



March 22, 2013
L-2013-104

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

Attention: Gerard Laska, Examiner

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
FPL Comments for the 2013 Written NRC License Examination

In accordance with provisions of NUREG-1021, Operator Licensing Examiner Standards, Examiner Standards ES-402, Administering Initial Written Examinations, Section E, Post-Examination Reviews, Paragraph 4, Florida Power & Light Company (FPL) has collected and considered comments from the applicants' regarding the written portion of the License Examination administered at Turkey Point on March 15, 2013.

FPL has three comments for your review based on the applicants' feedback. Attachments 1 and 2 provide the challenged questions, the answers, and references. Each question states the comment and provides FPL's recommendation. The enclosure provides supporting information.

Should there be any questions, please contact Mark Similey at (305) 246-6691.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael Kiley', is written over a light blue horizontal line.

Michael Kiley
Vice President
Turkey Point Nuclear Plant

Attachments and Enclosure

cc: Chief, Operations Branch, Division of Reactor Safety, Region II, USNRC (w/o enclosure)
Chief Examiner, Region II, USNRC (w/o enclosure)
Senior Resident Inspector, USNRC, Turkey Point Plant (w/o enclosure)
Document Control Desk, USNRC, Washington, D.C. (w/o enclosure)

ATTACHMENT 1 TO L-2013-104

Executive Summary of Challenged Questions and FPL Recommendation

Question 8: This question requires the operator to determine the most effective method of reducing RCS pressure in mode 3 with the 3C RCP running. 3-NOP-041.02, Pressurizer Operation, does not allow the use of Auxiliary Spray with any RCPs running. FPL recommends accepting distracter B ONLY as the only correct answer.

Question 34: This question requires the candidate to identify the maximum allowable ICW flow rate to each CCW HX under normal conditions and to state the reason why. Distracters B and D properly identify the need to minimize long-term tube side erosion in the CCW HXs. Two maximum flow rates are specified in 3-NOP-019, Intake Cooling Water System, dependent on plant configuration, both of which are considered normal alignments. During operations with no other evolutions in progress for ICW, the maximum allowable flow rate is 10,000 gpm as specified by distracter B. The maximum allowable flow rate during basket strainer back flush is 12,850 gpm as specified by distracter D. Approved plant documentation identifies both of these system alignments as normal. Therefore distracter D is also correct as it describes the maximum allowable flow rate as 12,850 gpm. FPL recommends accepting both answers B and D as correct.

Question 62: This question requires the candidate to verify RIL TS Limits and determine the required action for boration based on an event causing a Turbine Runback. The question did not provide distracters for required actions from 3-ONOP-089, Turbine Runback. Since the ONOP takes precedence over other ARP actions per 0-ADM-211, Emergency and Off-Normal Operating Procedure Usage, the operator would use the procedural guidance within 3-ONOP-089 to borate in 50 gallon increments, withdraw control rods, and clear the TS RIL issue. FPL recommends deleting question 62 from the exam.

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Exam Questions, Answers and References

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QUESTION 8

Plant Conditions:

- Unit 3 is in Mode 3.
- Tavg at its no-load value.
- **Reactor Coolant Pump 3C is operating with 3A and 3B are secured.**

Which ONE of the following would be most effective at lowering PZR pressure?

- A. Spray Valve PCV-3-455A Open
Spray Valve PCV-3-455B Open
- B. Spray Valve PCV-3-455A Open
Spray Valve PCV-3-455B Closed**
- C. Spray Valve PCV-3-455A Closed
Spray Valve PCV-3-455B Open
- D. Spray Valve PCV-3-455A Closed
Spray Valve PCV-3-455B Closed
Auxiliary Spray CV-3-311 Open

B is only correct Answer.

D is not allowed by procedure.

REVISION NO: 2	PROCEDURE TITLE: PRESSURIZER OPERATION TURKEY POINT UNIT 3	PAGE: 34 of 87
PROCEDURE NO: 3-NOP-041.02		
5.0 INFREQUENT OPERATIONS		
5.1 <u>Pressurizer Auxiliary Spray Operations</u>		
1. CHECK CVCS normal Charging and Letdown in service.		
2. CHECK NO RCPs running.		
3. CHECK a Pressurizer steam bubble exists.		

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Question # 8 provides the operator with a scenario with RCP 3C in service, and asks which set of conditions would be the most effective at lowering PZR pressure.

Distracter A is incorrect, as opening PCV-3-455B, thereby short-cycling spray, thus making spray flow from PCV-3-455A ineffective.

Distracter B will provide effective spray as PCV-3-455A is open delivering full available spray flow, without short-cycling spray through PCV-3-455B.

Distracter C is incorrect, as the open spray valve is from the secured RCP, there will be no spray.

Distracter D would provide effective spray, however it is not allowed by plant procedures.

Recommend accept B as the only correct answer.

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QUESTION 34

Plant conditions:

- Unit 3 is operating at 100% power.
- Three CCW Heat Exchangers are in service.

