November 10, 2003

Mr. John Skolds
Chairman and CEO of AmerGen
AmerGen Energy Company, LLC
4300 Winfield Road
5th Floor
Warrenville, IL 60555

SUBJECT: OYSTER CREEK GENERATING STATION - NRC INTEGRATED INSPECTION REPORT 05000219/2003004

Dear Mr. Skolds:

On September 27, 2003, the US Nuclear Regulatory Commission (NRC) completed an inspection at your Oyster Creek Generating Station. The enclosed integrated inspection report documents the inspection findings, which were discussed on October 17, 2003 with Mr. Ernest Harkness 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. Additional inspection activities above the baseline program were conducted in response to the labor action ongoing for the majority of this inspection period.

Based on the results of this inspection no findings of significance were identified.

Since the terrorist attacks on September 11, 2001, NRC has issued five Orders and several threat advisories to licensees of commercial power reactors to strengthen licensee capabilities, improve security force readiness, and enhance controls over access authorization. In addition to applicable baseline inspections, the NRC issued Temporary Instruction 2515/148, "Inspection of Nuclear Reactor Safeguards Interim Compensatory Measures," and its subsequent revision, to audit and inspect licensee implementation of the interim compensatory measures required by order. Phase 1 of TI 2515/148 was completed at all commercial power nuclear power plants during calendar year 2002 and the remaining inspection activities for Oyster Creek are scheduled for completion in calendar year 2003. The NRC will continue to monitor overall safeguards and security controls at Oyster Creek.

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 Website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA by Richard S. Barkley Acting For/

Peter W. Eselgroth, Chief
Projects Branch 7
Division of Reactor Projects

Docket No. 50-219
License No. DPR-16

Enclosure: Inspection Report 05000219/2003004
w/Attachment: Supplemental Information

cc w/encl:
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Site Vice President, Oyster Creek Nuclear Generating Station, AmerGen
Plant Manager, Oyster Creek Generating Station, AmerGen
Regulatory Asurance Manager Oyster Creek, AmerGen
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Vice President - Operations Support, AmerGen
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U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.:	50-219
License No.:	DPR-16
Report No.:	05000219/2003004
Licensee:	AmerGen Energy Company, LLC (AmerGen)
Facility:	Oyster Creek Generating Station
Location:	Forked River, New Jersey
Dates:	June 29, 2003 - September 27, 2003
Inspectors:	Robert Summers, Senior Resident Inspector Steve Dennis, Resident Inspector Jack McFadden, Health Physicist Tim O'Hara, Reactor Inspector Jeff Herrera, Resident Inspector Neil Della Greca, Senior Reactor Inspector Alan Blamey, Senior Operations Engineer
Approved By:	Peter W. Eselgroth, Chief Projects Branch 7 Division of Reactor Projects

CONTENTS

SUMMARY OF FINDINGS

IR 05000219/2003-004; 06/29/03-09/27/03; Oyster Creek Generating Station; Routine Integrated Report.

This report covers a 13-week period of inspection by resident inspectors and an announced inspection by a regional senior health physics inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3 dated July 2000.

A. NRC-Identified and Self-Revealing Findings

No findings of significance were identified.

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. The violation and corrective action tracking number is listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Oyster Creek began the integrated inspection period at full power. On August 14, 2003, a plant trip occurred and was caused by electrical grid instabilities in the Northeast and Midwest portions of the country. The plant returned to full power on August 16, 2003. On August 22, 2003, a plant trip occurred and was caused by a main turbine trip due to an instrumentation failure. The plant returned to full power on August 24, 2003. On August 29, 2003, the A Reactor Recirculation pump tripped due to a fault in the motor windings and caused a power reduction to 90 percent. Full power was restored the same day with the remaining four Reactor Recirculation pumps. The plant remained at 100 percent power for the duration of the inspection period with the exception of several occasions during which power was decreased for brief periods of time for control rod adjustments and condenser backwashing.

1. REACTOR SAFETY

Cornerstones: Initiating Events/Mitigating Systems/Barrier Integrity

1R01 Adverse Weather Protection (IP 71111.01)

a. Inspection Scope

A single sample involving an actual adverse weather condition was selected for review by the inspector. The inspectors observed the site preparations made by the licensee in anticipation of Hurricane Isabel and verified their completion during the week of September 15, 2003. The inspectors also staffed the site continuously as the hurricane moved through the region on September 18 and 19, 2003. The inspectors toured all outside plant areas including the switchyard, fire diesel building, and intake and dilution pump structures, prior to the arrival of the hurricane, to verify that adequate protection of systems and components required for continued plant operation or safe shutdown could be maintained. The inspectors also verified that site staffing was adequate to ensure emergency facilities could be fully staffed if facility manning and/or activation was required during the storm. During the storm, inspectors toured all outside plant areas to observe plant conditions and assess licensee actions.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (IP 71111.04Q)

a. Inspection Scope

The inspectors performed four partial walkdown inspections on the systems listed below. A random sampling of valve positions in the field was verified to be properly aligned in accordance with operating procedures. Control room indications and controls were verified to be appropriate for the standby or operating status of the system and system

maintenance action requests were reviewed to assure no degraded conditions existed to adversely affect operability. This inspection activity represented four samples:

- 4160V Switchgear, week of July 28, 2003
- Reactor Building Closed Cooling Water (RBCCW), week of August 4, 2003
- Fire Protection System and Fire Diesels, week of August 25, 2003
- Service Water, week of September 15, 2003

b. Findings

No findings of significance were identified.

1R05 Fire Protection

1. Area Inspections (IP 71111.05Q)

a. Inspection Scope

The inspectors walked down accessible portions of 11 samples listed below due to the potential to impact mitigating systems. Plant walkdowns included observations of combustible material control, fire detection and suppression equipment availability, and compensatory measures. As a part of the inspection, the inspectors had discussions with fire protection personnel, and reviewed procedure 333, “Plant Fire Protection System,” and the Oyster Creek Fire Hazards Analysis Report to verify that the fire program was implemented in accordance with all conditions stated in the facility license.

- OB-FZ-8C, A & B Battery Rooms
- RB-FZ-1B, Reactor Building 95' Elevation
- RB-FZ-1F1, Reactor Building Southeast Corner Room
- RB-FZ-1F3, Reactor Building Northwest Corner Room
- RB-FZ-1F 4, Reactor Building Northeast Corner Room
- TB-FZ-11B, Turbine Building Lube Oil Storage Area
- OB-FZ-4, Cable Spreading Room 36' Elevation
- OB-FA-6, 480V Switchgear Room and Outside Corridor
- OB-FZ-10B, Chemical Lab, Reactor Building 35' Elevation
- MT-FA-12, Main Transformer Area
- LL-FA-30, Independent Spent Fuel Storage Installation

b. Findings

No findings of significance were identified.

