



UNITED STATES
NUCLEAR REGULATORY COMMISSION

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

October 30, 2006

Southern Nuclear Operating Company, Inc.
ATTN: Mr. L. M. Stinson
Vice President
P. O. Box 1295
Birmingham, AL 35201-1295

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT - NRC INTEGRATED INSPECTION
REPORT 05000321/2006004, 05000366/2006004, AND 072000036/2006002

Dear Mr. Stinson:

On September 30, 2006, 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 13, 2006, with Mr. Dennis Madison 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.

This report documents one NRC-identified finding which was assessed using traditional enforcement as a Severity Level IV violation. However, because of the low severity level and because it has been entered into your corrective action program, the NRC is treating this violation as a non-cited violation (NCV) in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you contest this NCV, you should provide a written 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 Senior Resident Inspector at the Hatch Nuclear Plant.

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, and 72-36
License Nos. DPR-57 and NPF-5

Enclosure: Inspection Report 05000321/2006004,
05000366/2006004, and 072000036/2006002
w/Attachment: Supplemental Information

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X PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE X NON-SENSITIVE
 ADAMS: X Yes ACCESSION NUMBER:

OFFICE	RII/DRP	RII/DRP	RII/DRP	RII/DRP	RII/DRS	RII/DRS	RII/DRS	RII/DRS
SIGNATURE	CWR /RA/		via email	via email	via email	via email	via email	via email
NAME	C. Rapp	S. Shaeffer	D. Simpkins	J. Hickey	W. Loo	N. Griffis	J. Díaz	R. Carrion
DATE	10/23/2006		10/23/2006	10/20/2006	10/20/2006	10/20/2006	10/30/2006	10/23/2006
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

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Letter to L. M. Stinson from Scott M. Shaeffer dated October 30, 2006

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REPORT 05000321/2006004, 05000366/2006004, AND 072000036/2006002

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.: 50-321, 50-366, 72-36

License Nos.: DPR-57 and NPF-5

Report Nos.: 05000321/2006004, 05000366/2006004, and 072000036/2006002

Licensee: Southern Nuclear Operating Company, Inc.

Facility: Edwin I. Hatch Nuclear Plant

Location: Baxley, Georgia 31515

Dates: July 1 - September 30, 2006

Inspectors: D. Simpkins, Senior Resident Inspector
J. Hickey, Resident Inspector
W. Loo, Senior Health Physicist (Sections 2OS3 and 4OA5)
N. Griffis, Health Physicist (Section 2PS1)
J. Díaz Vélez, Health Physicist (Sections 2PS3 and 4OA1)
R. Carrion, Project Engineer (Sections 2OS1 and 4OA1)

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

Enclosure

SUMMARY OF FINDINGS

IR 05000321/2006-004, 05000366/2006-004, 07200036/2006-002; 07/01/2006-09/30/2006;
Edwin I. Hatch Nuclear Plant, Units 1 and 2, Identification and Resolution of Problems

The report covered a three-month period of inspection by resident inspectors, health physicists, and a project engineer. One Severity Level (SL) IV non-cited violation (NCV) was identified. 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 NRC 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.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- SL IV. An NRC-identified non-cited violation of 10 CFR 50.73 (a)(2)(i)(B) was identified for failure to report past conditions prohibited by plant Technical Specifications (TS). The inspectors determined that, during the most recent operating cycle for both Units 1 and 2, several main steam safety/relief valves exceeded the TS lift setting tolerance. These represented reportable events.

This finding was evaluated using the traditional enforcement process because the failure to accurately report events has the potential to impact the NRC's ability to perform its regulatory function. This finding was determined to be a Severity Level IV violation based on Supplement I of the NRC Enforcement Policy. (Section 40A2)

B. Licensee-Identified Violations

None.

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REPORT DETAILS

Summary of Plant Status

Unit 1 began the inspection period at or near 100% Rated Thermal Power (RTP). On July 30, power was reduced to 40% RTP when a relay failure caused a runback of the 1A Recirculation Pump. The unit was returned to 100% RTP on August 2. On August 10, a problem with the 1B Reactor Feed Pump speed control resulted in a load reduction to 80% RTP. The unit was returned to 100% RTP on August 13 and remained at 100% RTP through the end of the reporting period.

Unit 2 began the inspection period at or near 100% RTP. On September 25, a load reduction to 80% RTP was performed to repair an oil leak on the 2B Reactor Feed Pump. Unit 2 was returned to 100% RTP on September 26 and remained at 100% RTP through the end of the reporting period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather

a. Inspection Scope

Imminent Adverse Weather. The inspectors reviewed licensee actions in response to anticipated high winds resulting from Tropical Storm Ernesto. The inspectors reviewed licensee procedure 34AB-Y22-002-0, Naturally Occurring Phenomena, and walked down external plant areas to ensure debris and loose materials were controlled to limit missile hazards especially near switchyards and safety-related equipment.

b. Findings

No findings of significance were identified.

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, electrical breaker, 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.

- B and C trains of the Main Control Room Air Conditioning (MCRAC) during maintenance on the A train MCRAC.
- A and C MCRAC system during maintenance on the B MCRAC

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- Unit 2 Loop B Residual Heat Removal (RHR) system during maintenance on the Unit 2 Loop A RHR
- Unit 1 Vital AC system during maintenance on portions of the system

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 Fire Hazards Analysis drawings H-11846 and H-11847 to verify 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 1 Standby Gas and HVAC 164' elevation
- Unit 1 Reactor Building working floor and Air Supply Room 203
- Refueling Floor
- Unit 2 NE RHR and Core Spray room
- Unit 2 Reactor Core Isolation Cooling (RCIC) pump and turbine room
- Unit 2 SE RHR and Core Spray room
- Unit 2 Control Rod Drive (CRD) pump room
- Unit 2 High Pressure Core Injection Room
- Unit 2 CRD area 130'
- Unit 2 Reactor Building working floor 158' elevation
- Unit 2 Recirculation pump Motor Generator Set rooms 158' elevation
- Unit 2 Chiller Room 164' elevation

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 LR-SE-00020-18 which included a trip of the 2A reactor feed pump turbine, control rod insertion to comply with the requirements of the power to flow map, main turbine trip, RPS auto scram failure, loss of normal feed capability, loss of torus water level and emergency depressurization. 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

The inspectors reviewed the following two maintenance activities associated with structures, systems, and components (SSCs) to assess the licensee's implementation of the Maintenance Rule (10 CFR 50.65) with respect to the characterization of failures and the appropriateness of the associated (a)(1) or (a)(2) classification. The inspectors reviewed operator logs, associated Condition Reports (CR), 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.

- B MCRAC Ventilation System Outage
- 1A RHR Pump High Vibrations

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed the following seven Plan of the Day (POD) 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 if any increase in risk was promptly assessed and that appropriate risk management actions were implemented.

