



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

Report Numbers: 50-321/89-07 and 50-366/89-07

Licensee: Georgia Power Company
 P.O. Box 1295
 Birmingham, AL 35201

Docket Numbers: 50-321 and 50-366

License Numbers: DPR-57 and NPF-5

Facility Name: Hatch 1 and 2

Inspection Dates: April 22 - May 26, 1989

Inspection at Hatch site near Bayley, Georgia

Inspectors:	<u><i>John E. Menning</i></u> John E. Menning, Senior Resident Inspector	<u>6-16-89</u> Date Signed
	<u><i>Randall A. Musser</i></u> Randall A. Musser, Resident Inspector	<u>6-16-89</u> Date Signed
Approved by:	<u><i>Marvin V. Sinkule</i></u> Marvin V. Sinkule, Chief, Project Section 3B Division of Reactor Projects	<u>6/19/89</u> Date Signed

SUMMARY

Scope:

This routine inspection was conducted at the site in the areas of Operational Safety Verification, Maintenance Observations, Surveillance Testing Observations, Reportable Occurrences, Followup on NRC Bulletin, and Action on Previous Inspection Findings.

Results:

Four licensee-identified violations, which are not being cited, were identified. The first licensee-identified violation was for the performance of maintenance on the incorrect valve (paragraph 3), and the second was for deficient APRM response time testing (paragraph 5). The third was for inadequate response time testing of isolation actuation instrumentation (paragraph 5), and the fourth involved inadequate RPS functional testing procedures (paragraph 5).

No specific strengths or weaknesses of licensee programs were identified based on the inspectors' findings and observations in the areas inspected.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- C. Coggin, Training and Emergency Preparedness Manager
- *D. Davis, Manager General Support
- *J. Fitzsimmons, Nuclear Security Manager
- P. Fornel, Maintenance Manager
- O. Fraser, Site Quality Assurance Manager
- *G. Goode, Acting Engineering Manager
- *M. Googe, Outages and Planning Manager
- W. Kirkley, Acting Health Physics and Chemistry Manager
- *J. Lewis, Acting Operations Manager
- *C. Moore, Assistant General Manager - Plant Support
- *H. Nix, General Manager - Nuclear Plant
- H. Sumner, Assistant General Manager - Plant Operations
- *S. Tipps, Nuclear Safety and Compliance Manager

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

NRC Resident Inspectors

- *J. Menning
- R. Musser

NRC management on site during inspection period

M. Sinkule, Chief, Project Section 3B, Region II

- *Attended exit interview

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

2. Operational Safety Verification (71707) Units 1 and 2

The inspectors kept themselves informed on a daily basis of the overall plant status and any significant safety matters related to plant operations. Daily discussions were held with plant management and various members of the plant operating staff. The inspectors made frequent visits to the control room. Observations included control room manning, access control, operator professionalism and attentiveness, adherence to procedures, adherence to limiting conditions for operation, instrument readings, recorder traces, annunciator alarms, operability of nuclear instrumentation and reactor protection system channels, availability of power sources, and operability of the Safety Parameter Display system.

These observations also included log book entries, tags and clearances on equipment, temporary alterations in effect, ECCS system lineups, containment integrity, reactor mode switch position, conformance with technical specification safety limits, daily surveillances, plant chemistry, scram discharge volume valve positions, and rod movement controls. This inspection activity involved numerous informal discussions with operators and their supervisors.

The operability of selected safety-related systems was confirmed on essentially a weekly basis. These confirmations involved verification of proper valve and control switch positioning, proper circuit breaker and fuse alignment, and operability of related instrumentation and support systems. Major components were also inspected for leakage, proper lubrication, cooling water supply, and general condition. On April 27, 1989, the inspector confirmed the operability of the Unit 2 Post-LOCA Hydrogen Recombiner system. Proper electrical and valve alignments were confirmed using Attachments 1 and 2, respectively, to procedure 34SO-T49-001-2S. On May 2, 1989, the inspector confirmed the operability of the Unit 1 HPCI system. Proper switch, breaker, and valve lineups were confirmed using Attachments 1, 2, and 3, respectively, to procedure 34SO-E41-001-1S. During this walkdown, the inspector noted that the last digit was missing on the label for valve 1E41-F3055. The inspector also observed that the handwheel was missing on valve 1E41-F3092. These discrepancies were brought to the attention of the Unit 1 Shift Supervisor. On May 16, 1989, the operability of the Unit 2 "B" Core Spray system loop was confirmed. Proper breaker positions were verified using Attachment 2 to procedure 34SO-E21-001-2S. Proper switch and valve lineups were verified using Attachment 3 to procedure 34SO-E21-001-2S. On May 19, 1989, the operability of the Unit 2 "A" Core Spray system loop was confirmed. Proper breaker positions were verified using Attachment 2 to procedure 34SO-E21-001-2S. Proper switch and valve lineups were verified using Attachment 3 to procedure 34SO-E21-001-2S.

