BESEP – Benchmark Exercise on Safety Engineering Practices

OBJECTIVE

The overall objective of BESEP is to support safety margins determination by developing best practices for safety requirements verification against external hazards, using efficient and integrated set of Safety Engineering practices and probabilistic safety assessment.

IMPACT

The impact of BESEP is the improved licensing process of nuclear power plant new builds and upgrades with better safety margins determination and safety requirements verification against external hazards.

- Best practices for the verification of evolving and stringent safety requirements against external hazards.
- Guidance on the closer connection of deterministic and probabilistic safety analysis and human factors engineering for the determination and realistic quantification of safety margins.
- Guidance on the creation of graded approach for the deployment of more sophisticated safety analysis methods, such as upgrades of simulation tools, while maintaining the plant level risk balance originating from different external hazards.

PARTNERS

Teknologian tutkimuskeskus VTT Oy / Électricité de France / NUBIKI Nuclear Safety Research Institute Ltd. / UJV REZ, a. s. / Fortum Power and Heat Oy / RELKO spol. s r.o. / Risk Pilot AB

DURATION & BUDGET

- Sept. 2020 – Feb. 2024
- 3½ years
- 2,76 milj.€

CONTACT INFORMATION

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