

Panel discussion on nuclear energy-related projects

at the fifth session of the Meeting of the Parties to the Espoo Convention, 22 June 2011, Geneva



Informal note by the secretariat

Moderator

Mr. Georges Kremlis, Head of the “Cohesion Policy and Environmental Impact Assessments” Unit, Directorate-General for the Environment of the European Commission

Panellists

- Mr. Andreas Molin, Federal Ministry of Environment (Austria)
- Mr. Jorma Aurela, Ministry of Employment and the Economy (Finland)
- Mr. Jean-Luc Lachaume, Deputy Director-General of the Nuclear Safety Authority (France)
- Ms. Rita Mazzanti, Head of Liaison Office in Geneva, International Atomic Energy Agency
- Mr. Stasys Motiejunas, State Enterprise Radioactive Waste Management Agency (Lithuania)
- Ms. Monika Nauduzaite, Directorate-General for Energy, European Commission
- Ms. Patricia Lorenz, Friends of the Earth Europe

Reference materials

- Information on panel discussion on nuclear energy-related projects (ECE/MP.EIA/2011/INF.8)
- Background paper on the application of the Convention to nuclear energy-related activities (ECE/MP.EIA/2011/5)
- Informal list of nuclear energy-related activities in the UNECE region, first discussed at the 13th meeting of the Working Group on EIA (Exchange of good practices: Application of the Convention to nuclear energy-related activities; revised)

Event Description and background

As part of UNECE efforts to promote good practice in assessing transboundary environmental impacts and to enhance cooperation between neighbouring countries, a panel discussion on nuclear energy-related projects was organized. The panel focused on sharing experiences and discussing good practice in transboundary environmental impact assessment for nuclear energy-related projects.

To date, the Espoo Convention has been applied to approximately 50 nuclear energy-related projects in the UNECE region and, considering the numerous plans for further projects, it

will likely be applied more and more frequently. The Espoo Convention is the only international legal instrument to require countries to notify and consult each other on potential environmental impacts when planning new nuclear projects. It provides the public and authorities of a potentially impacted country with the possibility to comment on the planned project and to participate in the environmental impact assessment procedure. The Convention also requires that an environmental impact assessment be carried out for nuclear power plants and nuclear fuel storage and enrichment facilities at an early stage of planning.

Discussion Overview

Georges Kremlis opened the panel by noting that although planning of this panel had begun already well before, the topic is very timely in the light of the recent Fukushima Daiichi power plant disaster in Japan. He noted that the Espoo Convention is extremely important tool for assessing the environmental impacts of nuclear plants, but that it is not generally agreed whether EIA should also include risk assessment. He also reminded that, contrary to projects taking place in the territory of several countries, nuclear projects are realised within one country and the potential significant transboundary effects of these projects are related to long-range impacts of possible accidents. He then introduced the panellists and asked each to share their brief key notes on the issue.

Panel 1

Andreas Molin argued that environmental impact assessment (EIA) for nuclear power plants should also include an assessment of alternative sources for electricity production and the zero option. The whole lifecycle of nuclear fuel production should also be assessed considering both the front-end impacts (mining, enrichment) and the back-end impacts (reprocessing and storage). He argued that severe accidents should always be assessed in EIA and impacts of all possible events should be evaluated no matter how low the probability of them occurring. He discussed also the dilemma between general early-phase EIA and detailed late-phase EIA. Early EIA comes with only limited information of the actual project and technology, but on the other hand grants possibilities to influence plans before major decisions have been taken. He also noted that finding the right balance between transparency and public participation, and security and commercial secrecy is a crucial challenge.

Jorma Aurela shared Finland's experiences of being Party of origin in four recent nuclear energy projects and affected Party in several recent projects. He described the Finnish approach for assessing severe accidents ("100 TBq-rule") in EIA and noted that the approach will be re-evaluated in the light of the Fukushima accident. He also discussed the pros and cons of conducting an EIA in the early phase of the project and noted that in Finland EIAs are done in the early phase of the process and generally include several reactor alternatives.

Jean-Luc Lachaume presented the French approach to applying the Espoo Convention to nuclear energy activities. He noted that accidents are not defined or covered by the Convention but France has transmitted not only the impact assessment documentation, but also all documents related to the response to any possible accidents, to foreign countries to ensure adequate information sharing.

Rita Mazzanti reminded that nuclear accidents respect no borders, so an international approach to nuclear safety is essential. The IAEA Safety Standards are an internationally agreed benchmark for what constitutes a high level of safety for protecting people and the environment from the harmful effects of radiations. She argued that implementation is the key as even the best safety standards are useless unless they are actually implemented.

