July 25, 2005

Mr. Christopher M. Crane President and CEO AmerGen Energy Company, LLC 200 Exelon Way, KSA 3-E Kennett Square, PA 19348

SUBJECT: OYSTER CREEK GENERATING STATION - NRC INTEGRATED INSPECTION REPORT 05000219/2005003

Dear Mr. Crane:

On June 30, 2005, 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 July 11, 2005, with Mr. C. N. Swenson 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.

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

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

We appreciate your cooperation. Please contact me at (610) 337-5200 if you have any questions regarding this letter.

Sincerely,

/RA/

Ronald R. Bellamy, Ph.D., Chief Projects Branch 7 Division of Reactor Projects

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

Enclosure: Inspection Report 05000219/2005003 w/Attachment: Supplemental Information cc w/encl:

Chief Operating Officer, AmerGen Site Vice President, Oyster Creek Nuclear Generating Station, AmerGen Plant Manager, Oyster Creek Generating Station, AmerGen Regulatory Assurance Manager Oyster Creek, AmerGen Senior Vice President - Nuclear Services, AmerGen Vice President - Mid-Atlantic Operations, AmerGen Vice President - Operations Support, AmerGen Vice President - Licensing and Regulatory Affairs, AmerGen Director Licensing, AmerGen Manager Licensing - Oyster Creek, AmerGen Vice President, General Counsel and Secretary, AmerGen T. O'Neill, Associate General Counsel, Exelon Generation Company J. Fewell, Assistant General Counsel, Exelon Nuclear Correspondence Control Desk, AmerGen J. Matthews, Esquire, Morgan, Lewis & Bockius LLP Mayor of Lacey Township J. Lipoti, Ph.D., Assistant Director of Radiation Programs, State of New Jersey K. Tosch - Chief, Bureau of Nuclear Engineering, NJ Dept. of Environmental Protection R. Shadis, New England Coalition Staff N. Cohen, Coordinator - Unplug Salem Campaign W. Costanzo, Technical Advisor - Jersey Shore Nuclear Watch E. Gbur, Chairwoman - Jersey Shore Nuclear Watch

E. Zobian, Coordinator - Jersey Shore Anti Nuclear Alliance

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U. S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.:	50-219
License No.:	DPR-16
Report No.:	05000219/2005003
Licensee:	AmerGen Energy Company, LLC (AmerGen)
Facility:	Oyster Creek Generating Station
Location:	Forked River, New Jersey
Dates:	April 1, 2005 - June 30, 2005
Inspectors:	Robert Summers, Senior Resident Inspector Amar Patel, Resident Inspector Jeff Herrera, Resident Inspector Ronald Nimitz, Senior Health Physicist Andrew Rosebrook, Project Engineer Stephen Barr, Senior Operations Engineer Julian Williams, Operations Engineer
Approved By:	Ronald R. Bellamy, Ph.D., Chief Projects Branch 7 Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000219/2005003; 04/01/05 - 06/30/05; Oyster Creek Generating Station; routine integrated report.

This report covers a 13-week period of inspection by resident inspectors, a project engineer, and announced inspections by a regional senior health physics inspector and two operations engineers. 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

None.

REPORT DETAILS

Summary of Plant Status

Oyster Creek began the inspection period at 100% Rated Thermal Power (RTP). On April 16, 2005, power was reduced to 60% RTP to conduct scheduled maintenance on the "B" main feedwater regulating valve and to repair a leak on the turbine drain system main flash tank. Full power operation was restored on April 17. On May 14, power was reduced to 72% RTP to conduct scheduled maintenance and testing on 20 control rods and perform a rod sequence swap. Full power operation was restored on May 15. On June 1, at 9:09 pm, a reactor scram and turbine trip resulted from a grid disturbance. Following a post-scram review, the reactor was made critical at 5:11 pm on June 3, and 100% RTP operation was restored at 1:30 pm on June 4. The unit was operated at or near full power for the remainder of the inspection period, except for minor power changes to support scheduled maintenance and testing.

1. REACTOR SAFETY

Cornerstones: Initiating Events/Mitigating Systems/Barrier Integrity

- 1R01 Adverse Weather Protection (71111.01 2 Samples)
- a. Inspection Scope

This activity represented two inspection samples. The inspectors reviewed Oyster Creek's seasonal readiness preparations to verify that safety-related equipment would remain functional when challenged by summer weather conditions. The inspectors reviewed the licensee's seasonal readiness procedure (OP-AA-108-109, Seasonal Readiness, Rev. 1), seasonal check lists, and performed walk downs to verify that the safety-related equipment would remain functional during adverse weather conditions. The inspectors evaluated the condition of the Emergency Service Water System, Service Water System, Recirculation Motor-Generator Set Coolers, Circulating Water System, Electrical Switchyard, and Emergency Diesel Generators prior to the onset of summer weather conditions.

The inspectors also reviewed a sample of deficiencies associated with Oyster Creek's summer readiness action item list to verify that problems were entered into the corrective action program and appropriately addressed for resolution in a timely manner.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04 - 4 Samples)

- 1. <u>Partial System Walkdown</u>. (71111.04Q 3 Samples)
- a. Inspection Scope

This activity represented three inspection samples. The inspectors performed three partial system walkdowns during this inspection period. To evaluate the operability of the selected system(s), the inspectors checked for a correct valve lineup by comparing positions of valves with system drawings, as well as examining overall system material condition. The results of inspections, as well as minor deficient equipment conditions identified by the inspector, were discussed with the appropriate system engineers and operations staff to ensure entry into the corrective action program.

This inspection activity involved the following systems:

- Emergency Diesel Generator (EDG) #1 during EDG #2 maintenance on May 16, 2005
- Containment Spray/Emergency Service Water System (CS/ESW) #1 during CS/ESW #2 testing on April 21, 2005
- C Isolation Condenser System (IC) Train "A" during IC Train "B" testing on April 12, 2005
- b. Findings

No findings of significance were identified.

- 2. <u>Complete System Walkdown</u> (71111.04S 1 Sample)
- a. Inspection Scope

This activity represented one inspection sample. The inspectors conducted a detailed review of the alignment and conditions of EDG #2 after completion of the 24-month maintenance activity on May 23, 2005. The inspectors used the licensee procedures and the below listed documents to verify proper system alignment.

