U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 50-219/82-04

Docket No. 50-219

License No. DPR-16 Priority -- Category C

License: GPU Nuclear Corporation

Madison Avenue at Punch Bowl Road

Morristown, New Jersey 07960

Facility Name: Oyster Creek Nuclear Generating Station

Inspection At: Forked River, New Jersey

Inspection conducted: March 15-17, 1982

Inspectors: W. W. Kinney, Team Leader, EPS, RI — 4/30/82 date signed

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Aprroved By: H. W. Crocker, Chief, Emergency Preparedness — 4/30/82 date signed

SUMMARY

Inspection on March 15-17, 1982 (Report Number 50-219/82-04)

Areas Inspected: Routine announced emergency preparedness inspection and observation of the licensee's annual emergency exercise. The inspection involved 246 inspector-hours by a team of ten NRC Region I, NRC Headquarters, and NRC contractor personnel.

Results: No violations were identified.

DETAILS

1. Persons Contacted

	Normal Function/Title	Emergency Exercise Function/Title
P.R. Clark	Executive Vice President	Emergency Support Director
P.B. Fiedler	Vice President Oyster Creek	Member of Emergency Control Center Staff
J.G. Herbein	Vice President Nuclear Assurance	Dose Assessment Advisor to Emergency Support Director
J.T. Carroll, Jr.	Director-Station Operations	Emergency Director
J. L. Sullivan, Jr.	Plant Operations Director	Assistant to Emergency Director
K.O.E. Fickeissen	Plant Engineering Director	Technical Support Center Coordinator
J. Maloney	Manager-Plant Maintenance	Operations Coordinator
D. Turner	Manager-Radiological Controls	Radiological Protection Coordinator
D. Cafaro	Manager-Environmental Controls	Environmental Assessment Coordinator
M.F. Budaj	Manager-Special Projects	Media Affairs Representative
S. Fuller	Manager-Operations QA	NEOF Communications Coordinator
J.F. Riggar	Supervisor-Security	Group Leader Security Support
R.E. Rogan	Manager-Emergency Preparedness	NEOF Observer
R.D. Fenton	Supervisor-Emergency Preparedness	Lead Controller

E.T. Suter	Emergency Planning	Control Room Observer
D.H. Crankshaw	Coordinator-Emergency Preparedness	OSC Observer
G.A. Carson	Emergency Planning	TSC Observer

The team also observed and interviewed other licensee emergency response personnel as they performed their emergency response functions.

2. Emergency Exercise

The Oyster Creek Nuclear Generating Station emergency exercise was conducted on March 16, 1982, from about 4:30 a.m. until approximately 5:00 p.m.

a. Pre-exercise Activities

The licensee coordinated the exercise scenario with the various participating offsite agencies.

The licensee provided the NRC Region I with Attachments A and B of their 1982 Annual Radiation Emergency Exercise Scenario in a letter dated February 26, 1982. Attachment A provided the objectives of the exercise. Attachment B provided the scope of the exercise scenario; the scenario major initiating events and the time of event occurrence; and the expected response to the events.

The NRC team attended the licensee's pre-exercise briefing of the exercise observers/controllers which was held on March 15, 1982. At that time the team received a complete Emergency Exercise Scenario which included Attachment C. Attachment C provided detailed scenario data such as meteorological data, data for dose projection, control room data, time of activation of significant alarms, in-plant radiation data, and post-accident stack sample data. It did not include the off-site radiation data. The licensee had provided this data to their off-site monitoring team observers/controllers.

The exercise scenario included a large release of radioactivity to the environment which required emergency response by the State of New Jersey and Ocean County, both of which contain the land area within 10 miles of the facility. The scenario included a fire which caused the response of an offsite fire fighting company. Finally, the scenario included the contaminated injury of an emergency worker which caused the response of a local first aid squad ambulance service and a local hospital.

Based on the above findings, this portion of the licensee's exercise program appeared to be acceptable.

b. Exercise Observation

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

(1) detection, assessment, and classification of the emergency events provided in the exercise scenario;

(2) direction and coordination of the emergency response;

(3) notification of licensee personnel and offsite agencies of pertinent information;

(4) evacuation, assembly, and accounting for licensee personnel;

(5) assessment and projection of radiological (dose) data and consideration of protective actions;

(6) performance of offsite, onsite, and in-plant radiological surveys;

(7) performance of fire fighting;

(8) performance of first aid and rescue;

(9) provision of in-plant radiation protection;

(10) maintenance of site security and access control;

(11) performance of technical support;

(12) performance of repair and corrective actions; and

(13) provision of information to the public.

The NRC team noted that the licensee's activation and augmentation of the emergency organization; establishment of the emergency response facilities; and emergency response actions were generally consistent with their emergency response plan and implementing procedures. However, the team did find areas for licensee improvement which are discussed below. (The licensee also identified some of these areas in their critique of the exercise.)

With regard to the direction and coordination of the emergency response by the Full Mobilization (Offsite) Emergency Organization, it was noted that there was confusion in the Nearsite Emergency

Operations Facility (NEOF) about who was the individual in command, even though it was announced that one individual was the Emergency Support Director. The confusion was due to the fact that the most senior officer of GPU Nuclear present at the NEOF did not assume the position of the Emergency Support Director, and he took an active part in directing emergency actions. To eliminate such confusion, the most senior officer present at the NEOF should either assume the position of Emergency Support Director or not take an active part in directing emergency actions.

