution	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	062GG2.4.50	3.3	3.3
DC Electrical Distribution	0	0	0	0	0	0	0	0	0	0	1	This is a Generic, no stem statement is associated.	Ability to locate and operate components, including local controls.	063GG2.1.30	3.9	3.4
Emergency Diesel Generator	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	064GG2.1.30	3.9	3.4
Process Radiation Monitoring	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	073GG2.1.28	3.2	3.3
Service Water	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	076GG2.4.50	3.3	3.3
Instrument Air	0	0	0	0	0	0	0	0	0	0	1	This is a Generic, no stem statement is associated	Ability to perform without reference to procedures those actions that require immediate operation of system components and controls.	078G2.4.49	4.0	4.0
containment	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use	K/A Randomly Rejected	103A2.04	3.5	3.6

SRO

Pier 2 Group 1

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
Reactor Coolant Pump	0	0	0	0	0	0	0	1	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	Effects of VCT pressure on RCP seal leakoff flows	003A2.05	2.5	2.8
Chemical and Volume Control	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 143.5 / 45.3 / 45.13)	K/A Randomly Rejected	004A2.08	3.0	3.7
Residual Heat Removal	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	005GG2.4.31	3.3	3.4
Emergency Core Cooling	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	006GG2.4.50	3.3	3.3
Pressurizer Relief/Quench Tank	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	007A2.06	2.6	2.8
Component Cooling Water	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	008GG2.1.14	2.5	3.3
Pressurizer Pressure Control	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	010GG2.2.25	2.5	3.7
Reactor Protection	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is	K/A Randomly Rejected	012GG2.2.22	3.4	4.1

SRO

Tier 2 Group 1

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
												associated.				
Engineered Safety Features Actuation	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	013A2.06	3.7	4.0
Containment Cooling	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions. use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: **41.5/ 43.5/ 45.3145.13)**	K/A Randomly Rejected	022A2.03	2.6	3.0
Ice Condenser	0	0	0	0	0	0	0	0	0	0	0		K/A Rejected	025GG2.2.25	0	0
Containment Spray	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: **41.5/** 43.5 / **45.3/ 45.13)**	K/A Randomly Rejected	026A2.08	3.2	3.7
Main and Reheat Steam	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) **based** on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: **41.5/** 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	039A2.04	3.4	3.7
Condensate	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b)	K/A Randomly Rejected	056A2.04	2.6	2.8

SRO

Tier 2 Group 1

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	KIA Topic(s)	KA	RO	SRO
												procedures to correct, control. or mitigate the consequences of those abnormal operation:(CFR: 44.5 / 43.5 / 45.3 145.13)				
Emergency Diesel Generator	0	0	0	0	0	0	0	1	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control. or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	Water buildup in cylinders	064A2.15	2.6	3.1

SRO

Pier 2 Group 2

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
Control Rod Drive	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based *on those* predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	001A2.16	3.0	3.8
Reactor Coolant	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	002GG2.4.50	3.3	3.3
Pressurizer Level Control	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	011GG2.4.31	3.3	3.4
Rod Position Indication	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct. control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	014A2.05	3.9	4.1
Nuclear Instrumentation	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 42.5 / 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	015A2.05	3.3	3.8
Nuclear Instrumentation	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	016A2.01	3.0	3.1

SRO

Tier 2 Group 2

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	Pic(s)	KA	RO	SRO
In-core Temperature Monitor	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 143.5 / 45.3 / 45.13)	K/A Randomly Rejected	017A2.01	3.1	3.5
Containment Iodine Removal	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	027GG2.1.27	2.8	2.9
Hydrogen Recombiner and Purge Control	0	0	0	0	0	0	0	0	0	0	1	This is a Generic, no stem statement is associated.	Knowledge of operator responsibilities during all modes of plant operation.	028GG2.1.2	3.0	4.0
Containment Purge	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of these abnormal operation:(CFR: 41.5 143.5 / 45.3 / 45.13)	K/A Randomly Rejected	029A2.01	2.9	3.6
Spent Fuel Pool Cooling	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	033A2.02	2.7	3.0
Fuel Handling Equipment	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	03482.02	3.4	3.9

SRO

Tier 2 Group 2

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
Steam Generator	0	0	0	0	0	0	0	0	0	0	0	tc the of the followi on the (SYSTEM) ! (b) based on those predictions. use procedures to correct, control. or mitigate the consequences of those abnormal operation:(CFR: 41.5/ 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	*035A2.05*	3.2	3.4
Steam Dump/Turbine Bypass Control	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	041GG2.4.36	2.2	3.6
Main Turbine Generator	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	045A2.17	2.7	2.9
Condenser Air Removal	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	*355GG2.2.21*	3.4	4.1
Liquid Radwaste	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	068GG2.4.6	3.1	4
Waste Gas Disposal	0	0	0	0	0	0	0	1	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5/ 43.5/ 45.3 / 45.13)	Use of waste gas release monitors, radiation, gas flow rate and totalizer	071A2.02	3.3	3.6
Area Radiation Monitoring	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use	K/A Randomly Rejected	072A2.02	2.8	2.9

skd

Pier 2 Group 2

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
												procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5/ 45.3145.13)				
Circulating Water	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	075GG2.1.23	3.9	4.0
Station Air	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	079GG2.1.2	3.0	4.0
Fire Protection	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	086GG2.1.20	3.2	3.3

