

YANKEE ATOMIC ELECTRIC COMPANY

B.4.1.1



20 Turnpike Road Westborough, Massachusetts 01581

WYR 79-4

January 16, 1979

United States Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Attention: Office of Inspection and Enforcement
Eldon J. Brunner, Chief
Reactor Operations and Nuclear Support Branch

Reference: (a) License No. DPR-3 (Docket No. 50-29)
(b) I&E Letter to YAEC dated December 22, 1978, I&E
Inspection Report 78-19

Dear Sir:

Subject: Response to I&E Inspection 50-29/78-19

Reference is made to I & E Inspection No. 50-29/78-19 which was conducted by your Messrs. Karl Plumlee and Percy Clemons from November 6 to 8, 1978, at the Yankee Nuclear Power Station (Yankee Rowe) in Rowe, Massachusetts. The report written subsequent to this inspection identified five items which the inspectors felt were not conducted in full compliance with NRC requirements.

In accordance with the requirements of Section 2.201 of the NRC's "Rules and Practices" Part 2, Title 10 Code of Federal Regulations, we are submitting the following action taken on these items:

Item A:

10 CFR 20.101(a), "Exposure of individuals to radiation in restricted areas," limits the whole body dose to any individual in restricted areas to 1 1/4 rems in any calendar quarter except as provided by 10 CFR 20.101(b), which allows a whole body dose up to 3 rems per calendar quarter provided certain specified conditions are met. One of these conditions is that the licensee has determined the individual's accumulated occupational dose to the whole body on Form NRC-4 or on a clear and legible record containing all of the information required on that form.

Contrary to the above requirements, without determining their accumulated occupational whole body doses in the prescribed manner;

7907310163
497 060

1. Two individuals each were given permission to receive up to a 2 rem whole body dose in restricted areas during the fourth calendar quarter of 1978, and;
2. By the date of the inspection, one of these individuals had received 1.687 rem whole body dose in restricted areas during the fourth calendar quarter of 1978 as shown by the TRAP computer record system update for November 6, 1978.

Response:

In the case of the first individual, the Form NRC-4 was completely filled out; however, there was a calculation error of 0.34 rem in the lifetime total.

In the case of the second individual, all the Form NRC-4 information required had been received by the Health Physics office. At the time of authorizing the individual to exceed 1.25 rem, this individual's file was confused with the completed file of another individual who had an identical first and last name and who worked for the same contractor. Because of this confusion, the Form NRC-4 information was added to the incorrect file.

1. Corrective Steps Taken and Result Achieved:

The two records in error, which were identified by the inspector, were corrected immediately. In addition, a complete review of Form NRC-4's was performed after the inspection. No other discrepancies of this nature were found during the review.

2. Steps Taken to Avoid Further Items of Non-Compliance:

Refresher training was performed on November 8, 1978, with the personnel involved with exposure records. The importance of thorough adherence to NRC requirements was stressed with specific emphasis on the discrepancies discovered by the inspector. This training is documented.

3. The Date Full Compliance Will Be Achieved:

Full compliance was achieved on November 8, 1978.

Item B:

10 CFR 20.401 "Records of surveys, radiation monitoring, and disposal" requires in section (a) that each licensee maintain records showing the radiation exposures of all individuals for whom personnel monitoring is required under 10 CFR 20.202, on Form NRC-5 in accordance with the instructions contained on that form or on a clear and legible record containing all of the information required by Form NRC-5. YAEC retains the Form NRC-5 information in the TRAP computer record system, documented in a letter dated January 23, 1978, and approved by NRC in a letter dated February 18, 1978.

Contrary to the above requirements, 1.22 rem of the prior whole body dose received in restricted areas during 1978 was omitted from the Form NRC-5 information in the TRAP system for an individual who received 1.529 rem whole body dose on site between October 21 and November 4, 1978. Specifically the information required in items 6, 8 through 16, and 18 of Form NRC-5 was incorrect.

