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Docket File: 70-371

Licensee: United Nuclear Corporation (UNC)  
UNC Naval Products Division

Facilities: Naval Fuel Fabrication Plant  
Uncasville, Connecticut

Subject: Review of Emergency Plan, "Chapter 6.0, Emergency Control Plan,"  
As Submitted by Letter Dated February 1, 1980, and Supple-  
mentary Information Transmitted By Letter Dated March 14, 1980,  
07000371A02S

Background

By letter dated September 12, 1978, United Nuclear Corporation (UNC) transmitted the emergency plan for the Uncasville site. The proposed plan was revised March 7, 1979, after NRC requested additional information on January 2, 1979. The plan dated March 7, 1979, was again revised and sent NRC by letter dated February 1, 1980, after NRC had requested (October 30, 1979) additional information on the March 7, 1979 version. A few additional revised pages for the plan dated March 14, 1980, were provided by UNC in response to questions telephoned UNC on February 26, 1980, and listed in the memorandum of March 6, 1980. The questions on the March 1979 version of the plan concerned among other things format, responsibility assignments, frequency of equipment inspections and drills, and updated letters of agreement with supporting agencies. A few similar questions were asked concerning the February 1, 1980 plan.

Although UNC provided the information and commitments requested, the revised plan was not altered to conform to the format used in Annex A of Regulatory Guide 3.42, "Emergency Planning for Fuel Cycle Facilities and Plants Licensed Under 10 CFR Parts 50 and 70." However, all major items addressed in Regulatory Guide 3.42 are addressed in the plan.

The emergency plan as revised was reviewed using the criteria in Appendix E of Part 50, particularly Section IV, and Regulatory Guide 3.42, mentioned above.

Discussion

The discussion which follows summarizes the content of the UNC emergency plan under the same general subjects listed in Section IV of Appendix E of Part 50, "Content of Emergency Plans."

A. Organization - Notification

The licensee has established an emergency organization for coping with incidents such as accidental criticality, fire, power outage, or natural disaster. The emergency organization is headed by the senior qualified Emergency Director present but when no trained Emergency Directors are

present, responsibility is assumed by the senior supervisor present. One or more qualified Emergency Directors will normally be available on each shift. The Emergency Director is aided by the Manager, Nuclear and Industrial Safety, and by plant personnel with specified functional areas of responsibility under emergency conditions. Those areas include health physics, fire fighting, first aid, personnel count, record keeping, communications, and security.

There are a variety of communication systems to notify onsite personnel and offsite agencies of emergency situations. These include the telephone system, radio link to the State Police Barracks, plant-wide public address system, and criticality alarms.

#### B. Special Personnel

In addition to the onsite operations and staff personnel who have identified responsibilities in the event of an emergency, the emergency procedures include a list of employees by position, other than those assigned to the emergency organization, who can assist the emergency director in specified technical areas. The Emergency Director also can call on the personnel of the UNC Fuels Recovery Operation Plant at Wood River Junction, Rhode Island, for health physics assistance and monitoring equipment.

#### C. Release Measurement Capability and Notification Criteria

The Nuclear and Industrial Safety unit in the UNC plant has the required capability (trained personnel, and equipment in the emergency supplies) to determine the magnitude of a release of radioactive materials. The United Nuclear emergency plan divides incidents into five broad classes and gives radioactive material release quantities, concentrations or doses as criteria for activation of the emergency organization and determining the need for notification and participation of outside agencies.

#### D. Outside Agencies

The emergency procedures provide directions to the emergency organization to request participation by those offsite agencies whose services may be needed. Agreements have been reached with the following organizations:

State of Connecticut, Department of State Police

Department of Energy, Brookhaven Area Office (radiological assistance)

State of Connecticut, Department of Environmental Protection (direction and control of radiological emergency response plan incorporated into the Emergency Operations Plan of the State of Connecticut)

Lawrence and Memorial Hospitals (hospitalization of injured or contaminated persons), New London, Connecticut

William W. Backus Hospital (would accept patients by transfer from Lawrence and Memorial to make room for contaminated patients at Lawrence and Memorial), Norwich, Connecticut

Mohegan Fire Company, Uncasville, Connecticut

Northeast Nuclear Energy Company - Millstone Nuclear Power Station, Hartford, Connecticut (mutual assistance agreement for radiation survey meters and radiation survey teams)

E. Maintenance of Organization and Procedures

The licensee will maintain the emergency organization and review and update the emergency procedures for the site at least annually.

F. First Aid and Decontamination Facilities

In addition to identifying required onsite first aid, decontamination and personnel monitoring equipment and supplies, the emergency plan includes provisions for medical assistance for incidents involving excessive exposure to penetrating radiation and/or airborne radioactivity and contaminated wounds or body areas. The agreement with the Mohegan Fire Company includes the provision of ambulance service.

G. Offsite Treatment of Personnel

As indicated in paragraphs F and D, United Nuclear has arrangements with Lawrence and Memorial Hospital in New London, Connecticut, for the hospitalization and treatment of persons who are injured, contaminated, or have been exposed to excessive doses of radiation. Hospital staff personnel include doctors trained in nuclear medicine.

H. Personnel Training

The plan commits UNC to maintain emergency preparedness through a continuing program in which UNC personnel receive training in the use of emergency equipment and the procedures. The capability of outside agencies is maintained by their routine activities and their required special training. (Refresher training frequencies vary with responsibility and are given in the plan.)

I. Practice Drills

Regular evacuation drills are held for all employees at least once a year. At least one drill a year is held in which the outside agencies are involved (hospital, State Police, fire department, and ambulance service).

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J. Reentry Criteria

The UNC plan describes the basic reentry criteria. The technical support for planning and reentry recovery operations provided to the Emergency Director includes advice from specialists in radiological and criticality safety.

Conclusion

The emergency planning for the UNC Montville (Uncasville) site meets the requirements of 10 CFR 50, Appendix E and provides a basis for an acceptable state of emergency preparedness. Issuance of an authorizing amendment to the UNC license is recommended subject to the requirement that the licensee make no changes to the emergency plan as transmitted February 1, and supplemented March 14, 1980, which would decrease the effectiveness of the plan without the prior approval of the Commission. Furthermore, changes to the emergency plan without Commission approval should be promptly submitted, for information purposes, to the Region I Office of Inspection and Enforcement and the Office of Nuclear Material Safety and Safeguards.

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