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

January 29, 2009

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

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT - NRC INTEGRATED INSPECTION REPORT 05000321/2008005 AND 05000366/2008005

Dear Mr. Madison:

On December 31, 2008, 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 January 27, 2008, 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.

This report documents one NRC-identified finding of very low safety significance which was determined to be a violation of NRC requirements. This report also documents two licensee-identified violations which were determined to be of very low safety significance. The NRC is treating these violations as non-cited violations (NCVs) consistent with Section VI.A.1 of the NRC Enforcement Policy because of their very low safety significance and because they were entered into your corrective action program. If you contest 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 inspector at the Edwin I. Hatch Nuclear Plant.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, 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 05000321/2008005, 05000366/2008005
w/Attachment: Supplemental Information

cc w/encl: (See page 3)

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Letter to Dennis R. Madison from Scott M. Shaeffer dated January 29, 2009

SUBJECT: EDWIN I. HATCH NUCLEAR PLANT - NRC INTEGRATED INSPECTION REPORT 05000321/2008005 AND 05000366/2008005

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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.: 05000321/2008005, 05000366/2008005

Licensee: Southern Nuclear Operating Company, Inc.

Facility: Edwin I. Hatch Nuclear Plant

Location: Baxley, Georgia 31513

Dates: October 1 – December 31, 2008

Inspectors: J. Hickey, Senior (Sr.) Resident Inspector
P. Niebaum, Resident Inspector
A. Rao, Reactor Inspector
D. Simpkins, Senior Technical Training Program Specialist, TTC
C. Rapp, Senior Project Engineer
B. Caballero, Operations Engineer (Section 1R11)
J. Commiskey, Health Physicist (Section 2PS1)
J. Griffis, Health Physicist (Sections 2PS3 and 4OA1)
W. Loo, Sr. Health Physicist (Sections 2OS1, 4OA1 and 4OA5)
A. Nielson, Health Physicist (Sections 2PS1, 2PS3, and 2OS3)

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

Enclosure

SUMMARY OF FINDINGS

IR 05000321/2008-005, 05000366/2008-005; 10/01/2008-12/31/2008; Edwin I. Hatch Nuclear Plant, Units 1 and 2, Other

The report covered a three-month period of inspection by resident inspectors, reactor inspector, a reactor instructor, a project engineer, an operations engineer, and four health physicists. One NRC-identified Severity Level IV Non-Cited Violation (NCV) was identified. 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.

A. NRC-Identified and Self-Revealing Findings

Cornerstone: Mitigating Systems

- SL IV. A NRC-identified violation of 10 CFR 50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors, and 10 CFR 50.73, Licensee Event Report System, was identified when the licensee did not recognize the loss of all three main control room (MCR) air handling units (AHUs) was a reportable condition. Consequently, the licensee failed to make an eight hour report as required by 10 CFR 50.72 and submit a licensee event report (LER) within 60 days as required by 10 CFR 50.73. This violation does not apply to Unit 1 because it was in a refueling outage and the AHUs were not required to be operating. This violation has been entered into the licensees CAP as CR 2008111957.

  Failure to recognize the loss of the MCREC system safety function was reportable is a performance deficiency. This finding was evaluated using traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function of event assessment. The inspectors determined this finding was a SL IV violation because the failure to report this condition did not substantively impact the Agency's regulatory responsibilities and the Agency would not have responded in a significantly different manner had the information been properly reported. This finding had the cross-cutting aspect of evaluating for reportability in the area of Problem Identification and Resolution (P.1(c)) because the licensee evaluated reportability only for the entry into TS LCO 3.0.3. (Section 4AO5).

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 corrective action program. These violations and corrective actions are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Unit 1 began the period at full Rated Thermal Power (RTP). On November 22, a scram occurred due to a failed component in the condensate system. Power was returned to 100% on November 30 and remained at 100% RTP through the end of the reporting period.

Unit 2 began the inspection period at full RTP. On October 10, a trip of the 2A recirculation pump caused a reduction in reactor power to approximately 67% RTP. Power was returned to 100% RTP on October 13 and remained there 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 two systems when the opposite trains were removed from service or the system was recently realigned following maintenance. 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.

- Unit 2 Safety Relief Valves (SRVs)
- Unit 1 'D' Residual Heat Removal Service Water (RHRSW) Pump

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures

a. Inspection Scope

Internal Flooding. The inspectors walked down the following two areas which contained risk-significant structures, systems, and components to verify adequate protection from internal flooding. The inspectors checked if flood barriers were in place, sumps and drains were clear of debris, and terminal boxes that could become submerged were sealed. The inspectors reviewed alarm response procedures to verify alarm setpoints and setpoints for sump pump operation were consistent with the final safety analysis report (FSAR), the setpoint index, and Technical Specifications (TSs).

- Unit 1 High Pressure Coolant Injection (HPCI) system pump room
- Unit 2 HPCI system pump room

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-51073-05, which included loss and restoration of vital AC, Reactor Water Clean Up (RWCU) system leak into containment causing high drywell pressure and reactor scram, an unisolable leak in the residual heat removal (RHR) pump suction pipe, SRVs failed closed, and emergency depressurization by an alternative depressurization method. The inspectors reviewed licensee procedures 10AC-MGR-019-0, Procedure Use and Adherence, and DI-OPS-59-0896, 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 to verify 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.

