

August 31, 2000

Mr. Ron J. DeGregorio  
Vice President Oyster Creek  
AmerGen Energy Company, LLC  
P.O. Box 388  
Forked River, New Jersey 08731

SUBJECT: NRC's OYSTER CREEK GENERATING STATION INTEGRATED REPORT  
05000219/2000-006

Dear Mr. DeGregorio:

On August 12, 2000, the NRC completed an integrated inspection at your Oyster Creek reactor facility. The enclosed report presents the results of that inspection. The results of this inspection were discussed on August 18, 2000, with you and other members of your staff.

This inspection was an examination of 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. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations of activities, and interviews with personnel.

One issue of very low safety significance (Green) was identified. The issue involved the failure of one emergency service water pump, and is documented in the subject inspection report.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index/html> (the Public Electronic Reading Room).

We appreciate your cooperation. Please contact me at (610) 337-5146 if you have any questions regarding this letter.

Sincerely,

**/RA/**

John F. Rogge, Chief  
Projects Branch No. 7  
Division of Reactor Projects

Docket/License Nos.: 05000219/DPR-16

Enclosure: NRC Inspection Report No. 05000219/2000-006

Mr. Ron J. DeGregorio

2

cc w/encl:

PECO Energy Company - Correspondence Control Desk

J. A. Hutton, Director-Licensing

Manager, Nuclear Safety and Licensing

R. Brown, Manager, Experience Assessment

State of New Jersey

Mr. Ron J. DeGregorio

3

Distribution w/encl: (VIA E-MAIL)

Region I Docket Room (with concurrences)

L. Dudes - NRC Resident Inspector

H. Miller, RA

J. Wiggins, DRA

J. Rogge, DRP

N. Perry, DRP

D. Screnci, PAO

C. O'Daniell, DRP

M. Oprendeck, WCAC

J. Shea, OEDO

E. Adensam, NRR

H. Pastis, NRR

T. Colburn, NRR

W. Scott, NRR

DOCUMENT NAME: C:\2000-06.rpt.wpd

After declaring this document "An Official Agency Record" it **will** be released to the Public.

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RI/DRP		RI/DRP		/					
NAME	LDudes (JFR for)		JRogge							
DATE	8/30/00		8/31/00		08/ /00		08/ /00		08/ /00	

OFFICIAL RECORD COPY

**U. S. NUCLEAR REGULATORY COMMISSION**

REGION I

Report No. 05000219/2000-006

Docket No. 05000219

License No. DPR-16

Licensee: AmerGen Energy Company, LLC (AmerGen)  
PECO Energy Company  
Nuclear Group Headquarters  
P.O. Box 160  
Kennett Square, PA 19348

Facility: Oyster Creek Generating Station

Location: Forked River, New Jersey

Dates: July 2, 2000 - August 12, 2000

Inspectors: Laura A. Dudes, Senior Resident Inspector  
Thomas R. Hipschman, Resident Inspector  
Paul Kaufmann, Technical Lead, July 24-28, 2000  
Joseph Furia, Senior Health Physicist, July 10-14, 2000  
Tracy E. Walker, Senior Reactor Inspector, July 17-21, 2000  
George W. Morris, Reactor Inspector, July 17-21, 2000

Approved By: John F. Rogge, Chief  
Projects Branch 7  
Division of Reactor Projects

## SUMMARY OF FINDINGS

### Oyster Creek Generating Station NRC Inspection Report 05000219/2000-006

IR 05000219-00-006;07/02-08/12/00;Oyster Creek;Emergent work. The inspection was conducted by resident and region based inspectors. The inspection identified one green issue. The significance of issues is indicated by their color (green, white, yellow, red) and was determined by the Significance Determination Process (SDP) in Inspection Manual 0609 (see Attachment 1).

