

## ROUTING AND TRANSMITTAL SLIP

Date JUN 19 1979

| TO: (Name, office symbol, room number, building, Agency/Post) | Initials | Date |
|---------------------------------------------------------------|----------|------|
| 1. NRC PDR                                                    |          |      |
| 2. Assessments Unit (P-50) ✓                                  |          |      |
| 3.                                                            |          |      |
| 4.                                                            |          |      |
| 5.                                                            |          |      |

| Action       | File                 | Note and Return  |
|--------------|----------------------|------------------|
| Approval     | For Clearance        | Per Conversation |
| As Requested | For Correction       | Prepare Reply    |
| Circulate    | For Your Information | See Me           |
| Comment      | Investigate          | Signature        |
| Coordination | Justify              |                  |

REMARKS

TO BE PLACED IN NRC PDR

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

| FROM: (Name, org. symbol, Agency/Post)                 | Room No.—Bldg.      |
|--------------------------------------------------------|---------------------|
| Robert L. Tedesco, L <sup>2</sup> Task Force,<br>TMI-2 | P-1122B             |
|                                                        | Phone No.<br>X28090 |

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☆ U. S. GPO: 1977-0-241-530/3228

OPTIONAL FORM 41 (Rev. 7-76)  
Prescribed by GSA  
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

JUN 18 1979

MEMORANDUM FOR: ✓ N. C. Mosely, Director, Division of Reactor Operations  
Inspection, IE

FROM: W. C. Milstead, Lessons Learned Task Force

SUBJECT: REQUEST FOR INFORMATION REGARDING HYDROGEN EXPLOSION  
AT TMI-2

At about 2:00 pm on March 28, 1979, TMI-2 containment pressure rapidly increased to about 28 psig and was rapidly reduced to the initial pressure (2 psig). On page 5 of the TMI staff interview of Craig Faust conducted at 14:00 hours on April 6, 1979 by T. Van Whitbeck, et al. Mr. Faust stated "we probably had some kind of explosion because that is what it looked like; shock waves."

The only record we have seen of the 28 psig pressure spike which appears to be a hydrogen fire or explosion is on a graph for which the time scale is 1/2 inch equals 60 minutes. Using the information from this figure, in my judgement I cannot tell whether the recorded pressure spike was caused by a fire or an explosion. Mr. Faust's statement seems to indicate that some containment pressure measurements showed pulsations not present on the trace I have seen. If such is the case I would like a description of the behavior of containment pressure preferably a copy of a figure of the containment pressure vs. time showing oscillatory behavior, if it exists. Information which may provide insight to the manner of hydrogen combustion in the containment will be useful in evaluating the current design capability of post accident containment, combustible gas control systems and determining the need for changes in design requirements for future application. My request is consistent with the goals of IE's investigation expressed in Mr. Davis' letter of April 20, 1979 to the Commission.

Thank you,

A handwritten signature in dark ink, appearing to read "William C. Milstead", is written over the typed name.

William Milstead, Lessons Learned Task Force  
Containment Systems Branch  
Division of Systems Safety

cc: R. Mattson  
R. Tedesco  
R. Ireland  
W. Butler  
J. Kudrick

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