

EDISON DRIVE . AUGUSTA, MAINE 04330 . (207) 622-4868

June 29, 1988 MN-88-66 GDW-88-168

Region I UNITED STATES NUCLEAR REGULATORY COMMISSION Nuclear Materials Safety Section B 475 Allendale Road King of Prussia, Pennsylvania 19406

References: (a) License No. DPR-36 (Docket No. 50-309)

Subject: Renewal of License No. 18-14820-02

Gentlemen:

Maine Yankee hereby requests renewal of the subject By-product Material License. In accordance with your instructions for license renewal, please find enclosed two copies of supporting documents (Attachment) which update that which was submitted with our April 28, 1983 application. For completeness, we have included all the supporting documents. Changes to the updated Attachment are indicated by a bracket in the right-hand margin and a page date. The Attachment reflects our current program.

We have determined that, in accordance with 10 CFR 170.11(a)(3), no fee is required for this license renewal.

Please change our mailing address and phone number as follows:

Maine Yankee Atomic Power Company Edison Drive Augusta ME 04330 Telephone: 207-622-4868

8907200321 880**9**21 REG1 LIC30 18-14820-02 PDR Date Completed 7/20/88

FEE EXEMPT

109203 7-7-88

United States Nuclear Regulatory Commission Attention: Nuclear Materials Safety Section B

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We trust this renewal request is complete; however, if you have any questions or require additional information, please contact Stephen D. Evans at 207-622-4868.

Very truly yours,

MAINE YANKEE

G. D. Whittier, Manager

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Nuclear Engineering and Licensing

GDW/bjp

Attachment

c Letter only:

Mr. Richard H. Wessman Mr. William T. Russell Mr. Patrick M. Sears Mr. Cornelius F. Holden

AITACHMENT

Item 5. Street Address Where Licensed Material Will Be Used

Temporary job sites of the Licensee anywhere in the United States where the Nuclear Regulatory Commission maintains jurisdiction for regulating the use of by-product material.

ATTACHMENT

Item	6.	Indi	vidua1	Users
G. C. M. 133	700	100 2 2 407 2	4 4 20 20 20 2	THE REPORT OF

G. D. Cochrane R. P. Wills D. L. Hickey Radiological Controls Section Head Radiological Controls Supervisor Radiological Controls Supervisor

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ATTACHMENT

Item 8. Licensed Material

- 8A Element and Mass Number. Any by-product material.
- 8B Chemical and/or Physical Form.
 Fixed upon surface and/or contained within reactor equipment.
- 8C Name of Manufacturer and Model Number N.A.
- 8D Maximum Number of Millicuries and/or Sealed Sources and Maximum Activity per Source Which Will Be Possessed At Any One Time.

Total activity of any mixture of by-product material shall not exceed 3 curies. Removable surface contamination on all external surfaces shall not exceed 2200 disintegrations/minute/100 cm² prior to shipment.

8E Describe Use of Licensed Material

By-Product material used or handled under the provision of this License will be associated with the inspection, repair and/or testing of reactor system components containing such materials at off-site locations.

ATTACHMENT

Item 10. Radiation Detection Instruments

10A	10B Manufacturer's	10C Model	10D Number	10E Radiation	10F Sensitivity	
Type of Instrument Ion Chamber	Name Eberline		Available 29	Detected B-Y	Range O-1KR/hr.	J
Geiger Mueller	Eberline	E-140	13	B-Y	0-50 mr/hr.]
Ion Chamber	Eberline	RO-2A	20	B-Y	0-50 R/hr]
Geiger Mueller	Eberline	RM14 w/HP 210 detec		B-Y	0-50K cpm]
Geiger Mueller	Johnson	2000 W extendable probe	5 e	Υ	0-1KR/hr.]
Scintillation	Eberline	PAC-4S	1	a	0-500K cpm]
Ion Chamber	Eberline	RO-4A	3	B-Y	0-200R/hr.]
Ion Chamber	Eberline	PNR-4	2	n	0-5R/hr.	
Air Sampler	Eberline	RAS	14	N/A	NŻA]
Air Sampler	SAI	H-809V	10	N/A	N/A	
Geiger Mueller	Eberline	BC-4	2	B-Y	N/A	
Gas Proportional	NMC	DS-33P	1	a,B,Y	N/A	
Geiger Mueller	Eberline	E-520	16	B-Y	0-2R/hr.]

