Authority services

27 February 2024

SYKE/2023/1899

Points of Contact for Notification Bulgaria Ms. Gyuler Alieva Hungary dr. Andrea Musil

Notification in accordance with Article 3 of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) 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

Finland, as a Party of origin, hereby sends in accordance with Article 3(1) of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) a notification of a proposed project listed in Appendix I, paragraph 2(b). The notification is also sent in accordance with Article 7 of the Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (2011/92/EU as amended by 2014/52/EU).

Information on the planned project

As part of service life management for the Olkiluoto nuclear power plant, Teollisuuden Voima Oyj (hereinafter "TVO") has initiated an environmental impact assessment (EIA) for the possibility of extending the service life of the Olkiluoto 1 (hereinafter "OL1") and Olkiluoto 2 (hereinafter "OL2") plant units, together as "the plant units", and uprating their thermal power at the Olkiluoto nuclear power plant in Eurajoki, Finland. The OL1 was commissioned in 1978 and the OL2 in 1980. The plant units are identical boiling water reactors. TVO is analysing the possibility of extending the service life of the plant units until 2048 or, alternatively, until 2058. TVO is also analysing the possibility of uprating the thermal power. The starting point is an increase of the reactor's thermal power by 10 % to 2,750 MW, which corresponds to increasing the plant units' nominal electrical power output from the current 890 MW to 970 MW.

The alternatives being examined for the project are as follows: continuing the operation of the plant units at the current power level until 2048 (VE1a) or 2058 (VE1b) and continuing the operation at an uprated power level until 2048 (VE2a) or 2058 (VE2b). In the zero alternative (VE0), the operation of the plant units will continue until the expiration of the current operating licence.

The developer has concluded as a preliminary estimate which indicates that only the impact of releases of radioactive substances resulting from a severe reactor accident could extend transboundary. In the EIA report, the possible transboundary impacts will be assessed based on, among other things, a dispersion calculation. Other potential risks related to, for example,



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incidents, accidents, and transports are examined and the potential for the transboundary impacts is assessed. More information on the project, its alternatives and the planned content of the EIA can be found in the EIA programme and the summaries made for the public hearing in the likely affected Parties.

The decision-making process

The nuclear safety and radiation safety requirements set in Finland for a nuclear power plant are based on the provisions of the Nuclear Energy Act (990/1987) and Decree (161/1988), which are then supplemented by means of regulations issued by the Radiation and Nuclear Safety Authority (STUK). The current operating licence for the plant units under the Nuclear Energy Act is in force until 2038. A new operating licence must be applied for all project alternatives. In the case of alternatives VE2a and VE2b, this will be done by the end of 2028 and, in alternatives VE1a and VE1b, at the latest before 2038. The operating licence is issued by the Finnish Government.

The valid zoning plan makes it possible to carry out modification work in the power plant area and construct additional structures and/or buildings. In accordance with the Land Use and Building Act (132/1999), the construction of buildings related to the required modification work and the necessary infrastructure and facilities requires a building permit. The operation of a nuclear power plant requires an environmental permit in accordance with the Finnish Environmental Protection Act (527/2014).

The EIA procedure in Finland

An environmental impact assessment (EIA) procedure in Finland consists of two phases: an EIA programme phase and an EIA report phase. The assessment procedure begins when the developer submits the EIA programme to the EIA authority, which is according to the Act on Environmental Impact Assessment Procedure (252/2017) the Ministry of Economic Affairs and Employment in nuclear energy related projects within the meaning of the Nuclear Energy Act. The EIA programme contains information on the alternatives to the project and what the developer proposes to be the potential environmental impacts of the project to be studied and assessed.

Authorities and the public in Finland are entitled to comment on the EIA programme. In case of an international hearing, the EIA authority sends relevant documents to the Point of Contact, which is according to the amended Act on Environmental Impact Assessment Procedure (911/2022) the Finnish Environment Institute from 1 January 2023 in Finland, for the purpose of tasks related to the Espoo Convention. The EIA authority will consider all received comments and will issue its opinion on the EIA programme. In its statement, the EIA authority will indicate which investigations the developer must concentrate on and how the proposal for the EIA programme should be amended. In accordance with the Act on Environmental Impact Assessment Procedure, the EIA authority must give its statement to the developer on the adequacy of the EIA programme one month after the end of the commenting period.

The developer should assess the environmental impacts of the project and its alternatives. The developer prepares the EIA report based on the investigations carried out. Authorities and the public are entitled to comment also on the EIA report. The EIA report will be sent in accordance with the provisions of the Espoo Convention to the affected Parties that have indicated their



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participation in the EIA procedure. The EIA authority collects all opinions and statements submitted on the EIA report and, after taking these into account, issues its reasoned conclusion on the EIA. The EIA must be carried out before any decisions on licensing can be made. The developer attaches the EIA documentation and the reasoned conclusion to the permit applications.

Public hearing and documents

The public display of the EIA programme takes place in Finland from 23 January to 25 March 2024. Finland has made the consideration to notify Denmark, Estonia, Germany, Latvia, Lithuania, Norway, Poland, and Sweden, and to inform all Parties to the Espoo Convention. Finland also notified Austria by its request.

The EIA programme is available in Finnish, Swedish and English, and a summary of the EIA programme is available in Bulgarian, Danish, English, Estonian, German, Hungarian, Latvian, Lithuanian, Norwegian, and Polish. The documents, which have been prepared by the developer, can be downloaded from the EIA authority's webpage: <u>https://tem.fi/en/olkiluoto-ol1-ja-ol2-eia-programme</u>.

The concerned Parties should ensure that the public of the affected Party in the areas likely to be affected be informed of and be provided with possibilities for making comments on the proposed project.

Participation in the EIA procedure

Parties to the Espoo Convention have the right to participate in the EIA procedure in another state if a project under assessment may have adverse environmental impacts on that state. Please send a response by e-mail to the register office of the Finnish Environment Institute (<u>kirjaamo@syke.fi</u>) **by 16 April 2024 at the latest** and:

- acknowledge the receipt of the notification,
- indicate whether your state intends to participate in the EIA procedure,
- provide comments concerning the scope for the assessment of the likely significant environmental impacts of the project affecting your state, and
- submit any comments you might receive from the public and authorities in your state.

Please indicate our reference number SYKE/2023/1899 in your letter.



More information

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This document has been electronically signed. The electronic signatures can be verified from the register office of the Finnish Environment Institute.

Distribution As per send list below

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