U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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License Nos:	DPR-24; DPR-27
Reports No:	50-266/99020(DRS); 50-301/99020(DRS)
Licensee:	Wisconsin Electric Power Company
Facility:	Point Beach Nuclear Plant, Units 1 and 2
Location:	6610 Nuclear Road Two Rivers, WI 54241
Dates:	November 15-19, 1999
Inspector:	K. Lambert, Radiation Specialist
Approved by:	Steven K. Orth, Acting Chief, Plant Support Branch Division of Reactor Safety

EXECUTIVE SUMMARY

Point Beach Nuclear Plant, Units 1 & 2
NRC Inspection Report 50-266/99020(DRS); 50-301/99020(DRS)

This routine announced inspection reviewed the radiological planning and radiation protection program implementation for the Unit 1 refueling outage (U1R25). The inspection included a review of as-low-as-is-reasonably-achievable (ALARA) planning and work plan integration, outage dose performance and personnel contamination events, contractor personnel training, radiation worker performance, radiological posting and labeling, radiation protection self-assessments, and observations of several outage activities. Aspects of the radioactive material transportation program were also reviewed. The following conclusions were made in these areas:

- The licensee effectively evaluated planned work activities and successfully integrated past performance to develop dose estimates and goals for the U1R25 refueling outage. ALARA plans were effective and included lessons learned from previous evolutions. Pre-job briefings were generally effective in providing radiological and other information resulting in workers that were knowledgeable of radiological conditions, hold points, and special instructions. (Section R1.1)

- The licensee was appropriately evaluating, tracking and trending personnel contamination events and assigning dose to individuals in accordance with station procedures. (Section R1.2)

- The failure to barricade and post a high radiation area outside the Unit 1 demineralizer cubicle during the hydrogen peroxide addition shutdown process resulted in a Non-Cited Violation. (Section R1.3)

- Radiological postings and container labeling effectively informed workers of current plant radiological conditions. Overall, housekeeping and material condition of radiation protection equipment were good. (Section R2.1)

- The contract radiation protection technician training program was sufficiently detailed to provide trainees with the knowledge to perform assigned radiation protection tasks in accordance with station procedures and policies. (Section R5.1)

- Self assessments were of sufficient scope and depth to identify deficiencies and areas where improvements were warranted. Program enhancements were being effectively developed and implemented by the radiation protection staff. (Section R7.1)

- The October 16, 1999, shipment of radioactive material (99-075) to the Byron Station was adequately surveyed prior to release from the licensee's facility and arrived at its destination with removable contamination within NRC and DOT limits. (Section R8.1)

- The November 16, 1999, shipment of spent demineralizer resin (99-092) to a waste processor complied with NRC and Department of Transportation regulations. Personnel

involved with the shipment were knowledgeable of the procedures and their role in preparing the shipment for transportation. (Section R8.2)

Report Details

IV. Plant Support

R1 Radiological Protection and Chemistry Controls

R1.1 U1R25 Refueling Outage Planning and Implementation

a. Inspection Scope (83750, 71750)

The inspector reviewed the radiation protection (RP) staff's preparation and planning for the Unit 1refueling outage (U1R25) activities. Specifically, the inspector reviewed as-low-as-is-reasonably-achievable (ALARA) planning, radiation work permits (RWPs), the total outage dose estimate; and pre and post job ALARA briefings. The inspector also observed several outage work activities for radiation work practices.

b. Observations and Findings

On October 16, 1999, the licensee began a refueling outage, which was scheduled to be completed in 41 days. The refueling outage included the following scheduled work:

- Steam Generator Sludge Lancing Activities, 3.7 person-rem;
- Steam Generator Platform Upgrades, 3.2 person-rem;
- Refueling Activities (reactor head removal/reinstallation, and fuel movements), 6.5 person-rem;
- Reactor Cavity Decontamination Activities, 2.7 person-rem;
- In-Service Inspection Activities, 2.6 person-rem;
- "B" Reactor Coolant Pump Seal Maintenance, 4.0 person-rem; and
- Insulation Removal/Installation, 6.5 person-rem.

The RP staff developed a collective outage dose goal of 90 person-rem based on the original scope of work, which was revised to 75 person-rem after work schedules were finalized. The licensee's outage performance was consistent with dose estimates, and as of November 18, 1999, a dose of 53 person-rem was accumulated and was somewhat less than the estimated dose of 57 person-rem for that point in the outage. Station management attributed the lower than expected dose to better job planning and work group dose management.