ATTACHMENT

Item 11. Calibration of Instruments Listed in Item 10

All radiation detection survey instruments are calibrated at least quarterly using NBS Traceable sources. The counting systems are calibrated annually and air samplers are calibrated semi-annually. Calibrations are performed using written procedures approved by the Plant Operations Review Committee or the Department Manager.

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Item 12. Personnel Monitoring Devices

Thermoluminescent dosimeters are supplied by the Yankee Atomic Electric Company, Nuclear Services Division for personnel monitoring. Self-reading pocket dosimeters provide on-the-job information as to the exposure received. The plant also maintains its own chair counters for whole body, lung, and thyroid counting.

ATTACHMENT

Item 13. Facilities and Equipment

A complete chemistry and health physics laboratory is available for detailed measurements. Included are shielded thin-end-window G-M counters, a gas flow proportional counter, a well-type gamma spectrometer, four Ge-Li gamma spectrometers, and a liquid scintillation spectrometer.

The instrument calibration laboratory includes NBS traceable sources and equipment necessary to properly calibrate all radiation detection devices and instrumentation. All sources are stored in appropriate shielded containers and kept locked when not in use.

Respiratory protection devices may be required in situations where an airborne radioactivity condition is potential or existent. The air will be monitored by a radiation protection technician, as necessary, and respiratory protective devices specified according to the concentration and type of airborne contamination to a minimum through use of area ventilation and decontamination of equipment and work areas.

Prior to off-site shipment of any radioactive equipment from the plant, a representative from Maine Yankee will make an inspection of the vender's plant. During the inspection, it will be determined that existing or additional storage facilities, shielding, and remote tools/equipment are needed and available.

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Item 14. Waste Disposal

The handling of equipment containing radioactive materials at a vendor's facility shall be conducted in such a manner as to preclude the on-site release or disposal of any radioactive materials generated in the course of licensed activities. Prior to beginning any operation, provisions shall be made to collect and contain all liquid, solid and airborne waste materials.

All radioactive waste materials shall be appropriately packaged, surveyed and labeled in accordance with applicable NRC and DOT regulations governing the transport of radioactive materials. All disposal of radioactive waste material from a temporary field location shall be through one of the following methods:

- a. The radioactive waste shall be appropriately packaged, surveyed, labeled, and returned to the Maine Yankee plant for ultimate disposal through a licensed contractor.
- b. The radioactive waste shall be appropriately packaged, surveyed, labeled, and directly transferred to a licensed waste disposal contractor at the temporary field location.

ATTACHMENT

Item 15. Radiation Protection Program

The Maine Yankee Atomic Power Company is applying for renewal of the By-product Material License No. 18-14820-02 authorizing Maine Yankee to receive, possess, and handle radioactive materials at a temporary field location outside the boundaries of the Maine Yankee plant site.* Maine Yankee is also requesting renewal of the licensing provisions that authorizes the Maine Yankee Atomic Power Company to conduct radiation protection activities at temporary field locations where radioactive materials are present and handled pursuant to provisions of the By-product Material License.

Specifically, this renewal request is aimed at maintaining the mechanism whereby the Maine Yankee Atomic Power Company may ship reactor system components containing low-level fixed radioactivity to vendor facilities for special inspection, repair, and testing. The Maine Yankee plant maintenance department is well equipped to handle almost any routine or non-routine repair operation. However, situations arise periodically during the course of plant maintenance activities which require the services of specialized off-site facilities.

We are requesting renewal of the Maine Yankee By-product Material License which would continue to authorize the following activities:

- 1. That the Maine Yankee Atomic Power Company will be licensed to receive, possess, and handle radioactive material fixed or contained within reactor system components, at temporary field locations (vendor plants) in all states in which the NRC retains regulatory authority.
- 2. That the Maine Yankee Atomic Power Company be licensed to conduct radiation protection activities at temporary field locations (vendor plants) where radioactive materials fixed or contained within the reactor system components belonging to Maine Yankee are handled pursuant to the provisions of the By-product Material License issued to the Maine Yankee Atomic Power Company.

SPECIFIC CONDITIONS

- 1. All radioactive material fixed or contained within reactor system components and shipped to a vendor's plant will remain in the custody of the Maine Yankee Atomic Power Company and at all times be under the direct supervision of a Maine Yankee representative specifically named in the license.
- * This license is not intended to apply at sites which maintain their own radiation protection program pursuant to a license granted by the NRC or an Agreement State.

