UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report No.: 50-261/92-31

Licensee: Carolina Power and Light Company
P. O. Box 1551
Raleigh, NC 27602

Docket No.: 50-261

License No.: DPR-23

Facility Name: H. B. Robinson Unit 2

Inspection Conducted: November 14 - December 11, 1992

Lead Inspector: _____ for 12/30/92
L. W. Garner, Senior Resident Inspector — Date Signed

Other Inspectors: C. R. Ogle, Resident Inspector
J. L. Shackelford, Reactor Engineer

Approved by: _____ 1/4/93
for H. O. Christensen, Chief — Date Signed
Reactor Projects Section
Division of Reactor Projects

SUMMARY

Scope:

This routine, unannounced inspection was conducted in the areas of operational safety verification, surveillance observation, maintenance observation, reliable heat removal during shutdowns, and followup.

Results:

One violation was identified for failure to properly post the charging pump room as a contaminated process equipment area (paragraph 3).

A faulty capacitor in an nuclear instrument power range monitor transformer resulted in a turbine runback from 100% power to 47% power. The plant responded as anticipated (paragraph 3).

Operations' response to a potential containment integrity issue demonstrated a commitment to safety, in that, once maintenance activities appeared to have been unsuccessful in reducing containment penetration leakage rate to an acceptable level, an orderly unit shutdown was initiated. This action placed the unit in an unusual event condition (paragraph 3).

A poor work practice was observed during the conduct of daily station battery checks in that the electrician performing the checks repeatedly placed materials on the battery terminals (paragraph 4).

While the assessment of freeze protection circuitry performance relied heavily on a subjective technique and the requirements for portable heater placement and timing were not formally documented, the overall cold weather preparation program was considered adequate (paragraph 6).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

C. Baucom, Senior Specialist, Regulatory Compliance
*R. Chambers, Plant General Manager, Robinson Nuclear Project
*B. Clark, Manager, Maintenance
T. Cleary, Manager, Technical Support
*D. Crook, Senior Specialist, Regulatory Compliance
*C. Dietz, Vice President, Robinson Nuclear Project
R. Femal, Shift Supervisor, Operations
*W. Flanagan, Manager, Operations
*W. Gainey, Manager, Plant Support
*R. Gardner, Radiation Control Supervisor, Environmental and Radiation Control
*J. Harrison, Manager, Regulatory Compliance
P. Jenny, Manager, Emergency Preparedness
D. Knight, Shift Supervisor, Operations
*A. McCauley, Manager - Electrical Systems, Technical Support
*A. Padgett, Manager, Environmental and Radiation Control
D. Seagle, Shift Supervisor, Operations
D. Winters, Shift Supervisor, Operations

Other licensee employees contacted included technicians, operators, engineers, mechanics, security force members, and office personnel.

*Attended exit interview on December 15, 1992.

Acronyms and initialisms used throughout this report are listed in the last paragraph.

2. Plant Status

On November 20, 1992, the unit reduced power to conduct surveillance testing. During this power reduction, repairs and adjustments were made to the 4A and 6A feedwater heater level controllers to reduce secondary plant flow oscillations. An air filter and a larger air pressure regulator were also installed on LCV 1530A during this power reduction. The unit returned to full power on November 22.

At 12:34 p.m. on November 24, 1992, during calibration of the NI-42 instrument drawer, a turbine runback occurred as a result of the failure of an internal transformer in the NI-42 instrument drawer. The runback reduced power from 100% to 47%. Power was maintained at about 65% for the remainder of the day to permit troubleshooting.

At 11:00 p.m. on December 2, 1992, a shutdown was commenced as a result of CV integrity concerns involving leakage through primary sample valves PS-956E and PS-956F. At 1:12 a.m. on December 3, with power at 78%, the reduction was stopped as a result of successful maintenance efforts to reduce the leakage within acceptable limits. The unit was restored to

full power operation at 2:20 a.m. that same day. During the remainder of the inspection period the unit remained at full power.

