

January 2, 2001

Mr. John K. Wood
Vice President - Nuclear
FirstEnergy Nuclear Operating Company
P. O. Box 97, A200
Perry, OH 44081

SUBJECT: PERRY NUCLEAR POWER PLANT - NRC INSPECTION REPORT
50-440/00-15(DRS)

Dear Mr. Wood:

On December 4 through 8, 2000, the NRC conducted its biennial inspection of the licensed operator requalification training program at the Perry Nuclear Power Plant. The results of this inspection were discussed with you and other members of your staff on December 8, 2000. The enclosed report presents the results of this inspection.

This inspection was an examination of activities conducted under your license as they relate to safety and to compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations of activities, and interviews with personnel.

No findings of significance were identified.

In accordance with 10 CFR 2.790 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/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

/RA/

David E. Hills, Chief
Operations Branch
Division of Reactor Safety

Docket No. 50-440
License No. NPF-58

Enclosures: 1. Inspection Report 50-440/00-15(DRS)
2. List of Documents Reviewed

cc w/encls: B. Saunders, President - FENOC
N. Bonner, Director, Nuclear
Maintenance Department
G. Dunn, Manager, Regulatory Affairs
K. Ostrowski, Director, Nuclear
Services Department
T. Rausch, Director, Nuclear
Engineering Department
R. Schrauder, General Manager,
Nuclear Power Plant Department
A. Schriber, Chairman, Ohio Public
Utilities Commission
Ohio State Liaison Officer
R. Owen, Ohio Department of Health
R. Collings, Training Manager

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 - R. Schrauder, General Manager, Nuclear Power Plant Department
 - A. Schriber, Chairman, Ohio Public Utilities Commission
Ohio State Liaison Officer
 - R. Owen, Ohio Department of Health
 - R. Collings, Training Manager

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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-440
License No: NPF-58

Report No: 50-440/00-15(DRS)

Licensee: FirstEnergy Nuclear Operating Company (FENOC)

Facility: Perry Nuclear Power Plant, Unit 1

Location: P.O. Box 97 A200
Perry, OH 44081

Inspection Dates: December 4 - 8, 2000

Inspectors: M. Bielby, Senior Operations Lead Inspector
G. Wilson, License Operator Examiner

Approved by: David E. Hills, Chief
Operations Branch
Division of Reactor Safety

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
<ul style="list-style-type: none">● Initiating Events● Mitigating Systems● Barrier Integrity● Emergency Preparedness	<ul style="list-style-type: none">● Occupational● Public	<ul style="list-style-type: none">● Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner, which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.

SUMMARY OF FINDINGS

IR 05000440-00-15(DRS), on December 4 - 8, 2000, FirstEnergy Nuclear Operating Company, Perry Nuclear Power Plant. Licensed Operator Requalification Training Program.

The inspection was conducted by a regional senior operations specialist and license operator examiner. No findings of significance were identified.

Report Details

1. REACTOR SAFETY

1R11 Licensed Operator Requalification

.1 Review of Operating History - Effectiveness of Operator Training

a. Inspection Scope

The inspectors reviewed the plant's operating history from January 1999 through November 2000, to assess whether the Licensed Operator Requalification Training (LORT) program had addressed operator performance deficiencies noted in the plant.

b. Findings

No findings of significance were identified.

.2 Requalification Examination Material

a. Inspection Scope

The inspectors reviewed the Year 2000 annual requalification operating and written examination material to evaluate general quality, construction, and difficulty level. The inspection week operating examination material consisted of a "Plant and Control Systems," Section A static simulator written examination, "Administrative Controls/Procedural Limits," Section B open reference written examination, dynamic simulator scenarios, and job performance measures (JPMs). The written examination material consisted of a total of 45 open reference multiple choice questions. A total of two scenarios and five JPMs per operator were administered. The inspectors reviewed the methodology for developing the examinations, including the LORT program two year sample plan, probabilistic risk assessment insights, previously identified operator performance deficiencies, and plant modifications. The inspectors assessed the level of examination material duplication during the current year annual examination (through three examinations) and with last year's annual examinations. The inspectors also discussed various aspects of the examination development with members of the licensee's training staff.

Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Findings

No findings of significance were identified.

.3 Requalification Examination Administration Practices

a. Inspection Scope

The inspectors observed the administration of the requalification operating test to assess the licensee's effectiveness in conducting the test and to assess the facility evaluators' ability to determine adequate performance using objective, measurable performance standards. The inspectors evaluated the performance of one operating shift crew during four dynamic simulator scenarios and five JPMs in parallel with the facility evaluators. The inspectors observed the training staff personnel administering the operating test, including pre-examination briefings, observations of operator performance, individual and crew evaluations after dynamic scenarios, techniques for JPM cuing, and the final evaluation briefing for licensed operators. The inspectors noted the performance of the simulator to support the examinations. The inspectors also reviewed the licensee's overall examination security program.

Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Findings

No findings of significance were identified.

.4 Requalification Training Program Feedback Process

a. Inspection Scope

The inspectors assessed the methods and effectiveness of the licensee's processes for revising and maintaining its LORT program up to date, including the use of feedback from plant events and industry experience information. The inspectors interviewed licensee personnel (operators, instructors, training management, and operations management) and reviewed the applicable licensee's procedures. In addition, the inspectors reviewed Quality Assurance and Self-Assessment Audits.

Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Findings

No findings of significance were identified.