Licensed Operator Requalification. The inspectors reviewed documentation, interviewed licensee personnel, and observed the administration of job performance measures (JPM) in accordance with the licensee's operator requalification program to assess the effectiveness of the licensee in implementing requalification requirements identified in 10 CFR Part 55, Operators' Licenses. The evaluations were also performed to determine if the licensee effectively implemented operator requalification guidelines established in NUREG-1021, Operator Licensing Examination Standards for Power Reactors. The JPMs were inspected using the criteria in Inspection Procedure 71111.11. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

The inspectors reviewed the following three samples associated with structures, systems, and components 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 (CRs), Maintenance Work Orders

(MWO), and the licensee's procedures for implementing the Maintenance Rule 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 Control Rod Drive System
- Unit 1 and 2 Electro-Hydraulic Control System
- Unit 1 and 2 Core Spray System

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessments and Emergent Work Evaluation

a. Inspection Scope

The inspectors reviewed the following three risk assessment 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.

- October 14 through 17, Switchyard Air Circuit Breaker 179450 replacement
- October 4 through 8, Low River Level, 1Z41B003A Control Room A/C system outage, Unit-1 Scram Discharge Volume Thermal Sensors FT&C, 2B Reactor Building Component Cooling Water Heat Exchanger retube
- December 9 through 12, 1B Condensate Booster Pump Oil Cooler inspection, Swap Turbine Building Chillers, Unit-1 Reactor Protection System Test Switch functional testing

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 TSs 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.

- Plant Service Water Pump Operability with River Level less than 61.2' mean sea level (MSL).
- 2C Emergency Diesel Generator (EDG) crankcase vacuum ejector coupling failure
- Unit 1 RHRSW Flow Control Valve failed to close on low system pressure
- Unit 1 HPCI pipe not centered on vertical pipe hanger
- Engineering Evaluation 1725, Unit 2 HPCI Gear Box Reducer Oil Leak

b. Findings

No findings of significance were identified.

1R18 Plant Modifications

a. Inspection Scope

The inspectors reviewed the following temporary modification to ensure that safety functions of important safety systems have not been affected. Also, the inspectors verified that the design bases, licensing bases and performance capability of risk significant structures, systems, and components have not been degraded through modifications. The inspectors verified that any modifications performed during increased risk-significant configurations did not place the plant in an unsafe condition.

- 2008-044, Bypass of the High Oil Level Alarm on the Unit-1A Recirculation Motor

b. Findings

No findings of significance were identified.

1R19 Post Maintenance Testing

a. Inspection Scope

For the following three 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 also 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.

- 1B21F013J1 SRV pilot assembly replacement
- 1B EDG Room Louver inspection and lubrication
- 1E11N-017A RHRSW Heat Exchanger A inlet pressure switch replacement

b. Findings

No findings of significance were identified.

1R20 Refueling and Outage Activities

a. Inspection Scope

On November 22, a Unit 1 reactor scram occurred as a result of a failed power supply in the condensate flow control system. The inspectors reviewed the licensee's forced outage plan, monitored shutdown activities, licensee control of outage activities, and monitored the activities listed below. Documents reviewed are listed in the Attachment.

- Reactor Coolant System (RCS) cooldown following shutdown to verify the cooldown rate did not exceed TS limits
- TS and licensee procedures to verify mode change requirements were met
- Plant startup, heatup, and power ascension
- Licensee identification and resolution of problems related to outage activities

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 three 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-21-0386, 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-SUV-012-2, Unit-2 Plant Service Water, RHR and Standby Service Water Subsystem Valve Position Verification
- 34SV-E11-001-2, Unit-2 B Train RHR Pump Surveillance

In-Service Test
- 34SV-R43-011-1, 1A EDG 24 month operability and air start valves test

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP6 Drill Evaluation

a. Inspection Scope

The inspectors observed the following emergency plan evolution. 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 November 12

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS1 Access Control To Radiologically Significant Areas

a. Inspection Scope

Access Controls. 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 HRA conditions. Controls and their implementation for LHRA keys and for storage of irradiated material within the Unit 1 spent fuel pool (SFP) were reviewed and discussed with cognizant licensee representatives. Radiological controls were evaluated for selected activities that included chemistry reactor water trace metals and the reactor water cleanup valve nest and heat exchanger. 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. Results were compared to current licensee surveys and assessed against established postings and radiological 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 FSAR, TS, and 10 CFR Parts 19 and 20 requirements. Specific assessment criteria included UFSAR Section 12, RP; 10 CFR 19.12; 10 CFR 20, Subparts B, C, F, G, H, and J; TS Sections 5.4, Procedures and 5.7, HRAs; and approved licensee procedures. Documents reviewed are listed in the Attachment. The inspectors completed the 21 required 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 procedure NMP-GM-002, Corrective Action Program, Version (Ver.) 7.0. 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 Monitoring Instrumentation. During tours of the auxiliary building and SFP areas, the inspectors observed installed radiation detection equipment including the following instrument types: Area Radiation Monitors (ARMs), Continuous Air Monitors (CAMs), Personnel Contamination Monitors (PCMs), and portal monitors (PM) at the RCA and Protected Area exits. The inspectors observed the physical location of the components, noted the material condition, and compared sensitivity ranges with FSAR requirements.