2. Fire Drill Observation (IP 71111.05A)

a. Inspection Scope

The inspector observed an annual sample of a fire brigade drill in a plant area important to safety, associated with the Station Blackout Transformer, to evaluate the readiness of the licensee's personnel to prevent and fight fires. This drill was conducted on September 9, 2003, as part of the annual emergency preparedness exercise. The following inspection attributes were observed: protective clothing/turnout gear was properly donned; self-contained breather apparatus (SCBA) equipment was properly used (simulated); fire hose lines were capable of reaching all necessary fire hazard locations and that the lines were laid out without flow constrictions; the fire area of concern was entered in a controlled manner; sufficient fire fighting equipment was brought to the scene by the fire brigade to properly perform their firefighting duties; the fire brigade leader's fire fighting directions were thorough, clear, and effective; radio communications with the plant operators and between fire brigade members were effective; members of the fire brigade checked for fire victims and propagation into other plant areas, including propagation of smoke hazard into the plant; the fire fighting pre-plan strategy was utilized; the licensee pre-planned the drill scenario was followed, and that the drill objectives acceptance criteria were met.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (IP 71111.06)

a. Inspection Scope

Two inspection samples were selected for review by the inspectors, one for internal flooding, and a second for external flooding performed as part of the Adverse Weather preparations review for Hurricane Isabel.

The inspector reviewed the Updated Final Safety Analysis Report, section 2.4.2, concerning flood design considerations and their potential impact on safety related systems. The inspector also walked down the two containment spray pump corner rooms to assess the as-described configuration in section 10.5.4 of the Oyster Creek Internal Flooding Analysis, dated November 1991, and reviewed corrective action document Nos. O2002-0431, O2003-1341, O2003-1000, concerning the 1-6 and 1-7 sumps located in those areas.

The inspector also reviewed the licensee's Individual Plant Examination for External Events concerning external flooding events due to hurricanes, and Procedures 2000-ABN-3200.31, High Winds, and 2000-ABN-3200.32, Response to Abnormal Intake Level. The inspector observed operations staff implement portions of the referenced procedures, as were appropriate for the plant conditions. The inspector frequently toured the intake structure during the storms progression and verified that the

associated service water equipment was protected. The inspector also reviewed corrective action document No. O2003-1872, concerning a discrepancy between required Condensate Storage Tank levels referenced in the IPEEE and the above abnormal operating procedure for High Winds.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance

1. Biennial Review (IP 71111.07B)

a. Inspection Scope

Two samples were performed by the inspectors. The inspectors reviewed performance testing and processes to ensure that the following two heat exchangers could perform their design functions as intended:

- Containment Spray/Emergency Service Water (CS/ESW) System 1 and 2 Heat Exchangers (1-1, 1-2, 1-3, 1-4)

- Reactor Building Closed Cooling Water (RBCCW) System Heat Exchangers 1-1 and 1-2

These heat exchangers provide cooling (CS/ESW system is safety-related) to remove heat from plant systems during operating, transient and accident conditions. To ensure compatibility with commitments made in response to Generic Letter 89-13, "Service Water System Problems Affecting safety-related Equipment," the inspectors reviewed the licensee's inspection, cleaning, and performance monitoring methods and frequency associated with the CS/ESW heat exchangers. Although not covered by Generic Letter 89-13, the inspectors also reviewed the licensee's inspection, cleaning and performance monitoring of the RBCCW system heat exchangers (cooled by the service water system) because the RBCCW system is a risk-significant system. The inspectors compared test and/or inspection data to the established acceptance criteria to verify that the results were acceptable, and that operation was consistent with design. The inspectors walked down the selected heat exchangers to assess the material condition of these areas.

Additionally, the inspectors reviewed the licensee's methods for controlling biotic fouling, such as chlorine injection and monitoring for mussel presence and growth, to verify that the methods were implemented effectively.

The inspectors reviewed a sample of Corrective Action Program (CAP) reports related to the selected heat exchangers and systems. This review was done to ensure that the licensee was appropriately identifying, characterizing, and correcting problems related to these components.

2. Annual Review (IP 71111.07A)

a. Inspection Scope

One sample was selected for review by the inspectors. The inspectors reviewed performance testing results to ensure that the Turbine Building Closed Cooling Water (TBCCW) heat exchanger could perform its design functions as intended. The inspectors also reviewed the licensee's inspection, cleaning and performance monitoring records of the TBCCW system heat exchangers which are normally cooled by the Circulating Water System and can also can be aligned as a backup to the RBCCW system. The inspectors reviewed associated system corrective action and preventive maintenance records, and walked down the heat exchanger areas to assess material condition.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (IP 71111.11Q)

a. Inspection Scope

This inspection activity represented seven inspection samples, six more than quarterly requirements due to the strike of licensed and non-licensed operators, maintenance and radiation protection staff at the site in July and portions of August. The strike resulted in a number of SROs performing the duties regularly conducted by ROs and non-licensed operators. Increased oversight of training and qualification was deemed appropriate due to this organizational impact.

This inspection assessed the licensed operator requalification training provided to the Senior Reactor Operators (SROs) during the strike and the Reactor Operator (RO) reintegration evaluations conducted on the simulator before returning the ROs to licensed duty. The inspectors assessed the proficiency of the operating crews and verified that the evaluations of the crews identified and addressed operator performance issues. The inspection activities were performed using NUREG-1021, Rev. 8, "Operator Licensing Examination Standards for Power Reactors," and Inspection Procedure Attachment 71111.11, "Licensed Operator Requalification Program."

The inspectors observed requalification training administered on July 2, July 10, July 30, and August 7, 2003. The operating crews, which were composed of all SROs, were divided into two simulator crews for training. The training typically included two scenarios and four hours of classroom instruction. The inspectors assessed the simulator crew's performance during the scenario. The inspector also assessed the evaluator's assessment of the crew, to verify that operator performance issues were identified and appropriate remediation was conducted to address identified weaknesses.

The inspectors observed fourteen of nineteen ROs evaluated during the reintegration evaluations administered on August 20, 2003. The ROs were evaluated during simulator scenarios in crews of two using a training instructor to direct operation as a control room supervisor. The inspector assessed the reactor operator's performance during the scenario. The inspector also assessed the evaluator's assessment of the crew, to verify that operator performance issues were identified and appropriate remediation was conducted to address identified weaknesses.

