

## YANKEE ATOMIC ELECTRIC COMPANY

441 STUART STREET  
BOSTON 16, MASSACHUSETTS

LAR file copy (supp.)

March 7, 1962

U. S. Atomic Energy Commission  
Washington 25, D. C.Attention: Director, Division of  
Licensing and Regulation

Reference: License No. DPR-3; Appendix A, Paragraph D.2.h.

Dear Sirs:



We have taken part in a number of discussions with the staff in connection with our request to you dated December 8, 1961, for certain exemptions from 10 CFR 20. This letter is intended to summarize the additional information we have provided in regard to the protective measures employed at the Yankee plant in areas outside the vapor container where individuals could receive radiation doses of 100 mrem or greater in one hour.

Such areas are located and identified through a variety of means. Radiation surveys of the entire plant outside of the vapor container are made on a routine basis for this purpose by persons trained and designated to perform this work. Areas of the plant which are known to present a possibility of being subject to significant levels of radiation are checked most frequently. For example, the primary auxiliary building and the waste disposal building are surveyed routinely three times each week, and the remainder of the Potentially Contaminated Area at least once each week. In addition to the routine surveys, automatic radiation monitors are provided in selected areas which provide an alarm, either locally or in the main control room, if certain pre-set limits are exceeded.

Areas determined by any of these methods to have radiation levels in which individuals might receive doses in excess of 5 mrem in one hour are barricaded and conspicuously posted as "Radiation Areas".

Areas determined to have radiation levels in which individuals might receive doses in excess of 100 mrem in one hour are barricaded and conspicuously posted as "High Radiation Areas". Wherever practical, the measured radiation level and the location of its source are posted at the radiation area and kept up to date in accordance with the most recent survey.

Areas determined to have radiation levels in which individuals might receive doses in excess of 1 rem in one hour are identified in the same manner, as "High Radiation Areas", with the radiation level and its

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POOR ORIGINAL

YANKEE ATOMIC ELECTRIC COMPANY

U.S. AEC

441 STUART STREET  
Attn: Dir., Div of Lic & Reg  
BOSTON 16, MASSACHUSETTS  
Ref: Lic. DPR-3; Appendix A, Par. D.2.h.

March 7, 1962

source posted. In addition, however, a locked, wire mesh door will be provided to prevent unauthorized entry. Each such door will have only three keys. One of these will be provided for the sole use of the Shift Supervisors, one for the sole use of the Health Physics Department, and the last for the sole use of the Nuclear Auxiliary Operators. It should be noted that all of these personnel have received intensive training in Health Physics and especially in the performance of radiation level surveys.

Personnel may enter a "High Radiation Area" only under the following three conditions:

1. For the purpose of performing radiation surveys.
2. After issuance of a Radiation Work Permit or with the direct accompaniment of Health Physics personnel.  
(Rules governing the issuance and use of Radiation Work Permits as stated in the Radiation Protection Manual for the Yankee plant, as well as copies of the Permit itself, are attached.)
3. In an emergency--only if proper monitoring equipment for direct reading of radiation levels is used.

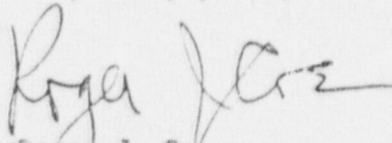
Under any of the above conditions, before an individual is permitted to enter a "High Radiation Area" he is required to notify the Shift Supervisor of his intent, the purpose of his stay and its duration. Upon leaving the "High Radiation Area" he is required once again to notify the Shift Supervisor.

As an added precaution, special radiation surveys are performed just prior to and during maintenance or test work performed in the Potentially Contaminated Area.

We trust that this letter and the attachments will complete the information required to allow the exemption to 10 CFR 20 which we requested in our earlier letter.

We should like to point out, with some feeling of pride, that the overall average exposure at the Yankee plant during the entire year 1961 was 91 mr and that the maximum individual exposure for the year was 760 mr.

Very truly yours,

  
Roger J. Coe,  
Vice President

Atts.

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YANKEE ATOMIC ELECTRIC COMPANY

EXCERPT FROM

RADIATION PROTECTION MANUAL

(ATTACHMENT TO LETTER DATED 3/7/62)

I. Radiation Work Permit

High Radiation Areas and areas posted No Entry Permitted or Radiation Work Permit Required may be entered only by individuals who have obtained clearance in the form of a Radiation Work Permit. The presence of Health Physics personnel may be substituted for a Radiation Work Permit. This procedure is established to provide radiation safety in areas where overexposure of personnel is possible within a normal work day. If the work to be done is a type which may influence plant status during operation and which requires standard tagging procedures, both the work permit and standard tagging procedures will be followed.

Before undertaking any work in these areas, maintenance and service personnel are required to have clearances from the Operating Section. It is the joint responsibility of the Operating Section and maintenance and service personnel to decide what conditions of clearance are required. Health Physics will prescribe protective equipment, the maximum radiation exposure or time limit per man, and any special precautions necessary.

