



Ministry of Environmental Protection and Regional Development the Republic of Latvia

ENVIRONMENTAL STATE BUREAU

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Comments concerning Environmental Impact Assessment Report of a Fennovoima nuclear power plant in Finland in municipality of Pyhäjoki (peninsula of Hanhikivi)

The Environmental State Bureau (Bureau) confirms that information about Environmental Impact Assessment (EIA) Report of a Fennovoima nuclear power plant (NPP) in Finland in municipality of Pyhäjoki was made publicly available on the website of Bureau (www.vpvb.gov.lv) from 26 February, 2014.

Bureau considers that the aerial and aquatic areas of transboundary radioactive pollution may be of considerable importance for Latvia, therefore it is crucial for the assessment of possible transboundary impact to highlight the main safe operation and pollution prevention measures included in the Fennovoima NPP EIA, such as:

- a) several safety levels complementing each other to be in effect during the development and operation of the Fennovoima NPP;
- b) to equip the Fennovoima NPP with safety countermeasures to prevent or limit the development and impact of accidents and malfunctions;
- c) to build the Fennovoima NPP so that it withstands possible threats caused by external factors.

According to EIA Report the radioactive gasses created by operation of the NPP will be treated using the best methods available. Radioactive dispersion in seawater will be regulated by limitations applied specifically to this NPP: radioactive liquids from the monitoring zone will be transferred to the liquid waste processing system for purification, so their radioactivity levels do not exceed the set emission limits. The radioactivity levels of water diverted into sea will be assessed by cluster sampling, measuring the radioactivity levels of water in the water discharge system before it is diverted into the coolant water discharge tunnel.

The impact of a nuclear accident in EIA Report is assessed by analysing a model of a severe reactor accident. According to the modelled accident, no direct or imminent impact on people living in close vicinity of the NPP is to be expected, and the Fennovoima NPP will not create a transboundary environmental impact during normal operation.

To assess the possible results of a nuclear accident at the NPP, the EIA procedure includes a modelling of a severe reactor incident, considering the release of radioactive material, its subsequent settling on the ground and local residents receiving a radiation dose of adequate severity (INES 6). In addition, a release five times as large was modelled for assessment as well. A release five times larger is an INES category 7 accident.

In case of the modelled severe reactor accident (INES 6) no imminent impact on human health in close vicinity of the NPP is to be expected in any weather. In case of an accident, the expected radiation dose outside Finnish borders is statistically insignificant, and it is unlikely that a need will arise to execute civil protection measures outside Finnish borders.

EIA concludes that an INES category 7 accident will not create any imminent transboundary health impact. In case of unfavourable weather (wind direction), the estimated lifetime radiation dose for residents of the Baltic states from such an accident should not exceed 12 mSv for children and 6 mSv for adults. However, depending on the direction of the release, Baltic states may have to impose limitations on the usage of freshwater fish for food.

We draw your attention that Bureau has received comments from Radiation Safety Centre of the State Environmental Service of Latvia who concludes that there are no significant reasons to demand Finland to cease their planned action – construction of the Fennovoima NPP.

To improve the level of nuclear safety in relation to the possible transboundary impact of the Pyhäjoki NPP, it is necessary:

- 1) to consider the cooperation between the Republic of Latvia and Finland concerning information exchange and coordination during emergencies and nuclear accidents;
- 2) to receive the following additional information from the project leader:
 - a) inform the Ministry of Environmental Protection and Regional Development of the Republic of Latvia about the construction progress and start of operations of the planned NPP, as well as the integration of monitoring systems and other important factors concerning the development and operation of the monitoring system, in order to make this information available to Latvian institutions and residents;
 - b) add the radiation doses for residents of Latvia estimated from the modelled severe reactor accident to article 6.1. of the EIA Report.

Hoping on a fruitful collaboration,
sincerely yours,
director



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