## **UNC RECOVERY SYSTEMS**



Division of United Nuclear Corporation One Narragansett Trail A UNC RESOURCES Company CEB: 80-117

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July 28, 1980

United States Nuclear Regulatory Commission Mr. George H. Smith, Chief Fuel Facility and Materials Safety Branch Region I 631 Park Avenue King of Prussia, PA 19406

Subject: USNRC Inspection 70-820/80-08

Reference: Letter on Subject, George H. Smith to

C. E. Bowers dated July 1, 1980

Gentlemen:

Attached is United Nuclear Corporation's response to the subject inspection report, which was transmitted to us via the referenced letter. We trust that this response will satisfactorily resolve the item delineated in Appendix A of your letter. If further amplification is needed, we will of course be happy to discuss the matter with you.

Very truly yours, UNC RECOVERY SYSTEMS

Bowers President

CEB: RJGr:ddm

Attachment

Attachment to Letter CEB: 80-117 C. E. Bowers to George H. Smith Dated July 28, 1980 USNRC Inspection 70-820/80-08

## USNRC Comment

"Contrary to the above (requirements of Section 300 of License No. SNM-777), on June 5, 1980, the nuclear criticality safety limit posted in the warehouse for the storage of fissile material contained in the inner containers of UNC-2600 shipping containers was not established in accordance with the surface density criteria of 175 grams U-235 per square foot. The maximum limit which should have been used was 8.4 kilograms of U-235 on the basis of the 48 square feet surface area assigned to each inner container. The limit of 10 kilograms of U-235 actually used was for material stored in the UNC-2600 shipping container."

## UNC Response

Subsequent to the inspector's identification of this item, UNC posted a copy of Authorization No. RO 297. However, we do not believe this should be an item of non-compliance. The warehouse posting states, in part, that "center aisle use or unlisted containers require separate NIS approval." The inner container of the 2600 is clearly an "unlisted container," and was given separate NIS approval, via RO 297, as required by the posted signs. The evaluation by UNC's Nuclear Safety Specialist was based on limiting the content of the 2600 inner container to 8 kilograms of U-235 which was well within the 8.4 kilograms permitted by the surface density criteria of 175 grams U-235 per square foot. At no time was the 8 kilogram limit exceeded (the maximum actual value was 5.003 kilograms), nor was a 10 kilogram limit used. The point of misunderstanding seems to lie in the statement in the body of the NRC inspection report, which says: "the evaluation then stated that the containers could be stored in positions 3-W-1 through 3-W-7 in accordance with the posted nuclear criticality safety posting. The posting for position 3-W-1 through 3-W-7 was for material in approved shipping containers." In actuality, UNC's reference to the safety posting was to the requirement of that posting that "unlisted containers require separate NIS approval," and not to the 2600 container with its 10 kilogram limit. This was clearly understood by all personnel involved, and was rigorously adhered to during the period of storage of 2600 inner containers.