



LOUISIANA
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July 24, 1981



W3P81-1757
Q-3-A30
3-A1.01.04

Mr. Frank J. Miraglia
Acting Chief
Licensing Branch No. 3
Division of Licensing
United States Nuclear Regulatory Commission
Washington, D. C. 20555

SUBJECT: Waterford 3 Draft Environmental Statement
Applicant Response to Agency Comment (Docket 50-382)

Dear Mr. Miraglia:

Thank you for your letter of July 14, 1981, offering us the opportunity to offer our response, as appropriate, to the comments on the Waterford 3 DES made by other Federal and State agencies. We have reviewed all of the agency comments you provided, and believe that a portion of them warrant our response. Therefore, as you requested, we have included three (3) signed originals and forty (40) copies of our response as an attachment to this letter.

If we can provide any additional information on the attached responses, please feel free to contact me. If you should receive any comments on the DES in addition to those enclosed with your letter of July 14th, we would also appreciate an opportunity to review those and offer any responses which may be appropriate.

Thank you for your consideration.

Very truly yours,

L. V. Maurin
Assistant Vice President
Nuclear Operations

LVM/sm

Attachments

cc: E. L. Blake, W. M. Stevenson, L. Constable, S. Black

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RESPONSES OF LOUISIANA POWER & LIGHT CO.
TO
SELECTED COMMENTS
OF
FEDERAL AND STATE AGENCIES
ON THE
DRAFT ENVIRONMENTAL STATEMENT
FOR WATERFORD 3
(DOCKET 50-382)

DEPARTMENT OF HEALTH & HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION
BUREAU OF RADIOLOGICAL HEALTH

Comment:

"...we suggest the (emergency) preparedness plan might be modified to address, in particular, the problems of monitoring gaseous radioiodines in the presence of radionoble gases."

LP&L Response:

Provisions for monitoring radioiodine concentrations as low as 10^{-7} $\mu\text{Ci/cc}$ with minimum interference from noble gases are described in Subsection 13.3.6.5.2.1.1 of the Waterford 3 Emergency Plan. Emergency radioiodine sampling will be done with silver zeolite cartridges which have an extremely low retention efficiency for noble gases.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI

Comment:

"We believe the Final EIS should include an evaluation and full discussion of any confirmatory items (concerning liquid, gaseous, and solid radioactive waste treatment systems) not resolved by the time it is issued."

LP&L Response:

It is noted that, in the NRC Safety Evaluation Report, the confirmatory items referred to in this report have been resolved. The conclusions regarding the capabilities of these systems are as follows:

(1) Liquid Radioactive Waste Treatment System (pg 11-12)

"NRC has determined that during normal operation, including anticipated operational occurrences, the liquid radioactive waste treatment system is capable of reducing the release of radioactive materials in liquid effluents such that the annual dose commitment to the total body or to any organ of an individual is less than 3 millirem and 10 millirem, respectively, in conformance with Section II.A of Appendix I." and

"It has also been determined that the liquid radwaste treatment system is capable of reducing the release of radioactive materials in liquid effluents to concentrations below the limits in 10 CFR Part 20, during periods of fission product leakage from the fuel at design levels. Based upon these findings, the staff concludes that the design of the liquid radioactive waste treatment system is acceptable."

(2) Gaseous Waste Treatment and Ventilation Systems (pg 11-17)

"The gaseous waste treatment and ventilation systems are capable of reducing releases of radioactive materials in gaseous effluents to ALARA levels in accordance with 10 CFR Section 50.34a, Appendix I to 10 CFR Part 50 and the Annex to Appendix I. The proposed gaseous radwaste treatment system and plant ventilation systems are capable of reducing the release of radioactive materials in gaseous effluent to concentrations below the limits of 10 CFR Part 20 during periods of fission product leakage from the fuel at design levels."

(3) Solid Radioactive Waste Treatment System (pg 11-19)

"It is the staff's position that sufficient space should be allocated for the storage of uncompacted and compacted trash and the compaction operation. The space allocated for solidified waste is marginally acceptable. In the event of temporary burial site restrictions or scheduling delays for truck transport of the waste, the storage space would be inadequate. The applicant has made a commitment to move the trash compactor to another location and to increase the space available for storage of solidified and compacted waste. The staff finds this satisfactory. With this commitment the staff finds the solid waste management system acceptable."

Comment:

"For consistency in the presentation of all environmental risks, we believe the probabilities of occurrence of infrequent accidents and limiting fault design basis accidents should also be provided."

LP&L Response:

LP&L would note that the enveloping probabilities for the design basis accidents are given in WASH 1400, and, if desired, this could be included in the FES.

Comment:

"The Final EIS should explain what arrangements have been made, or are planned, to assure that funds (for decommissioning) will be available when required."