Cornerstone: Mitigating Systems

- **GREEN.** The inspectors evaluated the failure of the 'C' emergency service water (ESW) pump. The licensee has experienced similar failures of ESW pumps and has not yet demonstrated a reliable permanent corrective action to resolve this problem. This issue was considered to have very low safety significance (Green) using the Significance Determination Process (SDP) phase 1 evaluation, because alternate ESW pumps were available to perform its safety function. There was no violation of NRC requirements because the licensee complied with the Technical Specifications limiting conditions for operations and action statements. (Section 1R13)

## Report Details

### Summary of Plant Status:

Oyster Creek began the inspection period at full power. On July 27, 2000, power was reduced to sixty-five percent in order to locate and mitigate the effects of a degraded fuel rod. Power was restored to ninety-eight percent on July 31. A power coastdown began on August 1, 2000, and will remain in effect until refueling outage 18R. Oyster Creek was at ninety-two percent power at the end of the inspection period.

#### **1. REACTOR SAFETY**

Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity

##### 1RO4 Equipment Alignment

##### .1 Core Spray Full Walkdown

###### a. Inspection Scope

A complete walkdown of all accessible portions of core spray system I and II was conducted by the inspectors to verify equipment alignment. Documents reviewed that are applicable to the core spray system alignment verification included: Emergency Core Cooling System Operation Procedure 308, Attachments 308-1 and 308-2; Emergency Operating Procedures EMG-3200.01A, Attachments E, J, and K, EMG-3200.01B, Attachments D, G, and H, EMG-3200.08A, Attachment D, EMG-3200.10, Attachment F; plant flow diagram drawing GE 885D781; and, Updated Final Safety Analysis Report, section 6.3. In addition, temporary modifications, operator work arounds outstanding, and corrective action program deficiencies associated with the core spray system were reviewed by the inspectors.

###### b. Issues and Findings

There were no findings identified.

##### .2 Emergency Service Water System, loops 'B' and 'D'

###### a. Inspection Scope

On August 6, 2000, the 'C' emergency service water (ESW) pump failed to meet its required inservice test (IST) flow requirements. The pump was declared inoperable. Prior to the 'C' pump failure, the 'A' ESW pump had recently been returned to service after a 12 day maintenance outage. The inspectors performed a walkdown of ESW system loops 'B' and 'D'. The inspectors chose the 'B' and 'D' loops due to the potential that one train may have been inoperable during the maintenance windows for the 'A' and 'C' pumps.

The inspection consisted of a valve alignment verification against procedure 310, "Containment Spray Operation," which included pre-operational valve line-ups for the ESW system. The inspector also reviewed the most recent IST surveillances for the 'B'

and 'D' pumps to verify that the pumps were capable of meeting their design flow requirements.

b. Issues and Findings

There were no findings identified.

.3 Standby Liquid Control System

a. Inspection Scope

The inspector conducted a partial walkdown of the standby liquid control (SLC) system per the baseline inspection program as a safety significant system.

The inspector compared actual valve and circuit breaker positions against the system operating procedure 304, "Standby Liquid Control." The inspector also reviewed the corrective action process (CAP) database for identification and resolution of significant issues affecting the standby liquid control system

b. Issues and Findings

There were no findings identified.

1RO5 Fire Protection

a. Inspection Scope

The inspectors conducted fire protection inspection activities consisting of plant walkdowns, discussions with fire protection personnel, a review of procedure 333, "Plant Fire Protection System," and the Oyster Creek Fire Hazards Analysis Report. Plant walkdowns included observations of combustible material control, fire detection and suppression equipment availability, and compensatory measures. The inspectors conducted fire protection inspections in the following areas:

- Reactor Building Elevation 119', Spent Fuel Pool Deluge Capability
- Reactor Building Elevation 51', Deluge system pressure, valve and sprinkler equipment condition.
- New Cable Spreading Room Elev. 63'
- 'C' Battery Room
- Redundant Fire Pump

b. Issues and Findings

There were no findings identified.

