L-2011-535

Victor McCree
Regional Administrator, Region II
Attn: Bruno Caballero
U. S. Nuclear Regulatory Commission
Marquis One Tower
245 Peachtree Center Ave., NE Suite 1200
Atlanta, GA 30303-1257

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
FPL Comments for the 2011 Written NRC License Examination

The provisions of NUREG-1021, Operator Licensing Examiner Standards, Examiner Standards ES-402, Administering Initial Written Examinations, allow the opportunity for submittal of comments on the written portion of the License Examination to the NRC. This letter documents that Florida Power and Light (FPL) Company has no challenges related to the site-specific written examination administered at Turkey Point on December 14, 2011.

FPL has two comments regarding the 2011 NRC License Examination Answer Key. First, Question 61 used indicated S/G level. The initial effects of S/G level response to a MSIV closure on the Simulator are opposite for narrow and wide range S/G levels. The answer key was updated to accept both "A" (WR) and "D" (NR). Also, Question 80 response was incorrectly marked during review. The correct response to Question 80 is "A", instead of the presently marked response "C". This also has been update. The corrected Answer Key is attached.

Should there be any questions, please contact Mark Wilson at (305) 246-6900.

Sincerely,

Michael Kiley
Vice President
Turkey Point Nuclear Plant

Attachment

SM
cc: Chief, Operations Branch, Division of Reactor Safety, Region II, USNRC
Chief Examiner, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant
Document Control Desk, USNRC, Washington, D.C.

NRC LICENSE EXAM COMMENT SHEET

2011-302 TURKEY POINT INITIAL LICENSE OPERATOR EXAM – Proposed Changes

Test Item (Question #/ Scenario/JPM)	Issue	Recommendation	Reference	Comments
Question # 61	This question did not specify whether indicated S/G Level was Narrow or Wide Range S/G Level.	Recommend accepting two answers (A and D). A – based on Wide Range S/G Level. D – based on Narrow Range S/G Level.	Plant Simulator	The initial 3A S/G Narrow and Wide Range Level response was plotted after 3A S/G MSIV was closed.
Question # 80	The stem of the question asked for the required transition based on Subcooling < 50°F. The answer key is marked with loss of Pressurizer Pressure Control.	Recommend changing the answer key to match the stem and only accept distractor A.	3-EOP-E-3	The procedural flowpath at Step 21 where RCS Subcooling is checked has the RNO transiton to 3-EOP-ECA-3.1.

Reviewed by: 12/16/11 Robert Heedinkes 12/20/11 Facility Author/Date

Approved by: 12/20/11 Facility Representative/Date

61.

Given the following conditions:

- Unit 4 is at 25% power with all systems in normal alignments.
- 4A Main Steam Isolation Valve closes on a spurious signal.

Assuming the reactor does NOT trip, which ONE of the following describes the INITIAL effect (1) on 4A S/G indicated Level and (2) on the S/G Feedwater Regulating Valve (FRV) response for 4B and 4C S/Gs?

	4A S/G Indicated Level	**4B/4C** FRV position
A.	higher	open more
B.	higher	closed more
C.	lower	closed more
D.	lower	open more

Indicated does not differentiate between NR and WR S/G levels. Both A and D are correct

