



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

October 30, 2007

Southern Nuclear Operating Company, Inc.  
ATTN: Mr. Dennis R. Madison  
Vice President - Hatch  
Edwin I. Hatch Nuclear Plant  
11028 Hatch Parkway North  
Baxley, GA 31513

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT - NRC INTEGRATED INSPECTION  
REPORT 05000321/2007004 AND 05000366/2007004

Dear Mr. Madison:

On September 30, 2007, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at your Edwin I. Hatch Nuclear Plant, Units 1 and 2. The enclosed integrated inspection report documents the inspection results, which were discussed on October 11, 2007, with you and other members of your staff.

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

The enclosed inspection report documents one self-revealing finding of very low safety significance which was determined to be a violation of NRC requirements. Additionally, one licensee-identified violation, which was determined to be of very low safety significance, is listed in the report. NRC is treating these violations as non-cited violations (NCVs) consistent with Section VI.A.1 of the NRC Enforcement Policy because of the very low safety significance and because you have entered them into your corrective action program. If you deny these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the 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 Inspectors at the Hatch Nuclear Plant.

SNC

2

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response (if any) 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/**

Scott M. Shaeffer, Chief  
Reactor Projects Branch 2  
Division of Reactor Projects

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

Enclosure: Inspection Report 05000321/2007004 and  
05000366/2007004  
w/Attachment: Supplemental Information

cc w/encl: (See page 3)

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cc w/encl: (See page 3)

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3

cc w/encls:

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4

Letter to Dennis R. Madison from Scott M. Shaeffer dated October 30, 2007

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT - NRC INTEGRATED INSPECTION  
REPORT 05000321/2007004 AND 05000366/2007004

Distribution w/encl:

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**U. S. NUCLEAR REGULATORY COMMISSION**

**REGION II**

Docket Nos.: 50-321, 50-366

License Nos.: DPR-57 and NPF-5

Report Nos.: 05000321/2007004, 05000366/2007004

Licensee: Southern Nuclear Operating Company, Inc.

Facility: Edwin I. Hatch Nuclear Plant

Location: Baxley, Georgia 31515

Dates: July 1 - September 30, 2007

Inspectors: J. Hickey, Senior Resident Inspector  
P. Niebaum, Resident Inspector  
S. Vias, Senior Reactor Inspector (Section 1R12)  
J. Quiñones-Navarro, Reactor Inspector (Section 4OA5.2)

Approved by: Scott M. Shaeffer, Chief  
Reactor Projects Branch 2  
Division of Reactor Projects

Enclosure

## SUMMARY OF FINDINGS

IR 05000321/2007-004, 05000366/2007-004; 07/1/2007-09/30/2007; Edwin I. Hatch Nuclear Plant, Units 1 and 2, Event Followup

The report covered a three-month period of inspection by resident inspectors. One Green non-cited violation was identified during this inspection period. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter 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 4, dated December 2006.

### A. NRC-Identified and Self-Revealing Findings

Cornerstone: Initiating Events

- Green. A self-revealing non-cited violation (NCV) of 10CFR50 Appendix B, Criterion V, Instructions, Procedures, and Drawings, was identified for inadequate work instructions provided to workers for the calibration of a main generator output recorder. The calibration was performed with the main generator on-line which caused a sensed power load unbalance (PLU) resulting in a reactor scram.

This finding is greater than minor because it is associated with Equipment Performance attribute and adversely affected the Initiating Events cornerstone objective in that it resulted in a challenge to safety functions at power. The finding was determined to be of a very low safety significance because no other mitigating equipment or functions were adversely affected. The inspectors determined this finding was related to the complete and accurate procedures aspect of the human performance cross-cutting area (H.2c). The licensee has entered this issue their corrective action program (CAP) as Condition Report (CR) 2006104201. (Section 40A3.3 )

### B. Licensee-Identified Violations

Violations of very low safety significance, which were identified by the licensee, have been reviewed by the inspectors. Corrective actions taken or planned by the licensee have been entered into the licensee's CAP. These violations and corrective actions are listed in Section 40A7 of this report.

