

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-322/88-05
Docket No. 50-322
License No. CPPR-95 Priority _____ Category C

Licensee: Long Island Lighting Company
P.O. Box 618
Wading River, New York 11792

Facility Name: Shoreham Nuclear Power Station

Inspection At: Wading River, New York

Inspection Conducted: June 6-10, 1988

Inspectors: C. Conklin, Team Leader, EPS,
FRSSB, DRSS

6/20/88
date

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Inspection Summary: Inspection on June 6-10, 1988 (Report No. 50-322/87-19)

Areas Inspected: Routine, announced emergency preparedness inspection and observation of the licensee's annual full-participation emergency exercise performed on June 7-9, 1988. The inspection was performed by a team of eight NRC Region I and contractor personnel.

Results: No violations were identified. Emergency response actions 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 June 10, 1988.

- G. Krieger, Emergency Preparedness Supervisor
- C. Daverio, Manager, Nuclear Operations Support Department
- J. Notaro, Manager, QA Department
- I. Freilicher, Vice President Corporate Affairs
- W. Steiger, Plant Manager
- E. Youngling, Manager, Nuclear Engineering
- S. Skorupski, Assistant Vice President Nuclear
- D. Crocker, Manager, Nuclear Emergency Preparedness

The team observed and interviewed several licensee emergency response personnel, controllers and observers as they performed their assigned functions during the exercise.

2. Emergency Exercise

The Shoreham Nuclear Power Station full-participation exercise was conducted on June 7, 1988 from 4:30 AM to 5:00 PM. The State of New York and Suffolk County did not participate. The Local Emergency Response Organization (LERO) compensated for the non-participants. The licensee and LERO conducted field monitoring activities, an ingestion pathway exercise and recovery and reentry activities on June 8-9, 1988. The Federal Emergency Management Agency (FEMA) observed all off-site activities.

2.1 Pre-exercise Activities

Prior to the emergency exercise, NRC Region I and FEMA representatives held meetings and had telephone discussions with licensee representatives to discuss objectives, scope and content of the exercise scenario. As a result, changes were made in order to clarify certain objectives, revise certain portions of the scenario and ensure that the scenario provided the opportunity for the licensee to demonstrate the stated objectives as well as those areas previously identified by NRC and FEMA as in need of corrective action.

NRC observers attended a licensee briefing on June 6, 1988, and participated in the discussion of emergency response actions expected during the various phases of the scenario. The licensee stated that controllers would intercede in exercise activities to prevent scenario deviation or disruption of normal plant operations.

The exercise scenario included the following events:

- Unidentified drywell leakage;
- A fire resulting in a loss of Uninterruptable Power Supply #2;
- A complete loss of off-site power;
- Loss of Coolant Accident (LOCA) due to Loop A recirculation valve failure;
- Loss of all ECCS resulting in a release to the atmosphere;
- Declaration of Unusual Event, Alert, Site Area Emergency and General Emergency Classifications;
- Calculation of offsite dose consequences; and
- Recommendation of protective actions to off-site officials.

2.2 Activities Observed

During the conduct of the licensee's exercise, eight 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:

1. Detection, classification, and assessment of scenario events;
2. Direction and coordination of the emergency response;
3. Augmentation of the emergency organization and response facility activation;
4. Notification of licensee personnel and offsite agencies of pertinent plant status information;
5. Communications/information flow, and record keeping;
6. Assessment and projection of offsite radiological dose and consideration of protective actions;
7. Provisions for inplant radiation protection;
8. Performance of offsite and inplant radiological surveys;
9. Maintenance of site security and access control;

10. Performance of technical support, repair and corrective actions;
11. Assembly, accountability and evacuation of personnel;
12. Preparation of information for dissemination at the Emergency News Center;
13. Fire fighting practices; and
14. Management of recovery and reentry operations.

3.0 Exercise Observations

3.1 Exercise Strengths

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 that provided strong positive indication of their ability to cope with abnormal plant conditions:

1. Very good command and control of all emergency response facilities (ERF's) was demonstrated, the Emergency Directors/Recovery Manager were decisive and aggressive leaders;
2. Emergency Response Organization (ERO) personnel were knowledgeable, well organized and well trained;
3. Shift turnover was accomplished smoothly and with no apparent loss of control of the situation;
4. The control room staff demonstrated a good use of backup procedures by successfully notifying the State of New York and Suffolk County at both the Unusual Event and Alert classifications when they were unable to notify them over the RECS;
5. The Technical Support Center (TSC) staff was very aware of site conditions, especially concerning ingress and egress;
6. The Operations Support Center (OSC) and TSC demonstrated good exposure control;

7. Field monitoring teams demonstrated good contamination control and survey techniques and were knowledgeable of the survey area;
8. The Emergency Operations Facility (EOF) effectively established and tracked priorities;
9. Information flow between the EOF, TSC and LERO was timely and effective;
10. Protective Action Recommendations (PAR's) were prompt and conservative. Evacuation time estimates were effectively utilized in determining the PAR's. Both shelter and evacuation doses were considered in making the PAR's;
11. The Emergency News Center (ENC) was an effective physical facility; and
12. Recovery and Reentry planning during the Ingestion Pathway exercise was well thought out and interaction with LERO was very good.

3.1 Exercise Weaknesses

The HRC identified the following exercise weakness which needs to be evaluated and corrected by the licensee. The licensee conducted an adequate self critique of the exercise that also identified this area.

1. The technical spokespersons at the ENC did not adequately explain technical issues raised for certain questions and answers were not provided for several questions. Additionally, visual aids weren't always used to help explain technical issues (50-322/88-05-01).

3.2 Areas Requiring Follow-up

The NRC team identified the following areas which could have degraded the response and should be evaluated by the licensee for corrective action.

1. A projected dose assessment was not completed prior to the decision to vent containment. This was due to conflicting calculations between the TSC and EOF which took time to resolve.
2. A dose projection was completed at 1112 based on the 1100 release rate. At the time this calculation was being

forwarded to management, it was known that the release rate was still increasing, but this information was not promptly provided to management.

4.0 Licensee Actions on Previously Identified Items

The following item was identified during a previous inspection (Inspection Report No. 50-322/87-12). Based upon observations made by the NRC team during the exercise the following open item was acceptably demonstrated and is closed:

(CLOSED) 87-12-01 IFI: Verify that response staff can meet augmentation goals.

5.0 Licensee Critique

The NRC team attended the licensee's post-exercise critique on June 10, 1988, during which the key licensee controllers discussed observations of the exercise. The licensee indicated these observations would be evaluated and appropriate corrective actions taken.

6.0 Exit Meeting and NRC Critique

The NRC team met with the licensee representatives listed in Section 1 of this report at the end of the inspection. 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 item.

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