3. Operational Safety Verification (71707)

The inspectors evaluated licensee activities to confirm that the facility was being operated safely and in conformance with regulatory requirements. These activities were confirmed by direct observation, facility tours, interviews and discussions with licensee personnel and management, verification of safety system status, and review of facility records.

To verify equipment operability and compliance with TS, the inspectors reviewed shift logs, Operation's records, data sheets, instrument traces, and records of equipment malfunctions. Through work observations and discussions with Operations staff members, the inspectors verified the staff was knowledgeable of plant conditions, responded properly to alarms, adhered to procedures and applicable administrative controls, cognizant of in-progress surveillance and maintenance activities, and aware of inoperable equipment status. The inspectors performed channel verifications and reviewed component status and safety-related parameters to verify conformance with TS. Shift changes were observed, verifying that system status continuity was maintained and that proper control room staffing existed. Access to the control room was controlled and operations personnel carried out their assigned duties in an effective manner. Control room demeanor and communications were appropriate.

Plant tours and perimeter walkdowns were conducted to verify equipment operability, assess the general condition of plant equipment, and to verify that radiological controls, fire protection controls, physical protection controls, and equipment tagging procedures were properly implemented.

Inadequate CPEA Posting

On November 12, 1992, the inspectors noted that the charging pump room was not posted as a CPEA as is the case normally. The inspectors questioned on-shift HP personnel who confirmed that the room was a CPEA and immediately corrected the posting. The inspectors reviewed surveys conducted on November 9, 1992, and November 15, 1992, before and after this observation, which indicated contamination levels on and around equipment which required posting the charging pump room as a CPEA in accordance with HPP-001, Radiation Control Area Surveillance Program.

An inadequate survey of contamination levels around equipment was the root cause of the improper posting. During C changing pump maintenance on November 11, 1992, the entire charging pump room was posted as an HCA. Late on November 11, a contractor HP technician conducted a survey in preparation for reducing the boundaries of the contaminated working area to that immediately around the "C" charging pump. The survey was inadequate in that no smears were taken on or in the vicinity of the

charging pumps. In fact, only 2 of the 15 smears for contamination were taken on non-walking surfaces; these two were taken on a tool box away from the contaminated process equipment in the room.

The fact that the charging pump room was not posted as a CPEA as required by HPP-001 is a VIO: Failure To Properly Post A Contaminated Process Equipment Area, 92-31-01.

Failure of ERFIS Rod Monitoring Task

At 9:30 a.m. on November 18, 1992, the control room was notified by onsite ERFIS computer personnel of the failure of the ERFIS rod positioning monitor task which occurred at 10:00 a.m. on November 17, 1992. This ERFIS feature senses rod positions and provides indication to control room personnel of improper rod positions. This feature is used to ensure compliance with TS requirements for rod misalignment monitoring. The failure was detected by computer system personnel during the routine daily system log performed on November 18. Prior to this notification, Operations personnel were unaware of any problems with the rod monitoring function. The computer was rebooted and the monitoring task was restored at approximately 9:45 a.m. on November 18, 1992.

Technical Specification Table 3.5-2 Item 15 requires that individual rod positions, as well as, upper and lower ion chamber currents be logged hourly following specified power changes and rod motions if the control rod misalignment task provided by ERFIS is inoperable. Since the failure was not detectable by Operations' normal routine monitoring activities or annunciation, Operations was not provided the opportunity to implement the action statement when the failure actually occurred. Within an hour of the failure being identified to Operations, the rod monitoring feature was restored to service.

After the determination that a rod monitoring task failure could be undetectable, compensatory measures to detect such a failure were initiated. These measures consisted of hourly comparisons of average rod bank positions with those recorded previously. Due to noise in the analog rod position input signals to the computer, the last decimal position of the average rod bank positions tend to fluctuate around some nominal values. Hence, if the average rod bank positions exactly match the values previously observed, then the rod position information is not being updated by the computer, i.e., the rod monitoring task has failed. On November 18, the ERFIS software was modified so the loss of the rod monitoring task would result in a swapover to the standby ERFIS computer and be annunciated in the control room. The inspector determined that this corrective action should be sufficient to ensure that a similar future failure of the rod monitoring task feature will be detectable by normal means.