General plant tours were conducted on at least a weekly basis. Portions of the control building, diesel generator building, intake structure, turbine building, reactor building, and outside areas were toured. Observations included general plant/equipment conditions, fire hazards, fire alarms, fire extinguishing equipment, emergency lighting, fire barriers, emergency equipment, control of ignition sources and flammable materials, and control of maintenance/surveillance activities in progress. Radiation protection controls, implementation of the physical security program, housekeeping conditions/cleanliness, control of missile hazards, and instrumentation and alarms in the main control room were also observed.

In the area of housekeeping the following discrepancies were observed by the inspector and brought to the attention of cognizant licensee personnel:

- * On April 26, 1989, a pool of oil was observed under RBCCW Chemical Addition Pump 1P42-C002 on elevation 203 in the Unit 1 reactor building.
- * On May 19, 1989, various pieces of loose bolting were observed on top of valve 2E51-F030 in the northwest diagonal of the Unit 2 reactor building.
- * On May 19, 1989, several pieces of apparently used anticontamination clothing were observed on a step off pad just inside entrance 2R-24 to the TIP room on elevation 130 in the Unit 2 reactor building.

The inspectors observed selected operations shift turnover briefings to confirm that all necessary information concerning the status of plant systems was being addressed. Each briefing was conducted by the oncoming OSOS. The inspectors noted that each OSOS discussed existing plant problems, activities that were anticipated for the shift, and any new standing orders or management directives. Radiological and industrial safety were generally stressed. The STAs discussed any recent procedure revisions that impacted on the attendees. The inspectors attended shift turnover briefings on the following dates and shifts; April 27, 1989 - Day, April 30, 1989 - Day, May 17, 1989 - Day, and May 26, 1989 - Day.

Several safety-related equipment clearances that were active were reviewed to confirm that they were properly prepared and placed. Involved circuit breakers, switches, and valves were walked down to verify that clearance tags were in place and legible and that equipment was properly positioned. Equipment clearance program requirements are specified in licensee procedure 30AC-OPS-001-OS, "Control of Equipment Clearances and Tags." On May 1, 1989, Unit 1 equipment clearance 1-89-536 was walked down. This clearance was placed to administratively control the power sources to MCC 1R24-S029. On May 10, 1989, Unit 2 equipment clearance 2-89-448 was walked down. This clearance was placed to support maintenance on the "2C" EDG.

Implementation of the licensee's sampling program was reviewed by the inspector. This review involved observation of sampling activities (reactor coolant and tank sampling) and chemistry surveillance. Related records were also reviewed. On April 28, 1989, the inspector reviewed the daily Meteorological Station Checks performed in accordance with procedure 62CI-OPS-010-0.

The licensee's deficiency control system was reviewed to verify that the system is functioning as intended. Licensee procedure 10AC-MGR-004-OS, "Deficiency Control System," establishes requirements and responsibilities for the preparation, processing, review, and disposition of deficiency reporting documents. This procedure applies to all deficiencies affecting equipment, procedures, or personnel. Deficiencies are reported on DCs. On May 1, 1989, the inspector reviewed recently prepared DCs and verified that DCs had been prepared as required by the controlling procedure and

that several deficiencies that were observed in the plant had been documented on DCs. More specifically, the inspector noted that DC 2-89-1244 had been generated to document an unlocked high radiation area door. The door was identified as door 2T-12 to the Unit 2 condenser bay. The inspector also observed that DC 1-89-1932 had been prepared to document a failure of the "A3" oil pump for recirculation system MG set 1B31-S001A to automatically start on a low oil pressure condition. On May 15, 1989, the inspector also reviewed recently prepared DCs and verified that problems observed in the plant had been properly documented. The inspector noted that DC 1-89-2179 had been prepared to document fluctuations in the feedwater flow input signal to the Unit 1 process computer and that DC 2-89-1395 had been generated to document the failure of offgas hydrogen analyzer 2N62-N009A to calibrate properly.