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Item 15. (cont.) 2.

- 2. All shipments of Maine Yankee equipment containing radioactive material shall be appropriately packaged, surveyed, and labeled in accordance with the applicable NRC, ICC, and DOT regulations governing the transportation of radioactive materials.
- 3. The Maine Yankee Atomic Power Company shall assume responsibility for all radiation protection activities incident to inspection, repair, and testing of Maine Yankee equipment containing radioactive materials while such equipment is at the vendor's plant. All radiation protection activities shall be conducted in accordance with the requirements of Title 10CFR20.
- 4. The maximum limit or quantity of radioactive material contained within reactor system components at any one location (vendor plant) shall not exceed that quantity specified in Table I below.

Table I Limits

Material Material	Form	Maximum Quantity
Any By-product Material	*Fixed upon surface and/or contained within reactor equipment	Total activity of mixed corrosion products not to exceed 3 curies

* Removable surface contamination on all external package surfaces shall not exceed 2200 disintegration/minute per 100 cm² Beta-Gamma

DESCRIPTION OF OFF-SITE RADIATION PROTECTION PROGRAM

I. Personnel

Maine Yankee personnel specifically named in the license renewal application for these proposed activities will be drawn from the plant radiation protection staff. Members of this group have had extensive training and experience in the fundamentals, theory and practical aspects of radiation protection activities associated with reactor operation and maintenance. Personnel selected to represent Maine Yankee will be fully qualified to perform the type of radiation protection activities at vendor plants that we propose in this license request (individual resumes are attached).

ATTACHMENT

Item 15. (cont.) II. <u>Duties and Responsibilities</u>

An off-site Radiation Protection team will normally consist of two persons, one of which is specifically named in Item 6 of the By-product Material License renewal application. The individuals named in Item 6 of the application are of supervisory capacity and shall be designated "Radiation Protection Supervisors." The other member of the team will be of technical grade and is designated the "Radiological Controls Technician."

The Radiation Protection Supervisor will be in attendance at the site to personally supervise the radiation protection activities. The supervisor shall be the individual directly responsible to Maine Yankee management for assuring that activities are conducted at all times in accordance with Commission regulations and conditions of the license.

The Radiation Protection Supervisor shall:

- Evaluate the practicality of conducting licensed activities at a specific location.
- Determine the scope of essential radiation protection activities.
- Direct the establishment of a "Radiation Control Area" is necessary and appropriate to effectively control ali radiation and radioactive materials.
- 4. Directly supervise radiation protection activities conducted under the license to insure that adequate protective measures have been taken in respect to the following:
 - a. personnel monitoring
 - b. exposure of personnel
 - c. radiation surveys
 - d. posting of areas
 - e. records, reports, and notification

The Radiological Controls Technician will:

- Work under the direction of the Radiation Protection Supervisor.
- Carry out all radiation protection activities as directed by the Radiation Protection Supervisor.

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Item 15. (cont.)

 Maintain accurate and legible records of all radiation survey and personnel monitoring records conducted in the course of radiation protection activities.

III. Operating Procedures and Standing Instructions

This section details the measures which Maine Yankee will take to comply with the regulations of the NRC and to protect the interests of the vendor company and Maine Yankee during all licensed activities conducted at temporary field locations.

As previously stated under <u>SPECIFIC CONDITIONS</u>, all activities shall be conducted in strict accordance with 10CFR20, "Standards for Protection Against Radiation". This section's operating procedures shall supplement the requirements of 10CFR20 in order to ensure safe and efficient operations at all times.

The Fundamental Standing Instruction shall be:

ALL OFF-SITE OPERATIONS MUST BE CONDUCTED AS CAREFULLY PLANNED ACTIVITIES.

1. Radiation Safety Evaluation

Prior to off-site shipment of any radioactive equipment from the plant, a representative* from Maine Yankee will make an inspection of the vendor's plant. The purpose of this inspection will be to evaluate the physical aspects of that particular facility to assure that adequate radiation protection measures can be instituted. This survey will pay special attention to the feasibility of establishing radiation control areas around plant equipment or areas where radioactive materials will be handled. Work areas will be selected to minimize any disruption of the normal operating routine of the vendor's facility.

