UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

May 29, 2003

Joseph E. Venable
Vice President Operations
Waterford 3
Entergy Operations, Inc.
17265 River Road
Killona, Louisiana 70066-0751

SUBJECT: WATERFORD-3 NRC RADIATION SAFETY TEAM INSPECTION REPORT 50-382/03-08

Dear Mr. Venable:

On April 25, 2003, the NRC completed a radiation safety team inspection at the Waterford-3 Station. The enclosed report documents the inspection findings that were discussed 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 operating license. The team reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, the team evaluated the inspectable areas within the Radiation Protection Strategic Performance Area that are scheduled for review every two years. These areas are:

- Radiation Monitoring Instrumentation
- Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems
- Radioactive Material Processing and Transportation
- Radiological Environmental Monitoring Program and Radioactive Material Control Program

This inspection report documents one self-revealing finding and one NRC-identified finding, both of which were of very low safety significance (Green). The findings were determined to involve violations of NRC requirements. Additionally, a licensee-identified violation is listed in Section 4OA7. Because of their very low safety significance and because the findings were entered into your corrective action program, the NRC is treating these findings as noncited violations (NCVs) consistent with Section V1.A of the NRC Enforcement Policy. If you contest the validity or significance of 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 U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Waterford Steam Electric Station, Unit 3, facility.

In accordance with 10 CFR 2.790 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 http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

//RA//

Troy W. Pruett, Chief
Plant Support Branch
Division of Reactor Safety

Docket: 50-382
License: NPF-38

Enclosure:
NRC Inspection Report
50-382/03-08

cc w/enclosure:
Executive Vice President and
Chief Operating Officer
Entergy Operations, Inc.
P.O. Box 31995
Jackson, Mississippi 39286-1995

Vice President, Operations Support
Entergy Operations, Inc.
P.O. Box 31995
Jackson, Mississippi 39286-1995

Wise, Carter, Child & Caraway
P.O. Box 651
Jackson, Mississippi 39205

General Manager, Plant Operations
Waterford 3 SES
Entergy Operations, Inc.
17265 River Road
Killona, Louisiana 70066-0751

Manager - Licensing Manager
Waterford 3 SES
Entergy Operations, Inc.
17265 River Road
Killona, Louisiana 70066-0751

Chairman
Louisiana Public Service Commission
P.O. Box 91154
Baton Rouge, Louisiana 70821-9154

Director, Nuclear Safety &
Regulatory Affairs
Waterford 3 SES
Entergy Operations, Inc.
17265 River Road
Killona, Louisiana 70066-0751

Michael E. Henry, Administrator
and State Liaison Officer
Department of Environmental Quality
P.O. Box 82135
Baton Rouge, Louisiana 70884-2135

Parish President
St. Charles Parish
P.O. Box 302
Hahnville, Louisiana 70057

Winston & Strawn
1400 L Street, N.W.
Washington, D.C. 20005-3502

Electronic distribution by RIV:
Regional Administrator **(EWM)**
DRP Director **(ATH)**
DRS Director **(DDC)**
Senior Resident Inspector **(MCH)**
Branch Chief, DRP/E **(WBJ)**
Senior Project Engineer, DRP/E **(VGG)**
Staff Chief, DRP/TSS **(PHH)**
DRS/PSB/Senior Health Physicist **(JBN)**
DRS/PSB/Health Physicist **(DRC)**
DRS/PSB/Health Physicist **(BDB1)**
RITS Coordinator **(NBH)**
B. McDermott **(BJM)**
WAT Site Secretary **(AHY)**

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DOCUMENT NAME: R:_WAT\WAT2003-008RP-JBN-TEAM.WPD

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ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket:	50-382
License:	NPF-38
Report No.:	50-382/03-08
Licensee:	Entergy Operations, Inc.
Facility:	Waterford Steam Electric Station, Unit 3
Location:	Hwy. 18 Killona, Louisiana
Dates:	April 21 - 25, 2003
Inspectors:	J. Blair Nicholas, PhD, Senior Health Physicist - Team Leader Jason C. Jang, PhD, Senior Radiation Specialist, Region I Daniel R. Carter, Health Physicist Bernadette D. Baca, Health Physicist
Accompanied by:	Dori L. Votolato, Materials Engineer, Nuclear Safety Intern
Approved by:	Troy W. Pruett, Chief, Plant Support Branch Division of Reactor Safety
Attachment:	Supplemental Information