Selected portions of the containment isolation lineup were reviewed to confirm that the lineup was correct. The review involved verification of proper valve positioning, verification that motor and air-operated valves were not mechanically blocked and that power was available (unless blocking or power removal was required), and inspection of piping upstream of the valves for leakage or leakage paths. On May 2, 1989, the inspector reviewed the following Unit 1 containment isolation valves: 1E11-F028A and B, 1E41-F051, 1E51-F019, 1G51-F002, 1G51-F011, 1G51-F012, and 1T48-F328A and B. On May 15, 1989, the inspector reviewed the following Unit 2 containment isolation valves: 2P33-F004, 2P33-F012, 2P64-F045, 2T23-F004, 2T23-F005, 2T48-F103, 2T48-F104, 2T48-F118A, 2T48-F118B, 2T48-F307, 2T48-F308, and 2T48-F309.

During this reporting period, the inspector reviewed the licensee's controls on overtime of personnel who perform safety-related functions. Section 6.2.2.g of the technical specifications establishes requirements for the control of such overtime, and Section 8.4 of licensee procedure 30AC-OPS-003-0S, "Plant Operations," provides implementing instructions to support the technical specification requirements. On May 2, 1989, the inspector reviewed a Maintenance Department Overtime Report for the month of March and determined that technical specification and procedural requirements had been met.

The inspector reviewed the status, scope, and findings of scheduled QA audits/surveillances of control room activities. This review focused on two recent QA evaluations of control room activities. On May 11, 1989, the inspector reviewed documentation for Surveillance 89-ORA-19 (performed on April 19, 1989) and Audit 89-PO-1 (performed on March 13-30, 1989). Surveillance 89-ORA-19 evaluated conduct and visitor control in the main control room and resulted in no negative findings or concerns. Audit 89-PO-1 evaluated compliance with regulatory and procedural requirements in the areas of administrative control, organization and staffing, logs and records, special orders, technical specifications, and procedures. Although this audit resulted in several findings (primarily related to the operation of plant systems), none were specifically related to the performance of control room personnel. The inspector noted that

the involved QA personnel were well qualified to perform these evaluations.

On May 17, 1989, the inspector verified that all required notices to workers were appropriately and conspicuously posted pursuant to 10 CFR 19.11. Related posting requirements are delineated in Section 8.1 of licensee procedure 40AC-REG-002-OS, "Federal and State Reporting Requirements." This procedure establishes posting locations at the Waste Separation and Temporary Storage Facility, Simulator Building near the breakroom, and Unit 1 Switchyard near Gate 16. Although not referenced in procedure 40AC-REG-002-OS, the licensee has also established a posting location north of the new Security Building. The inspector reviewed the postings at these locations and observed no discrepancies.

Unit 1 power level was reduced to approximately 30 percent of rated for four days during this reporting period. Condenser retubing interference walkdowns were performed at that time. These interference walkdowns were required to support retubing of the main condenser during the 1990 refueling/maintenance outage. The reduction from rated power commenced at 2320 on April 28, 1989. Approximately 30 percent of rated power was reached (and subsequently maintained) at 0450 on April 29, 1989. Following the completion of the walkdowns, power increase started at 2010 on May 2, 1989, and rated thermal power was achieved at 1000 on May 3, 1989.

No violations or deviations were identified.