SKB

Tier 3

Group	KA	Topic	RO	SRO
Conduct of Operations	G2.1.10	Knowledge of conditions and limitations in the facility license.	2.7	3.9
Conduct of Operations	G2.1.33	Ability to recognize indications for system operating parameters which are entry-level condition	3.4	4
Equipment Control	G2.2.7	Knowledge of the process for conducting tests or experiments not described in the safety analysi	2	3.2
Equipment Control	G2.2.33	Knowledge of control rod programming.	2.5	2.9
Radiation Control	G2.3.3	Knowledge of SRO responsibilities for auxiliary systems that are outside the control room (e.g.	1.8	2.9
Emergency Procedures/Plan	G2.4.16	Knowledge of EOP implementation hierarchy and coordination with other support procedures.	3	4
Emergency Procedures/Plan	G2.4.21	Knowledge of the parameters and logic used to assess the status of safety functions including:1.1	3.7	4.3

SRO EXAM

Tier / Group	Randomly Selected K/A	Reason for Rejection
T1/G1	BE05EG2.1.14 (7)	Cannot write a discriminating question on this KA. The new randomly selected KA is BE05EG2.2.6.
TUG2	003A2.05 (13)	System configuration does not apply to ONS. The new randomly selected KA is 003A2.01.
T2/G2	063GG2.1.30 (14)	Not SRO oniy KA. No SRO only learning objective. The new randomly selected KA is 08GG2.1.12.
T2/G1	064A2.15 (16)	ONS does not have Emergency Diesels and the malfunction (water buildup in cylinders) will not translate to our hydro units. The new randomly selected KA is 064A2.16.
TUG2	028GG2.1.2 (17)	ONS has deleted all requirements for Hydrogen Recombiners and Purge. The new randomly selected KA is 029A2.01.

RO

Tier 1 Group 1

Name/Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
Reactor Trip - Stabilization Recovery / 1	a	0	0	1	0	0	007EA2.06	Ability to determine and interpret the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	4.3	4.5
Pressurizer Vapor Space Accident / 3	0	0	1	0	0	0	008AK3.05	Knowledge of the reasons for the following responses as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.5 / 41.10 / 45.6 / 45.13)	ECCS termination or throttling criteria	4	4.5
Small Break LOCA / 3	0	0	/	/	0	1	009EG2.1.28	This is a Generic, no stem statement is associated.	Knowledge of the purpose and function of major system components and controls.	3.2	3.3
Large Break LOCA / 3	0	0	0	/	1	0	011EA2.05	Ability to determine and interpret the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	Significance of charging pump operation	3.3	3.7
RCP Malfunctions / 4	0	1	0	0	0	0	015AK2.10	Knowledge of the interrelations between (ABNORMAL PLANT EVOLUTION) and the following:(CFR: 41.7 / 45.7 / 45.8)	RCP indicators and controls	2.8	2.8
Loss of Rx Coolant Makeup / 2	1	0	0	0	1	0	022AA2.03	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	Failures of flow control valve or controller	3.1	3.6
Loss of RHR System / 4	0	0	/	/	0	1	025AG2.1.32	This is a Generic, no stem statement is associated.	Ability to explain and apply all system limits and precautions.	3.4	3.8
Loss of Component Cooling Water / 8	0	0	0	0	1	0	026AA2.03	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	The valve lineups necessary to restart the CCWS while bypassing the portion of the system causing the abnormal condition	2.6	2.9

RO

Tier ▮ Group 1

Name/Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
Pressurizer Pressure Control System Malfunction / 3	1	0	0	0	0	0	027AK1.01	Knowledge of the operational implications of the following concepts as they apply to the (ABNORMAL PLANT EVOLUTION):(CFR: 41.8 to 41.10 / 45.3)	Definition of saturation temperature	3.1	3.4
ATWS / 1	0	0	1	0	0	0	029EK3.04	Knowledge of the reasons for the following responses as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.5 / 41.10 / 45.6 / 45.13)	Closing the normal charging header isolation valves	3.1	3.1
Steam Gen. Tube Rupture / 3	1	0	0	0	0	0	038EK1.02	Knowledge of the operational implications of the following concepts as they apply to the EMERGENCY PLANT EVOLUTION):(CFR: 41.8 to 41.10 / 45.3)	Leak rate vs. pressure drop	3.2	3.5
Steam Line Rupture - Excessive Heat Transfer I 4	0	1	0	0	0	0	040AK2.02	Knowledge of the interrelations between (ABNORMAL PLANT EVOLUTION) and the following:(CFR: 41.7 / 45.7 / 45.8)	Sensors and detectors	2.6	2.6
Loss of Main Feedwater I 4	1	0	0	0	0	0	054AK1.01	Knowledge of the operational implications of the following concepts as they apply to the (ABNORMAL PLANT EVOLUTION):(CFR: 41.8 to 41.10 / 45.3)	MFW line break depressurizes the S/G (similar to a steam line break)	4.1	4.3
Station Blackout / 6	0	0	1	0	0	0	055EK3.02	Knowledge of the reasons for the following responses as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.5 / 41.10 / 45.6 / 45.13)	Actions contained in EOP for loss of offsite and onsite power	4.3	4.6
Loss of Off-site Power / 6	0	0	0	0	0	0	056AA1.24	Ability to operate and / or monitor the following as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.7 / 45.5 / 45.6)	K/A Randomly Rejected	2.9	3

