

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

February 12, 2009

Mr. Tom E. Tynan Vice President Southern Nuclear Operating Company, Inc. Vogtle Electric Generating Plant 7821 River Road Waynesboro, GA 30830

SUBJECT: ERRATA LETTER - VOGTLE ELECTRIC GENERATING PLANT - NRC INSPECTION REPORT 05000424/2008005 AND 05000425/2008005

Dear Mr. Tynan:

By letter dated January 20, 2009, we transmitted the results of the routine baseline inspections for the fourth quarter of 2008 (ML090200064). This report is being revised to provide additional information typically provided regarding radiation dose rates as discussed on pages 17 and 18 of the report. This revision does not change the inspection results. Please replace pages 17 through 22 of the report transmitted on January 20, 2009, with the enclosed revision.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at *www.nrc.gov/reading-rm/adams.html* (the Public Electronic Reading Room).

I regret any inconvenience this omission may have caused. Please contact me at (404) 562-4521 if you have any questions.

Sincerely,

/**RA**/

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

Docket Nos.: 50-424, 50-425 License Nos.: NPF-68, NPF-81

Enclosures: 1. Revised Pages 2. Removed Pages

cc w/encl: (See next page)

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/RA/

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

ADAMS:
Yes ACCESSION NUMBER:

□ SENSITIVE X□ NON-SENSITIVE

X SUNSI REVIEW COMPLETE

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SIGNATURE	CWR1		SMS		BRB1		AND					
NAME	CRapp		SShaeffer		BBonser		ANielson					
DATE	02/11/2009		02/11/2009		02/11/2009		02/11/2009		2/	/2009	2/	/2009
E-MAIL COPY?	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\RPB2\VOGTLE\REPORTS\08-05\2008-005 IIR ERRATA LETTER.DOC

cc w/encl: Angela Thornhill Managing Attorney and Compliance Officer Southern Nuclear Operating Company, Inc. Electronic Mail Distribution

N. J. Stringfellow Manager Licensing Southern Nuclear Operating Company, Inc. Electronic Mail Distribution

Jeffrey T. Gasser Executive Vice President Southern Nuclear Operating Company, Inc. Electronic Mail Distribution

L. Mike Stinson Vice President Fleet Operations Support Southern Nuclear Operating Company, Inc. Electronic Mail Distribution

Michael A. MacFarlane Southern Nuclear Operating Company, Inc. 40 Inverness Center Parkway P.O. Box 1295 Birmingham, AL 35201-1295

David H. Jones Vice President Engineering Southern Nuclear Operating Company, Inc. Electronic Mail Distribution

Bob Masse Resident Manager Vogtle Electric Generating Plant Oglethorpe Power Corporation Electronic Mail Distribution

Moanica Caston Vice President and General Counsel Southern Nuclear Operating Company, Inc. Electronic Mail Distribution

Laurence Bergen Oglethorpe Power Corporation Electronic Mail Distribution Mr. N. Holcomb Commissioner Department of Natural Resources Electronic Mail Distribution

Dr. Carol Couch Director Environmental Protection Department of Natural Resources Electronic Mail Distribution

Cynthia Sanders Program Manager Radioactive Materials Program Department of Natural Resources Electronic Mail Distribution

Jim Sommerville (Acting) Chief Environmental Protection Division Department of Natural Resources Electronic Mail Distribution

Mr. Steven M. Jackson Senior Engineer - Power Supply Municipal Electric Authority of Georgia Electronic Mail Distribution

Mr. Reece McAlister Executive Secretary Georgia Public Service Commission Electronic Mail Distribution

Office of the Attorney General Electronic Mail Distribution

Office of the County Commissioner Burke County Commission Electronic Mail Distribution

Arthur H. Domby, Esq. Troutman Sanders Electronic Mail Distribution

(cc w/encl cont'd – See next page)

SNC

cc w/encl cont'd: Director Consumers' Utility Counsel Division Govenor's Office of Consumer Affairs 2 M. L. King, Jr. Drive Plaza Level East; Suite 356 Atlanta, GA 30334-4600