2. Radiation Control Area

A "Radiation Control Area" shall be established at each temporary field location for the purpose of radiation protection. The "Radiation Control Area" shall encompass the area of a vendor's facility in which radioactive materials and radiation contained within Maine Yankee reactor components are handled pursuant to the provisions of the By-product Material License.

* An individual specifically named in Item 6 of the license application.

Item 15. (cont.)

a. Access Control

Access to the "Radiation Control Area" shall be limited to those persons specifically assigned to the activity by the vendor. Each individual assigned by the vendor must additionally be authorized to enter by the Maine Yankee Radiation Protection Supervisor.

b. Preparation of area

Prior to beginning any licensed activity which could result in radioactive contamination, the area in which the work is to take place shal? be adequately prepared to control and contain all contamination.

- i. Where possible and deemed necessary, floors, walls and ceilings shall be covered with polyethylene or other suitable material in such a manner as to contain radioactive materials and simplify decontamination at the completion of the activity.
- ii. If the possibility of airborne activity exists, the normal area ventilation shall be secured. A portable ventilation system containing an absolute filter shall then be used to ventilate the area and contain airborne activity generated.
- iii. Machine surfaces shall be covered where possible to prevent unnecessary contamination of equipment.

c. Posting of Area

All areas within the "Radiation Control Area" shall be routinely surveyed for radioactive materials and radiation. Criteria for classification and posting of arms shall be in accordance with the provisions of 10CFR20, Section 20.203.

d. Protective Clothing Requirements

All individuals entering the "Radiation Control Area" will be required to wear certain items of protective clothing. The Radiation Protection Supervisor shall specify the appropriate protective clothing requirements for each particular activity. The protective clothing shall be supplied by Maine Yankee.

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Item 15. (cont.)

e. Respiratory Protection

The Respiratory Protection Policy is described in Item 1.3. Facilities and Equipment.

3. Personnel Monitoring

All individuals who will receive radiation exposure while working within an area controlled by Maine Yankee for the purposes of radiation protection shall be issued personnel monitoring devices and shall be required to wear such devices at all times while within the "Radiation Control Area".

The personnel monitoring devices shall consist of TLD's and self-reading dosimeters. The TLD's and dosimeters are to be worn on the front of the clothing adjacent to each other. It shall be required that each individual examine his dosimeter periodically while in radiation areas. Personnel will be instructed not to allow the dosimeter reading to exceed administrative control limits. Personnel will have the dosimeter recharged and the reading recorded prior to reaching the administrative control limit.

The TLD's will normally be processed at monthly intervals or at the completion of licensed activities at a vendor's facility. The TLD of any individual will be processed immediately at any time that to overexposure has occurred or is suspected. The official and permanent record of accumulation of external exposure received by an individual will be obtained principally from the interpretation of the TLD. The direct reading dosimeter will provide day-to-day indication of external radiation exposure.

4. Radiological Surveys

The radiation protection program shall include radiation surveys for air activity, removable surface contamination and radiation levels. These surveys shall be conducted at regular intervals within the "Radiation Control Area" to evaluate radiological conditions arising from handling of radioactive materials. The Radiation Protection Supervisor will review all surveys and recommend measures to control radiation exposure. These control measures will be of two basic kinds: Physical and procedural.

ATTACHMENT

Item 15. (cont).

- a. <u>Physical Measures</u> will include such items as shielding, ventilation, respiratory protection and protective clothing.
- b. <u>Procedural Measures</u> includes access control, time limitations, and modification of working procedures.

Any unusual conditions detected during a radiation survey shall be brought to the immediate attention of the Radiation Protection Supervisor. Records of all surveys will be maintained for a permanent record of activities conducted at each temporary field location. Each survey record should contain sketches and instrument readings and explanatory notes of operation in progress.

5. Contamination Control Limits

At the completion of licensed activities at a vendor's facility, all equipment and plant areas located within and adjacent to the "Radiation Control Area" shall be surveyed for radioactive contamination and radiation dose rates.

Surface contamination limits on equipment and in-plant areas shall not exceed the values prescribed below upon termination of off-site activities at a temporary field location.

a. Remove Radioactive Surface Contamination

Beta-Gamma 1000 DPM/100 cm²

b. Fixed Radioactive Surface Contamination

Beta-Gamma 0.1 MR/HR at 1 inch

6. Radioactive Waste Disposal

The Radioactive Waste Disposal Policy is described in Item 14. Waste Disposal.

