U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-219/86-07

Docket No. 50-219

License No. DPR-16 Priority -- Category C

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

Facility Name: Oyster Creek Nuclear Generating Station

Inspection At: Forked River, New Jersey

Inspection Conducted: April 9-10, 1986

Inspectors: Craig Z. Gordon 5-15-86
C. Z. Gordon, EPS, EP&RPB, DRSS date

C. Amato, Region I
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Approved by: T. L. Harpster 5/16/86
T. L. Harpster, Chief date
Emergency Preparedness Section, DRSS

Inspection Summary: Inspection on April 9-10, 1986, (Report No. 50-219/86-07)

Areas Inspected: Routine, announced emergency preparedness inspection and observation of the licensee's annual emergency exercise performed on April 9-10, 1986. The inspection was performed by a team of four NRC Region I personnel.

Results: No violations were identified. The licensee's response actions for this exercise were adequate to provide protective measures for the health and safety of the public.

DETAILS

1. Persons Contacted

The following licensee representatives attended the exit meeting held on April 10, 1986:

P. F. Ahern, NSCC Staff
J. J. Barton, Deputy Director, OCNGS
T. Blount, Emergency Planner
J. E. Bontempo, Sr. Emergency Planner
D. J. Cafaro, Manager, Environmental Controls
P. B. Fiedler, Director, OCNGS
G. J. Gigi, Manager, Emergency Preparedness, GPU Nuclear
J. B. Leavitt, Deputy Director, Radiological Controls
R. L. Long, Director, Nuclear Assurance
B. C. Mingst, Senior Emergency Planner
T. M. Osborn, NSCC Staff
V. Plesnanski, Secretary, Emergency Preparedness
A. H. Rone, Manager, Operations Engineering
J. L. Sullivan, Director, Plant Operations
R. L. Sullivan, Manager, Emergency Preparedness
D. Turner, Director, Radiological Controls
I. A. Wazzan, Emergency Planner
R. E. Weltman, Manager, Mechanical Materials

2. Emergency Exercise

The Oyster Creek full scale exercise was conducted on April 9, 1986, from 3:30 p.m. until 10:45 p.m.

a. Pre-Exercise Activities

The exercise objectives, submitted to NRC Region I on January 22, 1986, were reviewed and, following revision, determined to adequately test the licensee's Emergency Plan. On February 13, 1986, 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 and supporting data by the licensee. The revised scenario allowed adequate testing of the major portions of the Emergency Plan and Emergency Plan Implementing Procedures (EPIP) 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 April 9, 1986, and participated in the discussion of emergency response actions expected during the scenario. Suggested NRC changes to the scenario

were made by the licensee in areas of operations, radiological controls, technical support, meteorology, and in presentation of data. These changes were also discussed during the briefing. The licensee 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:

- Loss of offsite AC power
- Failure of bridge control while raising a fuel pool canister
- Fire in Standby Gas Treatment System
- Noble gas and iodine release
- Loss of Coolant Accident (LOCA)
- Core uncovery
- Declaration of unusual event, alert, site area emergency, and general emergency classifications.
- Release termination
- Reentry and recovery

The above events caused the activation of the licensee's onsite emergency response facilities and offsite Emergency Operations Facility (EOF).

b. Activities Observed

During the conduct of the licensee's exercise, NRC team members made detailed observations of the activation and augmentation of the emergency organization, activation of emergency response facilities, and actions of emergency response personnel during the operation of the emergency response facilities. The following activities were observed:

- Detection, classification, and assessment of the scenario events;
- Direction and coordination of the emergency response;
- Notification of licensee personnel and offsite agencies;
- Communications/information flow, and record keeping;
- Assessment and projection of radiological dose and consideration of protective actions;
- Provisions for in-plant radiation protection;
- Performance of offsite and in-plant radiological surveys;
- Maintenance of site security and access control;
- Performance of technical support;
- Performance of repair and corrective actions;
- Performance of firefighting activities;
- Assembly and accountability of personnel;
- Provisions for communicating information to the public; and
- Management of recovery operations.

c. Exercise Observations

The NRC team noted that the licensee's activation and augmentation of the emergency organization, activation of the emergency response facilities, and use of the facilities were generally consistent with their emergency response plan and implementing procedures. The team also noted the following actions of the licensee's emergency response organization that were indicative of their ability to cope with abnormal plan conditions:

- Response and turnover were thoroughly conducted by the onshift operators when relieved by the initial response team.
- Personnel briefings were conducted in a timely manner by managers in command of each emergency facility.
- Emergency response personnel were knowledgeable in their assignments and demonstrated use of the emergency procedures, and, in general, demonstrated they were competent in performing assigned functions.
- The Emergency Support Director provided adequate direction and control throughout the emergency and the interface with State officials was effective.

d. Open Items

The NRC identified the following areas which need to be evaluated by the licensee for corrective action (the licensee conducted an adequate self-critique of the exercise which also identified some of these areas):

- Information communicated to the Control Room regarding the onsite fire indicated that no radioactivity was contained in the smoke (plume) yet elevated levels of radioiodine were actually present (50-219/86-07-01).
- Prior to obtaining an actual post-accident sample for drywell oxygen, the on-shift Control Room operators (exercise exempt personnel) were not notified (50-219/86-07-02).
- A repair and corrective action team was dispatched from the OSC to tie the 1-C and 1-D emergency buses without authorization from the Emergency Director (50-219/86-07-03).
- Access control performed by Security staff and frisking of personnel prior to TSC entry was not performed as described by Procedure 6430-IMP-1300.26, "Technical Support Center". (50-219/86-07-04).