- C Procedure 341, Emergency Diesel Generator Operation, Rev. 71
- C Procedure 337, 4160 Volt Electrical System, Rev. 59
- C Drawing, BR 3001, Emergency Power System One Line Diagram
- C Drawing, 8397907 SH.8, Emergency Diesel Generator No. 2 Elementary Diagram

- C Drawing, 3E-157-02-001, General Arrangement Diesel Generator Building
- C Drawing, 3E-862-21-1000, Diesel Generator Fuel Oil Storage and Transfer System
- b. <u>Findings</u>

No findings of significance were identified.

- 1R05 Fire Protection (71111.05Q 9 Samples)
- a. Inspection Scope

This activity represented nine inspection samples. The inspectors walked down accessible portions of the nine fire zones noted below due to the potential impact to mitigating systems. Plant walkdowns included observations of combustible material control, fire detection and suppression equipment availability, and compensatory measures. As part of the inspection, the inspectors had discussions with fire protection personnel, and reviewed procedure 333, "Plant Fire Protection System," OP-AA-201-009, "Control of Transient Combustible Material," 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.

- C Circulatory Water Intake Area, Service Water Pumps, Emergency Service Water Pumps, and the Circulating Water Pumps on April 28, 2005
- C OB-FZ-BA, Reactor Recirculating Water System Motor-Generator Set Room on May 12, 2005
- C RB-FZ-1F3, Core Spray System 1 area on May 17, 2005
- C RB-FZ-1F1, Containment Spray Northeast Corner Room on May 30, 2005
- C RB-FZ-1F4, Containment Spray Southeast Corner Room on May 30, 2005
- C DG-FA-15, EDG #1 Room on May 31, 2005
- C DG-FA-17, EDG #2 Room on May 31, 2005
- C TB-FA-2C, "C" 125 Volt Battery Room on June 8, 2005
- C RB-FZ-1B, IC System area 95 ft elevation on June 9, 2005
- b. <u>Findings</u>

No findings of significance were identified.

1R06 <u>Flood Protection Measures</u> (71111.06 - 2 samples)

- 1. <u>External</u>
- a. Inspection Scope

This activity represented two inspection samples. The inspectors reviewed the Oyster Creek Individual Plant Examination of External Events, Section 5.2, "External Floods," Technical Specifications (TS), and the Updated Final Safety Analysis Report (UFSAR), Section 2.4.2 concerning flood design considerations. The inspectors reviewed the procedure for "Response to Abnormal Intake Level," ABN-32, Rev. 3, and conducted a walkdown of the following outside buildings to verify that flood protection features were being maintained.

- C Fire Diesel Pump Room
- C Emergency Diesel Generator Rooms
- C Intake Structure
- C Standby Gas Treatment and Off-Gas Building Area

b. Findings

No findings of significance were identified.

- 2. Internal
- a. Inspection Scope

The inspector verified that operator actions to mitigate flooding described in section 10.7. of the Oyster Creek Internal Flooding Analysis, dated November 1991, were appropriately addressed in abnormal and emergency procedures. A walkdown was conducted of the northwest corner room, which contains the Control Rod Drive (CRD) Pumps and the "A" and "C" Core Spray Pumps (System I) to verify that internal flood protection features were being maintained.

b. <u>Findings</u>

No findings of significance were identified.

1R11 <u>Licensed Operator Requalification</u> (71111.11 - 2 Samples)

1. <u>Quarterly Review</u> (71111.11Q - 1 Sample)

a. Inspection Scope

This activity represented one inspection sample. This inspection assessed the Licensed Operator Requalification Training (LORT) provided to the SROs and the ROs and the evaluation conducted on the simulator on June 24, 2005. The inspectors assessed the proficiency of the operating crew and verified that the evaluations of the crew 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 training included two scenarios involving: a 480 volt bus malfunction, an RCS leak, and an Anticipated Transient Without Scram (ATWS) with Alternate Rod Insertion (ARI) recovery; and, a control rod malfunction, RCS leak, an ATWS, and a loss of CRD. The scenarios were part of the biennial LORT examination process and involved about three hours of testing/evaluation. The inspectors assessed the simulator crew's performance during the scenario. The inspectors 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.

b. Findings

No findings of significance were identified.

- 2. <u>Biennial Review</u> (71111.11B 1 Sample)
- a. Inspection Scope

Inspection activities were performed using NUREG-1021, Rev. 9, "Operator Licensing Examination Standards for Power Reactors," Inspection Procedure Attachment 71111.11, "Licensed Operator Requalification Program," and NRC Manual Chapter 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process (SDP)," as acceptance criteria, 10 CFR 55.46 Simulator Rule (sampling basis).

The inspectors reviewed documentation of operating history since the last requalification program inspection. The inspectors also discussed facility operating events with the resident staff. Documents reviewed included NRC inspection reports and licensee Corrective Action Program (CAP) Reports that involved human performance and TS compliance issues. Specifically, the inspectors reviewed the following plant CAP Reports:

- CAP O2004-3994: Half scram on reactor water level (see 71152 Sample inspection in Section 4OA2)
- CAP O2004-4012: Bypass of containment ventilation and purge during plant startup
- CAP O2005-0344: Startup of B CRD pump resulted in unexpected power escalation to 1937 MWt
- CAP O2005-0573: Three incidents of reactivity excursions within past two months.

The inspectors reviewed three comprehensive biennial written exams and two quizzes administered in 2005. The inspectors reviewed three simulator scenarios in each of the two weeks of the inspection and five job performance measures (JPMs) administered during the inspection, to ensure the quality of these exams met or exceeded the criteria established in the Examination Standards and 10 CFR 55.59.

The inspectors observed the administration of operating examinations to two crews (i.e., Operating Crews "B" and "C"). The inspectors observed the administration of three simulator scenarios for each operating crew and an additional two for Crew "B" as part of that crew's remediation following their failure during one of their initial scenarios. The inspectors also observed one set of five (two in-plant and three control room) JPMs administered to each individual of Crew "B." As part of the examination observation, the inspectors assessed the adequacy of licensee examination security measures.

The inspectors interviewed four evaluators, two training supervisors, three ROs, and four SROs for feedback regarding the implementation of the licensed operator requalification program. The inspectors also reviewed the Limited Focused Area Self-Assessment on Operator Training Program (December 2003), latest Accreditation Self-Evaluation Report (July 2004), End-of-Cycle reports for Cycles 05-01and 05-02, Check-In Report on simulator exercise guides (April 2005), Operations Training Deficiencies Escalation letter and resulting OC Training Improvement Plan (March 2005), and recent plant and industry events to ensure that the training staff modified the program when appropriate to recommended changes.

