

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION II 245 PEACHTREE CENTER AVENUE NE, SUITE 1200 ATLANTA, GEORGIA 30303-1257

April 28, 2015

Mano Nazar President and Chief Nuclear Officer Nuclear Division NextEra Energy P. O. Box 14000

SUBJECT: ST. LUCIE NUCLEAR PLANT – NRC OPERATOR LICENSE EXAMINATION

REPORT 05000335/2015301 AND 05000389/2015301

Dear Mr. Nazar:

During the period March 2-11, 2015, the Nuclear Regulatory Commission (NRC) administered operating tests to employees of your company who had applied for licenses to operate the St. Lucie Nuclear Plant. At the conclusion of the tests, the examiners discussed preliminary findings related to the operating tests and the written examination submittal with those members of your staff identified in the enclosed report. The written examination was administered by your staff on March 18, 2015.

All applicants passed both the operating test and written examination. There was one post-administration comment concerning the written examination. This comment, and the NRC resolution of this comment, is summarized in Enclosure 2. A Simulator Fidelity Report is included in this report as Enclosure 3.

The initial examination submittal was within the range of acceptability expected for a proposed examination. All examination changes agreed upon between the NRC and your staff were made according to NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1.

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 the NRC's document system (ADAMS). ADAMS is accessible from the NRC Website at http://www.nrc.gov/reading-rm.adams.html (the Public Electronic Reading Room).

M. Nazar 2

If you have any questions concerning this letter, please contact me at (404) 997-4662.

Sincerely,

/RA/

Eugene F. Guthrie, Chief Operations Branch 2 Division of Reactor Safety

Docket Nos: 50-335, 50-389 License Nos: DPR-67, NPF-16

Enclosures:

- 1. Report Details
- 2. Facility Comments and NRC Resolution
- 3. Simulator Fidelity Report

cc: Distribution via Listserv

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X□ PUBLICLY AV	AILABLE	☐ NON-PUBI	ICLY AVAILABLE	☐ SENSITIVE	X□NON-SENSITIVE
ADAMS: X☐ Yes	ACCESSION NUM	MBER:ML151	21A471_X□ SUNS	I REVIEW COMPL	ETE 🗌 FORM 665 ATTACHED

OFFICE	RII:DRS	RII:DRS	RII:DRS				
SIGNATURE	DXB2	AXG1	EFG				
NAME	BACON	GOLDAU	GUTHRIE				
DATE	4/24/2015	4/24/2015	4/28/2015	5/ /2015	5/ /2015	5/ /2015	5/ /2015
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 No.: 05000335, 05000389

License No.: DPR-67, NPF-16

Report No.: 05000335/2015301, 05000389/2015301

Licensee: Florida Power and Light Company (FP&L)

Facility: St. Lucie Nuclear Plant, Units 1 & 2

Location: 6351 S. Ocean Drive

Jensen Beach, FL 34957

Dates: Operating Test – March 2-11, 2015

Written Examination – March 18, 2015

Examiners: D. Bacon, Chief Examiner, Senior Operations Engineer

J. Kellum, Senior Reactor Engineer A. Goldau, Operations Engineer

Approved by: Eugene F. Guthrie, Chief

Operations Branch 2 Division of Reactor Safety

SUMMARY

ER 05000335/2015301, 05000389/2015301; operating test March 2-11, 2015 & written exam March 18, 2015; St. Lucie Nuclear Plant; Operator License Examinations.

Nuclear Regulatory Commission (NRC) examiners conducted an initial examination in accordance with the guidelines in Revision 9, Supplement 1, of NUREG-1021, "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, as applicable.

Members of the St. Lucie Nuclear Plant staff developed both the operating tests and the written examination. The initial operating test, written RO examination, and written SRO examination submittals met the quality guidelines contained in NUREG-1021.

The NRC administered the operating tests during the period March 2-11, 2015. Members of the St. Lucie Nuclear Plant training staff administered the written examination on March 18, 2015. All Reactor Operator (RO) and Senior Reactor Operator (SRO) applicants passed both the operating test and written examination. All applicants were issued licenses commensurate with the level of examination administered.

There was one post-examination comment.

No findings were identified.

REPORT DETAILS

4. OTHER ACTIVITIES

4OA5 Operator Licensing Examinations

a. Inspection Scope

The NRC evaluated the submitted operating test by combining the scenario events and JPMs in order to determine the percentage of submitted test items that required replacement or significant modification. The NRC also evaluated the submitted written examination questions (RO and SRO questions considered separately) in order to determine the percentage of submitted questions that required replacement or significant modification, or that clearly did not conform with the intent of the approved knowledge and ability (K/A) statement. Any questions that were deleted during the grading process, or for which the answer key had to be changed, were also included in the count of unacceptable questions. The percentage of submitted test items that were unacceptable was compared to the acceptance criteria of NUREG-1021, "Operator Licensing Standards for Power Reactors."