SUMMARY OF FINDINGS

Waterford Steam Electric Station, Unit 3
NRC Inspection Report 50-382/03-08

IR 05000382/2003-008; 04/21-25/2003; Waterford Steam Electric Station; Unit 3; Radioactive Material Control; Radiation Safety Team Inspection

The report covered a one week period of inspection by a team of four region-based health physics inspectors. Three findings of very low safety significance (Green) were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process," (SDP). Findings for which the SDP does not apply may be "Green" or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. Inspector Identified and Self-Revealing Findings

Cornerstone: Occupational Radiation Safety

Green. The team identified a noncited violation of Technical Specification 6.8.1.a because the licensee failed to follow radiation work permit requirements. Specifically, on April 21, 2003, operations personnel entered into an unsurveyed radiologically restricted area in an overhead area in the reactor auxiliary building without first contacting radiation protection personnel prior to entry.

This finding is greater than minor because it was associated with one of the Occupational Radiation Safety Cornerstone attributes (exposure/contamination control) and the finding affected the associated cornerstone objective (to ensure the adequate protection of public health and safety from exposure to radiation from radioactive material). The team processed the violation through the Occupational Radiation Protection Significance Determination Process because the occurrence involved potential doses (resulting from actions or conditions contrary to licensee procedures) which could have been significantly greater as a result of a single minor, reasonable alteration of the circumstances. However, because the violation was not an as low as is reasonably achievable (ALARA) finding, there was no personnel overexposure, there was no substantial potential for personnel overexposure, and the finding did not compromise the licensee's ability to assess dose, the violation had no more than very low safety significance (Section 2PS2).

Cornerstone: Public Radiation Safety

Green. The team identified a self-revealing noncited violation of 10 CFR 71.5 because the licensee failed to placard a transport vehicle containing hazardous material. On June 5, 2002, the licensee was informed by letter from the recipient that Radioactive Material Shipment 02-3047 arrived at it's destination with no radioactive placards on the transport vehicle as required for radioactive material labeled as Radioactive Yellow III.

This finding is greater than minor because it was associated with one of the Public Radiation Safety Cornerstone attributes (transportation program) and the finding

affected the associated cornerstone objective (to ensure the adequate protection of public health and safety from exposure to radiation materials released into the public domain). The team processed the violation through the Public Radiation Safety Significance Determination Process because the finding involved an occurrence in the licensee's radioactive material transportation program that is contrary to NRC and DOT regulations. The finding was a radioactive material control issue that involved transportation. However, it did not exceed radiation limits, involve a breach of package during transit, involve a Certificate of Compliance issue, involve a low level burial ground nonconformance, and involve a failure to make notifications or provide emergency information; therefore, the violation had no more than very low safety significance (Section 2PS2).

B. Licensee Identified Violation

A violation of very low safety significance (Green) which was identified by the licensee was reviewed by the team. Corrective actions taken or planned by the licensee have been entered into the licensee's corrective action program. This violation and the corrective action tracking number are listed in Section 4OA7 of this report.

REPORT DETAILS

2. RADIATION SAFETY

2OS3 Radiation Monitoring Instrumentation (71121.03)

a. Inspection Scope

The team evaluated the adequacy of the programs to calibrate radiation monitoring instruments and to provide self-contained breathing apparatus equipment. The team interviewed cognizant licensee personnel, inspected radiation monitoring instrumentation in the field, and compared the following items to regulatory requirements:

- Operability, calibration, performance checks and alarm set points, when applicable, of selected radiation detection instrumentation (whole-body counters, PCM-1B personnel contamination monitors, PM-7 personnel portal monitors, RSO-50E ion chambers, RO-2 ion chambers, Model 177 alarming rate meters, ASP-1 remball, and small gamma tool monitors)

- Calibration and alarm set points of selected area and process radiation monitoring instrumentation

- Calibration source traceability

- Calibration expiration and source response check currency of pre-staged radiation detection instruments

