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To: Swedish Environmental Agency
registrator@naturvardsverket.se

Polish Nuclear Power Plant: Opinion on Environmental Scoping Report

The Swedish NGO Office for Nuclear Waste Review (MKG) wants to provide the following points of opinion regarding the Polish Nuclear Power Plant Project:

1. MKG wants to point out that a decision to build a nuclear reactor in a country cannot be taken unless there is an assurance that the nuclear waste from the reactor can be managed in an environmental and sustainable way in the long term. MKG has in 2011 studied and supplied an opinion on the Polish strategic environmental impact report and plans for nuclear power programme and has found that Poland is very far from providing assurances that there is a serious consideration of how to deal with radioactive waste management. See the enclosure.
2. Poland is making the same mistake as many countries did in the 20th century by planning for a construction of a new nuclear power plant while delaying decisions on radioactive waste management and disposal facilities. Facilities that have been found very difficult to site and make safe. With this historic background it is not acceptable for a member of the European Union to start a nuclear power project in this way. Implementing the EU radioactive waste directive (2011/70/Euratom) cannot simply be done by providing simplistic and erroneous texts and figurative diagrams of idealised future systems for management and final disposal of radioactive waste.
3. It is not acceptable that the environmental scoping report intentionally leaves out management and final disposal of the radioactive waste produced by the nuclear power plant. For no other new industrial activity with environmental impact in a country can the environmental impact statement leave out waste management by referring to a non-existent project. In the way this issue is dealt with in the scoping report there will not be, contrary to the principles of the Aarhus

Convention, no possibility of public participation when all options are open regarding radioactive waste management and final disposal in Poland. The permit for a new nuclear power plant cannot be seen separately from the issue of how to manage and dispose of the waste. Such legal slicing up of decision-making procedures is not supposed to take place in environmental decision-making.

Best regards,



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Enclosure:

Polish Nuclear Energy: Opinion Regarding the Strategic Environmental Impact Report and Nuclear Power Program, Swedish NGO Office for Nuclear Waste Review, MKG, Letter to Mr. Michał Kięsznia, General Director for Environmental Protection, Poland and Ms. Hanna Trojanowska, Government's Plenipotentiary for Polish Nuclear Power Engineering Issues, Ministry of Economy, Poland, October 28th 2011

October 28th, 2011

To: Mr. Michał Kielsznia
General Director for Environmental Protection, Poland
(DOOS-tos.441.8.2011.dts.2)

Ms. Hanna Trojanowska
Government's Plenipotentiary for Polish Nuclear Power Engineering
Issues, Ministry of Economy, Poland

Polish Nuclear Energy: Opinion Regarding the Strategic Environmental Impact Report and Nuclear Power Programme

The Swedish NGO Office for Nuclear Waste Review, MKG, would like to make the following comments on the strategic environmental impact report (SEIR) and plan for nuclear power as presented by the Polish Government according to the Espoo Convention:

1. First of all MKG is of the understanding that before a decision to build a nuclear reactor in a country is taken there has to be an assurance that the nuclear waste from the reactor can be managed in an environmental and sustainable way in the long term. Special care has to be taken in the assessment of the plans to manage the spent nuclear fuel from the reactor. The decision to build a new reactor should not be taken before there is an assurance that there is an acceptable method and site available for final disposal of the spent nuclear fuel. MKG has read what is said on this issue in the provided documents and find that what is stated shows clearly that Poland is very far from providing such assurances.
2. On page 2-77 of the SEIR it is stated that "the report does not avoid the issue of impacts resulting from the expansion of necessary power distribution infrastructure, the fuel cycle including the generation, transport, and storage of radioactive waste". But this is exactly what the report does. The report clearly misjudges and misrepresents the problem of nuclear waste from nuclear energy. The report therefore is not usable for decision-making on nuclear energy issues.

3. On page 1-34 in the SEIR it is stated that “after about 300 years, the activity of fission products declines by 1000 times and spent fuel becomes practically harmless”. This is clearly incorrect and to base an analysis on the problems of how to deal with the waste in the form of spent nuclear on this assumption is unacceptable. All serious analysis of the problem of managing spent fuel from nuclear energy is based on the assumption that spent nuclear fuel has to be isolated from mankind and nature for hundreds of thousands of years. The statement in the SEIR is similar to statements brought forward in the 1950s when it was also claimed that the waste problem from nuclear energy was insignificant. It has since then been clear that the waste problem with nuclear energy is very problematic and a major argument against investment in the technology.

4. On page 1-48 in the SEIR it is stated that only 30 tonnes of radioactive waste is produced per year from a nuclear reactor. This figure is only the spent fuel. In addition, hundreds of tonnes of low-level and intermediate-level waste are produced as well as thousands of tonnes of waste when the reactor is decommissioned. This is more clearly stated on page 4-254, but the amounts of decommissioning wastes are not included.

5. On the “PROS” side of the comparison on page 1-57 it is stated that “the storage of nuclear fuel in tight containers will separate it from the environment for thousands of years! It is technically feasible and not difficult – the nuclear power industry is ready to build this type of repositories for radioactive waste in a number of countries.” The text may have been written as a simplistic description of the real situation, but from the context of the SEIR and the texts in the nuclear power programme it may be possible that this false picture is in fact the Polish Government position. It is clearly wrong. As said before the spent fuel has to be kept isolated for hundreds of thousands of years, not thousands. And no country has so far received a licence from the regulator to build a repository for spent fuel. In the case of Sweden the licence process is ongoing and the problems of keeping the canister tight for these long time scales is still unproven and may even prove not to be the case.

6. On pages 4-259-261 of the SEIR there is a description of a method for disposing of spent nuclear fuel that is highly imaginary but seems based on the still unqualified Swedish KBS method but somehow very different. If this is the level of understanding of the problem of spent fuel disposal that is state-of-the art- in the Polish nuclear programme it is deeply troubling. The text talks about melting spent fuel and drowning it with glass before putting it in copper canisters, There is also the mentioning of “polymer pellets with spent fuel in glass cladding”.

In the Swedish KBS method the spent fuel rods are placed in an iron insert in copper canisters that are surrounded by a bentonite buffer. But the

method is under criticism on the grounds that copper corrosion and bentonite erosion will not prevent a leakage of radioactivity. The method is still not licensed. However, on page 4-261 in the SEIR it is stated that “it appeared that technical problems had already been solved and that the selected locations offered good conditions for waste isolation for thousands of years”. This is not correct. There are still major technical problems to be solved and no site has yet been approved by the regulators in a licensing process in any country. And the site and method has to be safe for hundreds of thousands of years, not thousands.

7. The cost for new nuclear power is both in the plan (figure 1.3 page 6) and in the SEIR (page 1-60) stated to be very low. The figure in the SEIR is given as 35 euro/kWh. This is clearly wrong. In addition, the cost for on-shore wind power and biogas plants appear to be on the same order as coal with carbon capture and storage (CCS). This must also be wrong. Just the cost for nuclear waste management and decommissioning of reactors is on the order of 3-4 euro/MWh. The statement on page 4-258 of the SEIR that the cost for waste management of nuclear waste are only 1% of total electricity generation cost is wrong. The cost for new nuclear power is on the order of 60-80 euro/MWh and the waste costs are on the order of 5% of this cost. It is now understood that the investment in new nuclear power is more expensive than biomass co-generation electricity and wind power, unless nuclear power is heavily subsidised, directly and indirectly.

There is also some discussion of the merits of reprocessing in the SEIR and the nuclear power plan. It must be made clear that if reprocessing is carried out the waste management and fuel costs for MOX fuel increase and the electricity cost is even higher.

Best regards,



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