TECHNICAL EVALUATION REPORT

RADIOLOGICAL EFFLUENT TECHNICAL SPECIFICATION IMPLEMENTATION (A-2)

NORTHEAST NUCLEAR ENERGY COMPANY

MILLSTONE POINT NUCLEAR POWER STATION UNIT 2

NRC DOCKET NO. 50-336

NRC TAC NO. 8116

NRC CONTRACT NO. NRC-03-81-130

FRC PROJECT C5506

FRC ASSIGNMENT 4

FRC TASK 99

Prepared by

Franklin Research Center
20th and Race Street
Philadelphia, PA 19103

Author: C. Fernandez

FRC Group Leader: S. Pandey

Prepared for

Nuclear Regulatory Commission
Washington, D.C. 20555

Lead NRC Engineer: F. Congel
C. Willis

September 17, 1982

Prepared by:	Reviewed by:	Approved by:
C. Fernandez	S. Pandey	O P Cartagno
Principal Author:		Department Director
Date: 9/17/82	Date: 9/17/82	Date: 9-17-82

Franklin Research Center
A Division of The Franklin Institute
The Benjamin Franklin Parkway, Phila., Pa. 19103 (215) 448-1000

CONTENTS

FIGURES

TABLE

FOREWORD

This Technical Evaluation Report was prepared by Franklin Research Center under a contract with the U.S. Nuclear Regulatory Commission (Office of Nuclear Reactor Regulation, Division of Operating Reactors) for technical assistance in support of NRC operating reactor licensing actions. The technical evaluation was conducted in accordance with criteria established by the NRC.

1. INTRODUCTION

1.1 PURPOSE OF REVIEW

The purpose of this technical evaluation report (TER) is to review and evaluate both the proposed changes in the Technical Specifications of Millstone Nuclear Power Station Unit 2 with regard to Radiological Effluent Technical Specifications (RETS) and the proposed new Offsite Dose Calculation Manual (ODCM).

The evaluation used criteria proposed by the NRC staff in the model Technical Specifications for pressurized water reactors (PWRs), NUREG-0472 [1]. This effort is directed toward the NRC objective of implementing RETS which comply with the regulatory requirements, including those of 10CFR50, Appendix I [2].

1.2 GENERIC ISSUE BACKGROUND

Since 1970, 10CFR50.36a has required licensees to provide Technical Specifications which ensure that radioactive releases will be kept as low as reasonably achievable (ALARA). In 1975, numerical guidance for the ALARA requirement was issued in 10CFR50, Appendix I. The licensees of all operating reactors were required to submit, no later than June 4, 1976 [3], their proposed ALARA Technical Specifications and information for evaluation in accordance with 10CFR50, Appendix I.

In February 1976, the NRC staff recommended that proposals to modify Technical Specifications be deferred until the NRC completed the model RETS. The model RETS deals with radioactive waste management systems and environmental monitoring. Although the model RETS closely parallels 10CFR50, Appendix I requirements, it includes provisions for addressing some waste management system problems not addressed in Appendix I.

The current NRC position on the model RETS was established in May 1978 when the NRC Regulatory Requirements Review Committee approved the model RETS (NUREG-0472 [1] for PWRs and NUREG-0473 [4] for boiling water reactors (BWRs)). Copies were sent to licensees in July 1978 with a request to submit proposed

site-specific RETS on a staggered schedule over a 6-month period. Licensees responded with requests for clarifications and extensions.

The Atomic Industrial Forum (AIF) formed a task force to comment on the model RETS. NRC staff members first met with the AIF task force on June 17, 1978. The model RETS was subsequently revised to reflect comments from the AIF and others. A principal change was the transfer of the parameters and methodology used in dose calculations from the model RETS to a separate document, the ODCM.

The revised model RETS was sent to licensees on November 15 and 16, 1978 with guidance (NUREG-0133) [5] for preparation of the RETS and the ODCM and a new schedule for responses, again staggered over a 6-month period.

Regional seminars on the RETS were conducted by the NRC staff during November and December 1978. Subsequently, Revision 2 of the model RETS, additional guidance on the ODCM, and a Process Control Program (PCP) were issued in February 1979 to each utility at individual meetings.

1.3 PLANT-SPECIFIC BACKGROUND

In conformance with the requirements of Section V.B of 10CFR50, Appendix I, the Northeast Nuclear Energy Company (NNECO) filed two documents with the NRC: (1) "Demonstration of Compliance with 10 CFR Part 50, Appendix I, Part 1, Volume 1, Millstone Units 1 and 2" [6], and (2) "Demonstration of Compliance with 10 CFR Part 50, Appendix I, Part 2B, Millstone Unit 2" [7]. These submittals provided the necessary information to permit evaluation of Millstone Unit 2 in accordance with the requirements of Sections II.A, II.B, and II.C of Appendix I.