- Status and associated surveillance and maintenance records of self-contained breathing apparatus equipment staged and ready for use in the plant

- Capability for refilling and transporting self-contained breathing apparatus air bottles during emergency conditions

- Training and qualifications of personnel who use self-contained breathing apparatus during an emergency (control room operators and operations support center personnel), perform maintenance on self-contained breathing apparatus equipment, and refill air bottles

- Periodic air cylinder hydrostatic testing records

- Quality assurance audit reports, surveillance reports, and self-assessments that evaluated the radiation monitoring instrumentation program and respiratory protection program including self-contained breathing apparatus equipment

- Summary of corrective action documents written since March 2001 and selected examples involving radiation monitoring instruments and self-contained breathing apparatus equipment

b. Findings

No findings of significance were identified.

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (71122.01)

a. Inspection Scope

To ensure that the gaseous and liquid effluent processing systems were maintained so that radiological releases were properly mitigated, monitored, and evaluated with respect to public exposure, the team interviewed cognizant personnel, walked down the major components of the gaseous and liquid release systems, observed ongoing activities and equipment material condition, and compared the observed configuration to the description in the Final Safety Analysis Report. Additionally, the following items were reviewed and compared with regulatory requirements:

- 2001 Radiological Effluent Release Report
- Changes to the Offsite Dose Calculation Manual and to the radioactive waste system design and operation
- Anomalous results and unplanned releases, if any, reported in the 2001 Radiological Effluent Release Report
- Effluent radiological occurrence performance indicator incidents
- Effluent radiation monitor alarm setpoint values and calculation methodology
- Sample preparation, collection, and analysis of particulate, iodine, gaseous, and liquid effluents (Dry Cooling Tower Sump #2, Fuel Handling Building Trains A and B)
- Selected radioactive liquid and gaseous waste release permits and associated projected doses to members of the public
- Compensatory sampling and radiological analyses conducted for unmonitored releases and when effluent monitors were declared out-of-service
- Monthly, quarterly, and annual dose calculations
- Air cleaning system surveillance test results and the 2001 vendor NUPIC Audit (No. 17894)
- Surveillance test results for the stack and vent flow rates
- Records of instrument calibrations performed since the last inspection (August 2001) for each point of discharge effluent radiation monitors and flow measurement devices

- Calibration and quality control records of counting room instrumentation associated with radiological effluent monitoring and release activities
- 2001 and 2002 counting room cross check program results
- Quality assurance audit reports, surveillance reports, and self-assessments that evaluated the radioactive effluent treatment and monitoring program and engineered-safety-feature air cleaning systems
- Summary of corrective action documents written since August 2001 and selected examples related to the radioactive effluent treatment and monitoring systems program and the engineered-safety-feature air cleaning systems

b. Findings

No findings of significance were identified.

2PS2 Radioactive Material Processing and Transportation (71122.02)

a. Inspection Scope

The team interviewed licensee personnel involved in radioactive material and waste processing and transportation activities, walked down liquid and solid radioactive waste processing systems to verify that the current system configurations and operation agreed with the descriptions contained in the Final Safety Analysis Report and Process Control Program. The team reviewed the status of radioactive waste processing equipment that was not operational and/or abandoned in place for material condition, potential unmonitored release pathways, and unnecessary personnel exposure. No shipments of radioactive materials were conducted during the inspection. Therefore, to verify that the licensee's radioactive material/waste processing and transportation programs complied with the regulatory requirements of 10 CFR Parts 20, 61, and 71 and Department of Transportation (DOT) regulations contained in 49 CFR Parts 170-189, the following items were reviewed and compared with regulatory requirements:

- Radioactive material/waste processing and shipping procedures
- Adequacy of any changes made to the liquid and solid radioactive waste processing systems since the last inspection in April 2001
- Waste stream determination and sampling procedures, waste concentration averaging methodologies, and waste classification procedures
- Radio-chemical sample analysis results for each identified radioactive waste stream
- Changes in waste stream composition due to changing operational parameters and analysis updates