Senior Resident Inspector Southern Nuclear Operating Company, Inc. Vogtle Electric Generating Plant U.S. NRC 7821 River Road Waynesboro, GA 30830

Susan E. Jenkins Director, Division of Waste Management Bureau of Land and Waste Management S.C. Department of Health and Environmental Control Electronic Mail Distribution Letter to Tom E. Tynan from Scott M. Shaeffer dated February 12, 2009

SUBJECT: ERRATA LETTER - VOGTLE ELECTRIC GENERATING PLANT - NRC INSPECTION REPORT 05000424/2008005 AND 05000425/2008005

Distribution w/encl: C. Evans, RII EICS (Part 72 Only) L. Slack, RII EICS (Linda Slack) OE Mail (email address if applicable) RIDSNRRDIRS PUBLIC R. Martin, NRR (PM: HAT, SUM) Section 12; TS Sections 5.4 and 5.7; 10 CFR Parts 19 and 20; and approved licensee procedures. Documents reviewed are listed in the report Attachment. The inspectors completed 21 of the required line-item samples described in Inspection Procedure (IP) 71121.01.

<u>Problem Identification and Resolution.</u> The inspectors reviewed corrective action program (CAP) documents associated with access control to radiologically significant areas. This included review of selected CRs related to radworker and HPT performance. The inspectors evaluated 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

<u>Introduction</u>: Two examples of a Green, self-revealing, non-cited violation (NCV) of TS 5.7.1, High Radiation Area, were identified for unauthorized entries into HRAs. Inadequate communication between workers and HP resulted in licensee personnel breaching HRA boundaries without prior knowledge of the radiological condition.

<u>Description</u>: On May 9, 2007, a Shift Operator (SO) performed a visual inspection in the Unit 2 Residual Heat Removal Pump Room A. This room contained both a Radiation Area (RA) and a posted and barricaded HRA. The SO contacted HP prior to entering the room, but failed to communicate that entry into the HRA might be required. As a result, HP briefed the SO on current radiological conditions outside the rope barricade and not on conditions inside the HRA. The assigned RWP did not allow entry into HRAs without first obtaining a briefing on the HRA radiological conditions. Typically, this inspection does not require the SO to pass the HRA boundary, however insulation obstructed the SO's view from outside the HRA. Without knowledge of dose rates in the HRA, the SO proceeded past the HRA boundary and subsequently received an ED dose rate alarm. Dose rates inside the area were as high as 160 mrem/hr.

On August 16, 2007, two Facilities personnel entered the Unit 2 Fuel Handling Building room 2-FHB-A-01 to perform cleaning duties and replace light bulbs. This area contained a Contaminated Area (CA), RA, and a posted and barricaded HRA. Prior to starting work, the personnel were briefed by HP on radiological conditions in the CA and RA, but not on dose rates in the HRA. There was no clear understanding between the two groups that a HRA entry would be required. The assigned RWP did not allow entry into HRAs without first obtaining a briefing on the HRA conditions. Without knowledge of dose rates in the HRA, one worker proceeded past the HRA boundary in room 2-FHB-A-01 to continue the housekeeping activities and received an ED dose rate alarm. Dose rates in the area were as high as 238 mrem/hr at 30cm.

<u>Analysis</u>: The inspectors determined that the unauthorized entries into HRAs were performance deficiencies. This finding is greater than minor because it is associated with the Occupational Radiation Safety Cornerstone attribute of Human Performance and adversely affects the cornerstone objective of ensuring adequate protection of worker health and safety from exposure to radiation from radioactive material during routine civilian nuclear reactor operation. Workers who enter HRAs without prior knowledge of current radiological conditions could receive unintended occupational exposures. The finding was evaluated using the Occupational Radiation Safety SDP

and determined to be of very low safety significance (Green). The finding was not related to ALARA planning, nor did it involve an overexposure or substantial potential for overexposure, and the ability to assess dose was not compromised. This finding involved the cross-cutting aspect of Human Performance, Work Practices [H.4.a] because the HRA events were a direct result of poor communications during pre-job briefings and a willingness on the part of licensee personnel to proceed in the face of uncertainty.

