

1/21/04 Commission Mtg

Status of SFP Evaluation

- Summary
- Background
- Mitigation Strategies
- Recently completed analysis
 - Confirmatory testing
- Follow-on activities
 - NAS review
 - Analysis (other pools, scenarios)

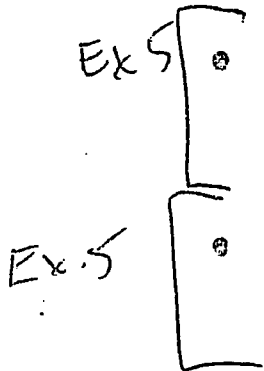
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SFP Summary

- Spent fuel pool design characteristics (both structural and thermal hydraulic) make them resistant to events which might lead to fuel damage
- Evaluation and improved calcs provide a measure of extant safety margins
- Mitigation strategies have been identified



- Independent technical peer review

SFP – Background

- NRC Vulnerability Project

- Preliminary work focused on development of best-estimate models and methods for calculating fuel heatup

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Confirmatory Testing

- Testing planned for confirming spent fuel pool modeling of T/H and accident progression

- Confirmation of modeling adequacy

- Natural circulation flow – laminar flow conditions, bypass area

- Radiative (and convective) heat transfer

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- Transient oxidation behavior

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- Confirmation of mitigation

- Small scale air oxidation kinetics testing has been completed

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Follow-On Activities

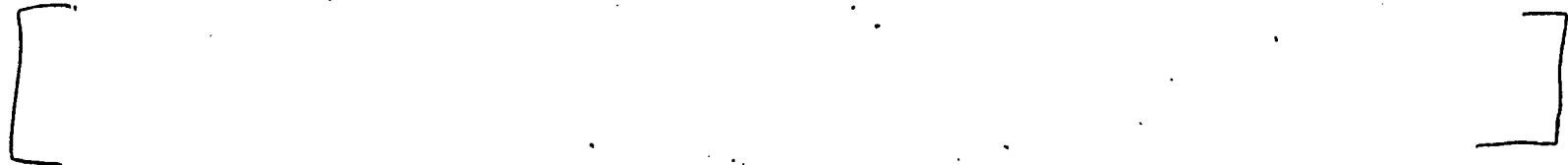
- **NAS review**
- **Follow-up analysis of BWR pool**
 - Scenario variations
 - Geometry changes
 - Mitigation strategies
 - Consequences analysis
- **PWR pool analysis**
- **Development of generalized screening criteria**

Follow-on Activities

- **NAS Review**

Preliminary public mtg- 12/3/03

EX. 5



Alvarez et al – modification of original position on all older fuel,
acknowledgement of error in their cost benefit analysis

Selection of 10 member panel near complete

NAS Review

- Proposed 1st Mtg - 2 days

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