ENCLOSURE 2

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.:	50-397
License No.:	NPF-21
Report No.:	50-397/97-16
Licensee:	Washington Public Power Supply System
Facility:	Washington Nuclear Project-2
Location:	Richland, Washington
Dates:	August 17 through September 27, 1997
Inspectors:	S. A. Boynton, Senior Resident Inspector G. D. Replogle, Resident Inspector
Approved By:	H. J. Wong, Chief, Reactor Projects Branch E

Attachment: Supplemental Information

EXECUTIVE SUMMARY

Washington Nuclear Project-2
NRC Inspection Report 50-397/97-16

Operations

- Operations personnel did not adequately assess available information indicating degraded performance of the installed instrumentation for measuring reactor coolant system (RCS) identified leakage. As a result, actions required to perform an alternate method for satisfying the surveillance were delayed and the Technical Specifications (TS) required surveillance interval for evaluating RCS operational leakage was exceeded (Section O1.2).

- Operations and engineering personnel did not demonstrate a questioning attitude following the identification of a broken lockwire on a safety-related pressure control valve associated with the automatic depressurization system (ADS). Verification of the valve's pressure control setpoint was delayed 2 days. The as-found setpoint was determined to be below that to support long term operability of the associated ADS valves (Section O8.1).

Maintenance

- The implementation of the Foreign Material Control (FMC) Program was poor during Refueling Outage R12. Previous corrective actions to prevent recurrence were considered weak (Section M8.1).

Engineering

- Problem Evaluation Requests (PERs) were appropriately written in the majority of instances when they were required. However, one violation of procedures, with two examples, was identified for the failure to write PERs for problems with safety-related equipment. Some engineers did not have an appropriate understanding of PER requirements and were not using the applicable procedure (Section E8.3).

Plant Support

- The failure of licensee personnel to recognize and address potential radiological concerns associated with several work activities resulted in unplanned personnel contaminations and exposures. A violation with three examples was identified. In an event involving the surveillance tests in the equipment drains radioactive (EDR) sump area, health physics (HP) and operations personnel did not properly address the source of the contamination and, as a result, a second equipment operator (EO) was contaminated (Section R1.1).

Report Details

Summary of Plant Status

The inspection period began with the reactor at 100 percent power. On August 26, 1997, power was temporarily reduced to 95 percent to compensate for high main condenser steam jet air ejector temperature that was a result of high ambient temperatures. On August 29, power was reduced to approximately 80 percent at the request of the Bonneville Power Administration. The plant was returned to full power on September 1. On September 6 and 12, power was temporarily reduced to 90 percent to support gain adjustments to the digital feedwater control system. During the weekends of September 20-21 and September 27-28, power was again reduced at the request of Bonneville Power Administration. At the end of the inspection period the plant was operating at 80 percent power in economic dispatch.

I. Operations

O1 Conduct of Operations

O1.1 General Comments (71707)

Using Inspection Procedure 71707, the inspectors conducted frequent reviews of ongoing plant operations. The conduct of operations was generally professional and safety conscious.

O1.2 Missed Surveillance for RCS Total Leakage

a. Inspection Scope (61726)

During discussions with operations personnel on September 5, 1997, the inspector noted that TS Surveillance Requirement (SR) for RCS total leakage had been performed using an instrument which was not operating reliably. The inspector conducted followup to this observation.

b. Observations and Findings

Background: TS SR 3.4.5.1, in part, requires the licensee to monitor RCS total leakage every 12 hours. The licensee would normally perform this surveillance utilizing, in part, the identified leakage totalizer (FDR-FQ-38) in the control room.

On September 4, 1997, operators noted a step change in the identified leakage rate surveillance results. While normal leakage was approximately 2.5 gpm, the surveillance indicated that leakage was approximately 0.1 gpm. Operations questioned the operability of the totalizer and initiated steps to measure identified leakage using an alternate method ("bucket test," in accordance with Plant Procedure Manual (PPM) 2.11.3, "Equipment Drain System").

