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H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23

RESULTS OF POST-EXAMINATION REVIEW OF
LICENSED OPERATOR WRITTEN EXAMINATIONS

Ladies and Gentlemen:

On February 2, 2007, written examinations were administered at H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, for reactor operator (RO) and senior reactor operator (SRO) initial license candidates. While the license candidates were in the process of taking their written examinations, HBRSEP, Unit No. 2, personnel found the incorrect version of the RO and SRO written examinations had been provided to the respective candidates. After informing NRC Region II personnel of this situation, it was concluded the candidates should complete the examinations that had been provided. As discussed at an NRC exit meeting on February 9, 2007, administering the incorrect version of the RO and SRO written examinations creates a situation where the validity of these examinations is in question. A post-examination review has been completed by HBRSEP, Unit No. 2, personnel to resolve this question of examination validity.

The post-examination review found the administered version of the written examinations was the original version that had been provided for NRC Region II review at a meeting in the regional office on January 22, 2007, hereinafter referred to as Revision 1. During the examination development and review process, three subsequent revisions were made to incorporate comments by NRC and HBRSEP, Unit No. 2, personnel. As a result, Revision 4 was the authorized version that should have been administered to the license candidates. In order to determine the validity of the written examination administered to the license candidates, a line-by-line comparison was made between Revision 1 and Revision 4 of the written examinations. Attachments I and II to this letter provide the detailed results of this post-examination review.

For the administered SRO examination, the post-examination review identified three questions that were materially or substantially modified during the development and review process, i.e., changes occurring between Revisions 1 and 4. One additional question from the SRO examination (Question No. 15) should be replaced with a question from the NRC-approved RO examination

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(Question No. 59), because that question was administered to the SRO license candidates. This results in three questions being excluded from the SRO examination as invalid or unapproved questions. The remaining examination questions answered by the SRO license candidates are considered substantially similar to those reviewed by and discussed with NRC Region II personnel during the examination development process. The resulting 23-question examination is considered an acceptable basis upon which these candidates may be evaluated for issuance of an NRC SRO license.

For the administered RO examination, the post-examination review identified six questions that were materially or substantially modified during the development and review process, i.e., changes occurring between Revisions 1 and 4. As discussed above, one additional question (Question No. 59) would be removed from the RO examination and included in the population of graded questions for the SRO examination. This results in seven questions being excluded from the RO examination as invalid or unapproved questions. The remaining examination questions answered by the RO license candidates are considered substantially similar to those reviewed by and discussed with NRC Region II personnel during the examination development process. The resulting 68-question examination is considered an acceptable basis upon which these candidates may be evaluated for issuance of an NRC RO license.

An electronic mail message was sent to NRC Region II personnel on February 14, 2007, which provided an initial analysis of the affected written examinations. That initial analysis has been further reviewed and refined, and the final results have been reviewed by HBRSEP, Unit No. 2, management and are provided by Attachments I and II.

We acknowledge the human error and organizational deficiencies that resulted in this situation, and will correct these problems through a root cause investigation that has recently been completed. It is also important to recognize the license candidates have invested a significant amount of time and effort in their preparations for these examinations, and prompt resolution of these examination concerns is in the best interest of these individuals. The problems associated with administration of the written examinations did not affect the fairness of these examinations, did not provide undue advantage to the license candidates, and did not result in examinations that lacked the appropriate degree of difficulty and challenge.

If you have any questions concerning this matter, please contact C. T. Baucom at (843) 857-1253.

Sincerely,

A handwritten signature in black ink, appearing to read "J. F. Lucas".

J. F. Lucas

Manager - Support Services - Nuclear

JFL/ctb

Attachments: I. Results of Post-Examination Review of Senior Reactor Operator Written Examination
 II. Results of Post-Examination Review of Reactor Operator Written Examination

c: Mr. R. C. Haag, NRC, Region II
 Mr. R. S. Baldwin, NRC, Region II
 Mr. C. P. Patel, NRC, NRR
 NRC Resident Inspector, HBRSEP
 Document Control Desk

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

RESULTS OF POST-EXAMINATION REVIEW OF SENIOR REACTOR OPERATOR WRITTEN EXAMINATION

BACKGROUND AND SUMMARY

A senior reactor operator (SRO) written examination was administered at H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, on February 2, 2007. While the license candidates were taking this examination, HBRSEP, Unit No. 2, personnel identified the incorrect version of that examination had been provided to the candidates. After informing NRC Region II personnel of this situation, it was concluded the candidates should complete the examination that had been provided.

