



NRC PUBLIC MEETING FEEDBACK

Category

1

POCKET 70-1151

Meeting Date: 12/04/2006 Meeting Title: Westinghouse Electric Company Minimum Margin of Subcriticality

In order to better serve the public, we need to hear from the meeting participants. Please take a few minutes to fill out this feedback form and return it to NRC.

1. How did you hear about this meeting?

- Radio/TV, NRC Web Page, NRC Mailing List, Newspaper, Other Facility Operations Committee (FOC)

- 2. Were you able to find supporting information prior to the meeting? * From the FOC
3. Did the meeting achieve its stated purpose?
4. Has this meeting helped you with your understanding of the topic? ** Although I disagree (with the NRC) I understand their position.
5. Were the meeting starting time, duration, and location reasonably convenient?
6. Were you given sufficient opportunity to ask questions or express your views?
7. Are you satisfied overall with the NRC staff who participated in the meeting? *** I believe the NRC is requiring new expectations on Westinghouse

COMMENTS OR SUGGESTIONS:

Thank you for answering these questions.

I am concerned for NFS and the other licensees/certificate holders with the level of effort and emphasis on margin of subcriticality when margin of subcriticality has very little impact on criticality risk (i.e., the risk associated with uncertainties in the code is extremely small). An error in how an analyst actually models a fissile system (e.g., such as modeling a dimension in a non-conservative manner) will likely have a greater impact on the final result of a calculation than will code uncertainties; and, neither of these types of errors contribute significantly to the risk of a criticality accident. Uranium-bearing systems, for example, are well understood systems and can be modeled with a high degree of confidence. Criticality safety analysts typically perform studies to determine what has the greatest impact on reactivity, such as changes in dimensions, spacing, reflection, etc. Criticality safety analysts also assume conservative conditions when modeling a system (e.g., bounding reflection, optimum fuel-water mixtures,

Continue Comments on the reverse: ↶

OPTIONAL

Name: RANDY Shackelford Organization: NFS
Telephone No. 423-743-2504 E-Mail: WRShackelford@NuclearFuelServices.com
Check here if you would like a member of NRC staff to contact you.

OMB NO. 3150-0197

Expires: 06/30/2006

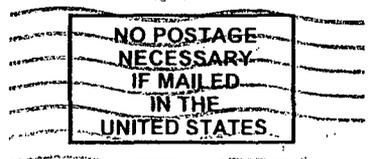
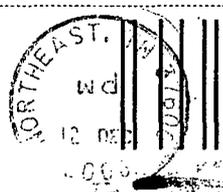
Public Protection Notification: If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

Please fold on the dotted lines with Business Reply side out, tape the bottom, and mail back to the NRC.

COMMENTS OR SUGGESTIONS: (Continued)

bounding dimensions, reduced spacing, etc.). Uncertainties in the code calculations are insignificant when compared to the various conservatisms applied to the computer models. We are being distracted (and I am personally being distracted) from the primary focus of criticality safety because of the efforts associated with subcritical margin. The primary focus of nuclear criticality safety is maintaining subcriticality for all normal and credible abnormal conditions and this is accomplished by identifying and controlling criticality accident sequences. We need to remain focused on what can go wrong in process systems – this is where the action is! We should not focus a disproportionate amount of attention (based on the risk) on subcritical margin or the quantification of conservatism in the models. There has never been a process criticality accident resulting from a code error or faulty calculation. Although a criticality accident from a code error or faulty calculation is not an impossibility, the credibility of such an accident is questionable (i.e., *extremely* low likelihood). If you consider the past process criticality accidents that have occurred, they occurred because something happened in the process that was not considered or planned for.

UNITED STATES
NUCLEAR REGULATORY
COMMISSION
WASHINGTON DC 20555-0001



BUSINESS REPLY MAIL
FIRST CLASS MAIL PERMIT NO. 12904 WASHINGTON DC
POSTAGE WILL BE PAID BY U.S. NUCLEAR REGULATORY COMMISSION

MARY ADAMS
MAIL STOP T8F42
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
U S NUCLEAR REGULATORY COMMISSION
WASHINGTON DC 20277-2904

