



*United States
Nuclear Regulatory Commission*

FF/H

Proposed
PBMR Preapplication Review Plan
(Project 713)

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Topics for Discussion

- Overall goals of preapplication review
- Scope of review
- Office responsibilities and contacts
- Proposed review plan and schedule

Overall Goals

- To assess the key technology, design, safety, licensing and policy issues that would need to be addressed and resolved in support of a licensing application for a PBMR.
- To develop a core infrastructure of analytical tools, contractor support, staff training and NRC staff expertise needed for NRC to fully achieve the capacity and the capability to review a modular HTGR license application.

Review Scope

- HTGR Technology Assessment:
 - technical and safety issues
 - research needs
- PBMR Regulatory Framework:
 - process issues
 - applicable requirements
 - policy issues

Office Responsibilities and Points of Contact

- RES (Stu Rubin):
 - overall project management
 - lead for technical issues
 - coordination with other offices
- NRR (Amy Cubbage and Diane Jackson):
 - lead for process issues
- NMSS (Vanice Perin):
 - lead for fuel cycle, transportation, waste and safeguards issues
- OGC (Cathy Marco):
 - lead for legal issues

Proposed Plan for Review

- Review process:
 - meetings on selected topics
 - Exelon/DOE followup submittal documenting topic and requested feedback
 - NRC response drafted
 - discussion with ACRS/ACNW
 - NRC response to Exelon/DOE
- Five topical meetings:
 - licensing process (4/30/01)
 - fuel performance and qualification
 - design
 - fuel cycle
 - PRA, safety classification, regulatory framework

Proposed Plan for Review (cont.)

- Overall - estimate 18 months to completion
- End Products – letters to Exelon/DOE
 - Commission guidance on policy issues

Proposed Schedule

- Topics:

Proposed Schedule for Meetings

- | | |
|--|---------|
| – licensing process/legal issues | 4/30/01 |
| – fuel: <ul style="list-style-type: none">• design and fabrication• testing and qualification• ensuring quality over the life of the plant | 6/01 |
| – design: <ul style="list-style-type: none">• codes and standards• high temperature design and materials• accident analysis (DBAs)• computer codes and their validation• prototype testing | 8/01 |

Proposed Schedule (cont.)

Proposed Schedule for Meetings

- fuel cycle: 10/01
 - fuel storage
 - transportation
 - safeguards
- framework 12/01
 - PRA
 - safety classification
 - applicable requirements
- ACRS/ACNW interactions on technical issues
- Stakeholder feedback