Enclosure

## REPORT DETAILS

### Summary of Plant Status

Unit 1 began the inspection period at or near 100% Rated Thermal Power (RTP). On August 11, power was briefly reduced to 89% due to high balance of plant temperatures. Unit 1 remained at 100% RTP through the end of the reporting period.

Unit 2 began the inspection period at or near 100% RTP. On August 1, power was briefly reduced to 91% due to a pole mounted transformer fire. On August 7, a reactor scram occurred due to the loss of the 2D 4KV electrical bus. The unit was returned to service on August 9 and remained at 100% RTP through the end of the reporting period.

### 1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

#### 1R04 Equipment Alignment

##### a. Inspection Scope

Partial Walkdowns. The inspectors performed partial walkdowns of the following four systems when the opposite trains were removed from service. The inspectors checked system valve positions, electrical breaker positions, and operating switch positions to evaluate the operability of the opposite trains or components by comparing the position listed in the system operating procedure to the actual position. Documents reviewed are listed in the Attachment.

- 1A and 2C Emergency Diesel Generators (EDG) while 1B EDG was removed from service for breaker maintenance
- Unit 1 Core Spray (CS) B system during maintenance on the CS A system
- Unit 1 Reactor Core Isolation Cooling (RCIC) system while Unit 1 High Pressure Coolant Injection (HPCI) system was removed from service for maintenance
- 1A and 1C EDGs during 1B EDG maintenance to replace a breaker

Complete System Walkdown. The inspectors performed a complete walkdown of the following system. The inspectors performed a detailed check of valve positions, electrical breaker positions, and operating switch positions to evaluate the operability of the system or components by comparing the required position in the system operating procedure to the actual position. The inspectors also interviewed personnel and reviewed control room logs to verify that alignment and equipment discrepancies were being identified and appropriately resolved. Documents reviewed are listed in the Attachment.

- Unit 1 Residual Heat Removal System (RHR)

Enclosure

b. Findings

No findings of significance were identified.

1R05 Fire Protection

a. Inspection Scope

Fire Area Tours. The inspectors toured the following 12 risk significant plant areas to assess the material condition of the fire protection and detection equipment, verify fire protection equipment was not obstructed and that transient combustibles were properly controlled. The inspectors reviewed the applicable fire zones on Pre-Fire Plan drawing A-43965 to ensure that the necessary fire fighting equipment, such as fire extinguishers, hose stations, ladders, and communications equipment, were in place. Documents reviewed are listed in the Attachment.

- Unit 2 Southeast RHR and CS Room
- Unit 2 Northeast RHR and CS Room
- Unit 2 Control Rod Drive (CRD) Area 130'
- Unit 1 Standby Gas and HVAC room 164'
- Refueling Floor
- Unit 2 Chiller Room 164'
- Unit 2 CRD Pump Room
- Unit 1 Working Floor and Air Supply Room 203'
- Unit 2 MG Set Rooms 158'
- Unit 2 HPCI Pump Room
- Unit 2 RCIC Pump and Turbine Room
- Unit 2 Working Floor 158'

Fire Drill Observation. The inspectors observed a fire drill conducted on August 28. The inspectors reviewed licensee procedure 34AB-X43-001-1, Fire Procedure, and the drill scenario to verify proper response of the on-shift fire brigade to a simulated fire. The inspectors checked proper use of protective clothing, self contained breathing apparatus, fire fighting equipment, fire pre-plans, proper fire fighting strategy including smoke removal and fire propagation checks, communications, command and control, and coordination with offsite fire company support. In addition, the inspectors attended the post-drill critique to assess if the licensee identified performance issues were comparable to those identified by the inspectors.

b. Findings

No findings of significance were identified.

