U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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Licensee:	Commonwealth Edison Company (ComEd)
Facility:	Byron Generating Station, Units 1 & 2
Location:	4450 North German Church Road Byron, IL 61010
Dates:	October 25-29, 1999
Inspectors:	K. Lambert, Radiation Specialist M. Mitchell, Radiation Specialist
Approved by:	Gary Shear, Chief, Plant Support Branch Division of Reactor Safety

EXECUTIVE SUMMARY

Byron Generating Station, Units 1 & 2
NRC Inspection Report 50-454/99017(DRS); 50-455/99017(DRS)

This routine announced inspection reviewed the radiation protection department's planning and implementation for the B2R08 refueling outage. The inspection included a review of as-low-as-is-reasonably- achievable (ALARA) planning and work plan integration, outage dose and personnel contamination events, contractor personnel training, radiation worker performance, observations of several outage activities, radiological posting and labeling, and radiation protection self assessments.

- The licensee effectively evaluated planned work activities and successfully integrated past performance to develop dose estimates and goals for the B2R08 refueling outage. ALARA plans were detailed and included lessons learned from previous evolutions. Pre-job briefings were effective in providing radiological and other information resulting in workers who were knowledgeable of radiological conditions, hold points, and special instructions (Section R1.1).

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

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

- During the Unit 2 Steam Generator Inspection Project (SGIP), work planning, radiological controls and good ALARA practices were effectively implemented with a few exceptions. The observed mock-up training, work evolutions and worker practices were generally well implemented. The lower than expected SGIP dose was due in part to staff understanding of dose goals for specific work assignments (Section R4.2).

- The training program for contract personnel was sufficiently detailed to provide workers with the knowledge to work safely and understand sound radiological practices. Contract radiation protection technicians' qualifications were appropriately reviewed and site specific training was provided to contract technicians based on their qualifications (Section R5.1).

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

Report Details

IV. Plant Support

R1 Radiological Protection and Chemistry Controls

R1.1 B2R08 Refueling Outage Planning and Implementation

a. Inspection Scope (83750)

The inspectors reviewed the radiation protection (RP) staff's preparation and planning for the Unit 2 refueling outage (B2R08) activities. Specifically, the inspectors reviewed as-low-as-is-reasonably-achievable (ALARA) planning, radiation work permits, pre and post job ALARA briefings, and the total outage dose estimate. The inspectors also observed several outage work activities for radiation work practices.

b. Observations and Findings

On October 23, 1999, the licensee began a refueling outage, which was scheduled to be completed in less than 26 days. The refueling outage included the following scheduled work:

- Steam Generator Activities (set up/tear down, manway cover removal/refitting, eddy current testing), 17.5 person-rem;
- Refueling Activities (reactor head removal/reinstallation, cono seals, fuel handling, reactor cavity decontamination), 7.9 person-rem;
- In-Service Inspection (ISI) Activities, 7.4 person-rem; and
- Reactor Coolant Pump Activities (inspections and repairs), 4.5 person-rem;
- Lead Shielding installation/removal, 2.59 person-rem; and
- Scaffolding installation/removal, 4.8 person-rem;

The RP staff developed a collective outage dose goal of 89.9 person-rem, based on the original scope of work. The licensee's outage performance was consistent with dose estimates, and as of October 29, 1999, a dose of 28.214 person-rem was accumulated. This was less than the dose of 40.214 person-rem estimated for this point in the outage. Station management attributed the lower than expected dose to better job planning and that work groups were tasked to manage their respective doses for the outage.

The RP staff had an individual assigned full-time to work with the planning staff. This individual attended outage planning meetings to ensure RP interests were addressed. For example, the RP representative reviewed work packages and ensured the planning staff was aware of RP department requirements, including radiological surveys and shielding.

The ALARA staff performed ALARA reviews on those jobs where the estimated total dose was greater than one person-rem. The inspectors 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. In addition, the ALARA staff designated certain initiatives and comments, which were to be incorporated into the radiation work permits (RWPs) as special instructions. The inspectors reviewed several outage RWPs and noted that they were detailed and included appropriate special instructions; protective clothing requirements; shielding requirements; accumulated dose and dose rate limits; and contingency plans for unexpected dose rates or contamination levels.

