ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket No.: 50-397

License No.: NPF-21

Report No.: 50-397/97-17

Licensee: Washington Public Power Supply System

Facility: Washington Nuclear Project-2

Location: Richland, Washington

Dates: September 28 through November 8, 1997

Inspectors: S. A. Boynton, Senior Resident Inspector
G. W. Johnston, Senior Project Engineer

Approved By: H. J. Wong, Chief, Reactor Projects Branch E

Attachment: Supplemental Information

EXECUTIVE SUMMARY

Washington Nuclear Project-2
NRC Inspection Report 50-397/97-17

Operations

- Management involvement in the plant curtailment for maintenance on the reactor feedwater drive turbines (RFWDT) was notable for reemphasizing expectations and raising personnel sensitivity to a significant evolution. The operations staff also demonstrated conservative decision-making when maintenance on the first drive turbine was delayed while operability concerns with the high pressure core spray (HPCS) system were addressed (Section M1.2).

Maintenance

- The licensee's troubleshooting and repair efforts associated with the RFWDTs were well planned and executed. The efforts resulted in improved drive turbine performance while identifying potential design improvements to the turbine governor control oil system (Section M1.2).

Plant Support

- The unavailability of members of the emergency response organization, along with technical and training issues related to the use of the licensee's automatic notification system, have challenged the licensee in demonstrating its ability to staff the onsite emergency response facilities in accordance with the emergency plan. The licensee's short term corrective actions to address this concern appear appropriate (Section P5.1).

- As low as reasonably achievable (ALARA) planning for several steam leak repair activities identified effective radiological controls and work practices (Section M1.2).

Report Details

Summary of Plant Status

The plant began the inspection period at 80 percent power. The reduced power level was maintained at the request of the Bonneville Power Administration (BPA). The plant returned to full power on September 29. On October 1, power was again reduced to 80 percent at the request of BPA. To support maintenance and testing of the reactor feedwater pump drive turbines, power was reduced to 65 percent on October 11. Following completion of the maintenance, power was returned to 100 percent on October 20. The plant remained at full power for the balance of the inspection period.

I. Operations

O2 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:

- Reactor Core Isolation Cooling System
- Divisions I, II and III 4160V Electrical Distribution
- Containment Instrument Air System (Automatic Depressurization System Supply)
- Standby Gas Treatment System

System configurations were found to be appropriate for the current operating mode and plant conditions. No notable material condition or housekeeping concerns were identified. Existing equipment deficiencies had been properly noted by the licensee and were being tracked for resolution.

O8 Miscellaneous Operations Issues (92901)

O8.1 (Closed) Violation 50-397/95029-01 and Inspection Followup Item 50-397/95029-02: failure of operators to perform an operability determination for Valve RCIC-V-28. The licensee attributed the failure to perform an operability determination to an error by the shift manager to ensure appropriate information was available to support his decision. The shift manager interpreted information in an operability assessment done September 16, 1995, which led him to believe that the assessment allowed an alternate testing methodology. No engineering or other operations management personnel were involved in the operability determination. Communications between the system engineer and the shift manager focused solely on the cause of the valve failure.

Valve RCIC-V-28 was replaced in a system outage with a stainless steel swing-type check valve, which should not experience a similar potential failure mechanism.

The personnel involved in the event were counseled with regards to requirements for operability determinations. The procedure governing operability determinations, Plant Procedure Manual (PPM) 1.13.12A, "Processing of Problem Evaluation Requests (PERs)," was revised to ensure that specific testing acceptance criteria and the impact that criteria has on operability are included in a Formal Assessment of Operability.

The licensee indicated in their response letter of December 13, 1995, that mechanical agitation (striking the valve with a hard hat) was not an accepted method of assuring proper equipment operation. The licensee noted that because a buildup of rust in the valve was considered the cause of a previous failure of the valve, the mechanical agitation of the valve was an attempt to troubleshoot the valve to determine if the plug in the valve was stuck due to rust particles.

