UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8931

August 11, 2005

Southern Nuclear Operating Company, Inc.
ATTN: Mr. H.L. Sumner, Jr.
Vice President - Hatch Plant
P. O. Box 1295
Birmingham, AL 35201-1295

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT - NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000321/2005006 AND 050000366/2005006

Dear Mr. Sumner:

On July 29, 2005, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at the Edwin I. Hatch Nuclear Plant. The enclosed report documents the inspection findings which were discussed on July 29, 2005, with Mr. George Frederick and other members of your staff. Subsequently, one issue was further characterized with Mr. George Frederick on August 4, 2005.

This inspection was an examination of activities conducted under your licenses as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations and the conditions of your operating licenses. Within these areas, the inspection involved a selected examination of procedures and representative records, observation of activities, and interviews with personnel.

Based on the sample selected for review, the inspectors concluded that, in general, problems were properly identified and evaluated. The NRC identified two findings of very low safety significance (Green). These findings were determined to involve violations of NRC requirements. The first violation is related to the control of design changes and the second violation is related to inadequate corrective actions. However, because of their very low safety significance and because they have been entered into your corrective action program, the NRC is treating these findings as non-cited violations, in accordance with Section VI.A of the NRC's Enforcement Policy. If you deny these non-cited violations, you should provide a response with the basis for your denial, within 30 days of the date of this inspection report, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001; with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the Resident Inspector at the Hatch Nuclear Plant.

A low threshold for identifying problems was maintained as evidenced by the large number of condition reports entered annually into the corrective action program. However, minor problems were noted involving corrective actions for operating experience not being documented within the corrective action program, timeliness of evaluations, and corrective actions which were incomplete

In accordance with 10 CFR 2.390 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 the 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/

Malcolm T. Widmann, Chief
Reactor Projects Branch 2
Division of Reactor Projects

Docket Nos.: 50-321, 50-366
License Nos.: DPR-57, NPF-5

Enclosure: NRC Inspection Report 05000321/2005006 and
05000366/2005006
w/Attachment: Supplemental Information

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.:	50-321, 50-366
License Nos.:	DPR-57, NPF-5
Report Nos.:	05000321/2005006 and 05000366/2005006
Licensee:	Southern Nuclear Operating Company, Inc. (SNC)
Facility:	Edwin I. Hatch Nuclear Plant, Units 1 and 2
Location:	P.O. Box 2010 Baxley, Georgia 31515
Dates:	July 11, 2005 - July 15, 2005 July 25, 2005 - July 29, 2005
Inspectors:	J. Bartley, Senior Resident Inspector, Watts Bar (Team Leader) J. Hickey, Resident Inspector, Hatch B. Monk, Resident Inspector, Browns Ferry C. Rapp, Senior Project Engineer
Approved By:	Malcolm T. Widmann, Chief Reactor Projects Branch 2 Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000321/2005-006, 05000366/2005-006; 07/11/2005 - 07/29/2005; Edwin I. Hatch Nuclear Plant, Units 1 and 2; Problem Identification and Resolution.

The inspection was conducted by a senior resident inspector, a senior project engineer, and two resident inspectors. Two Green non-cited violations (NCVs) were identified; one related to control of design changes and one related to inadequate corrective actions. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

Identification and Resolution of Problems

The inspectors identified that the licensee was generally effective at identifying problems and entering them into the corrective action program (CAP) for resolution. The licensee maintained a low threshold for identifying problems as evidenced by the continued large number of condition reports (CR) entered annually into the CAP. The inspectors also determined that the licensee was generally prioritizing and evaluating issues properly. The inspectors identified minor problems involving corrective actions for operating experience not being documented within the corrective action program, timeliness of evaluations, and corrective actions which were incomplete. NCVs related to the effectiveness of corrective actions and inadequate evaluation of issues were identified. Audits and self-assessments continued to identify issues related to the corrective action program. On the basis of interviews conducted during the inspection, the inspectors identified that personnel at the site felt free to raise safety concerns to management and to resolve issues via the CAP.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Barrier Integrity

- Green. A non-cited violation of 10 CFR 50, Appendix B, Criterion III, involving the failure to adequately control the configuration of the drywell to torus vacuum breaker actuators was identified. This resulted in the failure to maintain containment integrity requirements because one of two required barriers for containment integrity was inappropriately removed during a design change of the actuators.