An EO performed the first bucket test at approximately 6 a.m. on September 4. However, operations did not have confidence in this initial test because the EO had observed a flow surge during the surveillance. Also, upon exiting the controlled surface contamination area, the EO was found to be contaminated.

At approximately 7 p.m. on September 4, following a flush of the EDR flow instrument line, an EO completed a second bucket test and found identified leakage to be about 2.5 gpm. Upon exiting the controlled surface contamination area, the EO was again found to be contaminated (see Section R1.1 for a detailed discussion of the contamination events). Later in the shift, qualitative evaluations by the operating crew on the performance of the leakage totalizer indicated that the instrument was not measuring an identified leakage flow consistent with the latest bucket test or historical instrument readings. However, the operating crew did not declare the flow totalizer inoperable, and consequently did not convey to HP personnel the need to be able to perfom another bucket test early in the day shift to meet the TS SR.

At 7 a.m. on September 5, 1997, in consideration of the two contamination events, the shift manager postponed the next bucket test until additional HP controls could be established for the job. Operators performed TS SR 3.4.5.1 utilizing FDR-FQ-38, but operations recognized that the surveillance was not valid, based on the instrument's erroneous indications. At 8 a.m., FDR-FQ-38 was officially declared inoperable. HP established improved contamination controls for the job, and at approximately 3:30 p.m. the surveillance was successfully performed.

NRC Assessment: Based upon the valid bucket test performed on the evening of September 4 and taking into consideration the 25 percent grace period allowed by TS 3.0.2, the subsequent surveillance for RCS total leakage was required to be performed no later than 10 a.m., September 5. The failure to perform the surveillance within the required interval was identified as a violation of TS SR 3.4.5.1 (VIO 50-397/97016-01).

The inspectors considered the failure of Operations personnel to promptly inform HP of the need to establish better HP controls for the bucket tests to be a key contributor to the violation. Operations had clear indication that FDR-FQ-38 was inoperable on the evening of September 4, but did not inform HP of the need to enhance the HP controls for the test until the FDR-FQ-38 was officially declared inoperable at 8 a.m. on September 5.

c. <u>Conclusions</u>

Operations personnel did not adequately assess available information indicating degraded performance of the installed instrumentation for measuring RCS identified leakage. As a result, radiological controls were not promptly established to support an alternate, manual method for measuring leakage and, as a result, the TS required surveillance interval for evaluating RCS operational leakage was exceeded.

Operational Status of Facilities and Equipment

O2.1 Engineered Safety Feature System Walkdowns (71707)

The inspectors walked down accessible portions of the following engineered safety feature systems:

- Standby Service Water Loop A
- Reactor Core Isolation Cooling
- Emergency Diesel Generators, Divisions I, II, and III
- Residual Heat Removal System, Trains A, B, and C
- Low Pressure Core Spray System

The systems were found to be properly aligned for the plant conditions with no notable material condition deficiencies.

O8 Miscellaneous Operations Issues (92901)

O8.1 (Closed) Licensee Event Report (LER) 97-008-00: inoperability of four ADS valves due to improper setpoint of containment instrument air (CIA) pressure control valve. On July 16, 1997, the licensee identified, through a system engineer walkdown, a broken lockwire on Valve CIA-PCV-2B. Subsequent investigation on July 17 also identified that the valve stem locknut was loose. Valve CIA-PCV-2B provides a supply of nitrogen to the four Subsystem B ADS valves from the safety-related backup nitrogen bottles. The supply of nitrogen from these bottles is designed to provide an actuating force to open the ADS valves in support of long-term alternate core cooling. Normal supply to the ADS valves is from the nonsafety-related containment nitrogen system, which is not relied upon in the licensee's loss-of-coolant accident analyses. In addition, each ADS valve has a safety-related accumulator, which provides for at least one, and up to five, actuations of the ADS valve for depressurizing the reactor pressure vessel.