- POD for Week of 7/8-14
- POD for Week of 7/29-8/4

- POD for Week of 8/5-11
- POD for Week of 8/12-18
- POD for Week of 8/26-9/1
- POD for Week of 9/2-8
- POD for Week of 9/16-22

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following six operability evaluations and compared the evaluations to the system requirements identified in the Technical Specifications and the Final Safety Analysis Report (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.

- 2D RHR Service Water (RHRSW) pump high bearing temperature
- Unit 2 High Pressure Coolant Injection Pump seal leakage
- 1F 4160 Bus undervoltage time delay relay as found value greater than allowed by TS
- Boric acid accumulation on the Standby Liquid Control storage tank heater connection flange
- Abnormal Vibrations on the 1A and 1C RHR Pumps
- Ultra-low Sulfur Diesel Fuel for future use in the Emergency Diesel Generators (EDGs)

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing

a. Inspection Scope

For the following seven post maintenance tests, 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. 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.

- Unit 1 RCIC 1E51K52 relay replacement
- Unit 2 RCIC barometric condenser check valve 2E51F028 inspection

- Unit 2 RCIC room cooler control valve 2P41F040A inspection
- Unit 2 RHR Pump 2A cooler control valve 2P41F037A inspection
- Unit 2 RHR Pump 2C cooler control valve 2P41F037C actuator rebuild
- 1A EDG fuel oil pump running indication resistor replacement
- Removal of TMM 1-06-020, Temporary bracing on the 1A RHR Pump

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 six 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-E21-001-1, Core Spray Pump Operability
- 34SV-SUV-018-2, ECCS Status Checks
- 34SV-E11-004-2, RHRSW Pump Operability
- 34SV-E11-001-1, RHR Pump Operability

In-Service Test

- 34SV-E11-004-2, RHRSW Pump Operability

RCS 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 1-06-019, Tritium Collection System
- TMM 1-06-020, Temporary Bracing on the 1A RHR Pump

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation

a. Inspection Scope

The inspectors observed the following emergency plan off-hours 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 discussed the post-exercise critique with plant staff to assess the licensee's effectiveness in identifying areas of improvement. Documents reviewed are listed in the Attachment.

- Emergency Plan Drill conducted on August 26

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstones: Occupational Radiation Safety and Public Radiation Safety

2OS1 Access Control To Radiologically Significant Areas

a. Inspection Scope

The inspectors reviewed and evaluated licensee guidance and its implementation for controlling and monitoring worker access to radiologically significant areas and tasks associated with Unit 1 and Unit 2 operations. The inspectors evaluated changes to and adequacy of procedural guidance; directly observed implementation of established

administrative and physical radiation controls; appraised occupational worker and health physics technician (HPT) knowledge of and proficiency in implementing radiation protection (RP) activities; and assessed occupational worker exposures to radiation and radioactive material.

The inspectors directly observed controls established for workers and HPT staff involved in work/tasks associated with actual/potential airborne radioactivity area, radiation area, high radiation area (HRA), locked high radiation area (LHRA), and very high radiation area (VHRA) conditions. Controls and their implementation for LHRA keys and for storage of irradiated material within the Unit 1 spent fuel pool were reviewed and discussed in detail. Established radiological controls were evaluated for selected tasks including work conducted on the refueling floor and radiography for the Unit 1 and Unit 2 plant service water systems. In addition, licensee controls for areas where dose rates could change significantly as a result of plant operations were reviewed and discussed. For selected tasks, the inspectors attended pre-job briefings and reviewed radiation work permit (RWP) details to assess communication of radiological control requirements to workers. Occupational workers' adherence to selected RWPs and HPT proficiency in providing job coverage were evaluated through direct observations and interviews with licensee staff. Worker exposure as measured by electronic dosimeter was reviewed and assessed independently.

During facility tours within the radiologically controlled areas (RCA), the inspectors observed and evaluated postings and physical controls established for access to the Unit 1 and 2 reactor buildings; selected control building locations/equipment; and selected turbine building locations/equipment. The inspectors independently measured radiation dose rates and contamination levels associated with selected Unit 2 reactor building and radioactive waste processing areas/equipment. Results were compared to current licensee surveys and assessed against established postings and radiation controls.

The inspectors evaluated implementation and effectiveness of licensee controls for both airborne and external radiation exposure. Effectiveness of external radiation exposure controls was evaluated through review and discussions of individual worker dose as measured by electronic dosimeter for selected tasks.

RP activities were evaluated against the FSAR, TS, and 10CFR Parts 19 and 20 requirements. Specific assessment criteria included FSAR Section 12, Radiation Protection; 10 CFR 19.12; 10 CFR 20, Subparts B, C, F, G, H, and J; TS Sections 5.4, Procedures and 5.7, High Radiation Areas; and approved licensee procedures. Licensee guidance documents, records, and data reviewed are listed in the Attachment.

The inspectors completed 21 of the required 21 samples.

Problem Identification and Resolution. Licensee corrective action program (CAP) documents and CRs associated with access control to radiologically significant areas were reviewed and assessed. The inspectors evaluated the licensee's ability to identify, characterize, prioritize, and resolve the identified issues in accordance with licensee

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procedure NMP-GM-002-GL02, Corrective Action Program Details and Expectations Guideline, Version 4.0. In addition, the inspectors reviewed two self-assessments conducted since the last NRC inspection of these areas as well as Outage Information Reports for the last refueling outage of Unit 1 (in 2006) and Unit 2 (in 2005). Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

2OS3 Radiation Monitoring Instrumentation and Protective Equipment

a. Inspection Scope

Radiation Monitors. The operability, reliability, and maintenance of area radiation monitors (ARM) and continuous air monitors (CAM) were reviewed and evaluated. During plant walkdowns, the inspectors examined the material condition and verified current calibration dates for selected fixed ARMs, portable ARMs, and CAMs. The inspectors also reviewed documentation of performance checks and calibrations for selected monitors. Licensee program activities in this area were reviewed against requirements specified in applicable procedures and in Chapters 7, 11, and 12 of the FSAR. Licensee procedures, records, data, and other documents reviewed are listed in the Attachment.

Portable and Personnel Survey Instrumentation. Current program guidance, including procedures for calibration and operation, and its implementation to maintain operability and accuracy of selected personnel survey instrumentation, were reviewed and evaluated. The inspectors reviewed current calibration data for selected portable survey instruments, and assessed operability of various survey instruments staged or in use by HP staff. Responsible staff's knowledge and proficiency regarding portable survey instrument calibration activities were evaluated through interviews, record reviews, and observations of plant activities. The accuracy and operability determinations for instrumentation used to perform surveys in HRAs, LHRAs, and VHRAs were assessed.