FOXBOROEMU - SGA

File ScratchPads Disp Help

System Process

Dec 15, 2011 10:43 AM

PRIMARY
SECONDARY
POWER
ESF
SUPPORT SYS
SPDS
EMERG RESP
SOE GROUPS
UTILITIES
FOXSELECT
ALARMS
CHANGE ENV
PRINT
PREVIOUS

PTN UNIT 3

STEAM GENERATOR A

RELATED DISPLAYS

Narrow Range Level initially drops

NARROW RANGE LEVEL

100% 50% 0%

15 10 5 0

LAST 15 MINUTES

	40.0	%
LT474	40.1	%
LT475	39.7	%
	40.3	%

FEEDWATER SYSTEM

FW FLOW

AVG FW FLOW	2707	GPM
DIFF PRESS	26.1	INH2O
AVG FW FLOW	1170112	LB/HR

S/G A

WIDE RANGE LEVEL

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%

15 10 5 0

LAST 15 MINUTES

WR LT477 61.9 %

Wide Range Level initially rises

S/G STEAM FLOW

FT474	0	LB/HR
FT475	0	LB/HR
AVG FLOW	0	LB/HR

CV-3-1606

ATMOSPHERE

PCV-3-2604

STEAM HEADER

MOV-3-1400

S/G STEAM PRESSURE

PT474	1010	PSIG
PT475	1010	PSIG
PT476	1010	PSIG
AVG PRESS	1010	PSIG

ATMOSPHERE

CV-3-6267A

CV-3-6267B

#4 FEEDWATER HEATERS

PCV-3-6263

TOTAL BLWDWN FLOW 98347 LB/HR

BLDN TANK 316

LT6265 - BLWDWN LEVEL 75.0 %

FT6277A - BLWDWN FLOW 33895 LB/HR

CV-3-6275A

LCV-3-6265B

DISCHARGE CANAL

c:\f-3 mapps dcs\erdads hmi\foxboro hmi\exe\oneline\sga.one Supervisor hist01

80.

Given the following:

- Unit 4 experienced a Steam Generator Tube Rupture (SGTR) from 100% power.
- Containment temperature on TE-4-6700, TE-4-6701, and TE-4-6702 is 135°F and rising.
- The operating crew is implementing 4-EOP-E-3, Steam Generator Tube Rupture.
- The crew stopped the RCS cooldown and verified the ruptured S/G pressure is increasing slowly.
- QSPDS CET Subcooling is 70°F.
- Instrument Air to Containment has been lost, and CANNOT be established.

Which ONE of the choices below completes the following statements?

In order to remain in 4-EOP-E-3, Steam Generator Tube Rupture, RCS subcooling is required to be greater than ___(1)___.

If below the required RCS Subcooling for 4-EOP-E-3, then transition to ___(2)___.

A. (1) 50°F
(2) 4-EOP-ECA-3.1, SGTR with Loss of Reactor Coolant, Subcooled Recovery Desired

Only A is correct

B. (1) 100°F
(2) 4-EOP-ECA-3.1, SGTR with Loss of Reactor Coolant, Subcooled Recovery Desired

C. (1) 50°F
(2) 4-EOP-ECA-3.3, SGTR without Pressurizer Pressure Control

D. (1) 100°F
(2) 4-EOP-ECA-3.3, SGTR without Pressurizer Pressure Control

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
18	**Establish Charging Flow**	
	a. Charging pumps - AT LEAST ONE RUNNING	a. Perform the following: 1) **IF** CCW flow to RCP thermal barrier is lost, **THEN** go to Step 19. 2) Go to Step 18b.
	b. Check offsite power available	b. **IF** offsite power is **NOT** available, **THEN** check if diesel capacity is adequate to run one charging pump. 1) **IF** adequate diesel capacity is **NOT** available, **THEN** shed nonessential loads. Refer to ATTACHMENT 3 for component KW load rating.
	c. Start one charging pump.	
	d. Place RCS Makeup Control Switch in STOP	
	e. Adjust speed controller as necessary to establish maximum charging flow from the running charging pump(s)	
	f. Adjust Charging Flow to Regen Heat Exchanger, HCV-4-121, to maintain proper seal injection flow	
	g. Verify charging pump suction auto transfers to RWST	
19	**Check If RCS Cooldown Should Be Stopped**	
	a. Check core exit TCs - LESS THAN REQUIRED TEMPERATURE FROM STEP 11	a. **WHEN** core exit TCs are less than required temperature from Step 11, **THEN** go to Step 19b.
	b. Stop RCS cooldown	
	c. Maintain core exit TCs – LESS THAN REQUIRED TEMPERATURE FROM STEP 11	
20	**Check Ruptured S/G(s) Pressure – STABLE OR INCREASING**	**IF** pressure continues to decrease to less than 250 psig above the pressure of the intact SG(s) used for cooldown, **THEN** go to 4-EOP-ECA-3.1, SGTR WITH LOSS OF REACTOR COOLANT-SUBCOOLED RECOVERY DESIRED, Step 1.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
21	Part 2 - If below the required RCS Subcooling **Check RCS Subcooling Based On Core Exit TCs - GREATER THAN 50°F[230°F]**	Go to 4-EOP-ECA-3.1, SGTR WITH LOSS OF REACTOR COOLANT-SUBCOOLED RECOVERY DESIRED, Step 1.
22	**Depressurize RCS To Minimize Break Flow And Refill PRZ**	
	a. Normal PRZ spray – AVAILABLE	a. Observe CAUTIONS and NOTE prior to Step 23 **AND** go to Step 23.
	b. Spray PRZ with maximum available spray until any of the following conditions satisfied – Use ATTACHMENT 6 as reference * Both of the following 1) RCS pressure - LESS THAN RUPTURED S/G(s) PRESSURE 2) PRZ level - GREATER THAN 17%[50%] **OR** * PRZ level - GREATER THAN 71%[50%] **OR** * RCS subcooling based on core exit TCs - LESS THAN 30°F[210°F]	
	c. Stop depressurization by closing spray valve(s): * Close normal spray valves **OR** * Close Auxiliary Spray Valve, CV-4-311	* Stop RCP(s) as necessary to stop spray flow. * Perform the following: a) Reduce charging pump speed to minimum. b) Close Charging Flow To Regen Heat Exchanger, HCV-4-121. c) Adjust charging pump speed to maintain seal injection flow.
	d. Observe CAUTION prior to Step 25 **AND** go to Step 25	