NNECO submitted proposed changes to the Technical Specifications for Millstone Unit 2 [8-12]. The proposed changes in the September 19, 1979 submittal [8] followed the format of NUREG-0472 for PWRs. On October 1, 1981, Franklin Research Center (FRC), selected as an independent task review team, initiated a review and evaluation of the September 19, 1979 submittal comparing it with the model RETS (NUREG-0472). Additional guidance was provided by clarification letters and branch positions [13-18].

Subsequent to the initial review by FRC, draft review reports were prepared and delivered to the NRC.

Discussions with the Licensee at a site visit by the FRC review team on November 11, 1981 and subsequent correspondence resolved most of the deviations found in the RETS and ODCM submittals.

On August 12, 1982 and August 20, 1982, the Licensee resubmitted to the NRC a revised proposed RETS [19] and ODCM [20] incorporating FRC comments and agreements. These submittals are the subject of review and evaluation in this report.

2. REVIEW CRITERIA

Review criteria for the RETS were provided by the NRC in three documents:

NUREG-0472, RETS for Pressurized Water Reactors [1]

NUREG-0473, RETS for Boiling Water Reactors [4]

NUREG-0133, Preparation of RETS for Nuclear Power Plants [5].

Twelve essential criteria are given for the RETS and ODCM:

1. All significant releases of radioactivity shall be controlled and monitored.

2. Offsite concentrations of radioactivity shall not exceed the 10CFR20, Table 2 limits.

3. Offsite radiation doses shall be ALARA.

4. Equipment shall be maintained and used to keep offsite doses ALARA.

5. Radwaste tanks inventories shall be limited so that failures would not cause offsite doses exceeding 10CFR20 limits.

6. Waste gas concentrations shall be controlled to prevent explosive mixtures.

7. Wastes shall be processed to shipping and burial ground criteria under a documented program, subject to quality assurance verification.

8. An environmental monitoring program, including a land-use census, shall be implemented.

9. The radwaste management program shall be subject to regular audits and reviews.

10. Procedures for control of liquid and gaseous effluents shall be maintained and followed.

11. Periodic and special reports on environmental monitoring and on releases shall be submitted.

12. Offsite dose calculations shall be performed using documented and approved methods consistent with NRC methodology.

Subsequent to NUREG-0472 and NUREG-0473, the NRC staff issued clarifications and branch positions [13-18] establishing a policy that requires the licensees of operating reactors to meet the intent, if not the letter, of the model RETS requirements. The NRC branch positions issued since the RETS implementation review began have changed the model RETS requirements applicable to operating reactors. These changes have been incorporated in all reviews.

Review of the ODCM was based on the guideline provided by the NRC staff in a branch position, "General Content of the Offsite Dose Calculation Manual" [21]. The format for the ODCM is left to the licensee and may be simplified by tables and grid printouts.

3. TECHNICAL EVALUATION

3.1 GENERAL DESCRIPTION OF RADIOLOGICAL EFFLUENT SYSTEM

This section briefly describes the radwaste liquid and gaseous effluent treatment and control systems installed at Millstone Nuclear Power Station Unit 2.

3.1.1 Liquid Effluents

The liquid radioactive waste system has the capability to collect, treat, store, and dispose of all radioactive liquid wastes. Liquid wastes are collected in sumps and drain tanks in the various buildings, then transferred to the appropriate tanks in the radwaste building for further treatment, temporary storage, and disposal. Final discharge of processed liquid wastes involves return to the chemical and volume control system or disposal at the discharge structure. Batches with a low radioactivity concentration are discharged through a distribution pipe and diluted in the quarry prior to release into the ocean.

A diagram of the liquid radwaste system showing the location of the liquid effluent monitors is shown in Figure 1. The processed liquid radwaste originating from the primary and equipment drain tanks is monitored by the clean liquid radwaste effluent line monitor. The steam generator blowdown and condensate polishing waste effluents are monitored by the steam generator blowdown monitor and the condensate polishing facility waste neutralizing sump discharge line monitor, respectively. The processed liquid waste that originates at the aerated waste drain tank is monitored by the aerated liquid radwaste effluent line monitor. These monitors are all provided with automatic termination of release upon a high-concentration alarm signal.

3.1.2 Gaseous Effluents

Airborne particulates and gases vented from process equipment and building ventilation exhaust air are the normal sources of radioactive gaseous effluents from the plant. The major source is the waste gas processing system which contains six decay tanks and a HEPA filter to ensure that releases are ALARA.