RO

Tier 1 Group 1

Name/Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
Loss of Vital AC Inst. Bus / 6	0	0	0	0	1	0	057AA2.12	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	PZR level controller, instrumentation and heater indications	3.5	3.7
Loss of DC Power / 6	0	0	0	1	0	0	058AA1.03	Ability to operate and / or monitor the following as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.7 / 45.5 / 45.6)	Vital and battery bus components	3.1	3.3
Loss of Nuclear Svc Water / 4	0	0	0	0	0	0	062AK2	Knowledge of the interrelations between (ABNORMAL PLANT EVOLUTION) and the following:(CFR: 41.7 145.7 / 45.8)	K/A Randomly Rejected	0	0
Loss of Instrument Air / 8	0	0	0	0	0	0	065AK3.08	Knowledge of the reasons for the following responses as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.5 / 41.10 / 45.6 / 45.13)	K/A Randomly Rejected	3.7	3.9
Reactor Trip - Stabilization - Recovery ▮▮	0	0	0	0	0	0	BE02EG2.1.2	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3	4
Reactor Trip - Stabilization - Recovery / 1	0	0	0	0	1	0	BE10EA2.1	Ability to determine and interpret the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	Facility conditions and selection of appropriate procedures during abnormal and emergency operations.	2.5	4
Steam Line Rupture - Excessive Heat ,Transfer/ 4	0	0	0	1	0	0	BE05EA1.3	Ability to operate and / or monitor the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.7 / 45.5 / 45.6)	Desired operating results during abnormal and emergency situations.	3.8	4.2
Inadequate Heat Transfer - Loss of Secondary Heat Sink ▮ 4	0	0	0	1	0	0	BE04EA1.1	Ability to operate and / or monitor the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.7 / 45.5 / 45.6)	Components, and functions of control and safety systems, including instrumentation, signals, interlocks, failure modes. and automatic and	4.4	4.2

RO

Tier ▮ Group ▮

Name/Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
									manual features.		

RO

Tier 1 Group 2

Name / Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
Continuous Rod Withdr	0	0	0	0	0	1	001AG2.4.31	This is a Generic, no stem statement is associated.	Knowledge of annunciators alarms and indications and use of the response instructions.	3.3	3.4
Dropped Control Rod /	0	0	0	0	0	0	003AK3.05	Knowledge of the reasons for the following responses as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.5 / 41.10 / 45.6 / 45.13)	K/A Randomly Rejected	3.4	4.1
Inoperable/Stuck Contr	0	0	0	0	0	1	005AG2.4.6	This is a Generic, no stem statement is associated.	Knowledge symptom based EOP mitigation strategies.	3.1	4
Emergency Boration / 1	0	0	0	0	0	0	024AK2.01	Knowledge of the interrelations between (ABNORMAL PLANT EVOLUTION) and the following:(CFR: 41.7 145.7 145.8)	K/A Randomly Rejected	2.7	2.7
Pressurizer Level Malfu	0	0	0	0	0	0	028AK2.03	Knowledge of the interrelations between (ABNORMAL PLANT EVOLUTION) and the following:(CFR: 41.7 / 45.7 / 45.8)	K/A Randomly Rejected	2.6	2.9
Loss of Source Range	0	0	0	1	0	0	032AA1.01	Ability to operate and / or monitor the following as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.7 / 45.5 / 45.6)	Manual restoration of power	3.1	3.4
Loss of Intermediate Ra	0	0	0	0	0	0	033AA1.02	Ability to operate and / or monitor the following as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.7 / 45.5 / 45.6)	K/A Randomly Rejected	3	3.1
Fuel Handling Accident	0	0	0	0	0	0	036AA1.04	Ability to operate and / or monitor the following as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.7 / 45.5 / 45.6)	K/A Randomly Rejected	3.1	3.7
Steam Generator Tube	0	0	0	0	0	0	037AK3.02	Knowledge of the reasons for the following	K/A Randomly Rejected	3.2	3.5