3. Maintenance Observations (62703) Unit 2

During the report period, the inspectors observed selected maintenance activities. The observations included a review of the work documents for adequacy, adherence to procedure, proper tagouts, adherence to technical specifications, radiological controls, observation of all or part of the actual work and/or retesting in progress, specified retest requirements, and adherence to the appropriate quality controls. The primary maintenance observations during this month are summarized below:

<u>Maintenance Activity</u>	<u>Date</u>
1. Troubleshooting of Condenser Vacuum Sensing Line per MWO 2-89-2226	04/27-28/89
2. Replacement of EDG Neutral Resistor 2R34-S004C per MWO 2-86-7760	05/10/89
3. Installation of Control Room Annunciator to Indicate High Temperature Trip of the Unit 2 "B" SGTS Train per MWO 2-89-0132 and DCR 87-117.	05/23/89

During the observation of maintenance per MWO 2-89-0132 on May 23, 1989, the inspector witnessed the installation of an annunciator card in Cubicle "B" in Annunciator Logic Cabinet "2A" (2H21-P237). (This cabinet is composed of five cubicles.) The inspector noted that there was no labeling inside the cubicle to orient maintenance personnel and help ensure that an annunciator card is placed in the proper location. The inspector observed that maintenance personnel had to go to the I&C shop and refer to a Cubicle Card Location drawing (1476-B3320-D) to verify the proper location for the card to be installed. It was also noted that cubicle designations were not marked on the cubicle doors. A cubicle arrangement diagram was referred to to verify that the card was being installed in the proper cubicle. Finally, the inspector observed various temporary (and apparently unauthorized) markings on the cubicle doors, primarily indicating which control room panels are associated with each cubicle. The inspector concluded that appropriate labeling would significantly reduce the potential for personnel errors during maintenance activities. This concern was discussed with the Maintenance Superintendent on May 24, 1989.

At 1515 on May 23, 1989, Unit 2 entered Technical Specification Action Statement 3.6.6.2.b, requiring the unit to be in hot shutdown within 12 hours. The "B" Hydrogen Recombiner system had been out of service for calibration. The "A" Hydrogen Recombiner system was made inoperable on May 23 when maintenance electricians mistakenly performed maintenance on valve 2T49-F004A (a valve in the "A" system). The licensee properly entered the action statement for having both Hydrogen Recombiner systems inoperable. This matter was reported to the NRC pursuant to 10 CFR Part 50.72(b)(i)(A). Valve 2T49-F004A was returned to operable status at 1920 on May 23, allowing the licensee to exit the action statement.

Investigation into this matter revealed that the maintenance electricians had intended to perform a 36-month PM in accordance with MWO 2-89-1309 on valve 2E11-F104A (an RHR heat exchanger vent valve). The electricians had some difficulty locating this valve, and eventually located and performed work on a valve which they believed to be 2E11-F104A. This valve was, however, 2T49-F004A. Investigation has shown that valve 2T49-F004A was labeled with the proper MPL designation. Following reinstallation of the limit switch rotor assembly on valve 2T49-F004A, the electricians placed the operator declutch lever in the manual position. They then observed that the operator motor rotated briefly. Since the circuit breaker for the operator of valve 2E11-F104A had been racked out, the electricians then realized that a problem existed and stopped work. Maintenance supervision notified operations personnel as soon as it was apparent that maintenance had been performed on the wrong valve. Corrective action involved counseling the involved individuals. Additionally, briefing sessions on this event were scheduled for maintenance engineering, maintenance craft, I&C, and contractor personnel. The licensee expected to complete these briefings within a two-week period.

Technical Specification 6.8.1.a requires that written procedures be established, implemented, and maintained for the activities referenced in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Section 9 of Regulatory Guide 1.33 recommends that maintenance that can affect the performance of safety-related equipment be performed in accordance with appropriate written procedures, documented instructions, or drawings. The failure to perform the maintenance in accordance with MWO 2-89-1309 is a violation of Technical Specification 6.8.1.a. However, this violation meets the criteria specified in Section V of the NRC Enforcement Policy for not issuing a Notice of Violation and, therefore, is not being cited. This matter identified as NCV 366/89-07-01, is considered to be closed.

One licensee-identified violation, which is not being cited, was identified.