In accordance with 3-NOP-019, Intake Cooling Water System, under normal conditions which ONE of the following identifies the maximum allowable ICW flowrate to each CCW Heat Exchanger, AND the reason for this limit?

- A. 10,000 gpm;
Prevent runoff of the ICW pump.
- B. 10,000 gpm;
Minimize long-term tube-side erosion.
- C. 12,850 gpm;
Prevent runoff of the ICW pump.
- D. 12,850 gpm;
Minimize long-term tube-side erosion.

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Question # 34 requires the candidate to identify the maximum allowable ICW flow rate to each CCW HX under **normal conditions** and why. Distracters B and D properly identify the need to minimize long-term tube side erosion. The second determination is the **maximum** flow rate.

There are two maximum flow rates, 10,000 gpm and 12,850 gpm.

As both distracters are correct values in accordance with 3-NOP-019, the student must discern which "normal" to use.

Either the "normal operation" within the context of 3-NOP-019 step 2.2.4.2:

2.2.4 CCW Heat Exchangers

1. ICW outlet temperature from CCW HXs should **NOT** exceed 120°F.
2. Maximum ICW flowrate to each CCW HX during normal operation should **NOT** exceed 10,000 gpm in order to minimize long term tube side erosion of the CCW HXs. The ICW flowrate for each CCW HX may be increased to 12,850 gpm for up to 72 hours period to accommodate HX or Basket Strainer cleanings.

-OR-

"Normal Operations" as defined by the Turkey Point Plant Radiological Emergency Plan:

Normal Plant Operations - Activities at the plant site associated with routine testing, maintenance, or equipment operations, in accordance with normal operating or administrative procedures. Entry into abnormal or emergency operating procedures, or deviation from normal security or radiological controls posture, is a departure from NORMAL PLANT OPERATIONS.

If a competent operator understands that the plant routinely backwashes basket strainers on a near-weekly basis, he should identify this as a normal evolution, and that under these conditions, the plant is allowed to raise ICW flow rate to the maximum flow rate to 12850 gpm.

Recommend accept B and D as correct answers.

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QUESTION 62

Plant conditions:

- Unit 3 is at 100% power, all systems in normal alignments.
- A turbine runback occurs.
- The unit is stabilized at 82% power.
- Annunciator B 8/2, ROD BANK A/B/C/D EXTRA LO LIMIT is in alarm.
- Control Bank D indicates 130 steps.

Which ONE of the following correctly completes the statement below?

The technical specification LCO for Rod Insertion Limits ____ (1) ____ exceeded. The operator must immediately stop driving rods and ____ (2) ____.

- A. (1) is
(2) commence emergency boration IAW 3-ONOP-46.1, Emergency Boration.
- B. (1) is
(2) borate \geq 16 gpm IAW 0-OP-046, CVCS - Boron Concentration Control.
- C. (1) is NOT
(2) borate in 50 gallon increments IAW 0-OP-046, CVCS - Boron Concentration Control.
- D. (1) is NOT
(2) borate \geq 16 gpm IAW 3-OP-46, CVCS - Boron Concentration Control.

There are no correct Answers

REVISION NO.	PROCEDURE TITLE	PAGE
1	TURBINE RUNBACK	13 of 19
3-ONOP-026	TURKEY POINT UNIT 3	
STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
3.2 Subsequent Actions (continued)		
<p>16. MONITOR Annunciator B 8/2 ROD BANK A/B/C/D EXTRA LO LIMIT - CLEAR</p>	<p>PERFORM the following as necessary after the runback:</p> <p>A. WHEN turbine runback is complete, THEN PLACE control rods in Manual.</p> <p>B. SET boric acid totalizer to 60 gallons.</p> <p>C. DETERMINE boric acid flow rate as determined by the Unit Supervisor.</p> <p>D. PLACE the Reactor Makeup Selector Switch to BORATE.</p> <p>E. PLACE the RCS Makeup control Switch to START.</p> <p>F. ADJUST the setpoint on the Boric Acid Controller FC-3-113A to the desired flow rate as indicated on FR-3-113.</p> <p>G. WITHDRAW Control Rods to establish T_{avg}/T_{set} ΔT up to +3°F T_{avg} GREATER THAN T_{set} until Annunciator B 8/2 is CLEAR.</p> <p>H. REPEAT Section 3.2 Step 10 RNO steps until Annunciator B 8/2 is CLEAR.</p>	

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Question 62 gives the event of a runback followed by Annunciator B 8/2 in alarm. Bank D rods past the Rod Insertion Limit would happen as a result of the runback. 3-ONOP-089, Turbine Runback, has Immediate Operator Actions and would be entered directly. During the subsequent actions, the RIL condition would be addressed in step 3.3.10. Per the rules of use specified in 0-ADM-211, the ARP actions would not be used since the operator is already in the correct procedure to address the RIL condition caused by the runback.