



UK Spent Nuclear Fuel and HLW Management

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Range of strategies

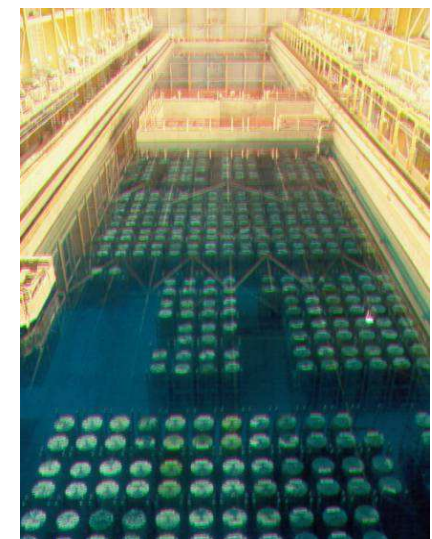
- Storage and direct disposal of spent nuclear fuel
 - Plans in Sweden and Finland plans well advanced
- France long term strategy of reprocessing and re-use of Pu in fast reactors – disposal of vitrified HLW
- Spent fuel being stored and some HLW from past reprocessing (Germany)
- Interim storage and planning for eventual disposal
- Interim storage and plans being developed



UK approach for spent nuclear fuel management

- HLW from past reprocessing
- Reprocessing of Magnox fuel and completion of THORP contracts
- Store fuel from AGR and Sizewell PWR
- Fuel from future new build - storage and deep geological disposal
- Higher activity wastes to be disposed in geological disposal facility

**Key technical challenge:
Understanding the long term
behaviour of stainless steel clad
oxide fuel**



Scenarios for UK deployment - future nuclear energy options

Where is the tipping point from open to closed fuel cycle

Influenced by (examples)

- Economics
- Fuel supply
- Geological disposal
- Technology
- Plutonium
- Public acceptability