The RP staff assigned two individuals to work full-time with the planning staff. One individual was involved with long range planning (i.e., greater than five weeks away), while the second individual was involved with daily and short range planning (i.e., less than five weeks away). These individuals attended outage planning meetings to ensure RP interests were addressed. For example, the RP representatives reviewed work packages and ensured the planning staff was aware of RP department requirements, including radiological surveys and shielding, and radiation protection technician availability for job coverage.

The ALARA staff performed Level II ALARA reviews on those jobs where the estimated total dose was greater than one person-rem. Level I ALARA reviews pertained to routine activities and used the RWP system as the mechanism for providing the necessary radiological controls and instructions. The inspector reviewed several ALARA reviews and noted that they appropriately considered the work to be performed, job location, lessons learned, exposures from previous evolutions, and contingency plans. ALARA reviews were maintained as part of the RWP package. The inspector reviewed several outage RWPs and noted that they were detailed, included protective clothing requirements, shielding requirements, accumulated dose and dose rate limits, and appropriate special instructions.

Pre-job briefings were performed for all jobs requiring Level II ALARA reviews and for other jobs based on radiological risk (i.e., work in high radiation areas or contamination potential). The inspector observed several pre-job briefings and determined that the briefings were adequately performed and that good communication was evident between the work groups and radiation protection staff. During the observed briefings, radiation protection personnel described the work to be done and the requirements of the RWP. These requirements included radiation and contamination levels, appropriate protective clothing, radiological hold points, and any specific instructions. However, the inspector noted that radiation and contamination levels were discussed at the end of the briefing versus at the beginning of the briefing, and in one briefing the discussion of the radiation levels appeared as an after thought. Radiation protection management agreed that it was more appropriate to provide radiological information early in the briefing, then discuss the RWP requirements as a result of these radiological conditions afterward. The inspector noted that during pre-job briefings later in the week, the radiological conditions were discussed at the beginning of the briefing.

In progress ALARA assessments were planned for any job that extended over multiple shifts and required a Level II ALARA review. ALARA assessments were also performed and documented when a job reached 50 percent of its projected dose, which ensured that the ALARA measures used to reduce dose for a given job were effective. In addition, more formal ALARA reviews were performed if the job dose exceeded the projected dose by more than 25 percent, and for any job that did not receive a Level II ALARA review and had the potential to exceed one person-rem before job completion. The ALARA and RP staffs indicated that additional dose reduction measures were implemented as a result of the assessments and reviews.

Post-job ALARA reviews were planned for those jobs that required a Level II ALARA review or were determined to be prudent to document the effectiveness of dose reduction techniques. Post-job reviews were to include the reasons for the actual dose being under or over the dose goal, lessons learned from problems encountered, and any dose saving enhancements. The licensee also indicated that reviews would be included for those jobs where the actual dose was significantly under the estimated dose to identify those activities that saved dose and to determine if dose and work hour estimates were faulty. In addition, the licensee was compiling a list of lessons learned from the outage based on information from station and contractor personnel. These lessons learned were to be incorporated into the planning process for future outages.

The inspector observed several work activities in containment and noted that workers wore appropriate protective clothing, were aware of RWP requirements, and were engaged in work activities. While the inspector observed minor radiation worker deficiencies (i.e., touching face shields or safety glasses while wearing rubber outer gloves), these problems were isolated. Overall, radiation worker practices were improved compared with previous outages.

c. Conclusions

The licensee effectively evaluated planned work activities and successfully integrated past performance to develop dose estimates and goals for the U1R25 refueling outage. ALARA plans were effective and included lessons learned from previous evolutions. Pre-job briefings were generally effective in providing radiological and other information resulting in workers that were knowledgeable of radiological conditions, hold points, and special instructions.

R1.2 Personnel Contamination Events

a. Inspection Scope (83750)

The inspector reviewed the personnel contamination events (PCEs) that occurred during the outage, including planned PCEs and hot particle events. Specifically, the inspector reviewed procedures, PCE evaluations and discussed the incidents with the RP staff.

b. Observations and Findings

Personnel contamination events less than 1000 disintegrations per minute (dpm) were tracked for trending purposes. Contamination events greater than 1000 dpm were evaluated and documented on a PCE worksheet. In addition, contamination identified on licensee issued modesty garments were not considered a PCE for record keeping purposes, since the garments were considered part of the protective clothing. However, the licensee appropriately evaluated and documented these contaminations as a means of assessing the contamination control program.

