- Return 71-6698

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Nuclear Assurance Corporation 24 Executive Park West Atlanta, Georgia 30329

(404) 325-4200 Telex: 549567, 542703

715 Horizon Drive Grand Junction, Colorado 81501 (303) 245-4320 TWX 9109296334

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July 30, 1982

CRJ/82/179/ETS

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Mr. Charles E. MacDonald Transportation Certification Branch Division of Fuel Cycle and Material Safety, NMSS United States Nuclear Regulatory Commission Washington, D.C. 20555

Reference: 1. Docket No. 71-6698 2. Mr. Charles E. MacDonald's letter of December 29, 1981 to Nuclear Assurance Corporation.

Dear Mr. MacDonald:

Enclosed is our response (10 copies) to the twenty-two requests for added information enumerated in the enclosure to your letter of December 29, 1981. Individual responses are summarized in the front of the numbered sections of the notebooks with detailed responses following in the form of revised pages.

Allow me to suggest that you review the responses to items 1, 2, and 3 before reviewing subsequent items. As you will note, we have chosen to change the design and crushable material of the impact limiters. This new design incorporates an engineered crushable material with isotropic properties. The limiter's shape is a right circular cylinder that fits over the ends of the cask. There is a backing disk integral with the impact limiter that backs up the crushable material and transmits the deceleration forces to the cask structure. This new impact limiter was designed to decelerate the cask during end, side, and oblique impacts without transmitting excessive forces to the cask.

One consequence of our changing the impact limiter design is the considerable number of editorial changes required throughout the text of Revision 2 of NAC-3-801. Time did not permit us to effect all of the text changes so we must ask your indulgence in your review to bear in mind that references to balsa and red wood and crushing characteristics of tubular materials within the limiters are no longer germaine and should be ignored. We will make the editorial changes necessary to remove references to the previous impact limiter and provide changed pages to you at a later date. Or, if you prefer, we can incorporate the required changes in the final revision to the report

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Mr. Charles E. MacDonald July 30, 1982 Page 2

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Should you have questions regarding our responses, we would be pleased to meet with you and your staff.

Sincerely,

NUCLEAR ASSURANCE CORPORATION

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C. R. Johnson Group Vice President Engineering and Transportation Services

CRJ:pwh

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Enclosures

## Nuclear Assurance Corporation

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