Entergy Nuclear South
Entergy Operations, Inc.
17265 River Road
Killona, LA 70057-3093
Tel 504-739-6715
Fax 504-739-6698
rmurill@entergy.com

Robert J. Murillo
Licensing Manager
Waterford 3

W3F1-2007-0056

November 12, 2007

Mr. Elmo E. Collins, Jr.
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Subject: Operator Initial License Examination Post Examination Materials
Waterford Steam Electric Station, Unit 3 (Waterford 3)
Docket No. 50-382
License No. NPF-38

Dear Mr. Collins:

In accordance with guidance provided in NUREG-1021, ES-501, "Initial Post-Examination Activities," Entergy hereby submits Waterford 3 November 8, 2007 NRC initial license examination post examination materials. The enclosed materials include the following:

- Applicant examination cover sheets and graded answer sheets.
- Clean copies of the applicants answer sheets.
- Written examination and key.
- Questions asked by the applicants and the responses during the examination.
- Written examination seating chart.
- ES-403-1 written examination grading quality checklist.
- Written examination performance analysis, and
- Original Form(s) ES-201-3, "Examination Security Agreement," with a pre- and post-examination signature by every individual who had detailed knowledge of any part of the examination before it was administered.

There are no post examination comments.

There are no new commitments contained in this submittal.

If you have any questions concerning the above, please contact Horace J. Lewis at (504) 739-6199.

Sincerely,

RJM/OPP/ssf

Enclosures

(w/o Enclosures)

cc: U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

NRC Senior Resident Inspector
Waterford Steam Electric Station Unit 3
P.O. Box 822
Killona, LA 70066-0751

U. S. Nuclear Regulatory Commission
Attn: Mr. N. Kalyanam
Mail Stop O-07D1
Washington, DC 20555-0001

Wise, Carter, Child & Caraway
ATTN: J. Smith
P.O. Box 651
Jackson, MS 39205

Winston & Strawn
ATTN: N.S. Reynolds
1700 K Street, NW
Washington, DC 20006-3817

Morgan, Lewis & Bockius LLP
ATTN: T.C. Poindexter
1111 Pennsylvania Avenue, NW
Washington, DC 20004

Enclosures to

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Waterford 3 2007 RO Retake exam analysis for high missed questions

Exam analysis results:
Five Questions were missed by greater than 50 percent of the applicants.

An exam review was conducted with all applicants, all incorrect answers were discussed, reasons for incorrect answers were addressed and resolved for each question.

All questions were reviewed and found to be valid as written.

No deficiencies in the training program were identified.

Question 011

Given the following:

- A manual reactor trip was initiated using the pushbuttons on CP-8 ONLY.
- Reactor Trip Breakers open as required, resulting in a reactor trip.

Which ONE (1) of the following describes the indication for the reactor trip system 30 seconds after the event?

A. K1 – K4 lights illuminated.

B. K1 – K4 lights extinguished.

C. K1 and K4 lights illuminated; K2 and K3 lights extinguished.

D. K1 and K4 lights extinguished; K2 and K3 lights illuminated.

Answer B

Analysis:
One applicant missed this due to a knowledge weakness the other interpreted A and B distractors K1 - K4 to mean only K1 and K4 not K1 through K4.

This question was reviewed with all applicants; reasons for incorrect answers were addressed and resolved for this question.

The question was determined to valid as is.

Editorial suggestion:
Make distractors A and B to read “K1 through K4” or “K1, K2, K3, K4”

Question 015

Given the following:

- The plant was at 100% power.
- Containment Fan Coolers A, B, & D were operating.
- Containment Fan Cooler C was in Standby.
- Due to an RCS leak, the reactor was manually tripped and SI was manually actuated.

Which ONE (1) of the following describes the response of the Containment Fan Coolers during the event?

Containment Fan Coolers A, B, & D…

A. Immediately stop when SIAS is actuated. They will restart in slow speed 7 seconds after the SIAS. Containment Fan Cooler C starts in slow speed 7 seconds after the SIAS.

B. Immediately shift to slow speed when SIAS is initiated. Containment Fan Cooler C starts in slow speed immediately upon the SIAS actuation.

C. Stop 7 seconds after the SIAS actuation, then immediately restart in slow speed. Containment Fan Cooler C starts in slow speed 7 seconds after the SIAS actuation.

