# Visaginas Nuclear Power Plant in Lithuania

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The CEE Bankwatch Networks
Mission is to prevent environmentally
and socially harmful impacts of
international development finance,
and to promote alternative solutions
and public participation

### **Background**

The closure of Unit 2 at Ignalina NPP by the end of this year will cut the main electricity generating capacity (1250 MW). Thermal power plants and CHP in Lithuania are inefficient and obsolete and thus need to be renovated and modernized. According to scientific assumptions, the economically most efficient ways to replace Ignalina NPP capacities are the modernization of existing power plants, the conversion of gas-fired CHP's to biomass-fired and the utilization of other renewable energy potentials. Furthermore grid connections to Poland and Sweden can ensure alternative electricity supply.

Aggressive Russian commercial activity in natural gas and oil markets in the beginning of 2006, lead Lithuania's politicians to reconsider their previous Energy Strategy, and promote the construction of new nuclear power plant in the region. In early 2006 the Leaders of the Baltic States invited the energy companies "Lietuvos Energija", "Latvenergo" and Eestienergia" to invest in the construction of a new regional nuclear power plant. In October 2006 a consortium of three foreign consulting companies prepared a feasibility study. The study's summary stresses that nuclear energy is the cheapest option and that the construction of a 1600 MW nuclear power plant is feasible. The study was approved by the Project Steering Committee and presented to the Government of Lithuania.

In December 2006 "Lietuvos Energija" established the Nuclear Energy Department to carry out preparatory works for the construction of the new NPP. In March 2007 the Lithuanian Prime Minister invited Poland to participate in this nuclear project and both countries' Prime Ministers signed a bilateral communication on cooperation in the energy sector. With Poland's involvement in the project, the plant's expected capacity has doubled to 3200 MW to accommodate increased demand. Later on, the mentioned consulting consortium estimated the same 3200 MW capacity.

In the middle of 2007 the Lithuanian Parliament adopted amendments of the National Energy Strategy and passed the Law on the Nuclear Power Plant. Subsequently, the Ministry of Environment approved the Environmental Impact Assessment Programme and its revision and approval process started.

In Summer 2008, a National Investor Company for the construction of the new NPP and grid connections to Poland and Sweden has been established. The creation of Leo LT was followed by corruption scandals, resulting in the Lithuanian parliaments decision in September 2008 to send the Nuclear Power Plant Law to the Constitutional Court. In March 2009, the Constitutional Court decided that the formation of Leo LT was a breach of the Constitution. The court found that some provisions of the Nuclear Power Plant

Law and other Leo LT related legal acts were anti-constitutional. After the court's decision the Government of Lithuania changed the supervisory board, the board of directors and the director of LEO LT.

At the end of 2008, the project development company Visagino Atomine Elektrine was established for the construction of the NPP. Visagino Atomine Elektrine is a subsidiary of the LEO LT. Its aim is to implement the NPP project's preparation plan drafted by the Energy Ministry and confirmed by the Government. The Visagino Atomine Elektrine is obliged to implement it, regardless of further events in LEO LT.

### **Environmental Impact Assessment**

According to Lithuanian regulations, the EIA procedure starts with the preparation of an EIA Program, which has to present the structure of the EIA and a description of the topics to be studied. Based on the EIA Program an EIA Report should be prepared, describing the environmental and social impacts of the project. The EIA Program was published July 26, 2007 and approved by the Lithuanian Ministry of Environment November 15, 2007. However, comments submitted by environmental NGOs were not properly addressed in the EIA Program. At the end of 2007, an international consortium consisting of Pöyry Energy Oy and the Lithuanian Energy Institute started the preparation of the EIA Report. The first version of the report has been issued and announced for comments in September 2008. CEE Bankwatch member groups from the Baltic countries organized environmental NGOs in Lithuania, Latvia, Estonia, Belarus, Russia, Finland and Sweden to comment on the EIA Report and actively participate in public hearings. After a deep analysis of the report, environmental NGOs found a number of deficiencies in its content which were submitted to the EIA Report organizer, the Ministry of Environment and the project developer. The key issues can be summarized as follows:

- As the reactor model has not been chosen yet, the EIA Report lacks concreteness and fails to
  provide a detailed assessment of expected environmental impacts (i.e. impacts as well as
  monitoring requirements may differ significantly);
- While the creation of nuclear waste is part of the operation of an NPP and thus should be included when analysing possible environmental impacts, the EIA Report does not assess the management of spent nuclear fuel and highly radioactive waste;
- The proposed construction timetable is unrealistic and dangerous, the timetable should be based on existing experiences such as Olkiluoto in Finland and Flamanville in France but not on theoretical imaginations;
- Alternative electricity generation scenarios, including the usage of renewable energy and energy efficiency increase, have not been analysed in the EIA Report;
- The report fails to look at the expected emissions during the operation of the NPP. Often, only a
  description of the current state of the environment is included;
- A few authoritative and well-substantiated studies have recently found an alarming link between the incidence of cancer, especially childhood leukaemia, and the proximity to nuclear power plants. Despite tens of thousands of people living within a 5-20 km radius from the nuclear power plant, the report offers no established explanation for these findings;
- It is unacceptable that the current EIA does not address cumulative impacts of the ongoing decommissioning phase. Overlaps between the decommissioning and the construction/operation phase of the proposed new NPP should be identified with clear time lines;