Turbine Runback Due To NI-42 Malfunction

On November 24, 1992, I & C was requested to investigate the cause of spiking on NI-42. During calibration of the NI-42 instrument drawer, at 12:34 p.m. a series of turbine runbacks occurred. After determining that NI-42 had failed, the operator placed the turbine control system in manual to stop the runbacks at 47% power. At 1:03 p.m., the plant was returned to and maintained at approximately 65% power (below the 70% power turbine runback permissive setpoint) to allow repair of NI-42. The inspectors verified through discussions with Operations personnel and via review of ERFIS printouts and strip chart recordings that the plant had responded as anticipated to the transient. NI-42 was subsequently repaired and the unit returned to full power at 11:46 p.m. the same day.

The inspectors observed I & C technicians perform troubleshooting activities on NI-42. It was determined that the internal +25 VDC instrument transformer in NI-42 had malfunctioned, i.e., the transformer output contained approximately 0.5 volt AC ripple. The AC ripple had adversely affected the NI-42 drawer control power circuit which resulted in a turbine runback and subsequently in blowing of the control power fuses which initiated another turbine runback. The inspectors witnessed I & C repeat the loss of the control power fuses by repeating the applicable calibration steps of LP-705, NIS Power Range Channel N41, N42, N43, and N44. It was shown that when the NI-42 test signal was adjusted to the P-8 bistable setpoint, the AC ripple would cause the P-8 bistable to continuously trip and reset (within milliseconds). The rapid change of state of the P-8 bistable resulted in a control transformer in the NI-42 drawer rapidly turning on and off. The rapid cycling of the control power transformer adversely affected the control power voltage and eventually resulted in the control fuses blowing. The initial turbine runback was attributed to a decrease in control power voltage to less than that required to keep the NI-42 bypass relay energized. NI-42 channel had been placed in bypass per LP-705 to allow the calibration of the channel. At the point in the procedure when the bypass relay de-energized, i.e., the turbine runback signal was unblocked, a greater than 5% change in power in 5 seconds had occurred and thus, a turbine runback was initiated as expected. As indicated above, the control power fuses were subsequently blown and a second turbine runback occurred. The cognizant system engineers explained to the inspectors via use of logic diagrams and CWDs that the turbine runback due to the blown control power fuses was the expected response for this condition.

The continuous turbine runback below 70%, the nominal design turbine reference runback termination point, had previously been identified as a malfunction of the turbine control circuitry. However, troubleshooting had not been successful in determining the cause of this deficiency. Additional troubleshooting activities are being developed for RO-15.

The +25 VDC transformer was found to have a bad capacitor. This capacitor, as well as, two other capacitors were replaced. The

transformer was bench tested, reinstalled in the NI-42 drawer and successfully calibrated before NI-42 was returned to service. At the end of the report period, the system engineer was evaluating a change to the loop calibration procedures which measure the output of the + and - 25 VDC transformers to also verify that the AC ripple is within an acceptable value. If implemented, this PM activity should provide for early detection of capacitor degradation and reduce the potential for similar failures in the future.

The cause of the spiking, the issue which had initiated the troubleshooting activity, was determined to have been caused by an unrelated hardware failure. The isolation amplifier associated with NI-42 was determined to have failed, most likely due to age. The isolation amplifier was replaced. The inspectors have no further questions involving this failure at this time.

Unusual Event Associated With Shutdown Initiation Due To CV Integrity

On December 2, 1992, at 11:00 p.m. a shutdown at 10% per hour was initiated due to a failure to reduce leakage through RCS primary sampling CIVs PS-956E and F to an acceptable level. At 11:05 p.m. an NOUE was declared in accordance with criteria in EAL-2 flowchart Unusual Event Matrix. At 1:12 a.m. on the subsequent day the leakage through the valves was verified to have decreased to an acceptable value. At this time, with reactor power at 78%, the unit shutdown was discontinued and the NOUE was subsequently terminated at 2:20 a.m.. The unit was returned to full power operation at 2:20 a.m. on the same day. State, local, and NRC notifications were performed in accordance with regulatory requirements.

