



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

MAR 17 1982

MEMORANDUM FOR: Homer Lowenberg, Chief Engineer  
Office of Nuclear Material Safety and Safeguards

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

SUBJECT: CRBR FUEL CYCLE ENVIRONMENTAL REVIEW

This is in response to your memorandum of March 15, 1982 requesting our review of the submittal letter (March 12, 1982) and proposed Amendment XIII.

The DOE submittal appears to respond to most of the concerns raised in our March 2, 1982 meeting between DOE, NRC and Battelle Northwest. DOE has deleted the use of sodium as a coolant in the shipment of spent core and blanket assemblies. In addition, they have specified at least 100 days of cooling prior to shipment. As a result of these modifications in the latest proposed amendment to the CRBR fuel cycle environmental report, our major transportation concerns have been alleviated.

From the March 2 meeting we have only two major questions which have not been addressed:

1. Comparison of transportation requirements and affects between CRBR and 1000 MWeLWR.
2. Population doses for truck shipment of spent core and blanket assemblies from CRBR to reprocessing site or storage.

This additional information should be requested of DOE.

*Charles E. MacDonald*  
Charles E. MacDonald, Chief  
Transportation Certification Branch  
Division of Fuel Cycle and  
Material Safety, NMSS

*3. Est. heat load req'd of fresh fuel & spent fuel ...*  
*... have less capacity.*  
*... heat ...*