- Scaling factors and calculations used to account for difficult-to-measure radionuclides
- 10 CFR Part 20, Appendix G, Quality Assurance Program
- Documentation for five non-excepted package shipments that demonstrated shipment packaging, surveying, labeling, marking, placarding, vehicle checks, emergency instructions, disposal manifest, shipping papers provided to the driver, and licensee verification of shipment readiness (02-1006, 02-1009, 02-1016, 02-1019, and 03-3008)
- Selected transferee's licenses
- Conduct of radioactive waste processing and radioactive material shipment preparation activities
- Training of personnel responsible for the conduct of radioactive material/waste processing and shipment preparation activities
- Quality assurance audit reports, surveillance reports, and self-assessments that evaluated the radioactive material processing and transportation programs
- Summary of corrective action documents written since April 2001 and selected examples related to the radioactive material processing and transportation programs

b. Findings

1. Introduction: The licensee failed to placard a transport vehicle containing hazardous material labeled Radioactive Yellow III in accordance with 10 CFR 71.5 and Department of Transportation (DOT) regulations.

Description: On June 11, 2002, the licensee was notified by the shipment recipient that Radioactive Material Shipment 02-3047 arrived with no hazardous material placards on the transport vehicle. The shipment contained three packages, two Type A packages labeled Radioactive Yellow II and one Type A package labeled Radioactive Yellow III. The highest radiation level on contact with the Radioactive Yellow III labeled package was 11 millirem per hour and had a transport index of 2.1. DOT regulations require shipment vehicles containing packages labeled as Radioactive Yellow III to be placarded on each side as RADIOACTIVE. The finding was identified in the licensee's corrective action program as Condition Report CR-WF3-2002-1057.

Analysis: The failure to placard a transport vehicle containing hazardous waste labeled as Class 7, Radioactive, Yellow III is a performance deficiency. This self-revealing violation was greater than minor because it was associated with one of the Public Radiation Safety Cornerstone attributes (transportation program) and the finding affected the associated cornerstone objective (to ensure the adequate protection of

public health and safety from exposure to radiation materials released into the public domain). The team processed the violation through the Public Radiation Safety Significance Determination Process because the issue involved an occurrence in the licensee's radioactive material transportation program that is contrary to NRC and DOT regulations. The finding had no more than very low safety significance because the finding was a radioactive material control issue that involved transportation; but, it did not exceed radiation limits, involve a breach of package during transit, involve a certificate of compliance issue, involve a low level burial ground nonconformance, or involve a failure to make notifications or provide emergency information.

Enforcement: 10 CFR 71.5 states, in part, each licensee shall comply with the applicable requirements of DOT regulations in 49 CFR Parts 170 through 189 appropriate to the mode of transport. 49 CFR 172.504(a), states, in part, that transport vehicles containing any quantity of hazardous material labeled Radioactive Yellow III must be placarded on each side as RADIOACTIVE. Because the failure to comply with NRC and DOT regulations was of very low safety significance and the issue was identified in the licensee's corrective action program as Condition Report CR-WF3-2002-1057, this violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy (NCV 50-382/0308-01).

2. Introduction: The licensee failed to follow radiation work permit requirements. Specifically, operations personnel entered into an unsurveyed radiologically restricted area located in an overhead area of the reactor auxiliary building without contacting radiation protection personnel prior to entry as required by Radiation Work Permit 2003-1002.

Description: On April 22, 2003, during walk downs of radiological waste systems, the team found a ladder staged in the waste concentrator room without a radiological survey tag attached. When questioned, radiation protection personnel were not aware that work had been performed in the overhead area; therefore, radiation protection personnel had not performed a radiological survey of the overhead area. Based on the licensee's investigation, it was determined that the ladder had been used by operations personnel on April 21, 2003, to operate the liquid waste management transfer pump discharge isolation valve, LWM-719, which is located in the overhead area. Overhead areas (areas greater than 8 feet) in the power block were posted as radiologically restricted areas. Radiologically restricted areas were not routinely surveyed and require radiation protection personnel to perform a radiological survey prior to entry. The routine monthly radiological survey of the waste concentrator room performed on April 12, 2003, indicated that general area dose rates were less than 2 millirem per hour for the area below Valve LWM-719. A radiological survey was performed on April 22, 2003, in the overhead area near Valve LWM-719. The survey indicated that general area dose rates were 2-3 millirem per hour in the overhead area and that the maximum dose rate on contact with the valve was 10 millirem per hour.

