UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931

January 15, 2002

Duke Energy Corporation
ATTN: Mr. G. R. Peterson
Site Vice President
Catawba Nuclear Station
4800 Concord Road
York, SC 29745

SUBJECT: CATAWBA NUCLEAR STATION - NRC INTEGRATED INSPECTION REPORT 50-413/01-06, 50-414/01-06

Dear Mr. Peterson:

On December 22, 2001, the NRC completed an inspection at your Catawba Nuclear Station. The enclosed report documents the inspection findings which were discussed on December 20, 2001, with you and other members of your staff.

The inspection examined activities conducted under your licenses as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your licenses. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection the inspectors did not identify any findings of significance.

Immediately following the terrorist attacks on the World Trade Center and the Pentagon, the NRC issued an advisory recommending that nuclear power plant licensees go to the highest level of security, and all promptly did so. With continued uncertainty about the possibility of additional terrorist activities, the Nation's nuclear power plants remain at the highest level of security and the NRC continues to monitor the situation. This advisory was followed by additional advisories, and although the specific actions are not releasable to the public, they generally include increased patrols, augmented security forces and capabilities, additional security posts, heightened coordination with law enforcement and military authorities, and more limited access of personnel and vehicles to the sites. The NRC has conducted various audits of your response to these advisories and Catawba's ability to respond to terrorist attacks with the capabilities of the current design basis threat. From these audits, the NRC has concluded that Catawba's security programs are adequate at this time.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system

(ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Robert Haag, Chief
Reactor Projects Branch 1
Division of Reactor Projects

Docket Nos.: 50-413, 50-414
License Nos.: NPF-35, NPF-52

Enclosure: Inspection Report 50-413/01-06, 50-414/01-06

cc w/encl:
Regulatory Compliance Manager
Duke Energy Corporation
Electronic Mail Distribution

Lisa Vaughn
Legal Department (PB05E)
Duke Energy Corporation
422 South Church Street
Charlotte, NC 28242

Anne Cottingham
Winston and Strawn
Electronic Mail Distribution

North Carolina MPA-1
Electronic Mail Distribution

Henry J. Porter, Assistant Director
Div. of Radioactive Waste Mgmt.
S. C. Department of Health
and Environmental Control
Electronic Mail Distribution

R. Mike Gandy
Division of Radioactive Waste Mgmt.
S. C. Department of Health and
Environmental Control
Electronic Mail Distribution

Richard P. Wilson, Esq.
Assistant Attorney General
S. C. Attorney General's Office
Electronic Mail Distribution

Vanessa Quinn
Federal Emergency Management Agency
Electronic Mail Distribution

North Carolina Electric
Membership Corporation
Electronic Mail Distribution

Peggy Force
Assistant Attorney General
N. C. Department of Justice
Electronic Mail Distribution

County Manager of York County, SC
Electronic Mail Distribution

Piedmont Municipal Power Agency
Electronic Mail Distribution

Manager
Nuclear Regulatory Licensing
Duke Energy Corporation
526 S. Church Street
Charlotte, NC 28201-0006

Distribution w/encl:
C. Patel, NRR
RIDSNRRDIPMLIPD
PUBLIC

PUBLIC DOCUMENT (circle one): YES NO

OFFICE	RIIDRP	RIIDRP	RIIDRP				
SIGNATURE	DBillings	DRoberts	DRoberts for				
NAME	DBillings	DRoberts	MGiles				
DATE	1/15/2002	1/15/2002	1/15/2002				
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos:	50-413, 50-414
License Nos:	NPF-35, NPF-52
Report No:	50-413/01-06, 50-414/01-06
Licensee:	Duke Energy Corporation
Facility:	Catawba Nuclear Station, Units 1 and 2
Location:	4800 Concord Road York, SC 29745
Dates:	September 23, 2001 - December 22, 2001
Inspectors:	D. Roberts, Senior Resident Inspector D. Billings, Acting Senior Resident Inspector M. Giles, Resident Inspector
Approved by:	R. Haag, Chief Reactor Projects Branch 1 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000413-01-06, IR 05000414-01-06, on 09/23–12/22/2001, Duke Energy Corporation, Catawba Nuclear Station, Quarterly Integrated Resident Inspector Report.

The inspection was conducted by resident inspectors. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using the Significance Determination Process (SDP) found in Inspection Manual Chapter 0609. Findings to which the SDP does not apply are indicated by “No Color” or by the severity level of the applicable violation. The NRC’s program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website.

