

---

# Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991)



## CASE STUDY FACT SHEET #5

### Nuclear Power Plants in Finland

---

#### BACKGROUND

Nuclear power is an important source of energy in Finland: Finland has four nuclear power plants in operation with a total electrical output of 2,700 MW, providing 27% of Finnish electricity. One nuclear power plant is under construction (*Olkiluoto 3*) and three are being assessed (*Olkiluoto 4*, *Loviisa 3* and *Fennovoima*). The **Espoo Convention** is being, or has been, applied to the four nuclear projects.



Loviisa Power Plant area, with illustration of Loviisa 3 (indicated). Source: Fortum Power and Heat Oy.

#### THE PROJECTS

**Olkiluoto 3:** Location: *Olkiluoto Island*; net electrical output: 1,600 MW; cost: approx. €3 billion; approved in 2005; owner: *Teollisuuden Voima Oyj*.

**Olkiluoto 4:** Location: *Olkiluoto Island*; net electrical output: 1,000–1,800 MW; cost: €3–4 billion; owner: *Teollisuuden Voima Oyj*.

**Loviisa 3:** Location: *Hästholmen Island, Loviisa*; net electrical output: 1,000–1,800 MW; cost: €2.5–4.5 billion; owner: *Fortum Power and Heat Oy*.

**Fennovoima:** Location: *Pyhäjoki, Ruotsinpyhtää or Simo*; net electrical output: 1,500–2,500 MW; cost: €4–6 billion; owner: *Fennovoima Oy*.

The Espoo Convention is also being applied to a related, planned nuclear waste storage facility in Finland.

#### EIA PROCEDURE IN FINLAND

The environmental impact assessment (EIA) procedure is divided in two steps. In the first step an “EIA programme”, setting out the scope of the EIA, is submitted to the authorities. Both the authorities and the public then provide comments. In the second step, a final “EIA report” is elaborated taking into consideration the comments received in the first step. After a second round of comments, the EIA report is submitted to the competent authority, in this case the Ministry of Employment and Economy (MEE). Once MEE has considered the EIA report as “adequate”, the licensing process follows four more steps: (1) the “decision in principle”; (2) ratification of the

decision in principle by Parliament; (3) issue of the construction licence; and (4) issue of the operating licence.

## ESPOO CONVENTION PROCEDURE

**Initiating the process.** Nuclear power plants (listed in Appendix I to the Convention) automatically require application of the Convention if significant transboundary impact is likely. Although unlikely, a severe accident may cause transboundary impacts (e.g. radioactive contamination) if necessary measures are not implemented. Therefore, four procedures under the Espoo Convention are being or have been carried out, one for each project. *Note:* Finland and Estonia have an agreement on EIA in a Transboundary Context, as provided for by Article 8 of the Convention.

**Notification (Art. 3).** As Party of origin, Finland sent notifications (in 1998, 2007, and 2008) through its Ministry of Environment, to the affected Parties. The Parties notified were either neighbouring States or Baltic Sea littoral States. The following Parties were notified for one or more projects: Austria (at its own request), Denmark, Estonia, Germany, Latvia, Lithuania, Norway, Poland and Sweden. In addition, the Russian Federation was notified, though it is not a Party to the Convention. A summary of the EIA programme was translated into the language of each notified Party; this summary was intended for use by the public. The whole EIA programme was available in Finnish, Swedish and English. All of the above States, except Denmark, Latvia and, for Fennovoima, the Russian Federation, decided to participate in the EIA procedures for *Olkiluoto 4*, *Loviisa 3* and *Fennovoima*.

**Transmittal of information (Art. 3).** In the notifications Finland gave general information about the projects and likely transboundary impacts. The authorities of affected countries gave their opinions on the EIA programmes and reports.

**EIA preparation (Art. 4).** For *Olkiluoto 3*, the EIA report was submitted in 1999. For *Olkiluoto 4*, *Loviisa 3* and *Fennovoima*, the EIA programmes were submitted in 2007/2008, and the EIA reports, which included the comments made on the EIA programmes, were submitted in 2008. Summaries of the EIA reports were translated into the language of each participating Party. The whole EIA reports were available in Finnish, Swedish and English.

**Public Participation (Art. 2, 3 and 4).** For *Olkiluoto 3*, a Russian non-governmental organization arranged public participation in Russia (18 comments were received). For *Olkiluoto 4*, *Loviisa 3* and *Fennovoima*, the public from the affected Parties had the opportunity to comment on the EIA programmes and EIA reports. Following the Convention's provisions, MEE requested inclusion of the public's comments, and a description of how they were considered, in the EIA reports.

**Final Decision (Art. 6).** *Olkiluoto 3*: the former Ministry of Trade and Industry (now MEE) considered the EIA report as adequate and, after obtaining the decision in principle (2002), the government granted the construction permit (the final decision) in 2005. *Olkiluoto 4*: the EIA report was considered adequate by MEE, and the company has applied for the decision-in-principle (2008). *Loviisa 3* and *Fennovoima*: the EIA procedure is complete and MEE has made its statements on the adequacy of the EIA reports.

## LINKS (in English)

Fact sheet prepared  
March 2009

Finnish Ministry on Employment and the Economy (EIA programmes and reports):

<http://www.tem.fi/index.phtml?l=en&s=1910>

Finnish Radiation and Nuclear Safety Authority (STUK): [http://www.stuk.fi/en\\_GB/](http://www.stuk.fi/en_GB/)

Teollisuuden Voima Oyj: [http://www.tvo.fi/www/page/etusivu\\_en/](http://www.tvo.fi/www/page/etusivu_en/)

Fortum Power and Heat Oy:

<http://www.fortum.com/document.asp?path=14022;14024;14026;14043;36953;39998>

Fennovoima Oy: <http://www.fennovoima.fi/en/>

[www.unece.org/env/eia](http://www.unece.org/env/eia)