In addition to equipment walk-downs, the inspectors observed functional checks and alarm setpoint testing of various fixed and portable detection instruments, including portable ion chambers, telepoles, PCMs, and PMs. The most recent 10 CFR Part 61 analysis for Dry Active Waste (DAW) was reviewed to determine if calibration and check sources are representative of the plant source term. The inspectors reviewed the last two calibration records for selected PCMs, PMs, and containment high-range ARMs. Calibration stickers on portable survey instruments were noted during inspection of storage areas for "ready-to-use" equipment.

Operability and reliability of selected radiation detection instruments were reviewed against details documented in the following: 10 CFR Part 20; NUREG-0737, Clarification of TMI Action Plan Requirements; TS Section 3; FSAR Chapter 7; and applicable licensee procedures. Documents reviewed are listed in the Attachment.

Self-Contained Breathing Apparatus (SCBA) and Protective Equipment. Selected SCBA units staged for emergency use in the Control Room and other locations were inspected for material condition, air pressure, and number of units available. The inspectors also reviewed maintenance records for selected SCBA regulators for the past five years and certification records associated with supplied air quality.

Qualifications for individuals responsible for testing and repairing SCBA vital components were evaluated through review of training records. In addition, Main Control Room operators were interviewed to determine their knowledge of available SCBA equipment locations, including corrective lens inserts if needed, and their training on bottle change-out during a period of extended SCBA use. Respirator qualification records were reviewed for several Main Control Room operators and emergency responder personnel in the Maintenance Department.

Licensee activities associated with maintenance and use of respiratory protection equipment were reviewed against 10 CFR Part 20; Regulatory Guide (RG) 8.15, Acceptable Programs for Respiratory Protection; and applicable licensee procedures. Documents reviewed are listed in the Attachment. The inspectors completed the nine required samples.

Problem Identification and Resolution. The inspectors reviewed selected CRs associated with instrumentation and protective equipment to assess the licensee's ability to identify, characterize, prioritize, and resolve the identified issues in accordance with procedure NMP-GM-002. The inspectors also evaluated the scope of the licensee's internal audit program and reviewed recent assessment results. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

Cornerstone: Public Radiation Safety

2PS1 Radioactive Gaseous and Liquid Effluent Monitoring Systems

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 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 July 2006 to November 2008, 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. The inspector verified that 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 Offsite Dose Calculation Manual (ODCM), Rev. 17; and UFSAR. Documents reviewed are listed in the Attachment.

Effluent Release Processing and Quality Control (QC) Activities. The inspector evaluated the methods used to determine the isotopes that are included in the source term to ensure all applicable radionuclides are included, within detectability standards.

The inspector reviewed the Part 61 analyses to ensure hard-to-detect radionuclides are included in the source term.

The inspector reviewed the results of the inter-laboratory comparison program to verify the quality of radioactive effluent sample analyses. The inspector reviewed assessments of any identified bias in the sample analysis results and the overall effect on calculated projected doses to members of the public.

The inspector verified that the licensee was maintaining adequate effluent sampling records [sampling locations, sample analyses results, flow rates, and source term for radioactive liquid and gaseous effluent (i.e., information needed to satisfy the requirements of 10 CFR 20.1501).

Selected portions of procedures for effluent sampling, processing, and release were evaluated for consistency with licensee actions. Selected 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 2006 and 2007 Annual Radiological Effluent Release Reports to evaluate reported doses to the public and ODCM changes. Public dose calculations were reviewed and discussed with 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 in the Attachment.

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. Documents reviewed are listed in the Attachment.

Groundwater Monitoring. The inspectors discussed current and future programs for onsite groundwater monitoring with Chemistry supervisors and corporate Health Physicists, including number and placement of monitoring wells and identification of plant systems with the most potential for contaminated leakage. In addition, the inspectors reviewed procedural guidance for identifying and assessing onsite spills and leaks of contaminated fluids and reviewed spill records retained for decommissioning per 10 CFR Part 50.75(g).

Currently, the licensee maintains a large network of onsite groundwater monitoring wells with samples taken at various frequencies and for various radionuclides. Levels of onsite tritium contamination range from no detectable activity to greater than 20,000 picocuries per liter. Historically, the primary source of leakage has been from Unit 1 condensate storage tank pumps and associated piping. Hydrological studies show that

onsite groundwater contamination slowly migrates to the Altamaha River which was the normal effluent discharge point. No contamination levels exceeding NRC or Environmental Protection Agency limits have been reported in the offsite environs. The inspectors completed the three required samples.

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 inspectors observed routine sample collection and surveillance activities required by the licensee's REMP. The inspectors noted the material condition and operability of airborne particulate and iodine sampling stations. The environmental thermoluminescent dosimeters (TLDs) that were co-located with the air samplers were checked for material condition and appropriate identification. The inspectors observed collection of milk samples from the State Prison Dairy. The inspectors determined the current location of selected air samplers, TLDs, and the milk sample, using a handheld Global Positioning System. The inspectors discussed land use census results, river use surveys, changes to the ODCM, and sample collection/processing activities with responsible staff.

The inspectors reviewed the last two calibration records for selected environmental air samplers and river water samplers. The inspectors also reviewed the 2006 and 2007 Annual Radiological Environmental Operating Reports, results of the 2006 and 2007 inter-laboratory cross-check program, and selected procedures for environmental sample collection and processing. Selected environmental measurements were reviewed for consistency with licensee effluent data, evaluated for radionuclide concentration trends, and compared with detection level sensitivity requirements.

