

2013 DRESDEN NUCLEAR POWER STATION

INITIAL LICENSE EXAMINATION

OUTLINE SUBMITTAL

Facility:		Date of Examination:		
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 or ES-401N.	dm	N/A	RKW
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 or ES-401N and whether all K/A categories are appropriately sampled.	dm	N/A	RKW
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	dm	N/A	RKW
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	dm	N/A	RKW
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.	dm	N/A	RKW
	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.	dm	N/A	RKW
	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.	dm	N/A	RKW
3. W A L K T H R O U G H	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.	dm	N/A	RKW
	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	dm	N/A	RKW
	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.	dm	N/A	RKW
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.	dm	N/A	RKW
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	dm	N/A	RKW
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	dm	N/A	RKW
	d. Check for duplication and overlap among exam sections.	dm	N/A	RKW
	e. Check the entire exam for balance of coverage.	dm	N/A	RKW
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	dm	N/A	RKW
a. Author	Dell R. McNeil / <i>Dell R. McNeil</i>		Date	02/07/2014
b. Facility Reviewer (*)	N/A			N/A
c. NRC Chief Examiner (#)	Raymond Kevin Walter / <i>Raymond Kevin Walter</i>			2/7/2014
d. NRC Supervisor	Timothy Peterson / <i>Timothy Peterson</i>			2/7/14
Note:	# Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. * Not applicable for NRC-prepared examination outlines.			

Original form misplaced, this copy recreated. RKWalter 2/7/14

Scenario Outline

Station: <u>Dresden Generating Station</u>	Scenario No.: <u>ILT-N-1</u>	Class ID: <u>2013-301</u>
Evaluators	Operators	/ crew position
_____	_____	/ ATC
_____	_____	/ BOP
_____	_____	/ CRS
Initial Conditions:	<u>~5% Power, steady state, and equilibrium xenon</u>	

Turnover:	<u>2C RFP OOS</u>	

Event No.	Malfunction No.	Event Type*		Event Description
1	NONE	N	BOP	Establish Primary Containment Inerting Lineup Per DOP 1600-05
2	NONE	R	ATC	Withdraw Rods To Open Turbine Bypass Valves
3	RODH08DO	C/T	ATC	Control Rod Drifts Out (TS)
4	NIA5POT	I/T	BOP	APRM Fails Upscale Without Half Scram (TS)
5	X10 / X13	C	ATC	RFP Vent Fan – Trips Due To Overcurrent
6	HPINIT	I/T	BOP	HPCI System Spurious Initiation (TS)
7	F41	M	TEAM	LOCA In DW – Manual Scram
8	H32	C	TEAM	Loss Of RFPs - Use HPCI To Restore Level

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor, (T)ech Spec

Scenario Outline

Station: <u>Dresden Generating Station</u>	Scenario No.: <u>ILT-N-2</u>	Class ID: <u>2013-301</u>
Evaluators	Operators	/ crew position
_____	_____	/ ATC
_____	_____	/ BOP
_____	_____	/ CRS
Initial Conditions:	<u>100% Power, steady state, and equilibrium xenon</u>	

Turnover:	<u>At beginning of shift, perform Core Spray Test</u>	
	<u>Drop power using control rods</u>	

Event No.	Malf. No.	Event Type*		Event Description
1	AT17	C/T	BOP	CORE SPRAY TEST per DOS 1400-05 with Min Flow Auto-close Failure (TS)
2	NONE	R	ATC	Lower Power Using Control Rods
3	RODD08ST	C	ATC	CRD – Control Rod Stuck & Requires Higher Pressure to Move
4	NONE	T	SRO	Torus Level PAM Instrument Not Qualified per IMD (TS)
5	Q31 / Q21	C	BOP	Service Water Pump Degradation
6	RLMRFPA(B)(C)	I	ATC	FW- Recirc Runback Due to Loss of FW Signal
7	RXMLGOSC / A55	M	ALL	Manual Scram REQUIRED – Due to Reactor Core Instabilities
8	RDHLVFPA(B) / RDHLDEGA(B)	M/C	ALL	Failure to Scram (SBLC successful)

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor, (T)ech Spec

Scenario Outline

Station: <u>Dresden Generating Station</u>	Scenario No.: <u>ILT-N-3</u>	Class ID: <u>2013-301</u>
Evaluators	Operators	/ crew position
_____	_____	/ ATC
_____	_____	/ BOP
_____	_____	/ CRS
Initial Conditions:	<u>88% Power, steady state, and equilibrium xenon</u>	

Turnover:	<u>Scheduled load drop at beginning of shift</u>	
	<u>Surveillance DOS 0500-01 Manual Scram Circuit Sensor Test due</u>	

Event No.	Malf. No.	Event Type*		Event Description
1	NONE	R	ATC	Lower Power with Recirc
2	MGDDBATR	C	BOP	Generator Bus Duct Blower Trip
3	NONE	N	ATC	Perform Manual Scram Circuit Sensor Test on RPS Channel B
4	ICTUBLK	I/T	BOP	Isolation Condenser Tube Leak (TS)
5	B02	C/T	ATC	RPS – MG Set Trips / Re-energize from Reserve Power (TS)
6	B02	I	ATC	Recirc MG Set Vent Fan Failure
7	T50 / T52	M	ALL	Loss of Stator Cooling / Manual Scram
8	AT5 NVM100BP NVML29AP NVML29BP NVML112P	M	ALL	FLOODING - Loss of RPV Level Indication Due to Loss of Inst Power and Transmitter Failures

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor, (T)ech Spec