The radiation protection staff developed an outage goal of less than 100 PCEs (greater than 1000 dpm) for the outage. Radiation protection staff had documented 49 outage PCEs greater than 1000 dpm as of November 17, 1999, which was below the 74 PCEs predicted for that point in the outage. Of these 49 PCEs, only one was attributed to a hot particle, which the licensee defined as a discrete contamination greater than 10,000 dpm. The hot particle contamination did not result in the licensee assigning a shallow or deep dose to the individual.

The inspector selectively reviewed PCE evaluations and noted they were appropriately completed, although, the inspector noted several minor documentation deficiencies. Radiation protection management acknowledged the findings and indicated that corrective actions would be evaluated and implemented if deemed necessary. The inspector also noted that while the number of PCEs were significantly lower than the previous unit 2 outage (U2R24), the station was also not scheduled to perform the number of high risk, high contamination jobs as conducted during U2R24.

c. Conclusions

The licensee was appropriately evaluating, tracking and trending personnel contamination events and assigning dose to individuals in accordance with station procedures.

R1.3 High Radiation Area Incident

a. Inspection Scope (83750)

The inspector reviewed the circumstances surrounding the failure to post and control a high radiation area (HRA) involving the Unit 1 mixed bed demineralizer cubicle. This included a review of survey data and discussions with cognizant individuals.

b. Observations and Findings

On October 19, 1999, while performing routine surveys, a radiation protection technician (RPT) discovered a high radiation area outside the locked gate of the Unit 1 mixed bed demineralizer cubicle. The RPT had measured 200 millirem per hour (mrem/hr) at 30 cm from the locked gate. Upon discovery, the area was properly barricaded and posted as an HRA in accordance with Technical Specifications.

The licensee's evaluation of this incident determined that the area outside the Unit 1 demineralizer cubicle was previously posted as an HRA; however, the HRA posting and barricade were removed to facilitate the building of a scaffold for maintenance work near the cubicle late this summer. The dose rate outside the locked gate to the cubicle was less than 10 mrem/hr when the barricade and posting were removed.

The HRA was identified at the time Unit 1 was shutting down for the U1R25 outage. The addition of hydrogen peroxide to induce a reactor coolant system "crud burst" had been completed on October 18, 1999. Dose rates in the reactor coolant system let down and residual heat removal systems had peaked, with the let down processed through the Unit 1 demineralizer. Based on the average dose rate increase from the radioactive materials removed by the demineralizer, the RP staff estimated that the demineralizer dose rates increased at the rate of approximately six mrem/hr during the shutdown process. The RP staff estimated that the area outside the locked cubicle door exceeded 100 mrem/hr at 30 cm for approximately 17 hours before being identified. RP staff reviewed dosimetry records for the period in question and determined that no unauthorized entries were made into the area and no unintended exposures resulted from this event.

RP staff implemented procedure HPGD 44, Revision 2, dated July 20, 1995, "Hydrogen Peroxide Addition to the Reactor Coolant System", which identified the plant locations affected by the reactor coolant system "crud burst", and the areas required to be surveyed and posted. The RP staff performed dose rate surveys of the affected areas per the procedure, but did not survey the area outside the Unit 1 demineralizer cubicle because the procedure did not identify the area as requiring a survey. RP management indicated that the procedure would be revised to include all affected areas.

Technical Specification 15.6.11, Radiation Protection Program, required that entryways to HRAs with dose rates less than 1000 mrem/hr at 30 cm from the radiation source or from any surface penetrated by the radiation be barricaded and conspicuously posted as an HRA. Contrary to the above, on October 18 and 19, 1999, an HRA existed outside the Unit 1 demineralizer cubicle that was not barricaded or posted (NCV 50-266/99020-01(DRS); 50-302/99020-01(DRS). This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Section VII.B.1 of the NRC Enforcement Policy. This violation is in the licensee's corrective action program as Condition Report 99-2461.

c. Conclusions

The failure to barricade and post a high radiation area outside the Unit 1 demineralizer cubicle during hydrogen peroxide addition as part of Unit 1 shutdown process, resulted in a Non-Cited Violation.

