



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
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April 7, 2008

Stewart B. Minahan, Vice
President-Nuclear and CNO
Nebraska Public Power District
72676 648A Avenue
Brownville, NE 68321

SUBJECT: COOPER NUCLEAR STATION - NRC EXAMINATION
REPORT 05000298/2008301

Dear Mr. Minahan:

On March 20, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Cooper Nuclear Station. The enclosed report documents the examination findings, which were discussed on March 20, 2008, with Messrs. Dan Sealock, Dave Werner, and other members of your staff.

The examination included the evaluation of one applicant for reactor operator license, one applicant for instant senior operator license and four applicants for upgrade senior operator licenses. The written examinations and operating tests were developed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9. The license examiners determined that all six of the applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

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).

Sincerely,

/RA/

Ryan E. Lantz, Chief
Operations Branch
Division of Reactor Safety

Nebraska Public Power District

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Docket: 50-298
License: DPR-46

Enclosure:
NRC Examination Report 05000298/2008301

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EXAMINATION REPORT
U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Dockets: 50-298
Licenses: DPR-46
Report : 05000298/2008301
Licensee: Nebraska Public Power District
Facility: Cooper Nuclear Station
Location: 72676 648A Avenue
Brownville, NE 68321
Dates: March 14-27, 2008
Inspectors: S. Garchow, Chief Examiner, Operations Branch
G. Apger, Operations Engineer, Operations Branch
Approved By: Ryan E. Lantz, Chief
Operations Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

ER 05000298/2008301; March 17-27, 2008; Cooper Nuclear Station; Initial Operator Licensing Examination Report.

NRC examiners evaluated the competency of one applicant for reactor operator license, one applicant for instant senior operator license and four applicants for upgrade senior operator licenses at Cooper Nuclear Station. The licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9. The written examination was administered by the licensee on March 14, 2008. NRC examiners administered the operating tests on March 17 - 20, 2008. The examiners determined that all six of the applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

A. NRC-Identified and Self-Revealing Findings

No findings of significance were identified.

B. Licensee-Identified Violations

None.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA5 Other Activities (Initial Operator License Examination)

.1 License Applications

a. Scope

The NRC examiners reviewed all six license applications submitted by the licensee to ensure the applications reflected that each applicant satisfied relevant license eligibility requirements. The applications were submitted on NRC Form 398, "Personal Qualification Statement," and NRC Form 396, "Certification of Medical Examination by Facility Licensee." The examiners also audited two of the license applications in detail to confirm that they accurately reflected the subject applicant's qualifications. This audit focused on the applicant's experience and on-the-job training, including control manipulations that provided significant reactivity changes.

b. Findings

No findings of significance were identified.

.2 Operator Knowledge and Performance

a. Examination Scope

On March 14, 2008, the licensee proctored the administration of the written examinations to all six applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on March 24, 2008.

The NRC examination team administered the various portions of the operating test to all six applicants on March 17-20, 2008. The one applicant for reactor operator license participated in two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 11 system tasks, and an administrative test consisting of 4 administrative tasks. The one applicant seeking an instant senior operator license participated in two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 10 system tasks, and an administrative test consisting of 5 administrative tasks. The four applicants for upgrade senior operator licenses participated in two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 5 system tasks, and an administrative test consisting of 5 administrative tasks.

b. Findings

All the applicants passed all parts of the operating test. For the written examinations, the senior operator applicants' average score was 86 percent and ranged from 80.0 to

94.0 percent. The text of the examination questions, the operating test, and the licensee's examination analysis have been placed in the ADAMS system and may be accessed under the accession numbers noted in the attachment.

Chapter ES-403 and Form ES-403-1 of NUREG-1021 require the licensee to analyze the validity of any written examination questions that were missed by half or more of the applicants. The licensee conducted this performance analysis for eight questions that met this criterion and submitted the analysis to the chief examiner. This analysis concluded that one of the questions (Examination Question 63) required minor rewording in the question stem, five of the questions would be further evaluated in the hot license training program, and two of the questions had answer key change recommendations.