Troubleshooting performed on July 18 found that the setpoint of Valve CIA-PCV-2B was 63 psig, well below the normal setpoint of 180 psig. The licensee determined that the set pressure was insufficient in supporting long-term alternate core cooling with the Subsystem B ADS valves. The valve was promptly readjusted to the appropriate 180 psig setpoint, following the troubleshooting, to restore operability. Based upon the licensee's identification of the broken lockwire on July 16, and the subsequent setpoint restoration on July 18, the Subsystem B ADS valves were determined to have been inoperable for long-term cooling purposes for at least 52 hours. TS 3.5.1.G requires the plant to be placed in Mode 3 within 12 hours when two or more ADS valves are inoperable. Thus, the condition identified by the licensee was a condition prohibited by TS and reportable under the requirements of 10 CFR 50.73.

The inspector noted that the normal nitrogen supply and each individual ADS valve accumulator were available for the duration of the time the valve was improperly set. Additionally, the licensee's analyses have shown that the operability of the three Subsystem A ADS valves would have been sufficient to provide the ADS function of long-term alternate core cooling if the normal nitrogen supply was lost. Therefore, the ADS depressurization and long-term cooling safety functions were maintained throughout this time period and the actual safety significance of the event was considered to be low.

Identification of the broken lockwire by the system engineer demonstrated a good practice of inplant monitoring. However, based upon the information available to the licensee on July 16 and 17, and the 12 hour action time provided by TS 3.5.1.G, the timeliness of troubleshooting efforts to determine the valve's setpoint was inconsistent with the potential impact on ADS operability. The weak follow-through on the identified discrepancy by operations and engineering resulted in the four Subsystem B ADS valves being inoperable for an extended period of time that could have been avoided. A violation of 10 CFR Part 50, Appendix B, Criterion XVI was identified (VIO 50-397/97-16-02).

As a result of the licensee's investigation of this event, the licensee was unable to determine the specific cause of the misadjustment of Valve CIA-PCV-2B and there was no clear evidence that would indicate tampering was involved.

II. Maintenance

M1 Conduct of Maintenance

M1.1 General Comments

a. Inspection Scope (62703, 61726)

The inspectors observed the following work activities:

- Work Order HFW3, Replacement of SW-V-49, low pressure coolant spray pump motor cooler throttle valve
- PPM 2.11.3, Drywell Identified Leakage Bucket Surveillance

In general, work was appropriately performed. However, problems associated with the drywell identified leakage bucket surveillances are discussed in Sections O1.2 and R1.1.

M8 Miscellaneous Maintenance Issues (92902)

M8.1 (Open) Inspection Followup Item 50-397/97009-02: implementation of the FMC Program. The inspector identified that the craftsmen and supervisors associated with the Diesel Generator 2 cooling water heat exchanger work had an inadequate level of knowledge to ensure proper implementation of the WNP-2 FMC requirements. Additionally, the work instructions associated with the job did not contain steps to ensure that required FMC inspections were performed. This inspection followup item was established to track additional followup regarding the overall implementation of the licensee's FMC program.

The FMC controls for WNP-2 are specified in PPM 10.1.13, "FMC for Systems and Components," Revision 14. The program requirements apply to both safety- and nonsafety-related work. As a minimum, the procedure requires a documented FMC inspection by a craft supervisor prior to system/component closure.

In response to the inspector's original finding, the licensee retrained all craft supervisors regarding the WNP-2 FMC requirements. Craft supervisors were instructed to ensure that an appropriate FMC inspection was documented in the "Work Performed" section of the work order. This documentation was required even if the work document did not itself specify an FMC inspection. WNP-2 management stated that the individual work orders did not need to specify when the inspections were required, as the craft supervisors were already trained to perform and document these inspections without such prompting.

As part of the followup to the inspector's concern, the quality assurance department performed additional inspection of work packages to check compliance with FMC requirements. The quality assurance inspectors reviewed 15 work packages in which the scope of work would have required an FMC inspection and found that an FMC inspection was not performed for eight of the jobs (all jobs were from Refueling Outage R12). Furthermore, an FMC inspection was only performed when the work package specifically required it. When craft supervisors were expected to perform the inspections without being prompted by the work document, the supervisors consistently failed to perform the inspections. The finding was documented in PER 297-0683.

