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*MSB2*

Licensing Assistance Section  
Nuclear Materials Safety Branch  
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Your ref: STD-DP-08-3  
Our ref:

January 30, 2008

Subject: Application for an Amendment to License Number SNM-1460 (Docket Number 070-01503) to Change the Radiation Safety Officer

Dear Sir or Madam:

The Westinghouse Electric Company LLC hereby submits this application for an amendment to License Number SNM-1460 to change the Radiation Officer from Mr. Raymond C. Crott to Mr. Ira Seybold. Mr. Seybold's resume is attached. I have also attached the revised pages to the license renewal application submitted on January 18, 2008, which reflects the requested change.

If you have any questions concerning this application, please contact me or Mr. Raymond Crott, Manager Environment Health and Safety at (724) 722-5324.

Sincerely,

A handwritten signature in black ink, appearing to read 'John E. Goossen', written over a horizontal line.

John E. Goossen, Director  
Westinghouse Science and Technology Department

cc: R.C. Crott  
I.R. Seybold

Attachments (2)

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NMSS/RGN1 MATERIALS-002

# ATTACHMENT 1

## RESUME

IRA SEYBOLD

# Ira R. Seybold

## **Education**

Harrisburg Area Community College – two years of engineering

United States Navy Nuclear Power School – Qualified Mechanical Operator, Engineering Laboratory Technician

## **Qualified through training and experience for the following positions:**

- Emergency Response Manager
- Hazardous Material Supervisor responsible for maintenance, disposal and transportation of chemical, radioactive and mixed waste
- Manager of a nuclear power plant's radiation safety program
- Manager of radiation dosimetry, internal and external
- Trainer for all aspects of nuclear emergency response, radiation safety, continuous behavior observation for people responsible for observing, safety in motion, human performance clock/investigation, radiation dosimetry and others
- Supervisor of the radiation safety technicians at a broad scope license facility
- Supervisor of technicians responsible for shipping over 800 radioactive material shipments per year over a seven year period

## **Employment Experience**

*Westinghouse Electric Company* January 1988-Present  
Manager and engineer of the Westinghouse radiation safety assistance program at Dominion's Surry and North Anna Plants, ended with winning the Contractor of the year award.

ALARA Field Engineer – Various assignments, excellent results.

Supervisor of the Radiation Safety Technicians at Waltz Mill.  
Cost reductions/savings.  
Staff augmentation to match growth of business.  
Team participation for performance enhancement.

*Independent Consultant to the Nuclear Industry* January 1980 – January 1988

*Three Mile Island (TMI)* July 1979-January 1980  
Dosimetry Manager, Post accident recovery team.

**Employment Experience Continued**

*Yankee Rowe* (a pressurized water reactor) May 1974-July 1979  
Radiation Protection Manager responsible for all aspects of the program including license interface with American Nuclear Insurers and the US Nuclear Regulatory Commission.

*United States Navy* May 1967-May 1974  
Submarine Service aboard a fast attack submarine and a submarine tender. Final position on the tender as shift supervisor for radiation safety and waste processing.

**Work Experience Other Skills and Activities**

- Member of license control committees
  - Plan Operations Review Committee at a PWR
  - External Audit and Review Committee at various PWRs and BWRs.
  - Radiation Safety Committee at a large broad scope materials license.
- Trainer/Instructor
  - Navy instructor, Utility instructor, Consulting instructor
  - Westinghouse instructor
- Human Resource Activities
  - Continuous Behavior Observation and Human Performance
- Budget responsible for organizations as large as 50 people (~13 million dollars)
- Field project team member responsible for customer interface and crew coaching in ALARA and industrial safety
- Procedure development, training and compliance accountability
- Consultant to the nuclear power plants in the areas of radiation safety, emergency response and dosimetry
- Radiation measuring instrumentation calibration and maintenance supervisor
- Supervisor of environmental monitoring for radioactive materials
- Coordinator of complex activities requiring matrix management of workers from other organizations into a coherent team focused on completing the task
- Accomplished public speaker

