SFR Group
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Aiken, SC 29803

July 26, 2016

United States Nuclear Regulatory Commission
Acting Director Scott Moore
Office of Nuclear Materials Safety and Safeguards
11545 Rockville Pike
Rockville, Maryland 20852

Acting Director Moore:

By this letter Spent Fuel Reprocessing Group (SFR) is serving notice to the Nuclear Regulatory Commission, of its intent to store spent nuclear fuel received from nuclear power plants in the State Of South Carolina. SFR Group will make application to the Commission (NRC) at a later date as requested, for a construction and operating permit or license. We recognize that a directed and methodical review is required. SFR Group, located in Aiken, South Carolina, intends to acquire or build a storage facility designed for spent nuclear fuel (SNF) storage, near the Savannah River Site and Barnwell, South Carolina. SFR believes there is a market to store and eventually utilize spent nuclear fuel materials in a new generation of power reactors.

SFR Group recognizes the need to consolidate SNF for economy and security and to lessen the burden on operating nuclear power plants in South Carolina. Nuclear plants should have the option to store all of the SNF they have, in their spent fuel pools/basins, and be free from dry storage at their sites. Consolidation in one location helps power plants and makes all concerned better stewards of our shared environment.

Nuclear utilities want to reclaim and reuse the remaining fuel that exists in all 'spent fuel,' the promise to recover and reuse for better economy. This promise should be kept. From the beginning of the nuclear industry many vastly different nuclear reactor designs were studied; prototypes were built and concepts were tested. A wealth of data on these different types is available to new scientists and engineers. New generation prototypes should be built and tested. One type of reactor, e.g., the *Molten Salt Reactor*, may be able to reuse both reclaimed fuel and fission products. There is the possibility that highly radioactive waste, from the fission process, could be burned, or transmuted to stable forms. This offers a new prospect: close the nuclear fuel cycle and reduce the amount of high level radioactive waste.

Nuclear utilities paid into the Nuclear Waste Fund one mill/kw, held by the Energy Department for the purpose of building and operating the first nuclear waste repository, to store high level radioactive waste. The contract between nuclear utilities and the government was broken when the latter failed to process SNF separating it into waste products and unused fuel.

Finally, reclaimed fuel was to be provided to a fuel manufacturer to be reconstituted for reuse in a power reactor. While the United States and other nations are planning for the next generation of nuclear reactors, it is important that SNF is provided consolidated storage, so that when industry develops new reactor designs and processes, consolidated SNF sources are ready and secure. Nuclear utilities own SNF and storage casks located at their respective facilities. SFR will have a state-of-the-art facility to secure and hold SNF casks received from these nuclear power plants. These joint ventures ensure receipt and accountability, and later recovery, for each owner.

Academia, the medical profession, isotopes industrial processes, and other special products and services have a growing need for radioactive isotopes and sources. Radioactive isotopes should be available in the United States in plentiful supply. Sources of isotopes are dwindling. Researchers need nuclear isotopes: for discovering and understanding nuclear properties, energies, capabilities, physical and material properties; for teaching and training the next generation of nuclear scientists and engineers; for discoveries and uses now unrealized; for an abundance of isotopes to develop products and services yet unknown; for medical tracers and markers, for better health and longevity. Electrical energy consumption will greatly increase in years and decades to come; the industry must be ready to meet demands. Power plants take years to build and nuclear plants need to know fuel sources are ready and proven. Steps must be taken so that when industry is ready technology can integrate all the pieces.

Mike Stake,
President, SFR Group

Attachments: (1) Location of SC Advanced Technology Park, (2) Overall Site Plan

cc:
File
Principals