## 1R12 Maintenance Rule Implementation

### .1 Service Water System

#### a. Inspection Scope

The inspector reviewed the performance goals, maintenance activities and corrective action plans for the service water system. The inspector also reviewed the maintenance rule failure determination performed in accordance with the operability review portion of CAP 2000-0702, which documented a failure of the No. 2 service water pump to start during weekly equipment rotation. The system has been in Maintenance Rule category a(2), acceptable performance.

#### b. Issues and Findings

There were no findings identified.

### .2 120V AC Vital Power

#### a. Inspection Scope

The inspector reviewed the performance goals, maintenance activities and corrective action plans for the 120V AC vital power. The system is designated as Maintenance Rule category a(1) due to inconsistent preventive maintenance programs, inadequate part replacements, and a lack of lubrication. The inspector reviewed engineering evaluations 99-002 and 99-009 which outlined the root causes for the system entering a(1) status, the corrective actions to return the system to category a(2) (acceptable performance) and the expected monitoring period to return the system to a(2).

#### b. Issues and Findings

There were no findings identified.

### .3 Standby Liquid Control System

#### a. Inspection Scope

The inspector reviewed the performance goals, maintenance activities and corrective action plans for the standby liquid control system. The system has been in Maintenance Rule category a(2), acceptable performance. The inspector reviewed corrective action reports against the associated system performance criteria.

#### b. Issues and Findings

There were no findings identified.



## 1R13 Maintenance Risk Assessment and Emergent Work Evaluation

## .1 'A' Emergency Service Water Motor Replacement

a. Inspection Scope

On July 24, the 'A' emergency service water (ESW) pump and motor were removed from service for planned maintenance. During post-maintenance testing, the licensee identified that the replacement pump motor failed, extending the unavailability of the 'A' ESW pump. The inspector reviewed the licensee's actions to plan and control emergent work activities as a result of the unforeseen failure of the replacement pump motor.

b. Issues and Findings

There were no findings identified.

## .2 'C' Emergency Service Water Pump Failure

a. Inspection Scope

The inspector reviewed the licensee's actions to plan and control emergent work activities as a result of the failure of the 'C' ESW pump.

b. Issues and Findings

The inspector evaluated the failure of the 'C' emergency service water (ESW) pump. The licensee has experienced similar failures of ESW pumps and has not yet demonstrated a reliable permanent corrective action to resolve this problem.

On August 6, 2000, the 'C' ESW pump failed to develop adequate flow to meet surveillance test acceptance criterion. The licensee replaced the pump and satisfactorily performed post-maintenance testing. The preliminary root cause of the failure was attributed to the loss of proper fit between the impeller and the shaft due to corrosion in conjunction with less than optimum design of the connection, and vendor assembly methods that may have led to accelerated corrosion. The licensee has experienced similar failures of ESW pumps (NRC Inspection Reports 05000219/1999-001 and 05000219/1999-005). Engineering took corrective actions at the time of the failures in 1999; however, the pumps continue to fail. An engineering modification has been incorporated into the new 'A' and 'C' pumps that is designed to improve the connection of the impeller to the shaft. Engineering plans further root cause analyses to improve the reliability of these pumps, and to incorporate the modification into the 'B' and 'D' pumps when replacements become available.

This issue was considered to have very low safety significance (Green) using the Significance Determination Process (SDP) phase 1 evaluation, because alternate ESW pumps were available to perform the system's safety function. Additionally, the inspectors evaluated the period of time that the 'A' ESW pump was out of service concurrently with a portion of the period since the 'C' ESW pump was last tested prior to this failure. Similarly, the inspectors determined that this issue was considered to have

very low safety significance (Green) using the Significance Determination Process (SDP) phase 1 evaluation, because alternate ESW pumps were available to perform the system's safety function. There was no violation of NRC requirements because the licensee complied with the Technical Specifications limiting conditions for operations and action statements. The licensee documented this issue in CAP 2000-0988.