Remedial training was assessed through the review of evaluation records for the past two years, to ensure remediation plans were unique to the individual failures, timely, and effective. Specifically, the inspectors reviewed 24 remedial training packages implemented over the last two years; all failures requiring remediation were on written quiz and exam performance. The inspectors also reviewed the remediation package for the observed Crew "B" simulator scenario crew failure and observed the "out-of-the-box" scenario evaluation following the crew's remedial training.

Conformance with operator license conditions was verified by reviewing the following records:

- Attendance records for the last two-year training cycle,
- 12 medical records (25% of all licensed operators) to confirm all records were

complete, that restrictions noted by the doctor were reflected on the individuals' license and that the exams were given within 24 months, and

• Proficiency watch-standing and reactivation records for all active operator licenses.

The inspectors observed simulator performance during the conduct of the examinations, and reviewed simulator performance tests and discrepancy reports to verify compliance with the requirements of 10 CFR 55.46. Oyster Creek is committed to the ANSI 3.5-1985 standard. The inspectors reviewed simulator configuration control and performance testing through interviews and the review of facility simulator procedures, open and closed simulator issue reports and maintenance orders, and the review of test results. Specifically, the following tests were reviewed:

Normal, Malfunction and Transient tests:

- TTS71, Simultaneous Closure of All MSIVs
- TS05, Loss of Offsite Power Sources
- NOT17, Core Spray Pump Operability Test
- TTS69, Manual Reactor Scram

Core Performance test:

• NOT09, Shutdown Margin Test

Steady-State test:

• SSP03, 39% Steady State Accuracy Test

Actual Plant Transient Comparison test:

• Draft comparison of simulator vs. plant response for June 1, 2005, plant scram

On July 5, the inspectors conducted an in-office review of licensee requalification exam results. The inspection assessed whether pass rates were consistent with the guidance of NRC Manual Chapter 0609, Appendix I, "Operator Requalification Human Performance Significance Determination Process (SDP)." The inspectors verified:

- Crew failure rate on the dynamic simulator was less than or equal to 20%. (Failure rate was 12.5%.)
- Individual failure rate on the dynamic simulator test was less than or equal to 20%. (Failure rate was 12.5%.)
- Individual failure rate on the walkthrough test (JPMs) was less than or equal to 20%. (Failure rate was 0%.)
- Individual failure rate on the comprehensive biennial written exam was less than or equal to 20%. (Failure rate was 8.3%.)
- More than 75% of the individuals passed all portions of the exam. (79.2% of the individuals passed all portions of the exam.)

b. Findings

No findings of significance were identified.

1R12 <u>Maintenance Rule Implementation</u> (71111.12Q - 3 Samples)

a. Inspection Scope

This activity represented three inspection samples. The inspectors reviewed AmerGen'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 discussed the current system performance, associated issues and concerns, and planned activities to improve performance with the system engineers, and also reviewed AmerGen performance trending data for the selected systems. Plant Health Committee presentations were reviewed. In addition, unavailability data was compared with control room log entries to verify accuracy of data and compliance with (a)(1) goals. The three SSCs reviewed during the inspection period were:

- C Main Switchyard
- C EDG #1
- C EDG #2
- b. Findings

No findings of significance were identified.

1R13 <u>Maintenance Risk Assessment and Emergent Work Evaluation</u> (71111.13 - 5 Samples)

a. Inspection Scope

This activity represented five inspection samples. The inspectors evaluated five on-line risk work activities and verified that the licensee evaluated the risk associated with the inoperability of the system along with other ongoing maintenance work. In addition, the inspectors reviewed work schedules, recent corrective action documents, troubleshooting plans, repair and retest results, and control room logs to verify that other concurrent planned and emergent maintenance or surveillance activities did not adversely affect the plant risk already incurred with the out of service components. The inspectors assessed AmerGen's risk management actions during shift turnover meetings, control room tours, and plant walkdowns. The inspectors also used AmerGen's on-line risk assessment monitor (ORAM Sentinel) to evaluate the risk

associated with the plant configuration and to assess AmerGen's risk management. When appropriate, the inspectors verified compliance with TSs. The following activities were reviewed:

- C Half Scram events on April 8, 2005, due to loose connection on the Main Steam Isolation Valve (MSIV) Position Limit Switches
- C EDG #1 routine 6 month maintenance during the week of May 3, 2005
- C EDG #2 routine 24 month maintenance during the week of May 15, 2005
- C "B" CRD Pump Motor replacement emergent work May 17, 2005
- C 34.5 kV Bank 5 Voltage Regulator replacement emergent work on May 18, 2005

b. Findings

No findings of significance were identified.

- 1R14 Personnel Performance During Non-routine Plant Evolutions (71111.14 2 Samples)
- a. Inspection Scope

This activity represented two inspection samples. The inspectors interviewed plant operators and system engineers, and reviewed operator logs and plant computer data to determine the nature and cause of the non-routine evolution, as well as the operator's response, to determine if the response was in accordance with plant procedures. The following non-routine plant evolutions were reviewed:

- C Response to the 34.5 kV Bank 5 Voltage Regulator loss (off-site power source) while EDG #2 was inoperable due to a maintenance overhaul on May 18, 2005
- C Reactor scram event due to a grid disturbance on the 230 kV distribution system that caused a load reject on June 1, 2005
- b. Findings

No findings of significance were identified.

- 1R15 Operability Evaluations (71111.15 4 Samples)
- a. Inspection Scope

This activity represented four inspection samples. 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 appropriate action if a component was determined to be inoperable. The inspectors verified that the TS limiting conditions for operation were properly addressed. The four selected samples are listed below:

- C "A" Standby Liquid Control Pump (CAP O2005-1503) during the week of April 4, 2005, and Operability Evaluation, OC-2005-OE-0002.
- C "B" CRD Pump Trip Alarm (CAP O2005-1556) during the week of April 8, 2005, and Operability Evaluation, OC-2005-OE-0003.
- C Bank 5 Voltage Regulator Battery (CAP O2005-2163) during the week of May 20, 2005.
- C "B" CRD bearing oil discoloration (CAP O2005-2201 and Action Request 2115981) during the week of May 20, 2005.

b. Findings

No findings of significance were identified.