Enforcement: TS 5.7.1, High Radiation Area, requires individuals entering HRAs to meet one or more of the following criteria: 1) carry a survey meter; 2) wear an ED and be made aware of radiological conditions in the area; or 3) be escorted by a HP technician. Contrary to the above, on May 9, 2007, and on August 16, 2007, plant personnel entered HRAs without a survey meter, without being aware of radiological conditions in the area, or without HP technician escort. Because the violation is of very low safety significance and has been entered into the licensee's CAP (CR 2007105476 and CR 2007108830), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000424/425, 2008005-01, Unauthorized Entries Into High Radiation Areas.

2OS2 ALARA Planning and Controls

a. Inspection Scope

The inspectors reviewed ALARA program guidance and its implementation for ongoing 2R13 job tasks. The inspectors evaluated the accuracy of ALARA work planning and dose budgeting, observed implementation of ALARA initiatives and radiation controls for selected jobs in-progress, assessed the effectiveness of source-term reduction efforts, and reviewed historical dose information.

ALARA planning documents and procedural guidance were reviewed and projected dose estimates were compared to actual dose expenditures for the following high dose jobs: scaffolding installation/removal, reactor vessel head work, steam generator maintenance activities, motor operated valve (MOV) testing and maintenance, and installation of the external neutron monitoring system inside containment. Differences between budgeted dose and actual exposure received were discussed with cognizant ALARA staff. Changes to dose budgets relative to changes in radiation source term and/or job scope were also discussed. The inspectors attended pre-job briefings and evaluated the communication of ALARA goals, RWP requirements, and industry lessons-learned to job crew personnel.

The inspectors made direct field or closed-circuit-video observations of outage job tasks involving work inside Unit 2 containment. For the selected tasks, the inspectors evaluated radworker and HPT job performance, individual and collective dose expenditure versus percentage of job completion, surveys of the work areas, appropriateness of RWP requirements, and adequacy of implemented administrative and physical controls.

Implementation and effectiveness of selected program initiatives with respect to sourceterm reduction were evaluated. Chemistry program ALARA initiatives and their effect on containment and auxiliary building dose rate trends were reviewed. Plant exposure history for 2005 through 2008 year-too-date, and data reported to the NRC pursuant to 10 CFR 20.2206 were reviewed, as were established goals for reducing collective exposure during the current 2R13 outage. The inspectors reviewed procedural guidance for dosimetry issuance and exposure tracking. The inspectors also examined dose records of declared pregnant workers to evaluate assignment of gestation dose.

ALARA program activities and their implementation were reviewed against 10 CFR Part 20, and approved licensee procedures. In addition, licensee performance was evaluated against guidance contained in Regulatory Guide (RG) 8.8, Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations will be As Low As Reasonably Achievable, and RG 8.13, Instruction Concerning Prenatal Radiation Exposure. Documents reviewed are listed in of the Attachment. The inspectors completed 20 samples of specified line-items in IP 71121.02 to close the procedure.

<u>Problem Identification and Resolution.</u> The inspectors reviewed selected CR and Action Item (AI) data in the area of exposure control. The inspectors evaluated the licensee's ability to identify, characterize, prioritize, and resolve the identified issues in accordance with 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 Treatment and Monitoring Systems
 - a. Inspection Scope

<u>Groundwater Monitoring.</u> The inspectors discussed current and future programs for onsite groundwater monitoring with chemistry specialists and corporate staff, including number and placement of monitoring wells and identification of plant systems with the greatest potential for contaminated leakage. The inspectors also reviewed procedural guidance for identifying and assessing onsite spills and leaks of contaminated fluids. In addition, the inspectors reviewed records of historical and recent contaminated spills retained for decommissioning purposes as required by 10 CFR Part 50.75(g).