A. Inspector Identified Findings

The inspectors did not identify any findings of significance.

B. Licensee Identified Violations

One violation of very low significance has been reviewed by the inspectors. Corrective actions taken or planned by the licensee appear reasonable. This violation is discussed in Sections 4OA3.2 and 4OA7 of this report.

Report Details

Summary of Plant Status:

Unit 1 operated at 100 percent power throughout the inspection period, except for a brief period on November 16 and 17, 2001, when reactor power was reduced to 87 percent to facilitate main turbine control valve movement testing.

Unit 2 started the inspection period in a scheduled refueling outage. The outage ended on October 21, 2001, and 100 percent power was reached on October 25, 2001. The unit operated at or near 100 percent power until December 7, 2001, when a reactor trip occurred due to a ground on the D reactor coolant pump (RCP) motor. The unit was placed in Mode 5, Cold Shutdown, to support the replacement of the RCP motor. At completion of the inspection period on December 22, 2001, forced outage repair activities were completed and the unit was placed on-line.

1. REACTOR SAFETY
Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

1R01 Adverse Weather Protection

a. Inspection Scope

The inspectors reviewed the licensee's preparations for cold weather, including annual inspections, preventive and corrective maintenance, and programmatic controls, to ensure that risk-significant systems, structures and components (SSCs) were adequately protected from cold or freezing conditions. This included a review of instrumentation procedure IP/0/B/3560/008, Rev. 13, Preventative Maintenance and Operational Check of Freeze Protection Heat Trace and Instrument Box Heaters (EHT/EIB) Systems, and PT/0/B/4700/038, Rev. 11, Cold Weather Protection.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment

a. Inspection Scope

The inspectors performed partial walkdowns of the following equipment: 4 kilovolt (KV) essential electrical busses during 6.9 KV bus testing; redundant containment isolation valve 2WL-807, following thermal overload trip of 2WL-805A; and cross-tied alignment of 125 volts direct current (Vdc) Vital Distribution Centers 2EDA and 2EDC during 125 Vdc battery 2EBA discharge testing. These partial walkdowns were conducted to verify the availability of redundant or diverse systems and components during periods when safety equipment was inoperable. The walkdowns were performed to ensure that proper levels of defense-in-depth were maintained. In addition, the inspectors performed a full system walkdown of the Unit 2 auxiliary feedwater system to verify that components were aligned in their correct standby positions and that equipment material condition was satisfactory to support proper system operation. The inspectors reviewed plant drawings, valve alignment documents, abnormal procedures, and the UFSAR.

The inspectors also reviewed outstanding work requests, PIPs, and operator workarounds for issues affecting the auxiliary feedwater system. The inspectors verified valve alignment, labels and tags, and area cleanliness.

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

The inspectors toured areas important to reactor safety to verify that combustibles and fire ignition sources were properly controlled, and that fire detection and suppression capabilities were intact. For areas where fire detection equipment was out of service, the inspectors verified that compensatory measures (i.e., fire watch tours) were properly implemented. For dry pipe suppression systems, the inspectors verified that pre-fire plans specified proper steps for fire brigade personnel to activate the systems when needed. The inspectors selected the areas based on a review of the licensee's safe shutdown analysis, probabilistic risk assessment-based sensitivity studies for fire related core damage accident sequences, and summary statements related to the licensee's 1992 Initial Plant Examination for External Events submittal to the NRC. Areas toured this quarter included: service water (RN) pumphouse and fire pump intake area; Units 1 and 2 component cooling water (KC) pump areas; Units 1 and 2 A-train essential 4160V switchgear; A and B-train auxiliary shutdown panels; Unit 1 auxiliary feedwater pump area; Units 1 and 2 cable and relay rooms; and Units 1 and 2 ETB 4160V essential switchgear areas. Where licensee identified deficiencies were observed, the inspectors verified that the deficiencies were properly entered into the corrective action program for timely resolution.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance

a. Inspection Scope

The inspectors reviewed eddy current test data associated with the 2B containment spray (NS) heat exchanger (HX). Eddy current testing was performed on the heat exchanger as planned outage work during the Unit 2 refueling outage. Test results indicated a significant increase in pitting located in straight tube runs. As a result, engineering personnel requested that 100% of the unplugged tubes be eddy current tested in the HX U-bend area to quantify the total tube damage in the HX. At the completion of this testing, and tube plugging, the total number of tubes plugged was 117 out of the 729 total tubes in the HX. The inspectors reviewed calculation CNC-1223.13-00-0002 and discussed this item with engineering personnel to confirm that the number of plugged tubes was acceptable for continued operation.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification

a. Inspection Scope

The inspectors observed a control room simulator training scenario on November 14, 2001, to assess licensed operators and crew performance. The training scenario involved challenges to the operators including: a main steam leak on the steam line from the B steam generator (S/G); a tube leak in the B S/G which started at 400 gallons per minute (GPM) and escalated to 2500 GPM resulting in a reactor trip and safety injection actuation; a failure of the A safety injection (NI) pump and the A motor-driven auxiliary feedwater (CA) pumps to automatically start; and a failure of one control rod to fully insert. Following the simulator scenario, the inspectors observed the critique conducted by training instructors to assess their ability in identifying operator or simulator performance deficiencies.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation

a. Inspection Scope

The inspectors reviewed the licensee's implementation of the maintenance rule (10 CFR 50.65) to determine whether responsible personnel were properly evaluating the effectiveness of maintenance on equipment important to safety. The inspectors verified that the licensee was properly classifying maintenance preventable functional failures. For those systems, structures, and components (SSCs) that were categorized as 10 CFR 50.65 (a)(1) due to previous performance problems, the inspectors reviewed corrective action documents to verify that the licensee had identified causal factors and recommended appropriate corrective actions. Some SSCs were also reviewed for proper maintenance rule scoping and risk categorization within the licensee's tracking system. The inspectors conducted this inspection for the following Problem Investigation Process reports (PIPs):

PIP or program document	Equipment Problem
C-01-5000	Failure of NS pressure transmitter PT5270
C-01-3425	U-2 residual heat removal (ND) system support snubber failure
C-01-2654, 2665, 2696	2BD rod control urgent failures

C-01-2648	Failure of reactor trip breaker 2RTA to close
C-01-2758	Failure of Unit 1 containment pressure channel three
C-01-3601	Out-of-tolerance condition on 2A containment valve injection water system (NW) level transmitter

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed the licensee's assessments of the risk impact of removing from service those components associated with the five emergent and planned work items listed below, focusing primarily on activities determined to be risk significant within the maintenance rule. The inspectors also verified that the licensee adequately identified and resolved problems associated with maintenance risk assessment and emergent work.

Component or System	Reason for Removal from Service
2A1 Condenser	Outlet expansion boot seal repair
Motor-operated valve 2WL-805A	Thermal overload due to actuator failure
1B KC heat exchanger	Planned heat exchanger cleaning
125 Vdc vital battery 2EBA	Planned discharge testing
1B hydrogen mitigation system	Planned quarterly in-service testing

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions

a. Inspection Scope

The inspectors observed and reviewed licensee performance following a Unit 2 reactor trip that occurred on December 7, 2001. This review was conducted to determine if operators' response to the event was appropriate and in accordance with plant procedures and training. As part of this review, the inspectors reviewed PIP C-01-6158, which the licensee generated to critique the performance of the on-shift operating crew. In addition, the inspectors reviewed PT/0/A/4150/002, Rev. 4, Transient Investigation, which included written statements from on-shift licensed operators regarding the event.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed operability determinations (or justifications for continued operation) to verify that the operability of systems important to safety was properly established, that the affected component or system remained available to perform its intended safety function, and that no unrecognized increase in plant or public risk occurred. Operability evaluations were reviewed for the three issues listed below:

PIP Number	Issue
C-01-4018	Control room ventilation system (VC) Train B operability determination following damper adjustments in the A and B trains with the A train in-service
C-01-4799	Control room ventilation system chilled water system (YC) Train A test data point did not meet established acceptance criteria and the train was not declared inoperable.
C-01-5349	Cold-leg accumulator out-leakage caused pressurization and accumulation of gas in the NI and ND discharge piping.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications

a. Inspection Scope

The inspectors reviewed Nuclear Station Modification No. NSM-21401/00 for piping modifications CA system to verify: (1) that the design basis, licensing basis, and performance capability of a SSC that could impact initiating event frequency was not degraded through the modification; and (2) that the modification performed during risk significant configurations did not place the plant in an unsafe condition. The inspectors also reviewed testing associated with this modification to ensure that the intended design goal was met and that testing did not adversely affect plant operations.