The licensee further indicated that engineering had believed the failure of October 16, 1995, was similar to the failure of September 16, 1995. The personnel focused on troubleshooting and repair, not pursuing the potential issue of the operability of the valve. The same personnel were involved with both events, which compounded the focus on troubleshooting and repair of the valve.

The failure to declare the valve inoperable was based on a belief that the initial followup assessment of operability performed for the September 16, 1995, surveillance failure allowed the valve to be considered operable, but degraded. The PER issued for the October 16, 1995, test failure was to be addressed in the disposition of the PER issued for the initial failure. During the daily PER meeting, the reviewers focused their review on the failure to perform the followup assessment of operability required testing and the actions required to meet those requirements. PPM 1.13.12A, "Processing of PERs," was revised to allow the initiator or validator to identify a PER as a significant PER. At the time of the event, the PER Program Lead with the responsibility for designating a PER as significant did not believe the PER associated with the event of October 16, 1995, was significant. Although this change appears to have improved the process, the inspector noted that it would not necessarily have identified the PER in this case as significant.

The licensee determined that if Valve RCIC-V-28 were to stay stuck closed during reactor core isolation cooling (RCIC) operation, the RCIC system would be able to operate and inject into the reactor pressure vessel at the design rate of 600 gpm. The RCIC would also remain operable for at least 6 hours. The limitation of this is a potential for a small accumulation of water in the lube oil during prolonged operation. There would also be concern for ALARA radiological consequences for personnel who may be in the room when a design basis event occurs. Flooding of the RCIC room would be limited to approximately 0.5 inches on the floor over a 6-hour period, assuming the sump was full at the time of the event. Room temperatures would reach 152°F, and humidity would be 100 percent in 6 hours, which was deemed not to adversely affect components in the room. The radiation doses for all necessary components were also found to be within bounding postulated doses.

The inspector concluded that the RCIC system would perform as required if the RCIC-V-28 valve were to remain stuck closed. Further, the inspector determined the licensee's response did address the concerns identified in NRC Inspection Report 50-397/95-29, and no further events have occurred since.

II. Maintenance

M1 Conduct of Maintenance

M1.1 Maintenance and Surveillance Observations

a. Inspection Scope (62707, 61726)

The inspectors observed and/or reviewed portions of the following work activities:

- MSP-SGT-B101, Standby Gas Treatment (SGT) System Unit A high-efficiency partical air Filter Test
- MSP-SGT-B103, SGT System Unit A Carbon Adsorber Test
- OSP-ELEC-M702, Emergency Diesel Generator, Division II, Monthly Operability Surveillance
- Microwave Intrusion Detection System Testing (WO# GZV9)
- Control Room Emergency Chiller Pressure Switch 1A (CCH-PS-1A) Isolation Valve Replacement (WO# ED01)
- CCH-PS-1A Calibration Check

b. Observations and Findings

Each of the observed activites was generally well planned and implemented. The clearance order for the testing of SGT Unit A high-efficiency air particle and charcoal filters was reviewed and walked down, and adequate isolation of the work area was verified. Appropriate compensatory measures were implemented by security during entry into the microwave intrusion detection zones by maintenance personnel. Personnel qualifications were also verified to be current for the activities associated with the testing of SGT Unit A and the replacement of the pressure

switch isolation valve. Appropriate involvement by system engineering personnel was noted during several of the maintenance activities.

With regards to the calibration check of CCH-PS-1A, the trip setpoint of the pressure switch was properly verified by the instrumentation and control (I&C) technicians; however, several administrative discrepancies were noted in the work order documentation. The discrepancies provided conflicting information in the work package and were apparently generated as a result of delays in implementing the work. The original work order was generated in 1994.

c. Conclusions

The observed maintenance activities demonstrated that the licensee was effectively implementing its maintenance and surveilance program.

M1.2 Power Curtailment for RFWDT Maintenance

a. Inspection Scope (71707, 62707)

The inspector reviewed portions of the licensee's activities associated with corrective maintenance on the RFWDTs. The review included the troubleshooting plan and schedule of maintenance, along with direct observation of the power curtailment on October 11.

b. Observations and Findings

Maintenance and Engineering: During the initial portion of the current operating cycle (Cycle 13), the licensee identified that the speed of the RFWDTs was oscillating by approximately 100 rpm (normal turbine speed is around 4000 rpm). These oscillations resulted in minor fluctuations in reactor vessel water level (± ½"). Similar oscillations were also identified during Cycle 12.

