

Comment on the Finnish consultation procedure on the national programme on the management of spent fuel and radioactive waste

In this consultation procedure, only very short summaries of the national programme and the EIA Report are available in English. These summaries do not provide information on two critical issues that are of high relevance for the public throughout Europe – whether if the safety of the copper canisters that will be used in the future spent fuel repository in Onkalo and the safety of the disposal for spent fuel resulting from lifetime extension of Finnish NPP can be proven.

Research results have shown that copper may corrode even in an oxygen-free environment. This, together with other corrosion mechanisms and mechanisms that can provide stress on the copper canister, means that the long-term integrity of the copper canister cannot be guaranteed at this point. Swedish authorities therefore have not approved the KBS-3 method's use yet but are awaiting more research. The Swedish Radiation Safety Authority is presently evaluating what appears to be severe anoxic corrosion, including pitting, which were observed in the 20-year old experimental packages from the LOT experiment in the Äspö Hard Rock Laboratory. Thus, the question arises how Finland intends to respond to these new contradictory facts suggesting that an unproven technology would be approved.

The EIA on the national programme on the management of spent fuel and radioactive waste should definitely reflect and assess the results of the copper research in depth and compare them to the Swedish developments.

In the EIA on the lifetime extension of Loviisa 1&2 it became clear that the necessary interim storage facility for the spent fuel is not available yet. An additional safety problem is the continued use of a wet storage system that is no longer state-of-the-art. These questions should be discussed in the EIA for the national programme on the management of spent fuel and radioactive waste, and a lifetime extension of Finnish NPP should not be licensed unless the safe disposal for the resulting spent fuel is proven.

We would appreciate it if the whole national programme and the EIA Report were provided in English, at least if you can provide us with more information to the above mentioned issues in English.

[REDACTED]
Austrian Institute of Ecology

[REDACTED]
Austria