R2 Status of Radiological Protection and Chemistry Facilities and Equipment

R2.1 Posting, Labeling and Radiological Housekeeping

a. Inspection Scope (83750)

The inspector reviewed the radiological postings and labeling of containers in the primary auxiliary building and the Unit 1 containment. In addition, material condition of radiological equipment and housekeeping practices were reviewed.

b. Observations and Findings

The inspector observed that radiological postings and boundaries in the primary auxiliary building and the Unit 1 containment were well maintained and in accordance with station procedures and regulatory requirements. The inspector determined through independent measurements that radiological postings reflected the actual area radiological conditions. Locked High radiation areas (LHRAs) (areas with radiation levels greater than one rem per hour) that could not be locked were appropriately barricaded and marked by a flashing red light in accordance with Technical Specifications. The methods used by the licensee to post LHRAs and HRAs and inform the workers of job specific radiation fields were effective in providing workers with sufficient radiological information to reduce exposures from radiation.

Radiological housekeeping and container labeling in the primary auxiliary building and the Unit 1 containment were generally good. The RPTs provided adequate direction and assistance to the staff for maintaining an organized working environment. Labeling of containers and bags was in accordance with procedures and regulatory requirements. The inspector noted that housekeeping was improved compared with the previous Unit 2 outage. However, a few minor labeling and housekeeping deficiencies were identified, which were appropriately corrected by the radiation protection staff. The inspector also noted that the material condition of radiation protection monitoring equipment (i.e., air samplers, portable survey instruments, effluent monitors, etc.) was good.

c. Conclusions

Radiological postings and container labeling effectively informed workers of current plant radiological conditions. Overall, housekeeping and material condition of radiation protection equipment were good.

R5 Staff Training and Qualification in Radiological Protection and Chemistry

R5.1 Contractor Personnel Qualifications and Training

a. Inspection Scope (83750)

The inspector reviewed the training program for contract radiation protection technicians (CRPTs). This included a review of procedures and discussions with the radiation protection and training staffs.

b. Observations and Findings

Radiation protection management indicated that 25 senior and 12 junior CRPTs were needed to augment the station technicians during the outage. Radiation protection management reviewed the CRPTs resumes and selected individuals based on their experience and whether they had passed the Northeast Utilities or the National Registry of Radiation Protection Technologists test (for senior CRPTs). Selected CRPTs (both senior and junior) who had not previously taken the above tests were provided the opportunity to take the Northeast Utilities test. Senior CRPTs were expected to pass the test with an 80 percent correct score, while the junior CRPTs had no requirement for passing the test.

The CRPTs received site specific training that included general employee, radiation worker, respiratory protection, foreign material exclusion, asbestos awareness, hazardous waste, and nuclear safety overview training. In addition to the above computer-based training, the CRPTs were required to review selected radiation protection procedures and applicable industry events, and to pass a mock-up exercise intended to test the CRPTs ability to perform tasks that would be part of the technicians job function. The inspector reviewed the training program, lesson plans and tests, and verified that the training program was adequately implemented.

c. Conclusions

The contract radiation protection technician training program was sufficiently detailed to provide attendees with the knowledge to perform assigned radiation protection tasks in accordance with station procedures and policies.

R7 Quality Assurance in Radiological Protection and Chemistry Activities

R7.1 Quality Assurance in Radiation Protection Activities

a. Inspection Scope (83750)

The inspector reviewed the radiation protection department's self assessment program implementation. This included a review of several assessments and discussions with cognizant radiation protection staff.

b. Observations and Findings

The licensee's self assessment program required that each department was expected to schedule and perform at least three self assessments per year. The radiation protection department had the following assessments completed or scheduled:

- Radiation surveys and postings, including contamination and radiation control effectiveness, May 1999;
- Dosimetry, including personnel monitoring, dose accounting and record keeping, September 1999; and
- Respiratory protection program for both radiological and non-radiological applications, December 1999.

Self assessment areas were selected based on input from RP staff, quality assurance identified weaknesses, recently modified programs, and weaknesses identified by external sources (i.e., NRC, external audits, etc.), and results of previous assessments.

The inspector reviewed the radiation survey and dosimetry self assessments results, dated July and October 1999, respectively. The assessments were self critical and were performed by qualified staff that included subject matter experts from other nuclear power plants. The assessments documented strengths, findings, and recommendations. While the assessments identified areas for improvement, no deficiencies were identified that required an initiation of a condition report. Radiation Protection management indicated that the recommendations and program enhancements were being evaluated, and would be implemented for both the radiation survey and dosimetry programs.

c. Conclusions

Self assessments were of sufficient scope and depth to identify deficiencies and areas where improvements were warranted. Program enhancements were being effectively developed and implemented by the radiation protection staff.

