NORTHEAST UTILITIES
THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Selden Street, Berlin, Connecticut
P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 665-5000

05- 08619

May 26, 1988

Docket Nos. 50-245
50-336
50-423
B12927

Re: BPM License
No. 06-13937-02

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555

Gentlemen:

Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3
Off-Site BPM License No. 06-13937-02

Pursuant to 10CFR30.32 and 30.37, Northeast Nuclear Energy Company (NNECO) wishes to renew its Off-Site By-product Materials License No. 06-13937-02, which expires June 30, 1988.

We have reviewed the information concerning the radionuclides, chemical, and/or physical forms of the radionuclides, quantities possessed, and uses for the radionuclides, and determined that there are no changes from the current program, except that Ronald Sachatello has been promoted to the position of Radiation Protection Supervisor for Millstone Unit No. 3. Information previously submitted concerning management control program, facilities, equipment, radiation safety procedures, waste disposal procedures, and location of use remains the same. Therefore the currently in force license accurately represents the current program at the Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3 with the exception of the personnel change previously outlined. No other changes to reflect the current program are necessary.

NNECO has reviewed NRC regulations applicable to the subject license and finds that no changes in the license are necessary to conform the license to current regulations.

Attached is a copy of the previously submitted Form 313I which reflects our current program. It should be noted that Millstone Unit No. 3 is now in commercial operation and is also covered by this license.

No fee is required for this renewal application, pursuant to 10CFR30.32(e).

Please call us if you have any questions.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

E. J. Mroczka
Senior Vice President

cc: W. T. Russell, Region I Administrator
M. L. Boyle, NRC Project Manager, Millstone Unit No. 1
D. H. Jaffe, NRC Project Manager, Millstone Unit No. 2
R. L. Ferguson, NRC Project Manager, Millstone Unit No. 3
W. J. Raymond, Senior Resident Inspector, Millstone Unit Nos. 1, 2, and 3

Director
Office of Nuclear Material
Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Docket Nos. 50-245
50-336
50-423
B12927

Attachment 1

Documents Reflecting Current Program
of BPM No. 06-13937-02

May 1988

NRC Form 313 I (12-81) 10 CFR 30

U.S. NUCLEAR REGULATORY COMMISSION

APPLICATION FOR BYPRODUCT MATERIAL LICENSE
INDUSTRIAL

See attached instructions for details.

Completed applications are filed in duplicate with the Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety, and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555 or applications may be filed in person at the Commission's office at 1717 H Street, NW, Washington, D. C. or 7915 Eastern Avenue, Silver Spring, Maryland.

1. APPLICATION FOR: *(Check and/or complete as appropriate)*

	a. NEW LICENSE
	b. AMENDMENT TO LICENSE NUMBER
X	c. RENEWAL OF LICENSE NUMBER BPM 06-13937-02

2. APPLICANT'S NAME *(Institution, firm, person, etc.)*

Northeast Nuclear Energy Company

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
203-447-1791

3. NAME AND TITLE OF PERSON TO BE CONTACTED REGARDING THIS APPLICATION
Mr. Benito Granados Millstone Health Physics Supervisor

TELEPHONE NUMBER: AREA CODE - NUMBER EXTENSION
203-447-1791 Ext. 4566

4. APPLICANT'S MAILING ADDRESS *(Include Zip Code)*
(Address to which NRC correspondence, notices, bulletins, etc., should be sent.)

Northeast Nuclear Energy Co.
P.O. Box 270
Hartford, Conn. 06101

5. STREET ADDRESS WHERE LICENSED MATERIAL WILL BE USED *(Include Zip Code)*

Northeast Nuclear Energy Co.
P.O. Box 128
Waterford, Conn. 06385

(IF MORE SPACE IS NEEDED FOR ANY ITEM, USE ADDITIONAL PROPERLY KEYED PAGES.)