The inspectors also reviewed the June 27, 2003, letter from the NRC to AmerGen approving the exemption from the requirements of 10 CFR Part 55, Section 55.59, as well as the commitments made in AmerGen's (1) Request for Exemption, dated May 30, 2003, (2130-03-20154) and (2) Supplemental Information Regarding the Exemption Request, dated June 26, 2003, (2130-03-20191). The inspectors verified that the requalification training met the commitments made in AmerGen's exemption request.

Also, the inspectors observed portions of requalification training that were developed and implemented "just-in-time" for significant plant evolutions, including the plant cooldown to Cold Shutdown Conditions on August 14, 2003, and again on August 22, 2003. This training was completed for operating crews that were composed of all SROs, of which several were in positions not normally staffed by SROs and focused on critical steps during an infrequently performed task.

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (IP 71111.12Q)

a. Inspection Scope

Three samples were selected for review by the inspectors. The inspectors reviewed the licensee's implementation of the maintenance rule as described in Oyster Creek procedure ER-AA-310, "Implementation of the Maintenance Rule." The inspectors verified that the selected systems, structures and/or components (SSCs) were properly classified as (a)(1) or (a)(2) in accordance with 10 CFR 50.65. The inspectors reviewed action requests (ARs), corrective action program reports (CAPs), (a)(1) corrective action plans and routine preventive maintenance activities. The inspectors also discussed the current systems performance, associated issues and concerns, and planned activities to improve performance with the system engineers. In addition, they compared unavailability data with control room log entries to verify accuracy of data and compliance with (a)(1) goals. AmerGen trending data was also reviewed. The documents reviewed are listed in the attachment. The three SSCs reviewed during the inspection period were as follows:

- Service Water System
- Emergency Diesel Generator #1
- Core Spray System/Auto Depressurization System Train #2

b. Findings

No findings of significance were identified.

1R13 Maintenance Risk Assessment and Emergent Work Evaluation (IP 71111.13)

a. Inspection Scope

Six samples were selected for review by the inspectors. The inspectors reviewed the risk assessment for the following maintenance activities:

- On August 6, 2003, a loss of power to Reactor Protection System (RPS) 2 occurred resulting in a half-scram. The inspectors verified that the licensee evaluated the risk associated with the loss of RPS 2 and adhered to procedural requirements stated in 2000-ABN-3200.39, RPS Failures. The inspectors reviewed Corrective Action Document (CAP) No.O2003-1550 and Action Request (AR) No. A2067691, generated during the licensee's review of the potential risk from the emergent work for the issue.

- On August 14, 2003, while taking reactor scram actions, the operators were unable to place the mode switch to the shutdown position due to a mechanical binding problem causing a more complicated plant shutdown (discussed in section 1R14). The inspectors reviewed the repair plan for the mode switch (AR No. A2068349) and the associated risk assessment with the plant in a shutdown condition.

- On August 15, 2003, during performance of the Source Range Monitor (SRM) Test and Calibration, SRM #23 failed the test. The licensee declared the SRM inoperable and the inspectors reviewed the associated risk evaluation and technical specification implications with the plant in a pre-startup condition. The inspectors also reviewed the issue disposition as described in CAP No. O2003-1623.

- On August 23, 2003, during the performance of a surveillance test, the Main Steam Isolation Valve (MSIV), NS03A, stroke time exceeded procedural limits and was declared inoperable. The inspectors reviewed the licensee risk assessment and description of the issue as stated in CAP No. O2003-1681 and the associated apparent cause evaluation.

- On August 29, 2003, the "A" Reactor Recirculation Pump tripped due to a drive motor breaker lockout. The inspectors interviewed the reactor engineer and verified that operating and abnormal procedures were followed and risk was evaluated for operating the plant in a "four recirculation loop" alignment. The event, described in CAP No. O2003-1723, and the associated apparent cause evaluation were also reviewed by the inspectors.

- On September 10, 2003, the 1A2 480 Volt Vital Bus was lost due to a procedure adherence error by the licensee during performance of surveillance procedure 610.3.115, "Core Spray System 1 Instrument Channel and Bistable Calibration and System Operability Test" (see section 1R22 for human performance discussion). The inspectors reviewed the licensee risk assessment of the vital bus loss to ensure all affected equipment was identified and properly assessed. The inspectors also reviewed the issue as described CAP No. O2003-1814 and the associated prompt investigation report.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance During Non-routine Plant Evolutions (IP 71111.14)

1. Plant Scram due to Electrical Grid Disturbance

a. Inspection Scope

While at 100 percent reactor power on August 13, 2003, at 4:10 p.m., a main generator over excitation condition occurred causing a generator and turbine trip and a reactor scram. The initiating event for this condition was the August 14, 2003, Northeastern US and Canadian Blackout. All control rods fully inserted. Reactor pressure peaked at approximately 1070 psig, as expected following the closure of the Main Turbine Stop Valves, and reactor pressure was initially controlled, as designed, with the Electromatic Relief Valves (EMRV) and Isolation Condensers (IC). Also as expected, the pressure peak actuated the Anticipated Transient Without Scram logic, which tripped three of the five Reactor Recirculation (RR) Pumps and subsequently required the plant to be placed in cold shutdown in accordance with technical specifications in order to restart the RR pumps. Following the scram, operators were not initially successful at placing the reactor Mode Switch into the Shutdown position. Since ICs and EMRVs had actuated, an RCS cooldown and depressurization was in progress. Main Steam Isolation Valves (MSIVs) automatically isolated (Group 1 Isolation) when the reactor pressure fell below 850 psig with the Mode Switch in the Run position. As a result, operators commenced a cooldown without the main condenser as a heat sink, using only the isolation condensers and subsequently, the shutdown cooling system. A cold shutdown condition was achieved at 2:36 a.m., on August 15, 2003. The inspectors reviewed operator actions following the scram, assessed procedure adherence, and observed plant shutdown activities. The inspector observed the licensee's troubleshooting activity on the Mode Switch (see Section 71111.13 for details).

b. Findings

No findings of significance were identified.

