Introduction of Session 1: Funding mechanisms

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Presentations of the Session 1:

1. **Overview of the Financing Arrangements for Nuclear Power Plant Decommissioning Financing in Switzerland.** Raymond Cron, STENFO, Switzerland
2. **Overview of the Financing Arrangements for Nuclear Power Plant Decommissioning Financing in Sweden.** Annika Åström, SSM, Sweden
3. **Describing the System for Decommissioning Financing for New Nuclear Power Plants in the UK.** Robert Middleton, DECC, United Kingdom
4. **Overview of the Financing Arrangements for Nuclear Power Plant Decommissioning in the USA.** Richard Turtil, US NRC, United States
5. **Overview of the Financing Arrangements for Nuclear Power Plant Decommissioning Financing in Belgium.** Chantal Cortvriendt, FPS Economy, SMEs, Self-Employed & Energy, Belgium
6. **Overview of the Financing Arrangements for Nuclear Power Plant Decommissioning Financing in France.** Louis du Pasquier, Ministère de l'Écologie, du Développement durable et de l'Énergie, France
7. **Financial Guarantees for Decommissioning of Canadian NPPs.** Milena Kostova, CNSC, Canada
8. **Overview of the Financing Arrangements for Nuclear Power Plant Decommissioning Financing in Japan.** Yuki Shimazu, Ministry of Economy, Trade and Industry, Japan
Challenges for funding mechanisms:

• Situation on capital markets
  – Challenging investment environment, insufficient investment returns,..

• Correct calculation of decommissioning and waste disposal costs
  – Inadequate basis for the calculation of the contributions of the NPP operators

• Economic stability of NPP operators
  – Challenging market conditions impacts the capacity of NPP operators to pay for the contributions and may lead to default of contributions
  – Additional taxes for nuclear production

• Early closure of the NPPs e.g. due to economic or political reasons

• Use of fund

• Regulatory framework – will be tested for the first time in many countries

• Unavailability of waste management routes (time, costs, packages,…) 

• Availability of resources when several decommissioning projects simultaneously (e.g. in Belgium, Germany or Sweden)

• Surprises increasing the scope of the decommissioning projects
Comments from a Finnish licensee’s point of view:

• Stable and predictable funding system with no big surprises or additional delays for the decommissioning project is a preference
• In Finland money is reserved for nuclear waste fund for the radioactive waste available at end of the each year
  – 25 years reserved for collecting money for new plants
  – Waste streams & final disposal clear although some parts not licensed yet
• Great interest in many companies to start providing services for decommissioning projects
  – More competition, lower costs,…
  – New innovative solutions for dismantling or treatment of waste may become available
• International co-operation has offered possibilities to learn from the others
  – OECD WPDD and other working groups
  – IAEA working groups, e.g. the new report for transition from operation to decommissioning
• New innovative solutions for decommissioning projects realization and funding
  – Zion Solution case in US
• Update of the Nuclear Energy Act in Finland
  – The process has started and operators invited to participate the working groups e.g of decommissioning and funding parts
Summary and reflections, session 1: solutions for challenges

• Situation on capital markets
  – Greater freedom for the Fund to invest its capital - wider range of assets (Sweden)

• Correct calculation of decommissioning and waste disposal costs
  – Experience from projects (e.g. José Cabrera)
  – Peer reviews (France) and stress tests (Germany), Supervising body : Commission on nuclear provisions (Belgium)
  – Use data from existing waste disposal facilities (Finland, Sweden)

• Economic stability of NPP operators & early closure of the NPPs
  – Securities & Guarantees (different mechanisms available)
  – Parent company liability (France)
  – Payments into fund in advance (Finland, Canada)
  – Nuclear Liabilities Financing Assurance Board (UK)
  – Minimum Funding Amount, MFA (US)
  – The Cap and Risk Fee (UK)
  – New accounting and remuneration rules to support early decommissioning (Japan)

• Use of fund
  – Supervision by the regulator or the fund
  – Finnish system where the fund does not pay the work but is a reserve for remaining works
  – Early availability of funding would support cost effective transfer from operation to decom.

• Regulatory framework
  – Dialog between the licensees and regulators (Finland)