Procedural guidance, program implementation, and environmental monitoring results were reviewed against: 10 CFR Part 20; Appendix I to 10 CFR Part 50; ODCM, Rev. 21; RG 4.15, Quality Assurance for Radiological Monitoring Programs (Normal Operation) - Effluent Streams and the Environment; and the Branch Technical Position, An Acceptable Radiological Environmental Monitoring Program - 1979. Documents reviewed are listed in the Attachment.

Meteorological Monitoring Program The inspectors directly observed the physical condition of the site's primary and backup meteorological monitoring towers and discussed equipment operability, reliability, and maintenance activities with responsible licensee representatives. The inspectors reviewed calibration records for applicable tower instrumentation, and evaluated measurement data recovery for calendar year (CY) 2006 and CY 2007.

Licensee procedures and activities related to meteorological monitoring were evaluated against ODCM; UFSAR Section 2.3; ANSI/ANS-2.5-1984, Standard for Determining Meteorological Information at Nuclear Power Sites; and Safety Guide 23, Onsite Meteorological Programs. Documents reviewed are listed in the Attachment.

Unrestricted Release of Materials from the RCA. The inspectors observed surveys of material and personnel being released from the RCA using small article monitor, PCMs, and PM instruments. The inspectors also observed source check testing of these instruments and discussed equipment sensitivity, alarm setpoints, and release program guidance with licensee staff. The inspectors compared recent 10 CFR Part 61 results for the DAW waste stream with radionuclides used in calibration and check sources to evaluate the appropriateness and accuracy of release survey instrumentation. The inspectors also reviewed the last two calibration records for selected release point survey instruments.

Licensee programs for monitoring materials and personnel released from the RCA were evaluated against 10 CFR Part 20 and IE Circular 81-07, Control of Radioactively Contaminated Material. Documents reviewed are listed in the Attachment. The inspectors completed the 10 required samples.

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

Cornerstone: Mitigating Systems

- Mitigating Systems Performance Index (MSPI), Emergency AC Power System
- MSPI, High Pressure Injection System
- MSPI, Heat Removal System

- MSPI, Residual Heat Removal System
- MSPI, Cooling Water Systems
- Safety System Functional Failures

The inspectors reviewed raw PI data collected from October, 2007 through September, 2008 for the Mitigating Systems indicators identified. The inspectors 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. Applicable licensee event reports (LERs) issued during the referenced time frame were also reviewed and are listed in the Attachment.

Cornerstone: Occupational Radiation Safety

- Occupational Exposure Control Effectiveness

The inspectors reviewed data collected from January 2007 through October 2008. For the reviewed period, 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 2007 through November 2008. Documents reviewed are listed in the Attachment.

Cornerstone: Public Radiation Safety Cornerstone

- RETS/ODCM Radiological Effluent

The inspectors reviewed the PI results from January 2007 through October 2008. The inspectors reviewed CAP documents, effluent dose data, and licensee procedural guidance for classifying and reporting PI events. The inspectors also interviewed licensee personnel responsible for collecting and reporting the PI data. 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 Operator Work Arounds List to verify the full extent of the issues were identified, an appropriate evaluation was performed and appropriate corrective actions were specified and prioritized.

- Operations Significant Work Arounds and Burdens dated December 15, 2008.

b. Findings and Observations

No findings of significance were identified.

.3 Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a review of the licensee's Corrective Action Program and associated documents to identify trends which could indicate the existence of a more significant safety issue. The review was focused on repetitive equipment issues, but also considered the results of inspector daily CR screening, licensee trending efforts, and licensee human performance results. The review nominally considered the six month period of July 2008 through December 2008 although some examples extended beyond those dates when the scope of the trend warranted. The inspectors also reviewed several CRs associated with operability determinations which occurred during the period. The inspectors compared and contrasted their results with the results contained in the licensee's two latest quarterly trend reports. Corrective actions associated with a sample of the issues identified in the licensee's trend reports were reviewed for adequacy. The inspectors also evaluated the trend reports against the requirements of the licensee's corrective action program as specified in licensee procedure NMP-GM-002 and 10 CFR 50, Appendix B. Documents reviewed are listed in the Attachment.

b. Findings and Observations

No findings of significance were identified.

4OA3 Event Follow-up

.1 Unit-1 Reactor Scram Due To Loss Of Condensate Flow

a. Inspection Scope

The inspectors responded to the control room and verified the licensee actions in response to the reactor scram were in accordance with Emergency, Abnormal and Normal Operating Procedures. The inspectors verified the cause of the scram was understood, reviewed chart recorders, operating logs and attended event response meetings.

b. Findings

No findings of significance were identified.

.2 Unit-2 Plant Transient Caused by the 2A Recirculation Pump Trip

a. Inspection Scope

The inspectors responded to the control room and verified the licensee actions in response to the plant transient were in accordance with Emergency, Abnormal and Normal Operating Procedures. The inspectors verified the cause of the transient was understood, reviewed chart recorders, operating logs and interviewed Operations staff on-shift during the event.

b. Findings

No findings of significance were identified.

.3 Altamaha River Level at 61.2' MSL

a. Inspection Scope

The inspectors responded to the control room and verified licensee actions in response to the low river level were in accordance with Abnormal Operating Procedures. The inspectors reviewed operating logs and interviewed Operations staff on-shift during the event.

b. Findings

No findings of significance were identified.