  This finding is more than minor because it affected the configuration control attribute of the Barrier Integrity cornerstone to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. This finding was determined to be of very low safety significance (Green) because for each of the affected torus vacuum breaker actuators, the outboard containment isolation valve in the associated penetration remained functional. This finding affects the human performance crosscutting area in that licensee staff failed to adequately implement the site process for design controls. (Section 4OA2.b(2)(ii))

Cornerstone: Mitigating Systems

- Green. A non-cited violation of 10 CFR 50, Appendix B, Criteria XVI, involving the failure to take prompt corrective actions for a previously identified NCV was identified. This resulted in the failure to evaluate and restore compliance with 10 CFR 50 Appendix R.

  Analysis. This finding is greater than minor because it affected the reliability objective and the equipment performance attribute of the Mitigating Systems cornerstone. Although emergency lighting units with at least an 8-hour battery power supply were not provided as required by 10 CFR 50, Appendix R, Section III.J, the inspectors determined that operators would be able to accomplish the actions with the use of flashlights. The inspectors determined that the finding affected the "Post-fire SSD" category in that it affected the ability to complete post-fire actions. Because the operators had a high probability of completing the task using flashlights, a low degradation rating was assigned due to minimal impact on the effectiveness of post-fire actions. Therefore, this finding was determined to have very low safety significance (Green). This finding affects the corrective action attribute of the Problem Identification and Resolution crosscutting area. (Section 4OA2.c(2)(ii))

B. Licensee-Identified Violations

None.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

a. Effectiveness of Problem Identification

(1) Inspection Scope

The inspectors reviewed a sample of Condition Reports (CRs) for issues across the seven cornerstones of safety to determine if problems were identified, characterized, and entered into the Corrective Action Program (CAP). The majority of the CRs reviewed by the inspectors were for the period from August 2003 to June 2005. The inspectors also reviewed corrective and elective maintenance work orders (MWOs), personnel contamination events, emergency preparedness related deficiencies documented in CRs, employee concerns log, Maintenance Rule status for various systems, selected self-assessments, audits, trend reports, procedure change tracking logs, engineering evaluation documents, operability evaluations, temporary modification log, operator workaround log, and operator logs. The inspectors also reviewed the system health reports for the following systems: High Pressure Coolant Injection (HPCI), Reactor Core Isolation Cooling (RCIC), Plant Service Water, Residual Heat Removal Service Water (RHRSW), Emergency Diesel Generators (EDGs), and Control Rod Drive. In addition, the inspectors reviewed the licensee's actions for instrumentation failures, foreign material exclusion, and valve misalignments. Documents reviewed are listed in the Attachment.

The inspectors reviewed the licensee's operating experience (OE) program to determine if industry and NRC OE was being adequate reviewed and dispositioned to verify that issues had been properly assessed for impact on the plant.

The inspectors reviewed all CRs written during the inspection and attended several plant status meetings and CAP review meetings to observe the evaluation of CRs, the assignment of a Severity Level (SL), and the assignment of a responsible department to evaluate and close the CR. In addition, the inspectors interviewed numerous plant staff members and conducted walkdowns of several areas of the plant to assess if component deficiencies were appropriately identified and entered into the CAP.

The inspectors reviewed all open action item tracking (AIT) entries that were not associated with a CR in the licensee's CAP database, Plant Hatch and Corporate, to verify that conditions adverse to quality were not being handled outside of the CAP.

(2) Assessment

The inspectors determined that the licensee was generally effective at identifying problems and entering them into the CAP. The threshold for identifying and initiating CRs was low. The CAP is used to identify equipment deficiencies and produce maintenance work orders (MWOs) for equipment repair. For the MWOs reviewed that

resulted from equipment deficiencies, the inspectors determined that all had been identified and included in the CAP.

The inspectors reviewed the trend reports listed in the Attachment to verify that the licensee was identifying adverse trends. The licensee trended specific areas to identify adverse trends that indicated continued problems within a trended area. If an adverse trend was identified, an SL3 CR was written to determine the apparent cause for the trend and the corrective actions needed. The inspectors did not identify any deficiencies with the trend reports or any cases where a CR was not generated. The inspectors reviewed selected trend CRs to verify the CRs correctly characterized the problem, the apparent cause was adequate, and the corrective actions were appropriately prioritized and scheduled. The inspectors did not identify any deficiencies with these CRs.

Plant walkdowns were performed in the following areas: Unit 1 and Unit 2 EDGs, main control room, Unit 1 and 2 HPCI rooms, Unit 1 and 2 RCIC rooms, and the service water intake structure. Deficiencies identified by the inspectors during these walkdowns were:

- A hand-held flashlight left on an electrical junction box (removed by licensee)
- Temporary drain hose routed with no apparent function (removed by licensee)
- Control cable with damaged heat shrink tubing (CR 2005107709)
- Caution sign on door not consistent with current plant configuration (Labeling Requisition initiated to eliminate sign)

None of the above issues identified as a result of the inspectors' walkdown were indicative of a negative trend in problem identification.

