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Comments on the Notification in Accordance with the Espoo Convention for Fennovoima Oy's Proposed Spent Nuclear Fuel Encapsulation Plant and Final Disposal Facility in Finland

On the 18th of August 2016 the Norwegian Radiation Protection Authority (NRPA) received notification from the Norwegian Ministry of Climate and Environment, in accordance with article 3 of the Espoo Convention, of an Environmental Impact Assessment Program (EIA Program) by the Finnish company Fennovoima Oy. The EIA Program concerns the final disposal of spent nuclear fuel from Fennovoima Oy's nuclear power plant Hanhikivi 1, which will be built in Pyhäjoki, Finland. With this EIA Program Fennovoima Oy supplements the construction license application for Hanhikivi 1 and launches the environmental impact assessment procedure for their own spent nuclear fuel encapsulation plant and final disposal facility.

The Finnish EIA procedure consists of two phases: (I) the EIA Program (scoping document) phase and (II) the EIA documentation phase. In the EIA Program the developer proposes that the research, construction, operational, and decommissioning phases of Fennovoima Oy's own encapsulation plant and final disposal facility will be studied during the further EIA procedure. The capacity of the encapsulation plant and final disposal facility will be 1,200-1,800 tons of uranium. The chosen technical implementation alternative is the multibarrier KBS-3 method where the final disposal will take place in drilled holes in final disposal tunnels in bedrock. Other issues covered by the impact assessment include the effects of ancillary projects, such as the construction of roads and power lines. The alternative locations for the encapsulation plant and final disposal facility are Eurajoki and Pyhäjoki.

There are two articles related to transboundary impacts and potential causes of accidents in the EIA Program. The first of these two articles, article 7.14 "Exceptional situations and accidents", state that the risks posed by exceptional situations and accidents during the transport of spent nuclear fuel will be studied in the EIA procedure. An exceptional situation during the transport of spent nuclear fuel could be an interruption due to a technical malfunction in the means of transport or a traffic accident. Potential causes of such accidents include for example collisions, external factors (sabotage, lightning strike), and fires. In the second article, article 7.17 "Transboundary environmental impacts" the developer state that, based on the preliminary estimate, the final disposal project will not have any transboundary environmental impacts.

A separate report regarding the transport of spent fuel, a risk analysis for exceptional situations and accidents and a long-term safety modeling will be completed during the EIA procedure. One of the



issues examined in these studies is whether the impacts could extend beyond the borders of Finland. Regarding potential accidents that could take place during the transport of spent nuclear fuel, NRPA would like to add the following sabotage scenarios for examination, in terms of impacts beyond the borders of Finland:

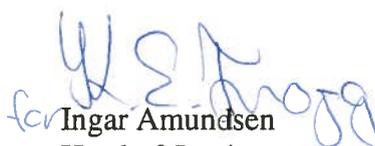
- Accidents damaging transport infrastructures
- Attack with explosives

In our opinion it is important that the Norwegian authorities can participate in the further impact assessment process, which means that we receive the EIA procedure for possible comments when it is available.

Yours sincerely



Per Strand
Director



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