Operability and analysis capabilities of the licensee's whole-body counter (WBC), personnel contamination monitor (PCM), and portal monitor (PM) equipment were reviewed and evaluated. For the WBC and selected PCMs and PMs, current calibration and recent operational/performance test surveillance data were evaluated. For selected PMs and PCMs located at the main RCA exit (C-52) and the Turbine Building RCA exits (T-16 and T-17), the inspectors directly observed equipment responses to mixed plant-specific radioactive sources positioned at various orientations and distances from the individual detectors to simulate potential worker contamination.

Licensee activities associated with personnel radiation monitoring instrumentation were reviewed against TS, 10 CFR 20.1501, and applicable licensee procedures listed in the Attachment.

Respiratory Protection Equipment – Self-Contained Breathing Apparatus (SCBA). The licensee's respiratory protection program guidance and its implementation for SCBA use were evaluated. The SCBA units staged for emergency use in the Control Room and other selected locations were inspected for material condition, air pressure, and number of units available. The inspectors reviewed and evaluated maintenance of SCBA equipment and certification records associated with supplied air quality. Proficiency and knowledge of staff responsible for maintaining SCBA equipment were evaluated through discussions, demonstrations of SCBA functional checks, and review of training records. Select Control Room operations personnel were interviewed to determine their knowledge of available SCBA equipment locations, including corrective lens inserts if needed, and their training on replacement of air bottles during extended usage periods. The inspectors assessed the licensee's arrangements for transporting replacement air bottles from the onsite refill station (located in an outlying building within the Protected Area) to the Control Room and Operational Support Center. Licensee activities associated with maintenance and use of SCBA equipment were reviewed against 10 CFR Part 20.1703; Regulatory Guide (RG) 8.15, Acceptable Programs for Respiratory Protection, Revision 1, October 1999; American National Standards Institute (ANSI)-Z88.2-1992, American National Standard Practices for Respiratory Protection; and applicable procedures listed in the Attachment.

The inspectors completed 9 of the required 9 samples.

Problem Identification and Resolution. Issues identified through Health Physics departmental self-assessments and CAP documents associated with radiation monitoring instrumentation and SCBA were reviewed and discussed with cognizant licensee representatives. The inspectors assessed the licensee's ability to identify, characterize, prioritize, and resolve selected issues in accordance with licensee procedure NMP-GM-002-GL02. Special assessments and CRs reviewed and evaluated in detail for this inspection area are listed in the Attachment.

b. Findings

No findings of significance were identified.

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

a. Inspection Scope

Effluent Monitoring and Radwaste Equipment. During inspector walkdowns, accessible sections of the Unit 1 and Unit 2 liquid and gaseous radioactive waste (radwaste) and effluent systems were assessed for material condition and conformance with the FSAR. The inspection included the Waste Sample Tanks, Floor Drain Sample Tanks, Chemical Waste Sample Tanks, Liquid Radwaste Discharge Monitors (1/2D11-N007), Unit 1 Off-gas System Post-Treatment Monitor (1D11-K615A and B), Unit 1 Recombiner Building Vent Monitor (1D11-R763A and B), Reactor Building Vent Monitors (D11-K619A and B / 2D11-K636A and B), Main Stack Monitor (D11-K600A and B), and associated airborne effluent sample lines. The inspectors interviewed chemistry and engineering staff

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regarding radwaste effluent monitor operation and equipment configuration requirements for representative sampling. The inspectors observed collection of particulate, iodine, and tritium samples from the main stack release pathway, and assessed those activities for procedural adherence.

The inspectors reviewed performance records and calibration results for selected radiation monitors, flowmeters, and air filtration systems. For monitors 1D11-K615B, D11-K619A and B, 2D11-K636A and B, 1D11-R763A and B, D11-K600A and B, and 1/2D11-N007, the inspectors reviewed the most recent calibration records. The inspectors also reviewed the last two functional/flow checks for these effluent monitors. The inspectors reviewed out-of-service monitors from January 2004 to July 2006, and verified that required compensatory sampling was performed. The most recent surveillances on the Off-Gas High-Efficiency Particulate Air Filter Systems were reviewed. Performance and operations of the systems were reviewed and discussed with cognizant licensee personnel.

Current licensee programs for monitoring, tracking, and documenting the results of both routine and abnormal liquid releases to onsite and offsite surface and ground water environs were reviewed and discussed in detail. Specifically, the inspectors reviewed and discussed the effect of routine effluent liquid releases made in accordance with Offsite Dose Calculation Manual (ODCM) requirements on surface water and ground water station sample tritium concentrations. Tritium concentration results for ground water monitoring wells associated with the Unit 1 Condensate Storage Tank were reviewed and discussed in detail. Reports associated with abnormal liquid releases and corrective actions initiated since Calendar Year (CY) 1978 were reviewed and discussed with responsible licensee representatives to evaluate the potential onsite/offsite environmental impact of significant leakage/spills from onsite systems, structures, and components. Also, the inspector verified that these areas had been properly documented in the licensee's site decommissioning files in accordance with 10 CFR 50.75(g), if required. Current licensee capabilities and routine surveillances to minimize and rapidly identify abnormal leaks from liquid radioactive waste tanks, processing lines, and spent fuel pools were reviewed and discussed in detail.

Installed configuration, material condition, operability, and reliability of selected effluent sampling and monitoring equipment were reviewed against details documented in the following: 10 CFR Part 20; RG 1.21, Measuring, Evaluating and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials In Liquid and Gaseous Effluents from Light-Water Cooled Nuclear Power Plants; TS, Section 5.0; the ODCM, Rev. 17; and FSAR. Documents reviewed are listed in the Attachment.

Effluent Release Processing and Quality Control (QC) Activities. The inspectors directly observed the collection of liquid waste samples and discussed the procedures and processes followed by chemistry personnel for obtaining waste gas samples and liquid effluent samples from waste monitor tanks. In addition, the inspectors discussed the process for performing liquid and gaseous releases with chemistry personnel in the radwaste facility control room. Chemistry technician proficiency in processing and counting effluent samples was evaluated.

QC activities associated with gamma spectroscopy were discussed with count room technicians and Chemistry supervision. The inspectors reviewed daily QC charts from June 1 to July 20, 2006, for High Purity Germanium (HPGe) detectors No. 1, 2, and 3; and reviewed licensee procedural guidance for count room QC activities. The inspectors reviewed calibration records for HPGe detector No. 1 (select counting geometries). In addition, results of the radiochemistry cross-check program for 2nd quarter 2005 through 1st quarter 2006 were reviewed and discussed with cognizant licensee staff.

