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84-256

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

-DCT 2 9 1984



GPU Nuclear Corporation ATTN: Mr. Ray E. Hahn P.O. Box 480 Middletown, PA 17057

Gentlemen:

Pursuant to 10 CFR Part 71, Certificate of Compliance No. 6771 for the Model No. SN-1 package is amended to authorize additional contents:

Up to 1,500 curies of radioactive solids including 60 grams fissile material and 40 curies of plutonium. The material must be packaged in accordance with GPU Nuclear Corporation application dated August 27, 1984.

One package per shipment as Fissile Class III.

All other conditions of Certificate of Compliance No. 6771 shall remain the same.

This authorization shall expire December 31, 1984.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

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

Enclosure: Approval Record

cc w/encl: Mr. Richard R. Rawl Department of Transportation

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

Transportation Certification Branch Approval Record Model No. SN-1 Package Docket No. 71-6771

By application dated August 27, 1984, GPU Nuclear Corporation requested additional contents in the Model No. SN-1 package. The contents consist of up to 1,500 curies of solid radioactive waste containing up to 60 grams fissile material and 40 curies of plutonium.

The package is currently approved for up to 5,000 curies of (dewatered) solid radioactive waste. The fissile material is well subcritical and the certificate has been conditioned to require the shipment to be made as Fissile Class III.

The waste material is divided between 20 canisters and positioned within the package in a lead shielded basket. The canisters are fabricated from 3.75" OD aluminum tubing with a wall thickness of 1/4" and approximately 36" long. The canisters have a 5/16" thick bottom welded to the tube and a 3" NPT threaded pipe plug for a top closure. The lead shielded basket has about 4" of lead on the bottom and sides and 5-inch thick plugs installed above each canister. The basket has 20 compartments to accept each canister. The basket plus 1-inch thick lead shielding on the sides is placed within an additional sealed stainless steel container prior to placement into the Model No. SN-1 package (cask). The cask is sealed with a silicone rubber O-ring.

Based on the distribution of the waste material (averaging less than 2 curies per canister, multiple packaging, and the form of the material (mainly metallic), the plutonium bearing solid has been exempted from the requirements of 10 CFR §71.63.

The NRC staff is in agreement with that applicant that this one-time shipment of waste material would have no adverse effect on the health and safety of the public.

Charles E. MacDonald, Chief

**Transportation Certification Branch** Division of Fuel Cycle and Material Safety, NMSS

Date: OCT 2 9 1984