The inspectors was notified by the licensee of the event and reported to the site to directly witness the events on December 3. Through direct observations, WRs and Operations logs reviews, and discussions with Operations, Maintenance, and Technical Support personnel, the inspectors constructed the following sequence of events. On December 2, a management review of OST-909, Sampling System Integrity Test, which was completed as unsatisfactory, resulted in a review to determine if a containment concern existed due to packing leakage on PS-956E and F valves. Later that day at 3:30 p.m., the control room was informed that PS-956F had a packing leak with the valve in the closed position. The valve was declared out of service and the 4 hour LCO associated TS 3.6.3 was entered. Observed leakage was approximately 2 to 3 drops per minute. At 6:05 p.m. the 4 hour LCO was exited when PS-956E and F were failed closed, one of the allowable actions specified by TS 3.6.3. At 6:52 p.m. Operations requested that an operability determination be performed to determine the effect the leakage had on CV integrity. Since the sampling procedure requires manual valves (PS-961C and PS-965B) downstream of PS-956E and F be closed after a sample is taken, seat leakage through PS-956E and F would tend to pressurize the line downstream of PS-956F. This would expose the packing of PS-956F to pressures up to and including normal RCS system pressure (approximately 2235 psig) and could explain why PS-956F has a packing leak when it is

closed. Since, a packing leak on the outboard CIV, PS-956F, indicated a potential for seat leakage through both PS-956E and F, it was decided to open the manual valves downstream of PS-956F and measure the seat leakage through the CV penetration. At 9:45 p.m. the control room was informed that the measured leakage, approximately 50 cc/min., exceeded the allowable leakage, 12 cc/min., established by Technical Support. Based upon this information, the unit was considered to be in a 36 hour to cold shutdown LCO per TS 3.6.3. While Technical Support was evaluating the existing condition, Maintenance and Operations were preparing to work on PS-956E and F. Shortly after 10:00 p.m. maintenance attempted to adjust the closing spring tension on these air operated diaphragm valves. Initial efforts were successful in reducing the seat leakage to approximately 30 to 35 cc/min.; however, additional adjustments were not successful in reducing the seat leakage to a lower value. After Maintenance indicated that it was not possible to reduce the leakage further without potentially damaging the valves, several other options such as cutting and capping the line were considered. However, since there were no clear success path, Operations determined that it would be prudent to initiate a controlled shutdown. The shutdown commenced at 11:00 p.m. and continued until 1:12 a.m. on December 3, at which time it was determined that seat leakage through PS-956E and F had decreased to approximately 10 cc/min.. This leakage rate was verified at the sample sink and at a drain off the sample line upstream of the sample cooler. The reason for the decrease could not be determined. A power increase was initiated and the unit was returned to 100% power at 2:20 a.m.. By 5:05 a.m. maintenance had successfully reduced the packing leak on both PS-956E and F to zero. Work request have been issued to repair these valves during the next opportunity. RCS samples will continue to be taken from an alternate sampling point, the CVCS letdown line. The inspectors have no further questions involving this event at this time.

The inspectors reviewed the Operability Determination No. 92-024 and supporting calculation. The calculation's acceptance criteria was based on the allowable leakage and the known leakage from the IVSW header. The allowable leakage rate minus the known leakage at 46 psig, the IVSW system pressure, was converted to an equivalent leakage rate at 2235 psig, the RCS pressure. This value, approximately 12 cc/min., then became the acceptance criteria for CV integrity for leakage through PS-956E and F and formed the basis for evaluating the operability of the penetration. The inspectors agreed that this was an acceptable approach to ensuring that CV integrity properly considered.

The inspectors noted that the SS log did not contain an explanation why the unit shutdown was initiated at 11:00 p.m.. This was discussed with the SS who indicated that he thought that he had included that information in the log but had forgotten to do so.

