



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA STREET, N.W., SUITE 2900
 ATLANTA, GEORGIA 30323-0199

Report Nos.: 50-413/94-26 and 50-414/94-26

Licensee: Duke Power Company
 422 South Church Street
 Charlotte, NC 28242

Docket Nos.: 50-413 and 50-414

License Nos.: NPF-35 and NP-52

Facility Name: Catawba Nuclear Station Units 1 and 2

Inspection Conducted: September 11, 1994 - October 8, 1994

Inspectors: *R. J. Freudenberger* 11/2/94
 R. J. Freudenberger, Senior Resident Inspector Date Signed
 J. Zeiler, Resident Inspector

Approved by: *Marvin V. Sinkule* 11/3/94
 Marvin V. Sinkule, Chief Date Signed
 Projects Branch 3
 Division of Reactor Projects

SUMMARY

Scope: This resident inspection was conducted in the areas of plant operations, maintenance, engineering and plant support. As part of this effort, backshift inspections were conducted.

Results: In the plant operations area, overall operator response to a Unit 2 reactor trip was assessed as adequate (paragraph 3).

In the maintenance area, procedural adherence and adequacy problems associated with maintenance of a Control Area Chill Water (YC) pump resulted in the licensee spending excessive time in a Technical Specification action statement (paragraph 4.a). The licensee's planned corrective actions for the increased number of missed Technical Specification surveillances were appropriately focused (paragraph 4.d).

In the engineering area, while predictive maintenance monitoring of pump vibration was effective, weaknesses were identified in the licensee's ASME Section XI Inservice Testing program. These weaknesses involved the untimely system engineering reviews of

ENCLOSURE

Inservice Testing data, as well as potentially inadequate procedures and evaluation of "smooth running" pump vibration data. An Unresolved Item (URI 50-413,414/94-26-01: Review Adequacy of Inservice Testing Procedures) was identified regarding these items (paragraph 6.a). An Inspector Followup Item (IFI 50-413,414/94-26-02: Review Timeliness of Part 21 Review of Trip and Throttle Valve Problem) was identified to followup on the reason why the site had not been informed of a 10 CFR Part 21 on a potential valve problem in a timely manner (paragraph 6.b).

In the plant support area, greater licensee sensitivity was warranted to ensure that the Emergency Notification System was working properly when a plant telephone service problem was identified (paragraph 7).

REPORT DETAILS

1. PERSONS CONTACTED

Licensee Employees

B. Addis, Training Manager
S. Coy, Radiation Protection Manager
J. Forbes, Engineering Manager
W. Funderburk, Work Control Superintendent
T. Harrall, IAE Superintendent
*D. Kimball, Safety Review Group Manager
W. McCollum, Station Manager
W. Miller, Operations Superintendent
*M. Patrick, Safety Assurance Manager
R. Propst, Chemistry Manager
D. Rehn, Catawba Site Vice-President
J. Roach, Security Manager
D. Rogers, Mechanical Superintendent
*Z. Taylor, Regulatory Compliance Manager
*D. Tower, Regulatory Compliance Engineer

*Attended exit interview.

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

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

2. PLANT STATUS

a. Unit 1 Summary

Unit 1 began the report period operating at approximately 63 percent power in support of repairs to the 1A main feedwater pump. That same day, the unit returned to full power operation and remained at essentially full power for the remainder of the report period.

b. Unit 2 Summary

Unit 2 began the report period operating at full power. On September 13, the unit tripped as a result of the 1C Main Steam Isolation Valve unexpectedly going closed. On September 16, the reactor was restarted and the unit reached 65 percent power the following day. Power was held at 65 percent until September 19 while replacing a letdown relief valve that was found leaking. The unit reached full power that same day. A power reduction to 65 percent was initiated on September 21 in order to repair a lube oil leak on the 2A main feedwater pump. The unit resumed full power September 22 and remained at essentially full power for the remainder of the report period.

c. Inspections and Activities of Interest

On September 20, representatives from the NRC Office of Nuclear Reactor Regulation were on-site for a management visit including Mr. H. Berkow, Director, Project Directorate II-3, Mr. R. Martin, Catawba Licensing Project Manager, and Mr. V. Nerses, McGuire Licensing Project Manager.

