To DCS 11/24/82
Return to L Tyson 376-55

DISTRIBUTION:
Docket File 70-371
PDR
NMSS rf
FCUP rf
GHBidinger (2)
LTyson
ALSoong
EYShum
WTCrow
Region I

NOV 19 1982

United Nuclear Corporation
UNC Naval Products
ATTN: Mr. W. F. Kirk, Manager
Nuclear and Industrial Safety
67 Sandy Desert Road
Uncasville, CT 06382

Gentlemen:

Your letter of February 24, 1982, requested renewal of License No. SNM-368. In our initial review of your application, we have identified major deficiencies in the renewal document. To continue our review, we need the following information:

1. A listing of currently approved pages, including date of page issuance or approval and security classification status.

2. Revised Nuclear Criticality Demonstration and Criteria as indicated in your February 24, 1982 letter.

3. ALARA Information (see Enclosure 1).

4. Environmental Information (see Enclosure 2).

5. A description of outdoor storage arrays and other new facilities.

On November 11, 1981, we requested another supplement to your application dated September 20, 1979. If you wish to continue our review of this amendment request, the supplement must be included in Item 2 above.

Our detailed review will be continued upon receipt of the above information. You should provide us with this information within sixty (60) days of the date of this letter.

Sincerely,

Original signed by:
W. T. Crow

William T. Crow, Section Leader
Uranium Process Licensing Section
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety, NMSS

Enclosures:
1. ALARA Information
2. Environmental Information

OFFICE ▶		FCUP	FCUF	FCUP	FCUP	FCUP
SURNAME ▶		GHBidinger:rad	LTyson	ALSoong	EYShum	WTCrow
DATE ▶		11/2/82 11/17	11/11/82	11/15/82	11/17/82	11/19/82

NRC FORM 318 (10-80) NRCM 0240

OFFICIAL RECORD COPY

Enclosure 1

ALARA INFORMATION

NOV 19 1982

1. ALARA requirement in Part I of the Application.

Paragraph 20.1(c) of 10 CFR Part 20 states, in part, that the licensee should make every reasonable effort to maintain radiation exposure and releases of radioactive materials in effluents to unrestricted areas as low as is reasonably achievable. Regulatory Guide 8.10, copy enclosed, describes the basic operating philosophy and administrative practices that a licensee should follow to keep occupational radiation exposures as low as is reasonably achievable. UNC should use Regulatory Guide 8.10 as a basis and include appropriate specifications to establish this commitment on a more formal basis. One method of accomplishing this would be to establish an ALARA Committee composed of persons who are technically qualified to evaluate plant operations from the ALARA standpoint. Regarding the ALARA Committee,

a. The qualifications of the committee members should be established (and outside consultants, if needed).

b. State the committee's frequency of meeting and the responsibility for auditing the training program, the administrative procedures for review of all new activities or changes in existing activities, and the responsibility for conducting periodic reviews and assessments of occupational radiation exposures (external and internal), airborne concentration of radioactivity in worker's work area, bioassay results, radioactive material releases to unrestricted areas, and other related abnormal events or emergencies.

c. Every 12 months, the ALARA committee should make a report to senior management, based on the results of their reviews, to identify:

i. Any upward trends developing in personnel exposures (external and internal) for identifiable categories of workers or types of operations, or effluent releases. The cause of the upward trend should be investigated and discussed.

ii. Exposures and releases which can be lowered in accordance with the ALARA concept.

iii. Equipment or operating procedures which are not being properly used and maintained for exposure and effluent control.

This report should include a review of other required audits and inspections performed during the past 12 months and recommendations for any required actions necessary to assure adherence to the ALARA concept in all areas of the radiation safety program. An individual at the management level should be identified as responsible for assuring that recommendations introduced by the committee are implemented.

2. ALARA requirement in Part II of the Application.

Please provide as an appendix to the application an analysis of occupational exposures (external and internal) and quarterly average airborne concentration of radioactivity at each work area in the facility, covering at least the past 2 years of plant operations for each plant area (such as Oxide Building #255) and type of operation performed (such as UF_6 vaporization).

The analysis should identify the sources and locations where most exposures occurred, as related to job categories and work activities. Any trends in exposures or airborne concentration of radioactivity that can be identified should be discussed. Abnormal occurrences should be reviewed and categorized, considering such aspects as frequency, operation being performed, and the magnitude of the resulting exposure. The analysis of internal exposures should consider air sampling data as well as bioassay data (including in vivo lung counting). The analysis should conclude with a description of any steps or measures planned or taken to reduce employee exposure and airborne level, and the effectiveness of these measures.

Enclosure 2

NOV 19 1982

Environmental Information

In connection with your license renewal application, environmental information is required to allow NRC to conduct an environmental impact assessment in accordance with 10 CFR 51. Please provide an updated and consolidated environmental report addressing the various topics as shown in Attachment 1. If some of the information is available in your past documents, please make an effort to update that information and enclose them as an appendix.

Attachment 1

NOV 19 1982

Information To Be Submitted on the Following Topics

1. Introduction

   1.1 Description of the Proposed Action

2. Description of Site Environment

   2.1 Site Location
   2.2 Demography
   2.3 Land Use
   2.4 Geology
   2.5 Hydrology

      2.5.1 Surface water
      2.5.2 Groundwater
      2.5.3 Water Use

   2.6 Meteorology and Climatology

      2.6.1 Winds, tornadoes and hurricanes
      2.6.2 Atmospheric dispersion

   2.7 Background Characteristics

      2.7.1 Radiological Characteristics
      2.7.2 Nonradiological Characteristics

         2.7.2.1 Atmospheric Effluents
         2.7.2.2 Background nonradiological characteristics of water

   2.8 Ecology

      2.8.1 Terrestrial biota
      2.8.2 Aquatic biota

3. The Facility

   3.1 External Appearance
   3.2 Operation Processes
   3.3 Waste Confinement and Effluent Control

      3.3.1 Gaseous effluents
      3.3.2 Liquid effluents
      3.3.3 Solid wastes

4. Environmental Impacts of Facility Operations

   4.1 Radiological Impacts

      4.1.1 Terrestrial

         4.1.1.1 Individual dose
         4.1.1.2 Population dose

   4.2 Nonradiological Impacts

      4.2.1 Terrestrial Impacts
      4.2.2 Aquatic Impacts
      4.2.3 Impacts of liquid effluent on groundwater
      4.2.4 Impacts of solid waste

5. Environmental Monitoring Program

   5.1 Radiological

      5.1.1 Air monitoring
      5.1.2 Water monitoring (surface and groundwater)
      5.1.3 Area monitoring (fallout, vegetation, soil and fish)

   5.2 Nonradiological

      5.2.1 Atmospheric monitoring
      5.2.2 Monitoring of surface waters
      5.2.3 Groundwater monitoring

   5.3 Summary of Effluent and Environmental Monitoring Data from the Past Five Years and Interpretation

6. Impact of Accidents

   6.1 Radiological Accident Evaluation
   6.2 Nonradiological Accident Evaluation
   6.3 Accidents which occurred in the past five year operation and their environmental impact.