

U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-219/88-05

Docket No. 50-219

License No. DPR-16

Priority ---

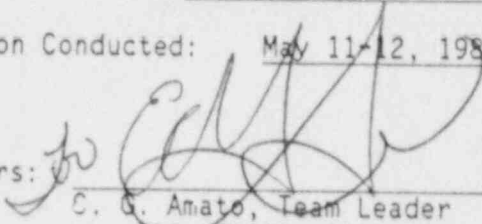
Category C

Licensee: GPU Nuclear Corporation
P. O. Box 388
Forked River, New Jersey 08731-0388

Facility Name: Oyster Creek Nuclear Generating Station

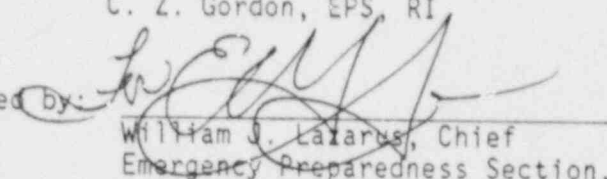
Inspection at: Forked River, New Jersey

Inspection Conducted: May 11-12, 1988

Inspectors: 
C. G. Amato, Team Leader
EPS, FRSSB, DRSS

6/30/88
Date

R. J. Bailey, SG, RI
R. K. Christopher, EPS, RI
E. E. Collins, RI, Oyster Creek
E. F. Fox, Jr., Sr. EPS, RI
C. Z. Gordon, EPS, RI

Approved by: 
William J. Lalarus, Chief
Emergency Preparedness Section, FRSSB

6/30/88
Date

Inspection Summary: Inspection on May 11-12, 1988 (Report No. 50-219/88-05)

Areas Inspected: Routine, announced, emergency preparedness inspection of the licensee's Emergency Exercise conducted on May 11-12, 1988. The State of New Jersey, Ocean County and local governments participated but were not observed by the U. S. Federal Emergency Management Agency.

Results: No violation, deviations or unresolved items were identified. Emergency response actions were adequate to provide protective measures for the health and safety of the public.

8807200134 880707
PDR ADDCK 05000219
Q PNU

DETAILS

1.0 Persons Contacted

- *J. Barton, Deputy Director, Oyster Creek
- *T. Blount, Lead Emergency Planner
- *J. Bontempo, Lead Emergency Planner
- *R. Ewart, Security Lieutenant
- *E. Fitzpatrick, Director, Oyster Creek
- *G. Giangli, Manager, GPU Corporate Emergency Planning
- *S. Kempf, Emergency Offsite Planner
- *J. Kowalski, Site Licensing Manager
- *D. MacFarlane, Manager Site Audits
- *S. Polan, Manager, Public Information
- *A. Rone, Director, Plant Engineering
- F. Sciarra, Security Officer
- *R. Stinzicum, Site Security Supervisor
- *J. Sullivan, Director, Plant Operations
- *R. Sullivan, Manager, Emergency Preparedness
- *S. Surgeoner, Manager, Public Relations
- *M. Slobodien, Director, Radiological Controls
- *K. Wolf, Manager, Radiological Engineering

* Denotes those present at the exit interview.

The inspectors also observed the actions of, and interviewed, other licensee personnel.

2.0 Emergency Exercise

The Oyster Creek Nuclear Generation Station announced, full-participation, exercise was conducted on May 12, 1988, 5:00 p.m. to 10:30 pm. The State of New Jersey, Ocean County and 26 municipalities and 36 local government Agencies participated. The U. S. Federal Emergency Management Agency did not observe the exercise.

2.1 Pre-Exercise Activities

The exercise objectives submitted to NRC Region I on January 12, 1988 were reviewed and, following revision, determined to be adequate to test the licensee's Emergency Plan. On March 29, 1988, the licensee submitted the complete scenario package for NRC review and evaluation. Region I representatives had telephone conversations with the licensee's emergency preparedness staff to discuss the scope and content of the scenario. As a result, minor revisions were made to the scenario which allowed adequate testing of the major portions of the Oyster Creek Nuclear Generating Station Emergency Plan and Implementing Procedures and also provided the opportunity for licensee personnel to demonstrate those areas previously identified by the NRC as in need of corrective action.

