



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 E. LAMAR BLVD
ARLINGTON, TX 76011-4511

May 15, 2015

Mr. Oscar A. Limpias
Vice President-Nuclear and CNO
Nebraska Public Power District
Cooper Nuclear Station
72676 648A Avenue
P.O. Box 98
Brownville, NE 68321

**SUBJECT: COOPER NUCLEAR STATION - NRC RETAKE EXAMINATION
REPORT 05000298/2015302**

Dear Mr. Limpias:

On April 21, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed an initial operator license retake examination at Cooper Nuclear Station. The enclosed report documents the examination results and licensing decisions. A telephonic exit meeting was conducted on May 6, 2015, with Mr. M. Maness, Operations Initial Training Superintendent, who was provided the NRC licensing decisions.

The examination included the evaluation of four applicants for reactor operator licenses, one applicant for an instant senior reactor operator license, and one applicant for an upgrade senior reactor operator license. The license examiners determined that all of the six applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued. There were two post examination comments submitted by your staff. Enclosure 1 contains details of this report and Enclosure 2 summarizes post examination comment resolution.

No findings were identified during this 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 Agencywide

O. Limpias

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Sincerely,

/RA/

Vincent G. Gaddy, Chief
Operations Branch
Division of Reactor Safety

Docket No. 50-298
License No. DPR-46

Enclosure:

1. NRC Examination Report 05000298/2015302
2. NRC Post Examination Comment Resolution

cc w/encl:
Electronic Distribution for Cooper Nuclear Station

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Letter to Oscar A. Limpias from Vincent G. Gaddy, dated May 15, 2015

SUBJECT: COOPER NUCLEAR STATION - NRC RETAKE EXAMINATION
REPORT 05000298/2015302

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U.S. NUCLEAR REGULATORY COMMISSION

REGION IV

Docket: 0500050298

License: DPR-46

Report: 05000298/2015302

Licensee: Nebraska Public Power District

Facility: Cooper Nuclear Station

Location: Brownville, Nebraska

Dates: January 27 - May 6, 2015

Inspectors: T. Buchanan, Chief Examiner, Operations Engineer

Approved By: Vincent G. Gaddy, Chief
Operations Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

ER 05000298/2015302; January 27 - May 6, 2015; Cooper Nuclear Station; Initial Operator Licensing Retake Examination Report.

NRC examiners evaluated the competency of four applicants for reactor operator licenses, one applicant for an instant senior reactor operator license and one applicant for an upgrade senior reactor operator license at Cooper Nuclear Station.

The licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1. The written examination was administered by the licensee on April 21, 2015.

The examiners determined that all of the six applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

A. NRC-Identified and Self-Revealing Findings

None

B. Licensee-Identified Violations

None

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA5 Other Activities (Initial Operator License Examination)

.1 License Applications

a. Scope

NRC examiners reviewed all license applications submitted to ensure each applicant satisfied relevant license eligibility requirements.

b. Findings

No findings were identified.

.2 Examination Development

a. Scope

NRC examiners reviewed integrated examination outlines and draft examinations submitted by the licensee against the requirements of NUREG-1021.

b. Findings

NRC examiners provided outline and draft examination comments to the licensee. The licensee satisfactorily completed comment resolution prior to examination administration.

NRC examiners determined the written examinations initially submitted by the licensee were within the range of acceptability expected for a proposed examination.

.3 Operator Knowledge and Performance

a. Scope

On April 21, 2015, 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 and post examination comments to the NRC on April 28, 2015.

The operating tests were waived for the applicants because they previously passed those items and because the licensee requested and received waivers for these items for the retake examination.

b. Findings

No findings were identified.

All applicants passed the written examination. The final written examinations and post examination analysis and comments may be accessed in the ADAMS system under the accession numbers noted in the attachment.

.4 Simulation Facility Performance

a. Scope

The NRC examiners did not observe simulator performance with regard to plant fidelity.

b. Findings

No findings were identified.