LP&L Response:

As identified in NUREG-0586, "Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities", several methods can be considered for providing the assurance that funds will be available when needed for decommissioning. These can include prepayment, decommissioning insurance, securities, bonds, letters of credit, segregated or unsegregated sinking funds, or various combinations of these methods. NRC not only has current regulations which include considerations that extend to the financial capability of an applicant to decommission a facility, but also is formulating additional regulations to provide more specificity in documenting this financial assurance. LP&L is now formulating its plans and their implementation mechanisms to ensure that it will be able to meet the revenue requirements for decommissioning and fully comply with all applicable Federal Regulations concerning the demonstration of assurance that the financial resources to decommission Waterford 3 will be available.

Comment:

"Because of the potentially severe economic costs (of severe radiological accidents); however, we believe these risks should be mentioned explicitly in the benefit-cost summary, Section 6.6."

LP&L Response:

Notation that there are potential economic costs associated with postulated accidents can be accurately included in Section 6.6, if the probability of their occurrence is also discussed. The most effective mechanism to accomplish this notation is likely to be through cross reference to Sections 5.9.2.1.4(4) and 5.9.2.1.4(6) and summarization of Table 5.21. Therefore, it is suggested that the following be added to Section 6.6:

"The economic costs which could potentially occur due to a severe radiological accident are substantial; however, the probability of such costs being incurred are very low. These costs and the probability of their occurrence are fully discussed in Sections 5.9.2.1.4(4) and 5.9.2.1.4(6)."

Comment:

"The statement on page 5-54 that a dose greater than about 25 rems over a short period of time is necessary before any physiological effects are clinically detectable, should be reviewed. Information contained in the World Health Organization Technical Report No. 123 would seem to indicate that physiological changes can occur at exposures as low as 10 rems."

LP&L Response:

Various statements concerning the threshold of physiological effects of exposure to higher levels of radiation are available in the literature. Some of these identify threshold levels much higher than that selected by NRC for publication in the DES. The actual threshold level identified is not as significant to the public understanding of potential effects of severe accidents, as is the extremely low probability of their occurrence.

Comment:

"Table 6.1 lists water samples to be taken from the intake structure, but none from the discharge canal which would provide a measure of the radioactivity discharged from the facility. This should be explained."

LP&L Response:

No samples are taken from the discharge canal because the Liquid Waste Management Monitor provides continuous indications of the gross gamma activity in the plant effluent and will terminate the discharge if a high radiation condition exists. Therefore, the radioactivity discharged from the facility is accurately measured and controlled.

Comment:

"It is not clear whether the thermoluminescent dosimeters (TLD) are to be collected on a quarterly schedule which could change to a semi-annual schedule, or whether some TLD's will be collected quarterly and some semi-annually. These points should be clarified..."

LP&L Response:

At each TLD location noted in Table 6.1, two TLD's are placed into service; one TLD is changed quarterly, while the other is changed semi-annually.

SOIL CONSERVATION SERVICE

Comment:

"The approximately 100 acres of land that will be utilized during construction and operation are clarified as prime farmland."

LP&L Response:

It is suggested that this statement be included in Section 5.2, LAND-USE IMPACTS, in the Final Environmental Statement.

STATE OF LOUISIANA
DEPARTMENT OF CULTURE, RECREATION, AND TOURISM
OFFICE OF PROGRAM DEVELOPMENT
STATE HISTORIC PRESERVATION OFFICER

Comment:

"We concur that these areas (Areas 3, 4, and 5) should be protected from major disturbance during the determination process."

LP&L Response:

The FES should draw attention to LP&L's commitment not to disturb Areas 3, 4, and 5 without the prior approval of a mitigation plan by the Louisiana State Historic Preservation Officer. Therefore, these areas will be protected during the determination process.

DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT CORPS OF ENGINEERS

Comment:

"Temperature changes influence river pH and alkalinity through shifts in the chemical equilibria of carbonate, sulfate, borate, and phosphate. Changes in DO and additions of boron and sulfates (Table 4.3) further complicate the situation... The impact of Waterford 3 on pH and alkalinity along with the resulting changes in the chemical equilibria should be fully discussed..."

LP&L Response:

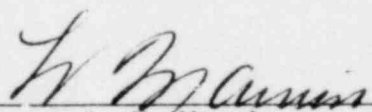
It is acknowledged that water temperature modifications affect the chemical equilibria mentioned in the Corps' comment. However, in view of the rapid dissipation of the major portion of Waterford 3's excess discharge temperatures and the relatively small extent of the river's area affected by these temperatures, it is anticipated that the effects of these modifications on the river's water quality and biological communities are negligible.

Comment:

"In Table 1.1, the US Army Corps of Engineers permit is dated 4/77. According to our records, this should be 9/77."

LP&L Response:

It is agreed that Table 1.1 should be revised to include the permit date in accord with the Corps records.



L. V. Maurin
Assistant Vice President
Nuclear Operations