During the weeks of September 12 and October 3, a specialist inspection of the licensee's Radiological Effluents and Confirmatory Measurements Program was conducted. Results of this inspection are documented in NRC Inspection Report 50-413,414/94-25.

During the weeks of September 26 and October 3, a specialist inspection of the licensee's Operator Requalification Program was conducted. Results of this inspection are documented in NRC Inspection Report 50-413,414/94-20.

3. **PLANT OPERATIONS** (NRC Inspection Procedure 71707)

Throughout the inspection period, facility tours were conducted to observe operations and maintenance activities in progress. The tours included entries into the protected areas and the radiologically controlled areas of the plant. During these inspections, discussions were held with operators, radiation protection technicians, instrument and electrical technicians, mechanics, security personnel, engineers, supervisors, and plant management. Some operations and maintenance activity observations were conducted during backshifts. Licensee meetings were attended by the inspectors to observe planning and management activities. The inspections confirmed licensee compliance with 10 CFR, Technical Specifications, License Conditions, and Administrative Procedures.

Unit 2 Reactor Trip due to Main Steam Isolation Valve Closure

On September 13, at approximately 6:54 p.m., the Unit 2 reactor tripped from full power. The automatic trip occurred on Over Power Differential Temperature as a result of the unexpected closing of the 2C MSIV. Almost immediately following the reactor trip, both the motor and turbine driven auxiliary feedwater pumps auto-started as expected when level in two steam generators reached the low-low setpoint. Shortly afterwards, a feedwater isolation occurred when average RCS temperature decreased to 564°F. As a result of the subsequent RCS cooldown, pressurizer level reached 17 percent resulting in the automatic isolation of normal letdown.

While stabilizing the unit in Mode 3 the operators experienced several minor equipment complications. The more significant of these complications were reviewed in detail by the inspector and are discussed below:

- While attempting to reset the CA auto-start signal, the operators did not obtain proper indication, via status lights, that the CA system had reset properly. The operators successfully reset the CA auto-start signal during the fourth and third attempt for A and B train, respectively. Following the reset, the operators were able to establish control of CA flow to each of the steam generators. The licensee performed a detailed investigation into this problem. Portions of the CA reset circuitry were checked and testing was conducted to demonstrate that aspects of the circuitry worked as expected. It was determined that the probable cause was that the operators did not depress the reset pushbuttons long enough for a one second timer in the circuitry to complete its cycle and clear the auto-start signal present. The licensee provided guidance to the operators on the need to depress the reset pushbutton until the reset light illuminates. The inspector concluded that the licensee had adequately investigated and determined the most probable cause of the problem.
- When letdown isolated automatically on low pressurizer level, the operators appropriately entered the correct abnormal procedure (AP/2/A/5500/12, Loss of Charging or Letdown) for restoring normal letdown. While attempting to warm the letdown line before placing normal letdown in service, letdown flow orifice control valve 2NV-849 would not open when manually throttled to 10 percent demand. After discussing the situation with the other operators, the Shift Operations Manager (a Senior Reactor Operator) decided that the intent of the letdown procedure step (i.e., warming the letdown line) could be met by opening 2NV-11A, Letdown Orifice 2C Outlet Control Valve, for the 45 gpm normal letdown flowpath. Normal letdown was subsequently established successfully without any further problems.

The inspector reviewed the letdown procedure and operator actions to re-establish normal letdown. The "Response Not Obtained" (RNO) to the procedure step for establishing normal letdown, was for excess letdown to be established. There were no other RNOs in the substeps for completing the normal letdown alignment, such as opening 2NV-849. The inspector judged that, while there was no RNO specifically for opening 2NV-849, the correct usage of the procedure had been to follow the RNO for the overall step and establish excess letdown. The inspector determined that adequate operator consideration for using valve 2NV-11A occurred prior to its opening and using this valve as opposed to establishing excess letdown had no safety impact on the recovery process. However, this example indicated a need for greater operator attention to the procedure RNO applicability and usage.