Maine Yankee

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mpany employees shall receive a rad

Item 15. (cont.) IV. Radiation Protection Training

All vendor company employees shall receive a radiation protection orientation prior to their assignment or work in any area controlled by Maine Yankee for the purposes of radiation protection. The orientation will cover all pertinent radiation protection practices and procedures to a degree sufficient to allow an employee to perform his assignment without incurring unnecessary radiation exposure.

V. Records, Reports, and Notifications

The Maine Yankee Atomic Power Company shall maintain permanent records of all licensed activities conducted at temporary field locations. These records shall include:

- Records showing the transfer of radioactive materials to and from the temporary field locations.
- 2. Records of radiation surveys.
- 3. Records of personnel radiation exposure.

A report showing individual radiation exposures shall be furnished to the vendor company upon completion of licensed activities at a temporary field location.

Reports of radiation exposure shall be furnished to individual vendor company employees in accordance with 10CFR20, 20.408.

Reports of personnel radiation exposure shall be submitted to the Commission pursuant to 10 CFR 20, Sec. 20.407 and 20.408.

VI. Procedures

Attached is a Special Off-Site By-product Material License Check-Off List to be used when work is conducted under this license. The station personnel at the work site are familiar, trained, and competent with station procedures concerning items on the check-off list.

SPECIAL OFF-SITE By Product Material License Check-Off List

Vandan		
VendorAddress		
Discription of Equipment:		
Nature of Work to be Performed:		
Comments:		
	Date Out	
	Date In	
		100

ITEM

Maine Yankee

Performed By Checked By
(Initials) (Initials)

I.	INI	TIAL	
	۸.	Assign Rad Controls to oversee entire operation:	
		1 (Supervisor) 2. (Technician)	
II.	PRE	PARATION FOR TRANSIT TO VENDOR	
	Α.	Package the material	
	В.	Survey the package	
	C.	DOT label on package	
	D.	Quantity of material to be trans- portedCi	
	Ε.	Removable surface contamination on external surfaces: DPM/100 cm ²	
	F.	Determine by inspection that Ven- dor Company has suitable facilities	
	G.	Calibrate instruments to be used according to approved plant procedures	
II.	AT	VENDOR (prior to operation)	
	Α.	Establish RCA & Control Point	
	В.	Measures taken to prevent spread of contamination (floors, walls, ceilings covered as necessary)	
	C.	If airborne activity possible, secure normal ventilation and esstablish auxiliary ventilation with absolute filter	
	D.	Machines covered where possible	
	Ε.	Areas within RCA properly posted	
	F.	Vendor Company personnel briefed on radiological safety measures to be used	

Performed By Checked By (Initials)

ITEM

G.	Preliminary survey:
	1. Removable surface contamination:DPM/100 cm ²
	2. Fixed surface contamination:mR/hr @ 1 inch
н.	Record name, ss. no., date of birth of Vendor Company personnel involved in operation
I.	Provisions made for collecting and containing all liquid, solid and airborne wastes
AT 1	VENDOR (During operation)
Α.	Routine surface contamination, radiation, and airborne activity surveys being taken and recorded
В.	Protective clothing (and respira- tory protection if appl:cable) be- ing used
c.	Proper personnel monitoring being used and dosimeter readings being recorded
AT 1	VENDOR (After operation)
Α.	RCA and adjacent areas surveyed for contamination:
	1. Removable surface contamination DPM/100 cm ²
	2. Fixed surface contaminationMR/hr at 1 inch
	3. Airborne activityuCi/cc
В.	Survey results recorded on map show- ing location of survey points
С.	Waste properly packaged, surveyed and labeled for transfer
D.	Material properly packaged, surveyed and labeled for transfer to Plant
	H. I. AT. A. B. C. AT. A.

		ITEM	Performed By (Initials)	
VI.	AT	MPLETION OF OPERATION		
	Α.	Records prepared for all transferrals to and from temporary field locations		
	В.	Report of individual expo sent to Vendor Company	osures	
	c.	Report of individual expo sent to Vendor Company en		
	D.	Report of individual exposent to NRC	osures	
	Ε.	Vendor Company employees:		
		Name S.	S. No.	D.O.B.

