



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

FEB 24 1982

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MEMORANDUM FOR: Homer Lowenberg, Chief Engineer, NMSS

FROM: Charles E. MacDonald, Chief
Transportation Certification Branch, FC, NMSS

SUBJECT: CRBR FUEL CYCLE ENVIRONMENTAL REVIEW

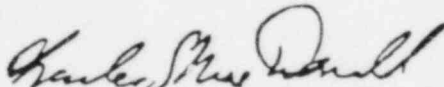
This is in response to your memorandum of February 23, 1982, requesting our review of the CRBR fuel cycle report. Our review considered the January 29, 1982 amendment and the February 19, 1982 draft providing additional information.

The three questions raised in our memorandum of February 5, 1982 were not addressed by the draft providing additional information. These questions are still outstanding and should be addressed by DOE.

Two major issues identified in our review of the environmental statement are the minimum cooling times for the shipment of irradiated core assemblies and blanket assemblies and the shipment of sodium with radioactive materials.

Throughout the report various cooling times for irradiated core assemblies and blanket assemblies are given. DOE should state the minimum cooling time for irradiated fuel and if this cooling time is less than 120 days, the response should include an upper bounding accident data which assumes a breached shipping cask.

Draft page 5.7-5 identifies four different types of fuel cask shipments (Fuel Shipping Casks). Alternatives (1) and (4) present no special problems that have not been addressed previously (e.g., NUREG-0170). Alternatives (2) and (3) include the shipment of assemblies sealed in sodium filled cans and sodium-filled casks. These two alternatives ((2) and (3)) should be addressed. This should include upper bounding accident data assuming water inleakage. Also, page 5.7-6 states under Cask Maintenance that "No provisions have been made for cleanup of sodium." This should be further discussed. It would appear that a facility that can receive radioactive material should be capable of safely disposing (packaging) of the material.


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