2. Plant Scram due to Turbine Trip Signal

a. Inspection Scope

While at 100 percent reactor power on August 22, 2003, at 2:59 a.m., a main turbine moisture separator hi-hi level signal caused a main turbine trip and subsequent reactor scram. All control rods fully inserted. Reactor pressure peaked at approximately 1070 psig, as expected following the closure of the Main Turbine Stop Valves, and reactor pressure was initially controlled, as designed, with the Electromatic Relief Valves (EMRV) and Isolation Condensers (IC). Also as expected, the pressure peak actuated the Anticipated Transient Without Scram logic for tripping three of the five Reactor Recirculation (RR) Pumps and subsequently required the plant to be placed in cold shutdown in accordance with technical specifications in order to restart the RR pumps. Following the initial reactor pressure peak, the EMRVs reclosed, the ICs were secured, and the main turbine bypass valves and main condenser were used to reduce reactor pressure until cold shutdown was achieved at 12:05 p.m. on August 22, 2003. The inspectors reviewed operator actions following the scram, assessed procedure adherence, and observed plant shutdown activities.

b. Findings

No findings of significance were identified.

3. Trip of 1A2 480 Volt Vital Bus

a. Inspection Scope

On September 10, 2003, at 2:02 p.m., the 1A2 480 Volt Vital Bus was lost due to a procedure adherence error by the licensee during performance of surveillance procedure 610.3.115, “Core Spray System 1 Instrument Channel and Bistable Calibration and System Operability Test” (see section 1R22 for human performance discussion). The inspectors observed operator response in the control room which included an assessment of technical specification evaluations, abnormal procedure adherence, communications with field operators, discussions with senior managers, and overall command and control of the event. No plant transient occurred and the bus power was restored at about 3:20 p.m.. The inspectors also reviewed Prompt Investigation Report (CAP No. O2003-1814) which discusses the event.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (IP 71111.15)

a. Inspection Scope

Six samples were selected for review by the inspectors. The inspectors reviewed operability evaluations in order to verify that they were performed as required by Oyster Creek procedure LS-AA-105, Operability Determinations. The inspector assessed the accuracy of the evaluations, the use and control of compensatory measures if needed, and where a component was determined to be inoperable, the inspectors verified that the Technical Specification limiting conditions for operation were properly addressed. The selected six samples are listed below:

- Air Ejector Offgas Radiation Monitor - high voltage and signal cable failure - CAP No. O2003-1209
- Fire Diesel 1-1 - control cable failure - CAP No. O2002-0596
- Core Spray System 1 - unexpected reactor lo-lo level trip signal received during performance of the system surveillance test - CAP No. O2003-1111
- "A" Control Rod Drive Pump - pump failed to remain running during the performance of the pump operability test - CAP No. O2003-0473
- Service Water - discharge piping support material design discrepancies - CAP No. O2003-1912
- Service Water Pump 1-1 - discharge piping internal coating degradation - CAP No. O2003-1860

b. Findings

No findings of significance were identified.

1R16 Operator Work-Arounds (IP 71111.16)

a. Inspection Scope

The inspectors reviewed the operator work-around database and a sample of the associated corrective action items to identify conditions that could adversely affect the operability of mitigating systems or impact human reliability in responding to initiating events. The inspector reviewed the licensee's implementation of procedure OP-AA-102-103, "Operator Work-Around Program." The inspector also reviewed the status of the corrective actions described in CAP No. O2003-0423 which identified specific problem resolutions relating to the operator work-around program and work-around review board.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (IP 71111.19)

a. Inspection Scope

Seven samples were selected for review by the inspectors. The inspector reviewed and observed portions of post maintenance testing associated with the below-listed seven maintenance activities because of their function as mitigating systems and their potential role in increasing plant transient frequency. The inspectors reviewed the post maintenance test documents to verify that they were in accordance with the licensee's procedures and that the equipment was restored to an operable state. The following post maintenance test activities were selected for review:

- Containment Spray (CS)/Emergency Service Water (ESW) System I - surveillance procedure 607.4.016, "CS/ESW Operability and Quarterly Inservice Test" was performed on July 15, 2003, following planned component calibrations on the CS System.

- "B" Control Rod Drive (CRD) Pump - following the repair of a leak on the pump seal water supply line, a leak check was performed on July 21, 2003, while the pump was in service.

- SRM No. 23 - surveillance procedure 620.4.004, "SRM Test and Calibration" was performed on August 15, 2003, following a repair required when the SRM failed to function when its mode switch was taken to standby.

- Scram Discharge Instrument Volume (SDIV) - surveillance procedure 619.3.011, SDIV Digital Calibration and Test was performed on August 15, 2003, following planned maintenance on the system (Work Orders R2036775 and R2038179).

- Mode Switch - following a troubleshooting repair plan, mode switch manipulations to test switch functionality, in accordance with actions described in Work Order C2006219, completed on August 15, 2003, following problems encountered with mode switch positioning during the shutdown on August 14, 2003.

- Main Steam Isolation Valve (MSIV) N0S3A - surveillance procedure 602.4.002, "MSIV Closure and In-service Test," was performed on August 23, 2003, following repair of a hydraulic line leak.

- Electromatic Relief Valves (EMRV) - surveillance procedure 602.3.008, "EMRV Valve Acoustic Monitoring Test," was performed on August 14, 2003, following an electrical transient which saturated the associated EMRV acoustic monitor.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (IP 71111.22)

a. Inspection Scope

Nine samples were selected for review by the inspectors. The inspectors observed pre-test briefings and portions of surveillance test (ST) performance for procedural adherence, and verified that the resulting data associated with the test met the requirements of the plant technical specifications and the Oyster Creek Updated Final Safety Analysis Report. The inspector also reviewed the results of past test performance of the selected STs to verify that degraded or non-conforming conditions were identified and corrected, if needed. The following nine STs were observed:

- Liquid Poison Pump Valve Operability Test, surveillance procedure 612.4.001, completed on June 30, 2003.
- Reactor Building to Suppression Chamber Vacuum Breaker Test, surveillance procedure 604.4.003, completed on July 1, 2003.
- Isolation Condenser Valve Operability Test, surveillance procedure 609.4.001, completed on July 10, 2003.
- Diesel Fire Pump Operability Test, surveillance procedure 645.4.036, completed on August 4, 2003.
- Source Range Monitor Test and Calibration, surveillance procedure 620.4.004, completed on August 15, 2003.
- Electromatic Relief Valve Pressure Sensor Test and Calibration, surveillance procedure 602.3.004, completed on August 28, 2003.
- Turbine Load Rejection Scram Test, surveillance procedure 619.3.001, completed on September 5, 2003.
- Grid Undervoltage Channel Functional Test, surveillance procedure 632.2.002, completed on September 5, 2003.
- Core Spray System 1 Instrument Channel and Bistable Calibration and System Operability Test, surveillance procedure 610.3.115, completed on September 12, 2003.

b. Findings

Introduction. A self-revealing finding and apparent violation of technical specifications was identified for failure to implement procedures while performing a surveillance test on Core Spray System 1, equipment that affects nuclear safety at Oyster Creek. Oyster Creek Technical Specification 6.8.1.B, in part states that written procedures shall be implemented for surveillance and test activities on equipment that affects nuclear safety. This is an unresolved item (URI) pending completion of the SDP.