- 1R16 Operator Work-Arounds (71111.16 1 Sample)
- a. Inspection Scope

This activity represented one inspection sample. 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 Operator Work-Around Board meeting for June was observed by the inspector. This board reviewed the entire database to ensure that appropriate actions are planned to remove the identified work-arounds and reduce the burden on the operating staff.

The inspector selected a work-around that involved replacement of the fire protection wrap around the electrical penetrations in the turbine building basement per work order (WO) A2077583. The materials were subjected to frequent wetting by ground water inleakage that degraded the fire protection capability. As a result, operators had to frequently tour the affected fire area to ensure that combustible materials and ignition sources were adequately controlled to prevent fires that would challenge the degraded fire wrap. This work-around also affected the plant fire brigade response to the area due to the degraded conditions. During May and June 2005, the degraded fire wrap was removed and replaced with a new material that is designed to be protected from degradation by ground water intrusion. The inspector observed portions of the installation of the new materials and monitored the corrective action implementation. At the end of this inspection period, the new fire wrap had been fully installed, removing this concern from the operator work-around list. The inspector reviewed CAP Nos.

O2002-1656, O2003-2532, and O2004-0777 to verify that the corrective actions addressed the identified problems. The permanent modification, installing the new fire wrap, will be inspected further to ensure that the materials are appropriately qualified and that the modification was reviewed and approved.

b. Findings

No findings of significance were identified.

- 1R19 Post-Maintenance Testing (71111.19 6 Samples)
- a. Inspection Scope

This activity represented six inspection samples. The inspector reviewed and observed portions of post-maintenance testing associated with the six maintenance activities listed below, because of their function as mitigating systems or 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:

- C IC System Train "A" Valve Operability and In-Service Test per procedure 609.4.001, following "A" IC Shell Water Level Instrument Calibration on April 12, 2005
- C Reactor Recirculation System Pump "B" Motor Generator Set Test per WO C2009833, following brush refurbishment on April 19, 2005
- C EDG #2 Fast Start Test per procedure 636.4.016, following 24-month maintenance on May 20, 2005
- C 34.5 kV Distribution System Bank 5 Voltage Regulator Test per procedure 337 and WO C2010518, following regulator controller replacement on May 18, 2005
- C "B" CRD Pump Operability Test per procedure 617.4.001, following motor replacement on May 19, 2005
- C Standby Gas Treatment System 2 Operability Test per procedure 651.4.001, following control relay replacement on May 31, 2005
- b. Findings

No findings of significance were identified.

1R20 <u>Refueling/Forced Outage Activity</u> (71111.20 - 1 Sample)

Routine Outage Activities

a. Inspection Scope

This activity represented one inspection sample. The inspectors reviewed and observed various risk significant activities associated with the forced outage, which began on June 1, 2005, and ended on June 4, 2005. These inspections included:

- C Portions of the reactor shutdown evolutions.
- C Overall outage schedule risk assessment.
- C Availability and adequacy of reactor water level and temperature instrumentation during transient and shutdown conditions.
- C Availability of protected equipment as specified by the daily shutdown risk assessment.
- C Portions of the reactor startup including approach to criticality and reactor heat up.
- b. Findings

No findings of significance were identified.

- 1R22 <u>Surveillance Testing</u> (71111.22 6 Samples)
- a. Inspection Scope

This activity represented six inspection samples. The inspectors observed and reviewed the Surveillance Tests (ST) listed below, concentrating on verification of the adequacy of the test as required by TS to demonstrate operability of the required system or component safety function. The inspector observed pre-test briefings and portions of the ST performance for procedure adherence, and verified that the resulting data associated with the ST met the requirements of the plant TS and the UFSAR. The inspector also reviewed the results of past tests for the selected ST to verify that degraded or non-conforming conditions were identified and corrected, if needed. The following six activities were reviewed:

- C IC System Train "B" Shell Water Level Instrument Calibration and Test per procedure 609.3.008, on April 14, 2005
- C Reactor Coolant System Unidentified Leak Rate Test per procedure 681.4.004 on April 18, 2005, when RCS leak rate increased to Action Level III per NRC Manual Chapter 2515 App. D, Plant Status

- C Containment Spray and Emergency Service Water Pump System 2 Operability and Quarterly In-Service Test per procedure 607.4.017, on April 21, 2005
- C EDG #2 Load Test per procedure 636.4.013, on May 20, 2005
- C Core Spray System 2 Instrument Calibration and Test per procedure 610.3.205, on May 25, 2005
- C Local Shutdown Panel Test per procedure 680.4.003, on May 13, 2005
- b. Findings

No findings of significance were identified.

- 1R23 <u>Temporary Plant Modifications</u> (71111.23 1 Sample)
- a. <u>Inspection Scope</u>

This activity represented one inspection sample. The inspectors reviewed a Temporary Modification (TM) associated with Reactor Protection System Channel 2, relays 2K17 and 2K51. The inspectors reviewed the associated implementing documents to verify the plant design basis and the system or component operability was maintained, which included CC-AA-112, "Temporary Configuration Changes," Rev. 6. The TM allowed for continued operability of the Main Steam Isolation Valve Position Limit Switch instrumentation associated with the scram function relays. This was required when the normal closed limit switch failed. Repair of the normal closed limit switch would require entry into the drywell and a forced outage. The TM consisted of using previously installed valve position limit switches in place of the scram limit switches per Engineering Change Request (ECR) #05-00265. The new position limit switch slightly altered the design of the scram limits (from 10 % to 5 % of travel in the closed direction). A 10 CFR 50.59 Screening Evaluation (OC-2005-S-0128) was reviewed by the inspectors to verify that the new limits would meet the TS requirements for the scram function. The inspectors reviewed CAP Nos. O2005-1644 and O2005-1695 that described this concern and identified the corrective actions. The TM was an interim action, with final resolution to occur during a planned outage. The inspectors also observed portions of the testing of the scram function after the TM was installed on April 16, 2005.

b. <u>Findings</u>

No findings of significance were identified.

Cornerstone: Emergency Preparedness [EP]

- 1EP4 <u>Emergency Action Level (EAL) and Emergency Plan (E-Plan) Changes</u> (71114.04 - 1 Sample)
- a. Inspection Scope

This activity represented one inspection sample. During the period of April 1 -June 23, 2005, the NRC has received and acknowledge the changes made to Oyster Creek's E-Plan in accordance with 10 CFR 50.54(q), which AmerGen had determined resulted in no decrease in effectiveness to the Plan and which have concluded to continue to meet the requirements of 10 CFR 50.47(b) and Appendix E to 10 CFR 50. The inspector conducted a sampling review of the Plan changes which could potentially result in a decrease in effectiveness. This review does not constitute an approval of the changes and, as such, the changes are subject to future NRC inspection. The inspection was conducted in accordance with NRC Inspection Procedure 71114, Attachment 4, and the applicable requirements in 10 CFR 50.54(q) were used as reference criteria.

b. Findings

No findings of significance were identified.