.3 Fuel Defect Identification, Troubleshooting and Suppression

a. Inspection Scope

On July 26, 2000, control room operators noted an increase in the offgas radiation activity levels. Increased sampling by the chemistry department in conjunction with engineering evaluation confirmed a degradation in one or more fuel assemblies. The inspector reviewed the licensee's troubleshooting plan which included reactivity maneuvers and the special evolution procedures which were in effect during the activities. In addition, the inspector reviewed the flux suppression plan to decrease the fuel defect effects and verified that the offgas activity levels and dose equivalent iodine sample results were significantly below technical specification allowable limits. The licensee will continue to monitor these parameters at an increased frequency. The inspector also verified that work with the potential to impact reactivity was being reviewed with respect to potential impact on plant operations.

b. Issues and Findings

There were no findings identified.

1R15 Operability Evaluations

.1 Emergency Service Water Piping Supports

a. Inspection Scope

On August 2, 2000, the licensee identified that several piping supports directly down stream of the emergency service water (ESW) pumps were corroded. The inspector reviewed the operability determination included in CAP 2000-0968, and the associated material nonconformance report (MNCR). The inspector reviewed calculation C-1302-532-E540-047 to verify that the corroded supports did not affect the structural and seismic capabilities required.

b. Issues and Findings

There were no findings identified.

.2 Electromatic Relief Valve Acoustic Monitor Failure and Notice of Enforcement Discretion  
**NOED NO. 00-6-007**

a. Inspection Scope

The inspectors reviewed the licensee's safety evaluation in response to inoperable acoustic monitoring instrumentation.

b. Issues and Findings

On July 17, 2000, the 'A' electromatic relief valve (EMRV) acoustic monitor failed a scheduled surveillance test. The EMRV acoustic monitors are designed to provide an indication of a failure of an EMRV to close after initial actuation. Several other means of detecting an open EMRV are available to operators including temperature indicators on the EMRV discharge piping, containment pressure indication and suppression pool temperature. The EMRV was declared inoperable and a technical specification 48 hour limiting condition for operation (LCO) was entered which allows time to repair the valve or shut down the reactor. Repair or replacement of the acoustic monitor instrumentation would have necessitated a plant shutdown in order to access the drywell and repair the failed instrumentation.

Technical Specification 3.13.A.3 requires a minimum number of channels to be operable per Table 3.13.1, or placing the reactor in the shutdown condition. However, the licensee requested that the NRC grant enforcement discretion to avoid an unnecessary plant transient. On July 19, 2000, a conference call was held between the NRC and the licensee. The discussion focused on the probable causes of the equipment failure, alternate means of detecting an open EMRV, and prior failures of similar equipment. The NRC verbally granted a Notice of Enforcement Discretion (NOED) on July 19, 2000, and documented this notice in a letter dated July 21, 2000.

The inspectors evaluated the failure of the 'A' EMRV acoustic monitor, which included a review of previous acoustic monitor failure records, industry operating experience notifications, and the licensee's corrective actions associated with the previous failures. The adequacy of previous corrective actions remains unresolved pending NRC review of the licensee's root cause determination of this most recent failure following an examination of acoustic monitor components by the licensee. **(URI 0500219/2000-006-01)**

.3 Operability Reviews

a. Inspection Scope

The inspectors reviewed operability determinations associated with the following plant equipment challenges:

- Core Spray Pump Motor Operability without Room Cooling Fans in Operation (C-1302-822-5450-050)
- Emergency Service Water Pumps 'B' and 'D' (125-1 File No. 0184-000)

b. Issues and Findings

There were no findings identified.

