



Discussion on nuclear energy- related projects

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Meeting of the Parties to the Convention on
Environmental Impact Assessment in a
Transboundary Context
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Good practice: Lithuanian experience

⇩ Good practice:

- Lithuanian experience in implementation of the Convention:
 - Near-surface repository for Low and Intermediate Level Short-Lived waste
 - Landfill type disposal facility for Very Low Level Short-Lived waste
 - Solid waste management and storage facilities
 - New NPP (Visaginas NPP) to replace Ignalina NPP

⇩ Assessment of radiological impact

- Radioactive releases during normal operation
- Emergencies

⇩ Assessment of conventional (non-radiological) impacts

⇩ Independent IAEA expert missions

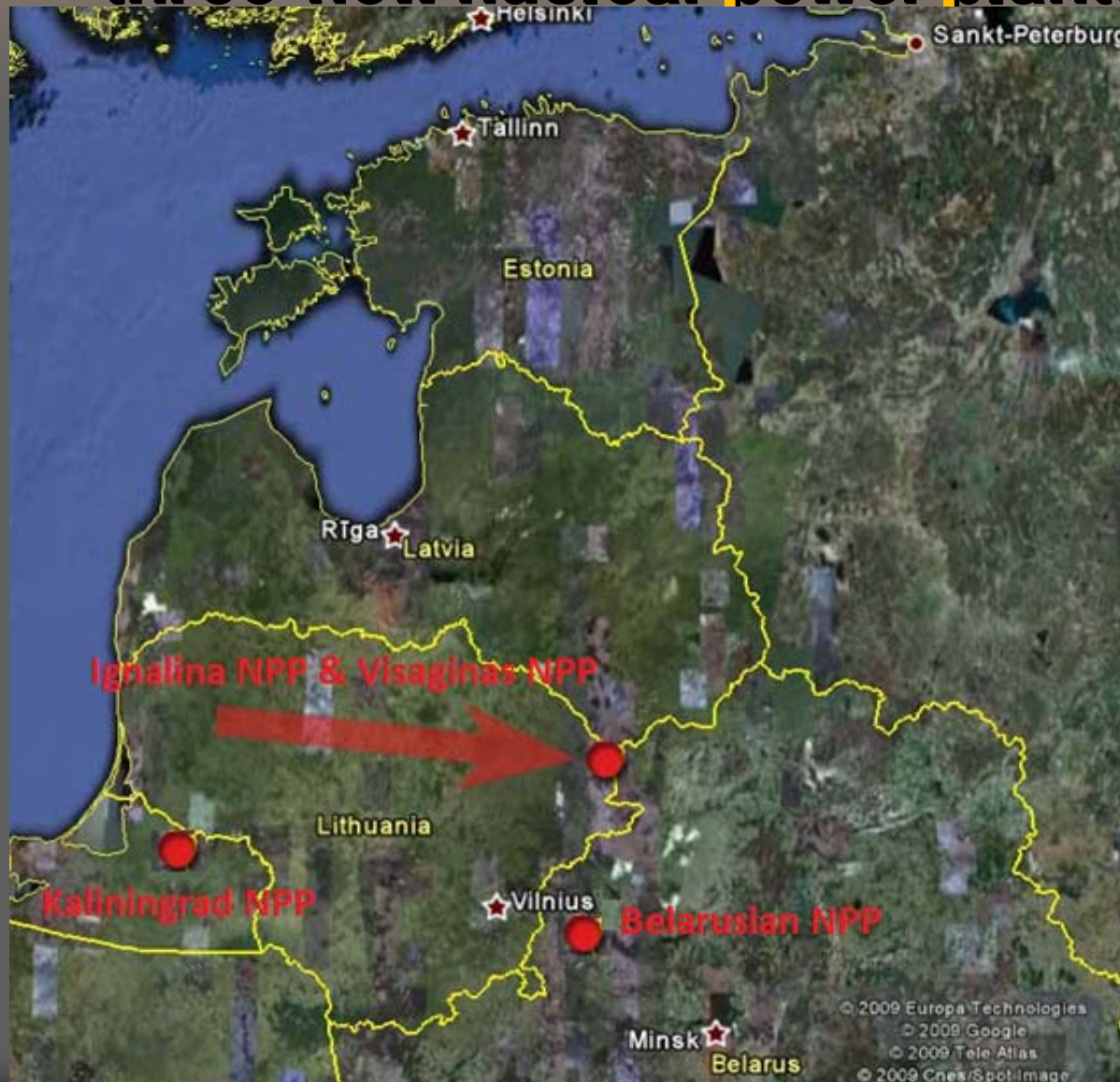
⇩ Public involvement

- Notification of Belarus, Estonia, Finland, Latvia, Poland, Russia, Sweden
- Public hearings in Belarus, Latvia and Estonia

