



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

October 29, 2013

Mr. Joseph Plona
Senior Vice President and
Chief Nuclear Officer
Detroit Edison Company
Fermi 2 - 210 NOC
6400 North Dixie Highway
Newport, MI 48166

SUBJECT: FERMI POWER PLANT, UNIT 2
NRC INITIAL LICENSE EXAMINATION REPORT 05000341/2013301

Dear Mr. Plona:

On September 24, the U.S. Nuclear Regulatory Commission (NRC) completed the initial operator licensing examination process for license applicants employed at your Fermi Power Plant, Unit 2. The enclosed report documents the results of those examinations. Preliminary observations noted during the examination process were discussed on September 11, 2013, with Mr. Greg Strobel, Mr. Jim Davis, and other members of your staff. An exit meeting was conducted by telephone on September 25, 2013, between Mr. Jim Davis of your staff and Mr. Carl Moore, Chief Operator Licensing Examiner, to review the proposed final grading of the written examination for the license applicants. There were no post-examination comments provided by the Training Department following completion of the written examination.

The NRC examiners administered an initial license examination operating test during the week of September 9, 2013. The written examination was administered by Fermi Power Plant training department personnel on September 13, 2013. Two Senior Reactor Operators and one Reactor Operator applicant were administered license examinations. The results of the examinations were finalized on October 4, 2013. Three applicants passed all sections of their respective examinations and two were issued senior operator licenses and one was issued an operator license.

The written examination and other related written examination documentation will be withheld from public disclosure for 24 months per your request. However, if an applicant received a proposed license denial letter because of a written examination grade that is less than 80.0 percent, the applicant will be provided a copy of the written examination. For examination security purposes, if this occurs, your staff should consider that written examination uncontrolled and exposed to the public.

J. Plona

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In accordance with Title 10 of the *Code of Federal Regulations*, Section 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 System (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Hironori Peterson, Chief
Operations Branch
Division of Reactor Safety

Docket No. 50-341
License No. NPF-43

Enclosures:

1. Operator Licensing Examination Report 05000341/2013301(DRS)
w/Attachment: Supplemental Information
2. Simulation Facility Report

cc w/encl: Distribution via ListServ™

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-341
License No: NPF-43

Report No: 05000341/2013301

Licensee: Detroit Edison Company

Facility: Fermi Power Plant, Unit 2

Location: Newport, Michigan

Dates: September 9 – 24, 2013

Inspectors: C. Moore, Chief, Operations Engineer
M. Morris, Senior Operations Engineer
D. McNeil, Senior Operations Engineer

Approved by: H. Peterson, Chief
Operations Branch
Division of Reactor Safety

SUMMARY OF FINDINGS

ER 05000341/2013301(DRS); 09/09/2013 – 09/24/2013; Detroit Edison Company, Fermi Power Plant, Unit 2, Initial License Examination Report.

The announced initial operator licensing examination was conducted by regional U.S. Nuclear Regulatory Commission (NRC) examiners in accordance with the guidance of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1.

Examination Summary

Three applicants passed all sections of their respective examinations. Two applicants were issued senior operator licenses and one applicant was issued an operator license.
(Section 4OA5.1)

A. NRC-Identified and Self-Revealed Findings

No findings were identified.

B. Licensee-Identified Violations

No findings were identified.

REPORT DETAILS

4OA5 Other Activities

.1 Initial Licensing Examinations

a. Examination Scope

The NRC examiners and members of the facility licensee's staff used the guidance prescribed in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1, to develop, validate, administer, and grade the written examination and operating test. Members of the facility licensee's staff prepared the outline and developed the written examination and operating test. The NRC examiners validated the proposed examination during the week of August 12, 2013, with the assistance of members of the facility licensee's staff. During the onsite validation week, the examiners audited 33 percent of the license applications for accuracy. The NRC examiners, with the assistance of members of the facility licensee's staff, administered the operating test, consisting of job performance measures and dynamic simulator scenarios, during the period of September 9 – 11, 2013. The facility licensee administered the written examination on September 13, 2013.

b. Findings

(1) Written Examination

The NRC examiners determined that the written examination, as proposed by the licensee, failed to meet the NRC's expectations for a proposed examination. More than 20 percent of the proposed examination questions for the Senior Reactor Operator (SRO) examination were determined to be unsatisfactory and required modification or replacement; additional attention in this area is warranted. A total of nine questions were determined to be unsatisfactory. Eight were judged to be unsatisfactory because only reactor operator or system knowledge was required to answer the question correctly; therefore, they were not SRO-only questions. The ninth question was judged unsatisfactory based on low level of difficulty.

All changes made to the proposed written examination were made in accordance with NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," and documented on Form ES-401-9, "Written Examination Review Worksheet," which will be available electronically in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS).