6. INDIVIDUAL(S) WHO WILL USE OR DIRECTLY SUPERVISE THE USE OF LICENSED MATERIAL
(See Items 16 and 17 for required training and experience of each individual named below)

	FULL NAME	TITLE
	Benito Granados	Health Physics Supervisor - Millstone Station
a.	Eric Laine	Radiation Protection Supervisor - Unit 2
	Mark Brennen	Radiation Protection Supervisor - Unit 1
b.	George Smith	Assistant Radiation Protection Supervisor - Unit 1
	Richard Gault	Assistant Radiation Protection Supervisor - Unit 2
c.	Ronald Sachatello	Station Health Physicist - Millstone Station

7. RADIATION PROTECTION OFFICER

Mr. Benito Granados

Attach a resume of person's training and experience as outlined in Items 16 and 17 and describe his responsibilities under Item 15.
See item 15A: "Duties of Rad. Prot. Officer"

8. LICENSED MATERIAL

LINE NO.	A ELEMENT AND MASS NUMBER	B CHEMICAL AND/OR PHYSICAL FORM	C NAME OF MANUFACTURER AND MODEL NUMBER *(If Sealed Source)*	D MAXIMUM NUMBER OF MILLICURIES AND/OR SEALED SOURCES AND MAXIMUM ACTIVITY PER SOURCE WHICH WILL BE POSSESSED AT ANY ONE TIME
(1)	Any byproduct material	Activation and corrosion	N/A	Maximum total: 3.0 (three) curies
(2)		product contamination		
(3)		fixed upon and/or contained		
(4)		within reactor system components		

	E DESCRIBE USE OF LICENSED MATERIAL
(1)	Repair, inspection, testing of reactor system components
(2)	
(3)	
(4)	

9. STORAGE OF SEALED SOURCES

LINE NO.	CONTAINER AND/OR DEVICE IN WHICH EACH SEALED SOURCE WILL BE STORED OR USED. A.	NAME OF MANUFACTURER B.	MODEL NUMBER C.
(1)	.Not applicable	Not applicable	Not applicable
(2)	Byproduct material is:	activation and corrosion	
(3)		product contamination fixed upon surfaces and/or	
(4)		contained within reactor system components	

10. RADIATION DETECTION INSTRUMENTS

LINE NO.	TYPE OF INSTRUMENT A	MANUFACTURER'S NAME B	MODEL NUMBER C	NUMBER AVAILABLE D	RADIATION DETECTED (alpha, beta, gamma, neutron) E	SENSITIVITY RANGE (milliroentgens/hour or counts/minute) F
(1)	G/M	Eberline	RM14/210	50	beta/gamma	0-50,000 cpm
(2)	Scintillation	Ludlum	177/43-2	20	alpha	0-500,000 cpm
(3)	Proportional	Eberline	PNR-4	4	neutron	1 mR/hr - 5 R/hr
(4)	Ion Chamber	Eberline	RO-2 RO-2A	20 30	beta/gamma	1 mR/hr - 5 R/hr 2 mR/hr - 50 R/hr

11. CALIBRATION OF INSTRUMENTS LISTED IN ITEM 10

☐ a. CALIBRATED BY SERVICE COMPANY
NAME, ADDRESS, AND FREQUENCY

☒ b. CALIBRATED BY APPLICANT
Attach a separate sheet describing method, frequency and standards used for calibrating instruments. Instruments are calibrated at 6 month time intervals by approved Station and ANSI procedures using ~~NBS traceable radiation sources.~~

12. PERSONNEL MONITORING DEVICES

TYPE (Check and/or complete as appropriate.) A	SUPPLIER (Service Company) B	EXCHANGE FREQUENCY C
☐ (1) FILM BADGE		
☒ (2) THERMOLUMINESCENCE DOSIMETER (TLD)	Teledyne Isotopes TLD whole body badge ($CaSO_4$-Dy) extremity badge (Li F)	☒ MONTHLY TLD routine read out ☐ QUARTERLY
☐ (3) OTHER (Specify): pocket ion chamber dosimeters: low range: 0-200 mRem 0-500 mRem high range: 0-1 Rem 0-5 Rem	Pocket Ion Chambers (Dosimeter) Dosimeter Corp. of America - DCA Stephen's Dosimeter Victoreen Dosimeter	☒ OTHER (Specify): TLD's read daily or at shorter intervals if required

13. FACILITIES AND EQUIPMENT (Check were appropriate and attach annotated sketch(es) and description(s).

☐ a. LABORATORY FACILITIES, PLANT FACILITIES, FUME HOODS (Include filtration, if any), ETC. HEPA ventilation & vacuum systems
☐ b. STORAGE FACILITIES, CONTAINERS, SPECIAL SHIELDING (fixed and/or temporary), ETC. Lead blankets, sheets, drums
☐ c. REMOTE HANDLING TOOLS OR EQUIPMENT, ETC. contamination tents, enclosure bags
☐ d. RESPIRATORY PROTECTIVE EQUIPMENT, ETC. In accordance with 10CFR20 & NUREG-0041 (sorbent cannister, airline, SCBA)