Since the sample of work orders reviewed was composed primarily of nonsafety-related work, and all of the instances where FMC requirements were not met were associated with nonsafety-related work, no violations of NRC requirements were identified. Nonetheless, the inspectors considered the overall implementation of the licensee's FMC program during Refueling Outage R12 to be poor. The inspectors also noted that there were no indications of foreign materials in systems following R12.

As corrective measures for the issue, the licensee initiated plans to retrain all maintenance personnel and planners regarding FMC requirements prior to the next outage. The inspectors considered the corrective measures to be weak. Specifically, training the maintenance staff was performed on two previous occasions (once before the last outage and once after the inspectors identified that FMC program requirements were not being met), but maintenance personnel were still not implementing the FMC Program requirements, as demonstrated by PER 297-0683. The inspector considered the absence of specific guidance in the work request (to specify and document the inspections) as a significant contributor to this problem. The licensee's corrective actions had not addressed this contributor. In response to the inspector's concern, the licensee planned to strengthen the corrective actions. This item will remain open pending further review of the licensee's FMC practices by the NRC.

M8.2 (Reopen) VIO 50-397/95020-02: Inspection Report 50-397/97-12 erroneously closed this item. The item number closed should be VIO 50-397/95020-01, which refers to the issue (qualitative/quantitative acceptance criteria) discussed in the report.

M8.3 (Closed) VIO 50-397/95020-01: See preceding paragraph.

III. Engineering

E8 Miscellaneous Engineering Issues (92903)

E8.1 (Closed) Unresolved Item 50-397/97003-03: inoperable reactor water cleanup instruments. On February 11, 1997, the licensee identified that reactor water cleanup flow Switches LF-FS-15 and LD-FS-16 (Division I and II) were inoperable since initial calibration in Spring 1995. The setpoints were found to be 276.5 gpm, while TS permitted a maximum setting of 271.7 gpm.

The licensee reported the finding to the NRC in LER 97-001. This issue will be reviewed and tracked in conjunction with the LER. This unresolved item is administratively closed.

E8.2 (Closed) Unresolved Item 50-397/96017-01: This item pertained to the licensee's deferral of one test associated with the reactor recirculation control (RRC) and reactor feedwater (RFW) systems. The licensee planned to trip one RFW pump from 100 percent reactor power to verify proper operation of RFW and RRC scram avoidance capabilities. The test was deferred until the end of the operating cycle.

On March 27, operators performed the subject test. Due to the unexpected operation of the plant, operators manually scrammed the reactor. The NRC subsequently conducted a special inspection of the event (NRC Inspection Report 50-397/97-10). This item is closed based on that inspection effort.

E8.3 (Closed) Unresolved Item 50-397/96024-03: failure to write PERs. The licensee had identified repetitive instances where plant personnel were not initiating PERs when required. PERs 296-0834, 295-1195 and 196-0357 each documented multiple examples of the procedural noncompliance.

Background: At WNP-2, the PER program is governed by PPM 1.3.12, "Problem Evaluation Reports." The program applies to both nonsafety-related and safety-related system, structures, and components. PPM 1.3.12 requires PERs to be written, in part, for the following conditions:

- Conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances associated with safety-related, augmented quality items, Maintenance Rule scoped systems, and those used in emergency operation procedures.

- Corrective work on an item because it does not meet specified requirements, unless the work is rework.

- System, structures, and components malfunction, damage, or degradation considered sudden or unexpected, or outside the anticipated performance of the item.

Although other processes are redundant to the PER process with regard to corrective actions (i.e. work requests), PERs are still required in most cases to ensure that plant problems are appropriately addressed and trended, i.e., Maintenance Rule. Additionally, plant managers review the new PERs each day. Part of the information considered at the PER meeting is previous, but similar, PERs. Failure to write a PER could result in masking problems from plant management, thus not allowing management the opportunity to ensure that appropriate corrective actions are taken. Furthermore, management may not get an accurate perception of equipment performance when past and current PERs are reviewed during the PER meeting.

NRC Assessment: The inspector audited a 6-week sample of operator logs (July 5 to August 16, 1997) to determine if PERs were being written, when appropriate, for equipment problems.