- 1EP6 <u>Drill Evaluation</u> (71114.06 1 Sample)
- a. <u>Inspection Scope</u>

This activity represented one inspection sample. The inspectors observed an emergency preparedness (EP) drill from the control room simulator, the technical support center, and the new Emergency Operations Facility (EOF) on April 13, 2005. The inspectors evaluated the conduct of the drill and AmerGen's performance related to emergency action level classifications, notifications, and protective action recommendations. The drill scenario contained four opportunities that contributed to the NRC Drill/Exercise Performance (DEP) performance indicator. However, during the drill a problem occurred with the plant simulator which prevented all but the initial classification and notification opportunity from being demonstrated.

The inspectors reviewed the following documents:

- Oyster Creek EP Drill, April 13, 2005
- C CAP O2005-1800, EP areas for improvement identified during the drill

b. <u>Findings</u>

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiologically Significant Areas (71121.01 - 9 Samples)

a. <u>Inspection Scope</u>

This activity represented nine inspection samples. The inspector reviewed selected activities, and associated documentation, in the below listed areas. The evaluation of AmerGen's performance was against criteria contained in 10 CFR 20, applicable TSs, and station procedures.

Inspection Planning - Performance Indicators

The inspector reviewed performance indicators (PIs) for the Occupational Exposure Cornerstone. The inspector also discussed and reviewed current performance, relative to the indicators, with cognizant AmerGen personnel.

Plant Walkdowns, RWP Reviews, and Jobs in Progress Reviews

The inspector toured the station and reviewed selected exposure significant work areas within the radiological controlled areas. The inspector made independent radiation surveys during the tours and reviewed housekeeping, material conditions, posting, barricading, and access controls to determine if radiological controls were acceptable. The inspector determined if prescribed radiation work permit (RWP), procedure, and engineering controls were in place, as applicable. The inspector observed on-going activities associated with RWP No. 65 (Fuel Verification) and RWP 80 (Torus Work). The inspector also attended a pre-job briefing associated with RWP 69 (De-sludging). The inspector selectively reviewed conformance with applicable RWP requirements. The inspector reviewed implementation of TS High Radiation Area (HRA) controls and reviewed the adequacy of electronic dosimeter setpoints. The inspector observed on-going spent fuel pool inventory activities.

The inspector reviewed and discussed internal dose assessments for 2005 (as of the time of the inspection), to identify apparent occupational internal doses greater than 50 millirem committed effective dose equivalent (CEDE). The review also included the adequacy of evaluation of airborne radioactivity controls and potential intakes associated with hard-to-detect radionuclides (e.g., transuranics). The inspector also selectively reviewed instances of personnel contamination.

The inspector reviewed physical and programmatic controls for highly activated or contaminated non-fuel material stored within the spent fuel pool.

Problem Identification and Resolution

The inspector selectively reviewed self-assessments and audits since the previous inspection to determine if identified problems were entered into the corrective action program for resolution. The inspector evaluated the database for repetitive deficiencies or significant individual deficiencies to determine if self-assessment activities were identifying and addressing the deficiencies. The review also included evaluation of data to determine if any problems involved PI events with dose rates greater that 25 R/hr at 30 centimeters, greater than 500 R/hr at 1 meter or unintended exposures greater than 100 millirem total effective dose equivalent (TEDE), 5 rem shallow dose equivalent (SDE), or 1.5 rem lens dose equivalent (LDE).

The review also included a review of problem reports since the last inspection which involved potential radiation worker or radiation protection personnel errors to determine if there was an observable pattern traceable to a similar cause. The review included an evaluation of corrective actions, as appropriate. (See Section 4OA2)

High Risk Significant, High Dose Rate HRA and Very HRA Controls

The inspector discussed procedure changes for HRA Access controls since the last inspection with the Radiation Protection Manager and selected supervisors to determine if the changes resulted in a reduction in the effectiveness and level of worker protection. During station tours, the inspector selectively reviewed implementation of HRA controls and discussed HRA controls with in-field, lead radiological controls personnel. Posting, barricading, and locking of HRAs was reviewed.

Radiation Worker Performance

During station tours, the inspector observed radiation worker performance with respect to stated RWP requirements. The inspector selectively questioned workers to determine if they were aware of the significant radiological conditions in their workplace, what RWP controls/limits were in place, and whether their performance took into consideration the level of radiological hazards present.

The inspector reviewed all radiological problem reports since the last inspection to identify radiation worker errors traceable to a similar cause. Corrective actions were reviewed.

Radiation Protection Technician Proficiency

The inspector observed radiation protection technician performance with respect to radiation protection work requirements to determine if they aware of the radiological conditions in their workplace and the RWP controls/limits, and if their performance was consistent with expectations for potential radiological hazards present.

The inspector reviewed all radiological problem reports since the last inspection to identify radiation protection technician errors traceable to a similar cause. Corrective actions were reviewed.

b. Findings

No findings of significance were identified.

2OS2 ALARA Planning and Controls (71121.02 - 7 Samples)

a. Inspection Scope

This activity represented seven inspection samples. The inspector conducted the following activities to determine if AmerGen was implementing operational, engineering, and administrative controls to maintain personnel occupational radiation exposure as low as is reasonably achievable (ALARA). The review was against the criteria contained in 10 CFR 20 and applicable industry standards and station procedures.

Inspection Planning

The inspector selectively reviewed pertinent information regarding station collective dose history, current exposure trends, and ongoing or planned activities in order to assess current performance and exposure challenges.

The inspector determined the site specific trends in collective exposures (using NUREG-0713 and plant historical data) and source-term (average contact dose rate with reactor coolant piping) measurements. The inspector selectively reviewed site specific procedures associated with maintaining occupational exposures ALARA.

Radiological Work Planning

The inspector selectively reviewed ALARA planning and preparation, as applicable, for the work tasks discussed in Section 2OS1, including use of engineering and work controls, based on sound radiation protection principles, to achieve occupational exposures that were ALARA. The inspector reviewed the planning and preparation for those work activities to determine if ALARA requirements were integrated into work procedure and RWP documents.