## 1R11 Licensed Operator Requalification

### a. Inspection Scope

Resident Quarterly Observation. The inspectors observed the performance of licensee simulator scenario LT-SG-51075-01, Torus Level Increase with Success Path/ Feedwater Line Break in the Drywell. The scenario included placing torus cooling in service, HPCI surveillance termination due to high torus level, a feedwater line break in the drywell resulting in an Alert due to high drywell pressure. The inspectors reviewed licensee procedures 10AC-MGR-019-0S, Procedure Use and Adherence, and DI-OPS-59-0896N, Operations Management Expectations, to verify formality of communication, procedure usage, alarm response, control board manipulations, group dynamics, and supervisory oversight. The inspectors attended the post-exercise critique of operator performance to assess if the licensee identified performance issues were comparable to those identified by the inspectors. In addition, the inspectors reviewed the critique results from previous training sessions to assess performance improvement.

### b. Findings

No findings of significance were identified.

## 1R12 Maintenance Effectiveness

### a. Inspection Scope

Resident Review. The inspectors reviewed the sample listed below associated with risk significant structures, systems, and components to assess the licensee's implementation of the Maintenance Rule (MR) (10 CFR 50.65) with respect to the characterization of failures and the appropriateness of the associated (a)(1) or (a)(2) classification. For the equipment identified below, the inspectors reviewed operator logs, associated CRs, Maintenance Work Orders (MWO) and the licensee's procedures for implementing the Maintenance Rule. The review was to determine if equipment failures were being identified, properly assessed, and corrective actions established to return the equipment to a satisfactory condition. Documents reviewed are listed in the Attachment.

- Unit 1 and 2 Standby Liquid Control System

Triennial Evaluation. The inspectors reviewed the licensee's MR periodic assessment, for the period of June 2004 to June 2007, to assess the effectiveness of the assessment and verify that it was issued in accordance with the requirements of 10 CFR 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." The inspectors evaluated the periodic assessment timeliness, balancing of reliability and unavailability, (a)(1) activities, (a)(2) activities, and the use of industry operating experience for the 24-month period covered by the assessment. The inspectors reviewed selected MR activities covered by the assessment period for the Reactor Building HVAC, Station Auxiliary DC Power, and HPCI systems. Additionally,

the inspectors conducted a plant walkdown to assess the condition of risk-significant plant structures within the MR scope to verify that condition monitoring was adequately performed. The inspectors reviewed selected plant work order data, system health reports, reliability and unavailability monitoring status documents, significant adverse condition investigation reports, MR system scoping documents, and MR expert panel meeting minutes to verify the application of MR requirements. The inspectors also discussed and reviewed relevant corrective action reports, and discussed MR issues with system engineers and licensee management. The inspectors reviewed the most recent MR structures inspection report. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors assessed the planning and control for the following five Plan of the Day documents listed below to verify that risk assessments were performed prior to components being removed from service. The inspectors reviewed the risk assessment and risk management controls implemented for these activities to verify they were completed in accordance with licensee procedure 90AC-OAM-002-0, Scheduling Maintenance, and 10 CFR 50.65 (a)(4). For emergent work the inspectors assessed whether any increase in risk was promptly assessed and that appropriate risk management actions were implemented.

- July 30 through August 3, Low Voltage Switchyard excavation, 1A Residual Heat Removal Service Water (RHRSW) Strainer maintenance and 2E11F008 Shutdown Cooling Outboard Isolation Valve Starter maintenance
- August 20 through August 24, 1C EDG Battery Charger preventive maintenance, 1A EDG Oil Heater Temperature Switch replacement, Reactor Manual Scram functional testing
- July 14 through July 20, 1B Hydrogen/Oxygen Analyzer preventive maintenance, 1B RHRSW Strainer differential pressure instrument tubing replacement, Unit 2 Main Turbine Weekly testing
- August 11 through August 16, Unit 1 Analog Transmitter Trip System functional test and calibration, Unit 1 Reactor Core Isolation Cooling relay replacement, Unit 2 Reactor Feed Pump Turbine Testing
- September 8 through September 14, Unit 1 HPCI planned outage, Unit 1 Switchyard work, Unit 2 Switchyard work

b. Findings

No findings of significance were identified.

