



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SEP 11 1980

DOCKET NO.: 70-1113
APPLICANT: General Electric Company
FACILITY: Fuel Fabrication Plant
Wilmington, North Carolina
SUBJECT: REVIEW OF AMENDMENT APPLICATION TO CONSTRUCT AND USE
NEW STORAGE BUILDING, JUNE 11, 1980, 07001113A07S

Background

By application dated June 11, 1980, General Electric Company (GE) notified NRC of the intent to build a warehouse on the Wilmington site and applied for a license amendment to permit use of the building for storage of empty or loaded fuel containers or non-nuclear items. The building is to be a steel frame building with sheet metal siding, 95 feet wide, 285 feet long and 30 feet high, located on a poured concrete slab, 137 feet north of the northeast corner of the fuel manufacturing building, within the fenced area.

Uranium fuel will be stored in Fissile Class I packages (RA-series fuel bundle shipping containers, BU-5, and BU-7 shipping containers) or in the inner metal containers of the model RA-series shipping packages. Non-nuclear storage will include such items as empty 5-gallon steel pails, fire brick and industrial supplies.

Discussion

Radiological Safety

There will be no unencapsulated uranium or any other radioactive materials handled in the warehouse building, which will therefore be a non-controlled area. Fulfillment of the containment requirements of Part 71 for the loaded shipping containers should be adequate assurance of radiological safety under the relatively static and protected conditions in the warehouse as compared to conditions during transportation.

8010020612

SEP 11 1980

Nuclear Criticality Safety

The fuel storage containers, except for the inner metal containers of the RA-series, are undamaged Fissile Class I, and should therefore be sub-critical in any number or arrangement in accordance with Part 71, §71.38(a). The inner metal containers of the RA-series will be stored in accordance with Section 1.6.2(d) of the existing license, which requires protection from mechanical damage or flooding. Under those storage conditions, as determined in the review and issuance of the existing license, there is no significant criticality hazard.

Environmental Impact

In view of the building use, there should be no emissions to the environment. Construction of the building involves no significant excavation. Installation of the storage building should leave the committed land area well below that considered in the environmental evaluation.

Conclusion and Recommendation

Based on the safety and environmental impact information summarized in the foregoing, it is concluded that the proposed storage building can be constructed and used as described without undue risk to the health and safety of the operating staff or the public, and without significant environmental impact.

Approval of the amendment application is recommended.

Robert L. Stevenson

Robert L. Stevenson
Uranium Process Licensing Section
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety

Approved by:

W. T. Crow

W. T. Crow, Section Leader