Licensee investigation into the problem with 2NV-849 identified that the valve would start opening at approximately 65 percent demand. It was determined that a valve setup problem existed, but the valve would still operate properly. The licensee implemented changes to procedure AP/2/A/5500/12 to provide guidance for

dealing with this demand indication problem in order to avoid a similar problem while re-establishing letdown. Maintenance to correct the setup problem was planned for the upcoming refueling outage. Based on review of the changes to the procedure, the inspector determined that the licensee's interim actions were acceptable.

The inspector reviewed the licensee's investigation into the cause of the closure of the 2C MSIV. The licensee identified that a normally energized auxiliary relay in the control circuit for the MSIV had failed, resulting in the valve closure. This Cutler-Hammer relay failure was determined to be directly related to a random failure of an internal component resulting in a short circuit of the relay coil. The licensee replaced the relay and determined that since this was a random failure, it was not necessary to replace any like relays in other applications.

The inspector attended the licensee's post-trip assessment meeting and reviewed transient data of the trip. It was determined that the licensee adequately identified the cause of the trip, as well as all activities necessary to be completed prior to startup.

4. MAINTENANCE (NRC Inspection Procedures 62703 and 61726)

Surveillance tests were observed to verify that approved procedures were being used; qualified personnel were conducting the tests; tests were adequate to verify equipment operability; calibrated equipment was utilized; and TS requirements were appropriately implemented.

In addition, the inspector observed maintenance activities to verify that correct equipment clearances were in effect; work requests and fire prevention work permits, as required, were issued and being followed; quality control personnel performed inspection activities as required; and TS requirements were being followed.

The following items were reviewed in detail:

a. Control Area Chill Water Pump A Repair

On September 29, the licensee declared the A YC Pump inoperable after vibration data taken that day indicated an inboard pump bearing problem. This placed both units in a 7-day action statement per TS 3.7.6.a due to an inoperable train of Control Room Area Ventilation System. The pump repair activity was performed by the licensee under WO 94074989-01, using procedure MP/O/A/7450/32, Control Room Chilled Water Pump Corrective Maintenance. When the pump was disassembled, it was determined that the inboard pump bearing was severely degraded. There was evidence that the bearing locknut may have gradually come loose due to the bearing lock washer coming unsecured. This would have allowed movement of the bearing on the pump shaft and resulted in increased bearing wear. The licensee replaced the pump inboard

and outboard bearings, as well as the pump impeller assembly due to excessive vibration readings obtained when the impeller was balance tested. The licensee completed the repair activity on October 4. After completing post-maintenance testing, the A train Control Room Ventilation System was declared operable the next day.

The inspector observed/monitored the progress of activities associated with the repair activity, discussed the activity with the maintenance technicians involved, and reviewed the completed WO package after the repair activity was completed. The inspector noted that several problems occurred during the repair activity related to weaknesses both in the quality of the corrective maintenance procedure that was used and personnel adherence to the corrective maintenance procedure. The more significant of these included: (1) beginning the pump repair with the wrong pump corrective maintenance procedure due to the wrong procedure being called for in the WO instructions; (2) two pump reassembly steps were backwards; (3) the incorrect size and torque values were listed for pump gland nuts; and (4) a procedure step was missed involving a final pump alignment check. The inspector reviewed each of these problems, determining that they were properly resolved and that PIPs were initiated as appropriate. As a result of these problems and other complications, the pump was not returned to service until October 5, resulting in the licensee operating in the TS action statement longer than expected.

