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Hearing response concerning the Polish plans to introduce nuclear power

The Polish government has informed the Danish ministry of the Environment that Poland intends to construct a number of nuclear power plants. This notification is based on the fact that both countries have signed the *Protocol on strategic environmental assessment to the Convention on the environmental impact assessment in the trans-boundary context*. The present document is the hearing response to the Danish ministry of the environment from REO, Reliable Energy Information. REO is a non governmental association which tries to spread technically correct and comprehensive information on all energy sources, including nuclear energy. REO has a positive attitude to nuclear power. REO is independent of political parties and of industrial associations. REO is run exclusively on a voluntary basis.

If a country constructs industrial plants it must inform those states **that might potentially be affected by an adverse transboundary impact of the plant**. The environmental effects of nuclear power plants are well known.

- In normal operation there are no significant environmental effects. The discharge of heat to the environment (the sea or a river) is larger than the corresponding for a fossil fuelled power plant, due to a lower efficiency. (This will not be the case for reactors of generation IV.) For a site at the Baltic Sea this is insignificant.
- In the case of a nuclear accident with release of radioactive materials these might be measurable in Denmark. Since the Polish reactors will not be of the same type as Chernobyl, an accident like the 1986-accident can be excluded. Even an accident like the one in Fukushima would not have any direct adverse effects on Danish territory.
- However, **indirect adverse effects** may be possible, first of all psychological effects due to scaremongering reports in the mass media. These may be counteracted by increasing the public knowledge about nuclear energy and ionizing radiation.
- The most significant disturbance of public order in Poland due to the existence of a nuclear power plant will be demonstrations against transport of spent nuclear fuel, frequently called "nuclear waste". These are well known from Germany and it is beyond doubt that German anti-nuclear protesters will participate in demonstrations in Poland as has already been reported in ZDF. This TV-station also made an

interview with a restaurant-keeper on the island of Isted. Yes, he was afraid that tourists would disappear due to a Polish nuclear power plant 100 km away!

- The mentioned problems in connection with transport of spent nuclear fuel can be avoided by following the suggestion of the MIT report *The future of the nuclear fuel cycle, 2011*¹, which says: *Long term managed storage (of spent fuel, REO) preserves future options for spent fuel utilization at little relative cost. Maintaining options is important because the resolution of major uncertainties over time will determine whether LWR spent nuclear fuel is to be considered a waste destined for direct geological disposal **or a valuable fuel resource for a future closed fuel cycle.*** (REO's accentuation).

In summary REO suggests to the Danish Ministry of the Environment to recognise that Poland by replacing part of its coal consumption with nuclear energy contributes to supplying cheap and reliable energy in EU and at the same time reducing the release of CO₂ by a cost-effective method. This fact is displayed clearly in Fig. 4.5 of the document on *Polish Nuclear Power Program, Ministry of Economy, Government Commissioner for Nuclear Power.*

On behalf of REO (www.REO.dk)



Bertel Lohmann Andersen

¹ <http://web.mit.edu/mitei/docs/spotlights/nuclear-fuel-cycle.pdf>