In addressing the RFWDT oscillations, the licensee implemented a troubleshooting plan to isolate the root cause and contributors. The inspector's review of the plan found it to be comprehensive in identifying both the electrical and mechanical aspects of the RFWDT control system that could potentially contribute to the phenomenon. The licensee's efforts eventually led to the conclusion that the oscillations were most likely being caused by mechanical binding in the turbine governor servo motor relay, which provides the motive force for adjusting the turbine governor valve. As a result, the licensee made the decision to remove each of the RFWDTs from service, one at a time, to disassemble and inspect their associated servo motor relays. This maintenance was accomplished during a period in which the plant was placed in economic dispatch at the request of BPA.

Maintenance of the servo motor relays found small amounts of particulates within the body of the relays and minor galling of the interior mating surfaces that resulted from the presence of the particulates. The servo motor relays were subsequently cleaned and lubricated and the RFWDTs were returned to service. The maintenance on the servo motor relays initially eliminated the turbine speed oscillations; however, several weeks following the maintenance oscillations redeveloped on RFWDT A.

From discussions with the cognizant system engineers, it was determined that the source of the debris within the relay body is generally from corrosion products from the system's carbon steel components. These corrosion products are a result of historical water intrusion problems into the RFWDT oil system. Additionally, design weaknesses in the installed lube oil filtration system have allowed the corrosion products to migrate through the lube oil system. The inspector noted that the servo motor relays have the smallest clearances within the control oil system and, thus, are the most susceptible components to particulate contamination. The licensee plans to reduce the particulate contamination in the control oil system through a design modification of the oil filtration system during Refueling Outage R13 (Spring 1998). The short-term and long-term corrective actions taken or planned by the licensee appeared to be appropriate to address the root cause of the turbine speed oscillations.

Operations: The plant power reduction on October 11, in preparation for the RFWDT maintenance, was conducted in accordance with PPM 3.2.1, Revision 29, "Normal Shutdown to Cold Shutdown," Section 5.1. Additionally, continuous monitoring of plant evolutions associated with the maintenance was provided by senior managers. Although not required by procedure, a station nuclear engineer was also available in the control room for assisting the operating crew during the downpower.

Control rod manipulations associated with the power reduction to 45 percent were properly executed in accordance with the requirements of PPM 1.3.59, "Reactivity Management Program." The operating crew's efforts were also well coordinated on the removal from service of plant equipment, including reactor feedwater Pump B, condensate booster Pump 2A, and feedwater heater Groups 1 and 2. When operability concerns were identified with the HPCS system, the shift manager appropriately considered the need to defer the removal of the reactor feedwater Pump B from service to maximize the availability of high pressure systems for delivery of water to the reactor vessel.

Radiation Protection: In conjunction with the RFWDT maintenance, the licensee took advantage of the reduced power level to perform repairs on a number of steam leaks, several of which were normally located in high radiation areas during full power operation. Although the RFWDT maintenance only required a power reduction to 65 percent, power was temporarily reduced to 45 percent initially.

This allowed for significantly reduced dose rates in the areas where leak repairs were to be made, while also maintaining reactor power and flow well outside of the area of increased awareness on the power-to-flow map. A review of the scope of the leak repair activities and the general area dose rates for those activities showed that the job planning was effective in minimizing personnel exposure.

c. Conclusions

The licensee's activities associated with the troubleshooting and repair of the RFWDTs was characterized by effective planning and safety-conscious decisions. ALARA planning and implementation were also effective in minimizing personnel exposure during concurrent steam leak repairs.