**ATTACHMENT 2**

**UPDATED PAGES  
SNM-1460  
LICENSE RENEWAL APPLICATION**

**WESTINGHOUSE ELECTRIC COMPANY LLC  
SCIENCE AND TECHNOLOGY DEPARTMENT  
PITTSBURGH, PA**

**APPLICATION FOR RENEWAL  
US NRC LICENSE NUMBER SNM-1460  
DOCKET NUMBER 070-01503**

**REVISION 1 – January 30, 2008**

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**REVISION RECORD**

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| 0                          | All                      | License renewal application.                   |
| 1                          | 7-8 to 7-10              | Revised to change the Radiation Safety Officer |



## **ITEM 7      INDIVIDUALS RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING AND EXPERIENCE**

### **7.1      Senior Management**

Overall responsibility for administration of this license rests with the Westinghouse Science and Technology Department (WSTD) which is a department of Westinghouse Electric Company. Figure 7.1 depicts the present organizational structure of WSTD.

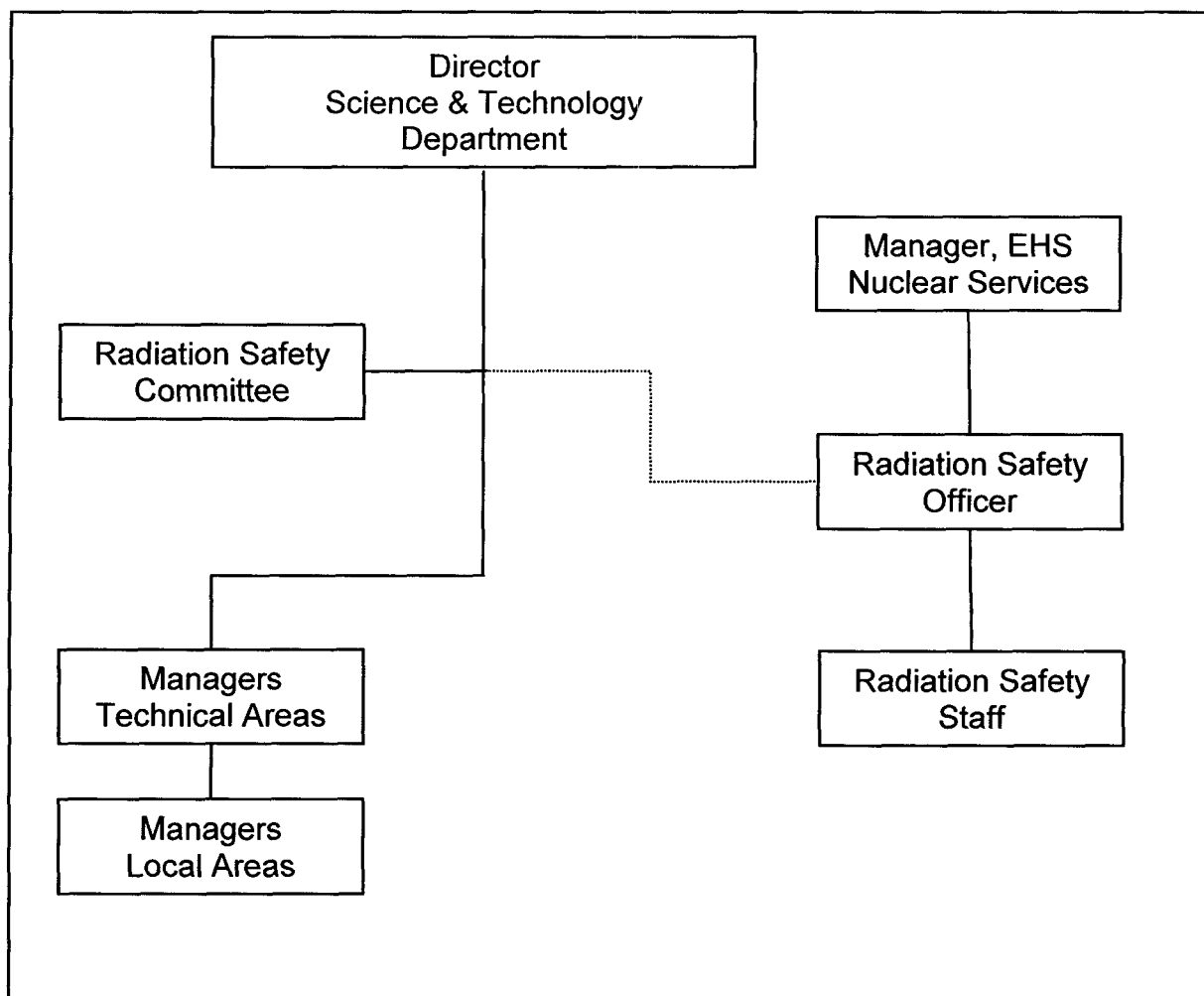
The direct responsibility for operational oversight of activities conducted under the license rests with the local area managers, who report to the Director, WSTD. The Radiation Safety Staff reports to the Radiation Safety Officer (RSO). The RSO direct reports to the Westinghouse Nuclear Services Manager, Environmental, Health and Safety (EHS) and matrix reports to the Director, WSTD for all matters regarding the License.