## 1R15 Operability Evaluations

### a. Inspection Scope

The inspectors reviewed the following five operability evaluations and compared the evaluations to the system requirements identified in the Technical Specifications (TS) and the FSAR to ensure operability was adequately assessed and the system or component remained available to perform its intended function. Also, the inspectors assessed the adequacy of compensatory measures implemented as a result of the condition. Documents reviewed are listed in the Attachment.

- Unit 1 Main Steam Chase steam break vent area obstructions
- Unit 2 Main Steam Chase steam break vent area obstructions
- Fisher Butterfly Valves tapered pin integrity
- Henry Pratt Butterfly Valve disc integrity
- EDG Fuel Oil Quality Sampling

### b. Findings

No findings of significance were identified.

## 1R19 Post Maintenance Testing

### a. Inspection Scope

For the following seven maintenance activities, the inspectors reviewed the test scope to verify the test demonstrated the work performed was completed correctly and the affected equipment was functional and operable in accordance with TS requirements. Following the maintenance activities, the inspectors reviewed equipment status and alignment to verify the system or component was available to perform the required safety function. Documents reviewed are listed in the Attachment.

- 2G11F004 Drywell Floor Drain Outboard Isolation Valve failed local leak rate test
- 2T48D343A1 Vacuum Breaker Instrument Air Supply Filter replacement
- 2T48F319 Drywell Vent Inboard Isolation Valve failed local leak rate test
- 1E11F016A Containment Spray Outboard Valve motor operator grease inspection
- 2C11D0013 Hydraulic Control Unit 18-51 Scram Valve diaphragm replacement
- 1E21F012A1 Spray Line Discharge Relief Valve lift test
- 1E11F048A RHR Heat Exchanger Bypass Valve motor operator grease inspection

### b. Findings

No findings of significance were identified.

## 1R22 Surveillance Testing

### a. Inspection Scope

The inspectors reviewed licensee surveillance test procedures and either witnessed the test or reviewed test records for the following five surveillances to determine if the scope of the test adequately demonstrated the affected equipment was operable. The inspectors reviewed these activities to assess for preconditioning of equipment, procedure adherence, and equipment alignment following completion of the surveillance. The inspectors reviewed licensee procedure AG-MGR-21-0386N, Evolution and Pre-and Post-Job Brief Guidance, and attended selected briefings to determine if procedure requirements were met. Documents reviewed are listed in the Attachment.

#### Surveillance Tests

- 34SV-R43-002-1, Diesel Generator 1B Monthly Test
- 34SV-E21-002-1, Core Spray Valve Operability
- 34SV-T48-002-1, Suppression Chamber to Drywell Vacuum Breaker Operability and Containment Purge/Vent Valve Position Check

#### In-Service Test

- 34SV-E21-001-1, 1A Core Spray Pump Inservice Test

#### Reactor Coolant System Leakage Test

- 34SV-SUV-019-1, Drywell Floor Drain Leakage

### b. Findings

No findings of significance were identified.

## 1R23 Temporary Plant Modifications

### a. Inspection Scope

The inspectors reviewed the following two temporary modifications (TMM) and assessed the evaluation using criteria defined in licensee procedure 40AC-ENG-018-0S, Temporary Modification Control. In addition, the 10 CFR 50.59 evaluation was assessed using the design basis information provided in the FSAR to verify the modification did not affect the safety functions of this system. The inspectors also verified the modification was installed in accordance with the TMM requirements.

- TMM 2-07-003, Restoration of Control Power to Sampling Panel 2P33-P211
- TMM 2-07-010, Reactor Feed Pump Vibration Alarm Setpoint Change

### b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation

a. Inspection Scope

During the following emergency plan drill, the inspectors observed licensee activities in the simulator, Technical Support Center and Operations Support Center to verify implementation of licensee procedure 10AC-MGR-006-0, Hatch Emergency Plan. The inspectors reviewed the classification of the simulated events and the development of protective action recommendations to verify these activities were conducted in accordance with licensee procedure 73EP-EIP-001-0, Emergency Classification and Initial Actions. The inspectors also reviewed licensee procedure 73EP-EIP-073-0, Onsite Emergency Notification, to verify the proper offsite notifications were made. The inspectors attended the post-exercise critique to assess the licensee's effectiveness in identifying areas of improvement. Documents reviewed are listed in the Attachment.

