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Strategy plan Polymeric Materials

- Safe and reliable management of polymeric materials in Nuclear Power Plants

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Vision

The vision of the program is to increase the knowledge about polymeric materials in Nuclear Power Plants (NPPs) and to form a strong competence network.

By this, the plants will benefit from more safe, reliable and cost-effective management related to service life of polymeric materials.

Focus areas and activity plan

1. Build-up of R&D program and expert group
2. Technical challenges
3. Knowledge transfer

Annual physical workshops to be held in the fourth quarter.

The activity planning should be regularly reviewed throughout the program period in strategy discussions within the steering group with input from the expert group.

Build-up of R&D program and expert group

- One of the most important aspects of the R&D program is the build-up of knowledge within a research network
- In addition to the steering group, consisting of plant representatives, an expert group should be formed consisting of e.g. researchers, suppliers and regulators
- To assist the steering group in the activity planning the SG can be supported by a technical expert

Technical challenges

- The request from the license holders is that the program shall focus on practical applications rather than just scientific advancement
- There is a need for running smaller more focused projects, preferably with clear safety and/or cost saving improvements for the plants

Technical challenges – identified areas

- LTO and ageing management – accelerated ageing and harvesting
- Low dose rates – threshold level?
- Cables and Online-monitoring
- Acceptance control of new materials
- Storage control
- Polymers and lubricants
- Environmental qualification

Knowledge Transfer

- Up-dating the course material produced by Sue Burney
- Finding suitable person/s to deliver the courses, preferably in the local language.
- Literature reviews, preferably presented in the context of the technical challenges that have been pinpointed
- Summaries of the work in international standardisation groups and presentation from relevant conferences

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Thank You!

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