The inspectors determined that the licensee was actively reviewing OE and that the OE coordinator was effectively coordinating the distribution to the responsible departments. However CRs were typically not written for OE even if actions were required. Organizations would enter the actions into the licensee's database as non-CAP AITs. The inspectors identified multiple examples in departmental OE databases that should have been entered into the CAP as CRs. The inspectors reviewed NMP-GM-008, Operating Experience Program, and determined it did not provide guidance on when a CR should be generated based on OE. The inspectors determined that, although it was typically being handled outside the CAP, the OE program was working because OE was being screened and actions were taken to address the conditions.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors reviewed procedure 10AC-MGR-004-0, Corrective Action Program, to determine the licensee's requirements for prioritizing and evaluating issues. The corrective action program coordinators (CAPCOs) assigned each CR a SL from SL1 (highest significance) to SL5 (lowest significance) and assigned the CR to a responsible department for processing. Corrective actions resulting from CRs were tracked using the AIT database. The AIT database included action items from the CAP and non-CAP

processes. The AIT's not linked to a CR were not part of the CAP. The inspectors reviewed the daily CRs, attended various CAPCO meetings, and compared the assignment of SL to each CR. The inspectors reviewed selected CRs to ensure that CR significance level classifications, operability determinations, reportability determinations, degraded and non-conforming condition determinations, cause determinations, and selection of corrective actions were consistent with the significance of the problems described. In addition the inspectors reviewed AITs not linked to CRs in the Hatch and corporate databases to verify correction actions were not being handled outside of the CAP. The inspectors also reviewed the licensee's follow-up of previously identified non-cited violations (NCVs) and Licensee Event Reports (LERs) to assess prioritization and completion of corrective actions. Documents reviewed are listed in the Attachment.

(2) Assessment

(i) General

The inspectors determined that the CAPCOs correctly assigned SLs to the CRs sampled by the inspectors. In general, the root cause evaluations for the CRs reviewed were adequate. The licensee was generally effective in prioritizing and processing CRs. Apparent Cause Evaluations reviewed were found to be thorough and well-documented. All of the evaluations were verified to be completed by qualified individuals.

The inspectors reviewed the self-assessments and audit reports listed in the Attachment to verify that the licensee was identifying problems with the CAP. Based on the reports reviewed, the inspectors determined that the licensee's audits were thorough and effective in identifying areas for improvement. CRs were written for issues identified in the audit reports.

The inspectors found four examples, listed below, where the problem statement of an AIT was the same as the problem statement of the CR for which they were corrective actions. The AITs would direct, "evaluate" or "explore." NMP-GM-002, Corrective Action Program, states that the evaluation time frame for a CR is the number of days allowed for evaluation of the condition and ending when corrective actions are either initiated and approved or completed. The procedure specifies a maximum 30-day evaluation time frame. Writing an AIT to "evaluate" or "explore" circumvents the 30-day evaluation clock for the CRs. The inspectors reviewed the status of the CRs and determined that in one case, CR 2003008237, this practice resulted in not taking prompt corrective actions (Refer to Section 4OA2.c(2)(ii)). For the remaining three CRs, the inspectors determined that the practice to evaluate or explore did not result in an inappropriate delay and therefore were minor.

- CR 2003008237 (SL4)/AI 2003203755
- CR 2003008181 (SL4)/AI 2003203667
- CR 2004101709 (SL3)/AI 2004200958
- CR 2005105494 (SL4)/AI 2005202070

The inspectors reviewed CR2004102319 for failed as-found local leak rate tests (LLRT) for all Unit 1 vacuum breaker actuators and the associated LER 05000321/2004-002-00, Air Actuator for Vacuum Breaker Failed LLRT because of an Inadequate Design. The inspectors determined that the short term corrective actions were appropriate, but that the root cause analysis (RCA), and therefore the long-term corrective actions, was inadequate. The regulatory compliance aspects for this issue are documented in the Findings paragraph of this section. The completed corrective actions consisted of repairing the actuators, updating the actuator drawing, both short term actions, and adding a paragraph to the standard procurement paragraph as a long term action. The added paragraph specified that the supplier notify the licensee of any exceptions or the use of alternate items in place of a specified item and provide technical information sufficient to justify the replacement. The inspectors determined that the RCA did not identify the inappropriate use of emails and telephone conversations to accomplish design changes. This informal communication chain resulted in incomplete requirements specified on ED-02-9028 and bypassed portions of the approval and review process for the Equivalency Determination (ED). On this ED, there was no documentation of any external physical requirements (i.e., shortening of the actuator to make it fit). Additionally, given the scope of the final change, the root cause failed to address if the change was still within the scope of the ED process. No corrective actions existed, which addressed either the human performance aspects, the failure to follow the ED process, or the appropriateness of the use of the ED process to make this final change. The inspectors determined that the inadequate RCA and corrective actions were a minor issue because no subsequent deficiencies associated with the ED process were identified.