1R17 Permanent Plant Modifications

.1 Outage Modification and Preparation Review (37700)

a. Inspection Scope

The inspectors evaluated the licensee's plans for continued operations following the fall 2000 outage (18R) by reviewing modifications and other activities that had been previously deferred due to GPUN's previous decision to potentially cease operations following the 17<sup>th</sup> operating cycle. The inspectors reviewed the Project Gap List and other lists of work items that had not been scheduled to determine the current status of the activities. For safety-significant and risk-significant work that had been canceled or delayed past the 2000 refueling outage, the inspectors assessed the licensee's justification for the delayed implementation of corrective actions and ensured that there was no adverse impact on equipment operability.

The inspectors reviewed documentation associated with the activities listed below. The activities were selected from the items that had not been scheduled pending the decision to continue to operate. The selection was based on risk significance and impact on the three reactor safety cornerstones (initiating events, mitigating systems and barrier integrity). The inspectors also observed a Plant Project Integration Team (PPIT) meeting.

Mitigation Systems:

MD-G544-001	Valve V-11-0034 Indication Circuit Modification to the 480 Volt Remote Shutdown Panel
MD-G845-001	Replace Degraded Voltage Relays
MD-H388	18R 5000 Volt Cable Replacement ('A' Reactor Feedwater Pump Cable Replacement)
MD-G507	Replace ESW Piping/Coating
MD-H531	Pipe Wall Thinning Evaluations for 18R
MD-H369-001	Installation of New Isolation Condenser MOVs (V-14-36 & V-14-37) to Comply with GL 89-10
MD-F383-002	18R Cable and Conduit Modification (Isolation Condenser MOV) to Support GL 89-10 Margins
MD-G690-001	Generic Letter 96-06 Modifications
MD-G075	Seismic Qualification Modifications
	Replace Service Water Pipe Tee and Flanges

Barrier Integrity:

MD-H422-001	Spent Fuel Pool Cooling Pipe Support Upgrades
MD-G461	Replace Turbine to Condenser Expansion Joint
MD-H539	18R Valve Replacement Project (Safety Valves, EMRVs, etc.)
	Recalibrate Air-Operated Valves
	Repair Reactor Metal Differential Temperature Recorder
	Reactor Recirculation Pump Seal Inspection

Event Initiators:

MD-H246-001	M-G Set Charger 'A' Trip Delay Modification
MD-F682	Replace Control Rod Blade
	Control Room Protective Relay Surveillance

The inspectors reviewed selected portions of the activities that were scheduled to be completed during the 2000 refueling outage. (These items are listed with Modification Documentation (MD) numbers above.) The inspectors directed their review to selected portions of the design, implementation, and proposed post-modification testing. As appropriate, the inspectors held discussions with the responsible design engineers and other personnel familiar with the proposed plant changes. These discussions addressed, in particular, the scope and extent of the changes, as well as the licensee's identification and resolution of problems that initiated the changes.

b. Issues and Findings

There were no findings identified.

.2 Reactor Building Crane Upgrade Modification

a. Inspection Scope

The inspector reviewed the modification documents, safety evaluation and engineering change documents associated with the reactor building crane upgrade modification. In addition the inspector reviewed the engineering dispositions of several weld defects identified as part of the upgrade modification. Documents reviewed included:

- Modification OC-MD-G607; Reactor Building Crane Upgrade
- Safety Evaluation #00882004
- Calculation C-1302-882-e310-011, Reactor Crane Butt Weld Evaluation

b. Issues and Findings

There were no findings identified.

1R19 Post Maintenance Testing

a. Inspection Scope

The inspector reviewed and/or observed the following post maintenance tests:

- 2400-SMM-3531.01, Section 7.0, “ESW Pump and Motor Maintenance,”
- 607.4.004, “Containment Spray and Emergency Service Water System I Pump Operability and Inservice Test,”
- 607.4.005, “Containment Spray and Emergency Service Water System II Pump Operability and Inservice Test.”

b. Issues and Findings

There were no findings identified.

