

National HLW programme news

Canada:

- Ontario Power Generation (OPG) has proposed constructing a deep geological repository at the Bruce site for OPGs LILW and reactor decommissioning waste. A hosting agreement has been reached with the local communities and the Scoping Document (EA Guidelines) for an environmental assessment of the project is nearing completion.
- The federal government has committed \$500 million to a 5-year plan to initiate decommissioning and waste management projects on AECL managed sites as part of a strategy to reduce long-term risks and liabilities.
- As directed by the Ontario government, in September 2006 OPG applied to the Canadian regulator (CNSC) for a Site Preparation Licence for new nuclear units at the Darlington Nuclear site. In the next step of the federal approvals process, the CNSC will determine the environmental assessment requirements.

Finland:

- Programme proceeding as planned with construction of Onkalo (at 150m below surface). Change of contracting structure – all management done by Posiva. Purchase of all required equipment.
- Construction of 5th NPP ongoing; start of discussion of 6th reactor – seems to have public acceptance. Posiva already prepared for increased inventory.

France:

- Last June 2 important acts passed: nuclear security & transparency to create independent safety authority, radwaste planning act based on Andra / CEA R&D (reviewed by NEA) specifies plan for all radioactive waste.
- HLW / long-lived ILW storage facility by 2015, geological repository operational by 2025. Reversibility to be guaranteed for 100a. License application will include public debate and will be decided by a vote by parliament. Closure would also be decided by law.
- P&T still ongoing R&D, feasibility by 2012 and pilot plant by 2020.

- Andra moves from multi-barrier to safety function approach. Concept without clay buffer EB (only metallic sleeve or concrete ground support, depending on waste type).

Germany:

- Past Federal Government decision to phase out nuclear; imposed moratorium on underground exploration of Gorleben Salt Dome as possible HLW repository site on October 1, 2000, due to doubts about waste disposal concept.
- New Federal Government since November 2005; continuation of nuclear phase out but utilities attempting to extend lifetime of NPP Biblis A to avoid closure in 2009.
- New Federal Government declared to handle waste disposal in speedy and safe manner, but nothing has happened.
- Doubts on Gorleben and disposal concept all clarified since November 2005, but moratorium continues and HLW in interim store.
- Court decision with complete confirmation of license granted for Konrad repository has far reaching consequences for German HLW disposal policy.

Sweden:

- Last week SKB submitted the license application for the encapsulation plant; final licensing will be coupled to repository licensing. Strong support by local major.
- Field investigations will be completed next year; site selection planned for late 2009 (delay of 2-3a from R&D plan 2004).
- SR-Can project submitted; risk below limits for 100 ka, but at longer time concerns – e.g. stability of bentonite vulnerable to dilute waters (e.g. during glaciation) to give chemical erosion, thermally induced spalling in emplacement holes after emplacement (if bentonite swelling after thermal pulse): under review by authorities with international expert team.

Switzerland:

- The Entsorgungsnachweis project was accepted by the Swiss government in June; the feasibility of co-disposal of HLW, spent fuel and long-lived

ILW has now been demonstrated.

- Nagra's request to focus the HLW disposal project in the Zürcher Weinland was rejected, however; the Federal Government will now specify the process of siting in a sectoral plan (Sachplan).
- The first part of the Sachplan (strategy) has been drafted and opened for comment; after finalisation (mid 2007) the process of implementation will be specified, which will allow Nagra to move forward with siting.

UK:

- Energy review almost complete, in favour of new nuclear power (global warming concerns plus energy supply security) – 6-10 GW new capacity. Requires solution to the waste problem.
- CoRWM reported in July results of options study, recommending geological disposal with early closure; government response a few weeks ago, accepts recommendation and responsibility for geological disposal of all wastes with the NDA and Nirex will be closed down (and experience incorporated into NDA). Practical implications unsure.
- CoRWM will continue and be extended with more technical expertise; RAWMAC to be officially wrapped up.
- More on deep geological disposal programme should be clear within the near future.

US:

- Regulations: final US EPA safety standard for Yucca Mountain to be issued by end of 2006; dose (either mean or median) limits could lie in the 0.15 to 3.5 mSv range as a function of time.
- Based on a compliance timescale out to peak dose or one million years after waste emplacement, it may be that certain new FEPs will be included.
- Specifications for a new WP design – a multi-purpose transportation-aging-disposal (TAD) package – is expected before the end of 2006.
- OCRWM Director plans to submit a License application on or before June 2008 Certification of the License Support Network (LSN) by the US NRC must occur prior to this submittal.
- Sandia has been appointed the lead national laboratory for the Yucca

Mountain Project (YMP)

- Recently the US DOE has lost several law suites regarding the 1998 deadline for taking title for commercial spent fuel; this has led to an increased interested by policy makers to consider interim storage.
- The recent changes in political control of the US Congress may lead to changes in the overall US nuclear waste management programme.
- GNEP has a key focus to aid in promoting the expansion of nuclear power in US. This may involve, for example, plus possible reprocessing.
- FY07 budget for YMP in a final comprehensive energy bill may not be finished until March; there are differences in current versions of this energy bill, leading to uncertainties in YMP, GNEP and role of interim storage (20 M\$ for operators to study interim storage and 10 M\$ for 2nd repository if interim storage not assured by end of 2007). For example, each state with NP may need its own interim storage.

International:

- Movements on siting and volunteer communities in further countries such as Belgium, Slovakia and Hungary (might be usefully publicised by NUMO)
- EU agreed funds for new Sappier project (2 years) on multinational repositories