b. Unit 1 CAPT Speed Indication Problem Troubleshooting

On September 29, the inspector witnessed and reviewed activities associated with the troubleshooting and repair of the loss of Unit 1 CAPT speed indication in the control room. This activity was performed under WO 94049869-01. As part of the troubleshooting activity, IAE technicians verified the calibration of the CAPT speed controls using procedure IP/1/A/3030/11, Calibration Procedure for Auxiliary Feedwater Pump Turbine Speed Control and Indications. The only problem found was that the turbine overspeed trip setpoint was slightly out of calibration. The setpoint was properly adjusted to within its acceptance range. Upon completing the calibration procedure, the CAPT was operated and it was verified that the control room indication of pump speed was working properly. After the IAE technicians discussed the results with engineering personnel, no further troubleshooting was determined necessary.

While no discrepancies were identified from the inspector's review of the licensee's troubleshooting activities, it was noted that the root cause of the initial speed indication problem had not been identified. The inspector was concerned that an intermittent problem might still exist that could jeopardize the proper operation of the CAPT overspeed protection function, such as a problem with the pump's magnetic speed pickup device. After

further investigation, the inspector learned from reading the control room operator logs that the speed indication problem was identified when the pump was operated on June 24. At that time, the licensee verified that the local speed indication in the CAPT room was operating properly. This information helped confirm that the magnetic speed pickup and hence the overspeed protection circuitry was functioning properly. Based on this, the inspector determined that the problem had only involved the control room speed indication. The inspector considered that a more thorough engineering evaluation of the root cause would have been appropriate prior to the decision to discontinue troubleshooting.

c. Diesel Generator 1B Operability Testing

On September 27, the inspector witnessed the 1B DG being tested in accordance with procedure PT/1/A/4350/02B, Diesel Generator 1B Operability Test. The purpose of this testing was to verify the proper operation of the DG and to satisfy the surveillance requirements of TS 4.8.1.1.2.

While verifying that all annunciators on the DG engine control panel were working properly, the non-licensed operators conducting the DG test noticed that the annunciator for a malfunction of the DG room ventilation system would not illuminate. The operators contacted their supervisor concerning the problem. It was determined that this problem had been identified earlier as a panel indication problem which did not impact the proper operation of the DG room ventilation system. Based on this determination, the DG test was allowed to continue. The inspector considered the operators' actions in dealing with the annunciator problem to be appropriate.

In accordance with the DG test procedure, prior to starting the engine, it was rolled on air to verify that there was no evidence of cooling water leakage into any of the cylinders. The inspector verified that the operators also monitored for a sticking cylinder air start valve during the engine roll. On September 8, the 1A DG had failed to start due to a sticking air start valve. Since that occurrence, the operators had been provided guidance on the symptoms for a sticking air start valve and given additional engine monitoring criteria to meet. This criteria involved verifying that the engine flywheel rotated smoothly with at least five revolutions, as well as ensuring that the proper amount of air was consumed from the starting air tanks. No discrepancies were identified when the engine was rolled on air.

Since this was the first DG start of the month, IAE personnel placed an electrical jumper in the DG control circuitry to simulate an emergency start signal. After the DG was started, the operators successfully paralleled the DG to the plant grid and operated it for approximately one hour fully loaded. The inspector witnessed portions of the DG operation and later

reviewed the completed test procedure. No discrepancies were identified.

d. Review of Missed Technical Specification Surveillances

Due to concerns over the increased number of missed TS surveillances that had occurred over the past several months, the inspector performed a cursory review of these items and the licensee's corrective actions to address this problem. The issues reviewed were reported in the following LERs:

- LER 413/94-02: Missed Technical Specification Surveillance Requirement.
- LER 414/94-04: Missed IWV Stoke Time Tests due to Written Communication.
- LER 413/94-07: Missed Technical Specification Surveillance 4.7.6.b due to Work Practices.
- LER 413/94-08: Missed Technical Specification Surveillance Due to Improper Work Practices.

