

The Babcock & Wilcox Company



DOCKET NUMBER PR-40,797
PETITION RULE 22

DIVISION
GENERAL OFFICE
BARBERTON, OHIO

BOILER DIVISION
NUCLEAR FACILITIES PLANT
P. O. BOX 785
LYNCHBURG, VA.

TELEPHONE
VICTOR 6-4611

May 28, 1963

Secretary
United States Atomic Energy Commission
Washington 25, D. C.

Dear Sir:

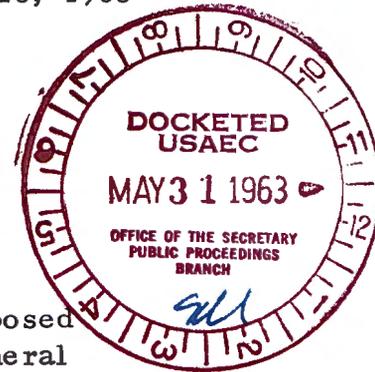
We recently sent you a letter commenting on proposed amendments to 10 CFR 40, 70, 71 and 72, which was general in nature. We would like to comment further on 10 CFR 71 in relation to shipment of research reactor fuel elements which have not been irradiated. The majority of our shipments of nuclear materials which go by common carrier are of this type.

Several years ago we obtained approval from the Bureau of Explosives and the Atomic Energy Commission on a container and a method of packing and shipping for research reactor fuel elements, that has apparently worked quite satisfactorily.

Unfortunately this container does not comply with any of the proposed classifications.

We would like to submit that the proposed amendments will impose severe restrictions on the shipment of research reactor fuel elements, and impose, in our considered opinion, unjustified economic penalties on the users of fuel elements. As you know, research activities are carried on by universities and other research operations where the cost of the program is of primary importance.

We would like to again outline our method of shipment for reactor fuel elements for your consideration.



Secretary
US AEC
Washington 25, D. C.

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May 28, 1963

Each reactor element is packaged in a plastic bag which in turn is sealed in a marine plywood element box. A vapor barrier fabric is then wrapped around each element box which effectively seals out water from the element. Eight of these individual packages are then packed in a shipping container in two rows of four elements each. A sheet of cadmium is placed between the two rows. The shipping container is made of marine plywood with screwed construction. After closure, it is further secured by metal banding in two locations. Required ICC radioactive labels and our "Notice of Fissionable Materials to Carrier", are applied prior to shipment.

Transportation by common carrier is limited to two shipping containers of eight elements each, or two (2) kilograms U-235, whichever is less. This insures a safety factor of at least three on the minimum critical mass under optimum moderation, optimum reflector conditions.

When shipments have to be made containing more than the above amount of uranium in reactor fuel elements, we use an exclusive use vehicle. Containers are loaded at our Plant onto the truck and secured against movement. The truck is then sealed prior to departure from our Plant. In the event of overseas shipments in which shipping arrangements are handled by the AEC, we further assure ourselves of the safety in flight by contact with the airline representatives who will be in direct charge of the flights carrying this material.

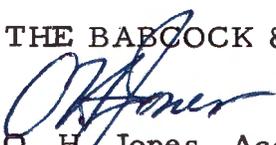
In all cases outlined above, we notify the receiver of the date of shipment, method of shipment, and the waybill number. The receiver in turn is requested to notify us immediately upon receipt before we will make a second shipment to him, or to any other customer, wherein the same transportation method is used.

Since this method of transporting fuel elements from the place of manufacture to the eventual customer has been a most satisfactory method for some years we request that we be permitted to continue this practice in the future.

In the event 10 CFR 71 should become law June 3, 1963, we request a waiver under Section 71.7 to enable us to meet our delivery commitments to customers who expect receipt of reactor fuel elements within the immediate future.

Very truly yours,

THE BABCOCK & WILCOX COMPANY


O. H. Jones, Accountability Representative

OHJ/mb

FORM NO. L-NFP-203

RETURN IN 5 DAYS TO
THE BABCOCK & WILCOX COMPANY
NUCLEAR FACILITIES PLANT
P. O. BOX 785
LYNCHBURG, VIRGINIA

AIR MAIL



Secretary
United States Atomic Energy Commission
Washington 25, D. C.

AIR MAIL