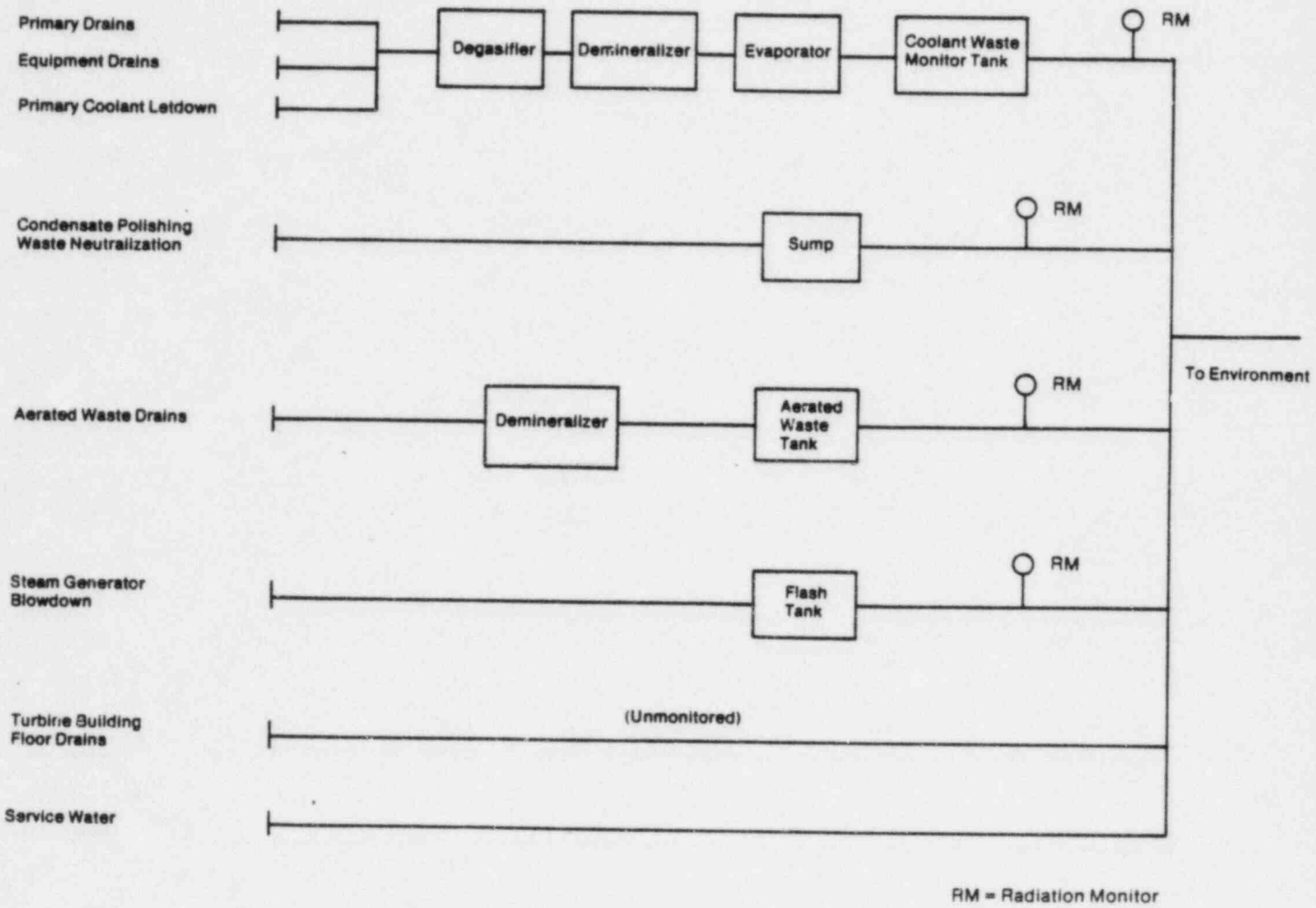

Figure 1. Liquid Effluent Release Paths, Millstone Unit 2

A diagram showing the location of radioactive gaseous effluent monitors is shown in Figure 2. Wastes originating from the following sources are discharged through the Unit 1 stack and monitored by the Unit 1 main stack monitor: main condenser/air ejector, containment purge, and waste gas processing system. The waste gas processing system is equipped with a process noble gas radiation monitor and an oxygen monitor to detect the presence of an explosive gas mixture. The turbine building ventilation exhaust and the steam generator blowdown tank vent are normally released without monitoring. Figure 2 also shows the location of HEPA filter and charcoal adsorber units.

3.2 RADIOLOGICAL EFFLUENT TECHNICAL SPECIFICATIONS (RETS)

The evaluation of the Licensee's proposed specifications to meet the requirements of 10CFR50, Appendix I was based on the following: (1) a review of information provided in the Licensee's September 19, 1979 submittal [8], (2) a site visit on November 12-13, 1981, and (3) a review of the Licensee's August 12, 1982 RETS submittal [19] and August 20, 1982 ODCM submittal [20].

A detailed review and evaluation of the Licensee's submittal [19] are contained in the supplementary technical review report [22]. A summary of the findings follows.