Job Site Inspections and ALARA Control

The inspector evaluated the use of ALARA controls for the work described in Section 2OS1 by reviewing use of engineering controls, implementation of ALARA procedures and controls, and use of shielding. The inspector also reviewed job supervisor oversight to ensure the work activities were conducted in a dose efficient manner (e.g., work crew size minimized, workers properly trained, proper tools and equipment).

Source-Term Reduction and Control

The inspector selectively reviewed AmerGen's evaluations, in the area of source term controls. In particular, the inspector reviewed AmerGen's Co-60 source term control efforts.

Radiation Worker/Radiation Protection Technician Performance

The inspector selectively observed radiation worker and radiation protection technician performance during work activities being performed in radiation areas, airborne radioactivity areas, or HRAs. The inspector reviewed activities that presented the greatest radiological risk to workers to determine if workers demonstrated the ALARA philosophy in practice (e.g., were workers familiar with the work activity scope and tools to be used, were workers utilizing ALARA low dose waiting areas) and whether there were any procedure compliance issues (e.g., work activity controls compliance).

Declared Pregnant Workers

The inspector selectively reviewed exposure control and monitoring for declared pregnant workers.

Problem Identification and Resolutions

The inspector reviewed self-assessments, audits, and special reports related to the ALARA program to determine if identified problems were entered into the corrective action program for resolution. The inspector reviewed dose significant post-job (work activity) reviews and post-outage ALARA report critiques of exposure performance to determine if identified problems were properly characterized, prioritized, and resolved in an expeditious manner. (See Section 40A2.)

b. Findings

No findings of significance were identified.

2OS3 Radiation Monitoring Instrumentation and Protective Equipment (71121.03 - 1 Sample)

a. Inspection Scope

This activity represented one inspection sample. The inspector reviewed selected activities, and associated documentation, in the below listed areas. The evaluation of AmerGen's performance in these areas was against criteria contained in 10 CFR 20 and applicable TSs and station procedures.

Problem Identification and Resolution

The inspector reviewed audits and self-assessments in the area of radiation monitoring equipment and protective equipment to determine if identified issues in this area were entered into the corrective action program. The inspector reviewed condition reports and action requests to evaluate AmerGen's threshold for identifying, evaluating, and resolving problems in this area. (See Section 40A2.)

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

- 4OA2 Problem Identification and Resolution (71152)
- 1. Routine Resident Review of CAP Documents
- a. Inspection Scope

As required by Inspection Procedure 71152, "Identification and Resolution of Problems", and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's corrective action program. This review was accomplished by attending daily screening meetings and accessing the licensee's computerized database.

In the Occupational Radiation Safety Cornerstone, the inspector reviewed selective corrective action documents to determine if identified problems were entered into the corrective action program for resolution and to evaluate AmerGen's threshold for entering issues into the program. The review included a check of possible repetitive issues. Also reviewed were recent audits and assessments, including Oyster Creek 1R20 Pre-Outage Assessment and Check In Self-Assessments.

The review was against the criteria contained in 10 CFR 20, Technical Specifications, and station procedures.

b. Findings

No findings of significance were identified.

- 2. Water In-leakage into the No. 12 Cylinder of EDG #1
- a. <u>Inspection Scope (1 sample)</u>

The inspector reviewed the corrective actions taken for an event involving apparent water in-leakage into the No. 12 cylinder of EDG #1. This problem was discovered

during the 24-month inspection and maintenance activity for EDG #1 on April 28, 2004. This issue is described in CAP O2004-1032. The inspector reviewed the referenced CAP, an associated Problem Resolution Response, the seven completed corrective actions, monitoring and trending results of the increased frequency lube oil sample analyses per the planned corrective actions, and discussed the results of all the corrective actions with the system engineer. The inspector noted that the corrective actions were completed appropriately. The inspector also observed that recent sample results indicate that water is not leaking into the lube oil system.

b. Findings and Observations

No findings of significance were identified.

- 3. <u>Public Radiation Safety Materials Released from RCA</u> (71122.02)
- a. Inspection Scope

The inspector selectively reviewed CAP O2005-0684, dated February 14, 2005. The CAP discussed the review of the adequacy of radiological surveys of large volume of scrap wire (cable) released from the radiologically controlled area of the station on January 15 and 17, 2005.

The inspector also reviewed corrective action documents associated with survey and monitoring of scrap cable for unrestricted release on January 15 and January 17, 2005. (CAP O2005-0684, CAP O2005-1500, Cable Release Radiological Survey Plan, associated radiological survey data, and associated radiological survey procedures).

The inspector also reviewed applicable radiological survey information for the materials released, reviewed conformance with applicable station procedures, and reviewed conformance with applicable special sampling plans.

The licensee's performance was reviewed against applicable license conditions and regulatory requirements.

b. Findings and Observations

AmerGen developed a special survey plan to survey the scrap wire (cable) in accordance with station approved procedures. The plan described required radiological surveys for both fixed and loose radioactive contamination and required documentation of survey results. AmerGen conducted the surveys, as defined in its sampling plan, to demonstrate that the materials released had no detectable radioactive contamination.

However, the inspector identified that selected survey results, as defined in the special radiological survey plan for survey of the scrap wire (cable), were not documented as required per the survey plan. Specifically, surveys to demonstrate that 100% of the material had received a direct frisk for contamination, were not documented. Further, survey results indicating extraneous contaminated materials were stuck to the scrap

wire (two pieces of slightly contaminated tape) were not documented. The materials were identified and removed. Such documentation was reasonable to allow the reviewers of the survey results to evaluate the continued suitability of the radiological survey plan.

The failure to document radiological survey results, in accordance with the special survey plan, is a violation of TS 6.11 associated with failure to adhere to procedures for personnel radiation protection. This violation is a performance deficiency in that a requirement was not met that was reasonably within the licensee's ability to foresee and correct and could have been prevented. This issue was not subject to traditional enforcement, in that the finding did not have any actual safety consequences and did not impact NRC's ability to perform its regulatory function. The finding was minor in that it was not a precursor to a significant event, if left uncorrected it was not likely to become a more significant event, the issue did not relate to a performance indicator, and the issue did not affect the associated cornerstone (Public Radiation Safety). Although this issue constitutes a violation of minor significance that is not subject to enforcement action in accordance with Section IV of the Enforcement Policy, it is being documented because it is associated with an issue of agency wide concern (i.e., control of licensed radioactive material). AmerGen placed this issue in its corrective action program (CAP O2005-1500, dated April 5, 2005), and updated the affected surveys to enter complete radiological survey results.

