P1-137

Mr. Larry Ernst, Product Manager Molly Bolt Co. 504 Mt. Laurel Avenue Temple, Pennsylvania 19560

#### Gentlemen:

The Nuclear Regulatory Commission (NRC) was informed by Hilti, Inc., in accordance with 10 CFR Part 21, of recent tests of Hilti Kwik-Bolts that indicate that the previously recommended minimum edge distance from an anchor bolt to an unsupported concrete edge may be insufficient to develop 100% of the recommended anchor capacity. The Hilti test results indicate that Hilti Kwik-Bolts placed at a distance of five anchor bolt diameters from an unsupported edge, as recommended by the Expansion Anchor Manufacturers Institute (EAMI) guidelines, have only 30% of the recommended anchor shear capacity and 78% of the recommended tensile capacity. Hilti further indicated, at a meeting with the NRC staff, that the test results are believed to be applicable to other expansion anchor bolts that use the same type of anchor mechanism as Hilti Kwik-Bolts.

The NRC staff feels that the test results indicating a 70% reduction in shear capacity are significant and indicate that there is a potential safety concern that will require further NRC review. In view of the foregoing, the NRC would like to invite representatives of companies that supply bolts or provide bolt installation services to the nuclear industry, such as your company, to attend a meeting where pertinent information could be freely exchanged between meeting participants. The meeting is scheduled for May 23, 1988, at 1:00 p.m. in Conference Room 12-8-11 at the NRC's White Flint Building which is located at 11555 Rockville Pike in Rockville, MD. We are requesting that attendees present a brief presentation, approximately 15 minutes, that addresses the subjects listed in the meeting agenda and any other aspects related to this issue which you consider important.

If you plan to attend, or if you have any questions or concerns (such as how to present proprietary information), please contact Jaime Guillen at (301) 492-1153 or Rom Lipinski at (301) 492-0844 before May 16, 1988. Your cooperation on this matter would be greatly appreciated.

Sincerely.

Original Signed By Carl H. Berlinger

Carl H. Berlinger, Chief Generic Communications Branch Division of Operational Events Assessment Office of Nuclear Reactor Reculation



Enclosures:

1. Meeting Agenda

2. Subjects of Presentations

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### Enclosure 1

# May 23, 1988 Meeting Agenda

<u>Item</u>		Speaker		Time	
1.	Introduction	NRC	1:00	- 1:15 p.m.	
11.	Presentations by Manufacturers*	Manufacturers	1:15	- 3:00 p.m.	
111.	Discussion/Forum	Attendees	3:00	- 4:00 p.m.	

## \*Invited Manufacturers

Hilti, Inc.

Molly Bolt Co.

Ramset/ITW/Red Head

Richmond Screw Anchor Co., Inc.

Tech. Services - Nuclear, Ramset Division - OLIN

TRW Assemblies and Fasteners Group, Nelson Stud Division

Enclosure 2

## Principal Subjects of Presentations

- Describe your anchor products, their use, and the design recommendations provided to your customers.
- II. Does the "five diameters" or other edge distance criterion apply to your anchor products? Provide justification for your answer.
- III. Describe any tests conducted by your organization that provides additional information regarding shear capacity reduction as a function of edge distance.
- IV. Provide a list of known nuclear power facilities that use your anchor products.
- V. Describe your company's l'atest recommendations regarding edge distance control and their bases.
- VI. Approximately what percentage of your type of anchors are possibly affected by the "edge distance" issue?
- VII. Present your perspective of the "edge distance" issue.