From this review, the inspector did not identify that there was an obvious common root cause or underlying programmatic breakdown. The inspector noted that the licensee recognized the increased number of missed surveillances and was planning broader scope corrective actions as a result. These planned corrective actions included: (1) the inclusion of all TS related testing into the Work Management System scheduling computer program, and (2) a review and comparison of how other nuclear stations schedule and control TS surveillances. The inspector concluded that a centralized scheduling system should help prevent future missed surveillances. The inspector discussed the status of this first item with licensee personnel. It was indicated that most TS surveillances had been loaded into the Work Management System, and by late October, this scheduling system may be implemented. The inspector will continue to monitor the licensee's progress toward the implementation of this process.

Overall, surveillance and maintenance activities observed and discussed above were performed in a satisfactory manner in accordance with procedural requirements and met the requirements of the TS.

6. **ENGINEERING** (NRC Inspection Procedures 37551 and 92903)

a. Increased Vibration Detected on A YC Pump

On September 29, vibration data collected as part of predictive maintenance on the A YC pump was evaluated by a licensee engineering vibration specialist and it was determined that an inboard bearing problem existed. The pump was subsequently

declared inoperable and corrective maintenance was performed. This maintenance activity was discussed in detail in paragraph 4.a.

The inspector reviewed the September 29 A YC pump vibration results, reviewed previous ASME Section XI (inservice testing) vibration results on the A YC pump, discussed the vibration results with engineering personnel, and reviewed the licensee's various programs for monitoring pump vibration trends.

The inspector determined that the licensee has established an effective predictive maintenance program for monitoring pump vibration. Monthly vibration data is collected and evaluated on safety-related, as well as certain nonsafety-related pumps. The licensee's engineering vibration specialist was considered knowledgeable and aggressively pursues potential vibration problems. The September 29, vibration monitoring had been part of this predictive maintenance program.

The inspector noted that inservice vibration test results obtained on September 15, had increased by as much as a factor of 2.5 for some points from the previous inservice test results obtained on June 23. Although vibration had increased by this magnitude, the September 15, results were still within the inservice testing acceptance range established. Based on this, no actions had been required per the inservice test procedure that was performed. The inspector determined that the licensee's inservice testing program had not been effective in detecting this deviation (increase) in vibration. The inspector considered that several factors contributed toward this problem. First, the inservice test data collected for the A YC pump on September 15, had not been reviewed in a timely manner by system engineering personnel responsible for the inservice testing program. By September 29, when the bearing problem was identified from subsequent vibration measurements, the previous vibration data had not been reviewed. Second, the pump inservice testing procedure does not require the actual comparison of the measured vibration results with the pump's reference values. While vibration velocity limits are defined in the procedure, the pump vibration reference values are not listed. This makes it impossible to detect vibration deviations, that may still be within the pump's acceptance range. The inspector determined that this was more of a problem associated with pumps classified as "smooth running," since the acceptance range for these pumps are assigned absolute vibration velocity limits as opposed to multipliers of the vibration reference values. The inspector questioned whether this met the intent of ASME Section XI, Article IWP 3100 for inservice test procedures which states in part that, "...each measured test quantity shall be compared with the reference value of the same quantity..." At the end of the report period, the inspector was continuing to discuss these issues with the licensee and NRC Inservice Testing Program experts. Pending further review, this issue will be carried as

Unresolved Item (URI) 50-413,414/94-26-01: Review Adequacy of Inservice Testing Procedures.

b. Auxiliary Feedwater Turbine Trip and Throttle Valve Problem

During this report period, the inspector was informed that a problem had been identified with the Gimpel manufactured T&T valve of the auxiliary feedwater pump turbine at the Davis-Besse Nuclear Station. After receiving abnormal valve indication when the valve was tripped, it was determined that the T&T valve stem had unthreaded from a coupling that was used to join the two sections of the stem. The cause was determined to be a loose coupling set screw that holds one section of the valve stem in the coupling. In addition, the valve stem did not have an indentation for the set screw to properly engage the stem and the coupling set screw threads were not fully developed to allow the set screw to make contact with the stem. On August 5, 1994, a 10 CFR Part 21 notification report was submitted to the NRC for this problem by Dresser-Rand Company, the current Vendor for this equipment.