4. Surveillance Testing Observations (61726) Unit 2

The inspectors observed the performance of selected surveillances. The observation included a review of the procedure for technical adequacy, conformance to technical specifications, verification of test instrument calibration, observation of all or part of the actual surveillances, removal from service and return to service of the system or components affected, and review of the data for acceptability based upon the acceptance criteria. The primary surveillance testing observations during this month are summarized below:

<u>Surveillance Testing Activity</u>	<u>Date</u>
1. Reactor Pressure (Recirc Pump Trip) Instrument FT&C per procedure 57SV-SUV-001-2S	04/26/89
2. Diesel Generator "2A" Monthly Test per procedure 34SV-R43-001-2S	04/26/89
3. APRM Functional Testing per procedure 34SV-C51-002-2S	05/04/89
4. Diesel Generator "1B" Semi-Annual Testing per procedure 34SV-R43-005-2S	05/23/89

No violations or deviations were identified.

5. Reportable Occurrences (90712 and 92700) Units 1 and 2

A number of LERs were reviewed for potential generic impact, to detect trends, and to determine whether corrective actions appeared appropriate. Events which were reported immediately were also reviewed as they occurred to determine that technical specifications were being met and the public health and safety were of utmost consideration.

Unit 1: 88-16 Torus Weld Shrinkage Causes Rock Bolt Deflection

By letter dated March 23, 1989, the licensee forwarded the final report of the engineering evaluation of the anchor bolts. The NRC staff consensus based on earlier review of the condition was that the deformed bolts posed no significant safety concerns. Therefore, this item is closed based on receipt of the final report.

89-06 Component Failure Results in Inoperability of High Pressure Coolant Injection System

This LER relates to a failure of Topaz Static Inverter, 1E41-K603, which supplies power to the HPCI flow control circuit. This failure resulted in HPCI inoperability since the system could not achieve design flow if automatically initiated with no power to the control circuit. Operations personnel properly declared HPCI inoperable and initiated the appropriate LCO. Investigation revealed that a diode within the inverter failed. Corrective action involved replacing the inverter and successfully demonstrating HPCI operability via the performance of procedure 34SV-E41-002-1S. Review of this LER is closed.

Unit 2: 88-10 Deficient Procedure Results in Inadequate Surveillance Results

This LER concerns a deficient APRM response time testing procedure that did not provide data to consistently demonstrate that the flow referenced, upscale, simulated, thermal power trip response times were acceptable. Technical Specification 4.3.1.3 requires the response time of this trip function to be demonstrated to be within its limit at least once per 18 months. Technical Specification Table 3.3.1-2 requires the response time of the flow referenced, upscale, simulated, thermal power trip to be less than or equal to 0.09 seconds. A footnote to Table 3.3.1-2 indicates that this limit does not include the simulated thermal time constant. The surveillance procedure was deficient in that it did not exclude the simulated thermal power time constant from the measurement of the response time.

This matter was identified by the licensee as part of the PUP. Corrective action involved replacing the deficient procedure with four new procedures. These new APRM time response testing procedures were

identified as 57SV-C51-009, 010, 011, and 012-2S. The inspector reviewed these procedures on April 25, 1989, and observed that they provided for the bypassing of the simulated thermal power time constant circuits. The inspector also noted that these procedures were approved for validation on November 11, 1988, and are scheduled for validation during the upcoming Unit 2 refueling/maintenance outage.

The inadequate APRM response time testing procedure resulted in a violation of Technical Specification 4.3.1.3. However, this violation meets the criteria specified in Section V of the NRC Enforcement Policy for not issuing a Notice of Violation and, therefore, is not being cited. This violation, identified as NCV 366/89-07-02 is considered to be closed. Review of the LER is also closed.

88-12 Deficient Procedure Causes Inadequate Response Time Surveillance Results

This LER concerns a deficient procedure for the response time testing of the isolation function of the supply and exhaust dampers in the Reactor Building and Refueling Floor Normal Ventilation systems. The procedure was deficient in that it did not include provisions for testing the response times of the associated isolation actuation instrumentation. This precluded determinations of isolation system response times as specified in TS Table 3.3.2-3 for Items 2a, b, c, and d. (A footnote to the Table requires that isolation actuation instrumentation response times be added to individual damper movement times to obtain the isolation system response time for each damper.) This deficiency was discovered by the licensee during a PUP review.