.5 Examination Security

a. Scope

The NRC examiners reviewed examination security for both the preparation and examination administration for compliance 10 CFR 55.49 and NUREG-1021. Plans for applicant control were discussed with licensee personnel.

b. Findings

No findings were identified.

40A6 Meetings, Including Exit

Exit Meeting Summary

A telephonic exit was conducted on May 6, 2015 between Ms. T. Buchanan, Chief Examiner, and Mr. M. Maness, Operations Initial Training Superintendent.

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

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

D. Goodman, Operations Manager
M. Bacon, Training Manager
M. Maness, Operations Initial Training Superintendent
E. Jackson, Nuclear Instructor
D. Franklund, Control Room Supervisor
K. Mascerano, Exam Developer
G. Jensen, Exam Mentor

NRC Personnel

J. Nance, Acting Senior Resident Inspector

ADAMS DOCUMENTS REFERENCED

Accession No. ML15127A507 - FINAL WRITTEN EXAM (withheld for two years)
Accession No. ML15127A524 - POST EXAM ANALYSIS-COMMENTS

NRC Resolution to the Cooper Nuclear Station Post Examination Comments

A complete text of the licensee's post examination analysis and comments can be found in ADAMS under Accession Number ML15127A524. One technical reference was redacted due to containing proprietary information.

RO QUESTION # 47

COMMENT: The licensee recommended accepting distractor 'C' in addition to answer 'A'. This question involved a diesel generator manual start for post maintenance testing. The question then asks what would first trip the generator if the engine driven lube oil pump shaft shears. The answer, low lube oil pressure, has a bypass of 50 to 70 seconds upon a diesel generator start signal. Because the stem does not specify how long the diesel had been running after the manual start, the applicant could choose either 'A' or 'C' depending on the assumption they made on the diesel generator run time. Because the stem did not provide the information on how long the diesel generator had been running unloaded, the facility recommends accepting both 'A' and 'C' as correct.

NRC RESOLUTION: The NRC agrees with the licensee's recommendation to accept both 'A' and 'C' as correct answers for Question #47. This is based on the conditions provided in the question stem which do not provide the timeframe in the diesel generator startup, allowing either state to be assumed. Depending on which assumption the applicant used, he could arrive at either answer 'A' or 'C', making both correct. The two correct answers do not conflict with each other.

RO QUESTION # 63

COMMENT: This question asked about the impact on main steam steady state temperature if a safety relief valve is opened at 90% power. The correct answer, 'C', was that the temperature would lower as the result of the turbine pressure control system offset lowering steam pressure and temperature. The facility believes that answer 'C' is incorrect due to the reason provided. The turbine pressure control system does not cause the steam pressure and temperature to lower, but instead acts in response to the lower pressure caused by the opened safety relief valve. The facility ran the event in the simulator and determined that, at 90% power, the main steam equalizing header pressure lowers between 2 and 4 psig following a safety relief valve opening. Using their steam table function on the human machine interface for the turbine pressure control system, the indicated main steam temperature would not change as the system maintains temperature the same with a seven psig change in pressure. Therefore, the facility believes that 'D' should be the correct answer. The facility believes the answer key is incorrect and recommends changing the correct answer from 'C' to 'D'.

NRC RESOLUTION: The NRC does not agree with the licensee's recommendation to change the correct answer from 'C' to 'D'. The NRC agrees that 'C' is not correct due to the wording of the reason for the lowered pressure and temperature. The turbine pressure control system does not lower main steam pressure, but instead reacts to main steam pressure changes caused in the reactor pressure vessel and due to the safety relief valve being open. Distractor 'D' is not correct because main steam pressure does decrease slightly, so main steam temperature decreases as well and does not remain constant. The question stem does not ask about indicated main steam temperature, so therefore 'D' is not correct. Because there is no correct answer, the question will be deleted.