The inspector found that in most cases PERs were written when required. However, performance was not consistent. For example, the inspector identified the following conditions that met the PER criteria, but PERs were not written.

- Hydraulic Control Unit 4619 experienced low accumulator pressure alarms on six occasions between July 10 and August 10. In response to each alarm, the accumulator was secured and recharged. Although a PER was required to be written to document the degraded condition (leaking

accumulator), no PER was written until the accumulator failed on August 11 when it could not be recharged. A PER would have likely prompted management into taking more effective corrective actions to preclude failure of the degraded accumulator. The failure to initiate a PER for the degraded condition (prior to accumulator malfunction) is the first example of a violation of 10 CFR Part 50, Appendix B, Criterion V which requires that procedures be implemented (VIO 50-397/97016-03).

- On July 21, 1997 the containment hydrogen monitor (CMS-SR-14) failed and was declared inoperable. The hydrogen monitor is described as safety-related in the Final Safety Analysis Report. The failure to initiate a PER for the inoperable hydrogen monitor is another example of a violation of 10 CFR Part 50, Appendix B, Criterion V (VIO 50-397/97016-03).

- On July 23, during the RFW pump trip test, the reactor vessel level control system unexpectedly tripped to single element control.

- Adjustable Speed Drive 1B1, gate turn-off problems were noted on July 8, 10, and 15. (The gate turn-offs are solid state devices that convert DC current to an AC signal to drive the RRC pumps.)

- On July 21, the low pressure core spray keepfill pump bearing oil resevoir was empty. This was unexpected because the oil resevoirs are verified to be at least half full twice a day and the bearings do not normally use a significant amount of oil. Additionally, keepfill pump bearings have suffered repetitive problems at WNP-2. Most recently, on October 16, 1996, the bearing associated with the RHR-P-3 keepfill pump failed and rendered residual heat removal Train C inoperable.

- Off-gas explosive monitors were found to be inoperable on July 21, 28, and 30.

- On July 28, a coupling associated with control rod drive Pump 1A was found in a damaged condition. Compensatory steps were established to prevent pump failure, but no PER was written.

For the above examples, the inspector discussed the issues with the cognizant engineers. The inspector observed that in all cases the engineers were generally aware of the issues, but did not have a proper understanding of PER requirements. One engineer stated that he was only required to write a PER if the system failure resulted in a plant power reduction. Another stated that he did not believe that the failure of the safety-related containment hydrogen monitor warranted a PER. None of the engineers had used the PER procedure when deciding whether or not to write a PER.

c. Conclusions

PERs were appropriately written in the majority of instances when they were required. However, one violation of procedures, with two examples, was identified for the failure to write PERs for safety-related component problems. Several other examples were also identified where PERs were not generated for nonsafety-related equipment problems. Some engineers did not have an appropriate understanding of PER requirements and were not using the applicable procedure.

IV. Plant Support

R1 Radiological Protection and Chemistry Controls

R1.1 Inadequate Job Planning for Establishing Radiological Controls

a. Inspection Scope (71750)

The inspectors reviewed the circumstances surrounding several recent plant activities that resulted in unplanned contaminations and exposures to personnel. The review included the planning aspects of the activities and the actions taken in response to the events.

10 CFR 20.1501 requires that surveys be made to evaluate the extent of radiation levels and the potential radiological hazards that could be present to ensure compliance with the requirements of 10 CFR Part 20. 10 CFR 20.1902 requires the posting as a high radiation area if areas accessible to personnel for radiation areas greater than 0.1 rem/hr at 30 cm. 10 CFR 20.21201 specifies limits for occupational exposures.

b. Observations and Findings

Inadequate Area Posting: On July 29, 1997, two contract workers were working in the pit area of condensate Filter/Demineralizer 1B, posted only as a radiation area. During their work they received dose rate alarms on their electronic dosimetry (indicating a dose rate > 50 mr/hr) and exited the area. Subsequent surveys of the pit area found general area radiation levels up to 150 mr/hr. As a result of the workers' prompt action the dose they received was relatively low (9 mrem total).