Initial corrective action involved satisfactorily performing special purpose procedures to meet the response time testing requirements. Permanent procedure revisions were also developed to ensure adequate response time testing in the future. On April 27, 1989, the inspector reviewed the following twelve new procedures that were developed for this purpose:

- 57SV-D11-024-2S, "Area Radiation Monitor Time Response Test for Channel A, Division I"
- 57SV-D11-025-2S, "Area Radiation Monitor Time Response Test for Channel B, Division I"

57SV-D11-026-2S, "Area Radiation Monitor Time Response Test for Channel A, Division II"
 57SV-D11-027-2S, "Area Radiation Monitor Time Response Test for Channel B, Division II"
 57SV-MNT-005-2S, "Response Time Test of Instrument Relay Logic Channel A"
 57SV-MNT-006-2S, "Response Time Test of Instrument Relay Logic Channel B"
 57SV-MNT-007-2S, "Response Time Test of Instrument Relay Logic Channel C"
 57SV-MNT-008-2S, "Response Time Test of Instrument Relay Logic Channel D"
 57SV-MNT-011-2S, "Response Time Testing of Pressure Sensors Channel A"
 57SV-MNT-012-2S, "Response Time Testing of Pressure Sensors Channel B"
 57SV-MNT-013-2S, "Response Time Testing of Pressure Sensors Channel C"
 57SV-MNT-014-2S, "Response Time Testing of Pressure Sensors Channel D"

The inspector noted that the twelve procedures had all been approved for validation and are scheduled for validation during the upcoming Unit 2 refueling/maintenance outage.

This matter is a violation of Technical Specification Table 3.3.2-3. However, this violation meets the criteria specified in Section V of the NRC Enforcement Policy for not issuing a Notice of Violation and, therefore, is not being cited. This matter, identified as NCV 366/89-07-03, is considered to be closed. Review of the LER is also closed.

88-14

Deficient Procedure Causes Inadequate 18-Month Reactor Protection System Functional Tests

This LER concerns certain, identified inadequacies in the licensee's LSFT procedures for the RPS. More specifically, the MSIV and TSV closure RPS logic was not completely tested, and the RPS 10-second time delays were not tested at the required 18-month frequency. These testing deficiencies resulted in a violation of Technical Specification 4.3.1.2

The inadequacies in the LSFTs were identified by the licensee's PUP personnel and were properly reported to the NRC. Initial corrective action involved developing and performing special purpose procedure 34SP-041488-CS-1-2S to bring Unit 2 into

full compliance with Technical Specification 4.3.1.2. The licensee subsequently developed permanent procedure revisions to assure that future RPS LSFTs fully meet the technical specification requirements. On May 15, 1989, the inspector reviewed Revision 0 of procedure 42SV-C71-001-2S, "Reactor Protection System LSFT," and Revision 0 of procedure 57SV-C71-007-2S, "RPS Time Relay Calibration," and confirmed that the intended, permanent, procedure revisions had been developed.

As previously noted, the events of this LER constitute a violation of Technical Specification 4.3.1.2. However, this violation meets the criteria specified in Section V of the NRC Enforcement Policy for not issuing a Notice of Violation and, therefore, is not being cited. This matter, identified as NCV 366/89-07-04, is considered to be closed. Review of the LER is also closed.

Three licensee-identified violations, which are not being cited, were identified.

6. Followup on NRC Bulletin (92701) Units 1 and 2

(Closed) 321,366/83-BU-03, Check Valve Failures in Raw Water Cooling Systems of Diesel Generators.

This matter was previously discussed in NRC Inspection Report Nos. 50-321/87-10 and 50-366/87-10. Review of the Bulletin was left open at that time pending verification that three valves (1P41-F552A, 1P41-F552C, and 2P41-F321) had been added to the licensee's pump and valve IST program. On May 10, 1989, the inspector reviewed the licensee's current IST program document and determined that the three valves had been added as intended. Review of this Bulletin is closed.