M8 Miscellaneous Maintenance Issues (92902)

M8.1 (Closed) Violation 50-397/95007-03: control room handswitch mispositioned. On February 8, 1995, the resident inspectors noted that the control room handswitch for Containment Air Cooling Valve CAC-FCV-4A was in the AUTO position. At the time, Clearance Order 95-02-0005 was in effect. Tag 1 of this danger clearance authorization required the valve handswitch to be in the closed position and was attached to the handswitch. A licensed operator had attached the clearance tag to the handswitch. An equipment operator had independently verified that the operator properly attached the tag and that the handswitch was positioned as required by the clearance order.

The licensee initiated PER 295-0090 to review this event. The evaluation concluded that the event was caused by failure to self-check and inattention to detail. Corrective actions included counseling of the involved operators and placing letters in their files. The individuals were coached on the management expectations for implementing clearance orders and the potential consequences of clearance order errors.

The licensee's corrective actions were considered appropriate.

M8.2 (Closed) Violation 50-397/95020-02: procedural noncompliance during surveillance testing resulted in initiating plant transient. During the calibration of a reactor core isolation cooling steam flow instrument, I&C technicians lifted a lead on the incorrect signal resistance unit, which resulted in a partial loss of steam flow signal to the reactor feedwater control system and subsequent reactor water level transient. In analyzing the event, the licensee determined the root cause to be a failure on the part of the technicians to adequately self-check the complete component designation for the lead they were lifting. The failure to utilize three-way communications and a lack of understanding of General Electric component identifiers on the part of the technicians contributed to the error.

In response to the event, the individuals involved were counseled and were provided training on self-checking and the proper use of three-way communications. As a result of this and several other events, work was stopped throughout the plant to take time and reinforce management expectations on self-checking and teamwork. With respect to the confusion over the component designation, I&C technicians were provided training on the General Electric system designators and a cross-reference relating the General Electric identifiers to the WNP-2 system designations. Signal resistance units in the control room cabinets were also relabeled to include the WNP-2 system designation. The actions were considered adequate to prevent recurrence.

M8.3 (Closed) Violation 50-397/95026-02: failure of I&C technicians to appropriately perform second-person verification checks when restoring safety-related instruments to service. RPM 7.4.3.3.1.53, "HPCS Initiation Drywell Pressure High A and C-CFT/CC," steps 7.1.25 and 7.2.25 state, "Have second person verify MS-PS-47A(C) has been properly valved into service."

The inspectors observed on July 26, 1995, that the second-person verification check was done by watching the primary worker perform the valve manipulations, and no provisions were made in the procedure for this alternative means of checking valve positions. Further, the individual that signed for the second verification was not the technician observing the work, but the technician who was involved with this surveillance test in the control room.

In response to the finding, the licensee initiated PER 295-0892 and determined that the root cause of the problem was the "lack of consistent use and definition of terminology used in the PPMs (i.e., independent vs. second-person verification) and a lack of understanding of shop policy."

The inspector did not entirely agree with the licensee's root cause evaluation and determined that the failure to provide I&C workers with appropriate refresher training on important shop policy manual topics was a significant contributor to the root cause. The licensee's focus on the adequacy of the procedures in the root cause evaluation was not viewed by the inspectors as appropriate because the terms and definitions provided in the procedures and the shop policy manual were clear.

For corrective measures, the licensee revised Volume 7 PPMs to use consistent terminology for verifications and to clearly define the terms associated with second-person verification. Additionally, the staff was retrained on the requirements for performing second checks and the valves associated with MS-PS-47A(C) were verified to be in the appropriate positions.

The inspectors verified that the procedural changes were implemented. The licensee's corrective actions were considered appropriate, but the root cause analysis was weak.

M8.4 <u>(Closed) Unresolved Item 50-397/96008-01</u>: acceptability of wetting main steam isolation valve (MSIV) internals prior to the performance of Technical Specification required testing. During Refueling Outage R11, the inspectors identified a concern related to the licensee's practice of wetting the internals of the MSIVs prior to stroking the valves for the performance of a local leak rate test. Specifically, the inspectors were concerned that the water on the valve seat could potentially provide an additional sealing capability that would not be present under accident conditions in which the valves are required to close. The licensee's justification for wetting the MSIVs was reviewed along with associated vendor documentation.

