



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

March 23, 2007

Carolina Power and Light Company
ATTN: Mr. T. D. Walt
Vice President
H. B. Robinson Steam Electric Plant Unit 2
3581 West Entrance Road
Hartsville, SC 29550

SUBJECT: H. B. ROBINSON STEAM ELECTRIC PLANT - INTERIM NRC EXAMINATION
REPORT 05000261/2007301

Dear Mr. Walts:

During the period of February 5 - 9, 2007, the Nuclear Regulatory Commission (NRC) administered operating examinations to employees of your company who had applied for licenses to operate the H. B. Robinson Steam Electric Plant. At the conclusion of the examination, the examiners discussed the examination questions and preliminary findings with those members of your staff identified in the enclosed report. The written examination was administered by your staff on February 2, 2007.

While administering the written examination, your staff discovered that the version of the written examination given to the applicants was not NRC approved. The actual 'as-given' written examination administered on February 2, 2007, was an earlier version of the exam and did not include a number of significant changes that were made to resolve NRC pre-examination review comments. In accordance with Title 10, Section 55.40, of the *Code of Federal Regulations* (10 CFR 55.40), the NRC uses the criteria in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," to evaluate the written examinations prepared by facility licensees. In addition, 10 CFR 55.40 and NUREG-1021 require that facilities receive NRC approval of the proposed examinations prior to their administration. The NRC performed a comprehensive review of the 'as-given' exam to determine whether the exam satisfied the requirements of NUREG-1021. Based on the large number of 'as-given' exam questions that were found to be unacceptable due to not meeting the requirements of NUREG-1021, the NRC determined that the 'as-given' exam was invalid. Consequently, the written examination administered on February 2, 2007, will not be used by the NRC in licensing decisions for those individuals who had applied for licenses. All of the applicants (two Reactor Operators (RO) and seven Senior Reactor Operators (SRO)) passed the operating test. The above information was provided to members of your staff during a telephone call on March 6, 2007. Details regarding the NRC's review of the 'as-given' exam and factors used to determine the validity of the exam are discussed in the enclosed report.

On March 9, 2007, Mr. Greg Ludlam - Robinson Training Manager, and myself discussed your plans to develop a new written examination and administer the exam during the week of June 11, 2007. The NRC will make resources available to support the review and approval of the new exam and will be contacting you under separate correspondence to discuss the

arrangements for the written examination. The examination process for these nine applicants remains open pending the results of the new written examination, which will be used with the results of the previously administered operating tests to make the final licensing decisions. A final examination report will be issued to discuss the results of the examination.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Should you have any questions concerning this letter, please contact me at (404) 562-4607.

Sincerely,

\\RA

Robert C. Haag, Chief
Operations Branch
Division of Reactor Safety

Docket No. 50-261
License No. DPR-23

Enclosure: NRC Inspection Report

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NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 50-261

License No.: DPR-23

Report No.: 05000261/2007301

Licensee: Carolina Power & Light (CP&L)

Facility: H. B. Robinson Steam Electric Plant

Location: 3581 West Entrance Road
Hartsville, SC 29550

Dates: Operating Test - February 5 - 9, 2007
Written Examination - February 2, 2007

Examiners: R. Baldwin, Chief, Senior Operations Examiner
G. Laska, Senior Operations Engineer
F. Ehrhardt, Senior Operations Engineer
B. Caballero, Operations Engineer (In-Training)

Approved by: Robert C. Haag, Chief
Operations Branch
Division of Reactor Safety

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SUMMARY OF FINDINGS

ER 05000261/2007301, 02/02/2007, 02/05-09/2007, H. B. Robinson Steam Electric Plant; Licensed Operator Examinations.

The NRC examiners conducted operator licensing initial examinations in accordance with the guidance in NUREG-1021, Revision 9, "Operator Licensing Examination Standards for Power Reactors." This examination implemented the operator licensing requirements of 10 CFR §55.41, §55.43, and §55.45.

The NRC administered the operating tests during the period of February 5 - 9, 2007. Members of the Robinson training staff administered the written examination on February 2, 2007. The entire written examination and the operating test were developed by the Robinson training staff.

Due to an error by the licensee, the written examination administered to the applicants on February 2, 2007, was not the version that had been approved by the NRC. This unapproved/ 'as-given' version of the exam was subsequently reviewed by the NRC in detail and was determined to be invalid. To support the examination process for the nine applicants who applied for licenses, Robinson plans to develop a new written examination that will be administered during the week of June 11, 2007. All of the applicants (two Reactor Operators (RO) and seven Senior Reactor Operators (SRO)) passed the operating test. The examination process for these nine applicants remains open pending the results of the new written examination, which will be used with the results of the previously administered operating tests to make the final licensing decisions. A final examination report will be issued to discuss the results of the examination.

While there were no post examination comments, the licensee issued a letter (Serial: RNP-RA/07-0024; ADAMS Accession Number ML070820133) dated March 1, 2007, that provided the results of their evaluation of the unapproved written examination. Information provided in this letter was factored into the NRC's overall review and determination that the 'as-given' written examination was invalid.

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Report Details

4. OTHER ACTIVITIES

4OA5 Operator Licensing Initial Examinations

a. Inspection Scope

The examiners evaluated two RO and seven SRO applicants who were being assessed under the guidelines specified in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9. The examiners administered the operating tests during the period of February 5 - 9, 2007. Members of the Robinson training staff administered the written examination on February 2, 2007. The evaluations of the applicants and review of documentation were performed to determine if the applicants, who applied for licenses to operate the Robinson plant, met the requirements specified in 10 CFR 55, "Operators' Licenses."