Pre-job briefings were performed on all jobs requiring ALARA reviews and for other jobs based on radiological risk (i.e., work in high radiation areas or contamination potential). The inspectors observed several pre-job briefings and determined that the briefings were adequately performed. During the observed briefings, the work group leader had described the work to be done and an ALARA representative had discussed the radiation and contamination levels, appropriate protective clothing, radiological hold points, and any specific instructions. Good communication was observed between the work groups and radiation protection staff.

Post-job briefings were planned for those jobs that had ALARA reviews. In addition, the ALARA staff intended to perform evaluations of all jobs where the actual dose exceeded the estimated dose by greater than 0.5 person-rem. More formal evaluations, including discussions with work groups to determine dose reduction improvements for future evolutions, were planned for jobs with actual doses that exceeded the estimated dose by more than 25 percent. The licensee also indicated that briefings were planned for those jobs where the actual dose was significantly under the estimated dose to identify those activities that reduced dose and determine if dose and work hour estimates were faulty. In addition, the licensee was planning to compile a list of lessons learned from the outage based on feedback from station and contractor personnel. These lessons learned were to be incorporated into the planning process for future outages.

In progress reviews of work activities were planned by the ALARA staff to evaluate whether the ALARA plans were effective in reducing doses to the workers. For example, the staff planned to compare the accumulated dose with the percent of the job completed (i.e., 50 percent of the dose accumulated and 50 percent of the job completed). When the in progress reviews concluded that the actual dose was going to exceed the estimated dose, additional dose reduction initiatives would be implemented or the job dose estimate would be revised.

The inspectors 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 inspectors observed several minor radiation worker deficiencies (i.e., touching face shields or safety glasses while wearing rubber outer gloves), these observations were isolated and indicated that radiation worker practices were improved compared with past outages.

c. Conclusions

The licensee effectively evaluated planned work activities and successfully integrated past performance to develop dose estimates and goals for the B2R08 refueling outage. ALARA plans were detailed and included lessons learned from previous evolutions.

Pre-job briefings were effective in providing radiological and other information resulting in workers who were knowledgeable of radiological conditions, hold points, and special instructions.

R1.2 Personnel Contamination Events

a. Inspection Scope (83750)

The inspectors reviewed the personnel contamination events (PCEs) that occurred during the outage, including planned PCEs and hot particle events. Specifically, the inspectors reviewed procedures and 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. Within the documentation of these events, the RP staff included the cause of the contamination, such as clean area contamination, protective equipment failure, or poor worker practice. Contamination events greater than 1000 dpm were evaluated and documented in a Problem Identification Form (PIF) and a PCE worksheet. In addition, if contamination were only identified on licensee issued modesty garments, the contamination was not considered a PCE for record keeping purposes. The licensee issued modesty garments were considered part of the protective clothing. However, the licensee documented these contaminations on the appropriate forms.

The radiation protection staff had developed an outage goal of less than 40 PCEs (greater than 1000 dpm) for the outage. Radiation protection staff had documented 10 outage PCEs greater than 1000 dpm as of October 29, 1999. Of these 10 PCEs, only two were attributed to hot particles. However, three additional hot particles were identified on licensee issued modesty garments. None of the hot particle contaminations resulted in the licensee assigning a shallow or deep dose to an individual. The RP staff indicated that discrete contamination greater than 25,000 dpm was considered a hot particle.

The licensee was evaluating an extremity contamination of 22,000 dpm on an individuals left thumb, and indicated that a dose would be assigned to the worker based on the evaluation, if warranted. The licensee was also evaluating the radiological intake of one worker. As of October 29, 1999 the licensee was performing whole body counts on the individual. The preliminary evaluation of this incident, indicated that the intake was an ingestion and the licensee was following the clearance of the activity from the body. The licensee indicated that a dose would be assigned to the individual based on the evaluation, if warranted.

