

X

MAR 12 1979

MEMORANDUM FOR: C. M. Ferrell, Accident Analysis Branch, DSE

THRU: G. R. Mazetis, Section Leader, Reactor Systems Branch, DSS

FROM: S. F. Newberry, Reactor Systems Branch, DSS

SUBJECT: ECCS PASSIVE FAILURE LEAK RATE

The Midland FSAR states that a leakage value of 30 gpm is conservatively assumed for evaluating ECCS performance; however, the applicant also maintains that a leak rate of 500 ml/min is suitably conservative for the purposes of dose analysis. Their bases for this statement are tests performed by the pump seal manufacturer.

Although the test report referenced by the applicant indicates that seal integrity was maintained for the conditions under which they are tested, we do not concur with their proposal for a seal leakage of 500 ml/min to serve as the bounding leak rate for a passive failure following a LOCA (valve stem packing or pump seal failure). Our position regarding passive failures is enclosed. Values between 30-50 gpm have previously been accepted by the staff. Accordingly, we believe the 30 gpm proposed by Midland is suitably conservative to demonstrate long-term core cooling.

Original signed by:

Scott F. Newberry
 Reactor Systems Branch
 Division of Systems Safety

Enclosure:
 As Stated

cc: T. Novak
 L. Soffer
 S. Israel
 G. Mazetis
 S. Newberry

Distribution:
 Central File
 NRR Rdg.
 RSB Rdg.
 Newberry chron

7904070088

Contact: Scott Newberry, NRR
 49-27341

OFFICE →	DSS:RSB	DSS:RSB			
SURNAME →	SNewberry:cj	GMazetis			
DATE →	03/09/79	03/12/79			