Selected portions of procedures for effluent sampling, processing, and release were evaluated for consistency with licensee actions. Two liquid and four gaseous release permits were reviewed against ODCM specifications for pre-release sampling and effluent monitor setpoints. The inspectors discussed performance of pre-release sampling and analysis, release permit generation, and radiation monitor setpoint adjustment with chemistry technicians and radwaste control room operators. The inspectors reviewed the 2004 and 2005 Annual Radiological Effluent Release Reports to evaluate reported doses to the public and ODCM changes. Public dose calculations were reviewed and discussed with cognizant licensee personnel.

Observed task evolutions, count room activities, and offsite dose results were evaluated against details and guidance documented in the following: 10 CFR Part 20 and Appendix I to 10 CFR Part 50; ODCM; RG 1.21; RG 1.109, Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50 Appendix I; RG 1.33, Quality Assurance Program Requirements; and TS Section 5.0. Documents reviewed are listed the in Attachment.

The inspectors completed 10 of the required 10 samples.

Problem Identification and Resolution. Multiple CRs and a Self Assessment associated with effluent release activities were reviewed. The inspectors evaluated the licensee's ability to identify, characterize, prioritize, and resolve selected issues in accordance with NMP-GM-002-GL02. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

2PS3 Radiological Environmental Monitoring Program (REMP) and Radioactive Material Control Program

a. Inspection Scope

REMP Implementation. The licensee's Annual Radiological Environmental Operating Reports for CY 2004 and CY 2005 were reviewed and discussed with cognizant licensee representatives. The inspectors discussed and evaluated the reported data for trends in radionuclide concentrations, anomalous/missing data, and land-use census information. QC activities and data for selected sample types listed in the reports were reviewed and

evaluated including inter-laboratory comparison results, analytical assumptions used in gross beta analyses, and calculations for air particulate gross beta lower limit of detection determinations. In addition, the inspectors reviewed the 1st quarter 2006 semiannual sample pump air flow calibration data.

Equipment operational status and staff proficiency in implementing REMP activities were assessed through review of records, observations of equipment material condition and operating characteristics, and through assessment of selected sample collection activities. Collection of weekly air particulate filters/charcoal cartridges and air flow rate determinations were observed at sampling locations 103, 107, 112, 116, 304, and 309. The placement and material condition of surface water samplers at sample locations 170 and 172 were observed. A collection of milk samples at sampling location 304 was also observed and discussed with collection personnel. During observations of sample collection, the inspectors evaluated the proficiency of staff collecting the samples, and assessed the adequacy and implementation of selected collection techniques. The placement and material condition of thermoluminescent dosimetry (TLD) equipment were assessed at sample locations 064, 103, 107, 112, 304, and 309. Using Global Positioning System equipment, the inspectors independently assessed selected TLD and air sampling locations and compared the current location data to ODCM-specified locations. REMP guidance, implementation, and results were reviewed against the licensee's ODCM and applicable procedures listed in the Attachment.

Meteorological Monitoring Program. Licensee program activities to assure accuracy and availability of meteorological monitoring data were evaluated through review of calibration and surveillance data and direct observation of equipment and readout data at the primary tower, backup tower, and control room. Equipment performance, reliability, and conduct of routine surveillances were discussed with technicians responsible for tower equipment maintenance and inspections. Meteorological availability data was reviewed and discussed with licensee representatives. Meteorological data reviewed included data for CY 2004, CY 2005, and Year-To-Date March 2006. The inspectors also verified consistency between meteorological tower local readouts and control room data.

Meteorological instrument operation, calibration, and maintenance were reviewed against details listed in the FSAR, Chapter 2; NRC Safety Guide 23, Onsite Meteorological Programs-1972; ANSI -3.11-2000, Determining Meteorological Information; RG 1.21; RG 4.15, Quality Assurance for Radiological Monitoring Programs (Normal Operation) - Effluent Streams and the Environment, December 1977; and applicable licensee procedures. Documents reviewed are listed in the Attachment.

Unrestricted Release of Materials from the RCA. Radiation protection program activities associated with the unconditional release of potentially contaminated materials from RCA egress points were evaluated. Operability and analysis capabilities of the licensee's Small Article Monitor (SAM) instruments were reviewed and evaluated. In addition, responsible staff's knowledge and proficiency regarding SAM instrument calibration activities were evaluated through interviews, record reviews, and direct observations of plant activities. For selected SAM instruments, current calibration and

recent operational/performance test surveillance data were observed and evaluated. For selected SAM instruments located at the main RCA exit (C-52) and the Turbine Building RCA exits (T-16 and T-17), the inspectors directly observed equipment responses to mixed plant-specific radioactive sources positioned at various orientations and distances from the individual detectors to simulate potential contamination.

The inspectors verified that radiation detection sensitivities were consistent with NRC guidance in IE Circular 81-07 Control of Radioactively Contaminated Material, May 14, 1981, and IE Information Notice 85-92. Documents reviewed are listed in the Attachment.

The inspectors completed 10 of the required 10 samples.

Problem Identification and Resolution. Selected licensee CAP documents including CRs and audits associated with REMP activities, meteorological monitoring activities and unrestricted release of materials from the RCA were reviewed and discussed with responsible licensee representatives. The inspectors evaluated the licensee's ability to identify, characterize, prioritize, and resolve selected issues in accordance with licensee procedure NMP-GM-002-GL02. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. Inspection Scope

The inspectors reviewed a sample of the licensee submittals for the performance indicators (PIs) listed below to verify the accuracy of the data reported. The PI definitions and the guidance contained in NEI 99-02, "Regulatory Assessment Indicator Guideline," Rev. 2 and licensee procedure 00AC-REG-005-0S, Preparation And Reporting Of NRC PI Data, were used to verify procedure and reporting requirements were met.

Initiating Events Cornerstone

- Unplanned Scrams
- Scrams with Loss of Heatsink
- Unplanned Power Changes

The inspectors reviewed raw PI data collected since October 2004 for each of the indicators identified and compared graphical representations from the most recent PI report to the raw data to verify the data was included in the report. The inspectors also examined a sampling of operations logs and procedures to verify the PI data was appropriately captured for inclusion into the PI report, and the individual PIs were

calculated correctly.

Occupational Radiation Safety Cornerstone

- Occupational Exposure Control Effectiveness

For the period January 2005 through June 2006, the inspectors assessed CAP records to determine whether HRA, VHRA, or unintended radiation exposures, resulting in TS or 10 CFR 20 non-conformances, had occurred. In addition, the inspectors reviewed selected personnel contamination event data, internal dose assessment results, and electronic dosimeter alarms associated with dose rates exceeding one rem per hour and cumulative dose rates exceeding established set-points from January 2005 through June 2006. Documents reviewed are listed in the Attachment.