(ii) Findings

Inadequately Controlled Design Changes

Introduction. A Green NCV was identified for the failure to adequately implement design control measures, i.e., specify design requirements, as prescribed in 10 CFR 50, Appendix B, Criterion III, Design Control. Specifically, in March 2002, changes were made to the configuration of the torus vacuum breaker actuators that failed to ensure their containment integrity function was maintained.

Description. On or about March 1, 2002, the licensee determined that replacement torus vacuum breaker air-operated actuators did not physically fit the associated vacuum breakers. These replacements were ordered to have the same fit and function as the originals with the exception of stronger internal springs. These components were procured by the licensee per ED-01-9143. Upon discovery that the new actuators would not fit, the licensee communicated with the vendor using telephone conversations and emails about the problem. These discussions resulted in a decision to physically shorten the actuators. The actuators were returned to the vendor for physical changes in size. The licensee again used the ED process to implement these changes, ED-02-9028. Though telephone conversations and emails communicated the intent of physically shortening the actuators, ED-02-9028 had no verbiage describing the desired change other than to reiterate the change to a stronger spring. The original actuators

were procured with two piston seals facing opposite directions. One seal was required for moving the piston while the second seal provided the containment barrier function. The change to shorten the actuator resulted in removing the seal that was required to maintain containment integrity.

Review of emails between the licensee and the vendor and other vendor correspondence indicates that there was no clear understanding of the containment isolation function of the actuator. The licensee received two vendor correspondences related to physically altering the actuators per ED-02-9028, one of which states that the replaced piston had one seal, whereas, the other describes the work done, which is silent as to seal changes.

Analysis. This finding is greater than minor because it affected the configuration control attribute of the Barrier Integrity cornerstone to provide reasonable assurance that physical design barriers (fuel cladding, reactor coolant system, and containment) protect the public from radionuclide releases caused by accidents or events. This finding was determined to be of very low safety significance (Green) because for each of the affected torus vacuum breaker actuators, the outboard containment isolation valve in the associated penetration remained functional. This finding affects the human performance crosscutting area in that licensee staff failed to adequately implement the site process for design controls.

Enforcement. 10 CFR 50, Appendix B, Criterion III, Design Control, states, in part, "Design changes, including field changes, shall be subject to design control measures commensurate with those applied to the original design . . . " Contrary to the above, in March 2002, changes were made to the configuration of the torus vacuum breaker actuators that failed to ensure their containment integrity function was maintained. Because this failure to comply with 10 CFR 50, Appendix B, Criterion III is of low safety significance and has been entered into the licensee's corrective action program as CR 2005107766, this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000321/2005006-01, Failure to Adequately Implement Design Control Measures.

c. Effectiveness of Corrective Actions

(5) Inspection Scope

The inspectors reviewed selected CRs to verify that specified corrective actions were timely and effective in resolving the problems described. This sample was based on risk as well as SL. The CRs reviewed also included those resulting from previous NRC violations as well as licensee audits and self assessments, and covered all safety cornerstones. The inspectors also discussed the CAP with plant staff to determine their impression of the CAP's effectiveness in resolving issues. Licensee trend reports, the action items resulting from CRs, system health reports, and CR backlog were also reviewed. The review was predominantly for the period between August 2003 and June 2005. However, some older CRs were also reviewed for long-standing issues. The inspectors also reviewed the temporary modification log to determine the reason and the

licensee plans relating to the temporary modifications. Documents reviewed are listed in the Attachment.

(6) Assessment

(i) General

The inspectors determined that the CAPCO program continued to improve in CAP management from the previous problem identification and resolution inspection conducted in August 2003. Based on a review of numerous completed as well as open CRs, discussions with plant personnel, and review of existing plant problems, the inspectors noted very few repetitive equipment related problems. CAP performance indicators also show continuing improvement. The CAP health is monitored using various performance indicators (PI) such as repeat events, number of CRs open greater than two years, number of CRs open, overdue AITs, and RCA grading. These indicators are rolled up into composite PI with a scale of 0 to 100. The composite PI has been consistently greater than 90 since June 2004. Prior to June 2004 it was consistently below 80. All of the individual PIs were in the top performance band (Green) with the exception of overdue SL3 CR initial responses which were Yellow based on one overdue response. A CR was generated to address the Yellow PI. In addition, the number of repeat SL1, 2, and 3 events has dropped significantly since 2003.

