11.0 QUALITY ASSURANCE

11.1 INTRODUCTION

Activities at Morris Operation (GE-MO) are conducted in accordance with a quality assurance plan reviewed and accepted by the USNRC and implemented by instructions and procedures at GE-MO.

11.2 QUALITY ASSURANCE (QA) HISTORY

QA program requirements during initial design and construction of GE-MO as a fuel reprocessing plant were developed by GE. During construction, the USAEC -- then the regulatory agency -- increased emphasis on specific methods of achieving quality assurance, proposing amendment of 10 CFR 50 to include Appendix B, "Quality Assurance Criteria for Nuclear Power Plants."

Prior to promulgation of Appendix B, GE had incorporated quality assurance provisions into the over-all safety assurance program for the reprocessing plant. Except for specific requirements related to documented record accumulation, key elements required by the proposed amendment (as applicable to fuel reprocessing facilities) had been included in the GE program. The program was documented in Supplement 3 to the "Design and Analysis Report - Midwest Fuel Recovery Plant." Construction of the facility was completed under this program.

GE curtailed operation of the facility in late 1974. At that time, GE proposed installation of a new fuel storage system. This system was licensed by the USNRC in December 1975. Design, fabrication and installation were performed under the current quality assurance plan, in accordance with applicable requirements of 10 CFR 72 Subpart G.

11.3 STRUCTURES, SYSTEMS, AND COMPONENTS IMPORTANT TO SAFETY

No credible event, planned discharge or design basis accident at GE-MO is identified that would expose a member of the public to radiation in excess of limits specified in 10 CFR 72.104 or 10 CFR 72.106.

It is therefore, the position of GE-MO that the term "basic components" in the sense defined by 10 CFR 21.3(1)(i)(c) and 10 CFR 21.3 (2) is not applicable to GE-MO.

However, "structures, systems and components important to safety" as promulgated in 10 CFR 72.122, "Overall Requirements" are identified below.

a. Fuel storage basin - concrete walls, floors, and expansion gate are principal elements in protection of stored fuel, and in isolation of basin water from the environment.

b. Fuel storage basin - stainless steel liner forms a second element in fuel protection and basin water isolation, facilitating decontamination.

c. Fuel storage system, including baskets and supporting grids is a principal element in protection of stored fuel.

d. Unloading pit doorway guard - is designed to prevent a loaded fuel basket from being tipped so that fuel bundles could fall into the cask unloading pit. The unloading pit doorway guard is an element in protection of fuel during movement of a loaded basket.

e. Filter cell structure - the concrete cell part of the basin pump room area provides radiation shielding to reduce occupational exposure.

f. Fuel Storage Basin building – the steel structure that surrounds/protects the fuel Basins.

g. Fuel Basket Grapple – Used to remove the fuel baskets from their storage location in the fuel basin support grid.

h. Fuel Grapple – Used to remove the fuel bundles from the fuel baskets when they are in the unloading pit.

i. Fuel Basin Crane – Crane utilized to move the full fuel baskets to the unloading pit.

j. Fuel Handling Crane – Crane used to remove the fuel bundles from the fuel storage baskets and place into a cask.

k. Cask Crane – 125 Ton overhead crane used to lift a fully loaded cask from the unloading pit and place cask onto transport vehicle.

l. Spent Fuel Cladding – Fuel in GE-MO basins are clad with SS or zircalloy cladding.