- Information flow to and from the TSC was not adequate in regard to plant parameters, equipment status, radiological release information, and confirmation of critical scenario events (50-219/86-07-05).

- The TSC staff encountered delays in obtaining information back from the Parsippany Technical Functions Center (PTFC) after their requests for onsite technical assistance were made (50-219/86-07-06).

- Members of the fire brigade proceeded to the fire scene without a representative from radiological controls. (50-219/86-07-07).

- When accompanying repair and corrective action teams, prior arrangements were not in place for including outside health physics support on radiation work permits for access into special radiation areas. (50-219/86-07-08)

- Contamination control techniques demonstrated by the fire brigade were poor. As a result, actual radiation surveys to determine if real contamination was spread to the adjacent area were required. Subsequently, the radiation detection instrument used to perform the resultant survey was found to be inoperable. (50-219/86-07-09)

- Assessment and dissemination of technical information at the EOF could have been better. Prior to meeting with State and simulated NRC representatives, protective action recommendations were not formulated. Further, the EOF technical support representative was unable to report core status during a critical briefing. Core damage assessment was not apparent. (50-219/86-07-10)

- Press releases contain an unnecessary amount of technical information regarding plant parameters and radiological data rather than translating this information into language and concepts readily understood by the public (50-219/86-07-11).

e. Licensee Actions on Previously Identified Items

(Closed) 50-219/85-17-01 Certain practices related to control room activities contributed to a degraded response.

During this exercise, the control room practices previously identified as open items were corrected in that briefings provided to control room staff in regard to overall plant conditions were timely; logs maintained by operators were adequate; no problems were identified with use of telephones; and the performances of shift technical advisors were effective. No items related to control room activities were found to recur.

(Closed) 50-219/85-17-02 A certain practice conducted within the Technical Support Center (TSC) contributed to a degraded response.

The Technical Support Center practice previously identified as an open item was corrected in that the current status of major events was maintained throughout the exercise. No items related to TSC activities were found to recur.

(Closed) 50-219/85-17-03 Certain practices related to operational support or inplant activities contributed to a degraded response.

Emergency response actions demonstrated by licensee personnel relating to the Operations Support Center (OSC) previously identified as deficiencies were corrected in that frisking and exposure control procedures were followed; analysis of air samples appeared adequate; accountability was maintained throughout the exercise; and OSC recordkeeping practices were adequate. No items related to OSC activities were found to recur.

(Closed) 50-219/85-17-04 Certain practices related to offsite dose assessment contributed to a degraded response.

Deficiencies previously identified relating to offsite dose assessment were corrected in that the dose assessment model was used throughout the exercise and inputs were appropriate; posting of data and data presentation was informative and timely; and radiological dose projections were accurate. No items related to dose assessment activities were found to recur.

(Closed) 50-219/85-17-05 Certain practices related to the Emergency Operations Facility (EOF) contributed to a degraded response.

Deficiencies previously identified relative to the Emergency Operations Facility were corrected in that the emergency classification was posted and updated and access control by security was adequate. No items related to EOF activities were found to recur.

f. Licensee Critique

The NRC team attended the licensee's post-exercise critique on April 10, 1986 during which key licensee controllers discussed observations of the exercise. The critique appeared adequate in that licensee participants highlighted both areas for improvement (which the licensee indicated would be evaluated and appropriate actions taken) and areas in which improvements have been made.

Specific improvement areas which were identified related to difficulty in obtaining samples from the radioactive gaseous and effluent monitoring system (RAGEMS), delays in coordinating Radcon

support, transmitting of press release information between the control room, EOF, news center and news media, and internal concerns with the public information program.

3. Exit Meeting and NRC Critique

Following the licensee's self-critique, the NRC team met with the licensee representatives listed in Section 1 of this report. The team leader summarized the observations made during the exercise.

The licensee was informed that previously identified items were adequately addressed and no violations were observed. Although there were areas identified for corrective action, the NRC team determined that within the scope and limitations of the scenario, the licensee's performance demonstrated that they could implement their Emergency Plan and Emergency Plan Implementing Procedures in a manner which would adequately provide protective measures for the health and safety of the public.

Licensee management acknowledged the findings and indicated that appropriate action would be taken regarding the identified open items.

At no time during this inspection did the inspectors provide any written information to the licensee.