



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

W. Kane

*Copy
K.C.
P.O.
1-1*

NOV 05 1979

NOTE TO: H. Denton
E. Case
R. Mattson
D. Eisenhut

FROM: D. Ross

SUBJECT: COMPLIANCE WITH NUREG-0578 WITH RESPECT TO LOFT PRE-TEST PREDICTION

Question: Should the LOFT Test L3-1, a small-break LOCA test (0.1 ft² equivalent) be delayed (from 17 Nov.) in order to permit vendors to comply with Requirement 2.1.9 of NUREG-0578.

Discussion

We stated (p. A44-45) in NUREG-0578 a requirement there should be a pre-test prediction of LOFT small break tests in order to:

- i) verify analyses used in support of SBLOCA procedures and,
- ii) to support eventual long-term compliance with Appendix K.

(BWR group may use small break TLTA for the same purpose).

The 9-13-79 letters to operating utilities reiterated this need, and incorporated as a schedule the Table B-2 of NUREG-0578.

My letters to W and CE owner's groups of 9-2-79 emphasized this requirement and noted the test date was 11-15-79 for L3-1.

There was no escape clause in the implementation letter of 9-13-79.

The Denton letter of 10-30-79 on Discussion of Lessons Learned Short Term Requirements has such an escape clause. The last sentence states that of a licensee can not meet the 1-80 requirements, provide an interim report and a justification for the delay.

All 3 PWR vendors, and Exxon, stated on 11-2-79 that they can not meet the pre-test prediction of L3-1. We need to ponder what sanctions should accrue to operators who fail to comply. This is a general question for which a matrix of non-compliance is needed (and I understand Telford & Co. are so doing). But for the instant case it would be very undesirable to let the code developers to tune to L3-1 by way of post-test prediction. We have recently noted (Ross letter to PWR owner's groups of 10-5-79) several significant model variations

8006066554

between the codes. L3-1 should help sort this out.

At present it seems unlikely that we will have definitive information by test time, 11-17. We have several options:

- A. Spur the vendors, and Exxon, to work harder.
- B. Delay the test.
- C. Run the test on schedule, but lock up the data.
- D. Run test on schedule, openly, and develop an alternative.
- E. Require use of 1 of the 3 NRC codes which are doing pretest.

Some brief comments on A-E follow below. However, RES has a strong predisposition for D, and should be heard from. T. Murley and I agree that if B were selected, we would at least have to inform the Commission, and perhaps ask their approval. Further discussion is:

- A. Not likely to work for every vendor, but we probably could get one or two (of four) vendors into some rudimentary compliance; this would require personal visits by analysis team this week to each vendor to develop code lockup criteria.

Prognosis: Fair

- B. A 4-6 week delay would be needed if we believed the vendors. A smaller delay (say 10 days) would be somewhat useful. Any delay for this purpose is
 - i) costly (\$30K per calendar day)
 - ii) bad for INEL morale
 - iii) delays NRC and community safety information
 - iv) has poor appearance
 - v) sets undesirable precedence

Prognosis: Poor

- C. Would require debarring press, national, international visitors, plus secrecy or (ignorance) assurances from the 65 people @ INEL needed to run test.

Prognosis: Very poor; don't do it

D. This permits vendors to tune to LOFT (i.e. deflowers the experiment); an alternate is not in sight.

Prognosis: Uncertain; see E.

E. We will have RELAP4, TRAC, and possibly RELAP5, pretest predictions. If these turn out reasonably well, we could require vendors to use NRC codes on their product line.

Prognosis: Fair; RES doesn't like too much. Sort of a transitive code verification, which no one really likes.

Of all of the A - E options, I favor A, and then E for those who miss. This means diverting analysis people from other work. However there is a broader policy question on sanctions against utilities who do not comply.

Comment?



D. Ross

cc: T. Novak
Z. Rosztoczy
W. Kane
S. Israel
G. Mazetis
P. Norian
S. Levine
S. Hanauer
T. Murley
L.S. Tong