The inspectors identified three instances of inadequate corrective actions which are discussed below. The inspectors did not identify any deficiencies as a result of the inadequate corrective actions and determined the issues were minor.

- CR 2004101129/AI 2004201686 was initiated for an issue regarding design configuration of RHRSW pumps. One of the root causes was determined to be that the purchase, acceptance, and verification processes did not result in the supplier performing all the steps desired to ensure expected pump performance. To correct this, the licensee wrote ERS-M-003, Refurbishment/Repair Specification Component Application: RHR Service Water Pumps. Additionally, the root cause identified that the vendor tested the pump at a reduced speed and inappropriately used correlation data to determine the pump would meet net positive suction head (required) requirements. The inspectors reviewed the ERS-M-003 and found that it did not adequately specify that the use of full speed testing for the first stage was the preferred test method. It still allowed the use of reduced speed testing and correlation data. The inspectors determined that this issue was minor because no additional RHRSW pumps have been purchased without the full speed testing, and licensee personnel were aware that full speed testing of the first stage was required. The licensee initiated CR 2005107472 to resolve this issue.

- NCV 05000321, 366/2003007-01 cited the licensee for inadequate corrective action for a previous NCV which involved a missed technical specification surveillance. It specifically identified that the licensee failed to determine extent of condition with regard to procedural deficiencies following initial identification in September 2001.

The licensee initiated CR 2003009445 (SL3) to address the missed surveillance identified in 2003. The licensee performed an apparent cause and an extent of condition review. However, a CR was not written specifically for the NCV as directed by the CAP procedure and CR 2003009445 did not evaluate why an extent of condition was not done. In 2001, the licensee's CAP procedures did not require an extent of condition/broadness review for apparent cause determinations. By 2003, the CAP procedures were revised to allow a broadness review at the department manager's discretion for apparent cause determinations. However, the CAP procedures do not require an extent of condition/broadness review for NRC findings and NCVs. The inspectors determined that this issue was minor because no additional examples of failing to perform extent of conditions were identified. The licensee initiated CR 2005107509 to resolve this issue.

- CR 2003008181 was written to address an NRC observation in IR 05000321, 366/2003006 that electrical links had inconsistent labeling conventions. The disposition of the CR stated they needed to decide how to label the links and then label them. The licensee generated AIT 2003203667 to track this work. However, the AIT only directed that a decision be made on how to label the links but did not direct the labels be installed. The AIT was closed on March 18, 2004. The inspectors walked down the links on July 13, 2005, and determined that new labels were not installed. The inspectors determined that the finding was minor because the links were adequately labeled and the CR dealt with an NRC observation. The licensee initiated CR 2005107080 to resolve this issue.

(ii) Findings

Failure to Take Prompt Corrective Action for an NCV

Introduction. A Green NCV was identified for failing to take prompt corrective actions to restore compliance with 10 CFR 50, Appendix R, Section III.J, as documented by NCV 50-366/03-06-05.

Description. The NRC identified NCV 05000366/2003006-05, Inadequate Emergency Lighting for Operation of Post-Fire Safe Shutdown Equipment, during the fire protection triennial inspection conducted in July 2003. The inspectors determined that the licensee did not meet the requirements of 10 CFR 50, Appendix R, Section III.J, which requires that emergency lighting units with at least an 8-hour battery power supply shall be provided in all areas needed for operation of safe shutdown equipment, and in access and egress routes thereto. Specifically that there were no emergency lighting units to provide adequate lighting for opening links in main control room (MCR) cabinets to prevent spurious opening of safety relief valves. Refer to IR 05000321, 366/2003006, Section 1R05.07.b.

The licensee initiated CR 2003110072 (SL3) on September 9, 2003, to enter the NCV into the CAP. AIT 2003204552 (Priority 3) was the only action item written which was directly linked to CR 2003110072. The action was to develop an engineering requirements document that would systematically establish lighting requirements. This

AIT was closed on October 1, 2004, when it was determined that the Appendix R lighting requirements were documented in the Plant Hatch Safe Shutdown Analysis Report. The inspectors reviewed this action and determined it did not restore compliance with the regulations. In addition, CR 2003110072 identified that the corrective actions for the CR would be resolved by CRs 2003008179 (SL4), 2003008181 (SL4), and 2003008237 (SL4). These CRs were written during the triennial fire protection inspection. CRs 2003110072, 2003008179, 2003008181, and 2003008237 were closed prior to the start of this inspection. The inspectors reviewed the licensee's corrective actions as implemented by these CRs and determined that only CR 2003008179, which redirected the emergency lighting at the Unit 2 drywell access, had corrective actions completed. The assessment of CAs related to the resolution of CR 2003008181 are discussed in the 'General' paragraph of this section.