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing

a. Inspection Scope

The inspectors observed or reviewed post-maintenance tests associated with the following six work activities to verify that equipment was properly returned to service and that proper testing was specified and conducted to ensure that the equipment could perform its intended safety function following maintenance.

Test Procedure Number	Maintenance/Test Activity
PT/4450/008E, Rev. 56	A-Train YC chiller operability test following condenser tube cleaning
PT/2/A/4350/002B, Rev. 73	2B emergency diesel generator operability test following governor replacement
PT/2/A/4200/031, Rev. 52	2SV-1 PORV operability test following five-year valve maintenance rebuild activity
PT/2/A/4200/038, Rev. 18	2WL-805A valve actuator replacement
PT/0/A/4400/022A, Rev. 61	2A nuclear service water pump operability test following packing replacement
PT/1/A/4200/005B, Rev. 53	1B NI pump operability testing following in-board bearing oil leak repair

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities

a. Inspection Scope

The inspectors conducted reviews and observations for selected licensee outage activities to ensure that: (1) the licensee considered risk in developing the outage plan; (2) the licensee adhered to the outage plan to control plant configuration based on risk; (3) that mitigation strategies were in place for losses of key safety functions; and (4) the licensee adhered to operating license and TS requirements. Between September 23, 2001, and October 25, 2001, the inspectors reviewed or witnessed the following activities related to the Unit 2 refueling outage to verify that operations were being conducted safely and that procedural adherence guidelines were followed:

- reduced inventory conditions;
- refueling and core verification activities;
- ice condenser work and closeout inspection;

- system lineups, including electrical, during major outage activities;
- reactor startup;
- zero power physics testing; and
- power escalation.

The inspectors also performed a walkdown of the Unit 2 containment building to verify that the licensee's inspection had identified and collected any foreign material that could potentially affect the performance of the emergency core cooling system recirculation sumps.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspectors reviewed the seven surveillance test procedures listed below to verify that Technical Specification surveillance requirements and/or Selected Licensee Commitment requirements were properly incorporated and that test acceptance criteria were properly specified. The inspectors observed actual performance of some of the tests and reviewed completed procedures to verify that acceptance criteria had been met. The inspectors also verified that proper test conditions were specified in the procedures and that no equipment preconditioning activities were occurring.

Procedure Number	Title
PT/2/A/4350/002B, Rev. 73	Diesel Generator 2B Operability Test
PT/2/A/4350/005, Rev. 19	6.9 KV Normal Auxiliary Power Automatic Transfer Test
PT/1/A/4200/007, Rev 45	1A NI Pump IWP
PT/2/A/4200/031, Rev. 52	SV Valve Inservice Test
IP/0/A/3710/010, Rev. 17	125 VDC Vital I & C Power System Battery Service Test
PT/1/A/4250/003C, Rev. 84	Turbine Driven Auxiliary Feedwater Pump #1 Performance Test
PT/1/A/4350/002B, Rev. 99	Diesel Generator 1B Operability Test

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications

a. Inspection Scope

The inspectors reviewed one temporary modification, CNTM-0062, Defeat P-12 Interlock for Condenser Steam Dump Valves Banks 2 and 3, to verify that the functions of important systems were not compromised. The modification was developed to allow Unit 2 to cooldown using condenser steam dump valves in banks 2 and 3 with P-12 defeated.

b. Findings

No findings of significance were identified.

1EP6 Drill Evaluation

a. Inspection Scope

The inspectors observed a control room simulator training scenario on November 14, 2001, to assess licensed operators' performance in the area of emergency preparedness. The inspectors verified that the operators made the correct drill event declaration (site area emergency) and that associated follow-up actions were performed in accordance with regulatory requirements and the licensee's procedures. The observed scenario (a faulted/ruptured steam generator) was performed in conjunction with the licensed operator requalification program.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors conducted reviews of the following five Reactor Safety PIs, as submitted to the NRC by the licensee, for accuracy:

Cornerstone	PI
Mitigating Systems	Safety System Unavailability - Residual Heat Removal System
Mitigating Systems	Safety System Unavailability -High Pressure Safety Injection System
Mitigating Systems	Safety System Unavailability -Auxiliary Feedwater System

Cornerstone	PI
Mitigating Systems	Safety System Functional Failures (SSFFs)
Barrier Integrity	Reactor Coolant System Leakage

This review was conducted on PI data through the third quarter of 2001 which was submitted to the NRC on or about October 21, 2001. To verify the PI data, the inspectors reviewed control room logs, Operator Aid Computer trends, operating procedure enclosures, and related licensee calculations. The inspectors verified samples of data for the entire period covered by the PI under review (e.g., for PIs covering four quarters, the inspectors reviewed samples of data for the three quarters immediately prior to third quarter 2001 in addition to that quarter's data).

