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March 26, 1981

United States
Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, Illinois 60137

ATTN: Mr. James G. Keppler,
Director

Re: STN 50-546
STN 50-547

Dear Mr. Keppler:

The NRC letter of March 20, 1981 is quite detailed and reasonably comprehensive.

Most of the points in my letter of September 26, 1980 have been discussed and handled. It is the March 4, 1981 letter of mine that has not been completely answered and is the subject of this correspondence.

The NRC must rely on microseismic investigation to determine if voids, separations or honeycombs exist in the concrete since all observable voids are considered "surface concrete defectives". Since the NRC has established the criteria, 95% reliability with 95% confidence, using Equation 2, it must be recognized that this is a probabilistic equation implying no instrument or human error associated with the statistical approach.

The March 4 letter gives an acceptable procedure for determining and including the human error and the instrument error in the test program. Several examples of this type of error are cited in the March 4 letter. For example, if the interpreter declared a "honeycomb" the same day he based the qualification test and the honeycomb turned out to have significant bubbles in the concrete, then there appears to be reasonable room for error.

EXHIBIT "A"

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We do not question Mr. Muenow's qualifications. However, everyone is capable of making an error. It appears that no written qualification exists in the record at Marble Hill. A qualification record must be performed to evaluate if we have 95% reliability with 95% confidence.

As it now stands, there is certainly less than 95% reliability as outlined in the March 4 letter, and we believe that no verbiage will erase that reality, only clear statistics.

This writer awaits the further response of the NRC.

Sincerely,

Michael A. Cassaro by mjb

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MAC/mjb