July 27, 1979

Note to: K. Cornell
R. DeYoung

SUBJECT: MEETING ON PRECURSOR EVENT IN A FOREIGN COUNTR

Kevin Cornell asked me to set up a meeting with NRC staf on this subject. A copy of the memo dated July 24, 1979, from R. DeYoung to H. Denton on this subject is attached.

A meeting has been set for 2:00 p.m., Tuesday, July 31, 1979, in our conference room with Joe LaFleur and Howard Faulkner, who are from IP, and with Jerry Cook, OELD. It is my understanding that they want to discuss question 4 in the memo referred to above. This discussion should also involve the basic question of whether the memo should be classified, how, when, and under what conditions the NRC became aware of the information, whic is discussed in the memo.

W. Parler

Enclosure:
cc of memo dtd 7/24/79
fr R. DeYoung to H.
Denton

cc: M. Rogovin
G. Frampton
E. Hebdon

P

July 24, 1979

In Reply Refer to:
NTFTM 790724-02

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

FROM: Richard DeYoung, Deputy Staff Director
NRC/TMI Special Inquiry Group

SUBJECT: PRECURSOR EVENT IN A FOREIGN REACTOR

We understand that in 1974 a small LOCA occurred at a foreign reactor that is very similar to the TMI incident. During the course of the incident steam formed in the RCS hot leg causing pressurizer level to rise while RCS pressure continued to decrease. This void formation caused pressurizer level to increase despite the fact that primary coolant was still being released from the system. The protective system in this design, which is similar to many U.S. reactors, required low pressurizer level and low RCS pressure for safety injection to be automatically initiated. This combination of coincident initiating signals and increasing pressurizer level caused the failure of safety injection to initiate while a small LOCA was occurring. Since many U.S. reactors have the same coincident logic for initiating safety injection, they are susceptible to the same problem. In addition, if the ECCS system could be deceived by this transient and its effect on pressurizer level, then operators of plants with other designs could have been confused by the pressurizer level indication that resulted from this transient.

Despite the significance and relevance of this incident to U.S. reactors, to our knowledge this incident has never been reported to the NRC by the vendor involved. 10 CFR Part 21 and Section 206 of the Energy Reorganization Act of 1974 require the reporting of defects and noncompliances to the NRC. We understand that individuals subject to Part 21 need to report failures or defects in foreign reactors that could create a substantial safety hazard in facilities and activities in the United States. Based on the insights resulting from the TMI accident, it would appear that this incident should have been reported by the vendor following the TMI accident.

We request that all relevant information currently available to NRR concerning this event be forwarded to us as soon as possible. This information should include as a minimum:

OFFICE ▶						
SURNAME ▶						
DATE ▶						

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1. A description of who within the NRC became aware of this event, by what means was knowledge of this event formally or informally received by the NRC, and when was knowledge of the event acquired.

2. A discussion of the basis for any decisions that have been made concerning the safety significance of this event and its applicability to domestic reactors.

3. A discussion of the regulatory requirements associated with the reporting of this event to the NRC by the vendor both after and prior to the TMI accident.

4. A discussion of the basis for any decisions to release to the public information associated with this event.

We request that we be kept informed of the status and eventual resolution of this matter.

Sincerely,

Richard DeYoung
Deputy Staff Director
NRC/TMI Special Inquiry Group

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