Tier 1 Group 2

10

Name / Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
								responses as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.5 / 41.10 / 45.6 / 45.13)			
Loss of Condenser Vac	0	0	0	0	0	0	051AG2.4.6	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.1	4
Accidental Liquid RadV	0	0	0	0	0	0	059AK2.01	Knowledge of the interrelations between (ABNORMAL PLANT EVOLUTION) and the following:(CFR: 41.7 / 45.7 / 45.8)	K/A Randomly Rejected	2.7	2.8
Accidental Gaseous Ra	0	0	0	0	0	0	060AK1.02	Knowledge of the operational implications of the following concepts as they apply to the (ABNORMAL PLANT EVOLUTION):(CFR: 41.8 to 41.10 / 45.3)	K/A Randomly Rejected	2.5	3.1
ARM System Alarms /	0	0	0	0	0	0	061AA2.06	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 143.5 / 45.13)	K/A Randomly Rejected	3.2	4.1
Plant Fire On-site / 9 8	0	0	1	0	0	0	067AK3.04	Knowledge of the reasons for the following responses as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.5 / 41.10 / 45.6 / 45.13)	Actions contained in EOP for plant fire on site	3.3	4.1
Control Room Evac. / 8	0	0	1	0	0	0	068AK3.14	Knowledge of the reasons for the following responses as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.5 / 41.10 / 45.6 / 45.13)	Safety injection setpoint of main steam line pressure	3.2	3.4
Loss of CTMT Integrity	0	0	0	0	0	1	069AG2.1.2	This is a Generic, no stem statement is associated.	Knowledge of operator responsibilities during all modes of plant operation.	3	4
Inad. Core Cooling / 4	0	0	0	0	0	0	074EK3.05	Knowledge of the reasons for the following responses as they apply to (EMERGENCY	K/A Randomly Rejected	4.2	4.5

Tier 1 Group 2

Name / Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
								PLANT EVOLUTION):(CFR: 41.5141.101 45.6 145.13)			
High Reactor Coolant A	a	0	0	1	a	a	076AA1.04	Ability to operate and / or monitor the following as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.9 / 45.5 / 45.6)	Failed fuel-monitoring equipment	3.2	3.4
Plant Runback / 1	a	0	0	0	a	a	BA01AA2.1	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	WA Randomly Rejected	3	3.7
Loss of NNI-X/Y / 7	a	0	0	0	0	a	BA02AG2.4.6	This is a Generic, no stem statement is associated.	WA Randomly Rejected	3.1	4
Turbine Trip / 4	a	0	0	0	a	a	BA04AK3.1	Knowledge of the reasons for the following responses as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.5 / 41.10 / 45.6 / 45.13)		3.2	3.2
Emergency Diesel Actu mergency Diesel Actri	a	0	0	0	a	a	BE05EA1.1	Ability to operate and / or monitor the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.7 / 45.5 / 45.6)	WA Randomly Rejected	4.2	4.2
Flooding / 8	is	0	0	0	0	is	BA07AK3.4	Knowledge of the reasons for the following responses as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.5 / 41.10 / 45.6 / 45.13)	*UA* Randomly Rejected	3.6	3.6
Inadequate Subcooling	0	0	0	0	0	0	BE03EK1.2	Knowledge of the operational implications of the following concepts as they apply to the EMERGENCY PLANT EVOLUTION):(CFR: 41 8 to 41.10 / 45.3)	UA Randomly Rejected	3.8	4

RO

Tier 1 Group 2

Name / Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	KIA Topic(s)	RO	SRO
LOCA Cooldown - Depi	0	0	0	0	0	0	BE08EA1.2	Ability to operate and / or monitor the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.7 / 45.5 / 45.6)	K/A Randomly Rejected	3.1	3.1
Natural Circ. / 4	0	0	0	0	0	0	BE09EK1.1	Knowledge of the operational implications of the following concepts as they apply to the EMERGENCY PLANT EVOLUTION):(CFR: 41.8 to 41.10 / 45.3)	K/A Randomly Rejected	3.5	3.7
EOP Rules and Enclos	1	0	0	0	0	0	BE13EK1.2	Knowledge of the operational implications of the following concepts as they apply to the EMERGENCY PLANT EVOLUTION):(CFR: 41.8 to 41.10 145.3)	Normal, abnormal and emergency operating procedures associated with (EOP Rules).	3	3.6
Loss of NNI-X/Y / 7	0	0	0	0	0	0	BA03AA1.1	Ability to operate and / or monitor the following as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 41.7 / 45.5 / 45.6)	K/A Randomly Rejected	4	4
EOP Rules and Enclos	0	1	0	0	0	0	BE14EK2.1	Knowledge of the interrelations between (EMERGENCY PLANT EVOLUTION) and the following:(CFR: 41.7 / 45.7 / 45.8)	Components, and functions of control and safety systems, including instrumentation, signals, interlocks, failure modes, and automatic and manual features.	3.6	3.4
Control Room Evac. / 8	0	0	0	0	0	0	BA06AA1.2	Ability to operate and / or monitor the following as they apply to (ABNORMAL PLANT EVOLUTION):(CFR: 42.7 / 45.5 / 45.6)	K/A Randomly Rejected	3.2	3.5
Fuel Handling Accident	0	0	0	0	0	0	BA08AK2.2	Knowledge of the interrelations between (ABNORMAL PLANT EVOLUTION) and the following:(CFR: 41.7 / 45.7 / 45.8)	K/A Randomly Rejected	3.8	4