The licensee has installed a number of onsite groundwater monitoring wells; optimally located to detect contamination based on recent hydrological studies. The sample results from these wells were included in the Annual Radiological Environmental Monitoring Program Report. For the period reviewed, all monitoring well results were below reporting limits (20,000 pCi/L for drinking water and 30,000 pCi/L for non-drinking water).

b. Findings

2PS2 Radioactive Material Processing and Transportation

a. Inspection Scope

<u>Waste Processing and Characterization</u> During inspector walk-downs, accessible sections of the liquid and solid radwaste processing systems were assessed for material condition and conformance with system design diagrams. Inspected equipment included floor drain tanks; resin transfer piping; resin and filter packaging components; and abandoned evaporator equipment. The inspectors discussed component function, processing system changes, and radwaste program implementation with licensee staff.

The 2007 Effluent Report and radionuclide characterizations from 2007 - 2008 for each major waste stream were reviewed and discussed with radwaste staff. For primary filters and Dry Active Waste (DAW) the inspectors evaluated analyses for hard-to-detect nuclides, reviewed the use of scaling factors, and examined comparison results between licensee waste stream characterizations and outside laboratory data. Waste stream mixing and concentration averaging methodology for spent resin and primary filters were evaluated and discussed with radwaste operators. The inspectors also reviewed the licensee's procedural guidance for monitoring changes in waste stream isotopic mixtures.

Radwaste processing activities and equipment configuration were reviewed for compliance with the licensee's Process Control Program and UFSAR, Chapter 11. Waste stream characterization analyses were reviewed against regulations detailed in 10 CFR Part 20, 10 CFR Part 61, and guidance provided in the Branch Technical Position on Waste Classification and Waste Form. Reviewed documents are listed in Section 2PS2 of the report Attachment.

<u>Transportation</u> The inspectors directly observed preparation activities for a shipment of contaminated laundry. The inspectors noted package markings and placarding, observed dose rate measurements, and interviewed shipping technicians regarding Department of Transportation (DOT) regulations.

Five shipping records were reviewed for consistency with licensee procedures and compliance with NRC and DOT regulations. The inspectors reviewed emergency response information, DOT shipping package classification, radiation survey results, and evaluated whether licensees' in receiving were authorized to accept the packages. Procedures for opening and closing Type B shipping casks were compared to Certificate of Compliance requirements. In addition, training records for selected individuals currently qualified to facilitate the shipment of radioactive material were reviewed.

Transportation program implementation was reviewed against regulations detailed in 10 CFR Part 20, 10 CFR Part 71, 49 CFR Parts 172-178; as well as the guidance provided in NUREG-1608, Categorizing and Transporting Low Specific Activity Materials and Surface Contaminated Objects. Training activities were assessed against 49 CFR Part 172 Subpart H. Documents reviewed are listed in the Attachment. The inspectors completed 6 of 6 samples as required by IP 71122.02.

<u>Problem Identification and Resolution</u> Selected CRs in the area of radwaste processing and transportation were reviewed in detail and discussed with licensee personnel. The

inspectors assessed the licensee's ability to characterize, prioritize, and resolve the identified issues in accordance with licensee procedure NMP-GM-002. The inspectors also evaluated the scope of the licensee's internal audit program and reviewed recent assessment results. Licensee CAP documents reviewed are listed in Section 2PS2 of the report Attachment.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors sampled licensee submittals for the listed PIs during the period from July 1, 2007 through June 30, 2008, for Unit 1 and Unit 2. The inspectors verified the licensee's basis in reporting each data element using the PI definitions and guidance contained in procedure 00163-C, NRC Performance Indicator and Monthly Operating Report Preparation and Submittal, and Nuclear Energy Institute document NEI 99-02, Regulatory Assessment Indicator Guideline.