Public Radiation Safety Cornerstone

- RETS/ODCM Radiological Effluents Occurrence

The inspectors reviewed data for CY 2005. The inspectors also interviewed licensee personnel that were responsible for collecting and reporting the PI data. In addition, licensee procedural guidance for classifying and reporting PI events was evaluated. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

.1 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.

.2 Annual Sample Review

a. Inspection Scope

The inspectors performed a detailed review of the following four CRs to verify the full extent of the issue was identified, an appropriate evaluation was performed, and appropriate corrective actions were specified and prioritized. The inspectors evaluated the CR against the licensee's CAP as delineated in licensee procedure NMP-GM-002, Corrective Action Program, and 10 CFR 50, Appendix B. Documents reviewed are listed in the Attachment.

- Foreign Material in the Iso-Phase Bus duct resulted in a generator trip
- Failure to establish complete contingency plans after the PASS was removed from Technical Specifications
- Operator error caused a loss of normal feedwater following a scram
- Safety Relief Valve (SRV) as-found mechanical lift setpoints outside of TS acceptance criteria

b. Findings and Observations

Introduction. An NRC-identified NCV of 10 CFR 50.73 (a)(2)(i)(B) was identified for failure to report conditions prohibited by plant TS. The inspectors determined that, during the most recent operating cycle for both Units 1 and 2, several main steam SRVs exceeded the lift setting tolerance in TS.

Description. During a review of the as-found lift setpoints of the SRVs removed from Unit 2 during the spring 2005 outage, the inspectors noted 5 of the 11 SRVs exceeded the maximum allowed lift setting of 1184.5 psig, ranging from 1186 psig to 1251 psig. An additional review was performed of the as-found lift settings for the SRVs removed from Unit 1 during the spring 2006 outage. The inspectors noted 3 of the 11 SRVs exceeded the maximum allowed lift setting of 1184.5 psig, ranging from 1185 psig to 1271 psig. The inspectors reviewed TS 3.4.3 and SR 3.4.3.1 and determined the safety function is demonstrated as operable by an as-found lift setpoint of 1150 psig \pm 34.5 psig. A review of the TS Bases for TS 3.4.3 noted "The ASME Boiler and Pressure Vessel Code requires the reactor pressure vessel be protected from overpressure during upset conditions by *self-actuated* safety valves." (emphasis added). NUREG 1022 states "the existence of similar discrepancies in multiple valves is an indication that the discrepancies may well have arisen over a period of time and the failure mode should be evaluated to make this determination. If so, the condition existed during plant operation and the event reportable under 50.73(a)(2)(i)(B) "Any operation or condition prohibited by the plant's Technical Specifications." The inspectors questioned the licensee regarding the failure mechanism and reporting requirements. The failure mechanism was attributed to corrosion-induced bonding of the pilot valve disc and seat. The decision to stop reporting as-found SRV lift setpoint drift as documented in Licensee Event Report (LER) 05000321-93-002 was based, in error, on an improvement in SRV reliability due to the installation of pressure actuating switches and not compliance with TS.

Analysis. This finding was evaluated using the traditional enforcement process because the failure to accurately report events has the potential to impact the NRC's ability to perform its regulatory function. This finding was determined to be a SL IV violation based on Supplement I of the NRC Enforcement Policy.

Enforcement. 10 CFR 50.73 (a)(2)(i)(B) requires that any condition or operation prohibited by TS be reported in an LER. Contrary to the above, the licensee failed to report multiple cases where SRV as-found testing results were greater than the 1150 psig \pm 34.5 psig permitted by TS. However, because the failure to report is a SL IV violation and has been entered into the licensee's CAP as CR 2006110200, this violation

is being treated as an NCV consistent with Section VI.A.1 of the NRC Enforcement Policy: NCV 05000321,366/2006004-01, Failure to Report Safety Relief Valve Test Results Outside Technical Specification Limits.

No other findings of significance were identified. The root cause performed for the generator trip caused by foreign material intrusion was comprehensive and included a review of seven foreign material intrusion events. The root cause performed for the omission of required chemistry sampling guidance when the PASS was removed from TS was factual and accurate. The root cause identified weakness in the TS change process and the proposed programmatic changes appeared adequate. The root cause performed as a result of an operator inadvertently securing the remaining running reactor feed pump was detailed and factual. The corrective actions appropriately focused on human performance and error prevention.

4OA3 Event Followup

a. Inspection Scope

For the non-routine event described below, the inspectors reviewed operator logs, plant computer data, and strip charts to determine what occurred and how the operators responded, and to determine if the response was in accordance with plant procedures. Documents reviewed are listed in the Attachment.

- On July 30, the inspectors observed the site response to the runback of the 1A Recirculation Pump caused by a failed relay in the control circuit. Power momentarily traversed into the "Immediate Exit" region of the Power/Flow Map and operators reduced power to exit the area.

b. Findings

No findings of significance were identified.

4OA5 Other Activities

.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. These reviews were conducted in accordance with NRC Inspection Procedures 60855 and 60855.1. The inspectors reviewed records to verify that the licensee had properly identified the parameters of each fuel assembly loaded, and that a physical inventory had been performed on all spent fuel in the ISFSI on a frequency of at least every 12 months. 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, and the performance of the

monitoring systems. 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 2006-004DC, Evaluation of Changes to the 2006 Dry Storage Equipment and Corresponding Changes to the Hatch 10 CFR 72.212 Report

b. Findings

No findings of significance were identified.

.2 ISFSI Radiological Controls

a. Inspection Scope

The inspectors conducted independent gamma surveys of the ISFSI facility and compared the results to previous quarterly surveys. The inspectors also observed and evaluated implementation of radiological controls, including RWPs, postings and TLD placement, and discussed the controls with an HPT and HP supervisory staff. Radiological controls for loading Hi-Star 100 ISFSI casks were also reviewed and discussed. Radiological control activities for ISFSI areas were evaluated against 10 CFR Part 20, 10 CFR Part 72, and applicable licensee procedures. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

On October 13, 2006, 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.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel

D. Madison, General Manager - Nuclear Plant
M. Ajluni, Assistant General Manager - Plant Support
S. Douglas, Assistant General Manager - Plant Operations
B. Goodwin, Engineering Manager
G. Johnson, Operations Manager
J. Lewis, Training and Emergency Preparedness Manager
J. Thompson, Nuclear Security Manager
R. Varnadore, Maintenance Manager
J. Dixon, Health Physics Manager

LIST OF ITEMS OPENED AND CLOSED

Opened and Closed

05000321,366/2006004-01 NCV Failure to Report Safety Relief Valve Test Results
Outside Technical Specification Limits. (Section
4OA2.2)