Response:

Yankee Rowe uses the TRAP computer system to assist in controlling and documenting occupational radiation exposures. During each calendar quarter, an exposure period file (EXPF) is maintained as part of the TRAP system. This EXPF contains and is updated with pocket dosimeter (POD) exposure to keep track of an individual's dose. TLD information may also be used to update the EXPF as it becomes available. At the end of each calendar quarter, information from the EXPF as well as other information stored in the TRAP computer system is used to complete an individual Form NRC-5. The EXPF also contains other space where exposure information may be entered for each individual. One such field is the year to date (YTD) field which may be updated at any time during the individual's stay at the plant. This YTD field is for informational use only, and is not used in the process of updating the Form NRC-5 section of the TRAP system.

During the inspection, an inspector noted a discrepancy in the YTD field in Yankee Rowe's fourth quarter EXPF. This discrepancy was due to an omission of 1.22 rem that the individual had received at another facility during February and March of 1978. After discovery, the EXPF was updated to reflect the additional information. The information on the individual's Form NRC-4 was complete and correct as noted by the inspector.

Based on the above stated facts, it is clear that this apparent item of non-compliance is inaccurate. Due to the fact that the information observed by the inspector on the EXPF was not to be used in compiling the Form NRC-5, it is obvious that at the time of the inspection, no violation with regard to the requirements of Form NRC-5 had occurred. We, therefore, request that this item of non-compliance be withdrawn.

Item C:

10 CFR 20.203, "Caution signs, labels, signals, and controls," requires in (b) that each radiation area be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words, "Caution Radiation Area." 10 CFR 20.202 Section (a)(2) defines a "Radiation Area"... as any area, accessible to personnel, in which there exists radiation, originating in whole or in part within licensed material, at such levels that a major portion of the body could receive in any one hour a dose in excess of 5 millirem.

Contrary to the above, on November 6, 1978, two areas near 4 ft x 8 ft containers of radwaste located outdoors were unattended and were not

posted as radiation areas. One area was below the containment, near the elevator. The other area was near the waste compactor. The radiation levels were in excess of 20 mrem/hr at a distance of 12 inches from these containers.

Response:

The LSA boxes are used to collect and transport contaminated dry waste. Materials for labeling and posting these boxes were available and personnel were aware of the requirements. It has been determined that the contractor involved in the work removed the area postings in order to move the containers but neglected to reinstall the area postings before going on coffee break. We note that although the area postings were removed, the individual boxes were at all times correctly posted and labeled as radioactive material.

1. Corrective Steps Taken and Result Achieved:

As noted on page 6 of reference b, the areas involved were immediately posted appropriately as radiation areas.

2. Steps Taken to Avoid Further Items of Non-Compliance:

Training was performed November 7, 1978, for the outside contractor involved with this item. The individuals concerned were reprimanded for this incident and the requirement for posting while containers are left unattended was stressed. Observation of the contractor's work practices since this training has shown no other problems of this nature.

We have noted that this is a reoccurrence of a similar non-compliance as referenced in the inspection report. In this regard we will pay special attention to this matter to avoid further items of non-compliance.

3. The Date When Full Compliance Will Be Achieved:

Full compliance was achieved November 7, 1978.

Item E:

Technical Specification 6.11, "Radiation Protection Program," requires that procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR 20 and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposures. Procedure No. OP-8415 "Radiation Work Permits" states in part that personnel will not deviate from instructions on the work permit.

Contrary to the above, a condition of radiation work permit, RWP No. 935, that gloves be worn on this job was not adhered to resulting in an individual working bare-handed on a pipe that was smeared at 200,000 dpm, on November 6, 1978. This individual received contamination on his hands, requiring his temporary removal from the job.

Response:

In regard to this item, the individual was questioned concerning his improper health physics practices. The individual stated that he had inadvertently failed to replace his gloves when he returned to the work area after obtaining a tool.

1. Corrective Steps Taken and Results Achieved:

The individual immediately went to the Health Physics control point where he washed his hands. Upon checking with a frisker, the individual's hands were found to be free of any contamination. The individual was reminded to follow the requirements of the RWP and was then allowed to return to the job.

2. Steps Taken to Avoid Further Items of Non-Compliance:

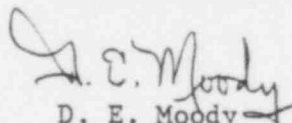
On November 7, 1978, training was conducted for the individual involved. The importance of following the Health Physics requirements on the RWP was stressed.

3. The Date Full Compliance Will Be Achieved:

Full compliance was achieved on November 7, 1978.

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY


D. E. Moody
Manager of Operations

DEM/em

497 064