The licensee's recommendations and the NRC responses follow:

Reactor Operator Question 25

The licensee recommended changing the answer key for this question because the original correct answer was determined to be incorrect. In this question, the applicant is required to evaluate a set of conditions in order to determine which technical specification Limiting Condition of Operation (LCO), if any, would be applicable. Because irradiated fuel was being moved in the spent fuel pool, the original answer key required the applicant to identify LCO 3.6.1.4, "Secondary Containment," be entered. The recommended answer key change was based on information contained in the technical specification basis document. The basis document states this LCO is only applicable if moving recently irradiated fuel. The basis document then defines the term "recently" as fuel that has been in a critical reactor within the previous 24 hours. The stem of the question states the reactor had been shutdown for 5 days prior to moving the fuel. Based on this, LCO 3.6.1.4 would not be applicable thereby making the original answer key incorrect. The correct answer recommended is there are no LCO entries required, or answer "a."

NRC Response: The NRC agrees with the licensee's recommendation to change the answer key from answer "c" to answer "a" based on the discussion above.

Senior Reactor Operator Question 15

The licensee recommended changing the answer key for this question because the original answer key was determined to be incorrect. In this question, the applicant is given a set of conditions involving a station blackout and subsequent starting of the emergency diesel generators. Based on the given conditions, the applicant was then required to determine which procedures would be used and in what sequence. The draft answer key required the candidate to determine the station blackout procedure would initially be entered and after the emergency diesel generators started, the emergency power procedure would be entered. The draft answer key was changed during the examination validation based on feedback from the validating operators. The validating operators stated there was a control room policy that the station blackout procedure would not be entered unless both emergency diesel generators failed to start. Based on this feedback the answer key was changed so that the only procedure used

would be the emergency power procedure. Following the examination, it was determined there was no procedural justification for the control room policy. It was also determined that the procedural requirement is that the control room crew enters the station blackout procedure. Once an emergency diesel generator starts and loads, the station blackout procedure would be exited. In this case, the emergency power procedure would then be entered because one of the given conditions was a failure of one of the emergency generators. Based on this, the licensee recommended changing the answer key so that answer "d" is correct instead of answer "b."

NRC Response: The NRC agrees with the licensee's recommendation to change the answer key from answer "b" to answer "d" based on the discussion above.

.3 Initial Licensing Examination Development

a. Examination Scope

The licensee developed the examinations in accordance with NUREG-1021, Revision 9. All licensee facility training and operations staff involved in examination preparation and validation were on a security agreement. The licensee submitted the outlines for the written examinations and operating tests on December 19, 2007. The NRC reviewed the outlines against the requirements and provided comments to the licensee. The licensee submitted the draft examination package on January 31, 2008. The NRC reviewed the draft examination package against the requirements and provided comments to the licensee on the examination on February 6, 2008. The NRC examination team conducted an onsite validation of the operating test and provided further comments during the week of February 11, 2008. The licensee satisfactorily completed comment resolution on March 3, 2008.

b. Findings

The NRC approved the initial examination outlines and advised the licensee to proceed with development of the written examinations and operating tests.

The examiners determined that the written examinations and operating tests initially submitted by the licensee were within the range of acceptability expected for a proposed examination.

No findings of significance were identified.

.4 Simulation Facility Performance

a. Examination Scope

The NRC examiners observed simulator performance with regard to plant fidelity during the examination validation and administration.

b. Findings

No findings of significance were identified.

.5 Examination Security

a. Examination Scope

The NRC examiners reviewed examination security for examination development and during both the onsite preparation week and examination administration week for compliance with NUREG-1021 requirements. Plans for simulator security and applicant control were reviewed and discussed with licensee personnel.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

The chief examiner presented the examination results to Mr. Dan Sealock, Nuclear Training Manager, on March 27, 2008. The licensee acknowledged the findings presented.

The licensee did not identify any information or materials used during the examination as proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

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M. Barton, Examination Developer
D. Werner, Operations Training Superintendent
E. McCutcheon, Senior Licensing Engineer

NRC Personnel

N. Taylor, Senior Resident Inspector
M. Chambers, Resident Inspector

ADAMS DOCUMENTS REFERENCED

Accession No. ML080870205 – CNS-2008-03-FINAL WRITTEN EXAMINATION
Accession No. ML080870214 – CNS-2008-03-FINAL OPERATING TEST
Accession No. ML080920033 – CNS-2008-03-POST EXAMINATION COMMENTS