CR 2003008237 was initiated on July 24, 2003, to resolve the lighting issue in the MCR cabinet. AIT 2003203755 was generated on August 28, 2003, to perform the corrective actions for CR 2003008237. The corrective action was to evaluate the adequacy of emergency lighting and component labeling for improvements when performing 34AB-X43-001-1 and 34AB-X43-001-2 procedures to ensure timely manual actions. The due date for this action was August 27, 2004. On July 26, 2004, the AIT was closed to Engineering Work Activity (EWA) #690 which was not a part of the CAP and was used to manage engineering resources. CR 2003008237 was closed on September 4, 2003. The inspectors reviewed EWA 690 and identified it had an estimated start date of March 2006. The inspectors determined that as of July 15, 2005, no actions had been taken to evaluate or restore the noncompliance cited in NCV 50-321/03-06-05.

Analysis. This finding is greater than minor because it affected the reliability objective and the equipment performance attribute of the Mitigating Systems cornerstone. Although emergency lighting units with at least an 8-hour battery power supply were not provided as required by 10 CFR 50, Appendix R, Section III.J, the inspectors determined that operators would be able to accomplish the actions with the use of flashlights. The inspectors determined that the finding affected the "Post-fire SSD" category in that it affected the ability to complete post-fire actions. Because the operators had a high probability of completing the task using flashlights, a low degradation rating was assigned due to minimal impact on the effectiveness of post-fire actions. Therefore, this finding was determined to have very low safety significance (Green). This finding affects the corrective action attribute of the Problem Identification and Resolution (PI&R) crosscutting area.

Enforcement. 10 CFR 50, Appendix B, Criteria XVI, Corrective Actions, requires in part, that measures be established to assure that conditions adverse to quality, such as nonconformance are promptly identified and corrected. Contrary to the above, as of July 15, 2005, a non-conformance with 10 CFR 50, Appendix R, Section III.J, which was identified on July 24, 2003, was not promptly corrected. Because this failure to comply with 10 CFR 50, Appendix B, Criterion XVI is of low safety significance and has been entered into the licensee's corrective action program as CR 2005107117, this violation is

being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000366/2005006-02, Failure to Take Prompt Corrective Actions for an NCV.

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

The inspectors reviewed numerous audits, self assessments, CRs, MWOs, and the Employee Concerns Program files to determine if issues affecting safety were being appropriately addressed. Discussions were held with numerous personnel at various levels in the organization to determine if a work environment and a process existed that was conducive to the identification of safety issues.

(2) Assessment

The inspectors determined that personnel at the site felt free to raise safety concerns. All personnel stated that they would not hesitate to raise safety concerns to their management or through the CR process. They also understood and believed that they could raise issues without fear of retaliation by management. Concerns resolution files for 2003, 2004, and 2005 were sampled. Approximately 100 concerns were entered into the program in the last year. None of the issues related to nuclear safety and thus no CRs were generated. However, the non-nuclear safety concerns were tracked using non-CAP AITs to ensure they were addressed. The inspectors confirmed that nuclear safety issues would result in a CR being generated and verified that CRs were initiated for the two nuclear safety concerns received during the report period. The inspectors concluded that a safety conscious work environment existed.

4OA4 Crosscutting Issues

Section 4OA2.b(2)(ii) describes a finding associated with failure to adequately implement the ED process during modifications to vacuum breaker actuators. The inspectors identified that a human performance error resulted in actuators being installed that did not have the required seal configuration to maintain containment integrity. Engineering personnel did not perform an ED when actuators were sent back to the vendor to be modified.

Section 4OA2.c(2)(ii) describes a finding associated with a failure to take prompt corrective actions to restore compliance with 10 CFR 50, Appendix R. The inspectors identified that corrective actions documents were closed without actions being implemented. This finding affects the correct action attribute of the PI&R crosscutting area.