Part 2 - Plausibility -No air with 70°F Subcooling

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED

CAUTIONS

- ***If a PRZ PORV is used to depressurize the RCS, the PRT rupture disk may rupture. This may result in abnormal containment conditions.***
- ***Cycling of the PRZ PORV shall be minimized.***

NOTE

If RCPs are NOT running, the upper head region may void during RCS depressurization. This will result in a rapidly increasing PRZ level.

23 **Depressurize RCS Using PRZ PORV To Minimize Break Flow And Refill PRZ**

a. PRZ PORV - AT LEAST ONE AVAILABLE

a. Establish auxiliary spray using ATTACHMENT 4 and return to Step 22b.

1) **IF** auxiliary spray can **NOT** be established, **THEN** go to 4-EOP-ECA-3.3, SGTR WITHOUT PRESSURIZER PRESSURE CONTROL, Step 1.

b. Open one PRZ PORV until any of the following conditions satisfied – Use ATTACHMENT 6 as reference

* Both of the following

  1) RCS pressure - LESS THAN RUPTURED S/G(s) PRESSURE

  2) PRZ level - GREATER THAN 17%[50%]

OR

* PRZ level - GREATER THAN 71%[50%]

OR

* RCS subcooling based on core exit TCs - LESS THAN 30°F[210°F]

c. Stop depressurization by closing PRZ PORV

c. Close PORV block valve.

ATTACHMENT TO L-2011-535

Turkey Point
Questions 1-75 RO
Questions 76-100 SRO only

Examination Answer Key December 14, 2011

1	D	26	B	51	D	76	B
2	A	27	A	52	A	77	A
3	B	28	B	53	B	78	A
4	D	29	B	54	A	79	C
5	A	30	D	55	B	80	A
6	A	31	D	56	C	81	B
7	B	32	B	57	C	82	A
8	C	33	C	58	C	83	A
9	C	34	C	59	B	84	B
10	C	35	B	60	A	85	B
11	A	36	C	61	A/D	86	D
12	D	37	A	62	C	87	A
13	D	38	B	63	A	88	D
14	D	39	C	64	D	89	D
15	C	40	B	65	C	90	D
16	C	41	B	66	A	91	C
17	B	42	C	67	C	92	A
18	B	43	A	68	C	93	D
19	C	44	C	69	C	94	B
20	A	45	C	70	D	95	C
21	B	46	D	71	C	96	D
22	D	47	D	72	D	97	B
23	D	48	D	73	A	98	C
24	C	49	D	74	D	99	D
25	C	50	A	75	D	100	C