



Omaha Public Power District
444 South 16th Street Mall
Omaha, Nebraska 68102-2247

November 4, 1999
LIC-99-0104

Mr. John L. Pellet
Chief, Operator Licensing Section
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76001

Reference: Docket No. 50-285

Dear Mr. Pellet:

Subject: Technical Review of the Reactor Operator (RO) and Senior Reactor Operator (SRO) Licensing Examinations

The Omaha Public Power District (OPPD) has reviewed the RO and SRO Licensing Examinations that were administered by the NRC at Fort Calhoun Station during October 22 to 29, 1999. In accordance with the requirements of NUREG 1021 (Operator Licensing Examination Standards for Power Reactors), OPPD's comments are provided in Attachments 1 and 2. A draft of these comments was provided to the NRC Lead Examiner on October 29, 1999. Additional training was provided on questions missed by 50% or more of the license candidates. No programmatic deficiencies were identified in reviewing these questions. As requested by the NRC Lead Examiner, Attachment 3 contains a completed Form ES-403-1 (Written Examination Grading Quality Checklist).

If you should have any questions, please contact me.

Sincerely,

S. K. Gambhir
Division Manager
Nuclear Operations

SKG/mle

Attachments

C: E. W. Mershoff, NRC Regional Administrator, Region IV
L. R. Wharton, NRC Senior Project Manager (w/o Enclosures)
W. C. Walker, NRC Senior Resident Inspector (w/o Enclosures)
Document Control Desk (w/o Enclosures)
Winston & Strawn (w/o Enclosures)

Mr. J. L. Pellet
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Attachment 1

Fort Calhoun – RO Written Exam

**ATTACHMENT 1
FORT CALHOUN – RO WRITTEN EXAM**

Typographical Errors:

Question Number	Original Answer Key	Recommended Correction	Justification Brief	Reference
70	D	C vice D	Typographical error. Error was corrected on SRO exam but not on RO exam at time of validation.	SRO Exam Question #71

Recommended Modifications to Answer Key:

Question Number	Original Answer Key	Recommended Correction	Justification Brief	Reference
11	C	B vice C	In accordance with OI-RM-1, B is the most correct response.	OI-RM-1 (attached)
30	B	Accept A or B	Due to the "and/or" logic used in the responses, A has to also be correct because it is a subset of B.	N/A
46	B	Delete Question	C and D are also correct responses.	Lesson Plan 07-12-29 (attached)
79	C	Accept B or C	Based on the question body, T.S. 2.21, Table 2.10 allows both B and C responses.	T.S. 2.21 (attached)
91	C	Accept B or C	Students were not provided Attachment 2. This was needed to distinguish between the responses.	EOP/AOP Attachment 2 (attached)

ATTACHMENT 1
FORT CALHOUN – RO WRITTEN EXAM

Detailed Comments:

RO QUESTION – 11

In accordance with OI-RM-1, Attachment 12 step 2.b., when the E.C.S. pushbutton is depressed the Operator is directed to verify the rate meter reads 10^3 R/h for two seconds.

OPPD recommends the answer key be changed to reflect "B" as the correct response vice "C."

RO QUESTION – 30

OPPD recommends the answer key be changed to reflect both "A" and "B" as correct responses.

The use of "and/or" logic in response "B," results in a situation exists where "A" and "B" are equivalent responses.

RO QUESTION – 46

OPPD recommends the question be deleted.

Responses B, C and D are all correct. In accordance with ES-403, the question should be deleted.

RO QUESTION – 70

OPPD recommends answer key be changed to reflect "C" as the correct response.

"C" was identified as being the correct response during the exam validation, conducted during the week of 27 September. The correction was made to the SRO exam but not the RO exam.

**ATTACHMENT 1
FORT CALHOUN – RO WRITTEN EXAM**

Detailed Comments:

RO QUESTION – 79

OPPD recommends the answer key be changed to reflect “B” or “C” as correct responses.

Technical Specification 2.21, Table 2-10, item 8 and note (i), identify separate situations where 2 incore thermocouples (minimum operable channels) and 4 incore thermocouples (NUREG 0737 requirement) are both required. Since the body of the question does not define the term “required” as it pertains to operability, both “B” and “C” are equally correct.

RO QUESTION – 91

OPPD recommends the answer key be changed to reflect “B” or “C” as correct responses.

The students were not provided EOP Attachment 2 (RCS Pressure – Temperature Limits) to determine if RCP NPSH existed. With the given information and the steam tables, the student can determine there is approximately 34 degrees F subcooling and assume NPSH existed. Without Attachment 2 there was no way to verify otherwise. Assuming this, response “B” gives the student additional information that adequate steam space exists in the pressurizer to start the first RCP by having an actual PZR level of <42.5% and consequently <50% actual level.

Mr. J. L. Pellet
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Attachment 2
Fort Calhoun – SRO Written Exam

**ATTACHMENT 2
FORT CALHOUN – SRO WRITTEN EXAM**

Typographical Errors:

Question Number	Original Answer Key	Recommended Correction	Justification Brief	Reference
34	A	C vice A	Typographical error. Corrected during exam validation, but not reflected on key.	LP 7-11-01 (attached)

Recommended Modifications to Answer Key:

Question Number	Original Answer Key	Recommended Correction	Justification Brief	Reference
44	D	B vice D	SO-G-28, Sections 4.1 and 4.3 indicate that response B is correct.	SO-G-28 (attached)
79	C	Accept B or C	Based on the question body, T.S. 2.21, Table 2.10 allows both B and C responses.	T.S. 2.21 (attached)
85	B	Delete Question	No correct answer exists among available responses.	OI-WDE-3 (attached)

ATTACHMENT 2
FORT CALHOUN – SRO WRITTEN EXAM

Detailed Comments:

SRO QUESTION – 34

OPPD considers the error with number 34 a typographical error. The question was corrected during exam validation of 27 September, but not reflected on key.

SRO QUESTION – 44

OPPD recommends the answer key be changed to reflect “B” as the correct response vice “D.”

SO-G-28 directs the LO* to don bunker gear as appropriate, for the situation. The LO* is not specifically required to don respiratory gear. Radiation Protection Personnel, however, are directed to don a full set of bunker gear and a Self Contained Breathing Apparatus.

SRO QUESTION – 79

OPPD recommends the answer key be changed to reflect “B” or “C” as correct responses.

Technical Specification 2.21, Table 2-10, item 8 and note (i), identify separate situations where both 2 incore thermocouples (minimum operable channels) and 4 incore thermocouples (NUREG 0737 requirement) are required. Since the body of the question does not define the term “required” as it pertains to operability, both “B” and “C” are equally correct.

SRO QUESTION – 85

OPPD recommends the question be deleted.

The body of the question very specifically requests the students to select the response that describes ALL automatic actions upon a high alarm of RM-055. In the precautions of the procedure, OI-WDL-3 identifies the actuations that will occur upon a high radiation signal to RM-055. None of the available responses match the information of the procedural precaution.