The Radiation Safety Committee (RSC) and Radiation Safety Officer (RSO) shall have sufficient authority, organizational freedom, and management prerogative to communicate with upper levels of management and provide direction to personnel regarding NRC regulations and license provisions.

Management responsible for activities conducted under this license shall have the prime responsibility for compliance with the terms and conditions of the license and the WSTD Radiation Safety Program. Management shall provide competent personnel and make certain that they have adequate facilities and equipment to accomplish assignments expeditiously, economically, safely and to maintain exposures as low as reasonably achievable. Each responsible manager shall either personally or through other management personnel assure that proper reviews and approvals are made by the Radiation Safety Committee.

Senior management shall assure that annual audits of the program are conducted to ensure the safe operation and compliance with regulatory requirements. The audit program shall include mechanisms to correct and resolve problems in an expeditious manner. Such audits may be conducted by either the RSC or by an independent auditor.

All members of the Radiation Safety Staff are authorized by senior management to immediately stop any activity which poses an immediate hazard, may lead to excessive exposures, or cause a violation of a license provision.



**Figure 7.1-1 Organizational Chart for Science and Technology Department**

## **7.2 Radiation Safety Committee**

The Radiation Safety Committee (RSC) shall review and evaluate operational and safety performance. This shall be accomplished through discussions at scheduled meetings, audits, and by inspection of operating areas. Minutes of all Radiation Safety Committee meetings and audit reports shall be retained in accordance with regulatory requirements.

The Radiation Safety Committee (RSC) shall have a minimum of five members chosen to provide both administrative and technical competence. Members of this Committee shall be appointed by the Director, Science & Technology Department. The RSC shall consist of the RSO; at least one member of management; and persons representing the groups or activities that will use radioactive material. Each technical member of the RSC shall have a minimum of two years experience in the safe use of radioactive material. There shall be at least one additional technical member other than the RSO. Administrative members of the RSC are not required to have a background in radiation safety. The minimum number of members constituting a quorum is at least one-half of the Committee's membership including the Chairman (or authorized delegate) and RSO (or his designee).

It is the responsibility of the RSC to establish appropriate policies and procedures to ensure control of the procurement and use of byproduct, source, and special nuclear materials; completion of safety evaluations of proposed uses; and the overall development and implementation of the radiation safety program. The duties and responsibilities of the Radiation Safety Committee include but are not limited to the following:

- Conduct periodic reviews and audits of the radiation safety program,
- Conduct safety evaluations of proposed uses of licensed materials,
- Assure the development of procedures and criteria for training and testing radiation workers,
- Assure the development of radiation safety manuals, as necessary
- Review and approve any facility or building for the use of any radioactive material which has not been previously approved.

