



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931

July 23, 2004

Duke Energy Corporation
ATTN: Mr. Ronald A. Jones
Vice President
Oconee Site
7800 Rochester Highway
Seneca, SC 29672

SUBJECT: OCONEE NUCLEAR STATION - NRC EXAMINATION REPORT NOS.
05000269/2004301, 05000270/2004301, AND 05000287/2004301

Dear Mr. Jones:

During the period June 14 - 18, 2004, the Nuclear Regulatory Commission (NRC) administered operating examinations to employees of your company who had applied for licenses to operate the Oconee Nuclear Power 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 June 25, 2004.

Four Reactor Operator applicants and seven Senior Reactor Operator applicants passed both the written and operating examinations. One Senior Reactor Operator failed the written exam. A Simulation Facility Report is included in this report as Enclosure 2. There was one post examination comment identified in 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) 562-4638.

Sincerely,
/RA/
Michael E. Ernstes, Chief
Operator Licensing and
Human Performance Branch
Division of Reactor Safety

Docket Nos. 50-269, 50-270, 50-287
License Nos. DPR-38, DPR-47, DPR-55

Enclosures: (See page 2)

- Enclosures: 1. Report Details
2. Simulation Facility Report
3. NRC Resolution to Facility Comments

cc w/encls:

B. G. Davenport
Compliance Manager (ONS)
Duke Energy Corporation
Electronic Mail Distribution

County Supervisor of
Oconee County
415 S. Pine Street
Walhalla, SC 29691-2145

Lisa Vaughn
Legal Department (PB05E)
Duke Energy Corporation
422 South Church Street
P. O. Box 1244
Charlotte, NC 28201-1244

Lyle Graber, LIS
NUS Corporation
Electronic Mail Distribution

Anne Cottingham
Winston & Strawn LLP
Electronic Mail Distribution

R. L. Gill, Jr., Manager
Nuclear Regulatory Issues
and Industry Affairs
Duke Energy Corporation
526 S. Church Street
Charlotte, NC 28201-0006

Beverly Hall, Acting Director
Division of Radiation Protection
N. C. Department of Environmental
Health & Natural Resources
Electronic Mail Distribution

Peggy Force
Assistant Attorney General
N. C. Department of Justice
Electronic Mail Distribution

Henry J. Porter, Assistant Director
Div. of Radioactive Waste Mgmt.
S. C. Department of Health and
Environmental Control
Electronic Mail Distribution

Bentley K. Jones
Training Manager
Oconee Nuclear Station
7800 Rochester Highway
Seneca, SC 29672-0752

R. Mike Gandy
Division of Radioactive Waste Mgmt.
S. C. Department of Health and
Environmental Control
Electronic Mail Distribution

Distribution w/encls:

L. Olshan, NRR
 C. Evans (Part 72 Only)
 L. Slack, RII EICS
 RIDSNNRRDIPMLIPB
 PUBLIC

OFFICE	RII:DRS	RII:DRS	RII:SRS	RII:DRS	RII:DRP	
SIGNATURE	/RA/	/RA/	/RA By G. Hopper for/	/RA/	/RA By R. Carroll for/	
NAME	GHopper:pmd	RAiello	GLaska	MErnstes	RHaag	
DATE	7/22/04	7/22/04	7/22/04	7/22/04	7/23/04	
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO
PUBLIC DOCUMENT	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.: 50-269, 50-270, 50-287

License Nos.: DPR-38, DPR-47, DPR-55

Report No.: 05000269/2004301, 05000270/2004301, and
05000287/2004301

Licensee: Duke Energy Corporation

Facility: Oconee Nuclear Station

Location: 7800 Rochester Highway
Seneca, SC 29672

Dates: Operating Tests - June 14 - 18, 2004
Written Examination - June 25, 2004

Examiners: G. Hopper, Operator Licensing Team Leader
R. Aiello, Senior Operations Engineer
G. Laska, Senior Operations Examiner

Approved by: M. Ernstes, Chief
Operator Licensing and Human Performance Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

ER 05000269/2004301, 05000270/2004301, 05000287/2004301; 6/14 - 25/2004; Oconee Nuclear Station; Licensed Operator Examinations.

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

The NRC administered the operating examination June 14 - 18, 2004. The Oconee Nuclear Power Station training staff administered the written examination on June 25, 2004. All of the outlines, the written examination, job performance measures (JPMs) and scenarios (3) were developed by the Oconee training staff. Four Reactor Operators (RO) and seven Senior Reactor Operator applicants (SRO), passed both the operating and written examinations. One SRO applicant passed the operating examination but failed the written examination. All but one applicant were issued operator licenses commensurate with the level of examination administered.