14. WASTE DISPOSAL

a. NAME OF COMMERCIAL WASTE DISPOSAL SERVICE EMPLOYED Waste disposal handled by NNECO with license agreement with St. of Conn. & Barnwell Waste Repository

b. IF COMMERCIAL WASTE DISPOSAL SERVICE IS NOT EMPLOYED, SUBMIT A DETAILED DESCRIPTION OF METHODS WHICH WILL BE USED FOR DISPOSING OF RADIOACTIVE WASTES AND ESTIMATES OF THE TYPE AND AMOUNT OF ACTIVITY INVOLVED. IF THE APPLICATION IS FOR SEALED SOURCES AND DEVICES AND THEY WILL BE RETURNED TO THE MANUFACTURER, SO STATE.

INFORMATION REQUIRED FOR ITEMS 15, 16 AND 17

Describe in detail the information required for Items 15, 16 and 17. Begin each item on a separate page and key to the application as follows:

15. RADIATION PROTECTION PROGRAM. Describe the radiation protection program as appropriate for the material to be used including the duties and responsibilities of the Radiation Protection Officer, control measures, bioassay procedures *(if needed)*, day-to-day general safety instruction to be followed, etc. If the application is for sealed source's also submit leak testing procedures, or if leak testing will be performed using a leak test kit, specify manufacturer and model number of the leak test kit.

16. FORMAL TRAINING IN RADIATION SAFETY. Attach a resume for each individual named in Items 6 and 7. Describe individual's formal training in the following areas where applicable. Include the name of person or institution providing the training, duration of training, when training was received, etc.

    a. Principles and practices of radiation protection.

    b. Radioactivity measurement standardization and monitoring techniques and instruments.

    c. Mathematics and calculations basic to the use and measurement of radioactivity.

    d. Biological effects of radiation.

17. EXPERIENCE. Attach a resume for each individual named in Items 6 and 7. Describe individual's work experience with radiation, including where experience was obtained. Work experience or on-the-job training should be commensurate with the proposed use. Include list of radioisotopes and maximum activity of each used.

18. CERTIFICATE

(This item must be completed by applicant)

The applicant and any official executing this certificate on behalf of the applicant named in Item 2, certify that this application is prepared in conformity with Title 10, Code of Federal Regulations, Part 30, and that all information contained herein, including any supplements attached hereto, is true and correct to the best of our knowledge and belief.

WARNING.–18 U.S.C., Section 1001; Act of June 25, 1948; 62 Stat. 749; makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

a. LICENSE FEE REQUIRED *(See Section 170.31, 10 CFR 170)* None	b. CERTIFYING OFFICIAL *(Signature)* W. G. Counsil
	c. NAME *(Type or print)* William G. Counsil
(1) LICENSE FEE CATEGORY: 10CFR170.11(a)(3)	d. TITLE Senior Vice President
(2) LICENSE FEE ENCLOSED: $ None	e. DATE March 28, 1983

Item 15

Radiation Protection Program

The Radiation Protection Program meets the applicable requirements of Title 10 Part 20 of the Code of Federal Regulations. NNECO owns and operates two operating commercial nuclear reactors, Millstone 1 and Millstone 2, in Waterford, Conn. The radiological protection program is staffed by over 200 specialists in the field of radiological health and safety. This includes senior corporate scientists, radiological engineers, health physics, ALARA specialists, and radiological monitoring technicians.

Northeast Nuclear Energy Company utilizes modern, industry accepted ionizing radiation detection and monitoring equipment. This equipment includes: whole body counters, Ge(Li) multichannel analyzers, high and low range alpha, beta, gamma, and neutron detection instrumentation, and various personnel monitoring dosimetry devices. Protective devices such as lead shielding, HEPA ventilation/vacuuming equipment, contamination containments, protective clothing, and respiratory protection apparatus are routinely employed in the radiological protection program. Additionally Northeast Utilities Service Company (NUSCO) runs a full service dosimetry laboratory for exposure analysis.