On September 29, the inspector discussed the problem and status of the licensee's evaluation with site engineering personnel. The Gimpel T&T valve is used in the same application at Catawba. It was discovered that the site had not received information regarding the problem. Later that day, the licensee operated the Unit 1 CAPT as part of a normally scheduled surveillance test. The inspector witnessed the testing and verified that proper valve indication was received when the T&T valve was cycled. Also, the Unit 2 CAPT had been tested on September 27. The inspector verified via discussions with the control room operators who operated the CAPT that proper indication was received when the T&T was cycled.

On October 3, after obtaining the Part 21 information, the licensee inspected the CAPT T&T valve stem tightness and set screw engagement on each unit. The Unit 1 valve stem was fully inserted into the coupling, but could be rotated. This indicated that the set screw was not properly engaged to the valve stem. In addition, there was no indentation found on the valve stem for the set screw to rest. The set screw was subsequently tightened and locktite was applied to help prevent it from backing out. When Unit 2 was inspected, the valve stem was found tightly secured in the coupling; however, the valve stem lacked an indentation. Based on these results, the licensee planned to check the tightness of the valve stem after each cycling of the T&T valve until each valve stem was machined with a set screw indentation. These modifications were planned during the next refueling outage on each unit.

The inspector determined that once the licensee was informed of the issue, proper corrective actions were implemented. At the end of the report period, the inspector was continuing to investigate

the reason why the site failed to be informed of the 10 CFR Part 21 in a timely manner. The results of this review will be addressed in a subsequent inspection. This issue is identified as Inspector Followup Item 50-413,414/94-26-02: Review Timeliness of Part 21 Review of T&T Valve Problem.

- c. (Closed) LER 413/93-05: Technical Specification Test Deficiency Due to Manufacturer Fabrication.

On March 1, 1993, the NRC resident inspectors notified the licensee that certain SSPS wiring errors had been found at facilities with similar equipment. The following day the licensee determined that wiring for the SSPS Train A, Phase B Containment Isolation logic test circuit for both units was incorrect. Due to these wiring errors, the periodic TS surveillance testing for the Phase B Containment Isolation Automatic Actuation Logic and Actuation relays had never been conducted properly. That same day, the licensee corrected the wiring error on Unit 1 and properly tested the circuitry. Since Unit 2 was in No Mode at the time, the wiring error corrections and testing was not completed until March 9, 1993.

These wiring errors were attributed to a manufacturer fabrication deficiency. It was determined that both Units' SSPS Train A, Phase B Containment Isolation logic testing circuitry was wired wrong at the manufacturer's facility. Since this problem was identified, the manufacturer of the SSPS equipment, as well as the NRC, has distributed an information notice to alert other facilities about these wiring problems.

The inadequate TS surveillance for Train A, Phase B Containment Isolation logic was the subject of Non-Cited Violation 413,414/93-09-03, which was addressed in NRC Inspection Report 50-413,414/93-09. The inspector verified that the licensee's corrective actions, which included the wiring corrections and testing, were completed by reviewing WOs 93017239-01 (Unit 1) and 93017327-01 (Unit 2). Accordingly, this item is considered closed.

- d. (Closed) LER 413/93-06: Reactor Trip Due to Blown Fuse in Intermediate Range Channel.

On June 12, 1993, Unit 1 was in Mode 2 (Unit Startup) and shutting down to make tube repairs in the main condenser when an automatic reactor trip occurred due to high flux trip bistable actuation on Intermediate Range Channel N35. This signal was generated by the loss of control power voltage to N35 caused by a blown fuse. Initially, the licensee was unable to determine the cause of the blown fuse; therefore, interim corrective actions included replacing the entire N35 drawer, testing the new drawer, and placing N35 back in service.