Cornerstone: Mitigating Systems

- Mitigating Systems Performance Index (MSPI), Cooling Water Systems
- MSPI, Emergency AC Power Systems
- Safety System Functional Failures

The inspectors reviewed Unit 1 and Unit 2 operator log entries, the Vogtle Electric Generating Plant Unit 1 and Unit 2 NRC Mitigating System Performance Index Basis Document, the monthly operating reports and monthly PI summary reports to verify that the licensee had accurately submitted the PI data.

Cornerstone: Occupational Radiation Safety

Occupational Exposure Control Effectiveness

The inspectors reviewed PI data collected from January 1, 2007, through September 30, 2008. For the reviewed period, the inspectors assessed CAP records to determine whether HRA, VHRA, or unplanned exposures, resulting in TS or 10 CFR 20 non-conformances, had occurred during the review period. In addition, the inspectors reviewed selected personnel contamination event data, internal dose assessment results, and ED alarms for cumulative doses and/or dose rates exceeding established set-points. Documents reviewed are listed in the Attachment.

Cornerstone: Public Radiation Safety

Radiological Control Effluent Release Occurrences

The inspectors reviewed the PI results for the period of January 1, 2007, through September 30, 2008. For the assessment period, the inspectors reviewed cumulative and projected doses to the public, out-of-service effluent radiation monitors and compensatory sampling data. The inspectors also reviewed licensee procedural

guidance for collecting and documenting PI data. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems

- .1 <u>Daily Condition Report Review</u>. 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 corrective action program. 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 Focused Review

a. Inspection Scope

The inspectors performed a detailed review of the work-around lists for Unit 1 and 2 that were in effect on October 28. The inspectors reviewed the licensee's list to determine whether any items would adversely affect the operators' ability to implement abnormal or emergency operating procedures. The inspectors reviewed proposed corrective actions and schedule for each item on the work-around list. The inspectors reviewed the compensatory actions and cumulative effects on plant operation. The inspectors verified each item was being dispositioned in accordance with plant procedure 10025-C, Work Around Program. Documents reviewed are listed in the Attachment.

b. Findings and Observations

Section 12; TS Sections 5.4 and 5.7; 10 CFR Parts 19 and 20; and approved licensee procedures. Documents reviewed are listed in the report Attachment. The inspectors completed 21 of the required line-item samples described in Inspection Procedure (IP) 71121.01.

<u>Problem Identification and Resolution</u> The inspectors reviewed corrective action program (CAP) documents associated with access control to radiologically significant areas. This included review of selected CRs related to radworker and HPT performance. The inspectors evaluated 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

<u>Introduction.</u> Two examples of a Green, self-revealing, non-cited violation (NCV) of TS 5.7.1, High Radiation Area, was identified for unauthorized entries into HRAs. Inadequate communication between workers and HP resulted in licensee personnel breaching HRA boundaries without prior knowledge of the radiological condition.

<u>Description</u> On May 9, 2007, a Shift Operator (SO) performed a visual inspection in the Unit 2 Residual Heat Removal Pump Room A. This room contained both a Radiation Area (RA) and a posted and barricaded HRA. The SO contacted HP prior to entering the room, but failed to communicate that entry into the HRA might be required. As a result, HP briefed the SO on current RA radiological conditions. The assigned RWP did not allow entry into HRAs without first obtaining a briefing on the HRA radiological conditions. Typically, this inspection does not require the SO to pass the HRA boundary; however, insulation obstructed the SO's view from outside the HRA. Without knowledge of dose rates in the HRA, the SO proceeded past the HRA boundary and subsequently received an ED dose rate alarm.

On August 16, 2007, two Facilities personnel entered the Unit 2 Fuel Handling Building room 2-FHB-A-01 to perform cleaning duties and replace light bulbs. This area contained a Contaminated Area (CA), RA, and a posted and barricaded HRA. Prior to starting work, the personnel were briefed by HP on radiological conditions in the CA and RA. There was no clear understanding between the two groups that a HRA entry would be required. The assigned RWP did not allow entry into HRAs without first obtaining a briefing on the HRA conditions. Without knowledge of dose rates in the HRA, one worker proceeded past the HRA boundary in room 2-FHB-A-01 to continue the housekeeping activities and received an ED dose rate alarm.