Description. On September 10, 2003, at about 2:00 p.m., a non-licensed operator was performing portions of procedure 610.3.115, Core Spray System 1 Instrument Channel and Level Bistable Calibration and System Operability Test. Step 6.11.10 of the procedure requires placing the keylock switch at the breaker for Core Spray Pump 1A in the trip position. The operator erroneously placed the keylock switch in the trip position at the breaker feeding the 1A2 480V Vital Bus thereby de-energizing the bus and its associated equipment. The equipment de-energized included two of the four loops of Core Spray and Containment Spray (each loop provides 100% system capability). Once the reason for the power loss to the bus was known, power was restored, per procedure, at about 3:15 p.m.. A half reactor scram occurred but no plant transient occurred during the event.

Analysis. A performance finding was identified for failure to implement technical specification required procedures. This finding was considered self-revealing in that the error caused the 1A2 480V vital bus to de-energize. This human performance error resulted in a loss of: two of four loops of Core Spray; two of four loops of Containment Spray, Reactor Building Ventilation; the operating (one of two) Control Rod Drive pump; two of four drywell coolers; the C 125V Battery Charger, and a loss of security related equipment. The equipment loss resulted in a half reactor scram signal, however, no plant transient (scram) occurred during the approximate one hour and 15 minutes that the bus was de-energized. Because the finding affected the reactor safety mitigating systems and barrier integrity cornerstone objectives, the finding is greater than minor. The finding also was determined to have potential safety significance greater than very low significance because of the safety systems affected. This finding did not present an immediate safety concern because an actual loss of a safety function did not occur since redundant 100% capacity safety system trains remained available; the loss of a safety function for a single train did not exceed the technical specification allowed outage time for the most limiting affected system; and, a plant transient did not occur.

A cross-cutting aspect of the finding was identified involving human performance, in that a non-licensed operator failed to implement technical specification required procedures during the performance of the surveillance test on Core Spray System I. The event resulted in the loss of the 1A2 480V Vital Bus and associated safety and non-safety system equipment, as discussed above. During a portion of the surveillance test, the non-licensed operator was required to remotely open a breaker associated with the Core Spray pump under test. After verifying that he had located the correct breaker, the operator placed the procedure down because the evolution required both hands. Upon returning to the breaker to open it as directed, he erroneously opened an adjacent

breaker on the same 4160 volt bus, de-energizing the 1A2 480 volt vital bus. This error was considered to involve the cross-cutting aspect of human performance due to the failure to implement the procedure as directed.

Enforcement. Technical Specification 6.8.1.B, in part states that written procedures shall be implemented for surveillance and test activities on equipment that affects nuclear safety. Contrary to above, on September 10, 2003, procedure 610.3.115, "Core Spray System 1 Instrument Channel and Level Bistable Calibration and System Operability Test," a surveillance procedure on equipment that affects nuclear safety, was not implemented as prescribed. The finding did not present an immediate safety concern based upon the facts noted in the analysis section above. Pending determination of the safety significance, this finding and apparent violation is identified as URI 05000219/2003004-01, Failure to implement a surveillance test procedure required by Technical Specifications.

1R23 Temporary Plant Modifications (IP 71111.23)

a. Inspection Scope

One sample was selected for review by the inspectors. The inspector reviewed temporary modification No. 2003-17 for the "A" Air Ejector Offgas (AEOG) Radiation Monitor. The modification replaced the signal and high voltage cables for the radiation monitor and was installed due to erratic readings on the monitor and testing which determined that the installed cable was degraded. The new cable was installed using a different route than the degraded cable in an effort to minimize high radiation exposure during the modification installation. The inspectors reviewed the 10 CFR 50.59 evaluation, the engineering change request (ECR) No. 03-00573, and the work order activity to install the cable (Work Order No. C2006077). Additionally, the inspectors walked down portions of the cable installation path.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiologically Significant Areas (IP 71121.01)

a. Inspection Scope

Eight samples of access control activities were selected for review by the inspector. The inspector reviewed radiological work activities and practices and procedural implementation during observations and tours of the facilities and inspected procedures, records, and other program documents to evaluate the effectiveness of Exelon/Oyster

Creek's access controls to radiologically significant areas. Additionally, the inspectors reviewed corrective action documents related to access control in these areas.

Plant Walkdowns and RWP Reviews

The inspector conducted several tours of the reactor, the old radioactive waste buildings, the outside areas within the radiologically controlled area (RCA), and a tour of the new radioactive waste building. The inspector reviewed observed work activities for compliance with the applicable radiological work permit (RWP) requirements. On July 30, the inspector observed a pre-job brief for work under RWP OC-1-03-0085 (Investigate/repair air-operated valves and solenoids in the tunnel in the old radioactive waste building). The inspector accompanied the workers and radiation protection technician to the vicinity of the work location and observed the entry into the tunnel where the valves were located. On several days, the inspector toured the protected area outside the RCA. The inspector observed activities, at the main RCA-access-control point and at satellite RCA-access-control points, to verify compliance with requirements for RCA entry and exit, wearing of record dosimetry, and issuance and use of alarming electronic radiation dosimeters. During these observations and tours, the inspector reviewed for regulatory compliance the posting, labeling, barricading, and level of radiological access control for locked high radiation areas (LHRAs), high radiation areas (HRAs), radiation and contamination areas, and radioactive material areas.

Problem Identification and Resolution

The inspector reviewed a summary of the continuous assessment process for the radiation protection group by the site's nuclear oversight organization for the period of April through June 2003. The inspector also reviewed ten Oyster Creek Radiation Protection Observation Scorecards covering the period from March through July 2003.

The inspector selected three issues identified in the Corrective Action Program (CAP) for detailed review (CAP Nos. O2003-1228, O2003-1375, and O2003-1423). The issues were associated with: dosimetry inappropriately placed on the chest; the metal wall in the motor-generator set room being inadvertently cut and an opening created into the RCA; and, unauthorized repair of self-contained-breathing-air masks. The documented reports for the issues were reviewed to ensure that the full extent of the issues was identified, an appropriate evaluation was performed, and appropriate corrective actions were specified and prioritized. The inspector evaluated the reports against the requirements of the licensee's CAP as delineated in Procedure LS-OC-125, Corrective Action Process.