Subsequent testing of the faulty N35 drawer revealed that the cause of the blown fuse was a combination of two factors: (1) a control power in-rush current capacity problem, and (2) an intermittent failure of the N35 detector high voltage power supply. Corrective actions included replacing the detector high voltage power supply and replacing all control and instrument power fuses in both Units' Nuclear Instrumentation System with a type that has a much higher in-rush current capacity. The results of the licensee's continued investigation into the cause of the N35 blown fuse and corrective actions were documented in Revision 1 of LER 413/93-06, dated March 1, 1994.

The inspector reviewed the WOs which implemented the previously described equipment replacements and associated testing and verified licensee corrective actions had been completed. Accordingly, this item is considered closed.

7. **PLANT SUPPORT (NRC Inspection Procedure 71750)**

Offsite Communications Degradation

On October 6, at approximately 5:00 p.m., the inspector noticed that the NRC resident office long distance FTS 2000 telephone circuits were not operating properly. Since the licensee's ENS is part of the FTS 2000 government telephone network, the inspector contacted personnel in the control room to determine if the ENS was still operating properly. The Operations Shift Manager indicated that at approximately 3:00 p.m. he had been alerted to a problem with the local commercial offsite telephone circuits, but was not aware of any impact to the ENS or other plant telephone service. Based on concerns over the condition of the ENS, the inspector requested that it be checked. The licensee subsequently discovered that the ENS and other emergency FTS 2000 phone circuits were out of service. The emergency communications systems (Selective Signaling System) used to notify and activate the state/county emergency response network was determined to be operating properly. In addition, the licensee's commercial long distance telephone circuits were not affected. It was later learned from the commercial phone carrier that a fiber optic cable had been cut during road construction work, causing the loss of FTS 2000 telephone service.

In accordance with 10 CFR 50.72.b.1.v, the licensee notified the NRC Operations Center of the loss of FTS communications via the licensee's normal long distance telephone circuits. All telephone communications were restored at 8:43 p.m., following repair of the telephone cable.

The inspector discussed with the licensee why it was not recognized earlier that the ENS was degraded. Apparently, inadequate communication occurred when the Operations Shift Manager was initially alerted to the problem, in that the potential impact to the ENS was not discussed. The inspector considered that greater attention should have been given to ensuring the proper operation of the ENS circuitry.

8. EXIT INTERVIEW

The inspection scope and findings were summarized on October 12, 1994, with those persons indicated in paragraph 1. The inspector described the areas inspected and discussed in detail the inspection findings addressed in the summary and listed below. No dissenting comments were 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.

<u>Item Number</u>	<u>Status</u>	<u>Description and Reference</u>
URI 413,414/ 94-26-01	Open	Review Adequacy of Inservice Testing Procedures (Paragraph 6.a).
IFI 413,414/ 94-26-02	Open	Review Timeliness of Part 21 Review of T&T Valve Problem (Paragraph 6.b).
LER 413/93-05	Closed	Technical Specification Test Deficiency Due to Manufacturer Fabrication (Paragraph 6.c.)
LER 413/93-06	Closed	Reactor Trip Due to Blown Fuse in Intermediate Range Channel (Paragraph 6.d.)

9. ACRONYMS AND ABBREVIATIONS

ASME	-	American Society of Mechanical Engineers
CA	-	Auxiliary Feedwater System
CAPT	-	Auxiliary Feedwater Turbine Pump
CFR	-	Code of Federal Regulations
DG	-	Diesel Generator
ENS	-	Emergency Notification System
FTS	-	Federal Telecommunication System
IAE	-	Instrument and Electrical
IFI	-	Inspector Followup Item
LER	-	Licensee Event Report
MSIV	-	Main Steam Isolation Valve
RCS	-	Reactor Coolant System
R&R	-	Removal and Restoration (Tagging Order)
SSPS	-	Solid State Protection System
T&T	-	Trip and Throttle
TS	-	Technical Specifications
URI	-	Unresolved Item
WO	-	Work Order
YC	-	Control Area Chill Water System