Analysis: Failure to follow radiation work permit requirements is a performance deficiency. This NRC identified finding was greater than minor because it was associated with one of the Occupational Radiation Safety Cornerstone attributes (exposure/contamination control) and the finding affected the associated cornerstone

objective (to ensure the adequate protection of public health and safety from exposure to radiation from radioactive material). The team processed the violation through the Occupational Radiation Safety Significance Determination Process because the occurrence involved individual worker potential for unplanned or unintended dose that resulted from actions or conditions contrary to radiation work permit requirements, which could have been significantly greater as a result of a single minor, reasonable alteration of the circumstances. However, because the violation was not an as low as is reasonably achievable (ALARA) finding, there was no personnel overexposure or substantial potential for personnel overexposure, and the finding did not compromise the licensee's ability to assess dose, the violation had no more than very low safety significance.

Enforcement: Technical Specification 6.8.1.a requires that procedures be established, implemented, and maintained covering the applicable procedures in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978. Regulatory Guide 1.33, Appendix A, Section 7.e.1, lists procedures for access control to radiation areas including a radiation work permit system. RWP 2003-1002, Task 01, required that health physics be contacted as appropriate to ensue awareness of radiological conditions in the work area. Because the failure to comply with radiation work permit requirements was of very low safety significance and the issue was identified in the licensee's corrective action program as Condition Report CR-WF3-2003-01071, this violation is being treated as a noncited violation, consistent with Section VI.A of the NRC Enforcement Policy (NCV 50-382/0308-02).

2PS3 Radiological Environmental Monitoring Program and Radioactive Material Control Program (71122.03)

a. Inspection Scope

The team reviewed the radiological environmental monitoring and meteorological monitoring programs to evaluate the effectiveness of the programs and verify that the licensee implemented the programs in accordance with the Technical Specifications, Offsite Dose Calculation Manual (ODCM), and Technical Requirements Manual (TRM). The team interviewed members of the licensee's staff responsible for implementing the radiological environmental monitoring, meteorological monitoring, and radioactive material control programs. The team inspected the following sample locations and equipment and observed associated activities:

- Inspection of selected environmental air samplers, milk farms, and thermoluminescent dosimeter(TLD) locations to verify sampling locations as described in the TRM and to determine equipment material condition

- Meteorological instrumentation and data displays at the primary and secondary meteorological towers

- The survey of materials for release from the controlled access area

The following items were reviewed and compared with regulatory requirements to determine whether the licensee had an adequate program to verify the impact of radioactive effluent releases to the environment and to ensure that the licensee's surveys and controls were adequate to prevent the inadvertent release of licensed materials into the public domain:

- Implementing procedures for the radiological environmental monitoring program
- Environmental sample analytical results for 2002 and the first calendar quarter for 2003
- Implementation of the environmental TLD program
- Calibration and maintenance records for the environmental air sampling equipment and radiation measurement instrumentation
- 2002 land use census results and any resulting changes to the radiological environmental monitoring program
- 10 CFR 50.59 Safety and Environmental Impact Screening and Evaluation for REMP Reduction approved by licensee management on July 25, 1996, and the technical justifications for the REMP reduction changes
- 2001 and draft 2002 Annual Environmental Operating Reports
- The station environmental laboratory's performance in the interlaboratory and intralaboratory comparison programs
- Implementing procedures for the meteorological monitoring program
- Meteorological instrument operability, reliability, and 2002 meteorological monitoring data recovery statistics
- The most recent calibration results of the meteorological monitoring instruments for wind direction, wind speed, and delta temperature
- 2002 Annual Meteorological Monitoring Program Report
- Procedures, methods, and instruments used to survey, control, and release of potentially contaminated materials from the controlled access area
- Detection sensitivities of radiation survey instruments used for the release of potentially contaminated materials from the controlled access area
- Criteria used for the unrestricted release of potentially contaminated material from the controlled access area

- Quality assurance audit reports, surveillance reports, and self-assessments that evaluated the radiological environmental monitoring, meteorological monitoring, and radioactive material control programs

- Summary of corrective action documents written since November 2001 and selected examples involving the radiological environmental monitoring, meteorological monitoring, radioactive material control programs

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA2 Problem Identification and Resolution

Cross-Reference to PI&R Findings Documented Elsewhere

Section 2OS3 evaluated the effectiveness of the licensee's problem identification and resolution processes in the radiation monitoring instrumentation and self-contained breathing apparatus equipment programs and no findings of significance were identified.