NRC observers attended a licensee briefing on May 11, 1988. Suggested NRC changes to the scenario made by the licensee were discussed during the briefing. A licensee representative stated that certain emergency response activities would be simulated and that controllers would intercede in exercise activities to prevent scenario deviations or disruption of normal plant operations.

The exercise scenario included the following events:

- Notification of possible terrorist action against unidentified reactors in New York, New Jersey, and Connecticut.
- Vehicle accident within the Protected Area, fuel oil spill and fire.
- Compressed gas cylinders set free by the accident penetrate an Augmented Off-Gas Treatment Building wall producing a ground level, unmonitored release; localized site contamination occurs.
- Penetration of Protected and Vital Areas by two intruders.
- Bomb detonation with resulting damage.
- Electromagnetic relief valve stuck in the open position.
- Release of radioactive material to the reactor building.
- Elevated, filtered release to the off-site environment.

2.2 Activities Observed

During the conduct of the licensee's exercise, NRC team members made detailed observations of the activation and augmentation of the Emergency Response Organization (ERO), activation of Emergency Response Facilities (ERFs) and actions of emergency response personnel during the operation of the ERFs. The following activities were observed.

1. Diagnosis of events and recognition of symptoms by reactor operators.
2. Selection and use of the correct Administrative Procedures, Abnormal Operating Procedures, Emergency Operating Procedures, Emergency Plan Implementing Procedures and Security Contingency Procedures.
3. Fire fighting, Radiation Control support of the Fire Brigade, contamination and hazardous material spill control.

4. Protected and Vital Area intrusion.
5. Simulated placement of two bombs one of which went off.
6. Apprehension and questioning of the intruders.
7. Location of the other bomb prior to detonation and its deactivation by a bomb disposal team.
8. Emergency Classification and timely notification to off-site authorities.
9. Assessment of accident conditions.
10. Dispatch of on-site and off-site monitoring teams.
11. Dispatch of teams from the Operations Support Center, including two security teams.
12. Calculation of projected doses and dose commitments.
13. Consideration of Protective Action.
14. Preparation of press releases.

3.0 Exercise Observations

3.1 Exercise Strengths

The NRC team noted that the licensee's activation and augmentation of the Emergency Response Organization (ERO), Security Organization, and Emergency Response Facilities, and use of these facilities were generally consistent with their Emergency Plan, Emergency Plan Implementing Procedures and Security Contingency Plan.

The team also noted the following licensee actions that provided positive indications of their ability to cope with abnormal plant conditions and security events:

- Prompt and correct response to events and symptoms by the Emergency Control Center staff;
- Good command and control and internal communications;
- Excellent response to the fire and recognition of the need to control a hazardous material spill, use of means to do so and notification of cognizant governmental authorities;
- Environmental Assessment Control Center staff were very aggressive and coordinated activities well;

- Good Radiation Control of Operations Support Center (OSC) teams;
- Excellent response by OSC teams tasked with repairing the Augmented Off-Gas (AOG) Treatment facility;
- Timely evacuation of the Reactor Building;
- Excellent communication with the bomb disposal team by the accompanying Security Officer;
- Good interface between the Emergency Control Center (ECC) and local law enforcement agencies;
- The Emergency Director correctly applied barrier breach analysis and followed recovery procedures;
- The modified Implementing Procedure re-locating the Emergency Director from the Emergency Control Center to the Technical Support Center was effective;
- Good, overall, consistent Security Organization response to threats, intrusion, intruder and bomb search and accountability.

3.2 Exercise Weaknesses

The NRC identified the following areas that need to be evaluated by the licensee (the licensee conducted an adequate self critique of the exercise which also identified some of these areas). These items will be evaluated during a subsequent Emergency Preparedness inspection.