Tier 2 Group 1

AO

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
Reactor Coolant Pump	0	1	0	0	a	a	0	0	0	0	0	Knowledge of electrical Dower supplies to the following:(CFR: 41.7)	CCW pumps	003K2.02	2.5	2.6
Chemical and Volume Control	0	0	0	0	a	a	1	0	0	0	0	Ability to predict and/or monitor changes in parameters associated with operating the (SYSTEM) controls including:(CFR: 41.5 / 45.5)	Normal operating band for letdown flow rate	004A1.08	2.7	2.9
Residual Heat Removal	0	0	0	0	a	a	0	0	0	1	0	Ability to manually operate and/or monitor in the control room:(CFR: 41.7 / 45.5 to 45.8)	Controls and indication for RHR pumps	005A4.01	3.6	3.4
Emergency Core Cooling	0	0	0	0	a	7	0	0	0	0	0	Knowledge of the effect that a loss or malfunction of the following will have on the (SYSTEM):(CFR: 41.7 / 45.7)	BIT/borated water sources	006K6.01	3.4	3.9
Pressurizer Relief/Quench Tank	0	0	0	0	a	0	1	0	0	0	0	Ability to predict and/or monitor changes in parameters associated with operating the (SYSTEM) controls including:(CFR: 41.5 / 45.5)	Monitoring quench tank temperature	007A1.03	2.6	2.7
Component Cooling Water	0	0	0	0	a	a	0	0	0	1	0	Ability to manually operate and/or monitor in the control room:(CFR: 41.7 / 45.5 to 45.8)	CCW temperature control valve	008A4.09	3.0	2.9
Pressurizer Pressure Control	0	0	0	0	1	a	0	0	0	0	0	Knowledge of the operational implications of the following concepts as they apply to the (SYSTEM):(CFR: 41.5 / 45.7)	Determination of condition of fluid in PZR, using steam tables	010K5.01	3.5	4.0
Reactor Protection	1	0	0	0	0	0	0	0	0	0	0	Knowledge of the physical connections and/or cause-effect relationships between (SYSTEM) and the following:(CFR: 41.2 to 41.9 / 45.7 to 45.8)	MFW	012K1.08	2.9	3.1

Tier 2 Group 1

RO

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
Engineered Safety Features Actuation	0	0	0	1	0	0	0	0	0	0	0	Knowledge of (SYSTEM) design feature(s) and or interlock(s) which provide for the following:(CFR: 41.7)	Containment integrity system reset	013K4.02	3.9	4.2
Containment Cooling	0	0	0	0	0	0	0	0	1	0	0	Ability to monitor automatic operations of the (SYSTEM) including:(CFR: 41.7 / 45.5)	Initia tion of safeguards mode of operation	022A3.01	4.1	4.3
Ice Condenser	0	0	0	0	0	0	0	0	0	0	0		K/A Rejected	025K6.01	0	0
Containment Spray	0	0	0	0	0	0	0	1	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	Loss of containment spray pump suction when in recirculation mode, possibly caused by clogged sump screen, pump inlet high temperature exceeded cavitation, voiding) or sump level below cutoff (interlock) limit	026A2.07	3.6	3.9
Main and Reheat Steam	0	0	0	0	0	0	0	0	0	0	1	This is a Generic, no stem statement is associated.	Knowledge of the purpose and function of major system components and controls.	039G2.1.28	.2	.3
Condensate	0	0	0	0	0	0	0	0	0	0	1	This is a Generic, no stem statement is associated.	Ability to recognize indications for system operating parameters which are entry-level conditions for technical specifications	056G2.1.33	3.4	4.0
Main Feedwater	0	0	0	0	0	0	1	0	0	0	0	Ability to predict and/or monitor changes in parameters associated with operating the (SYSTEM) controls including:(CFR: 41.5 / 45.5)	Power level restrictions for operation of MFW pumps and valves.	059A1.03	2.7	2.9
Auxiliary/Emergency Feedwater	0	0	0	0	1	0	0	0	0	0	0	Knowledge of the operational implications of the following concepts as they apply to the (SYSTEM):(CFR: 41.5 / 45.7)	Pump head effects when control valve is shut	061K5.03	2.6	2.9