.4 (Closed) LER 05000366/2008-003-00 and 05000366/2008-003-01, Crack in Reactor Pressure Boundary Piping Due to High Cycle Fatigue Results in Leakage

On May 19, 2008, it was determined that a leak in a one-inch instrumentation pipe was part of the reactor coolant system boundary. The cause of the crack was flow induced vibration resulting in a high cycle fatigue failure of the weld. This condition was documented in CR 2008103067. See Section 4OA7 for the disposition of this issue.

.5 (Closed) LER 05000321/2008-003 Sensed Low Electro-Hydraulic Control (EHC) Pressure Causes Turbine Trip Resulting in a Reactor Scram

On July 4, 2008, testing of the standby EHC pump was in progress. During the test, a low EHC system pressure was sensed which resulted in a turbine trip. The cause of the sensed low pressure was a recent change in the sensing location of the pressure switch and the installation of pressure transmitters with faster response times. This condition was documented in CR 2008107218. No findings of significance were identified.

4OA5 Other Activities

.1 Quarterly Resident Inspector Observations of Security Personnel and Activities

a. Inspection Scope

During the inspection period, the inspectors conducted the following observations of security force personnel and activities to ensure that the activities were consistent with licensee security procedures and regulatory requirements relating to nuclear plant security. These observations took place during both normal and off-normal plant working hours.

- Tours of the Central and Secondary Alarm Stations;
- Tours of selected security towers and security response posts;
- Observation of personnel entry screening operations within the plant's main entrance;
- Security Team shift turnover activities.
- Security firing range activities

b. Findings

No findings of significance were identified

.2 Independent Spent Fuel Storage Installation (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-Trac 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.

.3 Reportability for Loss of Main Control Room Environmental Control (MCREC) System

a. Inspection Scope

The inspectors reviewed the reportability requirements for a loss of the MCREC system safety function that occurred on February 21, 2008. The inspectors used the guidance provided in NUREG-1022,

b. Findings

Introduction: A NRC-identified Severity Level (SL) IV violation of 10 CFR 50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors, and 10 CFR 50.73, Licensee Event Report System, was identified when the licensee did not recognize the loss of all three main control room (MCR) air handling units (AHUs) was a reportable condition. Consequently, the licensee failed to make an eight hour report as required by 10 CFR 50.72 and submit a licensee event report (LER) within 60 days as required by 10 CFR 50.73. This violation does not apply to Unit 1 because it was in a refueling outage and the AHUs were not required to be operating.

Description: On February 21, 2008, the running 1C AHU for the MCREC system tripped and the 1B AHU failed to automatically start. The 1A AHU was previously tagged out to support work on the plant service water system. This resulted in the loss of all three AHUs in the shared main control room rendering the MCREC system inoperable. The licensee entered Technical Specification (TS) Limiting Condition of Operation (LCO) 3.0.3 which required the licensee to initiate action within one hour to place the unit in a mode the MCREC system was not required to be operable. The MCREC system was required to be operable in modes 1, 2, and 3. The licensee did not need to initiate action because the 1B and 1C AHUs were restarted within about 10 minutes. The licensee correctly determined the entry into TS LCO 3.0.3 was not reportable by either 10 CFR 50.72 or 10 CFR 50.73. However, the licensee did not recognize the loss of MCREC

system safety function was reportable by both an eight hour report as required by 10 CFR 50.72 and submitting an LER as required by 10 CFR 50.73.

Analysis: Failure to recognize the loss of the MCREC system safety function was reportable is a performance deficiency. This finding was evaluated using traditional enforcement because it had the potential for impacting the NRC's ability to perform its regulatory function of event assessment. The inspectors determined this finding was a SL IV violation of low safety significance because the failure to report this condition did not substantively impact the Agency's regulatory responsibilities and the Agency would not have responded in a significantly different manner had the information been properly reported. This finding had the cross-cutting aspect of evaluating for reportability in the area of Problem Identification and Resolution (P.1(c)) because the licensee evaluated reportability only for the entry into TS LCO 3.0.3.

Enforcement: 10 CFR 50.72 required in part that an eight hour notification be made for any event or condition that could have prevented the fulfillment of the safety function of systems that are needed to mitigate the consequences of an accident. 10 CFR 50.73 required in part that an LER be submitted within 60 days after discovery of any event or condition that could have prevented the fulfillment of the safety function. Contrary to the above, the licensee did not recognize that the failure of all MCREC AHUs on February 21, 2008, was a condition that could have prevented the fulfillment of the safety function of systems that are needed to mitigate the consequences of an accident. This condition was reportable as required by both 10 CFR 50.72 and 10 CFR 50.73. Because of the very low severity level and because this violation has been entered into the licensees CAP as CR 2008111957, this violation is being treated as a non-cited violation (NCV) consistent with Section VI.A of the NRC Enforcement Policy and is identified as NCV 05000366/2008005-01, Failure to Report a Reportable Condition. A Green self revealing NCV (NCV 05000366/2008002-02) of 10 CFR 50 Appendix B, Criterion V, Instructions, Procedures and Drawings was issued in the first quarter 2008 inspection report for failure to implement requirements specified in the equipment clearance procedure.

4OA6 Meetings, Including Exit

On January 27, 2008, the inspectors presented the inspection results to Mr. Dennis Madison and the other members of his staff who acknowledged the results. The inspectors confirmed proprietary information was not provided or examined during the inspection.