Job-In-Progress Reviews

In regard to pre-job brief for work under RWP OC-1-03-0085 (Investigate/repair air-operated valves and solenoids in the tunnel in the old radioactive waste building) and the observed work activity mentioned previously, this was the second day for this work. During the pre-job brief, the radiation protection technician reviewed with the work crew

the lessons learned during the previous day regarding low-dose access routes, low-dose waiting areas, and efficiencies in work sequencing in order to minimize dose.

Radiation Worker Performance

During the plant tours and the work activity on RWP OC-1-03-0085 described previously, radiation workers were observed to be performing tasks in compliance with the requirements of RWPs and radiological procedures.

Radiation Protection Technician Proficiency

During the pre-job brief and the work activity on RWP OC-1-03-0085 described previously, radiation protection staff and radiation protection technicians were observed to be providing guidance to workers and performing radiological control activities in compliance with the requirements of RWPs and radiological procedures. The inspector reviewed reports generated by the corrective action program for any issues regarding radiation protection technician proficiency since the last inspection.

The inspector performed a selective examination of documents (as listed in the List of Documents Reviewed section) to evaluate the adequacy of radiological controls.

The review in this area was against criteria contained in 10 CFR 19.12, 10 CFR 20 (Subparts D, F, G, H, I, and J), Technical Specifications, and procedures.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls (IP 71121.02)

a. Inspection Scope

The inspector reviewed the effectiveness of the licensee's program to maintain occupational radiation exposure as low as is reasonably achievable (ALARA).

Verification of Dose Estimates and Exposure Tracking Systems

The inspector examined a dose estimate document dated July 24, 2003 which was a product of the radiation protection group's involvement with the twelve-week work planning and management process. This document contained the daily dose estimates for the week of Monday, July 28, 2003 and broke the estimates down by work group, RWP, and work order. On July 29, 2003, the inspector reviewed the Oyster Creek Exposure Summary Report for July 28 thru August 3, 2003 which was used to track actual daily dose versus that estimated by work group. This document also provided the year-to-date actual cumulative dose versus the year-to-date goal.

The inspector performed a selective examination of documents (as listed in the List of Documents Reviewed section) for regulatory compliance and for adequacy of control of radiation exposure. The review was against criteria contained in 10 CFR 20.1101 (Radiation protection programs), 10 CFR 20.1701 (Use of process or other engineering controls), and procedures.

b. Findings

No findings of significance were identified.

2OS3 Radiation Monitoring Instrumentation (IP 71121.03)

a. Inspection Scope

The inspector reviewed the program for health physics instrumentation to determine the accuracy and operability of the instrumentation.

Verify Calibration, Operability, and Alarm Set point (if applicable) of Several Types of Instruments and Equipment

During the plant tours described in Section 2OS1, the inspector reviewed field instrumentation utilized by health physics technicians and plant workers to measure radioactivity and radiation levels, including portable field survey instruments, hand-held contamination frisking instruments, whole-body friskers, and portal monitors. The inspector conducted a selective review of the instruments observed in the toured areas, specifically for verification of: current calibrations, appropriate source checks, and proper function.

The inspector performed a selective examination of documents (as listed in the List of Documents Reviewed section) for regulatory compliance and adequacy in this area. The review was against criteria contained in 10 CFR 20.1501, 10 CFR 20 Subpart H, Technical Specifications, and procedures.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator (PI) Verification (IP 71151)

a. Inspection Scope

Four performance indicators were selected for review by the inspectors. The inspectors reviewed the Oyster Creek performance indicator (PI) data against applicable criteria specified in Nuclear Energy Institute (NEI) 99-02, Regulatory Assessment Performance

Indicator Guideline, Revision 2 (effective date of 19 November 2001), to verify that all conditions that met the NEI criteria were recognized and identified as PI occurrences. The inspectors verified the accuracy of the reported data through reviews of monthly operating reports, shift operating logs, Technical Specification logs, corrective action program records involving records of occurrences involving high radiation areas, very high radiation areas, unplanned personnel exposure, and monthly and quarterly gaseous and liquid effluent release reports (significant records reviewed by the inspector are listed in the Attachment to this report). The inspectors also observed a chemistry technician obtain and analyze a Reactor Coolant System sample. Except where noted below, the inspectors reviewed 12 months of reported data (from July 2002 - June 2003) for the following four PIs:

- Occupation Exposure Control Effectiveness (October 2002 to June 2003)
- RETS/ODCM Radiological Effluent Occurrences (October 2002 to June 2003)
- Reactor System Coolant Leakage
- Reactor Coolant System Specific Activity

b. Findings

No findings of significance were identified.

4OA2 Problem Identification and Resolution (IP 71152)

1. Annual Sample Review

a. Inspection Scope: Intake Canal Grass Diverter Bridge

The inspectors selected one CAP report for detailed review (CAP O2003-0317). In February 2003, the intake canal grass diverter bridge broke apart during a winter storm and lodged near the intake structure (see IR 02003-002, section 1R01). The inspectors reviewed corrective actions associated with the repair and reinstallation of the diverter bridge as part of the site summer readiness review (see IR 02003-003, section 1R01). An additional review of the diverter bridge corrective actions was performed as part of the site assessment for Hurricane Isabel preparations.

The CAP report was associated with a low intake level event causing a loss of service water and reactor building closed cooling water and degraded circulating water resulting in an immediate power reduction due to a failed grass diverter bridge that allowed a rapid increase in ice flow into the intake structure. The report was reviewed to ensure that the full extent of the issues were identified, an appropriate evaluation was performed, and appropriate corrective actions were specified and prioritized. The inspectors evaluated the reports against the requirements of the licensee's CAP as delineated in Procedure, LS-OC-125, "Corrective Action Program (CAP) Procedure," and 10 CFR 50, Appendix B.

b. Findings and Observations

There were no findings identified associated with the reviewed sample. The inspectors verified that the root cause evaluation and associated corrective actions were appropriate and timely, relative to the identified problem.

