Hubbard

* Brief TAS & change CTM item in next CTM update.

EDO Briefing on

ACRS Comments on the Draft Decommissioning Report

April 28, 2000

Balance Harris & This report
Frank M - Does ACRS comments lead to reopening GI-82.

Response to ACRS should be appropriate to their comments on Rx Safety Goal Policy Statement (4/17/00)

Gives time to address tech issues.

9/175

OVERVIEW

Issue:

- ACRS comments impact the staff report in four critical areas

  - Frequency of zirconium fires
  - Acceptance criteria
  - Timing of zirconium fire
  - Window of vulnerability

- Based on comments from the November 5 ACRS meeting, the staff thought there was a mutually acceptable approach for addressing T/H issues and the principle of using LERF.

Give RES Credit

Approach:

- Addressing the ACRS comments will require some additional technical work related to consequence analysis and T-H.

- The text of the report will have to be modified somewhat to address uncertainties and to clarify staff's technical bases.

- The response to ACRS will commit to additional technical work and some modification of the report. However, we will also dispute the relevance of some ACRS comments. to conclusions

- Staff believes that principal findings of the report remain valid.

OVERVIEW
(Continued)

Impact:

- In order to respond to the issues raised by the ACRS, the staff needs a three-week delay in responding to ACRS.

- In order to address the ACRS issues in the final report, a three-month delay will be needed.

- Should not impact timing or content of the rulemaking.

FREQUENCY OF ZIRCONIUM FIRES

Issue:

- The report concluded that the zirconium fire frequency is in the low E-6 per year range and is dominated by seismic.
- ACRS cited undue conservatism in the seismic numbers, and called for a discussion of human reliability uncertainties in the report.

Approach:

- Staff response to ACRS will commit to more discussion of uncertainties in report.
- Regarding seismic, the staff recognizes that there are conservatisms, but is not in a position to push the state of the art of seismic risk analysis.

Impact:

- Addressing these comments will not affect the report schedule.

ACCEPTANCE CRITERIA

Issue:

- The report assumes that any fuel uncovery will lead to a Large Early Release. The report uses the Reg Guide 1.174 guideline of 1E-5 per year as the acceptance criterion for zirconium fire frequency.

- ACRS claims that there are aspects of a zirconium fire which may go beyond LER. These include the effect of Ruthenium on early fatalities and the potential for enhanced land contamination.

Approach:

- Staff is prepared to include Ruthenium in the report. The effect on early fatalities does not qualitatively change our view of LERF guideline.

- The land contamination issue is a policy question that goes well beyond report scope and is under consideration by the Commission.

Impact:

- This work can be accomplished within the current schedule for finalizing the report.

TIMING OF ZIRCONIUM FIRE

Issue:

- The technical report concludes that fuel heatup to a zirconium fire will take about 10 hours, even for seismic sequences. This has implications for the time available for ad-hoc protective actions.

- ACRS cites the possibility of earlier ignition due to zirconium hydride formation and other phenomena.

Approach:

- Staff is preparing to present information refuting these arguments, although there may be some reduction of the delay time.

Impact:

- To address these comments, the staff needs a three-week delay in the schedule for responding to the ACRS and a three-month delay in finalizing the report.

WINDOW OF VULNERABILITY

Issue:

- The report concluded that the window of vulnerability for zirconium fire is no greater than five years. Plant specific analyses could demonstrate shorter times.

- ACRS (and other commenters) point out that the report does not address the partial draindown case, in which natural circulation of air is not present.

Approach:

- Staff proposes to do additional T-H analysis to address this issue. Staff expects the effect on the 5 year finding to be relatively small.

Impact:

- The staff needs a three-month delay in the schedule for including this additional analysis in the final report.

SUMMARY

- The ACRS comments, and those of other commenters, are substantive and require significant effort to address.

- In order to provide a response to ACRS, the staff needs a three-week delay in the current green ticket schedule.

- The staff believes the report can be modified to address these issues with only minor changes to the conclusions of the study.

- A three-month delay in the schedule for completing the technical report is needed to address the ACRS issues.

- Westinghouse Owners Group and NEI comments have not been received and could affect schedule if substantive.

- There should be no impact on the substance of, or the schedule for, the rulemaking.