4OA7 Licensee-Identified Violations

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

- 10 CFR 50.73(a)(2)(i)(B) requires in part that the licensee shall report any condition which was prohibited by technical specifications. Contrary to this, on May 19, 2008, the licensee determined that pressure boundary leakage resulting from a weld failure

in an instrumentation sensing line was discovered on March 8, 2005, and not reported. This issue was entered in the licensee's corrective action program under CR 2008103067. This finding is of very low safety significance because the leak was very small and within the RCS leakage accident analysis.

- Technical Specification 5.7.1.a requires, in part, that each high radiation area, in which the intensity of radiation is > 100 mrem/hr but < 1000 mrem/hr, measured at 30 cm from the radiation source or from any surface the radiation penetrates, shall be barricaded and conspicuously posted as a high radiation area. Contrary to the above, on October 14, 2008, the licensee was transferring Unit 1 condensate phase separator resin to the vendor's equipment for receiving the resin; however, the licensee did not barricade nor conspicuously post the areas that contained the pipes used for transferring the resin as a high radiation area. Licensee evaluations performed after the event showed that the intensity of radiation was >100 mrem/hr but <1000 mrem/hr measured at 30 cm from the pipe surfaces in those areas. This finding was entered in the licensee's corrective action program as Condition Report 2008110421. This finding is of very low safety significance because there was no evidence of unauthorized worker entry into the area and no unexpected /unintended radiation exposures to licensee personnel.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel
G. Johnson, Site Engineering Manager
J. Dixon, Health Physics Manager
S. Bargeron, Plant Manager
B. Goodwin, Design Manager
G Brinson, Operations Manager
J. Lewis, Site Support Manager
D. Madison, Hatch Vice President
S. Soper, Engineering Support Manager
J. Thompson, Nuclear Security Manager
R. Varnadore, Maintenance Manager
V. Coleman, Chemistry Manager
J. Dixon, Health Physics (HP) Manager
J. Reagin, Plant Health Physicist
J. Reddick, HP Supervisor
S. Tipps, Principal Engineer, Licensing

LIST OF ITEMS OPENED AND CLOSED

Opened and Closed		
05000366/2008005-001	NCV	Failure to Report a Reportable Condition (Section 4OA5.3)
Closed		
05000366/2008-003-00/01	LER	Crack in Reactor Pressure Boundary Piping Due to High Cycle Fatigue Results in Leakage (Section 4OA3.4 and 4OA7)
05000321/2008-003-00	LER	Sensed Low EHC Pressure Causes Turbine Trip Resulting in a Reactor Scram (Section 4OA3.5)

LIST OF DOCUMENTS REVIEWED

Section 1R04: Equipment Alignment
Procedures: 34SO-B21-001-2, Automatic Depressurization System (ADS) and Low-Low Set (LLS) Systems; 34SO-P70-001-2, Drywell Pneumatic System; 34SO-E11-010-1, Residual Heat Removal System
Drawings: H-26000, H-26066, H-28023, D-11004, H-16329

Section 1R11: Licensed Operator Requalification
Procedures: 72TR-TRN-002-0, License Continuing Training Program
Job Performance Measures (JPMs):
LR-JP-11.02-17, Inject Standby Liquid Control (SBLC)
LR-JP-08-15-14, Align Core Spray Suction from the Condensate Storage Tank to the Torus
LR-JP-25062-00, Emergency Classification and Notification
LR-JP-05.03-17, Shutdown High Pressure Coolant Injection (HPCI)
LR-JP-13.68-10, From Outside the Main Control Room, Override the LOCA/LOSP Drywell Chiller Trips and Start the Drywell Chillers

Section 1R12: Maintenance Effectiveness
Procedures: 40AC-ENG-020-0, Maintenance Rule (10 CFR 50.65) Implementation and Compliance
MWOs: 1072212101, 2071574501, 2082068601, 2040997401, 2040997501, 2040997601, 2072096801, 2072086701, 2080219301, 2081124501, 208003801, 1081906001, 1071985101, 1070799301, 20705855001
Condition Reports: 2008110363, 2008105305, 2008108196, 2008109264, 2008105326, 2008106290, 2007110379, 2008103376, 2008102357, 2008102083
AIT: 2006201745
Other: 3rd Quarter 2008 EHC System Health Report
3rd Quarter 2008 CRD Hydraulic System Health Report
3rd Quarter 2008 Core Spray System Health Report

Section 1R15: Operability Evaluations
Condition Reports: 2008110678, 2008110481, 2008110645, 2008111868
Drawings: H-16869, H-16330, H-17773, H-17766
Procedure: 34SO-E11-010-1, Residual Heat Removal System
Other: SNC email and attached documents

Section 1R19: Post Maintenance Testing
MWOs: 1070180101, 1072850001, 1082116901
Procedures: 95IT-OTM-001-0, Maintenance Work Order Functional Test Guideline
52GM-B21-005-0, Main Steam Safety Relief Valve Maintenance
42EN-ENG-014-0, ASME Section XI Repair/Replacement
42FP-FPX-004-0, Fire Protection Reviews
51GM-MNT-002-0S, Maintenance Cleanliness Inspection & Work Area Restoration
51GM-MNT-017-0, Control of Lubricants
52GM-MEL-003-0, Cable/Raceway Installation and Cable Termination
57CP-CAL-036-1, Static-O-Ring Pressure Switch

Section 1R20: Refueling and Outage Activities
34AB-C71-001-1 Reactor Scram Procedure
34-GO-OPS-001-1, Plant Startup
Condition Reports: 2008111632, 2008111605