R8 Miscellaneous Radiological Protection and Chemistry Issues

R8.1 Radioactive Material Shipment

a. Inspection Scope (86750)

The inspector reviewed the circumstances surrounding radioactive material shipment number 99-075 sent to the Byron Nuclear Plant that was identified with removable contamination on the outer surface of one container during the receipt survey.

b. Findings and Observations

On October 16, 1999, the RP department shipped an exclusive use radioactive material low specific activity (LSA) shipment consisting of three containers to the Byron Nuclear Plant. The three containers were a box, a drum and a skid with two tanks and associated piping. The pre-shipment contamination survey did not identify any removable contamination on the external surface of the packages. Upon arrival at the Byron Nuclear Plant, a receipt survey was performed that identified removable contamination on the external surface of the skid. A large area wipe, taken on and around a four-inch diameter flange, indicated removable activity of 10,000 disintegrations per minute (dpm) of gross beta/gamma activity. Based on this survey data and the identification of foreign material near the bolts of the flange, two additional wipes (100 square centimeters (cm^2) each)) were taken on the suspect area. These additional wipes indicated 20,000 dpm/100 cm^2 and 30,000 dpm/100 cm^2.

The Department of Transportation (DOT) regulations in 49.173.443 states, in part, that the level of non-fixed (removable) radioactive contamination on the external surface of each package may not exceed 22 dpm/cm^2 for beta and gamma emitters; that the removable radioactivity measured may be averaged over an area of 300 cm^2; and that for exclusive use shipments that the removable contamination on any package at any time during transport may not exceed ten times 22 dpm/cm^2. Therefore, the maximum removable radioactive contamination on the external surface of a package shipped exclusive use must be less than 66,000 dpm when average over an area of 300 cm^2.

The inspector reviewed the radioactive contamination receipt survey and noted that three wipes were taken of the flange and surrounding area totaling an area of at least 300 cm^2. The individual wipes measured 10,000 dpm for the large area wipe and 20,000 and 30,000 dpm for the 100 cm^2 wipes. Summing the wipes for the area of the flange resulted in a total removable contamination of 60,000 dpm, which was less than the DOT limit of 66,000 dpm for an exclusive use shipment. The summing of wipes was acceptable as discussed in Health Physics Position 064. The inspector also reviewed the shipping papers and noted that they were appropriately completed in accordance with NRC and DOT regulations.

c. Conclusions

The October 16,1999, radioactive material shipment, (99-075) was appropriately shipped from the licensee's facility and arrived at its destination with removable contamination within NRC and DOT requirements.

R8.2 Radioactive Waste Shipment

a. Inspection Scope (86750, 71750)

The inspector observed the preparations for a November 16, 1999 shipment of spent resin from the site to a waste processor, and reviewed shipping documents and discussed shipment information with cognizant health physics staff.

b. Observations and Findings

On November 16, 1999, the licensee shipped approximately 90 cubic feet of spent demineralizer resins to a waste processor for volume reduction and disposal (Shipment No. 99-092). The inspector observed the placement of the resin filled high integrity container into the shipping cask and radiological surveys of the shipping cask and transport vehicle. The surveys included direct measurements and wipes for removable contamination. The inspector noted that these tasks were properly performed in accordance with station procedures and NRC and DOT requirements.

The inspector reviewed the competed shipping documents prior to the shipment leaving the site. The documents reviewed contained all of the information required by the DOT in 49 CFR Part 172, and indicated that the waste was properly classified in accordance with 10 CFR Part 61. Discussions with the responsible individual revealed that the individual was knowledgeable regarding NRC and DOT shipping regulations. The inspector also called the emergency telephone number specified on the shipment manifest (the control room) the evening of the shipment, and verified that the individual contacted was knowledgeable about the shipment and emergency response information.

The inspector identified an industrial safety concern while observing an individual attempting to remove protective clothing (rubber boots) while standing on a ladder. The issue was discussed with RP management, who acknowledged the finding and indicated that a permanent scaffold would be erected next to the spent resin storage HIC and used instead of the step ladder.

c. Conclusions

The November 16, 1999, shipment of spent demineralizer resin (99-092) to a waste processor was in compliance with NRC and Department of Transportation regulations. Personnel involved with the shipment were knowledgeable of the procedures and their role in preparing the shipment for transportation.