Tier 2 Group 1

RO

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
AC Electrical Distribution	0	0	1	0	0	0	0	0	0	0	0	Knowledge of the effect that a loss or malfunction of the (SYSTEM) will have on the following:(CFR: 41.7 145.6)	ED/G	062K3.02	4.1	4.4
DC Electrical Distribution	0	0	0	0	0	0	0	0	0	1	0	Ability to manually operate and/or monitor in the control room:(CFR: 41.7 / 145.5to45.8)	Major breakers and control power fuses	063A4.01	2.8	3.1
Emergency Diesel Generator	0	0	0	0	0	0	0	0	1	0	0	Ability to monitor automatic operations of the (SYSTEM) including:(CFR: 41.7 1 45.5)	Number of starts available with an air compressor	064A3.04	3.1	3.5
Process Radiation Monitoring	0	0	0	0	0	0	0	0	0	0	1	This is a Generic, no stem statement is associated.	Ability to recognize indications for system operating parameters which are entry-level conditions for technical specifkations.	073GG2.1.33	3.4	4.0
Service Water	0	0	0	0	0	0	0	1	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 42.5 / 43.5 / 45.3 / 45.13)	Service water header pressure	076A2.02	2.7	3.1
Instrument Air	0	0	0	1	0	0	0	0	0	0	0	Knowledge of (SYSTEM) design feature(s) and or interlock(s) which provide for the following:(CFR: 41.7)	Securing of SAS upon loss of cooling water	078K4.03	3.1	3.3
Containment	0	0	1	0	0	0	0	0	0	0	0	Knowledge of the effect that a loss or malfunction of the (SYSTEM) will have on the following:(CFR: 41.7 / 45.6)	Loss of containment integrity under refueling operations.	103K3.03	3.7	4.1
Process Radiation Monitoring	0	0	0	0	0	0	0	0	0	1	0	Ability to manually operate and/or monitor in the control room:(CFR: 41.7 / 45.5 to 45.8)	Radiation monitoring system control panel	073A4.02	3.7	3.7

Tier 2 Group ▮

RO

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
Containment Spray	0	0	1	0	0	0	0	0	0	0	0	Knowledge of the effect that a loss or malfunction of the (SYSTEM) will have on the following:(CFR: 41.7 / 45.6)	Recirculation spray system	026K3.02	4.2	4.3
Containment	0	0	0	1	0	0	0	0	0	0	0	Knowledge of (SYSTEM) design feature(s) and or interlock(s) which provide for the following:(CFR: 41.7)	Vacuum breaker protection	103K4.01	3.0	3.7
Pressurizer Relief/Quench Tank	1	0	0	0	0	0	0	0	0	0	0	Knowledge of the physical connections and/or cause-effect relationships between (SYSTEM) and the following:(CFR: 41.2 to 41.9 / 45.7 to 45.8)	Containment system	007K1.01	2.9	3.1
Residual Heat Removal	0	1	0	0	0	0	0	0	0	0	0	Knowledge of electrical power supplies to the following:(CFR: 41.7)	RCS pressure boundary motor-operated valves	005K2.03	2.7	2.8
AC Electrical Distribution	0	0	0	0	0	0	0	0	1	0	0	Ability to monitor automatic operations of the (SYSTEM) including:(CFR: 41.7 / 45.5)	Vital ac bus amperage	062A3.01	3.0	3.1

RO

Tier 2 Group 2

ıme / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
ydrogen ecombiner and urge Control	0	1	0	0	0	0	0	0	0	0	0	Knowledge of electrical power supplies to the following:(CFR: 41.7)	Hydrogen recombiners	028K2.01	2.5	2.8
ontainment Purge	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5/ 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	029A2.03	2.7	3.1
pent Fuel Fool ooling	1	0	0	0	0	0	0	0	0	0	0	Knowledge of the physical connections and/or cause-effect relationships between (SYSTEM) and the following:(CFR: 41.2 to 41.9 / 45.7 to 45.8)	RWST	033K1.05	2.7	2.8
uel Handling iquipment	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions. use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5/ 43.5/ 45.3 / 45.13)	K/A Randomly Rejected	034A2.01	3.6	4.4
Steam Generator	0	0	0	1	0	0	0	0	0	0	0	Knowledge of (SYSTEM) design feature(s) and or interlock(s) which provide for the following:(CFR: 41.7)	Amount of reserve water in S/G	035K4.05	2.9	3.2
Steam Dump/Turbine Bypass Control	0	0	0	0	0	1	0	0	0	0	0	Knowledge of the effect that a loss or malfunction of the following will have on the (SYSTEM):(CFR: 41.7 / 45.7)	Controller and positioners, including ICS, S/G, CRDS	041K6.03	2.7	2.9
Main Turbine Generator	0	0	0	0	0	0	0	1	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or	Malfunction of electrohydraulic control	045A2.17	2.7	2.9