7. Action on Previous Inspection Findings (92701 and 92702) Units 1 and 2

a. (Closed) *Unresolved Item 366/87-02-02, Design Control Modification Problems

This URI was opened to resolve two inspector concerns. The first concern involved the development of Unit 2 DCR 84-201 for upgrading the ADS to satisfy the commitment for TMI item II.K.3.18. It appeared to the inspector that this DCR package had been closed, when in fact, an interim modification was in place. This interim modification appeared to involve a push button which was installed in

*Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations.

lieu of the required keylock switch to provide for inhibition of ADS without a high drywell pressure condition. Investigation has shown that DCR 84-201 had indeed been closed by the licensee and did not provide a manual inhibition feature. However, the licensee informed the NRC via letter SL-367 dated February 28, 1986, of their intent to omit installation of the keylock inhibit switch under DCR 84-201. The licensee proposed at that time to install the keylock under a new DCR. The push button observed by the inspector is a timer reset switch and was not installed to take the place of the keylock inhibit switch.

The second concern involved apparent discrepancies between Revision 7 of Unit 2 elementary wiring drawing H-27979 and ABN 2-77-55. It also appeared to the inspector that several "not applicable" ABNs were referenced on microfiche cards for drawings. Investigation has shown that several errors did appear on ABN 2-77-55, which was written against Revision 3 of drawing H-27979. However, these errors were corrected in Revision 4 of the drawing. Investigation has also shown that the apparently "not applicable" ABNs (81-92 and 83-134) did indeed change the associated drawings. Review of this URI is closed.

- b. (Closed) Unresolved Item 321/88-03-02, "Rock Bolt Bent at Torus Mid-bay Column

This item is closed based on the closure of Unit 1 LER 88-16.

- c. (Closed) IFI 321/88-10-01, Licensee Commitment to Develop New Reactor Engineering Instructions

This IFI was opened to track a licensee commitment to develop new instructions for SNM use and control responsibilities, training requirements, and procedural review requirements by July 1, 1988. The licensee was in the process of transferring SNM use and control responsibilities from the STA group to the Reactor Engineering group at the time that this IFI was opened. On May 8, 1989, the inspector reviewed the following eleven Reactor Engineering Instructions related to the licensee commitment:

- * Instruction No. RX-SNM-001, "Responsibilities and Requirements of the SNM Custodian"
- * Instruction No. RX-SNM-002, "Receipt and Inspection of SNM"
- * Instruction No. RX-SNM-003, "Storage of SNM"
- * Instruction No. RX-SNM-004, "SNM Transfers and Shipments"
- * Instruction No. RX-SNM-005, "Physical Inventories and Isotopic Accounting"
- * Instruction No. RX-TR-001, "Responsibilities and Training Requirements for a Unit Reactor Engineer"

- * Instruction No. RX-TR-002, "Responsibilities and Training Requirements for a Reactor Core Analysis Engineer"
- * Instruction No. RX-TR-003, "Responsibilities and Training Requirements for a Reactor Computer Engineer"
- * Instruction No. RX-TR-004, "Responsibilities and Training Requirements for a Reactor Fuel Performance Engineer"
- * Instruction No. RX-TR-005, "Responsibilities and Training Requirements for a Reactor Engineer Supervisor"
- * Instruction No. RX-PR-002, "Quarterly Procedure Review Program"

The inspector determined that new instructions had been developed consistent with the licensee commitment. The inspector observed that the eleven instructions were approved for use on July 1, 1988. Review of this IFI is closed.

d. (Closed) Violation 366/88-24-01, Inadequate EHC Drawing

The inspector reviewed the licensee's letter of response dated October 11, 1988. Initial corrective action involved revising plant drawing H-21234 via ABN 88-505 to accurately reflect the physical arrangement of the EHC hydraulic unit piping. The licensee also developed a plant drawing which accurately reflects the Unit 1 EHC system. On May 16, 1989, the inspector reviewed Revision 0 of drawing H-11473 and confirmed that the Unit 1 drawing had been developed and issued. The licensee also committed to include this matter in the fourth quarter's (1988) Engineering Continuing Training in order to emphasize the importance of completing accurate ABNs. On May 16, 1989, the inspector reviewed Instructor Handbook EC-IH-00762-06 dated December 15, 1988, and confirmed that appropriate training material had been prepared. Corrective actions stated in the licensee's response have been completed, and review of this matter is closed.

e. (Closed) Violation 321/88-34-03, Inadvertent Isolation of Shutdown Cooling

The inspector reviewed the licensee's letter of response dated January 13, 1989. Corrective action involved issuing a Department Instruction to provide written instructions to Maintenance Department personnel on the proper communication techniques to be used on the sound powered communication system. All Maintenance Department personnel were to be trained on the written instructions. The inspector confirmed that Department Instruction DI-MNT-32-1288N, "Communications During Surveillance," had been developed and issued. On May 16, 1989, the inspector reviewed training signoff sheets and confirmed that the training of personnel had taken place as intended. Corrective actions stated in the licensee's response have been implemented, and review of this matter is closed.