3.2.1 Effluent Instrumentation

3.2.1.1 Radioactive Liquid Effluent Monitoring Instrumentation

In Section 3/4.3.3.9 of the Licensee's submittal, a commitment is made to monitor and control all significant liquid effluent release paths. The following monitors are provided: clean liquid radwaste effluent line monitor, aerated liquid radwaste effluent line monitor, steam generator blowdown monitor, and condensate polishing facility waste neutralizing sump discharge line monitor. These monitors have appropriate alarm/trip setpoints and are demonstrated to be operable by performance of surveillance operations consistent with the model RETS [1]. Flow rate measurements are provided for the effluent lines in order to determine total radioactivity released through each liquid pathway. The steam generator blowdown line and the turbine

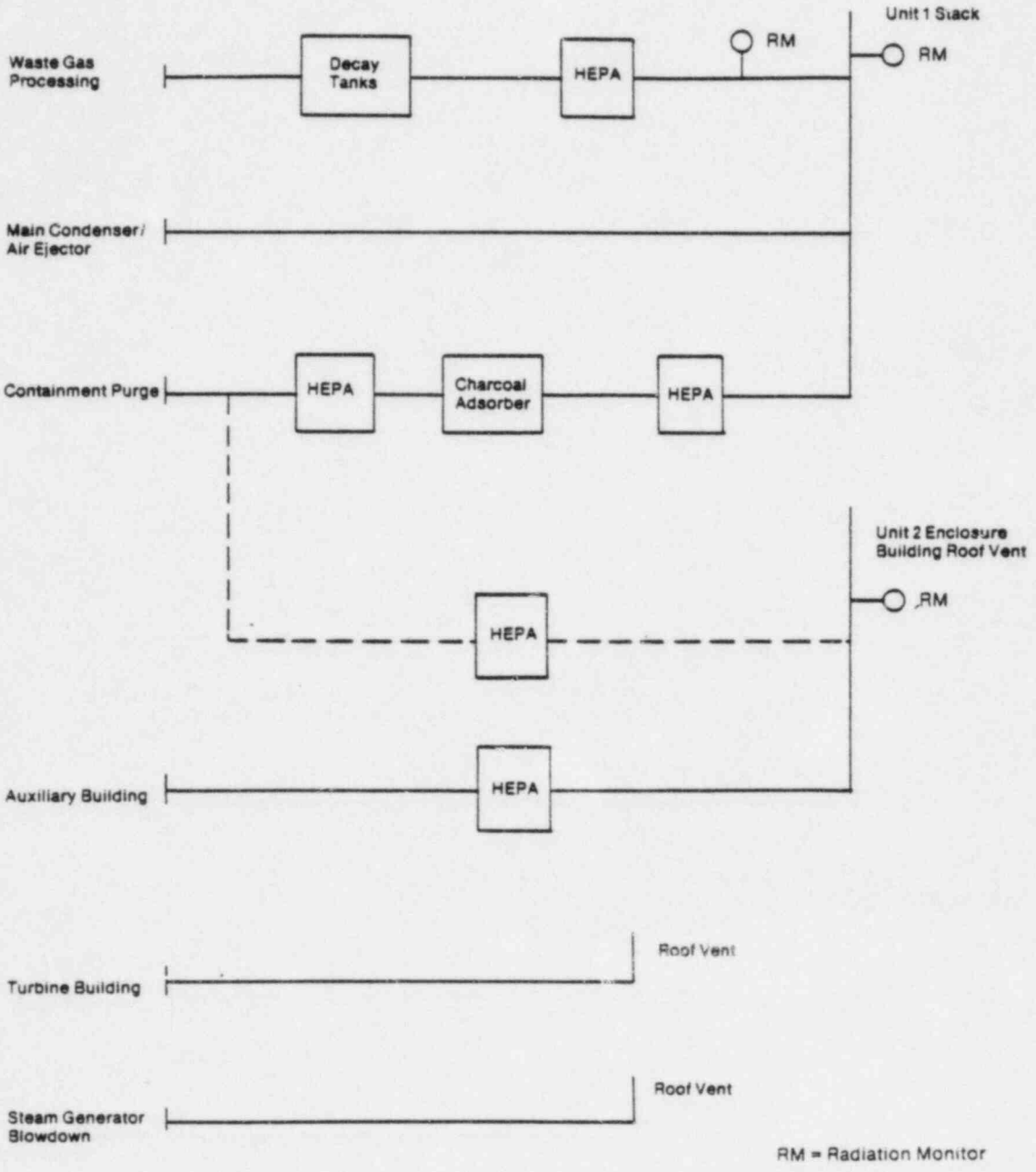

Figure 2. Gaseous Effluent Release Paths, Millstone Unit 2

building sump effluent line are adequately sampled, but continuous composite samplers are not provided. There are no liquid radwaste holdup tanks outside plant buildings that require tank level indicating devices. Figure 1 shows the location of the liquid effluent radiation monitors.

