



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

JUL 30 1984

MEMORANDUM FOR: C. J. Heltemes, Jr., Director  
Office for Analysis and Evaluation  
of Operational Data

FROM: Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

SUBJECT: AEOD/C403, "CASE STUDY REPORT FOR THE EDWIN I. HATCH  
UNIT NO. 2 PLANT SYSTEMS INTERACTION EVENT ON  
AUGUST 25, 1982"

We have completed our review of the subject case study report on the August 25, 1982 event at Hatch Unit 2. The report describes how, through a complicated scenario, four independent random failures permitted the uncontrolled flow of primary coolant water through the BWR scram system to an open vent and drain system outside of containment.

The case study recommends that the Hatch event be seriously considered by NRR in developing final positions relative to NUREG-0803, "Generic Safety Evaluation Report Regarding Integrity of BWR Scram Systems Piping." In addition, a number of recommendations were made relating to the individual equipment failures and problem areas that were experienced at Hatch.

In response to those specific recommendations which you directed to NRR, we plan the following actions:

1. Recommendation No. 3 discussed potential high energy steam releases outside primary containment via portions of the reactor building floor drain system. During the Hatch event, steam was released into the RCIC pump room and subsequently caused automatic isolation of the RCIC system.

The case study points out that while protective equipment has been installed in the floor drain system to prevent liquid back flow and potential flooding, such systems may not be adequate for protection against steam flow. The recommendation was made to include this scenario in the resolution of Generic Issue No. 77, "Flooding of Safety Equipment Compartments by Back Flow Through Flow Drains."

The resolution of the Generic Issue will consider the presence of steam as well as water in the drainage systems. As opposed to postulating mechanistic scenarios for steam entering the drainage systems, we plan to simply assume the initial presence of steam in the drainage system.

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