1R22 Surveillance Testing

a. Inspection Scope

The inspector observed or reviewed the results of the following surveillance and inservice tests:

- 607.4.004, “Containment Spray and Emergency Service Water System I Pump Operability and Inservice Test,”
- 607.4.005, “Containment Spray and Emergency Service Water System II Pump Operability and Inservice Test,”
- 617.3.012, “Hydraulic Control Unit Leak Detector Test,”
- 678.4.001, “Primary Containment Isolation Valve Operability and IST

b. Issues and Findings

There were no findings identified.

**2. Radiation Safety**

Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiological Significant Areas

a. Inspection Scope

The inspector reviewed the access control program by examining the controls established for three exposure significant areas, including postings, markings, control of access, dosimetry, surveys and alarm setpoints. Areas selected were located throughout the radiologically controlled area (RCA) and included concentrated liquid waste tanks 1A and 1B cubicles, high purity waste filter cubicle; and chemical waste filter cubicle. Controls reviewed included key control for locked high radiation areas, use of radiation work permits to control access to radiologically significant areas, and pre-job radiological briefings.

The inspector conducted job performance observations to evaluate radiation worker performance with respect to stated radiation protection work requirements. This also included verification of radiological controls, such as adequacy of surveys and radiation protection technician coverage. The inspector observed surveys being performed in the

cubicles listed above, and observed work being performed on the turbine deck (a posted high radiation area). The inspector reviewed the radiation work permit utilized for these entries, attended the pre-job briefings presented to the workers by the radiation protection staff, observed controls present for access to these posted high radiation areas, and reviewed alarm setpoints.

b. Issues and Findings

There were no findings identified.

2OS2 ALARA Planning and Controls

a. Inspection Scope

The inspector reviewed work performance during the current operating cycle. Areas reviewed included an evaluation of the use of engineering controls to achieve dose reductions; review of the use of low dose waiting areas; review of on-the-job supervision provided to workers, and a review of individual exposures from selected work groups. An evaluation of engineering controls utilized to achieve dose reductions, and analysis of licensee source term reduction plans was also conducted.

The inspector conducted observations of radiation worker and radiation protection technician performance during high dose rate and/or high exposure jobs to determine if the training/skill level was sufficient with respect to the radiological hazards. Additionally, the inspector conducted preliminary reviews of work planned for the upcoming refueling outage (18R) to examine the assumptions and basis for the various job estimates, including the methodology utilized for estimating job-specific exposures. The inspector identified the five highest cumulative dose jobs scheduled for the outage, and reviewed the calculations, assumptions and work control plans being established for these areas. The jobs identified were intergranular stress corrosion cracking (IGSCC)/ inservice inspection (ISI), recirculation pump motor cooler replacement, emergency condenser isolation valve installation, main steam isolation valve inspection/repair, and reactor disassembly, fuel shuffle, and reassembly.

b. Issues and Findings

There were no findings identified.

## 2OS3 Radiation Monitoring Instrumentation

### a. Inspection Scope

The inspector reviewed field instrumentation utilized by health physics technicians and plant workers to measure radioactivity, including portable field survey instruments, friskers, portal monitors and small article monitors. The inspector conducted a review of instruments observed in the reactor, turbine, old radwaste, new radwaste and augmented offgas building, specifically verification of proper function and certification of appropriate source checks.

### b. Issues and Findings

There were no findings identified.

## 4. OTHER ACTIVITIES

### 4OA1 Performance Indicator Verification

#### a. Inspection Scope

The inspectors reviewed performance indicator (PI) data from the 3rd quarter of 1999, through the 2nd quarter of 2000, for *Unplanned Power Changes per 7000 Critical Hours* to verify its accuracy. The inspectors used Nuclear Energy Institute (NEI) 99-02, Revision 0, "Regulatory Assessment Performance Indicator Guideline," as guidance and interviewed licensee personnel responsible for compiling the information.

#### b. Issues and Findings

There were no findings identified.