3.2.1.2 Radioactive Gaseous Effluent Monitoring Instrumentation

In Section 3/4.3.3.10 of the Licensee's submittal, a commitment is made to monitor and control all significant gaseous effluent release paths. The following monitors are provided for this purpose: MP2 stack monitor, MP1 main stack monitor, and the waste gas holdup system noble gas monitor. These monitors are demonstrated to be operable by performance of surveillance operations consistent with the model RETS [1]. Figure 2 shows the location of the gaseous effluent radiation monitors and the substreams monitored by each.

3.2.2 Radioactive Effluent Concentrations

3.2.2.1 Liquid Effluent Concentration

In Section 3/4.11.1.1 of the Licensee's submittal, a commitment is made to maintain the concentration of radioactive liquid effluents released from the site to within established limits at all times. All batches of radioactive liquid effluents and continuous releases from steam generator blowdown and service water effluents are sampled periodically in accordance with a sampling and analysis program which meets the intent of the model RETS [1]. Automatic termination of excessively radioactive liquid effluent streams is provided.

3.2.2.2 Gaseous Effluent Dose Rate

In Section 3/4.11.2.1 of the Licensee's submittal, a commitment is made to maintain the offsite dose rate from radioactive gaseous effluents to within the established limits at all times. The offsite dose rate limits used are:

a. 500 mrem/yr (total body) and 300 mrem/yr (skin) for noble gases

b. 1500 mrem/yr (any organ) for inhalation of iodine-131, iodine-133, and particulates with half-lives greater than 8 days.

The Licensee also provides a radioactive gaseous waste sampling and analysis program which meets the intent of the model RETS [1].

3.2.3 Offsite Doses from Radioactive Effluents

In Sections 3/4.11.1.2, 3/4.11.2.2, 3/4.11.2.3, and 3/4.11.4 of the Licensee's submittal, a commitment is made to implement the requirements of Sections IIA, IIB, and IIC of 10CFR50, Appendix I and the requirements of 40CFR190, respectively. The Licensee has committed to perform the dose calculations following ODCM guidelines. The dose calculations are performed in accordance with Regulatory Guides 1.109 and 1.113.

3.2.4 Effluent Treatment Systems

3.2.4.1 Liquid Radwaste Treatment System

In Section 3/4.11.1.3 of the Licensee's submittal, a commitment is made to have the degasifier, clean liquid primary demineralizer, boric acid evaporator, clean liquid secondary demineralizer, and the aerated waste demineralizer operable and used prior to discharge of liquid waste when projected doses are exceeded. The appropriate liquid radwaste subsystems are demonstrated operable and projected doses are performed once per 31 days as required in the model RETS [1].

3.2.4.2 Gaseous Radwaste Treatment System

In Section 3/4.11.2.4 of the Licensee's submittal, a commitment is made to have the following subsystems operable: two or more waste gas decay tanks, the waste gas filter, one waste gas compressor, the auxiliary building ventilation HEPA filter, and the containment purge HEPA filter. These components are used to reduce radioactive gaseous effluents when projected doses are exceeded. The appropriate gaseous radwaste treatment system components and/or ventilation exhaust treatment system components are demonstrated operable and projected doses are performed once per 31 days as required in the model RETS [1].

3.2.5 Tank Inventory Limits

In Section 3/4.11.2.6 of the Licensee's submittal, a commitment is made to limit the radioactive gas inventory in each gas storage tank to 9.92 x 10^4 curies of noble gases. This curie limit ensures that a tank failure does not result in an offsite dose which exceeds the limits in 10CFR20 for non-occupational exposures. The Licensee has committed to a sampling program of the waste gas tanks to monitor the activity content of the tanks. The Licensee does not have any outside liquid holdup tanks and thus has not addressed this section of the model RETS [1].

3.2.6 Explosive Gas Mixtures

Proposed Specification 3/4.11.2.5 and portions of other specifications relating to the waste gas holdup system oxygen monitor have been deleted from the August 12, 1982 submittal. The current instrumentation does not meet the intent of the model RETS requirements. It is the Licensee's understanding that the NRC staff is currently evaluating the requirements for waste gas holdup system explosive gas mixture monitoring. The Licensee intends to include an appropriate technical specification change upon resolution of the monitoring requirements.

3.2.7 Solid Radioactive Waste

In Section 3/4.11.3 of the Licensee's submittal, a commitment is made to solidify radioactive waste in accordance with a process control program (PCP) and to have a solid radwaste system to ensure meeting the shipping requirements for radioactive waste. The solid radwaste system is demonstrated operable and the solidification of at least one representative sample from every ten batches will be verified in accordance with the PCP. The PCP ensures that radwaste will be properly processed and packaged before it is shipped to the burial site.

