

71-9510

SEP 30 1982

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C Macdonald
396-55

FCTC:WHL
71-9510

U.S. Department of Energy
ATTN: Mr. Reuben P. Prichard
MS-E-201
Washington, DC 20545

Gentlemen:

This refers to your letter dated June 1, 1982 requesting our review of the Model No. GPHS package.

In connection with our review of this package, we need the information identified in the enclosure to this letter.

Please advise us within thirty (30) days from the date of this letter when this information will be provided.

Sincerely,

Original Signed by
CHARLES E. MACDONALD

Charles E. MacDonald, Chief
Transportation Certification Branch
Division of Fuel Cycle and
Material Safety, NMSS

Enclosure: As stated

cc w/encl:
DOE, Albuquerque Operations Office
ATTN: Mr. Jack R. Roeder
P.O. Box 5400
Albuquerque, NM 87115

Distribution: w/encl

Docket Files

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| DATE | 08/22/82 | 08/22/82 | 08/24/82 | 08/30/82 |

GPHS Module 750-Watt
Shipping Container
Docket No. 71-9510

Encl to ltr dtd: SEP 30 1982

DRAWINGS

Provide drawings of the package design that clearly show the safety features considered in the safety analysis report. The drawings should include components, materials, dimensions, gaskets, closure systems, and weld specifications.

CRITICALITY

In order for any package to qualify as Fissile Class I it is necessary to demonstrate that the requirements of 10 CFR §71.38 are met. In practice, Fissile Class I indicates that controls for criticality in transport are not required. This is possible since there is essentially no neutron interaction between packages under normal conditions of transport and at least 250 damaged packages are subcritical. It should be recognized that Fissile Class I packages could be co-mingled with other fissile packages. In the case of the subject package, it has not been shown that any number (infinite array) of packages are subcritical for the normal conditions of transport. The density analog method cannot demonstrate subcriticality of an infinite undamaged array; therefore, it cannot be used to satisfy 10 CFR §71.38(a). In this regard, we need a description of the criticality model and analysis and results which support a Fissile Class I designation by satisfying 10 CFR §71.38(a).

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| OFFICE ▶ | | | | | | | |
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