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RESPONSES TO QUESTIONS OF AUSTRIA AND LATVIA RELATED TO ENVIRONMENTAL IMPACT ASSESSMENT OF FENNOVOIMA'S NUCLEAR POWER PLANT

On 13 February 2014, Fennovoima Ltd (Fennovoima) submitted an environmental impact assessment report (EIA report) to the Finnish contact authority, the Ministry of Employment and the Economy concerning the nuclear power plant project in Finland. The EIA procedure was executed pursuant to the Environmental Impact Assessment Act (468/1994; EIA Act) and the international consultation referred to the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention).

On 2 June 2014, the Ministry of Employment and the Economy gave the authority statement on the EIA report and the statement also concluded the EIA procedure for the project.

On the basis of the Espoo Convention, Austria, Sweden, Norway, Germany, Estonia, Latvia and Poland participated in the international consultation of the EIA report through their statements. Austria and Latvia posed further questions in their statements. In the authority statement the Ministry of Employment and the Economy required that Fennovoima will submit responses to the questions contained in the statements. The responses were asked to be submitted to the Ministry by 31 October 2014.

Fennovoima has compiled this memorandum to response to the further questions of Austria and Latvia concerning the EIA assessment and report related issues.

Austria***Can the determination of the site elevation including safety margins and its justification regarding the sea level variation, wave heights and the respective uncertainties be explained?***

Both the Finnish Meteorological Institute (FMI) and the Swedish Meteorological and Hydrological Institute (SMHI) have independently made estimations of extreme values for high sea water level at the power plant site. The estimations consider also the effects of post-glacial rebound and the global warming during the plant's lifetime. Furthermore, the effects of waves, seiche (i.e. standing wave phenomenon occurring with very long wavelength), tide and meteorological tsunamis are also considered.

The construction elevation is determined based on the estimated sea water level that occurs at the site with the probability once in a hundred years with added wave margin and a safety margin of two meters. The estimated sea water level that occurs at the site once in a hundred years is approximately +2 meters (at a median confidence level). The total effect of the waves is estimated to less than 0.5 meter. Note that this 0.5 meter wave margin should not be confused with the maximum height of single waves at sea, which can be significantly higher. However, the wave margin is comparably low due to the shallow sea and shore. A safety margin of two

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meters is added on top of the total of the high sea water level and the wave margin. Hence the construction elevation is higher than 4.5 meters.

The uncertainties in the estimates are less than 0.5 meters (at 90 % confidence level). Also estimations for sea water level that occurs at the site with the probability once in hundred million years have been made and the estimations show that even these extreme sea levels does not exceed the design basis for the construction elevation.

Would the implementation of an alternative heat sink (e.g. a ground water well) be possible at the site? Has the implementation of an alternative heat sink, which is independent of the sea water, been considered?

The AES-2006/V491 -plant is equipped with a passive heat removal system that transfers residual heat from the reactor core to the atmosphere. This system operates independently from sea water.

Can you provide the interpolated results of the Cs-137 ground deposition in case of the considered INES 7 accident at the distance of 1,850 km from the Hanhikivi site (distance to the Austrian border)?

The estimated deposition of Cs-137 at the Austrian border as a consequence of the presented INES-7 event in unfavorable wind conditions (95 %-fractile) is less than 0.5 kBq/m².

Is it possible to perform a dispersion calculation of the considered INES 7 accident with a release time (1 hour) which corresponds to a conservative worst-case release scenario?

This proposed analysis is considered so unlikely that is not sensible to be analyzed in the framework of the environmental impact assessment. In case of a severe accident the release duration can be as short as one hour in some improbable but conceivable situations. However, in these situations the released amount is only a fraction of the analyzed 500 TBq Cs-137 -release.

When will the choice of interim storage be made? Is there a currently favored option?

Fennovoima is aiming to choose the interim storage concept of spent nuclear fuel within a year. The decision will be grounded to careful feasibility analysis concerning safety, technics and economics. The solution will be presented in the construction license application of the power plant.

When can the decision about the final disposal strategy of spent fuel be made available?

In planning the final disposal of spent nuclear fuel, Fennovoima is proceeding according to the Decision-in-Principle granted to Fennovoima in 2010. Fennovoima shall by the end of June 2016 either have an agreement of nuclear waste management cooperation with the parties currently under the nuclear waste management obligation, or start the EIA procedure concerning its own final disposal facility for spent nuclear fuel.

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In case Fennovoima has to construct its own final disposal facility: (When) can the progress and timetable of Fennovoima's EIA on SNF disposal be made available?

If Fennovoima needs to proceed with its own final disposal facility the EIA program for the final disposal project will be published by the end of June 2016. The investigations needed for the environmental assessment report will require several years of research work in selected alternative site locations. The final disposal of spent nuclear fuel will require the completion of the EIA procedure and Decision-in-Principle as well as construction and operating licenses regardless of the location of the final disposal facility. The international consultation of the EIA procedure will also be executed pursuant to the Espoo Convention.

Latvia

Radiation doses for residents of Latvia estimated from the modelled severe reactor accident to article 6.1. of the EIA Report

In unfavorable wind conditions, at the Latvian border (approximately 715 kilometers from the site) the doses to a child would be less than 2 mSv as consequence of the 100 TBq Cs-137 -release (INES-6) and less than 10 mSv as consequence of the 500 TBq Cs-137 -release (INES-7). The corresponding numbers for adults are less than 1 mSv and less than 5 mSv.