With regard to providing pertinent information to licensee personnel and offsite agencies, it was noted that the message flow and message recording systems used by the communicators in the emergency response facilities should be organized better to assure that: 1) information is communicated in a timely fashion; 2) the information is accurate; 3) the information given to various agencies is consistent; and 4) the messages are recorded in an orderly manner. Also, it was noted that security personnel were not kept abreast of emergency events other than the event classification level and offsite monitoring teams were not informed about either the status of the emergency at the site or the emergency classification level. Knowledge of the events and situation would help emergency response personnel in the performance of their emergency functions.

With regard to the assessment and projection of radiological (dose) data, it was noted that post-accident data from the analyses of post-accident samples of the reactor coolant, containment atmosphere, and stack effluents, and the readings from radiation monitors were either not available or were not provided to the environmental assessment personnel in a timely fashion. Also, other source term information needed for radiological dose assessment and projection was not supplied to the Environmental Assessment Control Center from the Technical Support Center personnel as rapidly as it was needed. It was also noted that, although the environmental assessment staff appeared to be well trained in their Emergency Plan Implementing Procedures, the staff had difficulty in adapting the procedures to unexpected situations. Additional training in the technical bases for the procedures would be beneficial. Further, it was noted that the reliability of the Meteorological Information and Dose Acquisition System (MIDAS) computer terminal in the Environmental Assessment Control Center should be improved.

With regard to the performance of offsite radiological surveys, it was noted that Geiger-Mueller (GM) counters were being used to measure the dose rate of the noble gases in the plume. An ionization chamber type meter would provide more accurate dose rate measurements. It was also noted that only gamma radiation measurements were made. Measurements of the beta radiation as well as the gamma radiation would help define the plume. Further, it was noted

that the offsite monitoring teams were using the same radio frequency as security personnel. This caused some interference with data transmission. If at all possible, the offsite monitoring teams should have radios with a separate frequency.

With regard to the performance of first aid and rescue, it was noted that there was about a 25 minute delay between the time when the ambulance should have arrived and the time when the ambulance actually arrived. It was determined that the call for offsite assistance was not made promptly by either the Emergency Director or the Operations Support Center Coordinator as called for in the pertinent Emergency Plan Implementing Procedure, EPIP-7, Personnel Injury. The licensee should assure that the responsible person is aware of his responsibility for ensuring that injured persons receive medical treatment and expeditious transport to a medical facility.

With regard to technical support, it was noted that the Technical Support Center did not have process data display equipment or closed circuit television of control room instrumentation for the technical support personnel to use in assessing and solving technical problems. Instead, the licensee used telephone conversations and a telecopier to transmit data from the Control Room to the Technical Support Center. Better means of transmitting and displaying process data to the Technical Support Center would enable the technical support personnel to perform better.

The onsite Technical Support Center took the lead in providing the technical support to the Emergency Director. The Emergency Plan indicates that once the Parsippany Technical Functions Center is manned and functional, it will assume responsibility for directing the technical functioning of the plant. The licensee should reconcile this situation so there is agreement between the plan and their emergency response.

It was noted at the Parsippany Technical Functions Center that there was no current Emergency Plan Implementing Procedure for the activation and operation of this center in support of the Oyster Creek Nuclear Generating Station.

With regard to the performance of repair and corrective actions, it was noted that unusual changes were made to equipment and controls which were not covered by procedures. Of concern was the fact that written records were not maintained of these unusual changes, such as the defeat of control interlocks, and future processing errors could result from the lack of knowledge of the actual status of the changes made to equipment and controls in the Control Room as they cope with the emergency situation. Also, in the area of communications in the Control Room, it was noted that shift turnover was accomplished only between individuals.

Consideration should be given to providing a shift turnover which includes a common briefing of incoming personnel on the overall situation.

With regard to the provision of information to the public, it was noted that once the Governor of the State of New Jersey declared a "state of emergency" the willingness of the licensee to brief reporters on the status of the plant was dampened. It was also noted that upon the declaration of the "state of emergency," the Governor's representative at the Media Center had to clear press release information with state officials at a different location. This could detract from, not promote, the flow of prompt announcements to the media on the status of the plant. According to the licensee, an agreement between the State of New Jersey and GPU Nuclear calls for the Governor's office to assume responsibility for the contents of press releases once the State has declared a state of emergency.

c. Exercise Critique

The NRC team attended the licensee's post-exercise critique on March 17, 1982. Most of the eighteen observers/controllers individually presented their observations concerning the exercise. Many pertinent observations were made during the critique. About one-third of the improvement areas discussed in the foregoing section of this report were discussed. The licensee indicated that the observations would be evaluated and appropriate corrective actions taken. The licensee also indicated that the items and the corrective actions would be documented.

The NRC team reviewed the licensee's findings and determined that the licensee had not identified any items which exhibited a potential for a significant degraded emergency response. However, areas for improvement were identified. Discussions during the critique indicated that licensee management possessed sufficient understanding of these areas to permit timely and effective improvements.

Based on the findings in the above area, the NRC team determined that the licensee had performed a critique of the emergency exercise in accordance with their Emergency Plan.

5. Exit Meeting and NRC Critique

On March 17, 1982, following the licensee's self-critique, the NRC team met with the licensee representatives listed in Section 1. The team leader summarized the purpose and scope of the NRC inspection. The team leader informed the licensee that their performance during the exercise demonstrated that they could implement their Emergency

Plan and Emergency Plan Implementing Procedures in a manner which would adequately provide for the health and safety of the public. There were areas where improvements should be made. The team leader and team members discussed these matters with the licensee. The areas for licensee improvement discussed in Section 2.b of this report were included in this discussion.

Licensee management acknowledged the findings and indicated that evaluation and resolution of the identified improvement areas would begin immediately.