No significant issues were identified.

Report Details

4. OTHER ACTIVITIES (OA)

4OA5 Operator Licensing Initial Examinations

a. Inspection Scope

The licensee developed operating tests and written examinations in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Draft Revision 9. The NRC examination team reviewed the proposed examinations. 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 also reviewed documentation associated with the licensee's Once Through Steam Generator (OTSG) replacement for Unit one to ensure conformance with simulator requirements specified in 10 CFR 55.46. Specifically, the review was to determine if the facility licensee's simulation facility was acceptable for use in operating licensing examinations. Replacement OTSGs had been installed in Unit One, and the plant referenced simulator had not yet been upgraded with the new OTSG computer model. The examiners reviewed the 10 CFR 50.59 evaluation, and the replacement OTSG Accident Analysis Summary Report, and compared the current OTSG data against the previous Unit One OTSG data to determine if there were thermal hydraulic characteristics that may not be properly replicated on the current simulator model. The examiners also reviewed and compared the main steam line break plant performance curves from the old and new OTSGs. The examiners used the previous OTSG data and simulator performance curves as acceptance criteria since these were the bases for the current simulator model.

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 Reactor Operator (RO) and eight Senior Reactor Operator (SRO) applicants who were being assessed under the guidelines specified in NUREG-1021. The examiners administered the operating tests during the period of June 14-18, 2004. Members of the Oconee Nuclear Power Station training staff administered the written examination on June 25, 2004. The evaluations of the applicants and review of documentation were performed to determine if the applicants, who applied for licenses to operate the Oconee Nuclear Power Station, met requirements specified in 10 CFR Part 55.

b. Findings

The examiners noted that the current simulator closely modeled the actual plant performance and was sufficient in scope and fidelity to allow conduct of the operating

tests specified in 10 CFR 55.45 and for use in the licensee's requalification program while the licensee is completing the installation and testing of the new reference plant model. The NRC noted that this model is expected to be installed by December 2004.

The licensee's examination submittal was within the range of acceptability expected for a proposed examination. Four RO and seven SRO applicants, passed both the operating and written examinations. One SRO applicant passed the operating examination but failed the written examination. The RO and SRO written examinations and answer keys, licensee's post examination comments, and combined RO/SRO examination and examination references may be accessed in the ADAMS system (ADAMS Accession Numbers, ML042020190 and ML042020184).

40A6 Meetings

Exit Meeting Summary

On June 18, 2004, the examination team discussed generic issues with Mr. Regis Repko and other members of your staff. The inspectors 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

B. Ayers, Training Instructor
G. Baumgarner, Training Instructor
B. Jones, Training Manager
N. Clarkson, Senior Engineer Regulatory Compliance
N. Constance, Operations Training Manager
R. Repko, Superintendent of Operations
J. Steely, Initial Training Supervisor
G. Washburn, Training Instructor

SIMULATION FACILITY REPORT

Facility Licensee: Oconee Nuclear Station

Facility Docket No.: 05000269/05000270/05000287

Operating Tests Administered on: June 14-18, 2004

This form is to be used only to report observations. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of noncompliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulation facility other than to provide information that may be used in future evaluations. No licensee action is required in response to these observations.

While conducting the simulator portion of the operating tests, the following items were observed:

<u>ITEM</u>	<u>DESCRIPTION</u>
GWR Flow Gauge	Units on gauge were labeled psig vice cfm

NRC RESOLUTION OF OCONEE'S POST EXAM COMMENTS

Question # 13

Comment: The question asks for the reason why RCS temperature and pressure are stabilized during a Station Blackout. The licensee recommends accepting choice "B" as an additional correct answer. The licensee determined that the question was written based on the information in the EAP-BO lesson plan. The current revision of the lesson plan does not address the effects of cooling down on RCS inventory. The Oconee EOP Reference Document contains additional information on this topic. The Blackout portion of the EOP Reference Document describes the effects of cooling the RCS down below 550 °F which would include emptying the pressurizer and voiding the hot legs, thereby interrupting natural circulation.

NRC Resolution: Recommendation Accepted; the question has two correct answers (B and D). Review of the EOP reference material for Station Blackout indicated that voiding in the hot legs could occur and subsequently block reactor coolant flow if a cooldown were initiated. Due to inadequate RCS makeup flow, a cooldown would empty the pressurizer and continued RCS contraction would void the hot legs interrupting natural circulation.