3.2.8 Radiological Environmental Monitoring Program

In Section 3/4.12.1 of the Licensee's submittal, a commitment is made to have an environmental monitoring program which closely follows the requirements

given in Branch Technical Position, Rev. 1, entitled "An Acceptable Radiological Environmental Monitoring Program." The sample locations are indicated in the ODCM as required. A land use census is conducted which identifies the location of the milk animals in each of the 16 meteorological sectors within a distance of 5 miles. The Licensee participates in an interlaboratory comparison program approved by the NRC and reports the results in the Annual Radiological Environmental Operating Report.

3.2.9 Audits and Reviews

In Section 6.5.4.8 of the Licensee's submittal, a commitment is made to perform periodic audits of the ODCM, PCP, radiological environmental monitoring program, and radioactive effluent release and monitoring procedures. The audits are performed by the Site Nuclear Review Board. Changes to the radiological environmental monitoring program, PCP, and ODCM are reviewed by the Plant Operating Review Committee/Site Operating Review Committee.

The audits and reviews in the Licensee's submittal meet the intent of the model RETS [1].

3.2.10 Procedures

In Section 6.8 of the Licensee's submittal, a commitment is made to establish, implement, and maintain written procedures for the quality controls for effluent monitoring, ODCM, and PCP consistent with the requirements of the model RETS [1].

3.2.11 Reports

3.2.11.1 Routine Reports

In Section 6.9.1.10 of the Licensee's submittal, a commitment is made to provide an annual radiological environmental monitoring report that includes summaries, interpretations, and statistical evaluation of the results of the environmental surveillance program.

In Section 6.9.1.11 of the Licensee's submittal, a commitment is made to provide semiannual radioactive effluent release reports which include a

summary of radioactive liquid and gaseous effluents released, meteorological data, an assessment of offsite doses, a summary of radioactive solid waste shipped offsite, and information concerning all unplanned releases of radioactivity from the site. Any changes to the ODCM are also included in the report. The results of the land use census required by Specification 3/4.12.2 are addressed in the ODCM.

3.2.11.2 Non-Routine Reports

In Section 6.9.1.9 of the Licensee's submittal, a commitment is made to provide a 30-day written report for an unplanned off-site release of (1) more than 1 curie of radioactive material in liquid effluents, (2) more than 150 curies of noble gas in gaseous effluent, or (3) more than 0.05 curies of radioiodine in gaseous effluent.

In Section 6.9.2 of the Licensee's submittal, a commitment is made to provide a special report for exceeding specification limits in Sections 3.11.1, 3.11.2, 3.11.3, and 3.11.4. A special report is provided for exceeding Section 3.11.1.2 (liquid effluent dose limits), Sections 3.11.2.2 and 3.11.2.3 (gaseous effluent dose limits), and Section 3.11.4 (total dose limits). A special report is provided for the extended inoperability of liquid and gaseous radwaste treatment systems and the solid radwaste system. A special report is also required for measured levels of radioactivity in an environmental sampling medium determined to exceed the reporting level of Table 6.9-1.

3.3 OFFSITE DOSE CALCULATION MANUAL (ODCM)

A brief discussion of the methodology and approach used by the Licensee to calculate offsite dose and to maintain the operability of the effluent treatment system is provided in this section. The methodology used by the Licensee is evaluated for consistency with the methodology and guidelines set by the NRC staff. As a minimum, it is required that the ODCM provide equations and methodology for the following topics:

- o alarm and trip setpoint on effluent instrumentation
- o liquid effluent concentration in unrestricted areas
- o gaseous effluent dose rate at or beyond the site boundary
- o liquid and gaseous effluent dose contributions
- o liquid and gaseous effluent dose projections.

In addition, flow diagrams defining the treatment paths and the components of the radioactive solid, liquid, and gaseous radwaste management systems are required. The description and location of environmental samples in support of the radiological environmental monitoring program are also required.

3.3.1 Evaluation

The Licensee has provided an ODCM which includes the parameters and methodology to be used in calculating offsite doses and effluent monitor setpoints for Millstone Units 1 and 2. The ODCM follows the methodology of NUREG-0133 and includes sections on:

- o Liquid dose calculations - Maximum individual whole body and organ doses for quarterly and annual limits, monthly dose projections for the Units 1 and 2 liquid radwaste treatment systems, and the quarterly dose calculations for the semiannual radioactive effluent report

- o Gaseous dose calculations - Instantaneous-release rate limits for noble gases and for iodine-131 and particulates with half-lives greater than 8 days, noble gas whole body gamma and beta air doses for quarterly and annual limits, iodine and particulate maximum organ doses for quarterly and annual limits, monthly projection doses for the gaseous radwaste treatment system, and total dose from the site calculation for compliance with 40CFR190