Tier 2 Group 2

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
												mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)				
Condenser Air Removal	0	0	0	0	0	0	0	0	0	0	1	This is a Generic, no stem statement is associated.	Knowledge of limiting conditions for operations and safety limits.	055G2.2.22	3.4	4.1
Liquid Radwaste	0	0	0	0	1	0	0	0	0	0	0	Knowledge of the operational implications of the following concepts as they apply to the (SYSTEM):(CFR: 41.5 / 45.7)	Units of radiation, dose and dose rate	068K5.03	2.6	2.6
Waste Gas Disposal	0	0	0	0	0	0	0	0	0	0	0	Knowledge of (SYSTEM) design feature(s) and or interlock(s) which provide for the following:(CFR: 41.7)	K/A Randomly Rejected	071K4.01	2.6	3.0
Area Radiation Monitoring	0	0	0	0	0	0	0	0	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)	K/A Randomly Rejected	072A2.02	2.8	2.9
Circulating Water	0	0	0	0	0	0	0	0	0	0	0	Ability to predict and/or monitor changes in parameters associated with operating the (SYSTEM) controls including:(CFR: 41.5 / 45.5)	K/A Randomly Rejected	075A1	0	0
'Station air	0	0	0	0	0	0	0	0	0	0	0	Knowledge of the physical connections and/or cause-effect relationships between (SYSTEM) and the following:(CFR: 41.2 to 41.9 / 45.7 to 45.8)	K/A Randomly Rejected	079K1.01	3.0	3.1
Fire Protection	0	0	0	0	0	0	0	0	0	0	0	Ability to monitor automatic operations of the (SYSTEM) including:(CFR: 41.7 /	K/A Randomly Rejected	086A3.03	2.9	3.3

Tier 2 Group 2

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
												45.5)				
Control Rod Drive	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	001GG2.1.27	2.8	2.9
Reactor Coolant	1	0	0	0	0	0	0	0	0	0	0	Knowledge of the physical connections and/or cause-effect relationships between (SYSTEM) and the following:(CFR: 41.2 to 41.9 / 45.7 to 45.8)	RCS vent system	002K1.04	2.8	3.2
Pressurizer Level Control	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	011GG2.4.31	3.3	3.4
Rod Position Indication	0	0	1	0	0	0	0	0	0	0	0	Knowledge of the effect that a loss or malfunction of the (SYSTEM) will have on the following:(CFR: 41.7 / 45.6)	Plant computer	014K3.02	2.5	2.8
Nuclear Instrumentation	0	0	0	0	0	0	0	0	0	0	0	Knowledge of the effect that a loss or malfunction of the following will have on the (SYSTEM):(CFR: 41.7 / 45.7)	K/A Randomly Rejected	015K6.03	2.6	3.0
Non-nuclear Instrumentation	0	0	0	0	0	0	0	0	0	0	0	Ability to predict and/or monitor changes in parameters associated with operating the (SYSTEM) controls including:(CFR: 41.5 / 45.5)	K/A Randomly Rejected	016A1	0	0
In-core Temperature Monitor	0	0	0	0	0	0	0	0	0	0	0	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	017GG2.1.30	3.9	3.4
Containment Iodine Removal	0	0	0	0	0	0	0	1	0	0	0	Ability to (a) predict the impacts of the following on the (SYSTEM) and (b) based on those predictions, use procedures to correct, control. or mitigate the consequences of those	High temperature in the filter system	027A2.01	3.0	3.3

RO

Tier 2 Group 2

Name / Safety Functio	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	Question Type	K/A Topic(s)	KA	RO	SRO
	X											abnormal operation:(CFR: 41.5 / 43.5 / 45.3 / 45.13)				

RO

Tier 3

Group	KA	Topic	RO	SRO
Conduct of Operations	G2.1.24	Ability to obtain and interpret station electrical and mechanical drawings.	2.8	3.1
Conduct of Operations	G2.1.27	Knowledge of system purpose and or function.	2.8	2.9
Conduct of Operations	G2.1.21	Ability to obtain and verify controlled procedure copy.	3.1	3.2
Equipment Control	G2.2.13	Knowledge of tagging and clearance procedures.	3.6	3.8
Equipment Control	G2.2.11	Knowledge of the process for controlling temporary changes.	2.5	3.4
Equipment Control	G2.2.23	Ability to track limiting conditions for operations.	2.6	3.8
Radiation Control	G2.3.4	Knowledge of radiation exposure limits and contamination control, including permissible levels	2.5	3.1
Radiation Control	G2.3.1	Knowledge of 10 CFR: 20 and related facility radiation control requirements.	2.6	3
Emergency Procedures/Plan	G2.4.46	Ability to verify that the alarms are consistent with the plant conditions.	3.5	3.6
Emergency Procedures/Plan	G2.4.26	Knowledge of facility protection requirements including fire brigade and portable fire fighting e	2.9	3.3