From a review of the vendor manual associated with the MSIVs, a specific caution was identified which stated that the valves should not be cycled any more than is absolutely necessary until water or steam has been let into the piping and valve system. This caution is based upon General Electric equipment specifications that do not allow for normal lubrication of the guide surfaces and is designed to prevent damage to those surfaces. The caution was mirrored in General Electric's preoperational specifications for the nuclear steam supply system at WNP-2.

The inspector reviewed the results of the MSIV local leak rate tests from the 1996 and 1997 refueling outages. The results of the tests, in scfh, were as follows:

	1996	1997
Steam Line A	5.7	1.7
Steam Line B	0.0	1.6
Steam Line C	3.3	8.9
Steam Line D	0.0	3.3

The maximum allowable leakage per MSIV is 11.5 scfh. The inspector noted that the test boundary for the leakage determination actually included both the inboard and outboard MSIV, the associated inboard main steam leakage control system isolation valve, and a main steam drain valve. Therefore, the results are conservative with respect to the leakage limit for one MSIV. Through a review of the operating logs it was also noted that the MSIVs were wetted prior to performing the leakage test in 1996 , but were dry during the leakage testing in 1997. In both cases leakage rates met the established acceptance criteria.

The wetting of the MSIVs appears to be an acceptable practice that is in accordance with vendor recommendations, and one that would not likely mask a degraded condition of the valve's sealing capability.

III. Engineering

E8 Miscellanecus Engineering Issues (92903)

E8.1 (Closed) Violation 50-397/95020-03: failure to perform a written safety evaluation for the removal of the position indication for reactor core isolation cooling (RCIC) Valve V-66. The root cause of the violation was an inadequate review of the Final Safety Analysis Report (FSAR) by the cognizant system engineer responsible for the modification. The review involved an electronic key word search of the licensing document database, but not a general review of the applicable sections of the FSAR.

In response to this event and a subsequent similar event, clarifying guidance was provided to managers, supervisors, and staff personnel responsible for performing computer searches of licensing basis documents (LBDs). Additionally, the lessons learned from the two events were incorporated into the training modules for licensing basis impact determinations and a periodic continuing training session for engineering support staff, which was completed in November 1995. The lessons learned focused upon the need to review all available information resources and to review hardcopy of the material. Proper implementation of the lessons learned should effectively preclude recurrance of the violation.

E8.2 (Closed) Inspection Followup Item 50-397/96021-01: residual heat removal (RHR) Pump RHR-P-3 bearing failure. On October 16, 1996, Pump RHR-P-3, the keepfill pump for RHR Trains B and C, tripped on overload due to a seized bearing. Operators started Pump RHR-P-2B; however, they could not start Pump RHR-P-2C due to system pressure decreasing below the pressure required for pump starting. Operators declared RHR Train C inoperable. The licensee initiated PER 296-0718 to document this event. Pump repairs were completed within the allotted Technicap Specification action requirement, and Pump RHR-P-3 and RHR Train C were restored to service.

The licensee determined the cause of the pump failure to be the use of a high-capacity double-row thrust bearing in a low-capacity application. The bearing was a high-capacity double-row design with a filling slot. The apparent bearing failure was due to insufficient loading on the bearing, coupled with the vibration in the application that allowed the balls in the bearing to contact the filling slot. The repeated contact with the slot over time damaged the balls, which caused the balls to slide rather than roll in the bearing cage; subsequently, this caused the bearing to overheat and fail. The corrective action was to replace the bearing with a Conrad style thrust bearing, which has no filling slot, and is matched in capacity to the application.

The inspector concluded that the replacement of the bearing addressed the failure. Measurements of the motor amperage and bearing temperatures for RHR-P-3 were done routinely and were last done 5 days prior to the failure. However, these measurements were not able to predict the bearing failure. The licensee's corrective ations were considered appropriate. The licensee is continuing to investigate improvements in the design of the keepfill pumps to assure long term reliability.