The inspectors noted that Operations' response to the event was good. On October 15, 1992, a small packing leak was observed of PS-956F and a work request was issued to correct the condition. At that time, the small amount of packing leakage was determined not to be a CV concern

and there was no known seat leakage through the valve; the fact that packing leakage could be indicative of seat leakage was not considered at the time. On December 2, the recognition that a potential CV issue might exist based upon only 2 to 3 drops per minute packing leakage demonstrated a positive questioning attitude. In addition, the decision to initiate a shutdown upon notification that the method being attempted to stop the leakage had failed demonstrated a sensitivity to safety issues, CV integrity and time to shutdown the unit down in a controlled, unhurried manner. This decision exemplified management's commitment to safety and desire to ensure that plant operations are performed in a controlled, calm environment.

One violation was identified. Except as noted above, the area/program was adequately implemented.

4. Surveillance Observation (61726)

The inspectors observed certain safety-related surveillance activities on systems and components to ascertain that these activities were conducted in accordance with license requirements. For the surveillance test procedures listed below, the inspectors determined that testing was accomplished by qualified personnel in accordance with an approved test procedure, and test instrumentation was properly calibrated. Upon test completion, the inspectors verified the recorded test data was complete and accurate, test discrepancies were properly documented and rectified, and that the systems were properly returned to service. Specifically, the inspectors witnessed/reviewed portions of the following test activities:

OST-107	Boric Acid Blender Control, Valve, and Pump Operation
MST-902	Battery Test - Daily (5 Days per Week)

Battery Test Daily

The inspectors observed performance of the daily battery checks used to verify proper battery cell voltages and specific gravities. While the measurement of voltages and specific gravities was satisfactory, the inspectors noted that the electrician performing the test repeatedly placed a clipboard and digital multimeter on the battery terminals. Though both the clipboard and multimeter were non-conducting, this practice conflicted directly with a warning posted at the entrance to the battery room. The notice stated "Electrical Shock Hazard Do not place any object on or near these batteries." The fact that this practice conflicted with the warning on the door was identified to the electrician by the inspectors. However, the worker elected to continue the practice. This poor practice was discussed with the appropriate supervisor.

No violations or deviations were identified. Except as noted above, the area/program was adequately implemented.

5. Maintenance Observation (62703)

The inspectors observed safety-related maintenance activities on systems and components to ascertain that these activities were conducted in accordance with TS, approved procedures, and appropriate industry codes and standards. The inspectors determined that these activities did not violate LCOs and that required redundant components were operable. The inspectors verified that required administrative, material, testing, and fire prevention controls were adhered to. In particular, the inspectors observed/reviewed the following maintenance activities:

WR/JO 92-ARRP1	Troubleshoot the A Accumulator Alarm
WR/JO 92-ASLZ1	Investigate NI-42 Spiking
WR/JO 92-ARPG1	EDG B Oil Replacement
WR/JO 92-AQGL1	EDG B Air Start Solenoid Valve Leak Repair

No violations or deviations were identified. Based on the information obtained during the inspection, the area/program was adequately implemented.

6. Cold Weather Preparation (71714)

The inspectors examined the licensee's cold weather preparation program. As a part of this effort, the inspectors witnessed accomplishment of check list E-057, a PM on freeze protection circuitry associated with safety-related equipment. This PM used the intensity of indicating lights installed on the FPPs as a check of the condition of freeze protection circuits. For circuits for which no indicating lights were installed, the technicians performing the PM verified proper circuit operation using current readings. No deficiencies were noted in the accomplishment of checklist E-057.

The inspectors compared EDP-009, Freeze Protection Panels; safety-related freeze protection checklists E-057 and E-058; and system drawings. Administrative inconsistencies noted include:

FPP-25 C-14 provides freeze protection for a portion of the AFW flow path from the SDAFW pump. FPP-25 C-14 is designated as supporting safety-related equipment on EDP-009 and, as such, is checked on (safety-related) check lists E-057 and E-058. FPP-25, C-15 and FPP-25 C-16 are used to support adjacent portions of the AFW flow path. However, FPP-25 C-15 and C-16 are not listed as supporting safety-related equipment on EDP-009 or checked on safety-related checklists E-057 or E-058.