Radiological monitoring is performed on a continuous basis by trained and qualified scientists, engineers, and Health Physics monitor technicans. These controls ensure compliance with authorized station procedures and applicable State and Federal regulation. Controls consist of routine surveys of each individual radiological work operation performed.

Surveys are conducted on radiation levels, radioactive contamination levels and airborne concentrations. All survey data are reviewed by supervisory personnel to evaluate the adequacy and accuracy of the survey information and to ensure no abnormal conditions exist. In addition, many operations are monitored by continuous running air samplers and radiation detectors/alarms. All radiation detection instrumentation in use is calibrated to known radiation standards by trained technicians.

NNECO Maintains a Health Physics Audit department which performs routine surveillance of the Health Physics program. Also two NRC inspector are assigned full time resident duty at the Millstone Nuclear complex in Waterford, Connecticut. Additionally NNECO receives frequent inspection and review by inspectors from the NRC, INPO, FEMA, and State Department of Environmental Protection.

Duties of Radiation Protection Officer

The Radiation Protection Officer, Mr. Benito Granados, is responsible for the supervision of Health Physics related activities at Millstone Station (Units 1 and 2). Mr. Granados is responsible for:

a. Radiological survey acquisition, interpretation, documentation.
b. Respiratory protection equipment selection, maintenance, testing.
c. Radiac meter calibration, usage, repair.
d. Internal/external contamination control including in-vivo bioassay, invitro sampling, and documentation.
e. Personnel dosimetry evaluation, and documentation.
f. Custodian of station radioactive check sources.
g. Radiological Dose Assessment Manager during radiological/nuclear reactor accidents.

Items 16 & 17 FORMAL TRAINING IN RADIOLOGICAL SAFETY WITH EXPERIENCE

A. Name Benito L. Granados

Where trained	Duration	On The Job	Formal Course
Electric Boat Division	15 yrs.	yes	yes
Connecticut Yankee	15 mos.	yes	yes
Millstone Nuclear Power Station (NNECO)	16 mos.	yes	yes

Experience with Radiation

Isotope	Max. Amount	Where Gained	Duration	Type of Use
Co-60	300 mCi	Electric Boat Division	15 yrs.	Calibration
Co-60	100 Ci	Electric Boat Division	15 yrs.	Radiograph
Ir-60	100 Ci	Electric Boat Division	15 yrs.	Radiograph
PoBe	5 Ci	Electric Boat Division	15 yrs.	Calibration
Co-60	6.18mCi	Connecticut Yankee	15 mos.	Calibration
Am-241	4 Ci	Connecticut Yankee	15 mos.	Calibration
Cs-137	50 Ci	Connecticut Yankee	15 mos.	Calibration
Cs-137	130 mCi	NNECO	16 mos.	Calibration
Cs-137	260 Ci	NNECO	16 mos.	Calibration

B. Name M. Brennan

Where trained	Duration	On the Job	Formal Course
U.S. Navy Prototype	6 mos.	yes	yes
U.S.S Daniel Boone	3 yrs.	yes	no
U.S. Navy prototype	3 1/3 yrs.	yes	yes
Anefco	6 wks.	yes	no
Nuclear Personnel Consultants	6 mos.	yes	no
Millstone Nuclear Power Station (NNECO)	7 yrs.	yes	yes

Item 9.

Experience with Radiation

Isotope	Max. Amount	Where Gained	Duration	Type of Use
Co^{60}	2.0 Ci	NNECO	7 yrs.	calibration of instruments
Cs^{137}	130 mCi	NNECO	7 yrs.	calibration of instruments
Cs^{137}	260 Ci	NNECO	7 yrs.	calibration of instruments
$Am^{241}Be$	5.88 Ci	NNECO	7 yrs.	calibration of instruments

C. Name E. Laine

Where trained	Duration	On the Job	Formal Course
University of Lowell, Lowell, MA	4 yrs.	no	yes
DCPA funded H. P. training, Lowell, MA	4 wks.	no	yes
Maine Yankee, Wiscasset, Maine	3 mos.	yes	no
Vermont Yankee, Vernon, Vermont	4 mos.	yes	no
Millstone Nuclear Power Station (NNECO)	6 yrs.	yes	yes

Item 9

Experience with Radiation

Isotope	Max. Amount	Where Gained	Duration	Type of use
Cs^{137}	130 mCi	NNECO	6 yrs.	calibration
Cs^{137}	260 Ci	NNECO	6 yrs.	calibration

D. Name G. Smith

Where trained	Duration	On the Job	Formal Course
U. S. Navy Nuclear Program	11 yrs.	yes	yes
Electric Boat Division	8 mos.	yes	yes
Millstone Nuclear Power Station (NNECO)	4 yrs.	yes	yes
Maine Yankee	1 mo.	yes	no
Indian Point	15 mos.	yes	no

Item 9.