The Committee shall meet on an as needed basis, but at least quarterly, and shall maintain a record of the minutes of each meeting. A copy of all Committee minutes shall be distributed to senior management having responsibilities for activities conducted under the license.

The Committee shall conduct an audit of activities conducted under this license at least annually with the period between audits not exceeding 15 months. Audit areas include but are not limited to facility reviews, waste collection and disposal, exposure and effluent trends, environmental surveillance, license compliance, and inventory of radioactive material. The results of such audits shall be documented. These reviews may be conducted by an independent auditor.

The current Chairman of the Radiation Safety Committee is Mr. Russ Cline, Manager, Westinghouse Corporate Security. Mr. Cline was appointed this position on October 1, 2007. Mr. Cline previously held the position of Manager, Environment, Health and Safety (EHS) since 1996. Mr. Cline's responsibilities as Manager, EHS included the management of the Radiation Protection, Health Physics, Dosimetry Records, Occupational Safety, Security, Fire Protection, Insurance and Emergency Response functions of Westinghouse Nuclear Services. Mr. Cline is also the present Chairman for the SNM-770 License Radiation Safety Committee. Mr. Cline began his career with Westinghouse in 1988 at the Corporation's Research and Development (R&D) Center, based out of Churchill, Pennsylvania. While at the R&D Center, Mr. Cline served as the Contractor Security Officer in the Defense Industrial Security Program (DISP).

Mr. Cline is a graduate of the Indiana University of Pennsylvania where he received his Bachelor of Arts Degree in Criminology with a minor in Political Science and a concentration in Security. During his career at Westinghouse, Mr. Cline has held positions of increasing responsibility, which has included both technical leadership and management oversight.

Mr. Cline's career has been primarily focused on support operations where he has been associated with safety, risk management and emergency response type services. Mr. Cline has held the following management positions:

- Supervisor, Security
- Manager, Asset Protection
- Manager, Plant Protection
- Manager, Security and Safety
- Manager, Industrial Hygiene, Safety and Environmental Compliance
- Manager, Environment, Health and Safety

- Manager, Corporate Security

### **7.3 Radiation Safety Officer**

The Radiation Safety Officer (RSO) is responsible for the establishment and guidance of programs in radiation protection. He also evaluates potential and/or actual radiation exposures, establishes appropriate control measures, approves written procedures, and assures compliance with pertinent policies and regulations. Under his direction, radiation safety personnel administer the established site policy, collect samples, perform analyses, take measurements, maintain records, and generally assist in performing the technical aspects of the radiation safety program.

The RSO will have specific training in health physics, and at least five years professional experience with radioactive material.

In general, the RSO will have the knowledge and ability necessary to respond effectively to the radiation safety needs of WSTD. The RSO will have a background of training and experience and a maturity of judgment sufficient to recognize the need for expert assistance at an early stage in the development of potential radiation safety problems involving disciplines outside of his or her area of expertise. Specifically the RSO will have or have access to individuals with the following skills and knowledge, as necessary to support the radiation safety program:

- Ability to communicate clearly, both verbally and in writing.
- Knowledge of mathematics, physics, chemistry, and biology sufficient to understand health protection standards, theories, and practices.
- Knowledge of current standards, guides, and reports published by various organizations (e.g., the International Commission on Radiological Protection; the National Council on Radiation Protection and Measurements; the United Nations Scientific Committee on the Effects of Atomic Radiation; the National Academy of Sciences, National Research Council Advisory Committee on the Biological Effects of Ionizing Radiation; and the American National Standards Institute) and the ability to understand, interpret, and effectively apply them.