4OA6 Meetings, Including Exit

On July 29, 2005 and August 4, 2005, the inspectors presented the inspection results to G. Frederick and other members of his staff who acknowledged the findings. The inspectors confirmed that proprietary information was not provided or examined during this inspection.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

R. Baker, Licensing Supervisor (Corporate)
J. Dixon, Health Physics Manager
W. Duvall, Chemistry Manager
G. Frederick, General Manager - Nuclear Plant
M. Googe, Maintenance Manager
J. Hammonds, Operations Manager
J. Lewis, Training and Emergency Preparedness Manager
J. Martin, Plant Supply Chain Superintendent
D. Madison, Assistant General Manager - Plant Operations
J. Thompson, Nuclear Security Manager
K. Underwood, Performance Analysis Supervisor
R. Varnadore, Engineering Support Manager
D. Willyard, Engineering Supervisor

NRC Personnel

D. Simpkins, Senior Resident Inspector, RII

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened
NONE

Opened and Closed

05000321/2005006-01	NCV	Failure to Adequately Implement Design Control Measures (Section 4OA2.b(2)(ii))
05000366/2005006-02	NCV	Failure to Take Prompt Corrective Actions for an NCV (Section 4OA2.c(2)(ii))

Closed
NONE

Discussed
NONE

LIST OF DOCUMENTS REVIEWED

Condition Reports

2001005606	2003009690	2004100463	2004105421	2004109411
2001007192	2003009705	2004100928	2004105456	2004109421
2001007276	2003009722	2004100929	2004105529	2004109567
2002002015	2003009723	2004100932	2004105564	2004109679
2002004315	2003009727	2004101049	2004105578	2004109710
2002006371	2003110008	2004101129	2004105592	2004109914
2003004592	2003110043	2004101360	2004105644	2004109971
2003005357	2003110068	2004101709	2004105677	2004109986
2003005365	2003110070	2004101809	2004105860	2004110456
2003005540	2003110072	2004101917	2004105918	2004110520
2003005743	2003110081	2004101943	2004105991	2004110520
2003005835	2003110087	2004102017	2004106162	2004110761
2003005845	2003110141	2004102189	2004106389	2004111110
2003006716	2003110153	2004102318	2004106421	2004111262
2003007377	2003110179	2004102319	2004106450	2004111282
2003007800	2003110198	2004102330	2004106531	2004111504
2003008074	2003110306	2004102459	2004106532	2004111945
2003008507	2003110319	2004102626	2004106532	2004112330
2003008520	2003110334	2004102791	2004106587	2004200838
2003008544	2003110334	2004102876	2004106595	2004201387
2003008559	2003110553	2004102977	2004106948	2004201389
2003008560	2003110555	2004103003	2004107050	2004201390
2003008658	2003110559	2004103030	2004107207	2004201579
2003008659	2003110776	2004103147	2004107214	2004203088
2003008661	2003110815	2004103160	2004107390	2005100182
2003008854	2003111030	2004103256	2004107568	2005100183
2003008975	2003111077	2004103417	2004107649	2005100341
2003008983	2003111198	2004103443	2004107664	2005100349
2003009101	2003111237	2004103481	2004107710	2005100364
2003009113	2003111464	2004103500	2004107773	2005100460
2003009146	2003111601	2004103510	2004107788	2005100649
2003009147	2003111835	2004103589	2004107790	2005100817
2003009162	2003111862	2004103620	2004107812	2005101570
2003009163	2003112037	2004103651	2004107893	2005101950
2003009286	2003112041	2004103791	2004107948	2005102145
2003009338	2003112117	2004104103	2004107978	2005102174
2003009363	2003112148	2004104389	2004107979	2005102295
2003009384	2003112279	2004104528	2004108180	2005102317
2003009445	2003112330	2004104570	2004108317	2005102391
2003009527	2003112558	2004104737	2004108358	2005102490
2003009539	2003112588	2004104833	2004108456	2005103026
2003009557	2003112589	2004105129	2004108759	2005103062
2003009558	2003112885	2004105131	2004108765	2005103121
2003009569	2004100299	2004105265	2004109341	2005103140
2003009656	2004100437	2004105374	2004109389	2005103169

2005103366	2005103367	2005103369	2005103579	2005103584
2005103706	2005103764	2005103767	2005103874	2005103969
2005104104	2005104685	2005104788	2005105083	2005105177
2005105358	2005105992	2005106013	2005106055	2005106167
2005106230	2005201467			

Maintenance Work Orders

1040626401	1051441701	1030473701	2051401601	1030368801
1050786901	1040626401	2043157401	1040396601	1050066101
1040582101	1041769101	1042551201	1050103601	1050883101

Action Items

2005201283	2005201287	2005201288	2005201291	2005201293
2003204244	2003203457	2004204579	2004204354	2005201999
2004203407	2004200030	2005200007	2005200087	2005200128
2005200155	2005200227			