Section 2PS1 evaluated the effectiveness of the licensee's problem identification and resolution processes in the radioactive gaseous and liquid effluent treatment and monitoring systems program and the engineered-safety-feature air cleaning systems and no findings of significance were identified.

Section 2PS2 describes a self-revealing finding for failure to placard a transport vehicle containing hazardous waste labeled as Class 7, Radioactive, Yellow III material, that could have been reasonably identified during the preparation of the shipment prior to the shipment leaving the licensee's site. Consequently, the recipient of the shipment notified the licensee by letter that the shipment arrived at it's destination with no radioactive placards displayed on the transport vehicle in accordance with NRC and DOT regulations.

Section 2PS3 evaluated the effectiveness of the licensee's problem identification and resolution processes in the radiological environmental monitoring, meteorological monitoring, and radioactive material control programs and no findings of significance were identified.

4OA6 Meetings, including Exit

On April 25, 2003, the team presented the inspection results to Mr. J. Venable, Vice President Operations, and other members of his staff who acknowledged the findings presented. The team confirmed that proprietary information was not provided or examined during the inspection.

4OA7 Licensee Identified Violation

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

10 CFR 20.1501(a) requires, in part, that a licensee make surveys that are reasonable under the circumstances to evaluate the concentrations or quantities of radioactive material and potential radiological hazards. On April 1, 2002, the licensee identified an 8" adjustable wrench with fixed surface contamination of 40 corrected counts per minute above background outside of the controlled access area. This event was identified in the licensee's corrective action program as Condition Report CR-2002-00609. Using the Public Radiation Safety Significance Determination Process, the team determined that this finding is of very low safety significance because it was a radioactive material control issue, was not a transportation issue, public exposure was not greater than 5 millirem from the event, and there was less than 5 occurrences.

ATTACHMENT

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

R. Dodds, Vice President Technical Assistant
J. Douet, General Manager, Plant Operations
T. Gaudet, Manager, Planning and Scheduling/Outage
J. Hornsby, Supervisor, Chemistry
B. Houston, Manager, Radiation Protection
J. Laque, Manager, Maintenance
K. Peters, Director, Nuclear Safety Assurance/Emergency Preparedness
G. Pierce, Superintendent, Chemistry
G. Scott, Engineer, Licensing
G. Sen, Manager, Licensing
D. Stevens, Radwaste Supervisor, Radiation Protection
J. Venable, Vice President Operations
K. Walsh, Manager, Operations
S. Wilson, Supervisor, Radiation Protection

NRC

M. Hay, Senior Resident Inspector
G. Larkin, Resident Inspector

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NONE

Opened and Closed During this Inspection

50-382/2003-08-01	NCV	Violation of 10 CFR 71.5 for failure to placard a transport vehicle containing hazardous material (Section 2PS2)
50-382/2003-08-02	NCV	Violation of Technical Specification 6.8.1.a required radiation work permit requirement (Section 2PS2)

Previous Items Closed

NONE

Discussed

NONE

LIST OF DOCUMENTS REVIEWED

Section 2OS3: Radiation Monitoring Instrumentation (71121.03)

Procedures:

HP-001-161 "Use of Respiratory Protective Devices"
HP-001-210 "Health Physics Instrument Control"
HP-022-350 "Operation of the Whole Body Counting System"
HP-002-371 "Instrument Source/Response Check"
HP-002-450 "Calibration and QA of the Whole Body Counting System"
HP-002-480 "Calibration of the Eberline PM-7 Series Personnel Monitor"
HP-002-484 "Operation and Calibration of the Merlin Gerin Shielded Tool Monitor"
HP-002-602 "Respiratory Protection Equipment Quality Control"
HP-002-630 "Verification of Breathing Air Quality"
HP-002-631 "Operation of the Breathing Air Fill Station"