- Knowledge of applicable NRC regulations, regulatory guides, and NUREG-series reports and ability to understand and effectively apply them.
- Knowledge and ability sufficient to operate instruments used in the program for measuring radiation and radioactive materials and to interpret the resulting measurements.
- Knowledge and ability sufficient to perform calibrations of instruments used in the program for measuring radiation and radioactive materials.
- Knowledge and ability sufficient to select radiation and radioactive materials measuring instruments appropriate to their proposed use in the program.
- Knowledge and ability sufficient to evaluate the need for shielding and to determine the types and amounts of shielding required.
- Knowledge and ability sufficient to calculate radioactive decay, buildup, and secular and transient equilibrium.
- Knowledge and ability sufficient to calculate internal and external radiation doses.
- Knowledge of personnel monitoring devices and the ability to select the proper device for a specific application.
- Knowledge and ability sufficient to manage or conduct a radiation safety training program for facility personnel.
- Knowledge and ability sufficient to recognize and anticipate existing and potential radiation safety problems.
- Knowledge and ability sufficient to recognize potential criticality problems and to take appropriate and timely action with respect to such problems.

- Knowledge of current radioactive effluent treatment methods, equipment, and procedures and ability to effectively use them.
- Knowledge and ability sufficient to recognize the potential for contamination associated with work with radioactive materials, to control contamination, and to decontaminate equipment, facilities, and personnel.
- Knowledge and ability sufficient to prepare a facility emergency plan and to conduct or manage the conduct of operations in accordance with the plan.
- Knowledge and ability sufficient to evaluate, select, and maintain and effectively use and supervise the use of respiratory protective equipment.
- Knowledge and ability sufficient to evaluate, select , and maintain and effectively use and supervise the use of protective clothing.
- Knowledge and ability sufficient to evaluate, design, test, maintain, and supervise the maintenance (from the radiation safety standpoint) of process control and confinement systems such as gloveboxes and hoods.
- Knowledge and ability sufficient to evaluate, select, design, maintain, and test sealed sources of radiation and devices in which the sources are to be used.
- Knowledge and ability sufficient to evaluate, select, and design and effectively use, maintain, and supervise the use and maintenance of radioactive waste collection, treatment, packaging, and disposal equipment and facilities and to prepare related radiation safety procedures.
- Working knowledge of transport regulations and requirements as they apply to the transport of radioactive materials.
- Knowledge and ability sufficient to implement a bioassay program.

- Knowledge and ability (including a maturity of judgment developed from appropriate radiation safety program experience in work situations similar to WSTD) sufficient to manage effectively the WSTD radiation safety program.

The RSO will be supported by adequate staff, facilities and equipment and will have direct access to senior management for matters pertaining to Radiation Safety.

The Radiation Safety Officer is currently Mr. Ira Seybold. Mr. Seybold is qualified through training and experience for the following positions:

- Emergency Response Manager
- Hazardous Material Supervisor responsible for maintenance, disposal and transportation of chemical, radioactive and mixed waste
- Manager of a nuclear power plant's radiation safety program
- Manager of radiation dosimetry, internal and external
- Trainer for all aspects of nuclear emergency response, radiation safety, continuous behavior observation for people responsible for observing, safety in motion, human performance clock/investigation, radiation dosimetry and others
- Supervisor of the radiation safety technicians at a broad scope license facility
- Supervisor of technicians responsible for shipping over 800 radioactive material shipments per year over a seven year period

Mr. Seybold's professional experience is summarized below:

*Westinghouse Electric Company*

January 1988-Present

Manager and engineer of the Westinghouse radiation safety assistance program at Dominion's Surry and North Anna Plants, ended with winning the Contractor of the year award.

ALARA Field Engineer – Various assignments, excellent results.

Supervisor of the Radiation Safety Technicians at Waltz Mill.

Cost reductions/savings.

Staff augmentation to match growth of business.

Team participation for performance enhancement.



*Independent Consultant to the Nuclear Industry*

January 1980 – January 1988

*Three Mile Island (TMI)*

July 1979-January 1980

Dosimetry Manager, Post accident recovery team.

*Yankee Rowe (a pressurized water reactor)*

May 1974-July 1979

Radiation Protection Manager responsible for all aspects of the program including license interface with American Nuclear Insurers and the US Nuclear Regulatory Commission.