FPP-28 C-27 provides strip heaters for the cabinets containing main steam header pressure transmitters. Despite the fact that these transmitters provide an input to the ESF actuation circuitry, they are not designated as supporting safety-related

equipment in EDP-009 nor are they checked on safety-related checklists E-057 or E-058. It was noted by the inspectors that supplemental freeze protection was provided for the cabinets by a portable heater.

FPP-22 C-15 provides freeze protection for the SDAFW pump gland leakoff and steam supply pressure instrumentation. This circuit is not designated as supporting safety-related equipment nor is it checked by (safety-related) checklist E-057 or E-058.

Circuits identified as supporting safety-related equipment are checked three times per week during cold weather while the remaining circuits are checked once per week. Thus, the safety significance of these administrative deficiencies is minor since all circuits are checked at least weekly. Nevertheless, these administrative deficiencies result in incomplete application of safety-related checklists E-057 and E-058 and hence, result in an inconsistent frequency of performance verification of some safety-related circuits.

The inspectors performed a walkdown of freeze protection circuitry associated with: SDAFW pump, SW pumps, circulation water pumps, intake structure fire protection piping, PWST level sensing instrumentation (LSL 1948 and LSL 1949), and RWST level sensing instrumentation. The following material deficiencies were noted:

A 3-foot section of insulation on the AFW pump recirculation piping to the CST had been removed to support ultrasonic flow measurement. While some licensee personnel were aware of this removal, no measures had been implemented to compensate for reduced freeze protection on this portion of the recirculation line. Licensee personnel indicated that a removable cover for this section of piping had been available in the past. Likewise, the insulation had also been removed from the freeze protected flow orifice RO 1413 in the same recirculation piping without any compensatory measures. A removable cover was installed on the piping used for ultrasonic flow measurement after the deficiency was identified to the licensee by the inspectors. The licensee indicated that the insulation would be installed on the orifice in the near future.

Exposed portions of heating cable on the gland seal and bearing water supply piping for A and B circ water pumps was cool to the touch despite the associated circuit power indicating light exhibiting a normal glow. A WR was issued to correct this condition.

A walkdown of fire protection piping at the intake structure by the inspectors revealed that though most piping was equipped with heating cable, some overlaying insulation was missing. The appropriate maintenance supervisor was aware of this and indicated that the remaining work would be completed in the near future.

These deficiencies were identified to licensee personnel for resolution.

Four portable heaters installed in the turbine building to supplement freeze protection of key plant instrumentation were also inspected. The inspectors verified that the heaters were installed in accordance with AP-015, Portable Heaters/Heating Devices. Additionally, the inspectors verified performance of the weekly heater/heating device inspection by fire protection personnel. No deficiencies were noted. Interviews of three shift supervisors indicated that placement of these heaters was not defined in any plant document, instead heaters were placed around equipment with a historical susceptibility to freezing. No method, such as a PM work request, was identified which ensures that heaters are placed in all the desired locations.

Selected operations shift personnel were interviewed. Operators displayed an acceptable understanding of their duties when cold weather protection guidelines were in effect.

The potential for mis-diagnosis of freeze protection circuit performance as a result of subjective interpretations of variations in indicator light intensity was discussed with the licensee. The potential of using freeze protection circuit current as a more reliable indicator of performance was discussed with the Manager of Electrical Systems.

No violations or deviations were identified. While the assessment of freeze protection circuitry performance relied heavily on a subjective technique and the requirements for portable heater placement and timing were not formally documented, the overall program was considered adequate.

7. Reliable Decay Heat Removal During Outages (TI 2515/113)

Information was obtained on practices for maintaining reliable decay heat removal during outages. This information was transmitted to NRR for further review. The inspectors have no further questions at this time.

8. Followup (92700, 92701, 92702)

(Closed) P2191-03 Part 21 Report From Rockbestos. This Part 21 addressed the activation energy of Firewall SR and Firezone R cables produced with KS-500 silicone rubber insulation. The licensee determined that the referred cables are installed at the site; however, they are installed in non-environmentally qualified, non-safety related applications. Thus, this item is considered closed.

