



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

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

September 29, 2005

Florida Power and Light Company  
ATTN: Mr. J. A. Stall, Senior Vice President  
Nuclear and Chief Nuclear Officer  
P. O. Box 14000  
Juno Beach, FL 33408-0420

SUBJECT: TURKEY POINT NUCLEAR PLANT - NRC EXAMINATION REPORT  
05000250/2005301 AND 05000251/2005301

Dear Mr. Stall:

During the period July 18 - August 12, 2005, the Nuclear Regulatory Commission (NRC) administered operating examinations to employees of your company who had applied for licenses to operate the Turkey Point Nuclear Plant Units 3 and 4. 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 July 15, 2005.

Two reactor operator (RO) and ten senior reactor operator (SRO) applicants passed both the written and operating examinations. There was one post examination comment. This comment is summarized in Enclosure 2. A Simulation Facility Report is included in this report in Enclosure 3.

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).

Should you have any questions concerning this letter, please contact me at (404) 562-4647.

Sincerely,

/RA/

James H. Moorman, III, Chief  
Operations Branch  
Division of Reactor Safety

Docket Nos.: 50-250, 50-251  
License Nos.: DPR-31, DPR-41

Enclosures: (See page 2)

Enclosures: 1. Report Details  
2. NRC Post Examination Comment Resolution.  
3. Simulation Facility Report

cc w/encls:

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Turkey Point Nuclear Plant  
Florida Power and Light Company  
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NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.: 50-250, 50-251

License Nos.: DPR-31, DPR-41

Report No.: 05000250/2005301, 05000251/2005301

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

Facility: Turkey Point Nuclear Plant, Units 3 & 4

Location: 9762 S. W. 344<sup>th</sup> Street  
Florida City, FL 33035

Dates: Operating Tests - July 18 - 22, August 1 - 4, and  
August 12, 2005  
Written Examination - July 15, 2005

Examiners: R. Baldwin, Chief, Senior Operations Examiner  
S. Rose, Senior Operations Engineer  
T. Kolb, Operations Engineer  
M. Chitty, License Examiner Trainee

Approved by: James H. Moorman, III, Chief  
Operations Branch  
Division of Reactor Safety

Enclosure 1

## **SUMMARY OF FINDINGS**

ER 05000250/2005301, ER 05000251/2005301; 7/18 - 22, 8/1 - 4, & 12/2005; Turkey Point Nuclear Plant, Units 3 & 4, 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 July 18 - 22, August 1 - 4 and August 12, 2005. Members of the Turkey Point Nuclear Plant training staff administered the written examination on July 15, 2005. The written examinations and the operating test outlines were developed by the NRC. Additionally, the NRC developed details for two of the six scenarios and all of the Job Performance Measures (JPMs). The Turkey Point Nuclear Plant training staff developed additional operating test details for four of the six simulator scenarios.

Two Reactor Operators (RO) and ten Senior Reactor Operators (SRO) passed both the operating test and written examination. All of the applicants who passed their examinations were issued operator licenses 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 NRC developed operating test outlines and written examinations in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9. The licensee's 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 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 two RO and ten SRO applicants who were being assessed under the guidelines specified in NUREG-1021. The examiners administered the operating tests during the period of July 18 - 22, August 1 - 4, and August 12, 2005. Members of the Turkey Point Nuclear Plant training staff administered the written examination on July 15, 2005. The evaluations of the applicants and review of documentation were performed to determine if the applicants, who applied for licenses to operate the Turkey Point Nuclear Plant, met 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 the proposed tests. Two RO and ten SRO applicants passed both the operating test and written examination.

The combined RO and SRO written examinations with knowledge and abilities (K/As) question references/answers, examination references, final RO written examination, final SRO written examination and licensee's post examination comments may be accessed in the ADAMS system (ADAMS Accession Numbers, ML052500269, ML052500249, ML052500253 and ML052560002).

The exam team noted several generic weaknesses during the examination; announcing reactor trips to the plant, initiation of a safety injection when conditions did not warrant it, deferring procedural steps in Emergency Operating Procedures without invoking 10CFR50.54.x, and inability to identify boron crystals on plant equipment during plant walkthroughs. Copies of these reports were sent to the facility Training Manager for evaluation and determination of appropriate remedial training.

#### 4OA6 Meetings

##### Exit Meeting Summary

On August 5, 2005, the examination team discussed generic issues with Mr. T. Jones and members of his 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

T. Jones, Site Vice President  
M. Baughman, Training Manager  
G. Blinde, Training Instructor  
D. Eddinger, Operations Shift Manager  
J. Hannah, QA Auditor  
G. Laughlin, Operations Training Supervisor  
S. Mihacakea, Licensing Engineer  
B. Miller, Training Instructor  
G. Moyssidi, Simulator Hardware Engineer.  
M. Navin, Operations Manager  
R. Wright, Assistant Operations Manager Support

##### NRC personnel

S. Stewart, Senior Resident Inspector  
T. Kolb, Operations Engineer  
S. Rose, Senior Operations Engineer  
M. Chitty, License Examiner Trainee

Turkey Point 2005-301

NRC Resolution to the Turkey Point Post Examination Comment

A complete text of the licensee's post-exam comments can be found in ADAMS under Accession Number ML05256002.

**JPM - Calculate Number of Gallons of Primary Water Required to Raise Power from 5% to 30%.**

***LICENSEE COMMENT:***

The JPM concerns itself with the calculation of the amount of primary water required to increase power from 5% to 30%. This was accomplished using procedure, 0-OP-046, "CCS - Boron Concentration Control, Attachment 5 - Reactivity Worksheet."

The licensee states that the JPM was developed based on using the Hot Zero Power (HWP), No Xenon column or by interpolation method between Hot Zero Power and Hot Full Power (HFP) to calculate integral rod worth. The licensee states that the applicants determined integral rod worth values using 3 different methods, Hot Zero Power, (No Xenon), Hot Full Power Equilibrium Xenon or interpolation between the two values. Using the HFP method was not discussed as a viable method for performing this calculation during the preparation week.

The licensee identified after administration of this JPM that using the HFP, Equilibrium column would provide values for JPM Step 2 for calculating Rod Worth that are slightly outside the acceptable band based on the tolerances agreed upon identified in the JPMs answer key. The licensee also states that the final ppm of boron was still correctly calculated within allowable limits.

The licensee recommended that, 1.) JPM Step 2 not be counted as a critical step, as it currently is, or 2.) allow the tolerance for acceptability range be expanded to allow for the HFP, Equilibrium Xenon calculation.

***NRC RESOLUTION:***

Recommendation partially accepted. The answer key, for Critical Step #2, will be changed to allow a range of values based on the HWP and HFP which will encompass the interpolated values. The step will remain a critical step as initially designed.



## SIMULATION FACILITY REPORT

Facility Licensee: Turkey Point Nuclear Plant Units 3 and 4

Facility Docket Nos.: 05000220 and 05000251

Operating Tests Administered on: July 18 - 22, August 1 -4, and August 12, 2005

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 in accordance with 10 CFR 55.46. No licensee action is required in response to these observations.

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

4. While transferring pressurizer control selector switch, to position 2, the switch did not properly make up contacts. The simulator failed to recognize that the operator had placed the switch in the correct position. This caused the inability to recover letdown and automatic pressurizer heater control. (Condition Report # 2005-19985-CR)
5. During a scenario, while initiating a Non-Regenerative Heat Exchanger (NRHX) tube leak, the simulator locked up (froze) and required simulator engineering to reset the simulator. (Condition Report # 2005-19838-CR)