*United States Navy*

May 1967-May 1974

Submarine Service aboard a fast attack submarine and a submarine tender. Final position on the tender as shift supervisor for radiation safety and waste processing.

**Work Experience Other Skills and Activities**

- Member of license control committees
  - Plan Operations Review Committee at a PWR
  - External Audit and Review Committee at various PWRs and BWRs.
  - Radiation Safety Committee at a large broad scope materials license.
- Trainer/Instructor
  - Navy instructor, Utility instructor, Consulting instructor
  - Westinghouse instructor
- Human Resource Activities
  - Continuous Behavior Observation and Human Performance
- Budget responsible for organizations as large as 50 people (~13 million dollars)
- Field project team member responsible for customer interface and crew coaching in ALARA and industrial safety
- Procedure development, training and compliance accountability

- Consultant to the nuclear power plants in the areas of radiation safety, emergency response and dosimetry
- Radiation measuring instrumentation calibration and maintenance supervisor
- Supervisor of environmental monitoring for radioactive materials
- Coordinator of complex activities requiring matrix management of workers from other organizations into a coherent team focused on completing the task
- Accomplished public speaker

#### Education

Harrisburg Area Community College – two years of engineering

United States Navy Nuclear Power School – Qualified Mechanical Operator, Engineering Laboratory Technician

#### **7.4 Radiation Safety Office Staff**

The Radiation Safety Officer (RSO) is supported by a Radiation Safety Staff comprised of Health Physics (HP) Technicians who assist in the maintenance and control of the WSTD Radiation Safety Program.

The primary function of the HP Technicians is to execute tasks as directed by the RSO in monitoring radiation exposures and the radiation levels of the related materials, work areas, and adjacent unrestricted areas.

The duties of the HP Technicians include but are not limited to the following:

- Perform assigned tasks relative to surveying and monitoring indication and/or contamination according to approved procedures.
- Assess the hazards associated with the work to be done and prepare, issue, and terminate radiation work permits (RWP).

- Receive all shipments of radioactive materials, perform the required surveys, and prepare the required documentation.
- Perform the required measurements and surveys and assist in preparation of the shipping paperwork for all outgoing shipments of radioactive material.
- Provide or arrange for the calibration of radiation survey equipment and radioactivity measurement systems.
- Perform quality control tests on all radiological measurement systems including portable instrumentation.
- Perform periodic source leak tests.
- Inform workers in the controlled areas of the radiological conditions in their work area.
- Direct workers in the proper techniques to use to prevent loss of control of contamination or minimize radiation exposure.
- Record radiological survey data in legible form and in the appropriate units as defined by procedure.
- Procure radiation safety related supplies and maintain an adequate supply on hand for daily usage.
- Collect, maintain, and issue all respiratory survey devices.
- Maintain calibrations and repairs of pocket dosimeters.
- Collect environmental samples for analysis.
- Collect and analyze general area air samples and effluent stack samples.

- Maintain emergency response supplies and kits in good condition and in a state of readiness.

An HP Technician is considered to be qualified in radiation safety procedures when that individual is capable of successfully accomplishing the following activities as required by federal regulations, license conditions, and facility procedures pertaining to radiation protection. This training is in addition to that described in Section 8 of this application.

- Conduct special and routine radiation, contamination and airborne radioactivity surveys and evaluate the results.
- Establish protective barriers and post appropriate radiological signs.
- Establish means of limiting exposure rates and accumulated radiation doses, including the use of protective clothing and respiratory protection equipment.
- Perform operability checks of radiation monitors and survey meters.
- Recommend appropriate immediate actions in the event of a radiological problem and perform necessary activities until the arrival of the RSO or a more senior Safety Technician.
- Conduct other routine radiological duties (e.g., surveillance items) as may be required.

The minimum educational requirement is two-year, post-high school technical institute graduate or equivalent. The individual must be able to perform basic mathematical calculations.