- Cordon control was not complete around the Augmented Off-Gas Treatment Building. Inadvertent entry into the fire zone was possible. (50-219/88-05-01)
- After the fire was extinguished, contamination control techniques were inadequate. Only one Health Physics Technician was available who did not survey all potentially contaminated individuals and equipment. A controller was not assigned to provide data. (50-219/88-05-02)
- The Technical Support Coordinator did not, apparently, at all times respond satisfactorily to the Emergency Support Director's questions as to the possible effects of varying torus water level. (50-219/88-05-03)

- The Emergency Operations Facility (EOF) Security Support Coordinator was not involved in the Emergency Support Director's initial EOF manager's meeting. As a result, information as to the status of the security event, implementation of the Security Contingency Procedures and their interrelations with operational safety were not initially available. (Reference IE Information Notice 83-27) (50-219/88-05-04)
- Operations Support Center command and control was not always clear and consistent as to who was in charge. (50-219/88-05-05)
- Operations Support Center activity was based on declaration of a Site Area Emergency one hour before it was declared. (50-219/88-05-06)
- Radio communications capability and radio net control procedures used during security events should be reviewed. (50-219/88-05-07)
- An apparent discrepancy between the Security Contingency Plan, Emergency Plan Implementing Procedures and the reporting requirements of 10 CFR 50.72 and 10 CFR 73.71 have resulted in failure to update the NRC in a timely manner as to the progress of the security event. (50-219/88-05-08)
- The licensee did not provide adequate initial assistance upon arrival of the bomb disposal team. (50-219/88-05-09)
- There is an inconsistency between the wording of Section 3.5 of and Attachment I, Category S to Procedure 9473-IMP-1300.01, Rev. 4. Paragraph 3.5 does not include Security related events as the basis for declaration of a Site Area Emergency (SAE). (50-219/88-05-10)

4.0 Licensee Action on Previously Identified Items

Based upon discussions with licensee representatives, observations of the exercise and review of records, the following items, identified in Inspection Reports 50-219/86-07, 87-11 and 88-06, were not repeated or satisfactory corrective actions are in progress and the following are closed or continued as noted.

- (Closed) IFI (50-219/86-07-01). The Control Room was not advised there was radioactivity in the fire plume.
- (Closed) IFI (50-219/86-07-04). Access control and frisking of personnel entering the Technical Support Center was not conducted in accordance with Procedure 6430-IMP-1300.26.

- (Closed) IFI (50-219/86-07-05). Information flow to and from the Technical Support Center (TSC) was inadequate.
- (Closed) IFI (50-219/86-07-06). The Parsippany Technical Functions Center (PTFC) did not respond promptly to TSC requests.
- (Closed) IFI (50-219/87-11-01). The Emergency Director (ED) analyzed data, and failed to concentrate on priority corrective actions.
- (Closed) IFI (50-219/87-11-02). The Fire Brigade exhibited poor fire fighting techniques.
- (Open) IFI (50-219/87-11-05). Evacuation Time Estimates (ETEs) were not considered when declaring a General Emergency (GE) and developing a Protective Action Recommendation (PAR). This exercise did not escalate to a GE, therefore no PARs were necessary and it was not possible to observe use of ETEs.
- (Open) IFI (50-219/87-11-06 and 50-219/88-06-05). Excessive air sample volume appears to be collected by field teams. The licensee has reviewed this matter and will provide documentation describing results of their review.
- (Closed) IFI (50-219/87-11-07). A Radcon technician could not use a portable (laptop) computer and software to calculate projected doses.
- (Closed) IFI (50-219/87-11-08). Containment high range monitor readings were not used to estimate core damage.
- (Open) IFI (50-219/88-06-04). The licensee has reviewed conservatisms in the methodology for computing projected doses and dose commitment calculations and will submit a revised Oyster Creek Emergency Dose Manual (9300-ADM-4010).

5.0 Exit Meeting

The inspectors met with the licensee personnel listed in Section 1 of this report at the conclusion of the inspection. The licensee was informed no violations, deviations or unresolved items were identified. The inspectors also discussed areas for improvement. The licensee acknowledged these findings and agreed to evaluate them, institute corrective actions as necessary and include needed corrections in the Corporate Emergency Plan, Oyster Creek Implementing Procedures, and the Oyster Creek Emergency Dose Manual. At no time during the course of the inspection did the inspectors give the licensee written material.