The inspectors selectively reviewed PCE evaluations and noted they were generally appropriately completed, although, the inspectors noted several minor documentation deficiencies. Radiation protection management acknowledged the findings and indicated that corrective actions would be evaluated and implemented if deemed necessary.

c. Conclusions

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

R2 Status of Radiological Protection and Chemistry Facilities and Equipment

R2.1 Posting, Labeling and Radiological Housekeeping

a. Inspection Scope (83750)

The inspectors reviewed the radiological postings and labeling of containers in the auxiliary building, radioactive waste building, and the Unit 2 containment. In addition, material condition of radiological equipment and housekeeping practices were reviewed.

b. Observations and Findings

The inspectors observed that radiological postings and boundaries in the auxiliary and radioactive waste buildings and the Unit 2 containment were well maintained and in accordance with station procedures and regulatory requirements. The inspectors determined, through independent measurements, that radiological postings reflected the actual area radiological conditions. High radiation areas (HRAs) with radiation levels greater than one rem that could not be locked, were appropriately barricaded and marked by a flashing red light in accordance with Technical Specifications. Access points for the SG were posted as locked high radiation areas (LHRAs) with discrete areas inside SG platforms marked as 'low dose waiting area' as appropriate. Missile barrier access points were posted as HRAs. The methods used by the licensee to post LHRAs and HRAs and inform the workers of job specific radiation fields on and around the SG platform were effective in providing workers with sufficient radiological information to minimize exposures from radiation.

Radiological housekeeping and container labeling in the auxiliary and radioactive waste buildings and the Unit 2 containment were generally good. The areas used by SG inspection work were kept clean, with trash and contaminated equipment areas marked appropriately. 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. However, the inspectors noted a few minor labeling and housekeeping deficiencies that were appropriately corrected by radiation protection staff. The inspectors 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 were well maintained and appropriately informed workers of current plant radiological conditions. Overall, container labeling and housekeeping were good. Material condition of radiation protection equipment was good.

R4 Staff Knowledge and Performance in Radiation Protection

R4.1 Reactor Head O-Ring Replacement Pre-Job Briefing

The inspectors attended the pre-job briefing for the reactor head O-Ring installation and replacement. The inspectors noted that the briefing covered most job areas effectively, including thorough discussions of job activities, dosimetry requirements, radiation dose rate and contamination levels, protective clothing requirements, communications protocol, and radiological contingencies.

The inspectors noted that there was strong team participation and good questions from the personnel attending the briefing. The staff included members experienced in the procedure and used a team approach to addressing potential problems with the process of removing the O-rings, cleaning the channel seats and installing the new rings and clips. Based on historical dose data, the team was challenged to beat previous performance and given positive performance incentives. Several individuals provided suggestions that could be effective in reducing total dose by reducing the time in the dose field. The inspectors concluded that the pre-job briefing effectively provided workers with the information and knowledge to perform work activities in a radiologically safe manner.

R4.2 Unit 2 Steam Generator Inspection Project (SGIP) Worker Performance

a. Inspection Scope (83750)

The inspectors performed numerous walkdowns in containment and in the SGIP work area, observed SGIP mock-up training, work evolutions, and worker practices. The inspectors also questioned workers concerning their responsibility to implement good work practices and their understanding of radiological controls and conditions.

b. Observations and Findings

The SGIP project was operated and managed physically separate from all the other containment projects. The operations office was outside the RPA and used telephone and video surveillance extensively. This assisted the staff in staying focused on the specific assignments related to the SGIP. The staff was successful in developing a team focus with enhanced communication between the team members due to this configuration. However, the inspectors noted that the physical separation did limit communications with the Outage Control Center and integration of the SGIP into the containment RP oversight.

Generally, radworker practices observed were good. Several workers, questioned by the inspectors, were aware of the radiation fields they were working in and the dose goal they had for the containment entry in addition to the specific job to which they were assigned. The inspectors noted that radiation protection technicians (RPTs) routinely dialoged with workers concerning their knowledge of work area dose rates and radiation work permit limits and directed workers to low dose waiting areas outside the missile barrier, when needed. Radworkers generally exhibited good work practices.

