

LoDCS 11/3/82
Return to L Tyson 346-55

NOV 02 1982

FCUP:GHB
70-1151

Westinghouse Electric Corporation
Water Reactor Divisions
ATTN: Mr. A. J. Nardi, Manager
NES License Administration
Box 355
Pittsburgh, Pennsylvania

Gentlemen:

We have reviewed your March 26, 1982, application for authorization to use moderation controls for nuclear criticality safety on bulk UO₂ powder handling equipment. The March 26, 1982, application also contained a request to use a new IDR conversion process. Our review has been limited to pages in the application dealing only with bulk handling of UO₂ powder which are identified in the enclosure to your April 22, 1982, letter. It is our understanding that the March 26, 1982, submittal replaces the January 9 and December 23, 1981, submittals in their entirety.

Enclosed are comments on the application and requests for additional information. Our review will continue upon receipt of the information.

Original signed by
George H. Bidinger

G. H. Bidinger
Uranium Process Licensing Section
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety, NMSS

Enclosure: As stated

cc: Mr. Charles Sanders, W

Distribution:

Docket No. 70-1151
PDR
FCUP r/f
NMSS r/f
W. T. Crow
L. Tyson
G. Bidinger (2)
Region II

8211160091 821102
PDR ADOCK 07001151
C PDR

OFFICE	FCUP <i>GHB</i>	FCUF <i>L</i>	FCUP <i>WTC</i>			
SURNAME	GHBidinger:mts	LTyson	WTCrow			
DATE	11/2/82	11/2/82	11/2/82			

NOV 02 1982

COMMENTS ON MARCH 26, 1982, APPLICATION* (LA 82-70)
FOR AUTHORIZATION TO USE MODERATION CONTROLS
FOR BULK UO₂ POWDER HANDLING

1. In proposed Subsection 1.8.1.2, Processing Operation Moderation Controls, a maximum water volume of 19 liters and maximum H/U ratio of 0.3 is used. Inasmuch as this volume limit is used in the safety demonstration, the limit should be included in Section 2 of the application, which will become a part of the license. The limit should be expressed for water and water-equivalent moderators.

This above subsection is confusing in that the existing definition of Dry UO₂ in Closed Containers in Subsection 1.8.1.2 permits an H/U ratio of 0.5 for enrichments of less than 4.15 w/o U-235. It is not clear which limit will be used for moderation control for less than 4.1, w/o U-235 in different parts of the facility. The proposed Subsection should be expanded to specify how and when each criterion will be used.

2. In Subsection 1.9.5.1.3, storage is described for polypaks and 150 kg containers. If polypaks are to be stored in this area, the moderation controls for the polypaks should be described. If material in the polypaks is to be processed in the blending/storage area, the process should be described. Containment of the material should be described and the actions for assurance of moderation control should be described.

3. Section 2.2.13, Moderation Control Areas, needs to be rewritten to make the license requirements quantifiable. Two criteria require "Special considerations" Two criteria require that "sources of moderator...shall be minimized" Two criteria refer to "Routine audits" and "Routine inspections." Words such as "special," "minimized" and "routine" must be quantified.

4. Subsection 2.3.2.2.c, Moderation Controlled Subcrits, should include a requirement that moderation control has been verified by moisture analysis.

*Limited to pages of application identified in April 22, 1982, Letter, Nardi to Page, (LA 82-89)