Experience with Radiation

Isotope	Max. Amount	Where Gained	Duration	Type of Use
Ir^{192}	90 Ci	Shippingport	8 mos.	Radiography
Cs-137	130 mCi	NNECO	4 yrs.	Calibration
Cs-137	267 Ci	NNECO	4 yrs.	Calibration

E. name: Ronald Sachatello

Where Trained	Duration	On the Job	Formal Course
Electric Boat	10 years	Yes	Yes
Connecticut Yankee	1 year	Yes	Yes
Millstone Nuclear Power Station (NNECO)	6 months	Yes	Yes

Experience with Radiation

Isotope	Max Amount	Where Gained	Duration	Type of Use
Co-60	100 Ci	Electric Boat Division	10 yrs.	Radiograph
Ir-192	100 Ci	Electric Boat Division	10 yrs.	Radiograph
Co-60	300 mCi	Electric Boat Division	10 yrs.	Calibration
PoBe	5 Ci	Electric Boat Division	10 yrs.	Calibration
AmBe	3 Ci	Electric Boat Division	10 yrs.	Calibration
AmBe	3 Ci	Connecticut Yankee	10 yrs.	Calibration
Cs 137	50 Ci	Connecticut Yankee	10 yrs.	Calibration
Cs 137	130 mCi	NNECO	6 mos.	Calibration
Cs 137	160 Ci	NNECO	6 mos.	Calibration

F. Name: Richard Gault

Where trained	Duration	On the Job	Formal Course
USN Prototype	6 months	yes	yes
USS Sam Reyburn	5 years	yes	no
Zion Power Station	2 months	yes	no
Maine Yankee Power Station	2 months	yes	no
Indian Point Power Station	4 months	yes	no
Millstone Power Station	5 years	yes	yes

Experience with Radiation

Isotope	Max Amount	Where Gained	Duration	Type of Use
Cs-137	130 mCi	NNECO	5 years	Calibration
Cs-137	260 Ci	NNECO	5 years	Calibration
AmBe	5.88 Ci	NNECO	5 years	Calibration

FORMAL TRAINING IN RADIOLOGICAL SAFETY WITH EXPERIENCE

G. Name John F. Kangley

Where trained	Duration	On the Job	Formal Course
Connecticut Yankee	10.75 years	yes	yes
Millstone Nuclear Power Station (NNECO)	3 years	yes	yes

Experience with Radiation

Isotope	Max. Amount	Where Gained	Duration	Type of Use
Co-60	6.18 mCi	Connecticut Yankee	10.75 years	Calibration
Am-241	4 Ci	Connecticut Yankee	10.75 years	Calibration
Cs-137	50 Ci	Connecticut Yankee	10.75 years	Calibration
Cs-137	260 Ci	NNECO	3 years	Calibration
Cs-137	260 Ci	NNECO	3 years	Calibration

NORTHEAST UTILITIES
THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

General Offices • Seldon Street, Berlin, Connecticut

P.O. BOX 270
HARTFORD, CONNECTICUT 06141-0270
(203) 666-6911

June 3, 1983

Docket No. 50-245
A03207

Office of Nuclear Materials Safety
and Safeguards
Attention: John G. Davis, Director
U. S. Nuclear Regulatory Commission
Washington, D. C. 02555

Reference: (1) J. E. Glenn letter to W. G. Counsil dated April 22, 1983.

Gentlemen:

Millstone Nuclear Power Station Unit No. 1
Offsite BPM License No. 06-13937-02

In Reference (1), the Staff requested Northeast Nuclear Energy Company to supply additional information to enable the continuation of review of NNECO's application for renewal of the subject license.

The information requested is contained in Appendix A of our December 4, 1978 application for an amendment to the subject license, and is still applicable to this license. A copy is enclosed.

The street address of the facility (Question 2 of Reference (1)) is Millstone Road, Waterford, Connecticut.