Prior to the workers entering the pit area, the filter/demineralizer had been returned to service following planned maintenance performed several days before. However, neither the workers nor the HP technicians who granted them access to the area recognized that there had been a change in plant conditions. This resulted in the workers performing work under an inappropriate radiation work permit (RWP). Had

it been recognized that the area was, in fact, a high radiation area, additional reviews of the activity would have been required to determine the appropriate level of radiological controls.

The root cause of this event appeared to be poor communications between operations and HP personnel with regards to changes in plant conditions. Additionally, HP personnel did not demonstrate the appropriate sensitivity towards the need to verify that radiological conditions had not changed prior to granting access to the condensate filter/demineralizer pit. The failure to survey the pit area to evaluate the extent of radiation levels is the first example of a violation of 10 CFR 20.1501(a)(2)(iii) (VIO 50-397/97016-04).

Significant Personnel Contamination During Nonroutine Surveillance: On September 4, 1997, an EO was contaminated while performing a manual determination of identified RCS leakage into the drywell. A subsequent whole body count also showed an uptake of a small amount of Cobalt-60 (approximately 30 nCi).

Identified leakage into the drywell is collected by the equipment drain radioactive system and directed to the EDR sump located on 422' level of the reactor building. Radioactive contamination in the EDR system has resulted in the EDR sump area to be posted as a contaminated high radiation area. The EO was required to enter this area to perform the manual leakage determination.

Although the activity was a nonroutine surveillance being performed in an area that is not normally entered, the EO performed the work under a Group RWP for routine equipment operation in high and high-high radiation areas. The RWP did not provide any specific information on the radiological hazards around the EDR sump and so required the HP prejob brief to include a review of the most recent surveys of the area. The most recent survey available for the EDR sump was performed in May 1997 and indicated contamination levels between 20,000 and 150,000 dpm/100 cm^2. The RWP also required catch containers when breaching contaminated liquid systems unless the liquid is directed to an approved drain system. The RWP did not provide any requirements for the type of catch container or drain system that would be acceptable. The use of an open polyethylene bottle to collect the EDR flow was an ineffective catch container and a key contributor in the EO's contamination. Contamination on the EO's hands can also be attributed to the removal of his protective gloves to read his dosimetry while in the contaminated area. HP surveys performed following the contamination event showed contamination levels between 80,000 and 4,000,000 dpm/100 cm^2 in the EDR sump area. The EO's egress from the area also resulted in spread of contamination outside of the posted area. HP personnel decontaminated the affected areas reducing levels around the EDR sump to $<$80,000 dpm/100 cm^2.

The inspector considered the root cause of this event to be poor radiological work planning and practices in relation to the potential radiological risks. Additionally, HP

personnel were not sensitive to the need to verify the radiological conditions around the EDR sump prior to entry into the area by the EO. The failure to perform surveys to evaluate the potential radiological hazards prior to the EO performing the surveillance is the second example of a violation of 10 CFR 20.1501(a)(2)(iii) (VIO 50-397/97016-04).

Second Personnel Contamination in EDR Sump Area: During the evening of September 4, 1997, a second EO entered the EDR sump area to perform another manual determination of drywell identified leakage. HP personnel, believing the contamination of the first EO was due to poor work practices, accompanied the second EO to the job site, but did not require any additional radiological controls. In fact, the EO utilized the same Group RWP used by the first operator earlier that day. The HP technician accompanying the EO did not identify any concerns with the EO's radiological work practices. However, upon exiting the area the second EO was also found to be contaminated. A subsequent whole body count also showed an uptake of Cobalt-60 at a similar level to that of the first EO.

The root cause of the contamination appeared to be from the significant contamination levels in the EDR system. Based upon whole body counts performed on each of the EOs, the licensee believed that the contamination levels generated airborne activity when the system was breached and drained into the open bottle. The erroneous assumption on the part of HP personnel that the initial contamination was due only to poor radiological work practices prevented them from appropriately considering the radiological risks involved with breaching the system and taking action to minimize that risk.