The examiners reviewed the circumstances surrounding the administration of an earlier unapproved version of the written examination on February 2, 2007, and assessed how this affected the examination process.

The examiners reviewed the licensee's examination security measures while preparing and administering the examinations to assess whether examination security and integrity complied with 10 CFR 55.49, "Integrity of examinations and tests."

b. Findings

During the administration of the written examination on February 2, 2007, the licensee identified that an earlier unapproved version of the examination was inadvertently given to the applicants. The licensee informed the NRC chief examiner of the error and it was decided to continue with the examination process since the applicants were in the process of taking the exam and at that time, the differences between the 'as-given' exam and the NRC approved exam were unknown. All nine applicants successfully passed the operating test that was administered during the period of February 5 - 9, 2007.

The licensee determined that the 'as-given' version of the exam was essentially the original version of the exam that had been revised slightly to address some of the NRC's review comments. The licensee performed a post-examination review to assess the validity of the 'as-given' exam. The results of that review were documented in a March 1, 2007, letter (Serial: RNP-RA/07-0024) to the NRC. The licensee's review effort concluded that nine questions were invalid or unapproved, but that the remaining 91 questions provided an acceptable basis upon which the applicants could be evaluated for issuance of NRC operating licenses.

To assess the validity of the 'as-given' exam, the NRC performed a comprehensive review of the exam and assessed the differences between the 'as-given' exam and the approved exam. The 'as-given' version of the exam required numerous changes to correct questions that the NRC's review had initially identified as unacceptable. These

changes were made as part of the normal examination review and revision process. The final version of the exam was approved by the NRC on January 31, 2007.

Two NRC chief examiners performed independent reviews of the 'as-given' exam. Individual exam questions were reviewed to determine whether they satisfied the requirements of NUREG-1021. The results of the two independent reviews were compared and a final determination on question acceptability was made based on the following criteria: 1) both chief examiners agreed that the question was unacceptable; 2) two or more of the four multiple choice answers were non-plausible; 3) there were multiple correct answers; 4) there were no correct answers; and 5) the 'as-given' question was changed during the review process and differed from the approved version of the question. Using these criteria it was determined that 27 of the 'as-given' questions were unacceptable. To gain further insights on question acceptability, the NRC reviewed the scores for these 27 questions. All applicants correctly answered 26 of these questions and seven of the nine applicants correctly answered the remaining question. With an overall average score of 99.15%, the 27 unacceptable questions were determined to be an inadequate discriminatory tool in which to judge applicant knowledge level.

Given the large number of unacceptable questions, the ability of the remaining acceptable questions to adequately test the knowledge, skills, and abilities of the applicants was assessed. While only a few of the examination areas required by NUREG-1021 were not covered by the remaining questions, a more important consideration was the limited coverage these remaining questions provided on operator knowledge, skills, and abilities that are needed to perform licensed duties. Based on these factors, the NRC determined that the 'as-given' exam was not valid and could not be used as a basis for making licensing decisions.

To support the examination process for the nine applicants who applied for licenses, Robinson plans to develop a new written examination that will be administered during the week of June 11, 2007. The examination process for these nine applicants remains open pending the results of the new written examination, which will be used along with the results of the previously administered operating tests to make the final licensing decisions. A final examination report will be issued to discuss the results of the examination.

NUREG-1021, ES-201, Paragraph C.3.j states that the region will not allow the written examination and operating test dates to diverge by more than 30 days without obtaining concurrence from the NRR operator licensing program office. Since the new written examination in June 2007 will be more than 30 days apart from the operating test that was administered in February 2007, Region 2 personnel discussed this situation with NRR. On March 13, 2007, NRR provided concurrence on the planned time frame for the new written examination.

The licensee's administration of an unapproved written examination was reviewed for possible noncompliance with 10 CRF 55.49, Integrity of Examinations and Tests. Additional NRC review and consideration is needed to determine whether a violation of

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this regulatory requirement occurred. Therefore, this item is identified as an unresolved item (URI) 05000261/2007301-01, Administering an Unapproved Written Examination, and is unresolved pending additional NRC review of the circumstances and information regarding this occurrence.

4OA6 Meetings

Exit Meeting Summary

On February 9, 2007, the examination team discussed generic examination issues with Mr. William Noll and members of his staff. The examiners asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee personnel

W. Farmer, Manager - Engineering
 C. Baucom, Supervisor of Licensing and Regulatory Programs
 B. Clark, Manager - Nuclear Assessment Section
 D. Foster, Manager - Shift Operations
 G. Ludlam, Manager - Training
 B. Noll, Director of Site Operations
 C. Church, Manager - Operations
 G. Sanders, Licensing Engineer
 C. Moon, Supervisor - Technical Training
 S. Wheeler, Supervisor - Emergency Preparedness
 K. Jones, Supervisor - Plant Support Group
 J. Huegel, Manager - Maintenance
 D. Blakeney, Manager - Outages and Scheduling
 A. Musselwhite, Assessor - Nuclear Assessment Section
 J. Long, Assessor - Performance Evaluation & Regulatory Affairs

NRC personnel

D. Jones, Resident Inspector

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000261/2007301-01	URI	Administering an Unapproved Written Examination (Section 4OA5)
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