DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
Rockville MD 20857

MAY 14 1982

Mr. John J. Stefano
Licensing Project Manager
Office of Nuclear Reactor Regulations
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Stefano:

The Bureau of Radiological Health staff have reviewed the Draft Environmental Statement (DES) related to the operation of Perry Nuclear Power Plant, Unit 1 and 2, NUREG-0884, dated March 1982.

In reviewing the DES, we note that (1) the application for a construction permit was received in 1973, (2) the Final Environmental Statement - Construction Phase was issued in April 1974, (3) the construction permit was not issued until May 1977, and (4) as of January 1982, the construction of Unit 1 was 82 percent complete and Unit 2 was 41 percent complete. The Bureau of Radiological Health staff have reevaluated the public health and safety impacts associated with the proposed operation of the plant and have the following comments to offer:

1. The design specifications of 10 CFR 50, Appendix I, EPA's 40 CFR 190, and the applicant's proposed radioactive waste management system (Section 4.2.5), provide adequate assurance that radioactive materials in the effluents will be maintained as low as reasonably achievable (ALARA). It appears that the calculated doses to individuals and to the population resulting from effluent releases are within current radiation protection standards.

2. The environmental pathways identified in Section 5.9.3 and Figure 5.2, cover all possible emission pathways that could impact on the population in the environs of the facility. The dose computational methodology and models (Appendix B and D) used in the estimation of radiation doses to individuals and to populations within 80 km. of the plant have provided the means to make reasonable estimates of the doses resulting from normal operations and accident situations at the facility. Results of the calculations are shown in Appendix D, Tables D-6, D-7, D-8 and D-9. These results confirm that the doses meet the design objectives.

3. The discussions in Section 5.9.4 on the environmental impact of postulated accidents is considered to be an adequate assessment of the radiation exposure pathways depicted in Figure 5.2 and the dose and health impacts of atmospheric releases. We will forego comments on the emergency preparedness aspects (Section 5.9.4.1.3.3) since we realize the process of granting an operating license to the facility will include review of emergency preparedness to include the adequacy of State and local government emergency response plans (FEMA-NRC Memorandum of Understanding, Regions RAC's criteria in NUREG-0654). We have representation on the RAC's whose evaluation relative to the Perry Nuclear Power Plant will speak for this agency.

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It is noted in Section 5.12, that a Technical Support Center (TSC) and an Emergency Operation Facility (EOF) have been located on-site to coordinate activities needed to mitigate the consequences of accidents. Some mention of these facilites should be included in Section 5.9.4 to indicate one of the positive steps that the NRC has taken to improve reactor safety as a result of the TMI-2 accident.

4. The radiological monitoring program, as presented in Section 5.9.3.4 and summarized in Table 5.5, appears to provide adequate sampling frequency in expected critical exposure pathways. Analyses for specific radionuclides are considered sufficiently inclusive to (1) measure the extent of emissions from the plant, and (2) verify that such emissions meet applicable radiation protection standards.

   Although adequate for operational monitoring, the program should be assessed to determine if it is adequate to meet the needs imposed on it in the event of an accident. In particular, we suggest reevaluation of the airborne radioiodine sampling analysis program. Possibly, it should be modified to address the problem of monitoring radiohalogens (especially radioiodine) in the presence of radionoble gases. This could be accomplished by reference to FEMA-REP-2, a document on instrumentation systems prepared with considerable input from NRC. A paragraph could be added at the end of Section 5.9.3.4.2 that addresses this issue. Such a discussion would provide assurance that the monitoring problems identified during the TMI-2 accident are recognized, and that positive steps have been taken to provide the instrumentation needed to adequately detect releases of radiohalogens under accident conditions.

5. Section 5.10 and Appendix C contain descriptions of the environmental impact of the Uranium Fuel Cycle (UFC). The environmental effects presented are a reasonable assessment of the population dose commitments and health effects associated with the release of radon-222 from the UFC.

Thank you for the opportunity to review and comment on this Draft Environmental Statement.

Sincerely yours,

John C. Villforth
Director
Bureau of Radiological Health