The inspectors attended a mockup for the Steam Generator (SG) entry and nozzle cover placement. This mockup included a dry run of the evolution using full protective clothing and respiratory protection equipment. The mock-up was successful in identifying several areas for improvement. The mock-up confirmed that one individual was too large to conduct the work in a timely fashion. Additionally, the training was effective in identifying that several of the workers did not meet the administrative requirements for respirator use. When this was identified the contract and station staff took steps to qualify an adequate number of individuals.

The inspectors attended a pre-job briefing for the day-shift steam generator nozzle dam cover placement. Sufficient information was provided to the workers at the briefing and a questioning attitude by the workers was exhibited. Radiation protection (RP) staff clearly communicated RWP requirements and historical dose rate information. The staff was eager to perform at a level that would reduce dose. The briefing included discussions by the supervision on the work to be performed with a proper focus on safety.

Prior to the briefing, the inspectors identified that the job procedure, Westinghouse MRS.2.2.2 Gen 2 (Revision 13), "Installation and Removal of Temporary Nozzle Covers and Channel Head Parts Accountability," contained two items that were contrary to the instructions given to the staff at the mock-up training. Specifically, Section 9.1.1 stated, "secure a safety belt and line to the worker who will enter the channel head" and Section 9.1.3 stated, "Prior to cover removal from the nozzle opening ensure the worker cleans up all debris and removes parts and/or tools from inside the steam generator channel head if not already done." The day shift SGIP staff had determined that the use of a safety belt and line would limit mobility and create an entrance and egress hazard contrary to ALARA principles. Additionally, the staff was specifically instructed to not remove any items from the SG bowl without an RP dose assessment prior to removal.

During the briefing, the procedural contradictions were discussed and the contract staff agreed to amend the procedure to conform with the planned activities prior to the actual work. The RP staff clearly articulated the radiological concern associated with removing debris from the SG bowl. It was agreed that in keeping with the concept of ALARA that a safety belt and line would not be used on the workers entering the SG.

The inspectors observed the SG entries for nozzle cover placement on a remote video monitor at the RPA access. The inspectors observed that the SGIP staff did not use a safety belt and line during the entries. Following the SG nozzle cover placement, the inspectors asked the contract supervisor for a copy of the procedural changes for review. The contract supervisor stated that the changes were not made. The Westinghouse contract supervisors were not sure why the procedural changes had not been completed prior to the work. However, the supervisors indicated that the matter would be reviewed and corrective actions implemented. This administrative oversight did not result in any additional dose or safety significant increase in risk to the workers.

The inspectors observed contract RPT oversight of the SGIP on several occasions. Generally, the practices of the RPT staff covering SG activities was good. In one instance however, during observed decontamination activities on the SG platform, the inspectors noted that the RPT assigned to video surveillance was at times tasked with

watching both platforms while the other RPT handled other duties inside the missile barrier. The RPT did not appear to follow the decontamination activities with the camera. When the inspectors asked the RPT to show the decontamination activities on the screen, a decontamination staff person was observed touching a cloth to their face shield. The contract RPT, assigned to the video surveillance, did not notice or respond to this activity. The inspectors noted that the contract RPT did not direct the decontamination staff to leave the SG platform. The SG RP manager indicated that at the start of the shift, the RPTs were reminded of the expectation to remove individuals from the SG platform if they were observed touching their face shield. RP management stated that they would conduct remedial training for the contract RPT to assure that they were attentive to duties during the video surveillance and were taking action as directed when deficiencies were observed. In addition, the licensee indicated that they would assess the staffing situation in containment and make changes as necessary. This observed activity did not result in facial contamination or intake of contaminants.

c. Conclusions

During the Unit 2 SGIP, work planning, radiological controls and good ALARA practices were effectively implemented with a few exceptions. The observed mock-up training, work evolutions and worker practices were generally well implemented. The lower than expected SGIP dose was due in part to staff understanding of dose goals for specific work assignments.

