



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

COMMISSION
CORRESPONDENCE 801118

November 18, 1980

The Honorable Tom Corcoran
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Corcoran:

I am pleased to respond to your letter of October 10, 1980 regarding possible alternate technologies that might be applicable for the interim storage of spent fuel. In particular, you expressed interest in certain methods for dry storage of spent fuel in contrast to the conventional use of water basins for such storage.

We have recognized the potential for use of dry storage techniques, including the drywell method that you reference as well as aboveground cask storage methods. Various dry storage technologies for spent fuel were discussed in the "Final Generic Environmental Statement on Handling and Storage of Spent Light Water Power Reactor," NUREG-0575, published by the NRC in August 1979. Subsequently, the NRC published a document titled "Dry Storage of Spent Nuclear Fuel, a Preliminary Survey of Existing Technology and Experience" (NUREG/CR-1223) in April 1980. A copy of these two documents are enclosed for your information.

In response to your question regarding the role of NRC with respect to dry storage technologies, such storage of commercial spent fuel would be subject to NRC licensing. Recently, the Commission has approved as an effective rule the issuance of 10 CFR Part 72, "Licensing Requirements for the Storage of Spent Fuel in an Independent Spent Fuel Storage Installation." A copy of this rule, as submitted for publication in the Federal Register, also is enclosed for your information. This rule is designed to cover NRC licensing of either wet or dry methods proposed for interim storage of spent fuel. The rule is applicable to such storage at a reactor site, if the proposed storage meets the test of independence from reactor operation as defined in the regulation, or at sites away from reactors. In connection with this regulation, the NRC staff is developing regulatory guidance to assist applicants in preparing license applications for both wet and dry storage proposals.

You may note that the enclosed document, NUREG/CR-1223, discusses both drywell and steel-and-concrete cask storage, but does not discuss the cast iron cask storage that you refer to in your letter. This method, recently developed in West Germany, was not discussed in the document because of proprietary data concerns. Since that time, however, the NRC staff has been contacted by a representative of Gesellschaft fuer Nuklear Service mbH (GNS) regarding the potential for licensing pursuant to 10 CFR Part 72 for spent fuel storage in their cast iron cask. Further contact is expected when data concerning the cask is available for release in English. No submissions for review have as yet been made to NRC staff and no customers or sites have been identified for such storage.

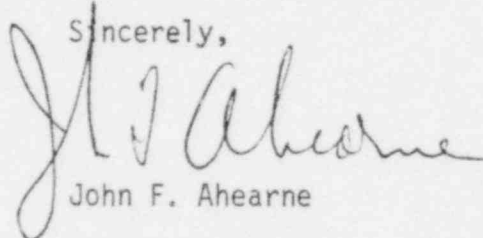
8012090406

The NRC staff also is familiar with the research and development being conducted by the Department of Energy (DOE) at its site in Nevada on dry storage of commercial spent fuel. Staff members have visited the site where demonstration tests are being conducted by DOE using both drywell and sealed cask storage methods. DOE has also been in contact with West Germany representatives concerning the cast iron cask and has expressed interest in including this cask in its studies.

With regard to time and resources for licensing, we have included in our budget request for FY 1982 appropriate resources to prepare and provide for licensing reviews of applications for independent spent fuel storage installations. Staff review time for an initial application for dry storage is estimated to be about one year or similar to the time estimated for more conventional water basin storage applications. This estimated staff review time includes preparation of both safety and environmental review documents, but does not include time required for any public hearings that may be requested in connection with a proposal. Subsequent proposals for utilization of the same or similar dry storage methods at other sites should result in reduced staff review time.

If you have any further questions regarding this matter, please let me know.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. F. Ahearne". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent. The ink is dark and the paper is off-white.

John F. Ahearne

Enclosures:

1. NUREG-0575, Vols. 1, 2 and 3
2. NUREG/CR-1223
3. 10 CFR Part 72

POOR ORIGINAL
final

NUREG-0575, Vol. 2
Appendices

**generic
environmental
impact
statement**

on

**HANDLING AND STORAGE
OF
SPENT LIGHT WATER POWER
REACTOR FUEL**

AUGUST 1979

Project No. M-4

U. S. Nuclear Regulatory Commission

**Office of Nuclear Material
Safety and Safeguards**

final

NUREG-0575, Vol. 1
Executive Summary
Text

**generic
environmental
impact
statement**

on

**HANDLING AND STORAGE
OF
SPENT LIGHT WATER POWER
REACTOR FUEL**

AUGUST 1979

Project No. M-4

U. S. Nuclear Regulatory Commission

**Office of Nuclear Material
Safety and Safeguards**

POOR ORIGINAL

final

NUREG-0575, Vol. 3
Comments on
Draft Statement
Staff Responses

**generic
environmental
impact
statement**

on

**HANDLING AND STORAGE
OF
SPENT LIGHT WATER POWER
REACTOR FUEL**

AUGUST 1979

Project No. M-4

U. S. Nuclear Regulatory Commission

**Office of Nuclear Material
Safety and Safeguards**

Dry Storage of Spent Nuclear Fuel

A Preliminary Survey of
Existing Technology and Experience

Prepared by P. A. Anderson, H. S. Meyer

Exxon Nuclear Idaho Company, Inc.

Prepared for
U. S. Nuclear Regulatory
Commission