Annual Sample Review

3. November 2004 Half-Scram Event

a. Inspection Scope

The inspectors selected one corrective action program report for detailed review, CAP No. O2004-3994. This CAP was associated with the half-scram event of November 22, 2004, which was received due to low reactor water level which occurred during the transition from the Low-flow Feedwater Regulating Valve (LFRV) to the Main Feedwater Regulating Valve (MFRV). The CAP 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 paid particular attention to the licensed operators' procedure adherence, critical parameter monitoring, and supervisory command and control. The inspectors evaluated the CAP report as delineated in LS-AA-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; however, the inspectors identified that the licensee's documentation of implemented corrective actions did not permit assessment of the adequacy of the listed actions. The CAP report followed the requirements of the LS-AA-125 procedure, but the enclosed root cause investigation did not identify a true root cause of the half-scram event. The CAP

report listed several corrective actions, a number of which addressed the operational areas of concern, yet the report took credit for how these actions were planned to be done and did not describe any actual actions or measures to assess effectiveness. These weaknesses identified by the inspector had also been previously identified by the licensee in a NOS audit (NOSA-OYS-05-01 Corrective Action Audit). The inspector pursued the actions taken to improve performance in the areas of licensed operators' procedure adherence, critical parameter monitoring, and supervisory command and control, via interviews with operators, training staff, and operations management. The interviews revealed that the operations and training departments had initiated and taken actions to address these areas, yet these actions had not been documented as part of the CAP report. For example, training had specifically modified scenario evaluation guides to highlight the evaluation of operators' monitoring of critical parameters during scenarios. Also, the operations department had implemented an improvement plan, part of which was a rotating schedule of shift discussion topics to reinforce desired behaviors; CAP No. O2004-3994 had been included in this schedule to address the specific area of supervisory command and control. The inspector concluded that, despite the weak documentation of the effort, adequate corrective actions had been taken in response to the licensed operator performance during the November 2004 halfscram event.

- 4. <u>Semi-Annual Review of Corrective Action Program Trends</u>
- a. Inspection Scope

The inspectors performed a semi-annual review of common cause issues in order to identify any unusual trends that might indicate the existence of a more significant safety issue. This review included an evaluation of repetitive issues identified via the corrective action process. The results of the trending review were compared with the results of normal baseline inspections.

The inspectors also monitored the quality of procedures during observation of normal baseline inspections to determine if an adverse trend in procedure quality was contributing to an increasing trend in human performance problems.

The inspector discussed an escalation letter issued by the Nuclear Oversight (NOS) Group regarding continuing weak performance in use of the CAP Process at the station. In addition, the inspector reviewed the following documents to determine if trends were identified that were not documented in the CAP system:

- C Nuclear Oversight Quarterly Report, NOSPA-OYS-4Q-04, October -December 2004
- C Nuclear Oversight Quarterly Report, NOSPA-OYS-05-1Q, January March 2004

b. Findings and Observations

No findings of significance were identified.

Regarding the quality of procedures contributing to human error, the inspectors observed some minor quality problems during baseline inspection activities, however, the issues were generally identified by the licensee staff and appropriately corrected. Overall, the inspectors noted an improving trend in human performance, especially for significant issues that contribute to initiating events (transients) or the loss of mitigating systems.

The inspectors observed that the NOS have continued to identify an adverse trend in the use of the CAP process at the station. This has resulted in an escalation letter to the station requiring documented actions to improve this situation. As a result of this continuing adverse trend, as well as a documented substantive cross-cutting issue in the NRC Annual Assessment for 2004, the licensee has initiated a broad change to the CAP process at the site in June 2005. This change will serve as the vehicle to upgrade the overall station performance in use of the CAP process and to assure quality and value in CAP input, products, and trend reviews. Changes to the CAP program and their effectiveness will be evaluated in future inspection periods.

4OA3 Event Follow-up (71153 - 2 Samples)

a. Inspection Scope

This activity represented two inspection samples. The inspectors reviewed the event involving a reactor scram and turbine trip from 100% RTP on June 1, 2005. The review consisted of observing plant parameters and status, including mitigating systems/trains and fission product barriers; reviewing alarms/conditions preceding or indicating the event; evaluating the performance of mitigating systems and licensee actions; and confirming that the licensee properly classified the event in accordance with emergency action level procedures and made timely notifications to NRC and state/county governments, as required.

The inspectors also reviewed the licensee response to an event on June 21, 2005, regarding a switchyard activity that resulted in the loss of a 34.5 kV source (Q121 line). The power supply loss resulted when the Transmission System Operator removed a 34.5 kV supply line to the Oyster Creek switchyard from service. This work had been previously scheduled and the Oyster Creek operators notified. However, this activity was not evaluated per Oyster Creek on-line work control procedures due to the work schedule not being updated to reflect the activity. When the plant operators were contacted by the 34.5 kV system operator just prior to removing the feeder line from service, Oyster Creek operators stated that the work had not been evaluated and requested that the work be delayed. However, within a few minutes, the plant operators noticed that the feeder line had been de-energized. The 34.5 kV system operator had taken appropriate actions to provide an alternate feeder (Z52 express line) per its agreement with Oyster Creek prior to removing the line. Oyster Creek work control staff

revised the daily risk evaluation for work and determined that risk had not changed unacceptably as a result of the 34.5 kV line work.

The on-line monitoring of 34.5 kV distribution system work relies upon verbal notification to the plant operators. A proper evaluation of the impact to the on-line maintenance risk can only occur if the plant operators perform an emergent risk evaluation per station procedures. In this case the inspectors noted that actions were taken to ensure that TS requirements were met prior to removing the Q121 line from service. In addition, although a risk evaluation was completed after the fact that showed no impact, operators did not have sufficient time to conduct an evaluation of the work prior to the system operator removing the line from service. The inspectors noted that while this activity had not been properly evaluated prior to commencing the work, the on-line risk was not adversely affected. The licensee has entered this condition into its corrective action program to ensure that appropriate controls are used to manage risk for these conditions.

b. Findings

No findings of significance were identified.