X1 Exit Meeting Summary

The inspector presented the inspection results to members of licensee management at the conclusion of the inspection on November 18, 1999. The licensee acknowledged the findings presented. The licensee did not identify any information discussed as being proprietary.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

S. F. Baker, Radiation Protection General Supervisor
B. J. Carberry, Radiation Protection Supervisor
A. J. Cayia, Manager, Regulatory Services and Licensing
E. J. Epstein, Radiation Protection Specialist
R. P. Farrell, Radiation Protection Manager
V. A. Kaminskas, Maintenance Manager
J. E. Knorr, Manager, Regulation and Compliance
E. J. Lange, Radiation Protection General Supervisor
J. D. Lindsay, Radiation Protection General Supervisor
R. G. Mende, Plant Manager
L. R. Pepple, Radiation Protection Supervisor
A. T. Rief, Radiation Protection Training Coordinator
M. W. Toole, Radiation Protection Supervisor

INSPECTION PROCEDURES USED

IP 83750	Occupational Radiation Exposure
IP 86750	Solid Radioactive Waste Management and Transportation of Radioactive Materials

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened

50-266/301-99020-01(DRS)	NCV	Failure to barricade and post an HRA in accordance with Technical Specifications

Closed

50-266/301-99020-01(DRS)	NCV	Failure to barricade and post an HRA in accordance with Technical Specifications

Discussed

None

LIST OF ACRONYMS USED

ALARA	As-low-as-is-reasonably-achievable
CRPTs	Contract Radiation Protection Technicians
DOT	Department of Transportation
dpm	Disintegrations Per Minute
DRS	Division of Reactor Safety
HRA	High Radiation Area
LHRA	Locked High Radiation Area
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
PCE	Personnel Contamination Event
PDR	Public Document Room
RP	Radiation Protection
RPTs	Radiation Protection Technicians
RWP	Radiation Work Permit

LIST OF DOCUMENTS REVIEWED

Procedures

HP 1.11, Rev. 13, Portal Monitor Use and Alarm Response;
HP 1.11.1, Rev. 14, Personnel Contamination Monitor (PCM-1B) Use and Contamination Alarm Response;
HPIP 1.57.1, Rev 13, Evaluation of Whole Body Count Results;
HP 2.1.2, Rev. 14, Personnel Contamination Monitoring, Decontamination, and Documentation;
HP 2.115.2, Rev. 6, Action Levels for Response to Incidents Involving High Levels of Contamination, Hot Particles and Activated or Fission Product Debris;
HP 9.1, Rev. 12, Monitoring of Radiography;
HPGD 44, Rev. 2, July 20, 1995, Hydrogen Peroxide Addition to the Reactor Coolant System;
HPIP 1.60, Rev. 7, Calculating Shallow and Deep Dose Rates Due to Skin Contamination;
NP 4.2.1, Rev. 3, Plant ALARA Program;
NP 4.3.3, Rev. 0, Health Physics Job Observation and Trending Program;
NP 13.1.1, Rev. 3, February 3, 1999, Self-Assessment Process;
NP 13.2.1, Rev. 3, Job Observation Process;
TRPR 1.0, Appendix A, Rev 1 (Draft), Radiation Protection Contractor Training Guideline;

Radiation Work Permits

RWP 99-1-1001; RWP 99-1-1041; RWP 99-1-1058; RWP 99-1-1061; RWP 99-1-1062;

ALARA Reviews

99-0029 U1R25; 99-0033 U1R25; 99-0034 U1R25;

Self Assessments

ALARA Review Log;
Personnel Contamination Event Reports; 99-04-010; 99-04-013; 99-04-014; 99-04-017; 99-04-032; 99-04-038; 99-04-040; 99-04-055;
Radiation Protection Group Self-Assessment Schedule for 1999;
Radiation Protection Self-Assessment: Dosimetry Program, S-A-RP-99-02;
RP Self-Assessment SA-HP-01-Radiological;

Miscellaneous

Condition Report 99-2461;
Radioactive Material Shipment No. 99-075;
Radioactive Material Shipment No. 99-092;
Root Cause Evaluation 99-122;
UIR25 PCE Summary Log