Area and Process Radiation Monitoring Instrumentation:

Main Steam Line Monitor (ARM-IR-5500B), Spent Fuel Pool Area Monitor (ARM-IR-5010), Fuel Handling Building Area Isolation Monitor (ARM-IR-0300.2), Holdup Tank Area Monitor (ARM-IR-5019), Steam Generator Blowdown Monitor (PRM-IR-0100X), Liquid Waste Management Monitor (PRM-IR-0647), Dry Cooling Tower Sump Monitor (PRM-IR-6776), Gaseous Waste Management Monitor (PRM-IR-0648), Fuel Handling Ventilation Particulate/Iodine/Gas Monitor (PRM-IR-5107.A), and Plant Vent Stack Particulate/Iodine/Gas Monitor (PRM-IR-0100.2)

Quality Assurance Documents:

QA Surveillance Reports QS-2001-W3-0035, QS-2001-W3-0088, and QS-2001-W3-0139 and self-assessments (Radiation Monitoring Instrumentation, March 12-16, 2001; Radiation Monitoring System Assessment, October 7-11, 2002; and CR-WLO-2003-00 CA-42)

Radiation Instrument Condition Reports:

CR-WF3-2001-0334, CR-WF3-2001-0368, CR-WF3-2001-0685, CR-WF3-2001-0890, CR-WF3-2001-0971, CR-WF3-2001-1176, CR-WF3-2002-0731, CR-WF3-2002-1538

SCBA Condition Reports:

CR-WF3-2002-01869, CR-WF3-2003-00772, and CR-WF3-2003-1094

Section 2PS1: Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (71122.01)

Procedures:

CE-002-016 "Maintaining Gaseous Waste Management System"
CE-002-018 "Monitoring Liquid Waste Management"
CE-003-506 "Sampling of GWMS and Containment Purge for Radioactive Effluents"
CE-003-511 "Liquid Effluent Sampling"
CE-003-515 "Gaseous Radioactive Waste Release Permit (Computer)"
CE-003-516 "Calculation and Adjustment of Radiation Monitoring Setpoints"
CE-003-533 "Quality Control of the Gamma Spectroscopy System"
CE-003-521 "Calibration of the Gamma Spectroscopy System"

Quality Assurance Documents:

QA Audit Report QA-06-2001-W3-1, QA Surveillance Reports QS-2002-W3-0012, QS-2002-W3-0108, QS-2002-W3-0119, QS-2002-W3-0123, and QS-2002-W3-0158

Condition Reports:

CR-WF3-2001-1153, CR-WF3-2002-0319, CR-WF3-2002-1322, CR-WF3-2003-0988, and CR-WF3-2003-1006

Section 2PS2: Radioactive Material Processing and Transportation (71122.02)

Procedures:

RW-001-211 "Radwaste Processing Standard"
RW-002-200 "Collection and Packing of Solid Radioactive Waste"
RW-002-210 "Radioactive Waste Solidification/Dewatering
RW-002-300 "Receipt, Storage, and Loading of Shipping Containers"
RW-002-310 "Storage of Radioactive Waste"

Quality Assurance Documents:

QA Audit Report QA-15-2001-W3-1, QA Surveillance Report QS-2002-W3-020, and self-assessments WLO-2001-0009, WLO-2002-0076, and WLO-2003-000CA

Condition Reports:

CR-WF3-2002-1057, CR-WF3-2003-0138, and CR-WF3-2003-0435

Section 2PS3: Radiological Environmental Monitoring and Meteorological Monitoring Programs (71122.03)

Procedures:

ESP-8-031	"Analysis of Tritium Content in Water"
ESP-8-036	"Gamma Isotopic Analysis of Environmental Samples"
ESP-8-037	"Preparation of Environmental Samples for Gamma Isotopic Analysis"
MI-003-395	"Primary Meteorological Tower Instrument Calibration EM IM0100"
MI-003-396	"Secondary Meteorological Tower Instrument Calibration EM IM0110"
HP-001-152	"Radioactive Material Control"
HP-001-221	"TLD Receipt, Processing, and Exposure Report Generation"
HP-002-451	"Calibration and Quality Control of the Panasonic UD-710A Automatic TLD Reader"
CE-003-523	"Meteorological Monitoring Program"
CE-003-524	"Radiological Environmental Monitoring Program"
CE-003-533	"REMP Sample Scheduling, Recording, and Shipping"
CE-003-534	"Land Use Survey"