<u>Analysis</u> The inspectors determined that the unauthorized entries into HRAs were performance deficiencies. This finding is greater than minor because it is associated with the Occupational Radiation Safety Cornerstone attribute of Human Performance and adversely affects the cornerstone objective in that workers who enter HRAs without prior knowledge of current radiological conditions could receive unintended occupational exposures. The finding was evaluated using the Occupational Radiation Safety SDP and determined to be of very low safety significance (Green). The finding was not related to ALARA planning, nor did it involve an overexposure or substantial potential for overexposure, and the ability to assess dose was not compromised. This finding involved the cross-cutting aspect of Human Performance, Work Practices [H.4.a]

because the HRA events were a direct result of poor communications during pre-job briefings and a willingness on the part of licensee personnel to proceed in the face of uncertainty.

<u>Enforcement</u> TS 5.7.1, High Radiation Area, requires individuals entering HRAs to meet one or more of the following criteria: 1) carry a survey meter; 2) wear an ED and be made aware of radiological conditions in the area; or 3) be escorted by a HP technician. Contrary to the above, on May 9, 2007, and on August 16, 2007, plant personnel entered HRAs without a survey meter, without being aware of radiological conditions in the area, or without HP technician escort. Because the violation is of very low safety significance and has been entered into the licensee's CAP (CR 2007105476 and CR 2007108830), this violation is being treated as an NCV, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000424/425, 2008005-01, Unauthorized Entries Into High Radiation Areas.

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a. Inspection Scope

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examined dose records of declared pregnant workers to evaluate assignment of gestation dose.

ALARA program activities and their implementation were reviewed against 10 CFR Part 20, and approved licensee procedures. In addition, licensee performance was evaluated against guidance contained in Regulatory Guide (RG) 8.8, Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations will be As Low As Reasonably Achievable, and RG 8.13, Instruction Concerning Prenatal Radiation Exposure. Documents reviewed are listed in of the Attachment. The inspectors completed 20 samples of specified line-items in IP 71121.02 to close the procedure.

<u>Problem Identification and Resolution.</u> The inspectors reviewed selected CR and Action Item (AI) data in the area of exposure control. The inspectors evaluated the licensee's ability to identify, characterize, prioritize, and resolve the identified issues in accordance with 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 Treatment and Monitoring Systems

c. Inspection Scope

<u>Groundwater Monitoring.</u> The inspectors discussed current and future programs for onsite groundwater monitoring with chemistry specialists and corporate staff, including number and placement of monitoring wells and identification of plant systems with the greatest potential for contaminated leakage. The inspectors also reviewed procedural guidance for identifying and assessing onsite spills and leaks of contaminated fluids. In addition, the inspectors reviewed records of historical and recent contaminated spills retained for decommissioning purposes as required by 10 CFR Part 50.75(g).

The licensee has installed a number of onsite groundwater monitoring wells; optimally located to detect contamination based on recent hydrological studies. The sample results from these wells were included in the Annual Radiological Environmental Monitoring Program Report. For the period reviewed, all monitoring well results were below reporting limits (20,000 pCi/L for drinking water and 30,000 pCi/L for non-drinking water).

d. Findings

2PS2 Radioactive Material Processing and Transportation

a. Inspection Scope

<u>Waste Processing and Characterization</u> During inspector walk-downs, accessible sections of the liquid and solid radwaste processing systems were assessed for material condition and conformance with system design diagrams. Inspected equipment included floor drain tanks; resin transfer piping; resin and filter packaging components; and abandoned evaporator equipment. The inspectors discussed component function, processing system changes, and radwaste program implementation with licensee staff.

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<u>Transportation</u> The inspectors directly observed preparation activities for a shipment of contaminated laundry. The inspectors noted package markings and placarding, observed dose rate measurements, and interviewed shipping technicians regarding Department of Transportation (DOT) regulations.