- 40A5 Other Activities
- 1. <u>TI 2515/161 Transportation of Reactor Control Rod Drives in Type A Packages</u>
- a. Inspection Scope

During this portion of the inspection, the inspector completed Phase I of the TI. The inspector interviewed cognizant personnel and determined that AmerGen had undergone refueling/defueling activities between January 1, 2002, and present, and that it had shipped irradiated control rod drives in Department of Transportation Specification 7A Type A packages.

b. Findings and Observations

No findings of significance were identified.

2. <u>TI 2515/163, Operational Readiness of Offsite Power</u> Cornerstones: Initiating Events, Mitigating Systems

The inspector performed Temporary Instruction 2515/163, "Operational Readiness of Offsite Power". The inspector collected and reviewed licensee procedures and supporting information pertaining to the offsite power system specifically relating to the areas of offsite power operability, the maintenance rule (10 CFR 50.65), and the station blackout rule (10 CFR 50.63). The inspector reviewed this data against the requirements of 10 CFR 50.63; 10 CFR 50.65; 10 CFR 50 Appendix A General Design Criterion 17, "Electric Power Systems"; and Plant TSs. This information was forwarded to the NRC Office of Nuclear Reactor Regulation for further review.

4OA6 Meetings, including Exit

Exit Meeting Summary

On July 11, 2005, the resident inspectors presented the inspection results to Mr. C. N. Swenson 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.

The inspector presented the inspection results for licensed operator requalification to members of licensee management at the conclusion of the inspection on June 24, 2005, and obtained pass/fail results from a licensee representative on July 5, 2005. No materials reviewed were identified by the licensee as proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

- R. Artz, Chemistry Supervisor
- B. Barbieri, System Engineering
- P. Bloss, BOP Systems Manager
- J. Booty, System Engineering
- T. Cipola, Acting Director, Maintenance
- C. Connelly, Radiation Protection/Chemistry Manager
- J. Derby, Radiological Engineer
- R. Detwiler, Director, Operations
- R. Ewart, Security Manager
- D. Fawcett, Licensing Engineer
- M. Filippone, System Engineering
- J. Freeman, Shift Operations, Superintendent
- M. Godknecht, Maintenance Rule Coordinator
- S. Hutchins, Electrical Systems Manager
- E. Johnson, System Engineer
- A. Judson, Radiological Engineer
- J. Kandasamy, Manager, Regulatory Assurance
- R. Larzo, Engineering
- J. Magee, Director, Engineering
- D. McMillan, Director, Training
- B. Mussel, System Engineering
- L. Newton, Chemistry Manager
- J. O'Rourke, Assistant Engineering Director
- T. Powell, Engineering Programs Manager
- J. Randich, Plant Manager
- J. Renda, Radiation Protection Manager
- G. Seals, Radiological Engineer
- H. Shoap, Normandeau Associates
- C. Swenson, Site Vice President

LIST OF DOCUMENTS REVIEWED

Section2OS1, 2OS2, and 2OS3:

CAP No. O2005-0684, dated February 14, 2005 CAP No. O2005-1500, dated April 5, 2005 Special Radiological Survey Plan for Cables, dated January 14, 2005 Radiological Surveys- cables, dated January 15, 2005 and January 17, 2005 Radiological Surveys- Turbine Building, dated October 27, 2004, November 1, 2004, and November 2, 2004. Procedure RP-AA-503, Unconditional Release Survey Method, Rev. 0. Procedure RP-AA-300, radiological Survey Program. Rev.1. Procedure RP-OC-503-1001, Release Survey Documentation, Rev. 0. Oyster Creek 1R20 Outage Report 2005-2007 Business Plan ALARA Items Station ALARA Committee Meeting Information (January 10, March 15, 31, and April 19, 2005) New Radwaste Housekeeping Status Report High Radiation Area Abatement Plan 2003-2005 Exposure Reduction Plan ANI Report (CAP 2005-2334) Focused Area Self-Assessment - 00318301 Oyster Creek WMG Audit 4017-RE-027, April 2004, and Corrective Action Documents. Corrective Action Documents (CAPS) - 2005-1759, 2005-0684, 2005-1500, 2004-4224-7, 2004-1572, 2004-1520, 2005-0645, 2004-3919, 2005-1759, 2004-0101, 2005-1986, 2004-3677 Procedure RP-AA-350, Rev. 4, Personnel Contamination Monitoring, Decontamination and Reporting Procedure 1002.5, Rev.11, Spent Fuel Pool Management and Inventory Control Procedure RP-AA-460, Rev. 7, Controls for High and Very High Radiation Areas. Procedure RP-AA-400, Rev. 3, ALARA Controls Procedure RP-AA-270, Rev.2, Pre-natal Radiation Exposure Controls

Procedure RP-AA-376, Rev.1, Radiological Postings, Labeling, and Markings

Document 958.387, Isotopic Calibration of 843-20 with 841-3 Sampler, August 1993

LIST OF ACRONYMS

ADAMS	Agency-wide Documents Access and Management System
ALARA	As Low As Is Reasonably Achievable
AmerGen	AmerGen Energy Company, LLC
AR	Action Request
ARI	Alternate Rod Insertion
ATWS	Anticipated Transient Without Scram
CAP	Corrective Action Process
CEDE	Committed Effective Dose Equivalent
CFR	Code of Federal Regulations
CRD	Control Rod Drive
CS	Containment Spray
DEP	Drill/Exercise Performance
EAL	Emergency Action Level
EDG	Emergency Diesel Generator
EOF	Emergency Operations Facility
EP	Emergency Preparedness
E-Plan	Emergency Plan
ESW	Emergency Service Water
HRA	High Radiation Area
IC	Isolation Condenser
JPM	Job Performance Measures
LDE	Lens Dose Equivalent
LFRV	Low-flow Feedwater Regulating Valve
LLC	Limited Liability Corporation
LORT	Licensed Operator Regualification Training
MFRV	Main Feedwater Regulating Valve
MSIV	Main Steam Isolation Valve
NOS	Nuclear Oversight
NRC	Nuclear Regulatory Commission
ORAM	On-line Risk Assessment Monitor
PI	Performance Indicator
RCA	Radiologically Controlled Area
RO	Reactor Operator
RTP	Rated Thermal Power
RWP	Radiation Work Permit
SDE	Shallow Dose Equivalent
SDP	Significance Determination Process
SRO	Senior Reactor Operator
SSC	Systems, Structures and Components
ST	Surveillance Test
TEDE	Total Effective Dose Equivalent
TI	Temporary Instruction
ТМ	Temporary Modification
TS	Technical Specification
UESAR	Undated Final Safety Analysis Report
WO	Work Order
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