Mr. Kremlis asked speakers of the first panel to briefly comment on each others key points. Mr. Lachaume said that France supports the IAEA safety approach, participates in the European stress tests and emphasized the importance of keeping civil society and neighbouring countries well informed of the stress tests. Mr. Molin argued that at last Fukushima proved that probabilistic criteria should not be used when deciding which accidents to include in the assessment. Mr. Aurela noted that new plants are very different compared to the old plants and that also certain nuclear energy related projects, such as low- or medium-level waste repositories, are very unlikely to cause transboundary impacts.

Panel 2

Stasys Motiejūnas shared Lithuanian experiences in applying the Espoo Convention to a planned nuclear power plant in Lithuania. He emphasized the importance of the Espoo Convention as it has a well defined procedure for impact assessment and public participation. He brought up the good experiences of the independent international Peer-Review by IAEA on Lithuanian EIA and argued that reviews should be made frequent. He also emphasized the importance of encouraging also non-Parties to follow the provisions of the Espoo Convention in relation to large-scale nuclear power projects.

Monika Naudužaitė discussed the role of international treaties, especially the Euratom treaty, in preventing adverse effects of nuclear activities. The Euratom treaty is an old treaty, which has to date never be revised but still has proved to be a flexible tool for regulating nuclear activities. This may be due to its realistic and binding provisions, well defined procedures, monitoring structure and enforcement procedure, but Ms. Naudužaitė also argued that even more important than good provisions is good implementation and commitment as reality does not always correspond with the intentions of conventions. She further argued that, in spite of the strengths of the Euratom treaty, it should also learn from the “new” Espoo Convention with regard to public participation and transparency.

Patricia Lorenz argued that the public and stakeholders are getting tired of participating in all kinds of participatory processes as they feel that they do not have any real impact on the planned projects. In some countries even a negative final statement from an EIA does not seem to influence the decision-making process. Severe accident have to be assessed in EIA and after Fukushima accident probabilistic safety assessments, which exclude certain scenarios based on low probability, can no longer be accepted. Also countries located very far from the planned activity should have the right to ask to be notified. She also argued that power upgrades and prolonging of the life time of existing plants should be treated as new builds.

Mr. Kremlis asked speakers of the second panel to briefly reflect on each others key points. Mr. Motiejūnas said that risk assessments are necessary in EIA and there should be guidance on how these should be done, but on other hand there should be a division between what is presented in EIA and safety assessment reports. EIA can be used for approving the project in principle and in defining the site, whereas the safety assessment will include more detailed risk analysis. Ms. Naudužaitė noted that the risk of severe accidents is very low, but that affected countries should have the right to participate in consultations if they so wish. Ms. Lorenz argued that if no information is available of the planned technology then there is nothing to discuss about the project in the Espoo context. Detailed information subject to the Euratom Treaty is inaccessible to the public and thus does not have relevance in respect to public information needs.

Mr. Kremlis then opened the discussion to the audience. Topics discussed included, for example, the possibility to the affected Party or its public to have a real influence on the decision, the need to consider alternative forms of energy production in EIA or SEA, the challenges of languages and translations, and early, less detailed EIA versus late more specific EIA.

Summary

Mr. Kremlis closed the panel by summarizing the main outcomes of the discussion. He presented his final conclusion on the following day. He noted that the background note prepared forms a good basis for the application of the Espoo Convention to nuclear energy-related activities and could be used as a basis for a guidance document. The general feeling of the discussion had been that follow-up work should be carried out, possibly by preparing guidance codifying the good practices as that would be useful.

He noted that the Espoo Convention is a tool that, contrary to the Euratom Treaty, ensures more public participation, transparency and cooperation between countries. He emphasized the importance of building confidence and social acceptance both in Parties of origin and in affected countries, and the role of transparency and public participation in this. He noted that the EIA scope should not only cover severe accidents but the full life cycle of the planned project. It should consider all alternatives including the zero alternative, and all phases of the project. Good practice would be to introduce risk assessment, to have alternatives fully considered, and to analyze cumulative impacts, the carrying capacity and the phenomenon of high concentrations of nuclear plants in certain areas.

EIA should be produced timely, and in certain cases good practice would be to conduct EIA in two stages – first early in planning when the site is selected and second time in a later phase, for instance combined with the safety statement. EIAs should also have a validity date and when necessary EIAs should be revised.

He said that good practice would be to give the affected Parties the right to ask for notification if they so wish. He mentioned that also voluntary notification mechanisms for non-Parties to ask to be notified and respectively to notify could be developed. The issue of languages used in notification can sometimes be problematic but generally at least the preliminary information can be provided in English.

He further noted that EIA is one of the pillars of the process but also SEA and other directives—Habitats Directive (and the Emerald Network) and Water Framework Directive—should be taken into consideration when appropriate.
