WENRA’s contribution to the European Union’s Topical Peer Review (TPR) and Insights from Switzerland

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WENRA’s Contribution to the Topical Peer Review

Technical Specification

• July 2015: ENSREG selects «Ageing management for NPPs» as the topic for the TPR

• January 2017: ENSREG endorses the Technical Specifications as suggested by WENRA
Insights from the Swiss Experience

Material ageing as focus of the EU TPR on ageing management
• Interesting issues have been identified for improvement (e.g., concealed piping)

Conceptual ageing of the design as second important aspect
• Swiss regulatory framework ask for review of obsolescence in the periodic safety reviews → safety evaluation for LTO
• Operators are asked to identify reasonably practicable safety improvements
• Backfittings must be implemented
PSA Results of Beznau NPP

- Bunker Systems
- Additional Emerg. Feedwater Train
- New Emerg. Diesel Generators
- Seismic Restraints, EOP Changes
- AM Diesel Generators

Year:
- 1984
- 1988
- 1992
- 1996
- 2000
- 2004
- 2008
- 2012
- 2016

Core Damage Frequency [per year]:
- $1.0 \times 10^{-02}$
- $1.0 \times 10^{-03}$
- $1.0 \times 10^{-04}$
- $1.0 \times 10^{-05}$
- $1.0 \times 10^{-06}$
Thank you.

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