Constructing the world’s first deep geological repository - POSIVA experiences

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The world’s first construction license for a final disposal facility has been granted

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POSIVA IS GRANTED CONSTRUCTION LICENCE FOR FINAL DISPOSAL FACILITY OF SPENT NUCLEAR FUEL

The Finnish Government has today granted a licence to Posiva for the construction of a final disposal facility for spent nuclear fuel. After an extensive and multidisciplinary research and development work Posiva can now proceed to construction of the final disposal facility in Olkiluoto according to the concept it has developed. The final disposal of the spent fuel generated in the Olkiluoto and Loviisa nuclear power plants into the Finnish bedrock is planned to start in the early 2020's.
Posiva’s program has progressed already for 40 years

- Studies of geological disposal started
- Site selection research
- Selection of Olkiluoto
- Construction of ONKALO and site confirmation studies in Olkiluoto
- Construction of disposal facilities
- Test operation, commissioning
- Starting final disposal of spent fuel

- 1978: Government’s decision on timetable
- 1983: EIA-law into force
- 1994: Application for the construction license
- 2001: Decision in principle by the Government and the Parliament
- 2012: Construction license granted by the Government
- 2015: Application for the operation license
- Early 2020’s: Construction license granted by the Government
- 2015: Application for the operation license
- Starting final disposal of spent fuel
Construction of above- and underground facilities started in 2016
Final disposal facility around 2120

- Repository capacity is 6500 tU (about 3250 canisters)
- Depth of the tunnel system -400-450 m and the extent is about 2 km²
- Construction and operating time approximately 100 years
- The volume of the cave about 2 million m³
- Tunnel length about 60-70 km
Three “shafts of success”

- Trust and transparency
  - it takes years to earn the trust, and only minutes to lose it – we do not risk this under any circumstances

- Independent and trusted authorities

- People’s own good, long experience of reliable, employing, tax-paying and transparent nuclear industry

Public acceptance of deep geological disposal of spent nuclear fuel
Kiitos!
Thank you!