- o Liquid monitor setpoints for all effluent monitors included in the Technical Specifications. The following monitors are included: liquid radwaste effluent line monitor and service water effluent line monitor (Unit 1); clean liquid radwaste effluent line monitor, aerated liquid radwaste effluent line monitor, steam generator blowdown monitor, condenser air ejector monitor, and condensate polishing facility waste neutralizing sump monitor (Unit 2)

- o Gaseous monitor setpoints for all effluent monitors included in the Technical Specifications. The following monitors are included: hydrogen monitor, steam jet air ejector offgas monitor, main stack noble gas monitor, and main stack sampler flow rate monitor (Unit 1); and stack noble gas monitor and waste gas decay tank monitor (Unit 2)

- o Radiological environmental monitoring program sample locations
- o Simplified flow diagrams for the liquid and gaseous radwaste treatment systems for Units 1 and 2
- o The bases for some of the factors used in the ODCM (included as appendices).

Most calculations in the ODCM give two or three methods for calculation of the same parameter. These methods are arranged in order of simplicity and conservatism, Method 1 being the easiest and the most conservative. As long as releases are low, Method 1 is used as a simple estimate of the doses. If release calculations approach the Technical Specification limits, less conservative, more detailed calculations are used.

Setpoint calculations are performed using a safety factor ranging from 2 to 10. Where simultaneous releases are possible, the setpoints include provisions for limiting the total release to within the Technical Specification limits.

Liquid dose calculations are performed using the NRC-approved LADTAP computer code; all significant input parameters are specified in the ODCM. The projected liquid dose calculations incorporate the use of estimate ratios for waste volume and activity levels.

Gaseous dose calculations are performed using the Environmental Protection Agency AIREM computer code and the NRC GASPAR computer code. The AIREM code is used for calculating the maximum individual whole body dose due to the plume from the 375-ft Unit 1 stack. All other doses are calculated using the GASPAR code, including the maximum individual whole body dose due to releases from the Unit 2 enclosure building roof vent and, for Units 1 and 2, the maximum individual organ doses due to releases of radioiodine and particulates for the food, inhalation, and milk pathways. The AIREM code is used for the noble gas Unit 1 stack releases since the GASPAR code was found to grossly underestimate the maximum individual dose due to the overhead gamma cloud. The AIREM code uses a finite cloud model similar to that in Regulatory Guide 1.109 as opposed to the semi-infinite cloud model used in the GASPAR code. The meteorological dispersion parameters (X/Qs and D/Qs) are the maximum quarterly average values for the years 1976 to 1978.

The simplified flow diagrams of the liquid and gaseous radwaste treatment systems adequately describe the major components of the systems, the significant release paths, and the location of the radiation monitors included in the Technical Specifications.

A table and figures showing the locations of the radiological environmental monitoring program samples are given in Section G of the ODCM. However, the Licensee has not provided sample locations for 22 accident TLDs as specified in the radiological environmental monitoring program.

4. CONCLUSIONS

Table 1 summarizes the results of the final review and evaluation of the Millstone Nuclear Power Station Unit 2 proposed Radiological Effluent Technical Specifications (RETS). The following conclusions have been reached:

1. The Licensee's proposed RETS meet the intent of the model Technical Specifications, NUREG-0472, with the exception that the Licensee has deleted the technical specifications relating to the waste gas holdup system explosive gas mixture monitoring. The Licensee stated that an appropriate technical specification change will be requested upon resolution of the monitoring requirements by the NRC staff.

2. The Licensee's Offsite Dose Calculation Manual uses documented and approved methods that are consistent with the methodology in NUREG-0133.

Table 1. Evaluation of Proposed Radiological Effluent Specifications (RETS), Millstone Unit 2

