DEPARTMENT OF HEALTH & HUMAN SERVICES
Public Health Service
Food and Drug Administration

Food and Drug Administration
Rockville MD 20857

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Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing - NRR
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Youngblood:

Staff of the Bureau of Radiological Health of the Food and Drug Administration, have reviewed the health aspects of the Draft Environmental Statement (DES) for the Enrico Fermi Atomic Power Plant, Unit 2, NUREG-0769, April 1981.

In reviewing the DES for Fermi-2, it is recognized that a DES is an administrative action for the issuance of an operating license. We note that (1) the application for the construction of this plant was received by NRC in 1969, (2) the NRC staff evaluation was issued as a Final Environmental Statement (FES) - Construction Phase in July 1972, (3) the construction permit was issued on September 26, 1972, and (4) as of March 1981, the construction of Fermi-2 was 80 percent complete. The Bureau of Radiological Health staff have reevaluated the health aspects associated with proposed operations of the plant, and have the following comments to offer:

1. It appears the design objectives of 10 CFR 50, Appendix I, and the proposed operation plan of the Fermi-2 facility provide adequate assurance that the potential individual and population radiation doses meet current radiation protection standards.

2. The environmental pathways identified in Section 4.5.1 and in Figure 4.2, on page 4-16, as discussed in Appendix F of the FES - Construction Phase, cover all possible emission pathways that could impact on the population in the environs of the facility. The dose computational methodology and models used in the estimation of radiation doses to individuals near the plant and to populations within 80 km. of the plant have provided reasonable estimates of the doses resulting from normal operations and accident situations at the facility. Results of these calculations are shown in Tables 4.6, 4.7, 4.8, 4.9, and 4.12, and confirm our assessment.

3. The discussion in Section 6 on the environmental impact of postulated radiological accidents at Fermi-2 is considered to be an adequate assessment of the radiation exposure pathways and the dose and health impacts of atmospheric releases.

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We believe, however, that the Emergency Preparedness Section (6.1.3.3) by itself is not adequate. We will forego further comment on this aspect, realizing that the process of granting an operating license to the facility will include an adequate review of emergency preparedness (FEMA-NRC Memorandum of Understanding, Regional RAC's, criteria in NUREG 0654). We have representation on the RAC's whose evaluation of the emergency planning relevant to Fermi-2 will speak for this agency.

In view of some of the monitoring problems during the Three Mile Island-2 accident, we suggest that the plan might be modified to address in particular the problems of monitoring radiohalogens (especially radioiodines) in the presence of radionoble gasses. This could be accomplished by reference to FEMA-REP-2, a document on instrumentation systems prepared with considerable input from NRC.

Considering the lessons learned from the accident at TMI-2, it would be helpful to expand the accident section of the DES to include a brief presentation of the critical public health and safety actions that the NRC has taken or plans to take to improve reactor safety and to mitigate the consequences of potential accidents. Such a discussion would provide an important amplification of this section of the DES, and would significantly increase public confidence and understanding of the implementation of the measures that the NRC has undertaken. The discussion in the first paragraph of page 6.9 is a possible introduction to the proposed modified section. (B1)

4. The operational monitoring program for each facility is planned to be a continuation of the preoperational program. It appears that the program will provide adequate sampling of environmental media and analysis for specific radionuclides that will be required to measure the extent of emissions from the plant, and to verify that such emissions meet applicable radiation protection standards.

5. The discussion of the uranium fuel cycle in Appendix C is a reasonable assessment of the population dose commitment and the potential health effects associated with releases of Radon-222 from facilty operations.

Thank you for the opportunity to review and comment on this draft document.

Sincerely yours,

John C. Villforth
Director
Bureau of Radiological Health