- The report lacks an assessment of possible alternatives to the proposed NPP the provided descriptions are too general;
- Environmental and socio-economical impacts in a transboundary context have no been assessed properly as the chapter doesn't refer to any data, studies or surveys, but operates with positive assumptions.

Representatives of the Bankwatch group from Lithuania applied to the responsible officers at DG Environment and organized a lobby trip to EU institutions with the aim to attract attention to the major deficiencies of the EIA Report and to push for revision. Environmental NGOs stated that such a document cannot be approved as a standard EIA Report. It can only be approved as a Preliminary or Strategic EIA Report. The final version of the Preliminary EIA and its approval should clearly define a concrete set of necessary Detailed EIAs, which would have to be completed and be subject to consultation, public participation, and a regular EIA approval procedure. Those Detailed EIAs would relate to concrete segments of the detailed technical designs of the NPP (for example, Detailed EIAs for fuel transportation and storage, reactors, cooling system, waste management facilities for different types of waste, waste management facilities for different types of radioactive waste, etc.). There should also be an overarching Final EIA integrating the key findings from previous documents, again subject to consultation, public participation, and a regular EIA approval procedure. However, according to EU regulations on Environmental Impact Assessment, the content of EIA reports is subject to national legislation. EU institutions can start an infringement procedure only if the legal procedures of EIA process have been violated. The Ministry of Environment has not yet approved the EIA Report on the Visaginas Nuclear Power Plant. Improvement of the report according to the comments of environmental groups is still under preparation.

## **Alternative Energy Development Scenarios**

CEE Bankwatch Network's groups from the Baltic States have prepared several studies, such as the Baltic Sustainable Energy Strategy (BSES), the Sustainable Energy Vision 2050 for Lithuania and the Sustainable Energy Vision 2050 for Latvia. These studies were presented as alternative energy development scenarios for the Baltic countries at different energy related events and especially organized seminars, conferences and a speakers tour.

The Baltic Sustainable Energy Strategy is based on the efficient use of available energy sources in the Baltic countries and envisages a slow phasing out of the region's use of nuclear power and fossil fuels. It presents a sustainable energy scenario that can secure countries' energy needs and economic competitiveness. In October 2008, CEE Bankwatch Network's groups from the Baltic States organized a speakers tour to present the BSES to politicians, governmental officials, energy scientists, NGOs and other interested parties. The speakers' tour started in Lithuania where two seminars in Kaunas and Vilnius were organized to present the BSES and to discuss the opportunities of non-nuclear development to experts, officials and employees of the Lithuanian Energy Institute, as well as the Lithuanian Ministries of Economy and Environment. Furthermore, additional meetings with officials from responsible ministries took place in Latvia and Estonia.

Recent technologies are able, more than ever before, to efficiently utilize energy, and to use renewable energy resources without harming the environment. In order to show how these technologies can

transform the current unsustainable energy sector into a sustainable system, CEE Bankwatch groups Community "Atgaja" from the Lithuanian and Latvian Green Movements have developed the Sustainable Energy Vision 2050 for Latvia. The aim of these two documents is to demonstrate the possibility to cover a significant share of the energy demand for both countries with increased renewable energy and by introducing adequate energy efficiency measures instead of planning the construction of new nuclear or fossil fuel based capacities. Environmentalists understand that a total shift towards sustainable energy is a complex and long process, realizable within a period of about 50 years. Moreover, the implementation will require initial investments, long-term national strategies and action plans. Nevertheless, such a change will have a number of beneficial effects, e.g. more stable energy supply, major improvement of environmental performance of the energy sector, certain social benefits.

The Visions for a Sustainable Energy Development in Lithuania and Latvia demonstrate that a gradual growth in the use of renewable energy sources and an increase in energy efficiency can cover the entire energy demand for both countries. However, politicians do not only think about covering their countries' energy demand, but also about earning some money by exporting electricity and very heavily promoting the construction of a new nuclear power plant in Lithuania. By presenting these Visions on different energy related events and lobby meetings, environmental NGOs urge Governments to support sustainable development of the Baltic energy sector by diversifying primary energy sources and increasing the contribution of renewable and local energy resources in the total energy balance; by implementing measures to increase energy efficiency at the demand side and in the energy transformation sector; and by integrating the Baltic power systems into the Central European and Nordic energy systems.

#### For more information

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