VII. SPECIAL CONDITIONS AND COMMENTS:

Reviewed	Ву:	

ATTACHMENT

Item 16. Formal Training in Radiation Safety

Name:

Title:

Gary D. Cochrane Radiological Controls Section Head Maine Yankee Atomic Power Company

Training	Location	Duration	On Job	Formal
Teaching Certificate in Education	Aroostook State College Presque Isle ME	3 years		yes
Health Physics Training Program	General Dynamics/ Electric Board Groton CT	2 years	yes	yes
SAVANNAH Training Program	Nuclear Merchant Ship SAVANNAH Hoboken NJ	2 weeks	yes	yes
Basic Radiological Health	Winchester MA	2 weeks		yes
Management of Radiation Accidents	Winchester MA	1 week		yes
Radionuclide Analysis by Gamma Spectroscopy	Winchester MA	2 weeks		yes
Health Physics Certification Training	Westboro MA	6 months		yes
Radiation Measurement, Standardization Monitoring Techniques, Instrumentation, Respir Protection and Radioact Waste Management	atory	18 years	yes	yes]

	ATTACHMENT	r]
Item 16. Formal Trainin	g in Radiation Safety	/]
Name: Robert P. Wills Title: Radiological Controls Supervisor Maine Yankee Atomic Power Company					
Training	Location	Duration	On Job	Forma1]
B.A. Chemistry and Geology: University of Maine	Farmington ME	3 years	no	yes]
Health Physics	Portsmouth Naval Shipyard Kittery ME	2 years	yes	yes]
ASME, Radioactive Waste and Materials	Washington, D.C.	1 week		yes]
Chem Nuclear Radioactive Materials Transportation Requirements	Charleston SC	1 week		yes]
Health Physics Certification NRRPT	University of Lowell MA	1 day		yes]
U.S. Ecology Radioactive Materials Disposal Site Requirements	Las Vegas NV) ∀eek		yes]
Radiation Measurement Standardization Monitoring Techniques, Instrumentation, Respiratory Protection and Radioactive Waste Management	Maine Yankee	5 years	yes	yes]

	ATTACHMENT]	
Item 16. Formal Trainin	ng in F ation Safety]	
Name: Dennis L. Hickey Title: Radiological Controls Supervisor Maine Yankee Atomic Power Company						
Training	Location	Duration	On Job	Forma1]	
B.S. in Biology	University of ME Orono ME	4 years	no	yes]	
Waste Treatment Plant Operation	SMVTI	1 semester		yes]	
Respirator Repair/ MSA	Maine Yankee		yes	yes]	
Health Physics Specialist Program	Maine Yankee		yes	yes]	
General Physics Instructor I	Columbia MD	1 week		yes]	
General Physics Instructor II	Columbia MD	1 week		yes]	
S. Ecology Radioactive Materials Disposal Site Requirements	Richland WA	1 week		yes]	
Radiation Measurement Standardization Monitoring Techniques, Instrumentation, Respiratory Protection and Radioactive Waste Management	Maine Yankee	7 years	yes	yes]	

ATTACHMENT

Item 17. Experience

Name: Gary D. Cochrane

Title: Radiological Controls Section Head Maine Yankee Atomic Power Company

PROFESSIONAL EXPERIENCE

Experien	ce	Location	Duration	On Job	Forma1
Health Physic Technician	S	General Dynamics/ Electric Boat Div. Groton CT	4 1/2 years	yes	
Staff Health Physicist		N.S. SAVANNAH Hoboken NJ	2 years	yes	
Plant Health Physicist		Maine Yankee	6 years	yes	
Radiological Supervisor	Controls	Maine Yankee	5 years	yes	
Radiological Section Head	Controls	Maine Yankse	2 years	yes	
Total Experie Member of Hea			24 years		1

EXPERIENCE WITH RADIATION

Radionuclide or Machine	Amount	Location	Duration	Use
Co60	5 curies	General Dynamics/ Electric Boat	4 1/2 years	Calibration of Portable Instrumentation
PuBe	3 curies	General Dynamics/ Electric Boat	4 1/2 years	Calibration of Neutron Meters
Mixed Fission Products	Up to Curie Range	General Dynamics/ Electric Boat	4 1/2 years	Refueling and Overhaul of Nuclear Submarines

EXPERIENCE of G. D. Cochrane (Continued)

EXPERIENCE WITH RADIATION (Continued)