The NRC reviewed the licensee's examination security measures while preparing and administering the examinations in order to ensure compliance with 10 CFR §55.49, "Integrity of examinations and tests."

The NRC administered the operating tests during the period March 2-11, 2015. The NRC examiners evaluated six Reactor Operator (RO) and nine Senior Reactor Operator (SRO) applicants using the guidelines contained in NUREG-1021. Members of the St. Lucie Nuclear Plant training staff administered the written examination on March 18, 2015. Evaluations of applicants and reviews of associated documentation were performed to determine if the applicants, who applied for licenses to operate the St. Lucie Nuclear Plant, met the requirements specified in 10 CFR Part 55, "Operators' Licenses."

The NRC evaluated the performance or fidelity of the simulation facility during the preparation and conduct of the operating tests.

b. Findings

No findings were identified.

The NRC developed the written examination sample plan outline. Members of the St. Lucie Nuclear Plant training staff developed both the operating tests and the written examination. All examination material was developed in accordance with the guidelines contained in Revision 9, Supplement 1, of NUREG-1021. The NRC examination team reviewed the proposed examination. Examination changes agreed upon between the NRC and the licensee were made per NUREG-1021 and incorporated into the final version of the examination materials.

The NRC, using NUREG-1021, determined that the licensee's initial examination submittal was within the range of acceptability expected for a proposed examination.

The NRC determined that the licensee's initial operating test submittal was within the range of acceptability expected for a proposed examination.

All applicants passed both the operating test and written examination and were issued licenses.

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

The licensee submitted one post-examination comment concerning the written examination. A copy of the final written examination and answer key, with all changes incorporated, and the licensee's post-examination comment may be accessed not earlier than March 20, 2017, in the ADAMS system (ADAMS Accession Numbers ML15097A264, ML15097A267 and ML15097A269).

4OA6 Meetings, Including Exit

Exit Meeting Summary

On March 12, 2015, the NRC examination team discussed generic issues associated with the operating test with Mr. Chris Costanzo, Site Vice President, and members of the St. Lucie Nuclear Plant staff. The examiners asked the licensee if any of the examination material was proprietary. No proprietary information was identified.

KEY POINTS OF CONTACT

Licensee personnel

- C. Costanzo, Site Vice President
- M. Baughman, Site Training Manager
- D. Cecchett, Licensing Engineer
- B. Coffey, Plant General Manager
- P. Farnsworth, Lead Exam Developer
- E. Feightner, Operations Training Supervisor Initial
- J. Owens, General Supervisor Operations Training
- P. Rasmus, Site Operations Director
- T. Spillman, Assistant Operations Manager Training

NRC personnel

- T. Morrissey, Senior Resident Inspector
- R. Reyes, Resident Inspector

FACILITY POST-EXAMINATION COMMENTS AND NRC RESOLUTIONS

A complete text of the licensee's post-examination comment can be found in ADAMS under Accession Number ML15097A269.

Item

RO Question # 32, K/A 006A2.12

Comment

The licensee recommends that answer choice "C" should be accepted as the only correct answer, instead of answer choice "D".

Given a set of initial conditions during plant cooldown, this question, in part, asks whether only safety injection, or both safety injection and main steam isolation, must be manually actuated for conditions that exist two minutes later. Answer choice "C" indicates that both safety injection and main steam isolation must be manually actuated. Answer choice "D" indicates that only safety injection be manually actuated.

The initial conditions were at a reactor coolant system pressure where automatic safety injection was already procedurally blocked for a cooldown in progress and steam generator pressures were not yet below the pressure where automatic main steam isolation would have been procedurally blocked.

The conditions given two minutes later specified that a 2A steam line rupture had occurred outside of containment just upstream of the main steam isolation valve, with plant parameters that were below the setpoints where both automatic safety injection, if it were not blocked, and automatic main steam isolation should have already occurred. It also specified that steam generator pressures (plural) were rapidly lowering. If main steam isolation had properly actuated, pressure would have been lowering in only the 2A steam generator.

Due to being procedurally blocked, manual actuation of safety injection is required. Due to failing to automatically actuate as designed, manual actuation of main steam isolation is also required. Therefore, answer choice "C" is the only correct answer.

NRC Resolution

The licensee's recommendation was accepted. Answer choice "C" is the only correct answer for RO question # 32.

Technical information provided by the licensee supports the change to the answer key. Since safety injection is blocked with pressure below the actuation setpoint and steam generator pressures for both steam generators are below the main steam isolation setpoint and rapidly lowering with a steam leak upstream of only the 2A steam generator, manual actuation of both safety injection and main steam isolation are required.

SIMULATOR FIDELITY REPORT

Facility Licensee: St. Lucie Nuclear Plant

Facility Docket No.: 05000335, 05000389

Operating Test Administered: March 2-11, 2015

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 Inspection Procedure 71111.11 are not indicative of noncompliance with 10 CFR 55.46. No licensee action is required in response to these observations.

No simulator fidelity or configuration issues were identified.