2. Selected Issue Follow-up

a. Inspection Scope

The inspectors reviewed selected corrective action reports (CAPs) to assess engineering performance of routine corrective action program requirements during the union strike. The reports were reviewed to ensure that the full extent of the issues were identified, an appropriate evaluation was performed and appropriate corrective actions were specified and prioritized. The inspectors evaluated the reports against the requirements of the AmerGen's corrective action program as delineated in LS-OC-125, "Corrective Action Program (CAP) Procedure." The CAPs reviewed are listed in the attachment.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up (IP 71153)

(Closed) Licensee Event Report 05000219/2003002-00. Completion of Reactor Shutdown Required by Technical Specifications

The LER was written to document the required reactor shutdown, which occurred on May 20, 2003, due to the loss of 4.16 kV vital bus 1C. The loss of the bus occurred when a normally energized cable connecting the bus to the emergency diesel generator output breaker experienced a ground fault. The inspectors determined that AmerGen had entered the issue into the Oyster Creek corrective action program (CAP No.02003-1000) to evaluate the root cause and take actions to prevent recurrence. This LER is closed.

4OA4 Cross-Cutting Issues other than PI&R

Section 1R22 describes an issue where a non-licensed operator failed to implement technical specification required procedures during the performance of a surveillance test on Core Spray System I. The event resulted in the loss of the 1A2 480V vital bus and associated safety and non-safety system equipment. This performance finding was considered to involve the cross-cutting aspect of human performance due to the failure to follow procedures.

4OA5 Other Activities

1. Continued Implementation of Strike Plans (IP 92711)

a. Inspection Scope

As a result of an 11-week strike that began May 22, 2003, the inspectors reviewed licensee compliance with technical specifications, verified staffing levels met the minimum requirements for emergency planning, fire protection, radiation protection, and licensed operators, and ensured facility security was maintained and unaffected by union picket line activity. Additionally, the inspectors observed shift turnovers, maintenance activities, licensed operator requalification training, and surveillance testing activities. The inspectors also verified that any backlog occurring in the corrective action program was being appropriately addressed by the licensee in accordance with plant procedures. The resident inspectors continued to observe a sample of critical activities until the strike ended on August 8, 2003, at which point Inspection Procedure 92712, Resumption of Normal Operations After a Strike was implemented (see section 4OA5.2).

b. Findings

No findings of significance were identified.

2. Resumption of Normal Operations After a Strike (IP 92712)

a. Inspection Scope

On August 8, 2003, the bargaining unit strike ended and the inspectors implemented the post strike inspection procedure (IP 92712). To better assess the performance of activities by both the augmented site staff during the strike and the returning staff after the 11-week strike during this inspection period, additional quarterly inspection samples were selected by the inspectors for review in the following areas: Equipment Alignment (1), Fire Protection (2), Licensed Operator Requalification Program (6), Maintenance Rule Implementation (1), Operability Evaluations (2), Surveillance Testing (4), Post-Maintenance Testing (1), and Emergent Work and Risk Assessment (1). (Note - the number of additional inspection samples above the nominal quarterly inspection requirements are in parentheses after each inspection area. See the individual sections in this report for the scope and findings for those inspection activities.)

In addition, the inspectors reviewed and assessed the reintegration of the returning staff as follows:

- Reviewed the Licensee Reintegration Plan in order to: verify an orderly turnover plan had been developed for all affected departments; verify the plan addressed training and qualification issues; verify the plan addressed employee concern issues stemming from the reintegration; verify the plan addressed any backlog issues in the engineering department; verify that deviations to the plan would be documented and addressed per the corrective action program; verify that Licensed Operator Requalification Program exemption request commitments were met; verify that plans were in place for Licensed Operators to complete all missed training/testing required for maintaining an active license per 10 CFR 55;

verify the plan included adequate measures to prevent tampering with plant equipment or data, as well as to promptly detect and react to tampering that might occur; verify the plan provided for appropriate decision-making in allowing individuals or groups to return to work in the plant.

- Reviewed the licensee's operations requalification training evaluations to verify that operators were proficient and to verify that operations shift crews were staffed as required by technical specifications.

- Reviewed a sample of training and qualification records for returning personnel in the maintenance, I&C, Rad Pro, Fire Protection, and Chemistry organizations to verify the records were current and personnel had up-to-date proficiency.

- Reviewed a sample of training records for returning personnel to verify they were cognizant of their Emergency Response Organization roles and responsibilities.

- Verified that security management and security officers had appropriately planned and prepared for emergent issues onsite involving possible wrongdoing, including tampering with important plant equipment.

- Observed a sample of control room shift turnovers to ensure issues and duties were communicated and deficiencies were understood.

- Observed a sample of job briefings, in all departments, for normal surveillance activities and emergent issues, to ensure personnel communication, procedure adherence, and job knowledge was adequate.

- Observed various department personnel during performance of maintenance activities to verify adequate job knowledge and procedure adherence.

- Reviewed and assessed the engineering corrective action backlog to determine if any risk significant issues had been deferred, and if so, how they were being addressed and may affect plant operation.

- Observed a sample of management/supervisor meetings discussing the performance of the returning staff in the conduct of normal duties to ensure that the Reintegration Plan

b. Findings

No findings of significance were identified.

3. (Closed) URI 05000219/2003003-04: NRC to review the adequacy of the radiological surveys and dose assessment for occupational exposure control for a reactor cavity entry on October 22, 2002.

During a previous inspection during the period of April 28 - May 2, 2003, the inspector had reviewed a radiological survey for an initial entry into the refueling cavity after drain down, dated October 21, 2002 (2345 hours) and identified the need for additional information to determine the adequacy of the radiological controls used for work in the surveyed area to control and assess workers' internal or external dose. The inspector indicated that the adequacy of the radiological surveys and dose assessment for occupational exposure control and assessment for the reactor cavity entry was an unresolved item (URI 50-219/03-03-04). During this current inspection, the inspector reviewed records and documentation which the licensee had retrieved from storage. Based on this data, the inspector determined that the radiological controls which had been provided were adequate, and the unresolved item is being closed.

4OA6 Meetings, including Exit

Exit Meeting Summary

On October 17, 2003, the resident inspectors presented the inspection results to Mr. Ernest Harkness and other members of licensee management. The licensee acknowledged the findings presented. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

4OA7 Licensee-Identified Violations

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

- Oyster Creek Technical Specification 6.13.1 requires, in part, that each high radiation area shall be barricaded and conspicuously posted as a high radiation area and controlled. Contrary to this requirement, on September 12, 2003, the licensee found that the open entrance leading to a high radiation area in a spent resin tank vault was not posted or controlled as a high radiation area for the previous 14 days. This event was identified in the licensee's corrective action program as CAP No. O2003-1843. This finding is of very low safety significance because it did not involve a very high radiation area or personnel overexposure.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee
M. Fillipone, Electrical Systems Manager
M. Godknecht, Maintenance Rule Coordinator
E. Harkness, Vice President
J. Magee, Director, Engineering
M. Massaro, Plant Manager
D. McMillan, Director, Training
J. O'Rourke, Assistant Engineering Director
T. Powell, BOP System Manager
D. Slear, Manager, Regulatory Assurance
B. Stewart, Senior Licensing Engineer
H. Trimble, Manager, Chemistry & Rad Protection
C. Wilson, Director, Operations