Radionuclide or Machine	Amount	Location	Duration	Use	
Mixed Corrosion Products	Up to Curie	General Dynamics/ Electric Boat	4 1/2 years	Refueling and Overhaul of Nuclear Submarines	
Mixed Fission/ Corrosion Products	Up to Curie	Maine Yankee	18 years	Nuclear Power Reactor Operation	J
AmBe	1 curie	Maine Yankee	18 years	Calibration of Neutron Meters]

ATTACHMENT

Item 17. Experience

Name:	Robert P. Wills	
Title:	Radiation Protection Supervisor	
	Maine Yankee Atomic Power Company]

PROFESSIONAL EXPERIENCE

Experience		Location	Duration	On Job	Forma1	
Health Physics Technician	Sh	ortsmouth Naval nipyard ttery ME	2 years	yes]
Health Physics Technician	Ма	ine Yankee	2 years	yes]
Hazardous Waste Coordinator	Ма	ine Yankee	1 1/2 years	yes]
Radiation Control Supervisor	s Ma	ine Yankee	1 1/2 years	yes]
Total Experience	In Health	Physics	= 7 years			J
EXPERIENCE WITH R	ADIATION]
Radionuclide or Machine	Amount	Location	Duratio	on l	Jse	J
Cs 137	168 Cf	Maine Yankee	5 years	. 1	Meter Cal	1
AmBe	1 uCi	Maine Yankee	5 years		Meter Cal]
Mixed Fission Products	Up to Curie Range	Portsmouth Naval Shipyard	2 years	(Refueling & Overhaul of Submarines]
Mixed Corrosion Products	Up to Curie Range	Portsmouth Naval Shipyard	2 years	(Refueling & Overhaul of Submarines]

EXPERIENÇE of R.	W. Wills	(Continued)]
EXPERIENCE WITH	RADIATION	(Continued)			
Radionuclide or Machine	Amount	Location	Duration	Use]
Mixed Fission Products	Curies Range	Maine Yankee	5 years	Operation & Refueling Nuclear Power Plant]
Mixed Corrosion Products	Curies Range	Maine Yankse	5 years	Operation & Refueling Nuclear Power Plant]

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Item 17. Experience

Name: Dennis Hickey
Title: Radiation Protection Supervisor
Maine Yankee Atomic Power Company

PROFESSIONAL EXPERIENCE

Experience		Location	Duration	On Job	<u>Formal</u>
Health Physics Tester	Mair	ne Yankee	2 years]
Health Physics Technician "S"	Mair	ne Yankee	2 years]
Radiation Control	s Mair	ne Yankee	2 years]
Radiation Control Supervisor	s Mair	ne Yankee	1 year]
EXPERIENCE WITH R	RADIATION				1
Radionuclide or Machine	Amount	Location	Duratio	on Use	1
Cesium 137	168 C1	Maine Yankee	7 year:	s Meter	Cal]
AmBe	1 uCi	Maine Yankee	7 years	s Meter	Cal]
Cesium 137	300 uCi	Maine Yankee	7 years	s Meter	Cal]
Mixed Fission Products	Curie Range	Maine Yankee	7 years	s Opera	tions]
Mixed Corrosion Products	Curie Range	Maine Yankee	7 years	S Opera	tions]

06/29/88

(FOR LFMS USE) INFORMATION FROM LTS BETWEEN: PROGRAM CODE: 03225 LICENSE FEE MANAGEMENT BRANCH, ARM STATUS CODE: 2 AND REGIONAL LICENSING SECTIONS FEE CATEGORY: EX 3P 170.116/3 EXP. DATE: 19880731 FEE COMMENTS: _ emt edded LICENSE FEE TRANSMITTAL REGION APPLICATION ATTACHED APPLICANT/LICENSEE: MAINE YANKEE ATUMIC POWER COMPANY RECEIVED DATE: 880707 3008638 DOCKET NO: CONTROL NO.: 109209 LICENSE NO.: 18-14820-02 ACTION TYPE: RENEWAL 2. FEE ATTACHED AMOSSAT: CHECK NO. : 3. COMMENTS SIGNED BP B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE OF IS FEE EXT 1. FEE CATEGORY AND AMOUNT: EXSP 170.776)3 CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR: AMENDMENT RENEWAL LICENSE OTHER SIGNED DATE