RETS Requirement	Technical Specifications: NRC Staff Model RETS NUREG-0473 (Section)	Technical Specifications: Licensee Proposal (Section)	Replaces or Updates Existing Tech. Spec. (Section)	Evaluation
Effluent Instrumentation	3/4.3.3.9, 3/4.3.3.10	3/4.3.3.9, 3/4.3.3.10	2.4.1, 2.4.2 (Appendix B)	Meets the intent of NRC criteria
Radioactive Effluents	3/4.11.1.1, 3/4.11.2.1	3/4.11.1.1, 3/4.11.2.1	2.4.1, 2.4.2 (Appendix B)	Meets the intent of NRC criteria
Offsite Doses	3/4.11.1.2, 3/4.11.2.2, 3/4.11.2.3, 3/4.11.4	3/4.11.1.2, 3/4.11.2.2, 3/4.11.2.3, 3/4.11.4	2.4.1, 2.4.2 (Appendix B)	Meets the intent of NRC criteria
Effluent Treatment	3/4.11.1.3, 3/4.11.2.4	3/4.11.1.3, 3/4.11.2.4	2.4.1, 2.4.2 (Appendix B)	Meets the intent of NRC criteria
Tank Inventory Limits	3/4.11.1.4, 3/4.11.2.6	3/4.11.2.6	2.4.2 (Appendix B)	Meets the intent of NRC criteria
Explosive Gas Mixtures	3/4.11.2.5	Not Provided	Not Addressed	Meets the intent of NRC criteria in the interim
Solid Radioactive Waste	3/4.11.3	3/4.11.3	2.4.3 (Appendix B)	Meets the intent of NRC criteria
Environmental Monitoring	3/4.12.1	3/4.12.1	3.2 (Appendix B)	Meets the intent of NRC criteria
Audit and Review	6.5.1, 6.5.2	6.5.4.7, 6.5.4.8	6.5.4.7, 6.5.4.8	Meets the intent of NRC criteria
Procedures	6.8	6.8	6.8	Meets the intent of NRC criteria
Reports	6.9.1.6 - 6.9.1.9 6.9.1.12, 6.9.1.13 6.9.2	6.9.1.9 - 6.9.1.11 6.9.2	6.9.1.8, 6.9.1.9 6.9.2, 5.6.1 (Appendix B)	Meets the intent of NRC criteria

5. REFERENCES

1. Radiological Effluent Technical Specifications for Pressurized Water Reactors, Rev. 2
   NRC, February 1980
   NUREG-0472

2. Title 10 Code of Federal Regulations, Part 50, Appendix I, Federal Register, Vol. 40, page 19442, May 5, 1975

3. Title 10 Code of Federal Regulations, Part 50, Appendix I, Section VB, "Effective Date," for submittal of Technical Specifications

4. Radiological Effluent Technical Specifications for Boiling Water Reactors, Rev. 2
   NRC, February 1980
   NUREG-0473

5. Preparation of Radiological Effluent Technical Specifications for Nuclear Power Plants, A Guidance Manual for Users of Standard Technical Specifications
   NRC, October 1978
   NUREG-0133

6. Letter of Transmittal to NRC from NNECO
   Subject: Demonstration of Compliance with 10 CFR Part 50, Appendix I, Part 1, Volume 1, Millstone Units 1 and 2
   June 4, 1976

7. Letter of Transmittal to NRC from NNECO
   Subject: Demonstration of Compliance with 10 CFR Part 50, Appendix I, Part 2B, Volume 1, Millstone Unit 2
   November 15, 1976

8. W. G. Counsil (NNECO)
   Letter to D. L. Ziemann and R. Reid (NRC)
   September 19, 1979

9. W. G. Counsil (NNECO)
   Letter to D. L. Ziemann and R. Reid (NRC)
   February 13, 1979

10. W. G. Counsil (NNECO)
    Letter to D. L. Ziemann and R. Reid (NRC)
    March 13, 1979

11. W. G. Counsil (NNECO)
    Letter to R. Reid (NRC)
    May 21, 1979

12. W. G. Counsil (NNECO)
Letter to D. L. Ziemann and R. Reid (NRC)
June 29, 1979

13. W. P. Gammill (NRC)
Memo to P. C. Wagner (NRC)
Subject: Current Position on Radiological Effluent Technical Specifications (RETS) including Explosive Gas Controls
October 7, 1981

14. "An Acceptable Radiological Environmental Monitoring Program"
Branch Technical Position
November 1979

15. C. Willis (NRC)
Memo to P. C. Wagner (NRC)
Subject: Plan for Implementation of RETS for Operating Reactors
November 4, 1981

16. C. Willis (NRC)
Letter to Dr. S. Pandey (FRC)
Subject: Changes to RETS Requirements following AIF meeting
November 20, 1981

17. C. Willis (NRC)
Letter to Dr. S. Pandey (FRC)
Subject: Control of Explosive Gas Mixture in PWRs
December 18, 1981

18. C. Willis and F. Congel (NRC)
"Status of NRC Radiological Effluent Technical Specification Activities"
Presented at the Atomic Industrial Forum Conference on NEPA and Nuclear Regulations, October 4-7 1981, Washington, D.C.

19. W. G. Counsil (NNECO)
Letter to R. A. Clark and D. M. Crutchfield (NRC)
August 12, 1982

20. W. G. Counsil (NNECO)
Letter to R. A. Clark and D. M. Crutchfield (NRC)
August 20, 1982

21. "General Contents of the Offsite Dose Calculation Manual"
Branch Technical Position, Radiological Assessment Branch
Revision 1, February 8, 1979

22. Radiological Effluent Technical Specification Implementation, Comparison of Plant and Model Radiological Effluent Technical Specifications, Northeast Utilities, Millstone Nuclear Power Plant Unit No. 2, September 17, 1982