

ATTN: F. MANNING

WORKSHOP ON PRECURSOR STUDIES
EPRI CONFERENCE CENTER
FEBRUARY 28 AND MARCH 1

Dear Participant:

Attached please find an agenda for the subject workshop and a list of invited participants. The general format will be as follows. For each Issue, there will be one or more prepared talks followed by individual five-minute contributions from participants with a final summary by the chairman and the rapporteurs (David Worledge and Joe Murphy). There will be an overhead projector and you are encouraged to bring a few viewgraphs to aid your "extemporaneous" contributions.

It would be helpful to our planning if you would R.S.V.P. to my secretary (415)855-2912.

Yours sincerely,



Ian B. Wall, Manager
Risk Assessment Program
Nuclear Power Division

IBW:taw

Attachment

WORKSHOP ON PRECURSOR STUDIES

EPRI Conference Center
Monday, February 28, 1983

9:00 a.m. (sharp) Opening Remarks (I.B. Wall)

Workshop Objectives
and Groundrules

9:20 a.m. Issue 1.

Why perform precursor studies and what
are reasonable deliverables from such
studies?

R.C. Erdmann (Chairman)

Precursor Program (NRC)
SEE-IN Program (INPO)

CONSIDER:

- How can the frequency of initiating
events and component failure rates
be confirmed with this information?
- What qualitative inferences can be drawn
about generic safety issues?
- What quantitative inferences can be drawn
on a plant specific, vendor specific,
or industry wide basis?
- How do we determine the impact of fixes?

11:30 a.m. LUNCH

AGENDA, continued
February 28, 1983

12:30 p.m.

Issue 2.

What constitutes an acceptable LER selection and screening process for a precursor study?

Steve Rosen (Chairman)

Opening Remarks (Chairman)

Consider:

- What incidents will be overlooked with the present criteria?
- How should the criteria be changed or improved?
- Are the LERS adequate as the source? Can they be supplemented with other operational experience?

2:00 p.m.

BREAK

2:15 p.m.

Issue 3.

What is the appropriate level of modeling detail needed to adequately utilize precursor information?

J. Hickman (Chairman)

- NUREG/CR-2497 Approach (ORNL)
- INPO 82-025 Approach (INPO)

Consider:

- How should systems differences be treated?
 - o Auxiliary feedwater system
 - o Automatic depressurization system
 - o Secondary depressurization and low-head condensate systems
 - o Partial system performance

AGENDA, continued
February 28, 1983

- How should one include non-safety or auxiliary systems?
- How necessary is plant-specific information?
 - o Event tree representation
 - o Fault tree representation
- How should potential recovery actions be treated?
 - o Feed and bleed
 - o Human actions
- What failures should be excluded?

5:00 p.m.

ADJOURN

7:00 p.m.

DUTCH TREAT DINNER

EPRI Conference Center
Tuesday, March 1, 1983

8:30 a.m. (sharp)

Current NRC Precursor Program (ORNL)

- Goals
- Methodology Changes

9:00 a.m.

Issue 4.

What quantification can be done on selected LERs?

W.E. Vesely (Chairman)

Opening Remarks (Chairman)

Consider:

- What value is there to subgrouping of LER information by A/E, NSSS vendor, plant type or other commonality?

AGENDA, continued
March 1, 1983

- What level of event/fault tree quantification is consistent with available precursor information?
- How should one treat actuarial and predictive (statistical) estimates?
- What can be learned from trend analysis?
- In estimating event frequency, how should uncertainty be characterized and propagated?

11:30 a.m.

LUNCH

12:30 p.m.

Issue 5.

How can precursor information be integrated into an industry-wide performance measure?

E. Rumble (Chairman)

Consider:

- What are the meanings and limitations of precursor type estimates?
- What causes the apparent differences in estimated frequencies for PRA and precursor sequences?
- How do precursor severe core damage studies relate to PRA core melt frequency estimates?
- How can this methodology be validated, i.e., how can we validate the models and the results?

4:00 p.m.

Meeting Summary

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