⇩ Outcomes of the EIA process:

- **Selection of suitable site**
- **Selection of appropriate technologies**

Map of the region: three new nuclear power plants



Transboundary EIA procedure applied for Lithuanian NPP

- Notification of Belarus, Estonia, Finland, Latvia, Poland, Russia, Sweden
 - EIA scoping document and general information has been provided in July 2007
- Responses to the notification were received from Belarus, Estonia, Finland, Sweden, Latvia and Poland
 - No reaction from Russia
 - Austria participated in the consultations on its own initiative
- EIA Report was submitted in August 2008
 - EIA Report and
 - Extended summaries translated into official languages of all affected parties
- Public hearing meetings in Latvia, Belarus and Estonia during scoping and EIA report phases.
- Poland, Belarus, Latvia and Austria requested additional consultations:
 - Meetings organised at MoE of Lithuania (November 2008 – February 2009)



Major concerns regarding Belarusian NPP (1)

Quality of the EI Analysis:

- lack of geological, seismological, and seismo-tectonic data
- missing analysis of back-end solutions
 - two decommissioning options are to be considered after operation period: **on site entombment of reactors** or **dismantling**
 - no information on nuclear waste disposal strategy
- incomplete assessment of the radiological impact on the population under normal operational conditions and in the event of an accident
- insufficient assessment of possible negative impacts on the ecosystem and hydrological regime of the second largest Lithuanian river Neris crosses the capital Vilnius which water will be used for the cooling purposes

Major concerns regarding Belarusian NPP (2)

⇩ Siting:

- no clearly defined site selection criteria
- no assessment of alternative sites
- analysis of one single site is presented in the EIA Report
 - the other two alternative sites are mentioned in the Report, however they have been rejected because they are in the karst region
- The analyzed single site is ~ 50 km from Lithuanian capital town Vilnius
 - In the radius of 50 km from the nuclear power plant high density population areas must have an evacuation plans in case of nuclear disaster
 - In practice it would require evacuation of half a million citizens from Vilnius and moving out all governmental institutions of Lithuania, what is being considered as totally unacceptable by the Lithuanian side

⇩ Transparency:

- the EIA should be performed in accordance with the provisions of the Espoo Convention
- the public of the affected parties should have access to the assessment's results

⇩ The preparatory construction works initiated and authorization for construction issued without finalization of the EIA process

Major concerns regarding Russian Federation (Kaliningrad) NPP (1)

EIA quality:

- no information on geological, seismotectonic, hydrogeological, hydrological, climatic and meteorological characteristics of the area
- insufficient assessment of possible negative impacts on Natura 2000 areas, the ecosystem of the largest Lithuanian river Nemunas and Curonian Lagoon
- the assessment of radiological impacts on Lithuanian population during normal operation and in the case of accidents is not thorough enough

Sitting:

- the applied site selection criteria are not known
- final state expertise conclusion is already made, although transboundary EIA is not finalized

Major concerns regarding Russian Federation (Kaliningrad) NPP (2)

⇩ Transparency:

- the EIA should be performed in accordance with the provisions of the Espoo Convention
- the public of the affected parties should have access to the assessment's results
 - public hearing has not been organized in Lithuania

⇩ The preparatory construction works initiated and authorization for construction issued without finalization of the EIA process

Frequent problems in the EIA

- ⇩ Lack of openness and transparency
 - analysis of alternative sites and alternative technologies as well as the “0” alternative is not performed
- ⇩ Missing analysis of back-end solutions
- ⇩ Challenges in application of limits, thresholds and criteria in transboundary considerations of ionizing radiation impacts
 - constrains to be applied for normal operation
 - dealing with accidental situations considering low probability events

Enhancement of transparency in site selection

- ⇩ Application of appropriate Siting Criteria
 - Siting Criteria have to be elaborated before starting site selection
 - Agreed with stakeholders
- ⇩ Openness of the siting process
- ⇩ Independent international Peer-Reviews

Safety enhancement of nuclear facilities

- ⇓ Safety reviews of the NPP (“stress tests”) based on comprehensive and transparent risk and safety assessment are to be performed in the EU
- ⇓ The neighboring countries are encouraged to follow the same methodology

How to make the EIA process more efficient?

- ↓ To elaborate harmonized assessment approach providing guidance on:
 - consideration of severe accident risks of very low probability
 - assessment of ionizing radiation impact during normal operation
 - consideration of back-end options
- ↓ To enhance role of independent international Peer-Reviews
 - for example lead by the IAEA
- ↓ To encourage Non-Parties to follow the Espoo Convention's requirements while implementing major projects that are likely to cause significant adverse transboundary impact
 - especially important for implementation of large scale nuclear projects



Thank you