



SWEDISH
ENVIRONMENTAL
PROTECTION
AGENCY

2024-04-03

Richard Kristoffersson
Phone: +46 (0) 10-698 17 69
richard.kristoffersson
@swedishepa.se

Case number:
NV-00751-24

Finnish Environment Institute
(SYKE)
transboundaryEIA.SEA@syke.fi
cc: Ms. Laura AITALA-MARTESUO
laura.aitala-martesuo@syke.fi

Swedish reply to the notification pursuant of Art. 3 of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) regarding the planned lifetime extension of the Olkiluoto nuclear plant, Finland

The Environment Institute (SYKE) notified the Swedish Environmental Protection Agency (SEPA) on the 24th of January 2024 regarding the possibility of extending the service life of the Olkiluoto 1 and Olkiluoto 2 plant units and uprating their thermal power at the Olkiluoto nuclear power plant in Finland.

The developer, Teollisuuden Voima Oy, states that they are investigating an extension of the operation for the operational age of the two reactors until 2048 or alternatively 2058. In addition to the lifetime extension, the possibility of increasing the heating output of the two reactors by 10% is also being investigated. The alternatives that will be investigated, apart from the 0 alternative where the reactors are operated until the current operating time, are extension with unchanged heat output until 2048 alternatively 2058, alternatively extension until 2048 alternatively 2058 with an increased heat output of 10%.

Consultation in Sweden

SEPA is the responsible authority for submitting and receiving notifications and otherwise fulfilling obligations for environmental impact assessments in a transboundary context (Espoo Convention) in Sweden, according to the Environmental Assessment Regulation (SFS 2017:966). The notification and the consultation documents have been circulated for consideration by SEPA to relevant government agencies, including but not limited to the County Administrative Boards, municipalities as well as environmental organizations and effected interest organizations.

The consultation period in Sweden lasted from 24th of February until March 28, 2024.

SEPA received statements from the Swedish Radiation Safety Authority, the Swedish Forest Agency, the Swedish Food Agency, the Swedish Board of Agriculture and Environmentalists for Nuclear Power.

Remarks received during the consultation

A summary of the statements received is included below, please note that the summary is written on behalf of the SEPA and not for the body to which the proposal is referred for consideration.

Swedish Radiation Safety Authority assesses that continued operation and possible power increase at Olkilouto 1 and 2 could entail significant environmental consequences for Sweden in the sense referred to in the Espoo Convention. The authority further believes that the EIA should include a severe accident that goes beyond the design-guiding criteria for the nuclear power plant, for example as the postulated events analyzed by the Finnish Radiation and Nuclear Safety Authority in the report STUKA268 and that the emissions from Olkilouto, even in the case of a lifetime extension, must be limited through the application of best available technology (BAT).

The Swedish Forest Agency shares the assessment that it is only the release of radioactive substances as a result of a serious reactor accident that can lead to significant transboundary consequences. Given the degree of seriousness of the consequences, the agency believes that Sweden should participate in international consultations according to the Espoo Convention. The part of the impact assessment that deals with transboundary effects of a reactor accident must take into account the impact on relevant forest ecosystem services in Sweden.

The Swedish Food Agency considers the risk to Sweden's food and drinking water supply to be as great as in the case of a radioactive release from a Swedish nuclear power plant, due to the reactors closeness to Sweden. Further more, they state that in the upcoming EIA, a detailed investigation, risk assessment and impact analysis should be included for how a serious accident, with an extensive release of radioactive substances, risks affecting drinking water and food production, including the fishing industry outside Finland's national borders. For example, it should be investigated whether a serious breakdown could mean that the EU's limit values for food (Euratom 2016/52) are exceeded.

The Swedish Board of Agriculture states that in the provided documentation it is assessed that consequences should be reviewed within 1,000 km of the power plant. From Olkiluoto to the Swedish coastline it is about 200 km, which means that Swedish territory with a margin lies within the area that should be reviewed. The agency therefore believes that Sweden should be allowed to take part in and provide comments on the upcoming environmental impact assessment.

Environmentalists for Nuclear Power supports the option with an extension to 2058 and a power increase of 10%. They believe that this option, together with the environmental consideration referred to in the Espoo Convention, is the best option for total consideration of the environment for the generation of electricity in Finland and thus in the entire Nordic electricity market, and do not see the need for Sweden to participate in further consultations.

SEPA hereby acknowledges having received the notification and based on received statements, also inform Finland that Sweden intends to participate in the upcoming Espoo process.

This decision has been made digitally and therefore lacks signatures.

For the Swedish Environmental Protection Agency

Nanna Wikholm
Head of Unit

Richard Kristoffersson
Point of Contact for the
Espoo Convention

Cc

The Ministry of Climate and Enterprise, Sandra Jalalian, Bastian Ljunggren and Eleonora Rönström

Enclosed, statements made in Swedish by:

Swedish Radiation Safety Authority
The Swedish Forest Agency
The Swedish Food Agency
The Swedish Board of Agriculture
Environmentalists for Nuclear Power