

Environmental Impact Assessments and Espoo processes as powerful tools in the Nuclear Field in Finland

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Finnish Environmental Impact Assessments for nuclear facilities and the Espoo processes

- Loviisa 3 (First time 1998! EIA is not valid forever) NPP 2008
- Olkiluoto 4 NPP 2008
- Fennovoima NPP 2008
- Posiva, Final repository for the spent fuel, enlargement 9000 > 12000 tonnes (first "part" in 1999),
... and Finland as an Affected Party:
- Visaginas NPP in Lithuania
- Swedish Final repository for the spent fuel, Forsmark (ongoing)



Finnish Environmental Impact Assessments for nuclear facilities – Case Espoo process Olkiluoto 4

- An international EIA (organizing authority Ministry of Environment), in accordance with the Espoo convention process took place in all Baltic Rim countries.
- All material was translated to **nine** languages. What to translate? Also Austria took part in this process and even had Espoo convention (article 5) consultations with Finland. Real dialogue took place.
- Sweden, Lithuania, Estonia, Norway, Germany, Poland and Austria participated and they also got answers to their specific questions from TVO.
- Accidents (INES 6 or 100 TBq-rule) and their consequences. 100 TBq rule is derived from the Finnish safety requirements for a severe reactor accident (for a new reactor)– how about after Fukushima?



TVO's Infrastructure on Olkiluoto Island



Finnish Environmental Impact Assessments for nuclear facilities – Some special features

- A Finnish EIA covers the whole lifetime of a nuclear facility and also all site activities must be considered (ie "old" units also).
- EIA takes place during the site selection phase, very early. The first licence is the construction licence, since the Decision-in-principle is a political decision (Olkiluoto 4 and Fennovoima 1 in 2010)
- Also the front and back ends of the fuel cycle must be covered.
- The most important questions are:
 - Cooling water impact the most important question in practice
 - Natura 2000- program spots are treated in the EIA, but the process is in principle separate (both Fennovoima and Olkiluoto 4)
 - Accidents (INES 6 or 100 TBq-rule) and their consequences. 100 TBq rule is derived from the Finnish safety requirements for a severe reactor accident – how about after Fukushima?



Finnish Environmental Impact Assessments for nuclear facilities – So many different International Obligations

- Århus/Aarhus Convention (25.6.1998) gives important obligations to give open information, participation possibilities and appealing possibility also to some other organisations after the Construction licence. Espoo convention and Århus convention overlapping?
- How about article 37 of the Euratom treaty; Disposal of radioactive waste (also nuclear power plants) could be liable of radioactive contamination of another member state: should it be broadened?
- And how about Natura processes in Europe? In nuclear projects they have been important in the Finnish EIA-processes.
- Nuclear law and Environmental law have still many challenges ahead but

EIAs and Espoo processes are powerful tools in the nuclear projects