LIST OF DOCUMENTS REVIEWED

Section 1R04: Equipment Alignment

34SO-Z41-001-1, Control Room Ventilation System
34SO-Z41-004-0, Control Building Ventilation System
34SO-Z41-005-0, Control Building Miscellaneous HVAC Systems
34SO-Z41-006-0, Health Physics HVAC Systems Operations
53SP-071106-OR-1-1, RHR Pump Vibration Measurement
34SO-R25-002-1, 120/240 Volt Vital AC System
52PM-R44-007-0, Vital AC Inverter Preventative Maintenance
Condition Reports: 2006107932, 2006108513
MWO: 1050107401, 1050258301, 1051259401, 1050509001, 1061259501
Drawings: H-13361, 13627, 13635, 15305, 16040, 16041, 16042, 16043, 16329, 16330, 19937,
26050, 26093, 51178, 51179, 51194
Z41-CBHVAC-LP-03703, Control Room Building Lesson Plan

Section 1R05: Fire Protection

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

Section 1R12: Maintenance Effectiveness

53SP-071106-OR-1-1, RHR Pump Vibration Measurement
Plant Review Board Meeting Minutes for August 9, 2006 - Meeting 2006-065
Plant Review Board Meeting Minutes for August 10, 2006 - Meeting 2006-066
Plant Review Board Meeting Minutes for August 15, 2006 - Meeting 2006-067
Operating Order OO-01-07-06, Operation of the A RHR loop with Vibration at Specific

Enclosure

Flowrates, 07/07/2006

Operating Order OO-06-07-06, Operation of the "A" RHR Pump with high vibration in the 4000 to 6000 gpm range, 07/27/2006

Operating Order OO-01-08-06, Operation of "A" Loop RHR Pumps, 08/10/2006

Operating Order OO-02-08-06, Operation of "A" Loop RHR Pumps, 08/11/2006

Raw Vibration Data from the A RHR pump run scenarios

2006 Second Quarter System Health Report for the Control Room HVAC System

2006 Second Quarter System Health Report for the RHR System

CRs: 2005107083, 2006101360, 2006101650, 2006101674, 2006101740, 2006105184, 2006105947, 2006106958, 2006106960, 2006107368, 2006107500, 2006107531, 2006107932, 2006108958, 2006109008

Section 1R15: Operability Evaluations

CRs: 2005111930, 2006106594, 2006108552, 2006105227, 2006107531, 2006108156, 2006108086

Action Items: 2006203300, 2006203304, 2006203307, 2006203308, 2006203309, 2006203310, 2006203335

Engineering Evaluations: 1151, 1152, 1153, 1155, 1159

Section 1R19: Post Maintenance Testing

CRs: 2006109332, 2006109260, 2006109332, 2006109017, 2006109040, 2006107789, MWOs: 1061944101, 2061942601, 2061942602, 2041668701, 2050002101, 2050019301, 1052565701

Drawings: H-17152, S-18151, H-26050

95IT-OTM-001-0, Maintenance Work Order Functional Test Guideline

57SV-SUV-015-1/2, HPCI/RCIC Pump Suction Source Instrument

52CM-MEL-004-0, HFA, CR120A, CR122, and CR305D Relay Maintenance

42SV-TET-001-2, Primary Containment Periodic Type B and Type C Leakage Tests

42EN-ENG-014-0, ASME Section XI Repair/Replacement

52CM-MME-001-0, Packing Valves, Adjusting Packing, and Stroking Valves

52CM-MME-024-0, Fisher Type 657 Actuators Sizes 30-70 and 87

34SV-E11-001-1, Residual Heat Removal Pump Operability

Section 1R22: Surveillance Testing

CRs: 2005101913, 2006104106, 2005102284, 2005107273, 2005107320, 2006107763

Section 1EP6: Drill Evaluation

73EP-EIP-004-0, Duties of the Emergency Director

Scenario for HNP Emergency Preparedness 2006 Off-Hours Exercise (August 26, 2006)

Southern Nuclear Emergency Notification Forms

Section 2OS1: Access Control To Radiologically Significant Areas

Procedures and Guidance Documents

60AC-HPX-012-0, Overview of Radiological Work Practices and Radiation Protection

Administrative Control Procedures, Version (Ver.) 7.5

62RP-RAD-006-0, RWP Processing, Ver. 11.1

62RP-RAD-008-0, Radiation and Contamination Surveys, Ver. 11.1
 62RP-RAD-009-0, Air Sampling and Concentration Determination, Ver. 5.2
 62RP-RAD-016-0, Very High and High Radiation Area Access Control, Ver. 21.2
 62RP-RAD-044-0, Identification and Tracking of Hot Spots, Ver. 3.1
 62RP-RAD-055-0, Underwater Storage and Inventory of Radioactive Materials in the Spent Fuel Pools, Ver. 3.0
 62RP-RAD-055-OS, Annual SFP Inventory U1/U2
 Radiation Work Permit 06-0040, Refuel Floor Maintenance and Support Activities, Revision 0
 RWP 06-0070, Refueling Floor Fuel Pool Profiling and Cleaning; Identification of Special Nuclear Material, Rev. 0
 RWP 06-0161, Unit 1 Radiography and Support, Rev. 1
 RWP 06-0261, Unit 2 Radiography and Support, Rev. 1

Records and Data

Self-Assessment, August 15-18, 2005
 Self-Assessment Report SA05-HP-01, Hatch Nuclear Balance of Plant Program
 Self-Assessment
 Survey No. 26428, Unit 2 Reactor Building 185' Elevation, 06/21/06
 Survey No. 26574, Unit 2 Radwaste Building 103' Elevation, 06/29/06
 Report SA06-HP-01, Dosimetry Program, January 24-26, 2006
 Unit Two 2005 Outage Information Report
 Unit One 2006 Outage Information Report (Draft)

Audits and Corrective Action Program Documents

CRs 2005102837, 2006101574, 2006101582, 2006101941, 2006102641, 2006102841, 2006104354, 2006104440

Section 2OS3: Radiation Monitoring Instrumentation and Protective Equipment

Procedures and Guidance Documents

10AC-MGR-026-0, Respiratory Protection Program, Ver. 0.2
 57CP-CAL-005-1, ARM System Calibration, Ver. 12.5
 57SV-CAL-008-1, ARM Calibration, Ver. 3.6
 60AC-HPX-006-0, Respirator Radiological Protection Program, Ver. 10.4
 62HI-OCB-005-0, Teletector Model 6112B Operation and Calibration, Ver. 4.3
 62HI-OCB-019-0, Geiger Counter Model E-120 Operation and Calibration, Ver. 4.2
 62HI-OCB-028-0, Use and Calibration of Whole Body Counters, Ver. 13.3
 62HI-OCB-031-0, RO-2A Ion Chamber Operation and Calibration, Ver. 5.2
 62HI-OCB-061-0, Portable Ion Chamber Model RO-7 Operation and Calibration, Ver. 4.1
 62HI-OCB-072-0, Portable Area Monitor, RMS 2, Ver. 2.1
 62HI-OCB-073-0, PCM-1B Operation and Calibration, Ver. 3.3
 62HI-OCB-086-0, RO20 Ion Chamber Operation and Calibration, Ver. 1.1
 62HI-OCB-092-0, AMS-4 Operation and Calibration, Ver. 2.0
 62HI-OCB-097-0, Bicron Micro Rem Meter Operation and Calibration, Ver. 0.1
 62HI-OCB-103-0, Eberline Portal Monitor, Model PM-7, Ver. 1.2
 62HI-OCB-108-0, Eberline Area Radiation Monitor, Model RMS-3, Operation and Calibration, Ver. 1.1
 62RP-RAD-003.0, Use and Care of Respirators, Ver. 9.8