- Emergency Plan Drill conducted on July 11, 2007

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Identification and Resolution of Problems

Daily Screening of Corrective Action Items. As required by Inspection Procedure 71152, Identification and Resolution of Problems, and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's CAP. This review was accomplished by either attending daily screening meetings that briefly discussed major CRs, or accessing the licensee's computerized corrective action database and reviewing each CR that was initiated.

4OA3 Event Followup

.1 Notice of Unusual Event Due to a Pole Mounted Transformer Fire

a. Inspection Scope

The inspectors responded to site for a pole mounted transformer fire in the Protected Area that occurred on August 1. The inspector observed the fire location and assessed the potential for impact on adjacent structures. The inspectors reviewed the licensees actions associated with the Emergency Plan activation, forced load reduction of the Unit 2, Fire Team response and compliance with 34AB-R81-001-0 Loss of 12 KV Supplemental Power System.

b. Findings

No findings of significance were identified.

.2 Unit 2 Scram on Low Reactor Water Level Due to Loss of the 2D Bus

a. Inspection Scope

The inspectors responded to the site for a reactor scram that occurred on August 7. The inspectors reviewed operator actions taken in accordance with licensee procedures and reviewed unit and system indications to verify that actions and system responses were as expected. The inspectors discussed the scram with operations, maintenance and licensee management to gauge each groups understanding of the sequence of events. The licensee's investigation revealed that during the installation of a relay cover following calibration, the cover contacted the relay output contacts which caused a loss of the 2D Bus.

b. Findings

No findings of significance were identified.

.3 (Closed) Licensee Event Report 05000366/2006-002, Inadequate Procedure Results in Automatic Reactor Scram

a. Inspection Scope

The inspectors reviewed the results of the investigation and corrective actions associated with the LER.

b. Findings

Introduction. A Green self-revealing NCV of 10CFR50 Appendix B, Criterion V, Instructions, Procedures, and Drawings, was identified for inadequate work instructions provided to workers for the calibration of a main generator output recorder. The calibration was performed with the main generator on-line which caused a sensed power load unbalance (PLU) resulting in a reactor scram.

Description. On April 5, 2006, Unit 2 was operating at 100% power when the licensee performed a calibration of a main generator output recorder. Procedure 57CP-CAL-010-2, Esterline Angus Megavar and KV Recorder, directed the technicians to ground the current transformer (CT) inputs to the recorder. When the technicians grounded the CT inputs, the PLU module sensed a loss of electrical generation. This condition caused a turbine control valve fast closure which then caused a reactor scram.

Analysis. This finding is greater than minor because it is associated with Equipment Performance attribute and adversely affected the Initiating Events cornerstone objective in that it resulted in a challenge safety functions at power. The finding was determined

to be of a very low safety significance because no other mitigating equipment or functions were affected by the inadequate calibration procedure. The inspectors also determined the cause of the finding was related to, complete accurate procedures aspect of the human performance cross-cutting area (H.2c).

Enforcement. 10CFR50 Appendix B, Criterion V, Instructions, Procedures, and Drawings, states that activities affecting quality shall be accomplished in accordance with documented instructions appropriate to the circumstances. Contrary to the above, on April 5, 2006, procedure 57CP-CAL-010-2 did not contain adequate guidance to prevent a reactor scram. Because the event was of a very low safety significance and has been entered into the licensee's CAP as CR 2006104201, this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000366/2007004-001, Inadequate Maintenance Instructions Results in Reactor Scram during Generator Recorder Calibration.

.4 (Closed) LER 05000321/2006-003: Personnel Error Results in Failure to Report Condition Prohibited by Technical Specifications

This LER was the result of a NRC-identified violation previously documented in inspection report 05000321, 366/2006-004. No additional findings of significance were identified.