- f. (Closed) Deviation 321, 366/88-38-01, Effect on Rock Bolts and Structures Due to Torus Shrinkage

This item is closed based on closure of Unit 1 LER 88-16.

8. Exit Interview (30703)

The inspection scope and findings were summarized on May 26, 1989, with those persons indicated in paragraph 1 above. Particular emphasis was placed on the four licensee-identified violations discussed in paragraphs 3 and 5. The licensee did not identify as proprietary any of the material provided to or reviewed by the inspectors during this inspection. Dissenting comments were not received from the licensee.

<u>Item Number</u>	<u>Status</u>	<u>Description/Reference Paragraph</u>
321/88-34-03	Closed	VIOLATION - Inadvertent Isolation of Shutdown Cooling (paragraph 7)
366/88-24-01	Closed	VIOLATION - Inadequate EHC Drawing (paragraph 7)
321, 366/88-38-01	Closed	DEV - Effect on Rock Bolts and Structures Due To Torus Shrinkage (paragraph 7)
366/89-07-01	Opened and Closed	NCV - Performance of PM on Incorrect Valve (paragraph 3)
366/89-07-02	Opened and Closed	NCV - Deficient APRM Response Time Testing (paragraph 5)
366/89-07-03	Opened and Closed	NCV - Inadequate Response Time Testing of Isolation Actuation Instrumentation (paragraph 5)
366/89-07-04	Opened and Closed	NCV - Inadequate RPS Functional Testing Procedures (paragraph 5)
366/87-02-02	Closed	URI - Design Control Modification Problems (paragraph 7)
321/88-03-02	Closed	URI - Rock Bolt at Torus Mid-bay Column (paragraph 7)
321/88-10-01	Closed	IFI - Licensee Commitment to Develop New Reactor Engineering Instructions (paragraph 7)

Licensee management was also informed that the five LERs discussed in paragraph 5 were considered to be closed and that the NRC Bulletin discussed in paragraph 6 was also considered to be closed. Another subject discussed in the exit interview was the inspector's concern about inadequate cubicle labeling (paragraph 3).

9. Acronyms and Abbreviations

ABN	-	As-Built Notice
ADS	-	Automatic Depressurization System
APRM	-	Average Power Range Monitor
DC	-	Deficiency Card
DCR	-	Design Change Request
ECCS	-	Emergency Core Cooling System
EDG	-	Emergency Diesel Generator
EHC	-	Electrohydraulic Control
ESF	-	Engineered Safety Feature
FT&C	-	Functional Test and Calibration
HPCI	-	High Pressure Coolant Injection
I&C	-	Instrumentation and Controls
IFI	-	Inspector Followup Item
IST	-	Inservice Testing
LCO	-	Limiting Condition for Operation
LER	-	Licensee Event Report
LOCA	-	Loss of Coolant Accident
LSFT	-	Logic System Functional Test
MCC	-	Motor Control Center
MG	-	Motor-Generator
MPL	-	Master Parts List
MSIV	-	Main Steam Isolation Valve
MWO	-	Maintenance Work Order
NCV	-	Non-Cited Violation
NRC	-	Nuclear Regulatory Commission
OSOS	-	On-Shift Operations Supervisor
PM	-	Preventive Maintenance
PUP	-	Procedure Upgrade Program
QA	-	Quality Assurance
RBCCW	-	Reactor Building Closed Cooling Water
RPS	-	Reactor Protection System
SGTS	-	Standby Gas Treatment System
SNM	-	Special Nuclear Material
STA	-	Shift Technical Advisor
TIP	-	Traveling Incore Probe
TMI	-	Three Mile Island
TSV	-	Turbine Stop Valve
URI	-	Unresolved Item