R5 Staff Training and Qualification in Radiological Protection and Chemistry

R5.1 Contractor Personnel Qualifications and Training

a. Inspection Scope (83750)

The inspectors reviewed the training programs for contract radiation protection technicians (CRPTs) and contract outage workers. 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 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 taken the Commonwealth Edison (ComEd) core training program for contract technicians. Selected CRPTs who did not have the ComEd core training were interviewed regarding their knowledge of the tasks in the core training program. For those tasks the CRPTs were deemed deficient, on the job training was performed with the task satisfactorily completed prior to being allowed to independently performing the activity. The training department developed and administered the training for those tasks that were outside the core training program. The inspectors reviewed the training program, lesson plans, and tests, with no problems identified.

Contract radiation workers who had received nuclear general employee training (NGET) at the station or another nuclear facility within the last three years could challenge the NGET test. Otherwise, individuals had to attend a two day training session or review the computer based training. The training program was sufficiently detailed to provide attendees with the necessary level of knowledge to work safely in the plant; to use sound radiological work practices to reduce exposure; and to understand the risks of working in radiation and contaminated areas. Contract personnel completed this training before being granted unescorted access to the station.

c. Conclusions

The training program for contract personnel was sufficiently detailed to provide workers with the knowledge to work safely and understand sound radiological practices. Contract radiation protection technicians' qualifications were appropriately reviewed and site specific training was provided to contract technicians based on their qualifications.

R7 Quality Assurance in Radiological Protection and Chemistry Activities

R7.1 Quality Assurance in Radiation Protection Activities

a. Inspection Scope (83750)

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

b. Observations and Findings

The licensee implemented a new self assessment program for the station in January 1999. The purpose of the self assessments was to review current performance and to identify gaps between actual performance and desired performance. Attributes of this program included monthly self assessments, monthly task observations, focus area assessments, and quarterly assessments. The quarterly assessments were a summation of the monthly assessments, task observations and any focus area assessments performed during that quarter. In addition the quarterly assessment provided a rating (green, white, yellow or red) for the following assessment areas:

- Radiological Protection Management and Leadership;
- Radiological Protection Personnel Knowledge and Skills;
- Radiation Dose Control;
- Radioactive Contamination Control;
- Control of Radioactive Material;
- Radiological Protection Measurements; and
- Radioactive Waste

Monthly task observations were a surveillance of activities performed by radiation protection staff. For example, third quarter 1999 observations included shipping activities, floor space contamination and radiation protection supervisor oversight. The

purpose of the task observations was to identify both programmatic and personnel weaknesses and strengths.

RP performed two focus area assessments per year, which were an in-depth review of a specific department area. The areas assessed were based on input from the department manager, areas important to department success, observed declining performance in a specific area, results of external reviews, and the results of previous self assessments.

The inspectors reviewed the radiation protection department's quarterly assessments for the second and third quarters of 1999. The assessments were detailed and self critical, resulting in several areas receiving red or yellow ratings. The assessments included improvement initiatives for areas with red or yellow ratings. The inspectors noted that subsequent assessments indicated that improvements had been made in areas with red or yellow ratings. The inspectors also noted that the 1999 third quarter self assessment provided better justification for the assessment conclusions than the first and second quarter assessments.

c. Conclusions

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

X1 Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on October 29, 1999.

The licensee did not identify any items discussed as proprietary.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

S. Armbrister, Westinghouse, Outage Coordinator
R. Biskey, Westinghouse, Project Manager
R. Colglazier, NRC Coordinator
A. Creamean, Lead Health Physicist, Operations
P. Donnelly, Maintenance Program Superintendent
M. Hury, Steam Generator Services Manager
J. Kuczynski, Lead Health Physicist, Technical
B. Levis, Site Vice-President
R. Lopriore, Station Manager
K. Moser, Acting Manager, Regulatory Assurance
M. Roberts, Radiation Protection Laboratory Supervisor
D. Thompson, Health Physicist
B. Vivian, Maintenance Services Superintendent

