



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

April 25, 2007

Duke Power Company LLC
d/b/a Duke Energy Carolinas, LLC
ATTN: Mr. G. R. Peterson
Vice President
McGuire Nuclear Station
12700 Hagers Ferry Road
Huntersville, NC 28078-8985

SUBJECT: MCGUIRE NUCLEAR STATION - NRC EXAMINATION REPORT
05000369/2007301 AND 05000370/2007301

Dear Mr. Peterson:

During the period of March 19 - 22, 2007, the Nuclear Regulatory Commission (NRC) administered operating examinations to employees of your company who had applied for licenses to operate the McGuire Nuclear Station. 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 March 29, 2007.

Four Reactor Operator (RO) and three Senior Reactor Operator (SRO) applicants passed both the written examination and operating test. One SRO applicant failed the written examination, but passed the operating test. There was one post examination comment submitted. The NRC resolution to the post examination comment is included in this report as Enclosure 2. A Simulation Facility Report is included in this report as Enclosure 3.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures 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 Nos.: 50-369, 50-370
License Nos.: NPF-9, NPF-17

- Enclosures: 1. Report Details
2. NRC Resolution to the McGuire Post Examination Comment
3. Simulation Facility Report

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ADAMS: X Yes ACCESSION NUMBER: ML071160215

OFFICE	RII:DRS	RII:DRS	RII:DRP	RII:DRS			
SIGNATURE	FJE For	RCH	JHM2	FJE			
NAME	GLaska	RHaag	JMoorman	FEhrhardt			
DATE	4/25/2007	4/25/2007	4/25/2007	4/25/2007/	4/ /2007	4/ /2007	4/ /2007
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.: 50-369, 50-370

License Nos.: NPF-9, NPF-17

Report Nos.: 05000369/2007301 and 05000370/2007301

Licensee: Duke Power Company, LLC

Facility: McGuire Nuclear Station, Units 1 and 2

Location: Huntersville, NC 28078

Dates: Operating Tests - March 19-22, 2007
Written Examination - March 29, 2007

Examiners: G. Laska, Chief, Senior Operations Examiner
F. Ehrhardt, Senior Operations Engineer
R. Monk, Resident Inspector, Examiner Qualified

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

SUMMARY OF FINDINGS

ER 05000369/2007301 and 05000370/2007301; 3/19 - 22/2007, and 3/29/2007; McGuire Nuclear Station, Units 1 & 2; 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 March 19 - 22, 2007. Members of the McGuire Nuclear Station training staff administered the written examination on March 29, 2007. The written examination and the operating tests were developed by the McGuire Nuclear Station training staff.

Four Reactor Operators (ROs) and three Senior Reactor Operators (SROs) passed both the written examination and operating test. One SRO applicant failed the written examination, but passed the operating test. The NRC issued a denial letter to the SRO applicant who failed the written examination. The applicants who passed both the written examination and the operating test were issued an operator license commensurate with the level of examination administered.

There was one post examination comment.

No findings of significance were identified.

Report Details

4. OTHER ACTIVITIES

4OA5 Operator Licensing Initial Examinations

a. Inspection Scope

The McGuire training staff developed the written examinations and the operating tests in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9. The NRC examination team reviewed the proposed written examinations and operating tests. Examination changes, agreed upon between the NRC and the licensee, were made according to NUREG-1021 and incorporated into the final version of the examination materials.

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

The examiners evaluated four RO and four SRO applicants who were being assessed under the guidelines specified in NUREG-1021. The examiners administered the operating tests during the period of March 19 - 22, 2007. Members of the McGuire Nuclear Station training staff administered the written examinations on March 29, 2007. The evaluations of the applicants and review of documentation were performed to determine if the applicants, who applied for licenses to operate the McGuire Nuclear Station, met the requirements specified in 10 CFR 55, "Operators' Licenses."

b. Findings

No findings of significance were identified.

The NRC determined that the details provided by the licensee for the walkthrough and simulator tests were within the range of acceptability expected for a proposed examination.

Four RO and three SRO applicants passed both the written examination and operating test. One SRO applicant failed the written examination, but passed the operating test. The NRC issued a denial letter to the SRO applicant who failed the written examination. The applicants who passed both the written examination and the operating test were issued an operator license commensurate with the level of examination administered.

The licensee submitted one post examination comment concerning the written examination. The written examinations, with knowledge and abilities (K/As), question references/answers, examination references, and the licensee's post examination comment, may be accessed in the ADAMS system (ADAMS Accession Numbers ML071020390, ML071020419, ML071020426, and ML071020385).

Copies of all individual examination reports were sent to the facility Training Manager for evaluation and determination of appropriate remedial training.

4OA6 Meetings

Exit Meeting Summary

On March 22, 2007, the examination team discussed generic issues with Mr. R. Repko 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

G. Peterson, Site Vice President
R. Repko, Nuclear Station Manager
S. Bradshaw, Superintendent Operations
T. Rohdes, Operations Training Manager
R. Pope, Training Supervisor
K. Crane, Regulatory Compliance
F. Kirk, McGuire Nuclear Station Operations
G. Hull, McGuire Nuclear Station Operations
C. Sawyer, Training Instructor
L. Gabbert, Training Instructor

NRC Personnel

J. Brady, Senior Resident Inspector
S. Walker, Resident Inspector

NRC RESOLUTION TO THE MCGUIRE POST EXAMINATION COMMENT

A complete text of licensee's post examination comment can be found in ADAMS under Accession Number ML071020385.

SRO QUESTION # 91

Comment:

After further investigation we propose that question 91 be deleted due to no correct answer.

Our original assumption was that a thermocouple open circuit would read off scale high. However, a thermocouple open circuit will cause it to fail low. Therefore B and D distractors are incorrect.

Research indicates a thermocouple short circuit will fail to a value close to the temperature of the shorted location. We can find no circumstance where the thermocouple could fail off scale high. How could the short location temperature be higher than core exit temperature? Therefore, A and C are also incorrect.

NRC RESOLUTION: Recommendation accepted. None of the answers were correct, therefore the question was deleted.

SIMULATOR FIDELITY REPORT

Facility Licensee: McGuire Nuclear Station

Facility Docket Nos.: 05000369/05000370

Operating Tests Administered: March 19 - 22, 2007

This form is to be used only to report observations. These observations do not constitute audit or inspection findings and, without further verification and review in accordance with IP 71111.11, are not indicative of noncompliance with 10 CFR 55.46. No licensee action is required in response to these observations.

Observations:

- Simulator exhibited several repeatability problems, in that several malfunctions did not have the same indications/response each time when initiated.
- The simulator model had the VA filter in service that is normally in service on Unit 2, instead of the VA filter that was in service on the reference unit.
- During a JPM validation, with the unit at mid-loop NC system indicated level began to rise without any source of inventory makeup. This required the selection of another JPM.
- With all RC pumps removed from service (while on the RAT) the reactor did not trip.
- It appeared that the D/G continued to be supplied with RN flow, with RN isolated to the A D/G. The procedure has the operator isolate water to a running D/G prior to starting RN pump. Without RN flow, the D/G continued to run without cooling water and D/G temperatures did not rise.
- On the first morning of the exam the simulator would not reset, this caused a slight delay.
- SM-15 (steam supply to second stage MSRs) being open should not have caused the cooldown effect that was apparent during the SGTR scenario. Also during the SGTR scenario, the RCS depressurized at a rapid rate during the cooldown, and in effect, the crew did not have to perform an RCS depressurization to match steam generator pressure with RCS pressure. This does not appear to be consistent with the WOG Executive series document figures. (PIP 07-2001 was written to address these two issues)