.5 (Closed) LER 05000366/2007-002: Excessive Feedwater Check Valve Leakage due to Valve Internal Clearances Being out of Tolerance

On February 18, 2007, two of three "A" Feedwater check valves failed their local leak rate tests. The cause of the failure of the inboard check valve was due to internal valve dimensions found outside the required tolerances. The cause of the test check valve failure was degradation of the valve internals. Both valves were repaired and then tested satisfactorily. The condition for the inboard check valve was documented in CR 2007101979 and the test check valve in CR 2007101980. No findings of significance were identified.

4OA5 Other

.1 Operation of an Independent Spent Fuel Storage Installation (ISFSI)

a. Inspection Scope

The inspectors reviewed selected ISFSI operations to verify that the licensee performed ISFSI activities safely and in compliance with approved procedures. The inspectors reviewed records to verify that the licensee had properly identified the parameters of each fuel assembly loaded. The inspectors also reviewed the TS to verify that the fuel placed in these casks met the requirements. The inspectors walked down the ISFSI pads to assess the material condition of the casks, the installation of security equipment, the performance of the monitoring systems and that the casks were placed in the identified locations. The inspectors also reviewed ISFSI document control

practices to verify that any changes to the required ISFSI procedures were performed in accordance with guidelines established in local procedures and 10CFR72.48.

Documents reviewed are listed in the Attachment.

- Licensing Document Change Request 2007-037, Approval of Spent Fuel Casks - 2007 Loading Campaign Corresponding
- Licensing Document Change Request 2007-039, Miscellaneous Changes to the Hatch 10 CFR 72.212 Report

b. Findings

No findings of significance were identified.

.2 (Closed) Unresolved Item 05000321,366/200606-002: Inadequate Testing of Remote Shutdown Panel Transfer Switches

The licensee provided completed surveillance results for testing of the isolation function of the remote shutdown panel transfer switches. After further in-office review of this documentation, it was determined that all the transfer switches were tested adequately. The licensee also provided information that determined this test was required to meet Appendix R requirements, but it was not required to satisfy Technical Specifications Operability.

40A6 Meetings, Including Exit

On October 11, 2007, the inspectors presented the inspection results to Mr. Dennis Madison and the other members of his staff who acknowledged the observations. The inspectors confirmed proprietary information was not provided or examined during the inspection.

40A7 Licensee-identified Violations

The following violation of very low safety significance (Green) was identified by the licensee and is a violation of NRC requirements which meet the criteria of Section VI of the NRC Enforcement Policy, NUREG-1600, for being dispositioned as NCVs.

- 10 CFR 50, Appendix B, Criterion III, Design Control, requires measures to be established to assure the design basis requirements for structures, systems and components are correctly transferred into specifications, drawings, procedures and instructions. Contrary to this, on August 29, 2007, the licensee determined that procedures did not exist to ensure the vent paths were capable of performing their intended function(s) in the event of a High Energy Line Break (HELB) in the Torus Room for Units 1 and 2. Tool boxes stored in the steam chase reduced the vent area assumed to be available in the accident analysis. Additionally, on Unit 2, a hinged plate was restrained and was not available to perform its pressure relieving function. The licensee initiated immediate corrective actions to restore the vent area and performed an evaluation of the effects of this unanalyzed condition. This finding is

Enclosure

determined to be of very low safety significance because the evaluation of the vent areas in the as-found condition showed that Unit 1 and Unit 2 were still within the bounds of the FSAR design basis. The licensee entered the finding into their CAP as CR 2007106943 and CR 2007106973.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## SUPPLEMENTAL INFORMATION

### KEY POINTS OF CONTACT

#### Licensee personnel

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S. Douglas, Plant Manager  
B. Goodwin, Engineering Manager  
G. Johnson, Operations Manager  
J. Lewis, Training and Emergency Preparedness Manager  
D. Madison, Hatch Vice President  
J. Thompson, Nuclear Security Manager  
R. Varnadore, Maintenance Manager

### LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

#### Opened and Closed

05000366/2007004-01                      NCV    Inadequate Maintenance Instructions Results in Reactor Scram during Generator Recorder Calibration (Section 4OA3.3)