INSPECTION PROCEDURES USED

IP 83750	Occupational Radiation Exposure

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS USED

ALARA	As-Low-As-Is-Reasonably-Achievable
ComEd	Commonwealth Edison
CRPTs	Contract Radiation Protection Technicians
dpm	Disintegrations Per Minute
DRS	Division of Reactor Safety
HRA	High Radiation Area
LHRA	Locked High Radiation Area
NRC	Nuclear Regulatory Commission
PCE	Personnel Contamination Events
PDR	Public Document Room
SG	Steam Generator
SGIP	Steam Generator Inspection Project
radworker	Radiation Worker
RP	Radiation Protection
RPT	Radiation Protection Technician
RWPs	Radiation Work Permits

LIST OF DOCUMENTS REVIEWED

Radiation Work Permits

RWP 992523 (Revision 0), "Set-up, Tear Down, Decon of A/D and B/C Steam Generator Platforms and Bullpens";
RWP 992526 (Revision 0, Temp. 1), "Installation and Removal of Steam Generator Nozzle Covers";
RWP 992580 (Revision 0), "Radiation Work Permit Request";
RWP 992795 (Revision 0), "Reactor Cavity Decontamination, Equipment Set Up, Removal and Associated Activities";
RWP 992571 (Revision 0), "Reactor Head Disconnect and Lift Preparation";

Procedures

BAP 700-5 (Revision 3), "Utilization of Portable Air Filtration/Ventilation Equipment";
BRP-2000-1 (Revison 3), "Description and Use of Byron Radiological Survey Forms (BRP 2000 T Series)";
BRP 5210-4 (Revision 4), "Dose Assessments From Contamination";
BRP 5010-1 (Revision 20), "Radiological Posting and Labeling Requirements";
BRP 5710-4 (Revision 10), "Routine Personnel Decontamination";
BRP 5720-2 (Revision 6), "Discrete Radioactive Control Program";
BRP 6210-2 (Revision 13), "Radiological Controls for Steam Generator Work"
BRP 6020-2 (Revision 10), "Radiological Air Sampling Program";
BRP 6021-6 (Revision 4), "Containment and Fuel Handling Building Air Sampling During a Refueling Outage";
BRP-6021-16 (Revision 4), "Set-up and Operation of portable Air Filtration/Ventilation Equipment";
BRP-700-2 (Revision 15), "ALARA Action Review";
NSP-RP-AA-500 (Revision), "Radioactive Material Control";
NSP-RP-AA-460 (Revision), "Controls for High Radiation Areas and Very High Radiation Areas";
AD-AA-103 Attachment 8, (Revision 1), "Radiation Protection Department Monthly Self-Assessment Report";
CWPI-NSP SH-3 (Revision 3), "Industrial Safety Manual of Common Work Practice Instructions-Confined Space Entry, May 24, 1999";
Westinghouse MRS.2.2.2 Gen 2 (Revision 13), "Installation and Removal of Temporary Nozzle Covers and Channel Head Parts Accountability";

Problem Identification Forms

PIF B1999-03804, "Personnel Contamination Event, 99-115";
PIF B1999-03768, "Personnel Contamination Event 99-118";
PIF B1999-03784, "Personnel Contamination Event 99-121";
PIF B1999-03784, "Personnel Contamination Event 99-122";

Byron Training Documents

Contractor Radiation Protection Technician Administration and Course Management Information (Revision 3);
Byron Training Department, Contractor Radiation Protection Technician Qualification Card;
Byron Station, Contractor Radiation Protection Technician Skills Proficiency Evaluation;
NTAFT-IMP04 Nuclear Generating Group Training Exemption Form (Revision 1).

Personnel Contamination Event Records

BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-113";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-114";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-115";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-116";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-117";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-118";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-119";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-120";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-121";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-122";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-123";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-124";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-125";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-126";
BRP 5720-4T1 (Revision 6), "Personnel Contamination Event, PCE 99-127";