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

05000219/2003004-01	URI	Failure to implement a surveillance test procedure required by Technical Specifications. (Section 1R22)

Closed

05000219/2003003-04	URI	NRC to review the adequacy of the radiological surveys and dose assessment for occupational exposure control for a reactor cavity entry on October 22, 2002. (Section 4OA5)
05000219/2003002-00	LER	Completion of Reactor Shutdown Required by Technical Specifications. (Section 4OA3)

LIST OF DOCUMENTS REVIEWED
(not previously referenced)

Section 1R07:

Work Orders: A0705422, A0705623, A2060174.
Procedure No.322 Service Water System, Rev. 55.
Procedure No.607.4.004 Containment Spray and ESW System 1 Pump Operability and Comprehensive/Preservice/Post-Maintenance Inservice Test, Rev. 51.
Procedure No.607.4.005 Containment Spray and ESW System 2 Pump Operability and Comprehensive/Preservice/Post-Maintenance Inservice Test, Rev. 46.
UFSAR 9.2.1, "Station Service Water System."
UFSAR 6.2.2, "Containment Heat Removal System."
ESW System Health Reports: ESW System and Containment Spray System.
GPU Nuclear Letter: "NRC Generic Letter 89-13 Response," dated January 30, 1990; updated June 21, 1991, September 26, 1991, and January 13, 1992
NDE Data Report 2003-006-001, "Containment Spray Heat Exchanger Eddy Current Inspection (System 2), April 17, 2003.
Calculation C-1302-241-E120-085, "Containment Spray System Heat Exchanger Performance Evaluation, Rev. 1.
PM032601, TBCCW System annual instrument calibration.
PM00129M, TBCCW Heat Exchanger cleaning.
TBCCW System health Report, August 2003.
SDBD-OC-241, "Design Basis Document for Emerg. Service Water System," Rev. 3.
SDBD-OC-532, "Design Basis Document for Containment Spray System," Rev. 0.

Section 2OS1:

RWP OC-1-02-00407, Rev. 00, 1R19 refuel floor/reactor reassembly.
Oyster Creek radiological survey on 119 refuel floor for initial entry after cavity drain down on October 22, 2002 at 2345 hours.
ALARA Plan No. 2002-057E, Rev. 3, Refueling floor activities including reactor disassembly, defuel/refuel, in-vessel inspections and repairs, and reactor reassembly (RWPs OC-1-02-00404, -00406, and -00407).
ALARA work-in-progress review for ALARA Plan No. 2002-057E/RWP OC-1-02-00407, 1R19 refuel floor reactor reassembly.
ALARA post-job review for ALARA Plan No. 2002-057E, Rev. 3, Refueling floor activities including reactor disassembly, defuel/refuel, in-vessel inspections and repairs, and reactor reassembly (RWPs OC-1-02-00404, -00406, and -00407).
Teledyne Brown Engineering Report of Analysis/Certificate of Conformance for twelve swipes (reactor building, old and new radioactive waste buildings, and turbine building), January 20, 2003.
Review of air sample logs for October 21, 22, and 23, 2002 in accordance with Procedure 6630-ADM-4212.01 (Air sample collection and analysis).
DAC-Hour assignment sheets for October 22, 2002 (reactor building, 119 ft level).
Gamma spectroscopy counting results for October 22, 2002.
Written account of reactor cavity survey dated October 22, 2002.

Oyster Creek Radiation Protection Observation Scorecards for March through July 2003.
Oyster Creek Nuclear Oversight Continuous Assessment Process Exit Presentation for period covering April 1 through June 30, 2003.
Health Physics Department Reintegration Plan, August 1, 2003.
Oyster Creek Exposure Summary Report (July 28 thru August 3, 2003).
Dose estimate for week zero on week E-1 (12-week planning process).
Operating Experience Report on Supplied Air Hood Air Line Connection, May 2003.
CAP No. O2003-1512, 10 CFR 20.1703(f) compliance/fleet common procedure due by September 1, 2003.

Section 4OA2,2 Corrective Action Program Reports (CAPs) Special Issue Review

O2003-1266, O2000-0426, O2000-1876, O2001-0094, O2001-0535, O2001-1139, O2001-1341, O2001-1342, O2001-1393, O2001-1615, O2002-0201, O2003-0808, O2003-0833, O2003-1778, O2003-0473, O2003-0616, O2003-0956, O2003-0957, O2003-1242, O2003-1346, O2003-1420, O2003-1427, O2003-1468, O2003-1111, O2003-0770.

LIST OF ACRONYMS

ADAMS	Agencywide Documents Access and Management System
AEOG	Air Ejector Off Gas
ALARA	As Low As Is Reasonably Achievable
AmerGen	AmerGen Energy Company, LLC
AR	Action Request
CAP	Corrective Action Process
CFR	Code of Federal Regulations
CRD	Control Rod Drive
CS	Containment Spray
DR	Design Request
ECR	Engineering Change Request
EDG	Emergency Diesel Generator
EMRV	Electromatic Relief Valve
ESW	Emergency Service Water
HRA	High Radiation Area
IC	Isolation Condenser
ICMs	Interim Compensatory Measures
IMC	Inspection Manual Chapter
IPEEE	Individual Plant Examination for External Events
JO	Job Order
LER	Licensee Event Report
LHRA	Locked High Radiation Area
MSIV	Main Steam Isolation Valve

NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
OHS	Office of Homeland Security
OS	Occupational Safety
PI	Performance Indicator
PI&R	Problem Identification & Resolution
PMT	Post Maintenance Test
PSIG	Pounds per Square Inch Gauge
RBCCW	Reactor Building Closed Cooling Water
RCA	Radiologically Controlled Area
RCS	Reactor Coolant System
RETS	Radiological Effluent Technical Specifications
RIS	Regulatory Information Summary
RO	Reactor Operator
RPS	Reactor protection System
RWP	Radiation Work Permit
SDIV	Scram Discharge Instrument Volume
SDP	Significance Determination Process
SRM	Source Range Monitor
SRO	Senior Reactor Operator
SSC	System, Structure, Component
ST	Surveillance Test
TBCCW	Turbine Building Closed Cooling Water
TS	Technical Specification
UFSAR	Updated Final Safety Analysis Report
URI	Unresolved Item
WO	Work Order