#### Closed

05000366/2006-002                      LER    Inadequate Procedure Results in Automatic Reactor Scram (Section 4OA3.3)

05000321/2006-003                      LER    Excessive Feedwater Check Valve Leakage due to Valve Internal Clearances Being out of Tolerance (Section 4OA3.5)

05000366/2007-002                      LER    Personnel Error Results in Failure to Report Condition Prohibited by Technical Specifications (Section 4OA3.4)

05000321,366/200606-002                      URI    Inadequate Testing of Remote Shutdown Panel Transfer Switches (Section 4OA5.2)

### LIST OF DOCUMENTS REVIEWED

#### Section 1R04: Equipment Alignment

##### Procedures:

34SO-R43-001-2, Diesel Generator Standby AC System  
34SO-E21-001-1, Core Spray System  
34SO-E51-001-1, Reactor Core Isolation Cooling System  
34SO-E11-010-1, Residual Heat Removal System  
34SO-R43-001-1, Diesel Generator Standby AC System

Drawings: H-16331, H-16328, H-16334, H-16335, D11004, H-16329, H-16330 , H-13412, H-13413, H-13414, H-11631

FSAR Sections: 8.1, 8.4.1, 8.4.2, 6.3.3, 6.4.2.4, 7.4.3.4, 4.7, 4.8, 7.4, 10.6

Tech Specs: SR 3.8.1.1, T.S. 3.5.1, 3.5.3, 3.3.5.2, SR 3.5.1.1, SR 3.5.1.2, SR 3.5.1.4, T.S.

## 3.7.1, SR 3.7.1.1

CRs: 2007106026, 2007107101, 2007108112

**Section 1R05: Fire Protection**

CR: CR2007108188

Drawings: A-43965 sheets 065B, 066B, 073B, 074B, 123B, 099B, 100B, 101B, 102B, 103B, 106B, 107B, 109B, 110B, 113B, 114B, 112B, H-23274, H-19636, H-11828

Procedures: 42SV-FPX-037-0, Fire Detection Instrumentation Surveillance

**Section 1R12: Maintenance Effectiveness****Resident Review**

System Health Report for the 2<sup>nd</sup> Quarter 2007

Leak List Database as of 9/9/2007

MWOs: 2061085501, 1061660601, 2050967901, 2051018601, 2062056201

CRs: 2006100509, 2006102224, 2006102576, 2006103579, 2006104976, 2006105418, 2006106634, 2006106640, 2006106728, 2006106837, 2006107419, 2007100403, 2006112359, 2006112229, 2005104368, 2005104433

**Triennial Review**

System Health Reports: 1<sup>st</sup> Quarter 2007

Component Health Reports: Large Pumps, Air-Operated Valves, Motor-Operated Valves

CRs: 2005103366, 2005103367, 2005112049, 2005103369, 2006107938, 2006107940, 2006107941, 2006107942, 2006107943, 2006107944, 2006111086, 2006104896, 2005112049, 2006102117

Current A(1) systems: Plant Service Water (P41), Turbine Building Chilled Water (P63), Station Auxiliary DC Power (R42), Reactor Building HVAC (T41), Remote Shutdown (C82)  
A1 SSC Monthly/Classification Status Reports: 2P63, 1P51, 1P63, 1W33, 1C82, 2R42, 2P41, 2P51

Meetings: Expert Panel Meeting - July 18, 2007, Daily CAP Management Review - July 17, 2007

**Procedures:**

MP-GM-002-001, Corrective Action Program Instructions, Rev. 2.0

40AC-ENG-020-0, Maintenance Rule (10CFR50.65) Implementation and Compliance, Rev. 5.0

NMP-GM-003-GL01, Self Assessment NMP, Self-Assessment Guideline, Rev. 2.0

Self Assessments: June 2004 (SA04-ENG-02) and June 2006 (SA06-ENG-02)

Maintenance Rule Periodic Assessment Reports: June 2000 and June 2002

Expert Panel Meeting Minutes: 1/16/07, 3/28/07, 4/12/07, 5/10/07, 5/31/07, 2/7/06, 6/8/06, 9/19/06, 10/13/06, 11/16/06, 12/12/06

