



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

June 30, 1988

Docket No. 50-440

Mr. Alvin Kaplan, Vice President
Nuclear Group
The Cleveland Electric Illuminating Company
10 Center Road
Perry, Ohio 44081

Dear Mr. Kaplan:

This letter forwards the report and the executive summary of the Operational Safety Team Inspection (OSTI) conducted by Mr. J. E. Cummins and other NRC personnel during the period March 14-25, 1988. The activities involved are authorized by NRC Operating License No. NPF-58 for the Perry Nuclear Power Plant. The team discussed the findings with you and other members of your staff at the conclusion of the inspection.

Selected activities in the areas of operations, maintenance, surveillance, engineering, management oversight, safety review, and quality programs were examined during the inspection. As a part of the operations performance evaluation, the team observed 162 hours of on-shift operation related activities. This included 95 hours of backshift (including weekends) coverage.

The team determined that sound procedures and programs had been developed and implemented and that the staff had a good, positive attitude. Strengths and weaknesses identified by the team are discussed in the inspection report.

The team did not identify any major items which indicated that the plant had any significant problems in making the transition from the construction and startup phases to the operating phase. Observations by team members indicated, however, that plant personnel were on a learning curve as they gained experience in operating and working in an operating nuclear power plant. Examples of these observations were instances in which plant personnel did not use procedures to perform plant evolutions, and instances in which personnel did not follow good radiological control practices. There was also an instance in which licensee personnel, who reviewed a surveillance procedure report that had questionable recorded data, failed to take any action. Team observations indicated that a more aggressive attitude toward root cause analysis and corrective action was needed.

No response to this letter is required, but some of the findings identified by the team may be potential enforcement items. The Region III Office will review this report and follow up on any enforcement items identified.

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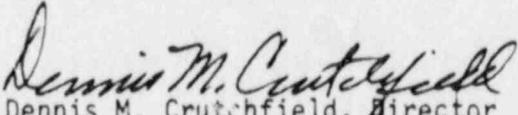
Mr. Alvin Kaplan

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June 30, 1988

Should you have any questions concerning this inspection, please contact me or Mr. J. Cummins (301-492-0957) of this office.

Sincerely,


Dennis M. Crutchfield, Director
Division of Reactor Projects III/IV/V
and Special Projects
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Enclosures:

1. Executive Summary
2. Inspection Report 50-440/88-200

cc w/enclosures: See next page

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EXECUTIVE SUMMARY
INSPECTION REPORT 50-440/88-200
PERRY NUCLEAR POWER PLANT

During the period March 14-25, 1988, an eight inspector team performed an Operational Safety Team Inspection (OSTI) at the Perry Nuclear Power Plant. The inspection was performed to determine if the Perry Plant had made the transition from the construction phase and an approximately 20 month long startup program to a safe operating plant. Since the primary focus of this inspection was on the operation of the plant, the inspection effort concentrated on control room operations and activities that interfaced with and supported the safe operation of the plant. The team observed 162 hours of on-shift operations related activities. In addition to observations of operations, inspection in the areas of maintenance, surveillance, management oversight, safety review, and quality programs were performed with emphasis on how these areas interfaced with plant operations.

SUMMARY OF SIGNIFICANT FINDINGS

The team considers that the licensee has implemented sound programs and procedures, and that the plant is staffed with an adequate number of competent personnel to effectively maintain the plant and operate it in a safe manner. The staff exhibited a good, positive attitude and, in general there appears to be a sense of team work in resolving problems and maintaining the plant; however, some disagreements between some departments were noted. Strengths and weaknesses identified by the team are summarized below and are discussed in detail in the succeeding paragraphs of this report.

Strengths and Weaknesses

The control room operations staff maintained control of the facility and an awareness of plant status in a professional manner, while displaying appropriate concern for safe facility operation. The operations staff also appears to have a sound understanding of integrated plant operations, component and equipment conditions, and system configurations. Control room shift turnovers, while generally thorough, sometimes lacked a historical update of events and ongoing activities. The team observed that the control room log entries sometimes lacked detail and did not provide adequate information for reconstructing events. The team believes that the log entries could be improved so that they will contribute to the evaluation and analysis of events.

The team discussed with the licensee the concern that the large volume of administrative work being performed by the unit supervisor was so time-consuming and distracting that it had the potential to impact on his ability to supervise other control room activities. The appropriate use of procedures was, in general, considered to be a strength by the team; however, team members observed two activities, which could have affected facility safety, being accomplished without benefit of procedural control or supervision. The team identified an apparent need for great Supervising Operator involvement in directing the activities of nonlicensed plant operators performing duties in the plant.

The depth of fire-fighting experience among personnel in the security and fire-protection section and the emphasis on fire protection training were considered by the team to be strong assets.

In the maintenance area, the licensee's program of integrated planning and scheduling of corrective and preventive maintenance, surveillances, and design changes was effective. Also the scheduling and performance of maintenance in preselected areas on a quarterly basis appeared to enhance efficiency and thereby promote safety. These programs were considered by the team to be strengths.

While the staff of the measuring and test equipment (M&TE) group was well qualified and knowledgeable and the calibration laboratory was well-equipped and of high quality, it did not appear to the team that the program for the return to the laboratory and the recalibration of M&TE was effective and adequate to ensure that out-of-calibration test equipment was not used in the field.

The timeliness of reviews of completed surveillance tests was considered by the team to be a strength; however, the team review of completed surveillance tests identified instances in which the post-test technical data reviews and analyses of trends failed to result in any followup corrective action or evaluation when inconsistent or anomalous data were obtained. The team was also concerned that the licensee could not provide documentation that would confirm the motor-operated valve (MOV) position indication limit switch settings for those MOVs that had not undergone testing by the motor-operated valve analysis testing system (MOVATS). The licensee had initiated action to confirm these limit switch settings prior to the time the team left the site.

The systems engineering function appeared to be generally well founded in an experienced staff that was generally well administered. During the inspection, however, the team observed licensee activities related to a problem with a water hammer in the residual heat removal (RHR) piping in the shutdown cooling leg, and found that the engineering group's approach was not well-disciplined. After more than a week from the time the problem was identified, the engineering group did not appear to have developed either a detailed plan for continued operation or for corrective action. This example evokes a more general concern that more aggressive root cause analysis and prompt corrective action is warranted.

The team observed that findings by the Independent Safety Engineering Group (ISEG) were frequently too general. Their reports were of a narrative type and addressed only broad, programmatic issues. The result was that the issues did not get timely responses from the designated action parties and did not appear to be treated as binding recommendations. To be meaningful, the team felt that the ISEG method of auditing and reporting needed to be more disciplined and to address manageable projects that were directed toward safety improvements.

In general, the team found the areas of quality assurance, quality control and safety review committees to be strengths.

Team members observed instances that indicated an apparent lax attitude toward radiological control practices in the plant. Examples of this were: a worker standing in potentially contaminated steam that had not been checked by health physics personnel, a worker carelessly discarding protective gloves after working on a potentially contaminated valve, a worker leaning over a radiological control barrier to use a barrel inside the barrier boundary as a writing desk, and workers in the radiologically controlled area ignoring water leaking on the floor from a potentially contaminated source. In the latter instance, a team member had health physics personnel check the area; and the water was found to be slightly contaminated.

Conclusions

The team concluded that the licensee has implemented sound programs and was developing a competent and knowledgeable staff. Some of the weaknesses identified indicate, however, that the licensee's staff was undergoing a learning process through experience in operating and working in an operating nuclear power plant.