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up

.1 Unit 2 Reactor Trip on December 7, 2001

a. Inspection Scope

The inspectors responded to the control room following a Unit 2 reactor trip on December 7, 2001. The inspectors also inspected portions of this event and the licensee's performance under IP 71111.14. This inspection was performed to verify that safety equipment responded as designed and to provide input to regional management for determining the need for additional NRC response.

b. Issues and Findings

No findings of significance were identified.

.2 (Closed) Licensee Event Report (LER) 50-414/00-002-01: Inoperable Ignitors on Both Trains of the Hydrogen Ignition System Due to a Common Cause Failure Mode on Non-Safety Related Equipment Resulting in a Technical Specification Violation.

This LER was a revision to LER 50-414/00-002, which was previously described and closed in NRC Inspection Report 50-413,414/00-03. The revised LER contained a more detailed analysis of the impact of having inoperable hydrogen ignition system (HIS) glow plugs from April 8, 2000, to April 30, 2000, when replacement of the failed glow plugs was completed and both trains of the HIS were returned to operable status. Two glow plugs, one per train, which are located in an inaccessible area beneath the reactor vessel missile shield wall were not replaced. The licensee obtained a TS amendment on May 5, 2000, allowing the inaccessible plugs to be replaced during the next scheduled refueling outage (September 2001).

The more detailed engineering analysis of the common-mode failure of these plugs was necessary after further testing of plugs that had initially passed an April 2000 surveillance test revealed that they might not have been able to fulfill their safety function. In May 2001, the licensee tested these plugs for 48 hours, which better approximated the duty cycle that they would be subjected to while performing their intended function. This additional testing was prompted by questions from the NRC inspectors in March 2001, while they were reviewing the original LER for a Safety System Functional Failure (SSFF) PI Verification inspection. The inspectors had questioned how the licensee could take credit for the plugs that initially passed the limited April 2000 test in determining that the system could have fulfilled its safety function despite a common mode failure mechanism that the licensee had identified for the entire lot of Unit 2 plugs.

During the May 2001 retest, several more of the Unit 2 plugs failed (this was in addition to the 22 B-train plugs and two A-train plugs that had initially failed the test in April 2000.) With only 35 plugs installed per redundant train, the licensee concluded in the revised LER that an SSFF had occurred for this system in April 2000. Accordingly, the licensee revised its NRC PI data for 2nd quarter 2000 to reflect the SSFF. The more detailed analysis concluded, however, that had a design basis accident occurred, the safety significance of this SSFF would be reduced by the availability of other hydrogen mitigation systems during the time period in question, including containment air return fans, hydrogen skimmer fans, and the hydrogen recombiners. The change in the SSFF PI constituted a minor PI discrepancy, which did not result in the PI crossing a significance threshold and, therefore, does not warrant any further NRC action.

The licensee also revised its root cause statement for this issue. They concluded that the violation was due to the lack of a process to ensure that new ignitors were properly functionally tested before returning the unit to a mode in which they were required to be operable. The licensee's corrective actions have since included a more rigorous testing program to demonstrate the functional capability of new ignitor plugs. The inspectors considered this performance issue to have a credible impact on safety because it resulted in a functional failure of a system important for protecting the containment radiation barrier. However, the issue was reviewed using the Significance Determination Process and was determined to be of very low safety significance (Green) due primarily to the availability of the other containment hydrogen mitigation systems.

Although no enforcement actions were taken for this issue in 2000 due to the initial conclusion that the failures were not the result of a licensee performance problem, the inspectors have since determined that the licencee's performance was related to the violation of TS 3.6.9. The TS states that, with one inoperable HIS train, the licensee restore that train to operable status within seven days or perform testing on the other train. With one containment region having no operable ignitors (in either train), the TS required that at least one ignitor in the affected region be restored to operable status within seven days. If either of these actions were not met, the TS required the unit be placed in Mode 3 within six hours (following the initial seven-day required action). Contrary to the above, both trains of the HIS were inoperable from April 8, 2000, when Unit 2 entered Mode 2, to May 5, 2000, when the NRC granted a TS amendment allowing inaccessible glow plugs to be replaced at a later date. This violation is considered to be licensee-identified and is discussed in Section 4OA7 of this report.