Subsequent investigation by HBRSEP, Unit No. 2, personnel found the administered version of the written examination was the original version that had been provided for NRC Region II review, hereinafter referred to as Revision 1. During the examination development and review process, three subsequent revisions were made to incorporate comments by NRC and HBRSEP, Unit No. 2, personnel. As a result, Revision 4 was the authorized version that should have been administered to the license candidates.

In order to determine the validity of the written examination administered to the license candidates, a line-by-line comparison was made of the revisions that occurred between Revision 1 and Revision 4 of the written examination. The results of that review are summarized as follows:

- Three questions were substantially or materially modified between Revisions 1 and 4 of the written examination. A further discussion of these changes is provided under the Examination Analysis below.
- For a determination of examination score, one question (Question No. 15) should be replaced with Question No. 59 from the NRC-approved reactor operator (RO) examination.
- Modifications to the remaining 22 questions were evaluated and are considered to involve formatting or editorial changes, including changes to improve stem wording or the plausibility of distractors.

The three questions that were substantially or materially modified should be considered invalid or unapproved questions, and Question No. 59 from the RO examination, which was administered to the SRO license candidates, should be included in the determination of examination score for those candidates. The 22 examination questions that had formatting or editorial changes are considered substantially similar to those reviewed by and discussed with NRC Region II personnel during the examination development process.

Therefore, the written examination administered to the SRO license candidates, when modified as described above, is a valid written examination that would be comprised of 23 questions. The resulting examination is considered an acceptable basis upon which these candidates may be evaluated for issuance of an SRO license.

EXAMINATION ANALYSIS

Question No. 13

Question No. 13 from the NRC-approved examination involved the operability status of containment due to a steam leak and the action required due to an associated containment entry. For the examination administered to the license candidates, this corresponds to Question No. 12, which involved the appropriate guidance to follow in response to indications of slowly decreasing pressurizer pressure.

This question is not considered valid and is withdrawn from the examination, because the question administered to the candidates is substantially different from the NRC-approved version.

Question No. 15

Question No. 15 from the NRC-approved examination involved a procedure transition during response to a LOCA in the Auxiliary Building. For the examination administered to the license candidates, this corresponds to Question No. 10, which involved the indication to be used to determine if a significant leak reported in the Auxiliary Building had been isolated.

During the examination review conducted with NRC Region II personnel on January 22, 2007, it was determined that Question No. 59 from the Revision 1 RO examination should be moved to the SRO examination. This was to be accomplished by exchanging questions from the same topic area between the SRO and the RO examinations, i.e., the administered examinations should have exchanged Question No. 15 from the NRC-approved SRO examination with Question No. 59 from the NRC-approved RO examination.

Therefore, Question No. 59 is considered a valid SRO examination question, and for a determination of examination score this question should replace Question No. 15 on the SRO examination.

Question No. 22

Question No. 22 from the NRC-approved examination involved the selection of individuals in accordance with EPOSC-04, "Emergency Work Control," to rescue an injured individual in a radiation field of 50 R/hour. For the examination administered to the license candidates, this corresponds to Question No. 3, which involved a determination of whether a respirator would be worn, and why.

This question is not considered valid and is withdrawn from the examination, because the question administered to the candidates is substantially different from the NRC-approved version.

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

RESULTS OF POST-EXAMINATION REVIEW OF REACTOR OPERATOR WRITTEN EXAMINATION

BACKGROUND AND SUMMARY

A reactor operator (RO) written examination was administered at H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, on February 2, 2007. While the license candidates were taking this examination, HBRSEP, Unit No. 2, personnel identified the incorrect version of that examination had been provided to the candidates. After informing NRC Region II personnel of this situation, it was concluded the candidates should complete the examination that had been provided.

Subsequent investigation by HBRSEP, Unit No. 2, personnel found the administered version of the written examination was the original version that had been provided for NRC Region II review, hereinafter referred to as Revision 1. During the examination development and review process, three subsequent revisions were made to incorporate comments by NRC and HBRSEP, Unit No. 2, personnel. As a result, Revision 4 was the authorized version that should have been administered to the license candidates.

In order to determine the validity of the written examination administered to the license candidates, a line-by-line comparison was made of the revisions that occurred between Revision 1 and Revision 4 of the written examination. The results of that review are summarized as follows:

- Six questions were substantially or materially modified between Revisions 1 and 4 of the written examination. A further discussion of these changes is provided under the Examination Analysis below.
- One additional question (Question No. 59) should be removed from the RO examination for determination of examination score and included in population of questions for the senior reactor operator (SRO) examination.
- Modifications to the remaining 68 questions were evaluated and are considered to involve formatting or editorial changes, including changes to improve stem wording or the plausibility of distractors.