D. Continue to run in fast speed on SIAS. Shift to slow speed 7 seconds after the SIAS actuation. Containment Fan Cooler C starts in slow speed 7 seconds after the SIAS actuation.

Answer A

Analysis:
One applicant chose distractor B stating he did not remember fan started on sequencer. One applicant chose distractor D stating he did not remember fan has two sets of contacts one for fast speed and one for slow speed.

This question was reviewed with all applicants; reasons for incorrect answers were addressed, and resolved for this question.

Question was determined to be valid as written.

Question 023

Given the following conditions:

- Emergency Diesel Generator ‘B’ is operating at 4.4 kW for OP-903-068 surveillance testing.
- The following alarm is received:
  - EDG B FUEL OIL XFER PUMP PWR LOST
- Fuel Oil Feed Tank “B” indicates 100 percent on CP-1
- The RAB watch reports that the breaker for Fuel Oil Transfer Pump ‘B’ breaker is tripped, and the motor is too hot to touch.

Based on these conditions, what is the MAXIMUM time Emergency Diesel Generator ‘B’ can continue to operate with no additional actions?

A. 1 hour

B. 2 hours

C. 1 day

D. 7 days

Analysis:
Both Applicants chose distractor C stating that in the past the tank was referred to as “Day Tank”

This nomenclature currently describes “Feed tank” not day tank and has for some time; course material lists multiple references to Feed tank capacity being designed for 2 hour supply. Tech spec basis states minimum level (approx ½ tank) for operability based on 1 hour operation at rated consumption.

This question was reviewed with all applicants; reasons for incorrect answers were addressed, and resolved for this question.

Question determined to valid as written.

Question 048

Given the following:

- A Steam Generator Tube Rupture on #1 SG is in progress.
- When the reactor was manually tripped, off-site power was lost.
- The crew has performed all Standard Post Trip Actions as required.
- Condenser Vacuum is currently 2.6 INHG.

Which ONE (1) of the following describes additional actions that will be taken for the SGTR in accordance with OP-902-007, Steam Generator Tube Rupture Recovery?

A. Cooldown the RCS using SBCS to <520 degrees F; isolate SG #1 and maintain isolated. Do not allow any steam release from #1 SG.

B. Cooldown the RCS using SBCS to <520 degrees F; once SG #1 is isolated, maintain at less than 1000 psia by operation of the Atmospheric dump valve, if necessary.

C. Cooldown the RCS using the Atmospheric Dump Valves to <520 degrees F; isolate SG #1 and maintain isolated. Do not allow any steam release from #1 SG.

D. Cooldown the RCS using the Atmospheric Dump Valves to <520 degrees F; once SG #1 is isolated, maintain at less than 1000 psia by operation of the Atmospheric dump valve, if necessary.

Answer D

Analysis:
Both Applicants chose Distractor C stating they felt any release from affected SG was prohibited.

Procedure directs to maintain affected SG pressure below 1000# to prevent opening of SG safeties thereby reducing possibility of uncontrolled release in the event that the safety were to lift and fail to reseat.

This question was reviewed with all applicants; reasons for incorrect answers were addressed, and resolved for this question.

The question was determined to be valid as written.

Question 057

Given the following:

- Reactor power is 100%.
- ASI control is in progress.
- The PNPO inserts Reg Group 6.
- When the PNPO releases the SHIM Switch, CEA 23 continues to insert into the core.
- The PNPO takes the appropriate action and CEA 23 insertion stops.
- Final position of CEA 23 is 116.5".
- All other CEAs in Reg Group 6 are at 125.25".
- Reg Group 6 is placed on the HOLD Bus to troubleshoot the cause of the malfunction.

Which ONE (1) of the following actions is correct?

A. Declare Reg Group 6 inoperable. CEA 23 remains operable.

B. Declare CEA 23 inoperable. Reg Group 6 remains operable.

C. Declare Reg Group 6 AND CEA 23 inoperable.

D. CEA 23 AND Reg Group 6 remain operable unless Shutdown Margin CANNOT be verified within 1 hour.

Answer B

Analysis:
One applicant chose distractor C, thinking the entire group was inoperable while on hold bus. The other applicant chose distractor D stating he may have misread distractor.

Tech Spec 3.1.3.1 LCO action C is a one hour Tech Spec. CEAs are still trippable while on the hold bus and are therefore operable.

This question was reviewed with all applicants; reasons for incorrect answers were addressed, and resolved for this question.

The question was determined to be valid as written.