(Closed) IFI 90-30-02 Establishment of a PM Route to Inspect Service Water Piping. This IFI concerned the lack of a valid preventative maintenance route which would include periodic inspections of the service water system. Significant degradation had been noted previously in certain piping runs of the service water system which had not received periodic inspections by the licensee. As a result of this

condition and the inspectors' concern, the licensee has established a PM route (number 2S-RO-004) which is implemented every refueling outage. This PM route required that the SW system engineer ensure that appropriate inspection activities be conducted on a representative sampling of the service water system during every refueling outage. Accordingly, this item is considered closed.

(Closed) VIO 91-14-03, Failure To Maintain Logs As Required By Operating Procedures. The inspectors reviewed the licensee's response to the NOV, dated July 23, 1991. The corrective actions were considered to be appropriate. The corrective actions appeared to have been successful in that since the violation was issued, the inspectors have not identified other examples of failure to document entries into TS LCOs in the Shift Supervisor's Log. Although there has been recent examples in which log entries have been incomplete, see IR 92-27 and paragraph 3 above, the inspectors have noticed a significant improvement in the amount and quality of the information contained in the official logs. Thus, based upon these improvements and lack of repetition of the cited violation, this item is considered closed.

(Closed) VIO 91-17-02, Failure to Use a Work Request to Perform Maintenance Activities. This violation concerned the failure of maintenance personnel to obtain the proper authorization to perform voltage readings during the performance of maintenance activities on valve SI-867A, BIT inlet valve. This failure to obtain proper authorization led to the tripping of the breaker from the power supply to the valve and the valve being subsequently declared inoperable. The immediate corrective actions were to remove the test equipment and reset the breaker. Subsequent testing verified the operability of the valve. Long term corrective actions to provide training to the individuals involved, as well as, other individuals in the affected organizations has been completed. This training emphasized the need to ensure that proper work authorizations are received prior to commencing any work activities and also to ensure that all test equipment is of the proper type before work is accomplished. Based on the satisfactory completion of the required corrective actions, this item is considered closed.

No violations or deviations were identified.

9. Exit Interview (71701)

The inspection scope and findings were summarized on December 15, with those persons indicated in paragraph 1. The inspectors described the areas inspected and discussed in detail the inspection findings listed below and in the summary. Dissenting comments were not received from the licensee. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection.

Item Number	Description/Reference Paragraph
92-31-01	VIO - Failure To Properly Post A Contaminated Process Equipment Area

10. List of Acronyms and Initialisms

a.m.	Ante Meridiem
AC	Alternating Current
AFW	Auxiliary Feedwater
CFR	Code of Federal Regulations
CIV	Containment Isolation Valve
CPEA	Contaminated Process Equipment Area
CST	Condensate Storage Tank
CIV	Containment Isolatio Valve
CV	Containment Vessel
CVCS	Chemical Volume Control System
CWD	Control Wiring Diagram
EAL	Emergency Action Level
EDG	Emergency Diesel Generator
EDP	Electrical Distribution Procedure
ERFIS	Emergency Response Facility Information System
F	Fahrenheit
FPP	Freeze Protection Panel
HCA	High Contamination Area
HP	Health Physics
HPP	Health Physics Procedure
I&C	Instrumentation & Control
i.e.	That is
IFI	Inspector Followup Item
IR	Inspection Report
IVSW	Isolation Valve Service Water
LCO	Limiting Condition for Operation
LCV	Level Control Valve
LP	Lesson Plan
LSL	Level Switch - Low
MST	Maintenance Surveillance Test
NIS	Nuclear Instrumentation System
NOUE	Notice Of Unusual Event
NOV	Notice of Violation
NRC	Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulation
OST	Operations Surveillance Test
p.m.	Post Meridiem
PM	Preventative Maintenance
PWST	Primary Water Storage Tank
RO	Refueling Outage
SDAFW	System Driven Auxiliary Feedwater
SI	Safety Injection
SS	Shift Supervisor
SW	Service Water
TI	Temporary Instruction

TS	Technical Specification
VDC	Volts Direct Current
VIO	Violation
W/R	Work Request
WR/JO	Work Request/Job Order