



Experience of the Transboundary EIA in Estonia

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September 2005



The proposed activities (1)

- **renovation of the power unit No 8 in Estonian Power Plant**
- **renovation of the power unit No 11 in Baltic Power Plant**



The proposed activities (2)

During the planned activities:

- **to replace pulverised oil shale boilers with the new more effective and environmentally sound circulating fluidised bed boilers**
- **to replace old worn boilers with new effective electrostatic precipitators**



The necessity of the proposed activities

- **relation with international agreements**
- **national policies**
- **repowering and modernisation contract of Narva Power Plants**
- **Ida-Viru County Development Plan**



Roles in EIA

- **Developer** – *Estonian Energy Ltd (Narva Power Plants Ltd)*
- **Decision-maker/supervisor** – *the Ministry of the Environment (MoE)*
- **EIA expert** - *Tallinn Pedagogical University, Institute of Ecology and expert group*



The transboundary EIA procedure (1)

- **Narva Power Plants Ltd submitted environmental memorandums to MoE**
- **MoE initiated the transboundary EIA**
- **Notification to Finland and Russian Federation**
- **Finland confirmed of its participation in the EIA procedure**



The transboundary EIA procedure (2)

- **Preparation of the EIA programme**
- **Draft EIA programme sent to Finland**
- **Public hearing of the programme**
- **Comments on the programme by the public and MoE of Finland**
- **Amendments to the EIA programme**
- **Adoption of the programme**



The transboundary EIA procedure (3)

- **Preparation of the EIA report**
- **Report in Estonian, summary also in English and Russian**
- **Draft EIA report to Finland**
- **Public hearing of the report**
- **Comments on the report by the public and MoE of Finland**



The transboundary EIA procedure (4)

- **Amendments to the EIA report**
- **Approval of the EIA report**
- **Environmental requirements**
- **Final decision and environmental permits**
- **Public notice**
- **Amended EIA report to Finland (as annex to the report)**



The potential alternatives in EIA

- **Planned activities:**

Renovation of Narva PP-s with fluidised bed boilers

- **Alternative 1:**

0-alternative

- **Alternative 2:**

Installation of additional gas cleaning equipment for the existing boilers

Environmental impact of the renovation of the power plants (1)



- **Changes in pollutant emissions:**
 - fly ash
 - sulphur dioxide
 - nitrogen oxides and other components
- **Influence to soil and vegetation:**
 - fly ash fallout to ground
 - sulphur fallout

Environmental impact of the renovation of the power plants (2)



- **Impact on water bodies and groundwater:**
 - hydrogeological and hydrochemical changes in groundwater condition
 - groundwater and surface water pollution risks
- **Transboundary environmental impact**

Environmental impact of the renovation of the power plants (3)



- **Possible environmental impact during the renovation (infrastructure, network of roads etc)**
- **Assessment of the magnitude, scope and significance of the impact etc**
- **Mitigation measures**



The results of the proposed activities

- **The essential positive effect – considerable decrease of SO₂**
- **Reducing the emission of:**
 - **sulphuric compounds (2,1 times compared to 2000-2001)**
 - **fly ash, the heavy metals, carcinogenic compounds (92%)**
 - **nitrogen oxides, HCl (20-30%)**
 - **CO₂ (20%) etc**



The negative points of alternative 2

- **Old part of the Baltic PP in very bad condition**
- **Lack of space for installation of equipments**
- **No reliable and successfully tested technology for the cleaning of the oil shale gases from SO₂**
- **The requirements of BAT were not satisfied**



Lessons learned

- **Good experiences**
- **Difficulties**



Good experiences (1)

- **Notification was sent early**
- **Draft EIA programme in English**
- **Amendments to the EIA programme according to Finnish comments**
- **Summary of the draft EIA report in English**



Good experiences (2)

- **Comments sent to the draft EIA report before public hearing in Estonia**
- **Informal contacts by e-mail**
- **Amended EIA report was sent to Finland**



Main difficulties

- **Very tight time schedule**
- **Not enough time was given to Finland for public hearings**
- **The Summary of the EIA report was translated in English**



Lessons learned

- **Notification should be sent as early as possible**
- **More time is needed to get comments from the Affected Party**
- **The whole EIA report should be translated**
- **Information also by e-mail**