SRO

Tier 1 Group 1

Name/Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
Reactor Trip-Stabilization - Recovery / 1	0	0	0	0	0	0	007EA2.01	Ability to determine and interpret the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	4.1	4.3
Pressurizer Vapor Space Accident / 3	0	0	0	0	0	1	008AG2.2.25	This is a Generic, no stem statement is associated.	Knowledge of bases in technical specifications for limiting conditions for operations and safety limits.	2.5	3.7
Small Break LOCA / 3	0	0	0	0	0	0	009EA2.02	Ability to determine and interpret the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.15/ 43.5 / 45.13)	K/A Randomly Rejected	3.5	3.8
Large Break LOCA / 3	0	0	0	0	0	0	011EA2.01	Ability to determine and interpret the following as they apply to (EMERGENCY PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	4.2	4.7
RCP Malfunctions / 4	0	0	0	0	1	0	015AA2.11	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	When to jog RCPs during ICC	3.4	3.8
Loss of Rx Coolant Makeup / 2	0	0	0	0	0	0	022AA2.03	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	WA Randomly Rejected	3.4	3.6
Loss of RHR System /	0	0	0	0	0	0	025AA2.03	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	WA Randomly Rejected	4.6	3.8
Loss of Component Cooling Water / 8	0	0	0	0	0	0	026AA2.05	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 /	K/A Randomly Rejected	2.4	2.5

SRO

Pier 1 Group 1

Name/Safety Function	K1	K2	K3	A1	A2	G	KA	Question Type	K/A Topic(s)	RO	SRO
								45.13)			
Pressurizer Pressure Control System Malfunction / 3	0	0	0	0	1	0	027AA2.02	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	Normal values for RCS pressure	3.8	3.9
ATWS / 1	0	0	0	0	0	0	029EG2.1.32	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.4	3.8
Steam Gen. Tube Rupture / 3	0	0	0	0	0	0	038EG2.4.6	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.1	4
Steam Line Rupture - Excessive Heat Transfer / 4	0	0	0	0	0	0	040AA2.04	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	4.5	4.7
Loss of Main Feedwater / 4	0	0	0	0	0	0	054AG2.4.30	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	2.2	3.6
Station Blackout / 6	0	0	0	0	0	0	055EG2.2.22	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.4	4.1
Loss of Off-site Power / 6	0	0	0	0	0	0	056AA2.40	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 / 45.13)	K/A Randomly Rejected	3.3	3.4
Loss of Vital AC Inst. Bus / 6	0	0	0	0	0	0	057AG2.2.22	This is a Generic, no stem statement is associated.	K/A Randomly Rejected	3.4	4.1
Loss of DC Power / 6	0	0	0	0	1	0	058AA2.01	Ability to determine and interpret the following as they apply to ABNORMAL PLANT EVOLUTION):(CFR: 41.10 / 43.5 /	That a loss of dc power has occurred; verification that substitute power sources have come on line	3.7	4.1

RO EXAM

Tier / Group	Randomly Selected K/A	Reason for Rejection
T1/G1	029EK3.04 (9)	ONS does not isolate the normal charging header when emergency borating for an ATWS. The new randomly selected KA is 029EK3.11.
T1/G2	032AA1.01 (21)	Selected new KA. At ONS operators do not select alternate power supplies for the Source Range Nuclear Instrumentation. This would be performed by I&E. On the new KA the question will be written concerning overlap with Wide-range NIs instead of Intermediate-range NIs. ONS no longer has Intermediate-range NIs. The new randomly selected KA is 032AA2.04.
T1/G2	068AK3.14 (23)	ONS does not have a Safety injection setpoint for main steam line pressure. The new randomly selected KA is 068AK3.12.
T1/G2	068AK3.12 (23)	Could not write a discriminating question on this KA. Sequence of actions contained in the Control Evacuation AP is not significant. The new randomly selected KA is 068AK3.12.
*TUG*1	008A4.09 (33)	Replace KA. ONS does not have a CCWS temperature control valve. The new randomly selected KA is 008A4.07
T2/G1	078K4.03 (48)	Could not write a discriminating question on this KA. The new randomly selected KA is 078K4.02.
T2/G1	026K4.06 (51)	ONS does not have Recirculation spray system. The new randomly selected KA is 026K4.86.
T2/G1	103K4.01 (52)	ONS does not have vacuum breakers associated with the containment. The new randomly selected KA is 103K4.86.
*TUG*1	064A3.04 (55)	ONS does not have Emergency Diesels and the K/A (number of starts available with an air compressor) does not translate well to our hydro units. The new randomly selected *KA* is 064A3.07.
T2/G2	028K2.01 (56)	ONS no longer has Hydrogen recombiners. The new randomly selected KA is 029K4.03.
T2/G2	055G2.2.22 (61)	ONS has no limiting conditions or safety limit associated with condenser air removal. The new randomly selected KA is 056G2.1.32.
T2/G2	027A2.01 (65)	ONS does not have an Iodine Removal System. The new randomly selected KA is 016K3.02.

T3	G2.1.24 (66)	Could not write a discriminating question on this **KA.** This KA **is** better evaluated on the operating exam. The new
T3	G2.2.23 (71)	SRQ only KA. The new randomly selected KA **is** G2.2.30.
T3	G2.4.26 (75)	**At** ONS Reactor Operators are not qualified to serve on the fire brigade. The new randomly selected KA is G2.4.29.