Records and Data

ASP-2E/NRD Calibration Data Sheet, S/N 1354, MPL No. D21-N1643, Dated 05/10/05
 Bicon Micro Rem Meter Calibration Form, Serial Number (S/N) B475Y, MPL Number D21-N1235, Dated 01/12/06
 E-120 Calibration Form/Data Sheet, S/N 15013, MPL No. D21-N1558, Dated 09/09/05
 Fastscan-2 Whole Body Counter Daily Calibrations, Dated 06/30/04 and 08/09/05
 Fastscan-2 WBC Efficiency Calibrations, Dated 07/01/04 and 08/10/05
 Peplemover WBC Daily Calibrations, Dated 08/06/04, 08/22/05, and 07/18/06
 Peplemover WBC Efficiency Calibrations, Dated 08/06/04 and 08/23/05
 RM-25 Calibration Data Sheet, S/N 707, MPL No. D21-N1496, Dated 07/06/05
 RO-2A Calibration Form/Data Sheet, S/N 469, MPL No. D21-N415, Dated 01/17/06
 SCBA Monthly Inspection Reports, Dated 07/03, 07/05, and 07/14/06
 Source Calibrations of 1/2D11-K621 A and B, Unit 1 Post-LOCA Monitors, Dated 03/14/06
 Source Calibrations of 1/2D11-K621 A and B, Unit 2 Post-LOCA Monitors, Dated 02/10/05
 Teletector Calibration Data Sheet, S/N 99354, MPL No. D21-N1410, Dated 09/07/05
 TRI Air Testing, Inc. Laboratory Report Compressed Air/Gas Quality Testing Analysis Results, Dated 02/17/06 and 04/27/06

Audits and CAP Documents

Audit Nos. H-HP-2004, Plant E. I. Hatch, Audit of Health Physics, 09/27/04; and H-HP-2005, Plant E. I. Hatch, Audit of Health Physics, 08/05/05
 CRs: 2005103535, 2006104711, 2006105230, 2006105457
 Plant Hatch 2004 and 2005 Annual Respiratory Protection Reviews

Section 2PS1: Radioactive Gaseous and Liquid Effluent Treatment and Monitoring SystemsProcedures and Guidance Documents

2003 Hatch Nuclear Plant Decommissioning Cost Study, Appendix D
 64CI-OCB-001-0, Main Stack Radiation Monitoring, Ver. 4.3
 64CI-OCB-002-0, Reactor Building Vents Radiation Monitoring, Ver. 3.3
 64CI-OCB-003-1, Recombiner Building Vent Radiation Monitoring, Ver. 4.0
 64CI-OCB-009-0, Liquid Radwaste Radiation Monitoring, Ver. 4.2
 64CI-OCB-018-0, Canberra Microvax Gamma Spectrophotometer Calibration, Ver. 5.6
 64CH-RPT-006-0, Liquid Effluent Reports, Ver. 4.16
 64CH-RPT-007-0, Gaseous Effluent Reports, Ver. 2.9
 64CH-SAM-028-0, Releases via Planned and Unplanned Routes: Sampling and Analysis, Ver. 1.0
 64CH-QCX-001-0, Quality Control for Laboratory Analysis, Ver. 7.6
 Hatch Nuclear Plant Augmented Radiological Environmental Monitoring Reports, Dated 01/07/87, 03/31/88, 04/03/89, 03/31/92, 03/28/95, and 02/22/00
 Hatch Nuclear Plant Radiological Effluent Release Reports for CY 2004 and 2005
 NMP-GM-002-GL02, Corrective Action Program, Ver. 4.0
 Offsite Dose Calculation Manual for Hatch Nuclear Plant, Ver. 17

Records and Data

Gaseous Effluent Release Permit Nos. 60071.018.018.G, 60073.019.019.G, 60074.016.020.G, and 60075.017.018.G

Germanium Detector #1 Efficiency Calibration Data for select geometries 1999 and 2000
 Liquid Effluent Release Permit Nos. 60073.008.005L and 60080.011.015.L
 Main Stack Off-gas Radiation FT&C, 05/01/05, 07/21/05, 10/05/05
 Main Stack Radiation Monitor Calibrations, 01/09/06, 01/10/06, and 01/11/06
 Out-of-Service Effluent Monitor Information for January 2004 - July 2006
 Plant Hatch Radiological Information Survey of Swamp, Nos. 5711 (02/02/04), 17862
 (05/16/05), and 25912 (05/19/06)
 Quality Control Charts viewed on Count Room Computer for Germanium Detectors #1, 2, and 3
 Radiochemistry Cross-Check Program Results, 2nd Quarter 2005 - 1st Quarter 2006
 Surveillance Tests of Standby Gas Treatment System Filters 1N62-D017A (06/15/04),
 1N62-D017B (06/16/04), 2N62-D017A (06/17/04), and 2N62-D017B (06/18/04)
 U1 Liquid Radwaste Effluent Line FT&C, 02/06/06
 U1 Liquid Radwaste Monitor Calibration, 05/02/05
 U1 Reactor Building Vent Radiation Monitor Calibrations, 04/05/05 and 04/06/05
 U1 Recombiner Building Vent Radiation Monitor Calibrations, 04/14/05
 U2 Liquid Radwaste Effluent Line FT&C, 05/18/06
 U2 Liquid Radwaste Monitor Calibration, 05/11/05
 U2 Off-gas Post-Treatment Monitor (process monitor 2D11-K615B) Calibration, 02/26/06
 U2 Reactor Building Vent Radiation Monitor Calibrations, 02/23/05 and 02/24/05

Audits and CAP Documents

Chemistry Self Assessment No. SA05-HPC-01, 08/15/05
 CRs 2004107000, 2004107227, 2004107754, 2004108613, 2005104789, 2005111391,
 2005105107, 2006101236, 2006102808,

Section 2PS3: Radiological Environmental Monitoring Program and Radioactive Material Control Program