**Other Documents**

MPFFs since 7/17/2004

Root Cause Evaluations: CR-2005103369

Followup to NCV 2006-002-02, Failure to Demonstrate that the Traveling Water Screen System was Effectively Controlled per 10CFR50.65

April 2007 Maintenance Rule Report (SSC Failures and Status)  
Operator Work Arounds, Burdens and Needs – 4/19/07

**Section 1R15: Operability Evaluations**

CRs: 2007106851, 2007106973, 2007106943, 2007107087, 2007106994, 2007107632, 2007107623, 2007103001, 2007108243

Procedures

NMP-GM-002, Corrective Action Program  
SCM-CGDP-001, Commercial Grade Dedication Plan Number 2 Diesel Fuel Oil

NRC IN 2005-023, Vibration-Induced Degradation of Butterfly Valves  
NRC Regulatory Guide 1.137, Fuel Oil Systems for Standby Diesel Generators  
Intra company Correspondence LR-PA-001-0406 Response to NRC IN 2005-023  
Action Item: 2006201277

**Section 1R19: Post Maintenance Testing**

MWOs: 2070580801, 2070580801, 2070581101, 2050613101, 1070306201, 2060416523, 2060420901, 1070329501, 1050895601

Procedures:

34SV-SUV-008-2, Primary Containment Isolation Valve Operability  
50AC-MNT-001-0, Maintenance Program  
52CM-MME-060-0, Copes Vulcan Valve/Actuator Maintenance  
57CP-CAL-250-0, AOV Stroke/Positioner Test and Setup  
34SV-T48-002-2, Suppression Chamber to Drywell Vacuum Breaker Operability  
52SV-T48-001-0, Torus to Drywell Vacuum Breaker Inspection  
52PM-T48-013-0, Purge and Vent Valve T-Ring Replacement  
51GM-MNT-017-0, Control of Lubricants  
52PM-MNT-005-0, Limitorque Valve Operator Inspection  
52PM-C11-003-2, CRD Scram Valve Maintenance  
34SV-E21-001-1, Core Spray Pump Operability  
95IT-OTM-001-0, Maintenance Work Order Functional Test Guideline  
42SV-SUV-004-0S, IST for Safety Relief Valves  
34SV-E11-002-1, RHR Valve Operability

**Section 1R22: Surveillance Testing**

CRs: 2006106704, 2006106687, 2006106704, 2006109233, 2006105249  
Tech Specs: SR 3.4.4.1, 3.5.1.1, 3.5.2.3,

**Section 4OA5: Other**

MWO 1070774101, MPC S/N 179 and Hi-Storm S/N 254 loading and transport activities

Procedures:

57CP-CAL-186-0S, Bourdon tube Style Test Gauge  
34FH-OPS-002-0, Dry Fuel Movement Prerequisites  
NMP-DP-001, Operational Risk Awareness

NMP-MA-007-003, SNC Rigging and Lifting Program Rigging Hardware Inspection  
52PM-F18-003-0, Spent Fuel Dry Storage Transporting Equipment  
NMP-AD-006, Infrequently Performed Tests and Evolutions  
51GM-MLH-004-0, NUREG-0612 Heavy Load Movement  
45QC-INS-020-0, Spent Fuel Dry Storage Helium Leak Rate Testing  
45QC-INS-018-0S, Visual Examination of Hydrostatic Testing of Holtec Hi-Star/Storm 100 MPC  
NMP-ES-024-302, Liquid Penetrant Testing Procedure (High Temperature) Color Contrast  
42FP-FPX-004-0, Fire Protection Checklist for MWOs  
52PM-F18-001-0, HI-STORM, HI-TRAC and MPC Staging  
52SV-F18-006-0, Hi-Storm/Trac Fuel Loading  
42FH-ERP-014-0S, ENG-0965 MPC-68 Loading Verification  
42FH-ERP-014-0S, ENG-0190 Fuel Movement Sheets