

APR 21 1989

Project M-49

NUTECH Engineers, Inc.
ATTN: Mr. William J. McConaghy, P.E.
Vice President
Waste Business Group
145 Martinvale Lane
San Jose, California 95119

Dear Mr. McConaghy:

SUBJECT: ACCEPTANCE AS A REFERENCE OF "TOPICAL REPORT FOR THE NUTECH
HORIZONTAL MODULAR STORAGE SYSTEM FOR IRRADIATED NUCLEAR FUEL,
NUHOMS®-24P" (NUH-002), REVISION 1

The Nuclear Regulatory Commission (NRC) staff has completed its review of NUTECH Engineers, Inc., "Topical Report for the NUTECH Horizontal Modular Storage System for Irradiated Nuclear Fuel, NUHOMS®-24P (NUH-002), Revision 1. Based on this review, NRC staff has concluded that the NUTECH Horizontal Modular System (NUHOMS®) design meets the requirements of 10 CFR Part 72 as defined in this letter and subject to appropriate specifications expressed in its enclosure, the NRC staff's safety evaluation report (SER), for the safe receipt, handling, and storage of spent fuel at an independent spent fuel storage installation (ISFSI) to be located at a nuclear power plant site. This acceptability is limited to conditions and the spent fuel detailed in the TR (i.e., Revision 1), augmented by information submitted after the filing of Revision 1 and in this letter with its enclosure.

By letter dated February 26, 1988, NUTECH Engineers, Inc., submitted for review a topical report entitled, "Topical Report Amendment² for the NUTECH Modular Storage System for Irradiated Nuclear Fuel, NUHOMS®-24P," (NUH-001), dated February 1988 (docketed under Project No. M-49). In response to NRC staff comments, a revision to the original NUTECH report was subsequently submitted and docketed. This was Revision 1 entitled, "Topical Report for the NUTECH Horizontal Modular Storage System For Irradiated Nuclear Fuel NUHOMS®-24P," (NUH-002), Revision 1, dated July 1988.

In the SER, the staff's review examined how the submitted NUHOMS® concrete horizontal storage module (HSM) and steel dry shielded canister (DSC) design for an ISFSI meets specific requirements of 10 CFR Part 72 with respect to design, operation, and decommissioning. The staff's review addresses normal and off-normal operating conditions and accidents. Radiological, shielding, criticality, structural, and thermal aspects of the storage module design and the vendor's Quality Assurance Program have been reviewed for compliance with applicable requirements of Subparts E, F, and G of 10 CFR Part 72.

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Requirements for physical protection in 10 CFR Part 73 and for offsite transport of radioactive materials in 10 CFR Part 71 were not within the scope of the TR and were not addressed in the staff's review.

Operating limits established for the module and its spent fuel content have been reviewed, and limitations and operating conditions applicable to fuel loading, onsite transfer, insertion of a canister into a module, storage operations, and surveillance are detailed in Chapter 12 of the SER (see enclosure). These specify the limitations under which the TR, with its described design and spent fuel, is accepted as a reference in a Safety Analysis Report in a 10 CFR Part 72 site-specific spent fuel storage license application. However, these are not complete; other appropriate technical specifications and limitations will apply, depending on siting or other conditions associated with a specific license application.

As a result of its evaluation, the NRC staff finds that the NUTECH Engineers Inc., "Topical Report for the NUTECH Horizontal Modular Storage System for Irradiated Nuclear Fuel, NUHOMS[®]-24P" (NUH-002), Revision 1, as augmented by additional information received and docketed after submittal of Revision 1, is acceptable as a reference, under the limitations delineated in the TR, as modified and expanded in the SER (enclosure), with the following exception:

Chapter 10, Operating Controls and Limits, of the TR is not to be cited as a reference. A site-specific license application should explicitly list its proposed technical specifications. This does not preclude a license applicant's use of Chapter 10 of the TR as guidance along with Chapter 12 of the NRC staff's SER (enclosure).

It is requested that NUTECH Engineers, Inc., publish an approved version of this report, with proprietary information in a separate binder, as per Item 3, "Proprietary Information," of the Introduction of Regulatory Guide 3.48, within three (3) months of the receipt of this letter and submit 25 copies for docketing.

This revision is also to incorporate this letter with its enclosure, the SER, following the title page and a listing identifying with submittal dates, supporting supplemental information submitted after the TR, i.e., Revision 1, and docketed under Project M-49. The report identification of the approved report is to have an "A" suffix.

The NRC staff does not intend to repeat the review of the features important to safety described in the TR and found acceptable when it appears as a reference in a license application except to assure that the material presented is applicable to the application involved. The NRC staff's acceptance applies only to the features described in the TR, as augmented by the supplemental information submitted subsequent to the filing of the TR (i.e., Revision 1).

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Should NRC criteria or regulations change, such that our conclusions as to the acceptability of the report are invalidated, NUTECH Engineers Inc., and/or the applicants referencing the topical report will be expected to revise and resubmit their respective documentation, or submit justification for the continued effective applicability of the topical report without revision of their respective documentation.

Sincerely,

ORIGINAL SIGNED BY:

John P. Roberts, Section Leader
Irradiated Fuel Section
Fuel Cycle Safety Branch
Division of Industrial and
Medical Nuclear Safety

Enclosure:
Safety Evaluation Report

DISTRIBUTION:

Project M-49

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Docket 72-4

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