During the validation of the written examination several questions were modified or replaced. Changes made to the written examination were documented on Form ES-401-9, "Written Examination Review Worksheet," which will be available in 24 months electronically in the NRC Public Document Room or from the PARS component of ADAMS. The examiners also identified a potential enhancement opportunity to one of Fermi Power Plant's emergency operating procedures during the written examination validation process. In the Emergency Operating Procedures (EOPs) on Sheet 5 (Table 14), Secondary Containment and Radioactivity Release Control, currently contains a secondary containment radiation Max Safe Operating Value of 5 R/Hr for each of the sub-basement corner rooms. These Max Safe values are above the

maximum radiation detector scale of 1 R/Hr for these areas and thus radiation technicians using portable detector monitoring equipment must be dispatched to determine when the Max Safe radiation levels are exceeded. There are concerns regarding how long this potential delay will take, and what effect it will have on accident mitigation. Fermi Power Plant initiated Condition Assessment Resolution Document 13-26923 to investigate these concerns.

On September 24, 2013, the licensee submitted documentation noting that there were no post-examination comments for consideration by the NRC examiners when grading the written examination. The post-examination comments and the NRC resolution for the post-examination comments, the proposed written examination, as well as the final as-administered examination and answer key, will be available in 24 months electronically in the NRC Public Document Room or from the PARS component of NRC's ADAMS.

The NRC examiners graded the written examination on September 24, 2013, and conducted a review of each missed question to determine the accuracy and validity of the examination questions.

(2) Operating Test

The NRC examiners determined that the operating test, as originally proposed by the licensee, was within the range of acceptability expected for a proposed examination. Changes made to the operating test, documented in a document titled, "Operating Test Comments," as well as the final as administered dynamic simulator scenarios and job performance measures (JPMs) are available electronically in the NRC Public Document Room or from the PARS component of NRC's ADAMS.

The NRC examiners completed operating test grading on September 30, 2013.

(3) Eligibility, Waiver, and Deferral Review

No waiver or deferral request was submitted for the applicants that were examined. During the onsite validation week, the examiners audited 33 percent of the license applications for accuracy. The NRC had several questions regarding the reactor operator applicants' on-the-job training requirements. The applicant was originally slated to be a SRO and stood all of his on-the-job training watches in the senior reactor operator position. The NRC noticed a requirement in QC-OP-725-040, "Licensed Operator Candidate Under Instruction Time," to be on shift "...in the position for which the applicant seeks a license and under the direct supervision of the licensed reactor operator or SRO...." Since the applicant's training records did not document that the applicant completed any reactor operator watches, the NRC asked the Fermi Power Plant training department to provide justification why the applicants training as a SRO exceeded, or was equivalent to that of a reactor operator. The licensee provided adequate justification for why the applicants' SRO on-the-job training encompasses the reactor operator on-the-job training. The licensee will evaluate the need to address this inconsistency in QC-OP-725-040, "Licensed Operator Candidate Under Instruction Time," in the future. Condition Assessment Resolution Document 13-27013 was written to evaluate whether this procedure needs to be enhanced.

(4) Examination Results

Two applicants at the SRO level and one applicant at the reactor operator level were administered written examinations and operating tests. All three applicants passed all portions of their examinations and were issued their respective operating licenses on October 4, 2013.

.2 Examination Security

a. Scope

The NRC examiners reviewed and observed the licensee's implementation of examination security requirements during the examination validation and administration to assure compliance with Title 10 of the *Code of Federal Regulations*, Section 55.49, "Integrity of Examinations and Tests." The examiners used the guidelines provided in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," to determine acceptability of the licensee's examination security activities.

b. Findings

No examination security issues were observed during the administration of this examination.

4OA6 Management Meetings

.1 Debrief

The chief examiner presented the examination team's preliminary observations and findings on September 11, 2013, to Mr. Greg Strobel, Mr. Jim Davis, and other members of the Fermi Power Plant Operations and Training Department staff.

.2 Exit Meeting Summary

The chief examiner conducted an exit meeting on September 25, 2013, with Mr. Jim Davis, by telephone. The examiners asked the licensee whether any of the material used to develop or administer the examination should be considered proprietary.

No proprietary nor sensitive information was identified during the examination or debrief/exit meetings.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

G. Strobel, Operations Manager
J. Davis, Nuclear Training Manager
D. Coseo, Operations Training General Supervisor
T. Barrett, Exam Team Lead

Nuclear Regulatory Commission

B. Kemker, Senior Resident Inspector
R. Jones, Resident Inspector
C. Moore, Chief Examiner
M. Morris, Examiner
D. McNeil, Examiner

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened, Closed, and Discussed

None

LIST OF DOCUMENTS REVIEWED

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspector reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

4OA5 Other Activities

None

LIST OF ACRONYMS USED

ADAMS	Agency-Wide Document Access and Management System
CAP	Corrective Action Program
CFR	Code of Federal Regulations
DRS	Division of Reactor Safety
IR	Inspection Report
JPM	Job Performance Measures
NCV	Non-Cited Violation
NRC	U.S. Nuclear Regulatory Commission
RO	Reactor Operator
SRO	Senior Reactor Operator

SIMULATION FACILITY REPORT

Facility Licensee: Fermi Power Plant, Unit 2

Facility Docket No: 50-341

Operating Tests Administered: 09/09/2013 through 09/11/2013

The following documents observations made by the NRC examination team during the initial operator license examination. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of non-compliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulation facility other than to provide information, which may be used in future evaluations. No licensee action is required in response to these observations.

During the conduct of the simulator portion of the operating tests, the following items were observed:

ITEM	DESCRIPTION
None	

J. Plona

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Hironori Peterson, Chief
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Division of Reactor Safety

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