Section 1R22: Surveillance Testing
Condition Reports: 2008103425, 2008103453, 2008103436, 2008110266, 2008110275
Hatch IST Program Component Basis Information

Section 1EP6: Drill Evaluation

Drill scenario for HNP Emergency Preparedness 2008 Exercise 04
Southern Nuclear Emergency Notification Forms

Section 2OS1: Access Control To Radiologically Significant Areas

Procedures and Guidance Documents:

60AC-HPX-004-0, Radiation and Contamination Control, Version (Ver.) 19.3
62RP-RAD-001-0, Dosimetry Issuance and Tracking, Ver. 15.1
62RP-RAD-006-0, RWP Processing, Ver. 11.5
62RP-RAD-008-0, Radiation and Contamination Surveys, Ver. 11.4
62RP-RAD-009-0, Air Sampling and Concentration Determination, Ver. 5.3
62RP-RAD-016-0, Control of High Radiation Areas, Ver. 25.1
62RP-RAD-044-0, Identification and Tracking of Hot Spots, Ver. 3.2
62RP-RAD-055-0, Underwater Storage and Inventory of Radioactive Materials in the Spent Fuel Pools, Ver. 3.1
NMP-GM-002, Corrective Action Program, Version 7.0

Records and Data:

Annual Inventory of U1/U2 SFP, Dated 07/28/08
Units One and Two SFP Annual Inventory Sheets, Dated 07/28/08
High Rad Key Control Inventory Log Book
Plant Hatch, Radiological Hot Spots, Open Status, Dated 11/19/08
Plant Hatch, Survey Nos. 48170, U1 Reactor Building 158 RWCU Hx North View (1RX158RWCU HX), Dated 10/29/08; 48278, U1 Reactor Sample Hood (1RX158), Dated 11/03/08; 48302, U2 Reactor Sample Hood (2RX185), Dated 11/04/08; 48413, U1 Reactor Building 158 RWCU Hx North View (1RX158RWCU HX), Dated 11/10/08; 48538, U1 Reactor Building 158 RWCU Hx North View (1RX158RWCU HX), Dated 11/14/08; 48595, U1 RWCU Valve Nest (1RX185), Dated 11/17/08
Radiation Work Permit (RWP) No. 08-0152, Unit 1 GEZIP, MMS, Sample Hood Activities and Chemistry Support Activities
RWP 08-0159, Unit 1 RWCU System Rooms including: RWCU Hx, RWCU Pump Rooms A and B, RWCU Valve Nest and Decant Pump Room
RWP 08-0252, Unit 2 GEZIP, MMS, Sample Hood Activities and Chemistry Support Activities

Condition Reports 2007108718, 2008110421

Section 2OS3: Radiation Monitoring Instrumentation and Protective Equipment

Procedures and Guidance Documents:

10AC-MGR-026-0, Respiratory Protection Program, Ver. 1.0
62HI-OCB-005-0, Teletector Model 6112B operation and Calibration, Ver. 4.4
62RP-RAD-003-0, Use and Care of Respirators, Ver. 9.16
NMP-GM-002, Corrective Action Program, Ver. 7.0

Records:

10 CFR Part 61 Analysis, Dry Active Waste, Dated 07/10/08
PCM1-B No. 1482 Calibrations, Dated 10/03/07, 07/03/08, and 09/11/08
PCM1-B No. 1486 Calibrations, Dated 07/20/07 and 05/15/08
PCM1-B No. 1487 Calibrations, Dated 04/23/07, 01/21/08, 05/01/08, and 09/10/08

PM-7 No. 455 Calibrations, Dated 03/31/08 and 08/27/08
Quarterly Breathing Air Quality Analyses, U1 Air, U2 Air, Eagle Systems Air Compressor, and Robbins Air Compressor, 04/24/07 – 09/24/08
SCBA Maintenance History, Unit Nos. 260, 277, 280, October 2003 – October 2008
SCBA Qualification Records, Selected Operations and Maintenance Personnel
Source Calibration of 1D11-K6221 A & B, U1 Post-LOCA Monitors, Dated 03/14/06 and 02/14/08
Source Calibration of 2D11-K6221 A & B, U2 Post-LOCA Monitors, Dated 02/10/05 and 02/22/07

Condition Reports 2007110166, 2008100742, 2008106380, 2008107302, 2008109027

Section 2PS1: Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

Procedures and Guidance Documents
10AC-MGR-011-0,
34SO-G11-036-1, Ver. 9.2
57SV-D11-010-1, Ver. 5.7
57SV-D11-020-1, Ver. 7.5
57SV-D11-021-1, Ver. 3.13
57SV-D11-022-2, Ver. 8.9
57SV-G11-004-1, Ver. 8.1
57SV-SUV-006-0, Ver. 7.8
64CI-OCB-001-0, Ver. 5.1
64CI-OCB-002-0, Ver. 4.4
64CI-OCB-003-1, Ver. 5.1
64CI-OCB-004-0, Ver. 9.0
64CI-OCB-009-0, Ver. 5.0
64CH-RPT-005-0, Ver. 14.2
64CH-RPT-006-0, Ver. 7.1
64CH-RPT-007-0, Ver. 3.1
64CH-SAM-024-0, Ver. 14.1
64CH-SAM-028-0, Ver. 4.1
64CH-QCX-001-0, Ver. 8.3
E-11-010-1, Ver. 32.11
NMP-EN-002, Ver. 2.0
NMP-ES-036, Ver. 3.0
NMP-GM-002, Ver. 7.0