Should you require further information, please feel free to contact us.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

W. G. Counsil

W. G. Counsil
Senior Vice President

Enclosure

APPENDIX A

AUTHORIZED ACTIVITIES

1. Northeast Nuclear Energy Company (NNECO) may receive, possess and handle radioactive byproduct material fixed to or contained within reactor system components belonging to NNECO, at temporary field loactions (vendor facilities), in all states in which the USNRC retains regulatory authority.

2. Northeast Nuclear Energy Company may conduct radiation protection activities at temporary field locations (vendor facilities) where radioactive byproduct material fixed to or contained within reactor system components belonging to NNECO are received, possessed and handled pursuant to the provisions of the byproduct material license issued to the NNECO and all applicable state and federal regulations.

SPECIFIC CONDITIONS

1. All radioactive byproduct material fixed to or contained within reactor system components belonging to NNECO and shipped to a vendor's facility will remain the property of NNECO, will at all times be the responsibility of a NNECO representative (Radiological Job Supervisor)

specifically named in the license, and will at all times be under the control of a NNECO employee who is qualified in radiation protection procedures, and who meets or exceeds the minimum qualifications set forth in ANSI 18.1-1971.

2. All NNECO equipment containing radioactive byproduct material shall be packaged, surveyed, labeled and shipped in accordance with all applicable state and federal regulations.

3. Northeast Nuclear Energy Company shall assume responsibility for all radiation protection activities incident to the receipt, inspection, repair and testing of NNECO equipment containing radioactive byproduct material while such equipment is at the vendor's facility. All radiation protection activities shall be conducted in accordance with all applicable federal and state regulations and NNECO administrative policies.

4. The maximum quantity of radioactive byproduct material contained within reactor system components at any one vendor facility shall not exceed three (3) curies. Removable surface contamination on all external surfaces of the packaging shall not exceed 2200 dpm/100 cm^2 prior to shipment from the Millstone site.

DESCRIPTION OF OFF-SITE RADIATION PROTECTION PROGRAM

I. Personal Qualifications

A. The Radiological Job Supervisor shall be:

1. Specifically named in the byproduct material license.

2. Responsible for the radiological safety of the off-site operation.

B. The Health Physics Technician(s) shall be:

1. Permanent NNECO employees.

2. Qualified in NNECO radiation protection procedures.

3. Meet or exceed the minimum qualifications set forth in ANSI 18.1-1971.

II. Personnel Duties and Responsibilities

A. The Radiological Job Supervisor is directly responsible to NNECO management for ensuring that activities at a vendor's facility are conducted at all times

in accordance with the specific conditions of the byproduct material license. He maintains contact with the Health Physics Technician(s) on the job and the vendor facility management to ensure that effective health physics controls are established and maintained.

B. Each Health Physics Technician is responsible to and reports directly to the Radiological Job Supervisor. He implements the radiological protection program at the vendor's facility and enforces all applicable state and federal regulations and NNPCO administrative policies. He complies with the specific conditions of the byproduct material license. He provides radiological training to vendor personnel consistent with the scope of the job to be done. He performs surveys, posts areas, issues personnel monitoring devices, monitors personnel radiation exposures and keeps records of all activities related to radiological protection.

III. Procedures

A. Shipment of Byproduct Material

1. Shipment of radioactive byproduct material to and from the vendor's facility shall be in

accordance with all applicable federal and state regulations and NNECo administrative policies.

B. Facility Evaluation

1. Before work begins at a vendor's facility, the Radiological Job Supervisor or the Health Physics Technician evaluates the facility to ensure that the job about to be done can be accomplished in a radiologically safe manner and that proper controls can be established.

C. Radiation Control Area

1. A "Radiation Control Area" shall be established at each field location for the purpose of radiation protection. The Radiation Control Area shall encompass that area of a vendor's facility in which the radioactive byproduct material is handled.

2. Access to the Radiation Control Area shall be limited to those persons specifically assigned to the activity, and shall be by written permit.

3. Prior to beginning work on the radioactive byproduct material, consideration shall be given to the following to control the spread of radioactive contamination:

   a. Cover non-involved equipment inside the Radiation Control Area.

   b. Contain the work area inside a ventilated "tent".

   c. Cover floors, benches, etc.