.5 Remedial Training Program

a. Inspection Scope

The inspectors assessed the adequacy and effectiveness of the remedial training conducted since the previous annual requalification examinations and the training planned for the current examination cycle to ensure that they addressed weaknesses in licensed operator or crew performance identified during training and plant operations. The inspectors reviewed remedial training procedures and individual remedial training plans, and interviewed licensee personnel (operators, instructors, and training

management). In addition, the inspectors reviewed the licensee's current examination cycle remediation packages for unsatisfactory operator performance on the written and operating examinations to ensure that remediation and subsequent re-evaluations were completed prior to returning individuals to licensed duties.

Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Findings

No findings of significance were identified.

.6 Conformance with Operator License Condition

a. Inspection Scope

The inspectors reviewed the licensee's program for maintaining active operator licenses and ensuring the medical fitness of its licensed operators. The inspectors evaluated the facility and individual operator licensees' conformance with the requirements of 10 CFR Part 55.

Specific documents reviewed for this inspection are listed in Enclosure 2.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA6 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. J. Wood and other members of licensee management at the conclusion of the inspection on December 8, 2000. The licensee acknowledged the observations and did not identify any information as proprietary.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

J. Wood, Vice President-Nuclear
B. Luthanen, Compliance Unit
K. Ostrowski, Director, Nuclear Services Department
R. Schrauder, General Manager, Nuclear Power Plant Department
R. Strohl, Operations Training Supervisor
R. Collings, Manager, Training and Emergency Planning
N. Bonner, Director, Nuclear Maintenance Department
T. Rausch, Director, Nuclear Engineering Department
D. Gudger, Supervisor, Compliance Unit

NRC

R. Vogt-Lowell, Resident Inspector, Perry
M. Bielby, Senior Operations Lead Inspector
G. Wilson, License Operator Examiner

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-440/00-15-01	URI	Potential failure to meet operator license reinstatement requirements of 10 CFR 55.53(f)(2) for completion of shift functions under the direction of a senior operator in a position to which the individual will be assigned.
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Closed

None

Discussed

None

LIST OF ACRONYMS

AOP	Abnormal Operating Procedure
CFR	Code of Federal Regulations
DRS	Division of Reactor Safety
JPM	Job Performance Measure
LORT	Licensed Operator Requalification Training
NRC	Nuclear Regulatory Commission
SRO	Senior Reactor Operator
URI	Unresolved Item

LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents referenced and/or reviewed during the inspection, including documents prepared by others for the licensee. Inclusion on this list does not imply that NRC inspectors reviewed the documents in their entirety, but, rather that selected sections or portions of the documents were referenced and/or evaluated as part of the overall inspection effort. NRC acceptance of the documents or any portion thereof is not implied.

Procedures

- TMP-2002, "Licensed Operator Requalification Program," Revision 2
- PAP-0201, "Conduct of Operations," Revision 9
- "Perry Nuclear Power Plant Operations Section Expectations Handbook," Revision 1

Licensed Operator Requalification Training Documentation

- Operations Training Review Committee Meeting Minutes (December 1999 - June 2000)
- Licensed Operator Requalification Training Program Observations 1999 - 2000
- Years 1999 - 2000 Requalification Training Section Course Completion (Attendance) Records
- Licensed Operator Requalification Program Training Plan, Revision 5, including:
- Lesson Plan OT-3036-006-B33, "Reactor Recirculation and Recirculation Flow Control System," July 30, 1997
- Lesson Plan OT-3036-004-N27, "Feedwater and Feedwater Leakage Control System," December 13, 1999
- Lesson Plan OT-3036-002-N32/C85, "Steam Bypass and Turbine Control System," January 6, 2000
- Lesson Plan OT-3036-003-N71, "Circulating Water," August 23, 2000
- Accelerated Requalification Training Program for one Crew and two Individuals that demonstrated unsatisfactory performance during the 2000 Annual Examination
- Years 1999-2000 Biennial Licensed Operator Requalification Program Cycle Schedule
- Year 2000 Sample Plan for Licensed Operator Requalification Program Annual Examination
- Year 2000 Annual Operating Examination Evaluations for One Operations Crew and Five Individual Operators
- Year 1999 and 2000 - Annual Written and Operating Examinations for SROs and ROs
- Licensed Operator Active License Tracking Forms for Year 2000 for On-Shift Watch Standing Hours
- Medical Records for Six Licensed Operators (3 SROs and 3 ROs)
- Intra-Company Memorandums for Removal of Operator(s) from Licensed Duties

Assessments

- Perry Plant Performance Review, March 31, 2000
- Perry License Event Report 2000-004, "Technical Specification 3.0.3 Entered Due to Inoperability of Both Trains of Annulus Exhaust Gas Treatment System"
- 2000 Quality Assurance Surveillance No. 00-038 of Operator Requalification Training
- 1999 Perry Training Section Self-Assessment No. 124 PTS 99

Condition Reports

- CR No. 00-0280, Non-Approved Presentation of LORT Training Material
- CR No. 00-1580, Licensed Operators Not Consistently Evaluated During LORT
- CR No. 00-2405, Staff Crew Failure During Weekly Simulator Evaluation
- CR No. 00-2765, Requal Cycle-9 Failures
- CR No. 00-3779, [Operator] License Medical Restrictions May Not Have Been Reported
- CR No. 00-3800, NRC Unresolved Item [Watchstanding Requirement 10 CFR Part 55.53(f)(2)]
- CR No. 00-3803, Requalification Inspection Improvement Areas