Technical Specifications, Section 6.14
Offsite Dose Calculation Manual, Revision 7, March 18, 2002
Technical Requirement Manual, Amendment No. 51, February 14, 2002, Section 3.12.1

Quality Assurance Documents:

QA Audit Report QA-6-2001-W3-1; QA Surveillance Reports W3F3-2001-0050, W3F3-2001-0136, W3F3-2002-0012, and W3F3-2002-0108

Radiological Environmental Monitoring Program Condition Reports:

CR-WF3-2002-0333, CR-WF3-2002-1623, CR-WF3-2002-1870, CR-WF3-2003-0034, CR-WF3-2003-0272, and CR-WF3-2003-0990

Meteorological Monitoring Program Condition Reports:

CR-WF3-2002-0123, CR-WF3-2002-1400, CR-WF3-2002-1814, and CR-Wf3-2002-1875

Release of Radioactive Material Condition Reports:

CR-WF3-2002-1289, CR-WF3-2003-0769, and CR-WF3-2003-0990

SUMMARY OF FINDINGS

Waterford Steam Electric Station, Unit 3
NRC Inspection Report 50-382/03-08
INSPECTION PERIOD 04/21/03 - 04/25/03

Cornerstone: Occupational Radiation Safety

D. Carter (4640)
PIM NRC NCV ORS April 25, 2003 71122.02
Violation of Technical Specification 6.8.1.a required radiation work permit requirement

Green. The team identified a noncited violation of Technical Specification 6.8.1.a because the licensee failed to follow radiation work permit requirements. Specifically, on April 21, 2003, operations personnel entered into an unsurveyed radiologically restricted area in an overhead area in the reactor auxiliary building without first contacting radiation protection personnel prior to entry.

This finding is greater than minor because it was associated with one of the Occupational Radiation Safety Cornerstone attributes (exposure/contamination control) and the finding affected the associated cornerstone objective (to ensure the adequate protection of public health and safety from exposure to radiation from radioactive material). The team processed the violation through the Occupational Radiation Protection Significance Determination Process because the occurrence involved potential doses (resulting from actions or conditions contrary to licensee procedures) which could have been significantly greater as a result of a single minor, reasonable alteration of the circumstances. However, because the violation was not an as low as is reasonably achievable (ALARA) finding, there was no personnel overexposure, there was no substantial potential for personnel overexposure, and the finding did not compromise the licensee's ability to assess dose, the violation had no more than very low safety significance (Section 2PS2).

Cornerstone: Public Radiation Safety

D. Carter (4640)
PIM SELF NCV PRS April 25, 2003 71122.02
Violation of 10 CFR 71.5 for failure to placard a transport vehicle containing hazardous material

Green. The team identified a self-revealing noncited violation of 10 CFR 71.5 because the licensee failed to placard a transport vehicle containing hazardous material. On June 5, 2002, the licensee was informed by letter from the recipient that Radioactive Material Shipment 02-3047 arrived at it's destination with no radioactive placards on the transport vehicle as required for radioactive material labeled as Radioactive Yellow III.

This finding is greater than minor because it was associated with one of the Public Radiation Safety Cornerstone attributes (transportation program) and the finding affected the associated cornerstone objective (to ensure the adequate protection of public health and safety from exposure to radiation materials released into the public domain). The team processed the violation through the Public Radiation Safety Significance Determination Process because the

finding involved an occurrence in the licensee's radioactive material transportation program that is contrary to NRC and DOT regulations. The finding was a radioactive material control issue that involved transportation. However, it did not exceed radiation limits, involve a breach of package during transit, involve a Certificate of Compliance issue, involve a low level burial ground nonconformance, and involve a failure to make notifications or provide emergency information; therefore, the violation had no more than very low safety significance (Section 2PS2).