4. The Radiation Control Area and areas within the Radiation Control Area as necessary, shall be posted in accordance with the applicable sections of 10 CFR 19 and 20.

5. Protective clothing to be worn inside the Radiation Control Area shall be specified in writing on the access control point. All protective clothing shall be supplied by NNECO.

6. Respiratory protection equipment may be required. The air will be monitored by a Health Physics Technician and respiratory

protection specified based on the results of these samples. Every precaution will be taken to keep airborne contamination to a minimum through the use of proper ventilation and prior decontamination of equipment and work areas. All respiratory protection equipment will be supplied by NNECO.

D. Personnel Monitoring

1. All individuals who will be required to work in the Radiation Control Area shall be issued personnel monitoring equipment and shall be required to wear this equipment at all times while in the Radiation Control Area.

2. The personnel monitoring equipment issued to vendor personnel shall be the same as that regularly issued to NNECO employees.

3. Radiation exposure to vendor personnel shall be kept within the limits specified in 10 CFR 20.

4. The permanent record dosimetry device will be evaluated immediately if the possibility of an overexposure exists.

5. Upon completion of work at a vendor's facility, the permanent record dosimetry shall be sent for evaluation as expeditiously as possible.

E. Surveys

1. Radiation surveys and air and surface contamination surveys shall be performed at the vendor's facility consistent with the amount of byproduct material present and the scope of the work being performed. The surveys should be conducted at regular intervals, both inside and outside the Radiation Control Area.

2. Protective clothing and equipment requirements may be based on the results of these surveys.

F. Return of Vendor's Facility to Uncontrolled Status

1. Radioactive byproduct material shall be packaged and made ready for transport back to NNECO in accordance with all applicable federal and state regulations and NNECO administrative policies.

2. A Health Physics technician shall conduct a thorough radiation and contamination survey of the area previously designated the Radiation Control Area and all adjacent areas. The area may be returned to uncontrolled status if the levels of loose surface contamination are less than 1000 dpm/100 cm^2 $\beta\gamma$ and less than 100 dpm/100 cm^2 α. Also the levels of fixed contamination must be less than .1 mr/hr at one inch.

G. Radioactive Waste Disposal

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

2. All radioactive byproduct waste materials shall be packaged and made ready for shipment in accordance with all applicable federal and

state regulations and NNECO administrative policies.

3. The radioactive byproduct waste material may either be:

   a. Shipped back to NNECO for alternate disposal through a licensed contractor.

   b. Directly transferred to a licensed contractor for disposal from the vendor's facility.

IV. Radiation Protection Training

A. Each vendor company employee who will have need to enter the Radiation Control Area shall receive a radiation protection orientation prior to the start of the job.

B. The type and scope of this training shall be commensurate with the amount of byproduct material involved, the radiation levels in the work area and the type of work to be done.

C. In all cases, the training will cover 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

A. Northeast Nuclear Energy Company shall maintain permanent records of all licensed activities conducted at temporary field locations. These records shall include:

1. Records showing the transfer of radioactive byproduct material to and from the temporary field location.

2. Records of all surveys.

3. Records of vendor personnel radiation exposure history.*

4. Records of vendor personnel radiation exposures received during the off-site operations.*

B. A report of occupational radiation exposure shall be furnished to all vendor personnel pursuant to 10 CFR 19 and 10 CFR 20.

*These records shall be copies. The official records are maintained with the other Northeast Nuclear Energy Company exposure records.

BETWEEN:

License Fee Management Branch, ARM
and
Regional Licensing Sections

(FOR LFMS USE)
INFORMATION FROM LTS

Program Code: 03225
Status Code: 2
Fee Category: EX 3P
Exp. Date: 19880630
Fee Comments: _____

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED
   Applicant/Licensee: NORTHEAST NUCLEAR ENERGY CO.
   Received Date: 880603
   Docket No: 3008619
   Control No.: 120543
   License No.: 06-13937-02
   Action Type: Renewal

2. FEE ATTACHED —
   Amount: —
   Check No.: —

3. COMMENTS

Signed Rachel Stockwell
Date 6/6/88

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/)

1. Fee Category and Amount: Fee Ex - 170.11(a)(3)

2. Correct Fee Paid. Application may be processed for:
   Amendment
   Renewal ✓
   License

3. OTHER _____

Signed D Jackson
Date 6/22/88