



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 4, 1994

The Honorable Bob Franks
United States House of
Representatives
Washington D.C. 20515-3007

Dear Congressman Franks:

I am responding to your letter of June 27, 1994, in which you relayed concerns regarding cooling of stored spent fuel at the Susquehanna Steam Electric Station and other nuclear power plants. You requested that the NRC address the concerns and advise you accordingly.

The NRC has been carefully evaluating the safety significance of the issues regarding spent fuel pool cooling raised by Messrs. Lochbaum and Prevatte. The NRC staff has met with Messrs. Lochbaum and Prevatte on several occasions to gain a thorough understanding of their concerns and to present to them the Staff's findings. Additionally, on July 8, 1994, the NRC Chairman, Dr. Ivan Selin, met with Messrs. Lochbaum and Prevatte to hear their concerns. I have attached letters from the Chairman to Mr. Lochbaum (see Enclosure 1) and Mr. Prevatte (see Enclosure 2).

The concerns involve a failure to cool the spent fuel pool following a postulated loss-of-coolant accident at the Susquehanna boiling water reactor facility. Based on assumptions the NRC staff applied in evaluating certain plant design features during original licensing, Messrs. Lochbaum and Prevatte have postulated that the radiological conditions inside the plant following the accident must be assumed to preclude plant operators from performing actions necessary to cool the spent fuel pool. At the Susquehanna facility, the normal spent fuel pool cooling system is not designed to retain its function following a loss of coolant accident, and operator actions are required to reestablish spent fuel pool cooling. Without spent fuel pool cooling, pool boiling may create an adverse environment that affects the ability to mitigate the accident.

In early 1993, the NRC staff initiated a preliminary assessment of the specific scenario postulated by Messrs. Lochbaum and Prevatte in response to their concerns. The staff determined the risk posed by the scenario to be low based on the low probability of the necessary concurrent contributing events. Additionally, the staff's initial assessment concluded that imposition of the postulated radiological conditions on this scenario without justification is not warranted without further evaluation. The NRC staff expects to complete its evaluation of concerns applicable to Susquehanna in October.

However, the staff determined that certain issues raised by Messrs. Lochbaum and Prevatte are valid concerns regarding the overall reliability of cooling for the spent fuel pool. The safety significance of these concerns does not

100077
9408110180 940804
PDR ADDCK 05000387
P PDR

NRC FILE CENTER COPY

201

1950

August 4, 1994

The Honorable Bob Franks

- 2 -

warrant precipitous action by the NRC to impose restrictions on operating nuclear plants. Rather, the staff will incorporate these concerns into a comprehensive review of spent fuel pool storage reliability. The NRC staff will work with Messrs. Lochbaum and Prevatte to fully consider their concerns in the resolution of this matter.

The staff issued an information notice informing all boiling water reactor licensees of the potential for the loss of spent fuel pool cooling (Information Notice 93-83, "Potential Loss of Spent Fuel Pool Cooling Following a Loss of Coolant Accident (LOCA)"). I have attached Information Notice 93-83 as Enclosure 3. As the NRC staff reviews spent fuel pool storage reliability, it will continue discussions with industry.

I trust this letter is responsive to your concerns.

Sincerely,

**Original signed by
James M. Taylor**

James M. Taylor
Executive Director
for Operations

Enclosures: as stated

*PREVIOUS CONCURRENCE

| | | | | | | |
|--------|-----------|--------------------|-----------------------|--------------------|------------------|----------------|
| OFFICE | *PDI-2/LA | *PDI-2/PM | *TECH ED | *PDI-2/D | *ADRI | *D/DRPE |
| NAME | MO'BRIEN | JSHEA:tlc | JMain | CMILLER | JACALVO | SVARGA |
| DATE | 7/20/94 | 7/20/94 | 07/15/94 | 7/20/94 | 07/13/94 | 07/14/94 |
| OFFICE | *D/DSSA | ADT <i>AT</i> | ADP <i>RPZ</i> | D/NRR <i>WR</i> | EDOS <i>Y</i> | OCA |
| NAME | MVIRGILIO | ATHADANI <i>AT</i> | RZIMMERMAN <i>RPZ</i> | WRUSSELL <i>WR</i> | JTAYLOR <i>Y</i> | <i>DL</i> |
| DATE | 7/20/94 | <i>7/20/94</i> | <i>7/25/94</i> | <i>7/26/94</i> | <i>8/14/94</i> | <i>8/14/94</i> |

OFFICIAL RECORD COPY

FILENAME: a:\SU10230.GRN

DISTRIBUTION:

Docket File 50-387/388 (w/incoming)

Central Files (w/incoming)

NRC & Local PDRs (w/incoming)

EDO#010230

EDO Reading

J. Taylor


T. Martin

W. Russell/F. Miraglia

R. Zimmerman

A. Thadani8

D. Crutchfield

F. Gillespie

M. Virgilio

PDI-2 Reading (w/incoming)

S. Varga

J. Calvo

C. Miller


OCA

SECY#CRC-94-0641

NRR Mail Room (EDO#010230 w/incoming) 012-G-18

N. Olson

C. Norsworthy

M. O'Brien

E. Wenzinger, RGN-I

J. White, RGN-I

L. Privity, RGN-I

FRONTIER
MAY 1963

1963