



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76011
February 23, 1981

Docket Nos. 50-313/80-20
50-368/80-20



Arkansas Power and Light Company
Attn: Mr. William Cavanaugh III
Vice President of Generation and
Construction
P. O. Box 551
Little Rock, Arkansas 72203

Gentlemen:

Subject: Health Physics Appraisal

The NRC has identified a need for licensees to strengthen the health physics programs at nuclear power plants and has undertaken a significant effort to assure that action is taken in this regard. As a first step in this effort, the Office of Inspection and Enforcement is conducting special team appraisals of the health physics programs, including the health physics aspects of radioactive waste management and onsite emergency preparedness, at all operating power reactor sites. The objectives of these appraisals are to evaluate the overall adequacy and effectiveness of the total health physics program at each site and to identify areas of weakness that need to be strengthened. We will use the findings from these appraisals as a basis not only for requesting individual licensee action to correct deficiencies and effect improvements but also for effecting improvements in NRC requirements and guidance. This effort was identified to you in a letter dated January 22, 1980, from Mr. Victor Stello, Jr., Director, NRC Office of Inspection and Enforcement.

During the period of October 27 - November 7, 1980, the NRC conducted the special appraisal of the health physics program at the Arkansas Nuclear Station. Areas examined during this appraisal are described in the enclosed report (50-313/80-20; 50-368/80-20). Within these areas, the Appraisal Team reviewed selected procedures and representative records, observed work practices, and interviewed personnel. It is requested that you carefully review the findings of this report for consideration in effecting improvements to your health physics program. The findings of the appraisal at Arkansas Nuclear Station indicate that although your overall health physics program is adequate for present operations, several significant weaknesses exist. These include the following:

- (1) Lack of engineering and radiation controls in the Unit 1 auxiliary building has led to the creation of a series of radiological events that impact adversely upon the plant staff.
- (2) The development and implementation of written approved procedures to cover all the activities of the health physics function at the Station.

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- (3) The position of Health Physics Supervisor in the present organizational structure does not provide him direct access to the plant manager and sufficient independence of plant operations.
- (4) The use of personnel other than ANSI N18.1 qualified health physics technicians to provide shift coverage during non-regular hours is considered poor practice.
- (5) Present practices concerned with the collection, compaction and movement of radioactive waste materials was found to be insufficient for good radiological control.

These findings are discussed in more detail in Appendix A, "Significant Appraisal Findings." We recognize that an explicit regulatory requirement pertaining to each significant weakness identified in Appendix A may not currently exist. However to determine whether adequate protection will be provided for the health and safety of workers and the public, you are requested to submit a written statement within twenty-five (25) days of the date of this letter, describing your corrective action for each significant weakness identified in Appendix A including: (1) steps which have been taken; (2) steps which will be taken; and (3) a schedule for completion of action. This request is made pursuant to Section 50.54(f) of Part 50, Title 10, Code of Federal Regulations.

During this appraisal, it was also found that certain of your activities do not appear to have been conducted in full compliance with NRC requirements. Consequently, you are required to respond to these matters, in writing, in accordance with the Provisions of Section 2.201 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations. Your response should be based on the specifics contained in the Notice of Violation enclosed herewith as Appendix B.

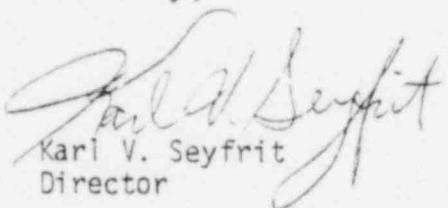
You should be aware that the next step in the NRC effort to strengthen health physics programs at nuclear power plants will be the imposition of a requirement by the Office of Nuclear Reactor Regulation (NRR) that each licensee develop, submit to the NRC for approval, and implement a Radiation Protection Plan. Each licensee will be expected to include in the Radiation Protection Plan sufficient measures to provide lasting corrective action for significant weaknesses identified during the special appraisal of the current health physics program. Guidance for the development of this plan will incorporate pertinent findings from the special appraisals and will be issued for public comment.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room. If this material contains any information that you believe to be proprietary, it is necessary that you make a written application within 20 days to this office to withhold such information from public disclosure. Any such application must be accompanied by an affidavit executed by the owner of the information, which

identifies the document or part sought to be withheld, and which contains a statement of reasons which addresses with specificity the items which will be considered by the Commission as listed in Subparagraph(B)(4) of Section 2.790. The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified period, this letter and the enclosures will be placed in the Public Document Room.

Should you have any questions concerning this appraisal, we will be pleased to discuss them with you.

Sincerely,



Karl V. Seyfrit
Director

Enclosures:

1. Appendix A, Significant Appraisal Findings
2. Appendix B, Notice of Violation
3. Office of Inspection and Enforcement
Inspection Report No. 50-313/80-20
50-368/80-20

cc w/enclosures:

James P. O'Hanlon
Station Manager
P. O. Box 608
Russellville, Arkansas 72801

APPENDIX A

SIGNIFICANT APPRAISAL FINDINGS

Arkansas Power and Light Company
Arkansas Nuclear One

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Based upon the results of the NRC Health Physics Appraisal conducted October 27 - November 7, 1980, it appears that several significant weaknesses exist in the health physics program as indicated below. (References are to related sections of the appraisal report).

- A. Lack of engineering controls and good decontamination and housekeeping practices in the Unit 1 auxiliary building has led to a series of instances where airborne radioactivity areas have been created causing frequent personnel evacuations and heavy use of respiratory protective equipment. These events have created a increased work load for the health physics staff and a potential for exposure to workers. (Section 6.2.2)
- B. The appraisal team found many examples of health physics activities being conducted by the staff where no procedure or current procedure was in use. The development and implementation of written approved procedures for health physics activities is considered a significant weakness. (Sections 3, 4, 6)
- C. The plant organization is such that the Health Physics Supervisor reports to a Technical Analysis Superintendent. This structure is contrary to the guidance in regulatory guide 8.8 which recommends that the radiation protection manager have direct recourse to responsible management and be independent of station divisions concerned with station operability. (Section 1)
- D. The use of personnel other than ANSI N18.1 qualified health physics technicians to provide the health physics function for off shifts is considered a significant weakness. (Section 1)
- E. The collection, compaction and movement of radioactive waste materials from radiologically controlled areas to their final disposition was considered weak in that specific procedures have not been implemented and the responsibility for each phase of the process has not been assigned. (Section 6)