Procedures and Guidance Documents

62HI-OCB-090-0, SAM-9 Bag Waste Monitor and SAM-9/SAM-11 Small Articles Monitor
 Operation and Calibration, Ver. 4.2
 ENV-931 HNP Radiological Monitoring – Fish Sampling, Rev. 13
 ENV-932 HNP Collection of Sediment Samples for Radiological Analysis, Rev 12
 ENV-934 HNP Altamaha River Drinking Water User Survey, Rev. 12
 ENV-935 HNP Land Use Census, Rev. 11
 ENV-936 Edwin I Hatch Nuclear Plant Radiological Monitoring Milk Sampling, Rev. 9
 ENV-937 HNP Radiological Monitoring – River Water Survey, Rev. 10
 ENV-938 HNP Radiological Monitoring – Grass Sampling, Rev. 8
 ENV-939 HNP Radiological Monitoring Thermoluminescent Dosimeters, Rev. 11
 ENV-940 Edwin I Hatch Nuclear Plant Radiological Monitoring – Airborne Particulates and
 Gaseous Iodine, Rev. 10
 ENV-941 Edwin I Hatch Nuclear Plant Radiological Monitoring – Airborne Particulates and
 Gaseous Iodine Air Sampling Flow Calibration, Rev. 6

Records and Data

0.45 Liter Marinelli Calibrations, Dated 09/13/05
 1.0 Liter Marinelli Calibrations, Dated 06/16/04

2nd Qtr. 2005 REMP TLD Data Package, Dated 07/21/05
 57IT-Y33-001-0 Climatronics Instruments (Meteorological Instruments Calibrations), Dated
 01/03/06, 01/9/06, 06/22/06, and 06/23/06
 Composite Air Filter Calibrations, Dated 10/09/03, 10/01/99, and 09/23/03
 DAW Distribution Report, Dated 05/26/2006
 Deviation Report, Dated 03/10/04 and 09/14/05
 Edwin I. Hatch Nuclear Plant Annual Radiological Environmental Operating Reports for 2004
 and 2005
 Environmental Samples Packing Slips, Dated 01/28/04, 03/10/04, 05/05/04, 09/08/04, 09/15/04,
 12/29/04, 03/09/05, 05/04/05, 08/03/05, 08/17/05, 08/31/05, 09/28/05, and 10/05/05
 FJ AC (Charcoal Cartridge) Calibrations, Dated 08/26/03 and 09/14/06
 HNP Air Flow Calibration Field Sheets, Dated 04/24/06 for Rotameters 103, 107, 112, 116, 304,
 and 309
 HNP Air Pump Maintenance Record from 05/02/05 to 06/26/06
 HNP River Water Log Sheet, Dated 06/05/06, 03/08/06, and 02/08/06 (Water Sampler
 Maintenance Records
 HNP Rotameter Air Flow Correction Chart, Dated 04/24/06
 Off-Site Dose Calculation Manual for Edwin I. Hatch Nuclear Plant, Revs. 16 and 17.
 Plant Hatch Environmental TLD Radiation Exposure Report Cover Sheet, Dated 04/21/04,
 07/21/04, 10/27/04, 01/14/05, 04/29/05, 08/11/05, 10/21/05, and 01/20/06
 Quench Curve Worksheets, Dated 05/22/06
 Results of Environmental Cross Check Program – Georgia Power Company – Smyrna SAIC
 Charcoal Cartridge Calibration, Dated 06/16/04
 Single Air Filter Calibrations, Dated 09/24/03
 S/N 33-TP2084A, Dated 9/24/03 and 09/14/05 (Energy and Efficiency Calibration 3 year
 frequency)
 TLD Log Sheet, Dated 04/06/04, 07/07/04, 04/05/05, 07/06/05, 10/04/05, 01/04/06
 Tritium in Water Minimum Detectable Concentrations, Dated 09/01/01

Audits and CAP Documents

H-ENV-2004 Audit of Effluent & Environmental Monitoring
 H-ENV-2005 Audit of Effluent & Environmental Monitoring
 Letter to Mr. S. J. Piedra, (Response to Audit), Dated 07/25/05
 Southern Nuclear Operating Company Audit of Georgia Power Company Environmental
 Laboratory, Dated 06/27/05.
 Southern Nuclear Operating Company Review of Corrective Action Georgia Power Company
 Environmental Laboratory, Dated 08/04/05

Section 40A1: Performance Indicator Verification

Procedures and Guidance Documents

Procedure 00AC-REG-005-0, Preparation and Reporting of NRC PI Data, Version 5.0

Records and Data

Hatch Performance Indicator Database
 Personnel Access Control Alarms Report from January 2005 through June 2006

Section 4OA2: Identification and Resolution of Problems

CRs: 2005110616, 2005110016, 2005105307, 2005105296

Beginning Of Shift Training 06-04

LRQ 06-1,2 Simulator Schedule

Spreadsheet 2006 Reactor Water Level Practice Tracking

LT-SG-50721-02/03, RC-2 & Initial Scram Response Practice

Action Items: 2005204325, 2005204326, 2005204327, 2005204053, 2006200469,
2006201907, 2006201909, 2006200469

SRV Test Report 52029-0 As-Received Steam Test Data for Unit 2 SRVs removed in the Spring 2005 Outage

As-Received Diagnostic Test Data Sheets for Unit 1 SRVs removed in the Spring 2006 Outage

LER 05000321-93-002 Corrosion-Induced Bonding Results in Safety Relief Valve Setpoint Drift SER for the Pressure Sensor Actuation for the Main Steam Safety Relief Valves dated July 24, 1992

Closeout of Generic Safety Issue B-55, "IMPROVED RELIABILITY OF TARGET ROCK SAFETY RELIEF VALVES", dated December 17, 1999

Section 4OA3: Event Followup

CRs: 2006107634, 2006107636, 2006107637, 2006107638, 2006107639, 2006107646,
2006107648, 2006107656, 2006107659, 2006107733

34GO-OPS-005-1, Power Changes

Section 4OA5: Other Activities

50AC-MNT-013-0, Spent Fuel Dry Storage Program

52SV-F18-004-0, Hi-Storm and MPC, Receiving, Handling and Storage

62RP-RAD-047-0, Independent Spent Fuel Storage Installation and Radiological Controls

Plant Hatch Perimeter TLD Report, 1st Quarter 2006

Plant Hatch Radiological Information Survey Nos. 19363 (08/10/06); 19581 (08/19/05); and 19859 (09/10/05)

CRs: 2006106583, 2006106669, 2006106670, 2006106680, 2006106716, 2006106940,
2006107292, 2006107293, 2006107429, 2006107844, 2006108979, 2006109113,
2006109114, 2006109116, 2006109122, 2006109144, 2006109159, 2006109486, 2006100289