Documents and Procedures

NMP-GM-002, Corrective Action Program
NMP-GM-002-GL02, Corrective Action Program Details and Expectations Guideline
NMP-GM-002-GL03, Corrective Action Program Root Cause Determination Guideline
NMP-GM-002-GL04, Corrective Action Program Apparent Cause Determination Guideline
NMP-GM-002-GL05, Corrective Action Program Trend Coding and Analysis Guideline
NMP-GM-002-GL06, Corrective Action Review Board Guideline
NMP-GM-002-GL07, Corrective Action Program Effectiveness Review Guideline
34SV-E41-002-1&2, HPCI Pump Operability
34SV-E51-002-1&2, RCIC Pump Operability
50AC-MNT-001-0, Maintenance Program
Operations Procedure Tracking Database Item #5912
Engineering Evaluation Document #951
52GM-MME-004-1 Reactor Vessel Reassembly
52GM-MME-004-2 Reactor Vessel Reassembly
42IT-TET-006-1 ISI Pressure Test of Class I Systems and Recirc Pump(s) Runback Test
42IT-TET-006-2 ISI Pressure Test of Class I Systems and Recirc Pump(s) Runback Test
ERS-—003 Equipment Repair Specification for RHRSW Pumps
Surveillance Requirement 3.8.6.2 for 1C EDG battery 1R42S002C Repetitive Task 1-3752-1A
52SV-R43-001-0 Diesel Generator and Accessories Inspection
52PM-R43-001-0 Diesel Engine Major Inspection
34GO-OPS-031-1 Daily Outside Rounds
NMP-ES–12 Southern Nuclear Heat Exchanger Program
Engineering Change Request from Ralph Hiller to Georgia Power for vendor order 6051482 and 6051483 dated 3/11/02 documenting one seal
Letter from Ralph Hiller to Georgia Power for vendor order 6051482 documenting modifications dated 3/15/02
Root Cause Analysis performed by Johnston Pump Company attached to letter dated March 4, 2004 related to RHRSW pump hydraulic performance failures
DCR 02-015, RHRSW Cutter Pump Design and Column Improvement

Temporary Plant Modification 2-03-018, 2P41, 2/21/2005
Temporary Plant Modification 1-04-021, 1E11F200B, 9/17/2004
LER 2004-002-0, Air Actuator for Vacuum Breaker Failed LLRT Because of an Inadequate Design
NCV 05000321/2004005-01, Lube Oil Cooler Failure Results in Emergency Diesel Generator Inoperability
NCV 05000321, 366/2004004-01, Failure to Perform 10 CFR 50.59 Evaluation
NCV 05000366/2004002-01, Inadequate Maintenance Instructions Results in Emergency Diesel Generator Start and Inoperability
NCV 05000321, 366/2003007-02. Failure to Evaluate Pressure Transients on Safety Related System
Hatch Nuclear Plant Quarterly Trend Report - November 2003 through January 2004 (4th Q '03)
Hatch Nuclear Plant Quarterly Trend Report - February 2004 through April 2004 (1st Q '04)
Hatch Nuclear Plant Quarterly Trend Report - May 2004 through July 2004 (2nd Q '04)
Hatch Nuclear Plant Quarterly Trend Report - August 2004 through October 2004 (3rd Q '04)
Hatch Nuclear Plant Quarterly Trend Report - November 2005 through January 2005 (4th Q '04)
Hatch Nuclear Plant Quarterly Trend Report - February 2005 through April 2005 (1st Q '05)
1Q04--Managers' Meeting Quarterly Trend Report
2Q04--Managers' Meeting Quarterly Trend Report
3Q04--Managers' Meeting Quarterly Trend Report
4Q04--Managers' Meeting Quarterly Trend Report
2Q03--Managers' Meeting Quarterly Trend Report
3Q03--Managers' Meeting Quarterly Trend Report
4Q03--Managers' Meeting Quarterly Trend Report
Corrective Action Program Peformance Indicator Report May 2005
Audit No. H-CAP-2004-1, Audit of the Hatch Corrective Action Program, August 11, 2004
Audit No. H-CAP-2004-2, Audit of the Hatch Corrective Action Program, February 1, 2005
SNC Corrective Action Program Fleet Self-Assessment, July 6 - July 16, 2004

Plant Drawings
S-26693 18" - 150# Vacuum Breaker Torus to Drywell
Ralph Hiller Co. 2-1/2 SA-A041 air actuator w/ 2 seals
Ralph Hiller Co. 2-1/2 SA-A042 air actuator w/ 1 seal