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*Oyster Creek Generating Station's
May 8, 2001 OSRE Performance
August 3, 2001*

AmerGen Energy Company, LLC
Oyster Creek Generating Station

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Opening Remarks

Ernest Harkness

Plant Manager

Oyster Creek Generating Station

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Darryl LeQuia
Director Site Support
Oyster Creek Generating Station



*Oyster Creek Generating Station's
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Background*

Oyster Creek has a Fundamentally Solid Security Program

- Effective Training
- Conscientious personnel
- Active Interface between Operations and Engineering
- Strong Management Support



Oyster Creek Generating Station's May 8, 2001 OSRE Performance Background

OSRE is designed to evaluate a licensee's ability to respond to the external design basis threat. This is done by focusing on:

- Interaction between the licensee's Operations and Security Departments
- Employing Protective Strategies

OSRE evaluation methods include:

- Table Top Exercises
- Force on Force Drills
- Weapons Proficiency Demonstrations
- Exercise Critiques

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Strategy

- Deploy forces to protect high probability target sets
- Protect as many components within each set as possible
- Strategy provides for rapid re-deployment based on alarms and intruder actions
- Secondary response positions provide good protection and are well equipped
- Training includes use of these secondary response positions



Oyster Creek Generating Station's May 8, 2001 OSRE Performance Background

May 8, 2001, Second Force-on-Force Drill

- Adversaries entered Protected Area and proceeded to area "A" of target set.
- Response force engaged adversaries but were neutralized.
- Adversaries simulated area breach and target destruction.

No alarms were received or simulated

- Adversaries proceeded to area "B" of target set without resistance
- Adversaries simulated area breach and target destruction.

No alarms were received or simulated

- Adversaries neutralized enroute to other targets



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OSRE Inspection Results:

- Table Top Drills - Good
- Weapons Proficiency - Good
- 3 out of 4 Force-on-Force Contingency Exercises -Good
- Exercise Critique – Good

Preliminary White Finding:

- Loss of a complete target set that was necessary to prevent or mitigate core damage.
- NRC considers Response strategy to be inadequate.

*Oyster Creek Generating Station's
Root Cause Presentation*

- Failure of exercise captured in Corrective Action Program
- Root Cause Team evaluated the Security Response to this exercise
- Team consisted of substantial site and off-site resources
- Full Root Cause Analysis Performed
 - Review of radio tapes
 - Interviews with security, operations, and engineering personnel

Oyster Creek Generating Station's Root Cause Presentation

Second Drill, May 8, 2001

Drill Timeline

- 1740 hours - Security informed by Operations that Plant was in an "Elevated Risk Condition" due to unavailability of the Standby Offsite Power Source. Therefore, access was being restricted to certain Vital Areas of the plant.
- Decision made to continue with the drill
 - Plant safety concerns evaluated
 - Missed opportunity to identify the need to simulate alarms
- 1825 hours - Drill Commences.
- 1828 hours - Drill Adversaries make initial contact with Defenders.
- 1829 hours - Drill Adversaries neutralize Defenders and simulate entering room containing Components "A" of Target Set
- **No Door Alarms Generated or Simulated**
- 1830 hours - Drill Adversaries simulate destroying Components "A" of Target Set and proceeded to room containing Components "B" of Target Set
- **No Control Room Alarms Simulated**
- 1831 hours - Drill Adversaries simulate entering room and destroying Components "B" of Target Set.
- **No Door Alarms Generated or Simulated**
- 1832 hours - Adversary Controller contacts CAS and Drill Controller and states that Components "A" and "B" of Target Set have been destroyed.
- 1842 Hours - Drill Adversaries neutralized - DRILL TERMINATED.

Oyster Creek Generating Station's Root Cause Presentation

Root Causes

- Failure to recognize the need to simulate alarms critical to the defensive strategy.
- Placement of defensive and delay barriers for Area 'A' not optimized.

Contributing Causes

- Noise abatement practices were LTA
- Inappropriate challenge by responder
- Training weapon malfunctioned
- Target sets were not optimized by proceduralizing operator actions

*Oyster Creek Generating Station's
Root Cause Presentation*

Corrective Actions

- Include alarm simulation in Security drills (complete)
- Relocated portable defensive barrier (complete)
- Re-enforced Training on noise abatement and Challenges (complete)
- Optimize Target sets (complete)
- Modifying the fixed delay barrier (completion date: 12/14/01)
- Proceduralize Operator actions (completion date: 09/28/01)

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*Oyster Creek Generating Station's
Analysis & Significance Determination*

Hugh McNally
Manager Nuclear Security
Mid-Atlantic Operating Group

Oyster Creek Generating Station's Analysis

- Response strategy not fully implemented
 - Security did not re-deploy
 - Interviews and radio tape verify that the responders would re-deploy
 - Radio tapes did not provide sufficient indication
 - Based on the alarms/information re-deployment would have been inappropriate

Oyster Creek Generating Station's Analysis

- Successful security drills conducted post OSRE for area “A”
- Safe shutdown capability maintained
 - Operator action not required for greater than 1 hour
 - Operations SRO identified required actions
 - Sufficient time available to perform required action

Oyster Creek Generating Station Significance Determination

Attachment 0609.02 Group 1 Questions

1. Issue **does not** have an actual or credible impact on safety.
2. Issue **does not** suggest a programmatic problem that has a credible potential to impact safety and is more than an isolated case.
3. Issue **could not** be viewed as a precursor to a significant event.
4. If left uncorrected the same issue **would not** become a more significant safety concern.
5. There **are no** associated circumstances that add regulatory or safety concerns (e.g., apparent willfulness, licensee refusal to comply).
6. Issue **does not** relate solely to NRC limits versus licensee administrative limits.
7. Issue **does not** relate to performance indicators or cause a threshold to be exceeded.

Oyster Creek Generating Station's Conclusion

The loss of the single target set during the second Force-on-Force exercise conducted on May 8, 2001, is considered to be of minor significance based on:

- Isolated incident
- Not due to procedure or training deficiencies
- Not predictable or repeatable
- Not a result of a broad programmatic problem with the physical protection system

Oyster Creek is using the Corrective Action Program to learn from this exercise and improve the Security Program

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Closing Remarks

Ernest Harkness