The six questions that were substantially or materially modified should be considered invalid or unapproved questions, and one question should be removed from the RO examination for determination of examination score. The 68 examination questions that had formatting or editorial changes are considered substantially similar to those reviewed by and discussed with NRC Region II personnel during the examination development process.

Therefore, the written examination administered to the RO license candidates, when modified as described above, is a valid written examination that would be comprised of 68 questions. The resulting examination is considered an acceptable basis upon which these candidates may be evaluated for issuance of an RO license.

EXAMINATION ANALYSIS

Question No. 13

Question No. 13 from the NRC-approved examination involved selecting the correct range of temperature indication seen downstream of a leaking pressurizer code safety valve. For the examination administered to the license candidates, this also corresponds to Question No. 13, which involved identifying the reason for the temperature indication seen downstream of a pressurizer code safety valve with indications of leakage.

This question is not considered valid and is withdrawn from the examination, because the question administered to the candidates is substantially different from the NRC-approved version.

Question No. 15

Question No. 15 from the NRC-approved examination involved identification of a reactor protection trip signal that is directly interlocked with permissive P-7. For the examination administered to the license candidates, this also corresponds to Question No. 15, which involved identifying the plant condition and action that would unblock certain automatic safety injection signals.

This question is not considered valid and is withdrawn from the examination, because the question administered to the candidates is substantially different from the NRC-approved version.

Question No. 51

Question No. 51 from the NRC-approved examination involved the operation of radiation monitor R-24 and its response to changing power levels. For the examination administered to the license candidates, this also corresponds to Question No. 51, which involved the process for checking the alarm setpoint for radiation monitor R-2.

This question is not considered valid and is withdrawn from the examination, because the question administered to the candidates is substantially different from the NRC-approved version.

Question No. 59

Question No. 59 from the NRC-approved examination involved identifying the indication used to determine if a significant LOCA outside the containment has been isolated. For the examination administered to the license candidates, this also corresponds to Question No. 59, which involved identifying the emergency procedure transition for a significant LOCA outside the containment.

During the examination review conducted with NRC Region II personnel on January 22, 2007, it was determined that Question No. 59 should be moved to the SRO examination. This was to be accomplished by exchanging questions from the same topic area between the SRO and the RO

examinations, i.e., the administered examinations should have exchanged Question No. 15 from the NRC-approved SRO examination with Question No. 59 from the NRC-approved RO examination.

Therefore, Question No. 59 is considered a valid SRO examination question, but should be removed from the RO written examination for determination of examination score.

Question No. 62

Question No. 62 from the NRC-approved examination involved identifying two objectives of procedure EPP-15, "Loss of Emergency Coolant Recirculation." For the examination administered to the license candidates, this also corresponds to Question No. 62, which involved identifying the first action that should be performed during response to a large break LOCA in the containment where safety injection has been reset, valve CC-749A will not open, and the Shift Technical Advisor reports that containment pressure has risen to 12 psig.

This question is not considered valid and is withdrawn from the examination, because the question administered to the candidates is substantially different from the NRC-approved version.

Question No. 67

Question No. 67 from the NRC-approved examination involved identifying the reason for tripping a reactor coolant pump (RCP) and the reason for a related procedural caution associated with initiating reactor coolant system bleed and feed in accordance with FRP-H.1, "Response to Loss of Secondary Heat Sink." For the examination administered to the license candidates, this corresponds to Question No. 66, which involved a similar situation, but only asked for the reason for the caution.

Due to the added knowledge requirement between Revisions 1 and 4 of the written examination, the question administered to the candidates is considered to be materially different from the NRC-approved version. Therefore, this question is not considered valid and is withdrawn from the examination.

Question No. 72

Question No. 72 from the NRC-approved examination involved identifying the total additional effective dose equivalent that an individual could receive without management concurrence and the additional dose the individual may receive prior to exceeding 10 CFR 20 limits. For the examination administered to the license candidates, this corresponds to Question No. 71, which involved a similar situation, but only asked for the total additional effective dose that an individual could receive without management concurrence.

Due to the added knowledge requirement between Revisions 1 and 4 of the written examination, the question administered to the candidates is considered to be materially different from the NRC-approved version. Therefore, this question is not considered valid and is withdrawn from the examination.