### 4OA4 Cross-cutting Issues

#### Problem Identification and Resolution

(Closed) Unresolved Item 50-219/98-12-02: potentially significant equipment qualification issues. The licensee conducted a self-assessment of the Oyster Creek environmental qualification (EQ) program in December 1998 and January 1999. During a previous inspection, NRC inspectors reviewed the licensee's findings and identified four issues that had the potential to become significant concerns if inadequate responses/resolutions were provided. These issues were:

- 1) No realistic flood calculations for the corner rooms;
- 2) No analysis of high energy line break (HELB) at the 95 feet elevation;
- 3) A number of EQ files had inappropriate steps in aging calculations (e.g., first LOCA peak, and energized mode); and
- 4) Relevant EQ related maintenance requirements were not identified in the EQ files (e.g., Patel connectors, and Rosemount transmitters).



The inspectors reviewed the licensee's resolution of these issues, including corrective action plans, engineering evaluations, and calculations. For the evaluations and calculations that were complete at the time of the inspection, there was no impact on the qualification of any safety-significant equipment. All of the issues had been entered into the licensee's corrective action program, and were either resolved or scheduled to be resolved. This unresolved item is closed.

#### 4OA6 Meetings

##### Exit Meeting Summary

On August 18, 2000, the resident inspectors presented the inspection results to Mr. DeGregorio 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.

**PARTIAL LIST OF PERSONS CONTACTED**Licensee (in alphabetical order)

v. Aggarwal, Director, Engineering  
R. Brown, Manager, Experience Assessment  
B. DeMerchant, Licensing Engineer  
R. Ewart, Manager, Site Security  
D. McMillan, Senior Manager, Systems  
K. Mulligan, Director, Operations and Maintenance  
J. Perry, Director, Maintenance  
J. Rogers, Licensing Engineer  
D. Slear, Senior Manager, Design  
R. Tilton, Manager, Assessment  
W. Truax, Director, Work Management  
C. Wilson, Senior Manager, Operations  
K. Wolf, Manager, Radiological Protection

**ITEMS OPENED, CLOSED, AND DISCUSSED**Opened

URI 0500219/2000-006-01 Electromatic Relief Valve Acoustic Monitor Failure (1R15)

Closed

URI 05000219/98-12-02 Potentially significant equipment qualification issues identified during licensee self-assessment. (4OA4)

**LIST OF ACRONYMS USED**

ADAMS	Agencywide Documents Access and Management System
ALARA	As Low As Is Reasonably Achievable
AmerGen	AmerGen Energy Company, LLC
CAP	Corrective Action Process
CFR	Code of Federal Regulations
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
EMRV	Electromatic Relief Valve
EQ	Environmental Qualification
ESW	Emergency Service Water
GL	Generic Letter
GPUN	General Public Utilities, Nuclear
HELB	High Energy Line Break
IGSCC	Intergranular Stress Corrosion Cracking
ISI	Inservice Inspection
IST	Inservice Test
JO	Job Order
LCO	Limiting Condition for Operation
LOCA	Loss Of Coolant Accident
MD	Modification Document
M-G	Motor-Generator
MNCR	Material Nonconformance Report
MOV	Motor-Operated Valve
NEI	Nuclear Energy Institute
NOED	Notice of Enforcement Discretion
NRC	Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
NSIC	Nuclear Safety Information Center
PARS	Publicly Available Records
PI	Performance Indicator
PPIT	Plant Project Integration Team
RCA	Radiologically Controlled Area
RWP	Radiation Work Permit
SDP	Significance Determination Process
SLC	Standby Liquid Control
TS	Technical Specification
URI	Unresolved Issue

## ATTACHMENT 1

# NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

### **Reactor Safety**

- Initiating Events
- Mitigating Systems
- Barrier Integrity
- Emergency Preparedness

### **Radiation Safety**

- Occupational
- Public

### **Safeguards**

- Physical Protection

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.