E8.3 (Closed) Violation 50-397/96002-02: failure of the licensee to perform a 10 CFR 50.59 evaluation to assess the acceptability of the deficient heating, ventilation, and air conditioning (HVAC) heaters in the diesel generator (DG)rooms. The licensee's 10 CFR 50.59 evaluation of the change to PPM 2.10.4 that permitted the addition of temporary heaters to the DG rooms appeared deficient in that it did not assess the deficient design of the DG rooms' HVAC system.

The licensee determined the cause of the violation to be a failure of management to define and communicate expectations to personnel concerning compliance to LBD design descriptions. The licensee had previously recognized that the installed HVAC heaters could not meet the FSAR design requirements during cold weather conditions (as documented in PERs 290-0960 and 290-0995, both dated December 1990), but had not taken permanent steps to correct the deficiency or to correct the FSAR.

The corrective actions taken by the licensee included:

- Defined and communicated management expectations to personnel involved with compliance with LBDs.
- Revised the FSAR and design specifications to characterize temperature requirements for the DGs.
- Revised PPM 1.3.9, "Temporary Modifications," to clarify 10 CFR 50.59 requirements.
- Revised PPM, "DG Room HVAC System," to refer to PPM 1.3.9 when installing temporary heaters.
- Revised PPM 1.3.43, "License Basis Impact Determination," to clarify temporary modifications safety evaluation requirements.

The inspectors verified that the procedural changes were implemented. The licensee's corrective actions were considered appropriate.

E8.4 (Closed) Violation 50-397/96002-04: failure of the licensee to have an approved 10 CFR 50.59 evaluation to determine that the failed off-gas vault coolers did not constitute an unreviewed safety question. The coolers were described in the FSAR and the acceptance of the failed condition of the coolers was considered a de facto

change to the facility as described in the FSAR. The licensee indicated that a draft 10 CFR 50.59 evaluation was performed in April 1995, but the Plant Operations Committee found the document to be inadequate and did not approve it. No further actions were taken until the condition was identified by the inspectors.

The licensee determined the cause of the violation to be a failure of management to define and communicate expectations to personnel concerning compliance to LBD design descriptions. This resulted in a failure to timely address plant design changes which were initiated to the off-gas vault HVAC system. Had the 10 CFR 50.59 review and FSAR changes been implemented for the spare-in-place status of the off-gas vault HVAC system, a violation would not have resulted.

The licensee completed the 10 CFR 50.59 evaluation. Further corrective action included the communication of management expectations to personnel involved with compliance with LBDs. These corrective actions were considered appropriate.

E8.5 (Closed) Unresolved Item 50-397/96024-01: improperly installed configuration of drywell pressure switches that provide an initiation signal to the HPCS. The subject unresolved item was reviewed during NRC Special Inspection 50-397/97-04. The efforts of that inspection effectively addressed the adequacy licensee's rot cause analysis of the improper installation and subsequent corrective actions.

IV. Plant Support

P5 Staff Training and Qualification in Emergency Preparedness

P5.1 Emergency Response Organization (ERO) Notification Drill Performance

a. Inspection Scope (71750)

During the past 6 months, the results of ERO notification drills have been mixed, with a number of drills failing to demonstrate the licensee's ability to contact the ERO to provide minimum staffing of the on-site emergency response facilities within 60 minutes. The inspector reviewed the licensee's actions to improve the ERO's performance in this area.

b. Observations and Findings

In June 1997, the results of an emergency response notification drill showed that five health physics (HP) technicians, a chemistry technician, and an I&C support staff, all essential ERO positions, were not filled. Specifically, the licensee's automatic notification system (ANS) was unable to contact those individuals to determine if they were capable of responding to the plant. To ascertain the broader implications of the results, the licensee established more frequent notification drills so that six drills would be performed over a period of 3 months. To improve the response by HP technicians, refresher training was provided on ERO actions and. responsibilities, including response to the ANS.