Records and Data
10CFR50.75 (g) Leak / Spill Decommissioning Record (NMP-EN-002)
Current 10 CFR Part 50.75(g) File
Daily & Weekly sample collection composite and permit data
Germanium Detector Efficiency Calibration Data
Groundwater monitoring well sample results, October 2006 – September 2008
Main Stack Off-gas Radiation FT&C records
Main Stack Radiation Monitor Calibrations
NMP-EN-002, Actions for Potential Groundwater Contamination Events, Ver. 2.0

Offsite Dose Calculation Manual (ODCM) for Hatch Nuclear Plant, Ver. 21
Out-of-Service Effluent Monitor Information for 2006 through 2008
Plant Hatch Annual Meteorological Report for 2006, Report No. C-1322119-003, Rev. 0
Plant Hatch Annual Meteorological Report for 2007, Report No. R-1715494-001, Rev. 0
Plant Hatch Nuclear Plant Radiological Effluent Release Reports for CY 2006 and 2007
Plant Hatch Process Radiation Monitoring System Health Reports 2006 through 3rd Qtr 2008
Quality Control Charts viewed for count room Germanium Detectors
Radiochemistry Cross-Check Program Results since last inspection
Surveillance Tests of Standby Gas Treatment System Filters 1N62-D017A, 1N62-D017B, 2N62-D017A, and 2N62-D017B
U1 Liquid Radwaste Effluent Line FT&C
U1 Liquid Radwaste Monitor Calibration
U1 Reactor Building Vent Radiation Monitor Calibrations
U1 Recombiner Building Vent Radiation Monitor Calibrations
U1 & U2 Process / Post LOCA Monitor Set-point records
U2 Liquid Radwaste Effluent Line FT&C
U2 Liquid Radwaste Monitor Calibration
U2 Off-gas Post-Treatment Monitor (process monitor 2D11-K615B) Calibration
U2 Reactor Building Vent Radiation Monitor Calibrations
V&V Test Plan and Results for CAS to APEX Count Room Software upgrade.

Condition Reports
2004104380, 2004107000, 2004107227, 2004107754, 2004109620, 2004110698, 2004107611, 2004108613, 2005108019, 2005111391, 2005111797, 2006100758, 2006101236, 2006102808, 2006110471, 2006111354, 2006111856, 2006205882, 2007102967, 2007103209, 2007103210, 2007103609, 2007103708, 2007104050, 2007103314, 2007104776, 2007105246, 2007105369, 2007107023, 2007107522, 2007108431, 2007110037, 2008100695, 2008103355, 2008104203, 2008104442, 2008104566, 2008105052, 2008105555, 2008108861, 2008109113, 2008109563, 2008110015, 2008110339, 2008110565, 2008110203, 2008111159, 2008111204, 2008111205

Surveillances / Work Orders
1043019101, 1062027203, 1062554401, 1071726401, 1080563101, 1080914501, 1080966201, 1081060701, 1081574201, 1081801901, 1082247701, 2042044501, 2052348201, 2062348001

Audits
QA Audit of Chemistry and Radioactive Waste (CRW), H-CRW-2006, Log H-QA-2006-029
Fleet Oversight Audit of Chemistry and Radwaste (CRW), H-CRW-2008, Log HFO-2008-023

Gas / Liquid Release Permits (Pre and Post Release)
G-20081007-166-C, G-20081007-167-C, G-20081008-168-C, G-20081008-169-C, G-20081104-182-C, G-20081104-183-C, G-20081105-184-C, G-20081105-195-C, G-20081111-186-C, G-20081111-187-C, G-20081112-188-C, G-20081112-189-C, L-20082001-281-C, L-20081002-316-C, L-20081004-252-B, L-20081015-318-B, L-20081020-321-B

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

Procedures and Guidance Documents

62RP-RAD-004-0, Ver. 14.0
62RP-RAD-017-0, Rev. 13.1
64CH-ENV-001-0, Version 12.8
ENV-930, Rev. 12
ENV-931, Rev. 13
ENV-932, Rev. 12
ENV-934, Rev. 12
ENV-935, Rev. 11
ENV-936, Rev. 9
ENV-937, Rev. 10
ENV-938, Rev. 8
ENV-939, Rev. 11
ENV-940, Rev. 10
ENV-941 Rev. 6

Records and Data

10 CFR Part 61 Analysis, Dry Active Waste, 07/10/08
57IT-Y33-001-0 Climatronics Instruments (Meteorological Instruments Calibrations), Dated 07/09/07, 07/10/07, 12/18/07, and 06/05/08
Edwin I. Hatch Nuclear Plant Annual Radiological Environmental Operating Reports for 2006 and 2007
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Section 4OA1: Performance Indicator Verification

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Hatch Key Performance Indicator Report, August 2008
Action Items: 2008203692, 2008201302
MSPI Consolidated Date Entry (CDE) and Margin Reports
Hatch MSPI Basis Document Version C
Other: Main Control Room Operating Logs

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Hatch Performance Indicator Database
Liquid Effluents Discharge Permit No. 60316, Dated 01/02/07
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Section 4OA2: Identification and Resolution of Problems
Apparent Cause Determination Grading Sheets
Monthly CAP Performance Indicators
Key Performance Indicators
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Section 4OA3: Event Follow-up
Condition Reports: 2008110678
Procedures: 34AB-Y22-002-0, Naturally Occurring Phenomena
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