Five shipping records were reviewed for consistency with licensee procedures and compliance with NRC and DOT regulations. The inspectors reviewed emergency response information, DOT shipping package classification, radiation survey results, and evaluated whether licensees' in receiving were authorized to accept the packages. Procedures for opening and closing Type B shipping casks were compared to Certificate of Compliance requirements. In addition, training records for selected individuals currently qualified to facilitate the shipment of radioactive material were reviewed.

Transportation program implementation was reviewed against regulations detailed in 10 CFR Part 20, 10 CFR Part 71, 49 CFR Parts 172-178; as well as the guidance provided in NUREG-1608, Categorizing and Transporting Low Specific Activity Materials and Surface Contaminated Objects. Training activities were assessed against 49 CFR Part 172 Subpart H. Documents reviewed are listed in the Attachment. The inspectors completed 6 of 6 samples as required by IP 71122.02.

<u>Problem Identification and Resolution</u> Selected CRs in the area of radwaste processing and transportation were reviewed in detail and discussed with licensee personnel. The inspectors assessed the licensee's ability to characterize, prioritize, and resolve the

identified issues in accordance with licensee procedure NMP-GM-002. The inspectors also evaluated the scope of the licensee's internal audit program and reviewed recent assessment results. Licensee CAP documents reviewed are listed in Section 2PS2 of the report Attachment.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors sampled licensee submittals for the listed PIs during the period from July 1, 2007 through June 30, 2008, for Unit 1 and Unit 2. The inspectors verified the licensee's basis in reporting each data element using the PI definitions and guidance contained in procedure 00163-C, NRC Performance Indicator and Monthly Operating Report Preparation and Submittal, and Nuclear Energy Institute document NEI 99-02, Regulatory Assessment Indicator Guideline.

Cornerstone: Mitigating Systems

- Mitigating Systems Performance Index (MSPI), Cooling Water Systems
- MSPI, Emergency AC Power Systems
- Safety System Functional Failures

The inspectors reviewed Unit 1 and Unit 2 operator log entries, the Vogtle Electric Generating Plant Unit 1 and Unit 2 NRC Mitigating System Performance Index Basis Document, the monthly operating reports and monthly PI summary reports to verify that the licensee had accurately submitted the PI data.

Cornerstone: Occupational Radiation Safety

Occupational Exposure Control Effectiveness

The inspectors reviewed PI data collected from January 1, 2007, through September 30, 2008. For the reviewed period, the inspectors assessed CAP records to determine whether HRA, VHRA, or unplanned exposures, resulting in TS or 10 CFR 20 non-conformances, had occurred during the review period. In addition, the inspectors reviewed selected personnel contamination event data, internal dose assessment results, and ED alarms for cumulative doses and/or dose rates exceeding established set-points. Documents reviewed are listed in the Attachment.

Cornerstone: Public Radiation Safety

Radiological Control Effluent Release Occurrences

The inspectors reviewed the PI results for the period of January 1, 2007, through September 30, 2008. For the assessment period, the inspectors reviewed cumulative and projected doses to the public, out-of-service effluent radiation monitors and compensatory sampling data. The inspectors also reviewed licensee procedural guidance for collecting and documenting PI data. Documents reviewed are listed in the Attachment.

b. Findings

No findings of significance were identified.

- 4OA2 Identification and Resolution of Problems
- .1 <u>Daily Condition Report Review</u>. 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 corrective action program. 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 Focused Review

a. Inspection Scope

The inspectors performed a detailed review of the work-around lists for Unit 1 and 2 that were in effect on October 28. The inspectors reviewed the licensee's list to determine whether any items would adversely affect the operators' ability to implement abnormal or emergency operating procedures. The inspectors reviewed proposed corrective actions and schedule for each item on the work-around list. The inspectors reviewed the compensatory actions and cumulative effects on plant operation. The inspectors verified each item was being dispositioned in accordance with plant procedure 10025-C, Work Around Program. Documents reviewed are listed in the Attachment.

b. Findings and Observations