Approval to start work will be in effect after the permit is signed by the issuing supervisor, Health Physics, and the person in charge of the working party. The original of the forms will be kept by the issuing supervisor, one copy will be kept by Health Physics, and one posted at the work area. Workmen should not deviate from the instructions of the permit without authorization from Health Physics.

# YANKEE ATOMIC ELECTRIC COMPANY

## Radiation Work Permit

No. ....

DATE: .....

DESCRIPTION OF WORK: .....

LOCATION: .....

MEN IN WORKING PARTY .....

SURVEY RESULTS: .....

MAXIMUM TIME PER MAN: .....

SPECIAL PRECAUTIONS: .....

### PROTECTIVE EQUIPMENT REQUIRED

PERMIT EFFECTIVE ..... A. M., P. M.

COVERALLS ..... LAB COAT .....

### APPROVAL TO START WORK

RUBBERS ..... RESPIRATOR .....

SHIFT SUPERVISOR: .....

RUBBER GLOVES ..... OTHER .....

HEALTH PHYSICS: .....

COTTON GLOVES .....

SUPERVISOR WORKING PARTY: .....

HEAD COVERS .....

ADDITIONAL INSTRUCTIONS: .....

HEALTH PHYSICS DEPARTMENT

# YANKEE ATOMIC ELECTRIC COMPANY

## Radiation Work Permit

No. \_\_\_\_\_

DATE: \_\_\_\_\_

DESCRIPTION OF WORK: \_\_\_\_\_

LOCATION: \_\_\_\_\_

MEN IN WORKING PARTY \_\_\_\_\_

SURVEY RESULTS: \_\_\_\_\_

MAXIMUM TIME PER MAN: \_\_\_\_\_

SPECIAL PRECAUTIONS: \_\_\_\_\_

### PROTECTIVE EQUIPMENT REQUIRED

PERMIT EFFECTIVE \_\_\_\_\_ A. M., P. M.

### APPROVAL TO START WORK

COVERALLS \_\_\_\_\_ LAB COAT \_\_\_\_\_

RUBBERS \_\_\_\_\_ RESPIRATOR \_\_\_\_\_

RUBBER GLOVES \_\_\_\_\_ OTHER \_\_\_\_\_

COTTON GLOVES \_\_\_\_\_

HEAD COVERS \_\_\_\_\_

SHIFT SUPERVISOR: \_\_\_\_\_

HEALTH PHYSICS: \_\_\_\_\_

SUPERVISOR WORKING PARTY: \_\_\_\_\_

ADDITIONAL INSTRUCTIONS: \_\_\_\_\_

SHIFT SUPERVISOR



# YANKEE ATOMIC ELECTRIC COMPANY

## Radiation Work Permit

No. ....

DATE: .....

DESCRIPTION OF WORK: .....

LOCATION: .....

MEN IN WORKING PARTY .....

SURVEY RESULTS: .....

MAXIMUM TIME PER MAN: .....

SPECIAL PRECAUTIONS: .....

### PROTECTIVE EQUIPMENT REQUIRED

PERMIT EFFECTIVE ..... A. M., P. M.

COVERALLS ..... LAB COAT .....

APPROVAL TO START WORK

RUBBERS ..... RESPIRATOR .....

SHIFT SUPERVISOR: .....

RUBBER GLOVES ..... OTHER .....

HEALTH PHYSICS: .....

COTTON GLOVES .....

SUPERVISOR WORKING PARTY: .....

HEAD COVERS .....

ADDITIONAL INSTRUCTIONS: .....

SUPERVISOR WORKING PARTY

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FROM: Yankee Atomic Electric Company  
Boston 16, Massachusetts  
(Roger J. Coe)

DATE OF DOCUMENT:

March 7, 1962

DATE RECEIVED

Mar. 12, 1962

NO.:

2723

LTR.

MEMO:

REPORT:

OTHER:

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CC:

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ACTION NECESSARY ☐

CONCURRENCE ☐

DATE ANSWERED:

NO ACTION NECESSARY ☐

COMMENT ☐

BY:

CLASSIF.:

Unclassified

POST OFFICE

REG. NO.:

FILE CODE:

50-29

DESCRIPTION: (Must Be Unclassified)

Ltr. summarizing additional info. they  
have provided in regard to the protec-  
tive measures employed at Yankee plant  
in areas outside the vapor containers.

ENCLOSURES:

3 cys. rec'd

1--Excerpt from Radiation Protection  
Manual entitled "Radiation Work Permit"

REFERRED TO

DATE

RECEIVED BY

DATE

Dr. Bryan

3-12-62

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2-compliance cys.

1-ORRO, TISE

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1-T. Hazard, TI

7 extras.

~~Editorial~~ E 3/15

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