.3 <u>(Closed) LER 50-414/01-001: Main Feedwater Isolation Valve 2CF-60 Failed to Close</u>

This event was discovered on September 14, 2001, during the preparations for shutdown for a refueling outage while at 17 percent power. It was captured in the licensee's corrective action program as PIP C-01-04119. The inspectors reviewed the LER and no findings of significance were identified.

4OA6 <u>Meetings</u>

<u>Exit Meeting Summary</u>

The inspectors presented the inspection results to Mr. Gary Peterson, Site Vice President, and other members of licensee management at the conclusion of the inspection on December 20, 2001. The licensee acknowledged the findings presented.

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

4OA7 <u>Licensee Identified Violations</u>.

The following finding of very low safety significance was identified by the licensee and is a violation of NRC requirements, which met the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as a Non-Cited Violation (NCV).

If you deny this non-cited violation, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the United States Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Catawba facility.

NCV Tracking Number	Requirement Licensee Failed to Meet
50-413, 414/01-06-01	Inoperable Ignitors on Both Trains of the Hydrogen Ignition System Due to a Common Cause Failure Mode on Non-Safety Related Equipment Resulting in Inoperable Hydrogen Ignition System and a Violation of TS 3.6.9. This issue was captured in the licensee's corrective action program as PIP C-00-02248.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

E. Beadle, Emergency Preparedness Manager
R. Beagles, Safety Review Group Manager
J. Foster, Radiation Protection Manager
G. Gilbert, Regulatory Compliance Manager
S. Brown, Operations Superintendent
W. Green, Work Control Superintendent
P. Grobusky, Human Resources Manager
P. Herran, Engineering Manager
M. Glover, Station Manager
R. Parker, Maintenance Superintendent
G. Peterson, Catawba Site Vice President
F. Smith, Chemistry Manager
R. Sweigart, Safety Assurance Manager

NRC

K. Barr, Region II
R. Haag, Region II
C. Patel, NRR
J. Wilson, NRR
D. White, Region II

ITEMS OPENED AND CLOSED

Opened and Closed During this Inspection

50-414/01-06-01	NCV	Violation of TS 3.6.9 due to Inoperable Hydrogen Ignition System (Section 4OA7)

Previous Items Closed

50-414/00-002, Rev. 1	LER	Inoperable Ignitors on Both Trains of the Hydrogen Ignition System Due to a Common Cause Failure Mode on Non-Safety Related Equipment Resulting in a Technical Specification Violation (Section 4OA3.2)
50-414/01-001	LER	Main Feedwater Isolation Valve 2CF-60 Failed to Close (Section 4OA3.3)

LIST OF ACRONYMS USED

AC	-	Alternating Current
CA	-	Auxiliary Feedwater
CFR	-	Code of Federal Regulations
dp	-	Differential Pressure
EDG	-	Emergency Diesel Generator
GPM	-	Gallons Per Minute
HIS	-	Hydrogen Ignition System
HX	-	Heat Exchanger
IWP	-	American Society of Mechanical Engineers, Section XI, Inservice (Water) Pump Test
KC	-	Component Cooling Water
KV	-	Kilovolts
LER	-	Licensee Event Report
NC	-	Reactor Coolant System
NCV	-	Non-Cited Violation
ND	-	Residual Heat Removal
NI	-	Safety Injection
NRC	-	Nuclear Regulatory Commission
NRR	-	Nuclear Reactor Regulation
NS	-	Containment Spray
NSM	-	Nuclear Station Modification
PI	-	Performance Indicator
PIP	-	Problem Investigation Process (report)
PORV	-	Power-Operated Relief Valve
QC	-	Quality Control
RCS	-	Reactor Coolant System
REV	-	Revision
SDP	-	Significance Determination Process
S/G	-	Steam Generator
SSC	-	Systems, Structures, and Components
SSFF	-	Safety System Functional Failure
SV	-	Main Steam Vent to Atmosphere (system)
TS	-	Technical Specification
UFSAR	-	Updated Facility Safety Analysis Report
UST	-	Upper Surge Tank
V	-	Volts
VC	-	Control Room Ventilation
Vdc	-	Volts direct current
WL	-	Liquid Waste
WO	-	Work Order
WZ	-	Ground Water Drainage
YC	-	Control Room Ventilation System Chilled Water System