The results of the first four notification drills, conducted on July 31, August 14, and September 4 and 23, also showed that personnel were unable to be contacted to fill several essential ERO positions. The results of the drills were reviewed by the licensee and a number of common contributors were identified. First, there was a lack of understanding on the part of ERO members for the need to respond to the ANS while at the site. Additionally, some ERO members, already on site, did not pay proper attention to, or could not hear plant announcements regarding the drills. Second, the pool of qualified HP technicians recognized by the ANS was inadequate to account for unavailability due to members being away from home, on vacation, or ill. Third, there was lack of understanding on how to properly respond to an ANS call.

In response to the findings, the licensee initiated an ERO duty notification at the beginning of each ERO team's on-call period to remind members of their ERO responsibilities. As a short-term solution for the HP and chemistry technicians, pagers have been provided to some of the responders to help ensure availability. It was noted that there were no repeat concerns with staffing the essential HP and chemistry technician positions following implementation of this action. The use of pagers for essential ERO support staff is also being considered for a long-term corrective action. The licensee is considering changes to ERO refresher training to address the identified ERO knowledge deficiencies. The adequacy and effectiveness of the licensee's corrective actions will be evaluated through inspection followup activities (IFI 50-397/97017-01).

c. Conclusion

The unavailability of members of the emergency response organization, along with technical and training issues related to the use of the licensee's automatic notification system, have challenged the licensee in demonstrating its ability to contact the ERO and staff the onsite emergency response facilities in accordance with the emergency plan. The long-term effectiveness of the licensee's corrective actions to address this concern has not yet been assessed.

S8 Miscellaneous Security Issues

S8.1 (Closed) Licensee Event Report 50-397/95-S01-00: unauthorized entry into the protected area. The subject of the licensee event report was adequately evaluated and dispositioned in NRC Inspection Report 50-397/95-27.

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 November 19, 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
R. Burk, Systems Engineering
D. Coleman, Acting Regulatory Affairs Manager
K. Graves, Systems Engineering
D. Hillyer, Radiation Protection Manager
A. Langdon, Assistant Operations Manager
P. Inserra, Licensing Manager
T. Messersmith, Corporate Emergency Preparedness, Safety and Health Officer
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

50-397/97017-01	IFI	assess adequacy and effectiveness of actions to improve ERO call-out performance

Closed

50-397/95007-03	VIO	control room handswitch mispositioned
50-397/95020-02	VIO	procedural noncompliance during surveillance testing resulted in initiating plant transient
50-397/95020-03	VIO	failure to perform a written safety evaluation for the removal of the position indication for reactor core isolation cooling (RCIC) Valve V-66

50-397/95026-02	VIO	failure to appropriately perform second-person verification checks
50-397/95029-01	VIO	failure of operators to perform an operability determination for Valve RCIC-V-28
50-397/95029-02	IFI	failure to perform operability determination
50-397/96002-02	VIO	failure to perform a 10 CFR 50.59 evaluation to assess the acceptability of the deficient HVAC in the DG rooms
50-397/96002-04	VIO	failure of the licensee to have an approved 10 CFR 50.59 evaluation for the failed off-gas vault coolers
50-397/96008-01	URI	acceptability of wetting main steam isolation valve (MSIV) internals prior to the performance of Technical Specification required testing
50-397/96021-01	IFI	RHR Pump RHR-P-3 bearing failure
50-397/96024-01	URI	improperly installed configuration of drywell pressure switches
50-397/95S01-00	LER	unauthorized entry into the protected area

LIST OF ACRONYMS USED

ALARA	as low as reasonably achievable
ANS	automatic notification system
BPA	Bonneville Power Administration
DG	diesel generator
ERO	emergency response organization
FSAR	Final Safety Analysis Report
HP	health physics
HPCS	high pressure core spray
HVAC	heating, ventilation, and air conditioning
I&C	instrumentation and control
IFI	inspection followup item
LBD	licensing basis document
MSIV	main steam isolation valve
NRC	U.S. Nuclear Regulatory Commission
PER	problem evaluation request
PPM	Plant Procedures Manual
RCIC	reactor core isolation cooling
RFWDT	reactor feedwater drive turbine
RHR	residual heat removal
scfh	standard cubic foot/feet per hour
SGT	standby gas treatment

URI	unresolved item
WNP-2	Washington Nuclear Project-2