Following the second contamination event, HP personnel again decontaminated the EDR sump area. Additional engineered and personnel radiological controls were established under a specific RWP approved by the radiation protection manager. Subsequent entries into the EDR sump area by EOs showed that the additional controls were effective in minimizing the potential for personnel contamination.

Inadequate Surveys Resulted in Unplanned Personnel Contaminations: On September 11, 1997, four individuals were found to have low levels of contamination (1000 - 8000 dpm/100 cm^2) after performing work on control rod drive hydraulic Pump 1A. Subsequent surveys by HP personnel found contamination around the pump motor couplings and gear box. These components were not identified as potentially contaminated prior to the job and no prejob surveys had been performed.

From discussions with the radiation protection manager it was identified that the HP supervisor was aware of the impending job, but directions to an HP technician to evaluate the job site was not adequately communicated. Thus, no direct HP coverage was provided during the work. It was also identified that two of the maintenance personnel involved with the job were qualified to perform contamination surveys.

The root cause of this event was a lack of sensitivity on the part of both maintenance and HP personnel for the need to verify radiological conditions before starting the work. The failure to survey the work area is the third example of a violation of 10 CFR 20.1501(a)(2)(iii) (VIO 50-397/97016-04).

c. Conclusions

The failure to recognize and address potential radiological concerns associated with several work activities resulted in unplanned personnel contaminations and exposures.

In the event involving the surveillance tests in the EDR sump area, HP and operations personnel did not properly address the source of the contamination and, as a result, a second EO was contaminated.

V. Management Meetings

X1 Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management after the conclusion of the inspection on October 2, 1997. The licensee acknowledged the findings presented.

The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT

Supplemental Information

PARTIAL LIST OF PERSONS CONTACTED

Licensee

P. Bemis, Vice President for Nuclear Operations
D. Coleman, Acting Regulatory Affairs Manager
D. Hillyer, Radiation Protection Manager
J. Hunter, ALARA Supervisor
P. Inserra, Licensing Manager
T. Messersmith, Corporate Emergency Preparedness, Safety and Health Officer
M. Monopoli, Operations Manager
G. Smith, Plant General Manager
J. Swailes, Engineering Manager
R. Webring, Vice President Operations Support

INSPECTION PROCEDURES USED

IP 37551:	Onsite Engineering
IP 61726:	Surveillance Observations
IP 62707:	Maintenance Observations
IP 71707:	Plant Operations
IP 71750:	Plant Support
IP 92901:	Followup - Operations
IP 92902:	Followup - Maintenance
IP 92903:	Followup - Engineering

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-397/97016-01	VIO	failure to perform TS in a timely manner required surveillance for identified leakage
50-397/97016-02	VIO	inadequate corrective actions related to improperly adjusted CIA valve for ADS valves
50-397/97016-03	VIO	failure to write PERs when required
50-397/97016-04	VIO	failure to perform radiological surveys

Closed

50-397/97008-00	LER	inoperability of four ADS valves due to CIA-PCV-2B pressure setpoint discovered set less than required
50-397/97003-03	URI	inoperable reactor water cleanup isolation instruments
50-397/96017-01	URI	deferral of reactor feedwater pump trip test
50-397/96024-03	URI	failure to write PERs
50-397/95020-01	VIO	inappropriate qualitative/quantitative acceptance criter for control rod drive housing support installation (closed as 50-397/95020-02 in IR 50-397/97-12)

Discussed

50-397/97009-02	IFI	implementation of the FMC Program
50-397/95020-02	VIO	(reopened due to erroneous closure in Inspection Report 50-397/97-12)

LIST OF ACRONYMS USED

ADS	automatic depressurization system
CIA	containment instrument air
EDR	equipment drains radioactive
EO	equipment operator
FMC	foreign material control
HP	health physics
IFI	inspection followup item
LER	licensee event report
NRC	U.S. Nuclear Regulatory Commission
PER	problem evaluation request
PPM	Plant Procedures Manual
RFW	reactor feedwater
RRC	reactor recirculation control
RWP	radiation work permit
SR	surveillance requirements
TS	Technical Specifications
URI	unresolved item
VIO	violation
WNP-2	Washington Nuclear Project-2